



Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105

Meeting Agenda

Joint MTC Planning Committee with the ABAG Administrative Committee

Friday, July 14, 2017

9:30 AM

Board Room - 1st Floor

This meeting is scheduled to be webcast live on the Metropolitan Transportation Commission's Website: <http://mtc.ca.gov/whats-happening/meetings> and will take place at 9:30 a.m.

1. Roll Call / Confirm Quorum

Quorum: A quorum of this committee shall be a majority of its regular voting members (4).

2. Pledge of Allegiance

3. ABAG Compensation Announcement - Clerk of the Board

4. ABAG Administrative Committee Approval of Summary Minutes

- 4a. [17-2682](#) ABAG - Minutes of the June 9, 2017, June 15, 2017, and June 30, 2017 Meetings

Action: ABAG Administrative Committee Approval

Attachments: [4a AC Minutes 20170609, 20170615, and 20170630 Draft combined.pdf](#)

5. MTC Compensation Announcement - Committee Secretary

6. Consent Calendar

- 6a. [17-2673](#) MTC - Minutes of the June 9, 2017 Meeting

Action: MTC Planning Committee Approval

Attachments: [6a Joint MTG Minutes June 9 2017.pdf](#)

7. Approval

[17-2730](#) Final Plan Bay Area 2040 Consolidated Slide Deck

Attachments: [7_FinalPBA40_PPT.pdf](#)

7a. [17-2679](#) Final Transportation-Air Quality Conformity Analysis for Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program, MTC Resolution No. 4298

Final Air Quality Conformity Determination for Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program and request referral of both items to the Commission for approval.

Action: MTC Commission Approval

Presenter: Ken Kirkey

Attachments: [7a_MTC_ResNo.4298_Final Transportation-Air Quality Conformity Analysis for](#)

7b. [17-2680](#) Final Environmental Impact Report for Plan Bay Area 2040, MTC Resolution No. 4299 and ABAG Resolution No. 09-17

Final EIR and request referral of the Plan Bay Area 2040 Final EIR to the Commission and ABAG Executive Board for certification.

Action: MTC Commission Approval and ABAG Executive Board Approval

Presenter: Ken Kirkey

Attachments: [7b_Final EIR PBA 2040, MTC_ResNo4299 and ABAG_ResNo09-17.pdf](#)

7c. [17-2681](#) MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040

Presentation of revisions to the Draft Plan and request referral of the Final Plan to the Commission and ABAG Executive Board for adoption.

Action: MTC Commission Approval and ABAG Executive Board Approval

Presenter: Ken Kirkey

Attachments: [7c_MTC_ResNo4300 and ABAG_ResNo10-17_Final PBA_2040.pdf](#)
[7c_Handout-Enterprise Report on Publicly Owned Land for Consideration in Pla](#)

- 7d. [17-2714](#) Proposed Amendment to the 2017 Transportation Improvement Program (TIP) - Revision Number 2017-14. MTC Resolution No. 4275, Revised
- TIP Amendment to reconcile the 2017 TIP with Plan Bay Area 2040 and request referral of the Amendment to the Commission for approval.
- Action: Commission Approval
- Presenter: Ken Kirkey
- Attachments: [7d_Proposed Amendment to the 2017 TIP – Revision Number 2017-14. MTC_F](#)

8. Public Comment / Other Business

9. Adjournment / Next Meeting

The next meeting of the Planning Committee will be September 8, 2017, 9:30 a.m. at the Bay Area Metro Center, 375 Beale Street, San Francisco, CA.

Public Comment: The public is encouraged to comment on agenda items at Committee meetings by completing a request-to-speak card (available from staff) and passing it to the Committee secretary. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

Meeting Conduct: If this meeting is willfully interrupted or disrupted by one or more persons rendering orderly conduct of the meeting unfeasible, the Chair may order the removal of individuals who are willfully disrupting the meeting. Such individuals may be arrested. If order cannot be restored by such removal, the members of the Committee may direct that the meeting room be cleared (except for representatives of the press or other news media not participating in the disturbance), and the session may continue.

Record of Meeting: Committee meetings are recorded. Copies of recordings are available at a nominal charge, or recordings may be listened to at MTC offices by appointment. Audiocasts are maintained on MTC's Web site (mtc.ca.gov) for public review for at least one year.

Accessibility and Title VI: MTC provides services/accommodations upon request to persons with disabilities and individuals who are limited-English proficient who wish to address Commission matters. For accommodations or translations assistance, please call 415.778.6757 or 415.778.6769 for TDD/TTY. We require three working days' notice to accommodate your request.

可及性和法令第六章: MTC 根據要求向希望來委員會討論有關事宜的殘疾人士及英語有限者提供服務/方便。需要便利設施或翻譯協助者，請致電 415.778.6757 或 415.778.6769 TDD / TTY。我們要求您在三個工作日前告知，以滿足您的要求。

Acceso y el Título VI: La MTC puede proveer asistencia/facilitar la comunicación a las personas discapacitadas y los individuos con conocimiento limitado del inglés quienes quieran dirigirse a la Comisión. Para solicitar asistencia, por favor llame al número 415.778.6757 o al 415.778.6769 para TDD/TTY. Requerimos que solicite asistencia con tres días hábiles de anticipación para poderle proveer asistencia.

Attachments are sent to Committee members, key staff and others as appropriate. Copies will be available at the meeting.

All items on the agenda are subject to action and/or change by the Committee. Actions recommended by staff are subject to change by the Committee.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #:	17-2682	Version:	1	Name:	
Type:	Minutes	Status:		Informational	
File created:	6/6/2017	In control:		Joint MTC Planning Committee with the ABAG Administrative Committee	
On agenda:	7/14/2017	Final action:			
Title:	ABAG - Minutes of the June 9, 2017, June 15, 2017, and June 30, 2017 Meetings				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	4a AC Minutes 20170609, 20170615, and 20170630 Draft combined.pdf				

Date	Ver.	Action By	Action	Result
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Subject:

ABAG - Minutes of the June 9, 2017, June 15, 2017, and June 30, 2017 Meetings

Recommended Action:

ABAG Administrative Committee Approval

Attachments

SUMMARY MINUTES (DRAFT)

ABAG Administrative Committee Special Meeting
Friday, June 9, 2017
Bay Area Metro Center
Board Room Room
375 Beale Street
San Francisco, California

1. CALL TO ORDER / ROLL CALL / CONFIRM QUORUM

ABAG President and Committee Chair Julie Pierce, Councilmember, City of Clayton, called the meeting of the Administrative Committee of the Association of Bay Area Governments to order at about 11:31 a.m.

A quorum of the Committee was present at about 11:31 a.m.

The Committee met jointly with the Planning Committee of the Metropolitan Transportation Commission.

Members Present

Julie Pierce, Councilmember, City of Clayton—Chair
Cindy Chavez, Supervisor, County of Santa Clara
David Cortese, Supervisor, County of Santa Clara—*Ex officio*
Pat Eklund, Councilmember, City of Novato
Pradeep Gupta, Mayor, City of South San Francisco
Scott Haggerty, Supervisor, County of Alameda
Karen Mltchoff, Supervisor, County of Contra Costa
David Rabbitt, Supervisor, County of Sonoma—Vice Chair

Members Absent

Raul Peralez, Councilmember, City of San Jose
Greg Scharff, Mayor, City of Palo Alto

Staff Present

Kenneth Moy, ABAG Legal Counsel
Duane Bay, ABAG Assistant Planning Director

2. ABAG COMPENSATION ANNOUNCEMENT

Fred Castro, Clerk of the Board, made the compensation announcement.

3. ABAG ADMINISTRATIVE COMMITTEE CONSENT CALENDAR

A. Approval of ABAG Administrative Committee Summary Minutes of Meeting on May 12, 2017

B. Approval of SFEP Annual Application to EPA National Estuary Program Funds

The Administrative Committee approved the annual ABAG/SFEP application for funds under the National Estuary Program and authorized the Executive Director or designee to enter into a new agreement with EPA on behalf of the San Francisco Estuary Partnership to provide technical, public involvement and administrative support in implementing the Estuary Blueprint developed under EPA's Comprehensive

Conservation and Management Plan program. The agreement term will be October 1, 2017-September 30, 2018.

C. Ratification of Contract for Services with Ninyo and Moore

The Administrative Committee ratified the agreement with Ninyo and Moore and authorized the Executive Director, or designee, to enter into the agreement with Ninyo and Moore to provide environmental consulting services to conduct Phase I and Phase II Environmental Site Assessments for the East Bay Coalition Brownfields.

D. Adoption of Resolution No. 04-17 Authorizing Acceptance of U.S. EPA Community Wide Coalition Assessment Grant

The Administrative Committee adopted Resolution No. 04-17.

E. Adoption of Resolution No. 05-17 Approving the Application for Grant Funds for California Climate Investments Urban Greening Program

The Administrative Committee adopted Resolution No. 05-17.

F. Adoption of Resolution No. 06-17 Investment Policy

The Administrative Committee adopted Resolution No. 06-17.

Chair Pierce recognized a motion by Pat Eklund, Mayor, City of Novato, which was seconded by Karen Mitchoff, Supervisor, County of Contra Costa, to approve the Administrative Committee Consent Calendar, including Resolution No. 04-17, Resolution No. 05-17, and Resolution No. 06-17.

The ayes were: Pierce, Cortese, Eklund, Gupta, Haggerty, Mitchoff.

The nays were: None.

The abstentions were: None.

The absences were: Chavez, Peralez, Rabbitt, Scharff.

The motion passed.

4. MTC PLANNING COMMITTEE CONSENT CALENDAR

A. Approval of MTC Planning Committee Summary Minutes of Meeting on May 12, 2017

The MTC Planning Committee took action on this item.

5. MTC PLANNING COMMITTEE APPROVAL

A. MTC Resolution No. 4290—Regional Advance Mitigation Planning (RAMP) Program

Kenneth Kao, MTC, reported on an update on the RAMP Program efforts and proposed adoption of RAMP as the preferred mitigation strategy for the Bay Area.

The MTC Planning Committee took action on this item.

B. MTC Resolution No. 4295—Federal Performance Target-Setting Requirements

David Vautin and Shruti Hari, MTC, reported on an overview of the federal performance target-setting requirements in MAP-21 and the FAST Act and requested authority to set future federal short-range targets to comply with statutory deadlines.

The MTC Planning Committee took action on this item.

6. REPORT ON PLAN BAY AREA 2040

A. Draft Plan Bay Area 2040—Summary of Public Input

Ursula Volger, MTC, and Duane Bay, ABAG, reported on summary of comments from open houses, public hearings, and outreach to community-based organizations.

The following individuals gave public comment: Pedro Galvao, Non-Profit Housing Association of Northern California; David Zisser, Public Advocates; Erin; Carolyn Wong, East Oakland Collective; Ken Bukowski.

Members discussed public involvement, staff organization, action plan, and responses to comments; recognizing public workshops and open houses; water quality and supply; Committee for Sustainable and Affordable Accommodations recommendations; outreach, housing affordability, using transportation funds to incentivize housing, autonomous vehicles; defining affordability and subsidizing, and non-subsidy alternatives; local jurisdiction response to housing issues; resilience public concerns; approaches to development and financial incentives.

7. PUBLIC COMMENT / OTHER BUSINESS

There was no public comment.

8. MTC PLANNING COMMITTEE ADJOURNMENT

The MTC Planning Committee meeting adjourned at about 12:38 p.m.

9. ABAG ADMINISTRATIVE COMMITTEE—CLOSED SESSION

PUBLIC EMPLOYMENT

Title: Post Consolidation Legal Counsel

The ABAG Administrative Committee deferred this time to the next meeting.

10. ABAG ADMINISTRATIVE COMMITTEE—REPORT ON COMPENSATION OF POST CONSOLIDATION LEGAL COUNSEL

The ABAG Administrative Committee deferred this item to the next meeting.

11. ABAG ADMINISTRATIVE COMMITTEE ADJOURNMENT / NEXT MEETING

Chair Pierce adjourned the meeting at about at 12:38 p.m.

The next joint meeting of the ABAG Administrative Committee and MTC Planning Committee will be announced.

Submitted:

/s/ Brad Paul, Acting Secretary-Treasurer

Date Submitted: June 12, 2017

Date Approved:

*For information, contact Fred Castro, Clerk of the Board, at (415) 820 7913 or
FredC@abag.ca.gov.*

SUMMARY NOTES (DRAFT)

ABAG Administrative Committee Special Meeting
Friday, June 15, 2017
Bay Area Metro Center
Board Room Room
375 Beale Street
San Francisco, California

1. CALL TO ORDER / ROLL CALL / CONFIRM QUORUM

ABAG President and Committee Chair Julie Pierce, Councilmember, City of Clayton, convened the meeting of the Administrative Committee of the Association of Bay Area Governments to order at about 3:00 p.m.

A quorum of the Committee was not present.

Members Present

Julie Pierce, Councilmember, City of Clayton—Chair
Pat Eklund, Councilmember, City of Novato
Pradeep Gupta, Mayor, City of South San Francisco
Scott Haggerty, Supervisor, County of Alameda
Karen Mltchoff, Supervisor, County of Contra Costa

Members Absent

Cindy Chavez, Supervisor, County of Santa Clara
David Cortese, Supervisor, County of Santa Clara—*Ex officio*
Raul Peralez, Councilmember, City of San Jose
David Rabbitt, Supervisor, County of Sonoma—Vice Chair
Greg Scharff, Mayor, City of Palo Alto

Staff Present

Brad Paul, ABAG Acting Executive Director
Kenneth Moy, ABAG Legal Counsel

2. APPROVAL OF ABAG ADMINISTRATIVE COMMITTEE SUMMARY MINUTES OF MEETING ON JUNE 9, 2017

There was no action taken.

3. CLOSED SESSION

PUBLIC EMPLOYMENT

Title: Post Consolidation Legal Counsel

There was no Closed Session.

4. REPORT ON COMPENSATION OF POST CONSOLIDATION LEGAL COUNSEL

There was no action taken.

5. ADJOURNMENT

Chair Pierce concluded the meeting at about at 3:05 p.m.

The next meeting of the ABAG Administrative Committee will be announced.

Submitted:

/s/ Brad Paul, Acting Secretary-Treasurer

Date Submitted: June 30, 2017

Date Approved:

*For information, contact Fred Castro, Clerk of the Board, at (415) 820 7913 or
FredC@abag.ca.gov.*

SUMMARY MINUTES (DRAFT)

ABAG Administrative Committee Special Meeting
Friday, June 30, 2017
Bay Area Metro Center
Board Room
375 Beale Street
San Francisco, California

1. CALL TO ORDER / ROLL CALL / CONFIRM QUORUM

ABAG President and Committee Chair Julie Pierce, Councilmember, City of Clayton, called the special meeting of the Administrative Committee of the Association of Bay Area Governments to order at about 10:01 a.m.

A quorum of the Committee was present at about 10:01 a.m.

Members Present

Julie Pierce, Councilmember, City of Clayton—Chair
Cindy Chavez, Supervisor, County of Santa Clara
Pat Eklund, Councilmember, City of Novato
Scott Haggerty, Supervisor, County of Alameda
Karen Mltchoff, Supervisor, County of Contra Costa
David Rabbitt, Supervisor, County of Sonoma—Vice Chair
Greg Scharff, Mayor, City of Palo Alto

Members Absent

Pradeep Gupta, Mayor, City of South San Francisco
David Cortese, Supervisor, County of Santa Clara—Ex officio
Raul Peralez, Councilmember, City of San Jose

Staff Present

Brad Paul, ABAG Acting Executive Director
Kenneth Moy, ABAG Legal Counsel

The ABAG Administrative Committee entered Closed Session at about 10:03 a.m.

2. CLOSED SESSION

PUBLIC EMPLOYMENT

Title: Post Consolidation Legal Counsel

The ABAG Administrative Committee returned to Open Session at about 10:21 a.m.

3. REPORT ON COMPENSATION OF POST CONSOLIDATION LEGAL COUNSEL

Kenneth Moy, ABAG Legal Counsel, reported on the compensation of post-consolidation legal counsel and the proposed First Amendment to Employment Agreement for Legal Counsel, including post-consolidation legal tasks and terms and conditions as follows:

1. The Agreement will terminate at the close of business on January 5, 2018 (Termination Date).
2. For the period from July 1, 2018 to the Termination Date (Transition Period), Moy's full time salary will set at \$191,233.67 per year.

3. For the Transition Period, Moy will work at 75% time which will result in a part-time salary of \$143,424.25 per year. This salary will be paid at the same time as MTC pays the consolidated staff.
4. Moy will continue to receive the benefits he received as an ABAG employee except that (a) ABAG will not be able to provide dental or vision benefits and (b) Moy's accrual of vacation and sick leave will be prorated at 75%.
5. Moy will devote his time and effort to the tasks described in Attachment A.
6. This amendment is effective July 1, 2017.

Chair Pierce recognized a motion by Pat Eklund, Councilmember, City of Novato, which was seconded by Greg Scharff, Mayor, City of Palo Alto, to approve the First Amendment to Employment Agreement for Legal Counsel with Kenneth Moy, including terms and conditions and post-consolidation legal tasks.

The ayes were: Chavez, Eklund, Haggerty, Mitchoff, Pierce, Rabbitt, Scharff.

The nays were: None.

The abstentions were: None.

The absences were: Cortese, Gupta, Peralez.

The motion passed unanimously.

4. ADJOURNMENT

Chair Pierce adjourned the meeting at about at 12:26 p.m.

The next joint meeting of the ABAG Administrative Committee will be announced.

Submitted:

/s/ Brad Paul, Acting Secretary-Treasurer

Date Submitted: June 30, 2017

Date Approved:

For information, contact Fred Castro, Clerk of the Board, at (415) 820 7913 or FredC@abag.ca.gov.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 17-2673 **Version:** 1 **Name:**

Type: Minutes **Status:** Consent

File created: 6/6/2017 **In control:** Joint MTC Planning Committee with the ABAG Administrative Committee

On agenda: 7/14/2017 **Final action:**

Title: MTC - Minutes of the June 9, 2017 Meeting

Sponsors:

Indexes:

Code sections:

Attachments: [6a Joint MTG Minutes June 9 2017.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

MTC - Minutes of the June 9, 2017 Meeting

Recommended Action:

MTC Planning Committee Approval

Attachments



Meeting Minutes - Draft

Joint MTC Planning Committee with the ABAG Administrative Committee

Friday, June 9, 2017

9:40 AM

Board Room - 1st Floor

1. Roll Call / Confirm Quorum

Present: 6 - Chair Spering, Vice Chair Halsted, Commissioner Connolly, Commissioner Liccardo, Commissioner Pierce and Commissioner Cortese

Absent: 1 - Commissioner Aguirre

Non-Voting Members Present: Commissioner Azumbrado and Commissioner Giacobini

Ex Officio Voting Member Present: Commission Vice Chair Haggerty

Ad Hoc Non-Voting Members Present: Commissioner Josefowitz and Commissioner Worth

ABAG Administrative Committee Members Present: Cortese, Eklund, Gupta, Haggerty, Mltchoff, Pierce, and Rabbitt.

2. ABAG Compensation Announcement - Clerk of the Board

3. ABAG Administrative Committee Approval of Summary Minutes

3a. [17-2576](#) ABAG - Minutes of the May 12, 2017 Meeting

Action: ABAG Administrative Committee Approval

Attachments: [3a AC Minutes 20170512 Draft.pdf](#)

4. Consent Calendar

Approval of the Consent Calendar

Upon the motion by Vice Chair Halsted and second by Commissioner Connolly, the Consent Calendar was approved by the following vote:

Present: 6 - Chair Spering, Vice Chair Halsted, Commissioner Connolly, Commissioner Liccardo, Commissioner Pierce and Commissioner Cortese

Absent: 1 - Commissioner Aguirre

4a. [17-2577](#) MTC - Minutes of the May 12, 2017 Meetings

Action: MTC Planning Committee Approval

Attachments: [4a_Joint MTG_Minutes_May 12 2017.pdf](#)

5. Approval

5a. [17-2536](#) MTC Resolution No. 4290 - Regional Advance Mitigation Planning (RAMP) Program

Update on the RAMP Program efforts and proposed adoption of RAMP as the preferred mitigation strategy for the Bay Area.

Action: Commission Approval

Presenter: Ken Kirkey, MTC; Abigail Ramsden, The Nature Conservancy; and Laura Cholodenko, State Coastal Conservancy

Attachments: [5a_MTC Res. No. 4290.pdf](#)
[5a_Handout_BIA Letter_MTC Planning Committee June 5 2017_RAMP.pdf](#)
[5a_highlighted tmp-4290.pdf](#)
[5a_Handout-PPT_RAMP 20170609.pdf](#)

Upon the motion by Vice Chair Halsted and second by Commissioner Pierce, MTC Resolution No. 4290 - Regional Advance Mitigation Planning (RAMP) Program was adopted as amended to be forwarded to the Commission for approval. The motion carried by the following vote:

Aye: 6 - Chair Spering, Vice Chair Halsted, Commissioner Connolly, Commissioner Liccardo, Commissioner Pierce and Commissioner Cortese

Absent: 1 - Commissioner Aguirre

5b. [17-2578](#) MTC Resolution No. 4295 - Federal Performance Target-Setting Requirements

Overview of the federal performance target-setting requirements in MAP-21 and the FAST Act and will request authority to set future federal short-range targets to comply with statutory deadlines.

Action: Commission Approval

Presenter: David Vautin and Shruti Hari, MTC

Attachments: [5b_MTC Res. No. 4295.pdf](#)

Upon the motion by Commissioner Liccardo and second by Commissioner Pierce, MTC Resolution No. 4295 - Federal Performance Target-Setting Requirements was adopted to be forwarded to the Commission for approval. The motion carried by the following vote:

Aye: 6 - Chair Spering, Vice Chair Halsted, Commissioner Connolly, Commissioner Liccardo, Commissioner Pierce and Commissioner Cortese

Absent: 1 - Commissioner Aguirre

6. Information**6a.** [17-2579](#) Draft Plan Bay Area 2040: Summary of Public Input

Summary of comments from open houses, public hearings, and outreach to community-based organizations

Action: Information

Presenter: Ursula Vogler, MTC and Duane Bay, ABAG

Attachments: [6a Draft PBA 2040 Summary of Public Input.pdf](#)
[6a Handout received during meeting 6 Wins Petition - PBA Action Plan 06 09 17.pdf](#)

The following individuals spoke on this item:

Pedro Galvao, Nonprofit Housing Association of Northern California;

David Zisser, Public Advocates;

Erin Lapeyroterie;

Karolyn Wong; and

Ken Bukowski.

7. Public Comment / Other Business

8. Adjournment / Next Meeting

The next meeting of the Planning Committee will be July 14, 2017, 9:30 a.m. at the Bay Area Metro Center, 375 Beale Street, San Francisco, CA.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 17-2730 **Version:** 1 **Name:**

Type: Report **Status:** Informational

File created: 6/26/2017 **In control:** Joint MTC Planning Committee with the ABAG Administrative Committee

On agenda: 7/14/2017 **Final action:**

Title: Final Plan Bay Area 2040 Consolidated Slide Deck

Sponsors:

Indexes:

Code sections:

Attachments: [7_FinalPBA40_PPT.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:
Final Plan Bay Area 2040 Consolidated Slide Deck

Attachments

Plan BayArea 2040

FINAL AIR QUALITY
CONFORMITY
ANALYSIS

FINAL EIR

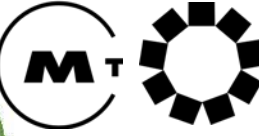
FINAL PLAN

ASSOCIATED TIP
AMENDMENT (2017-14)

July 14, 2017

*Joint MTC Planning &
ABAG Administrative
Committee*

Ken Kirkey
Bay Area Metro Staff



2017 Milestones



Extensive outreach to the public, key stakeholders, and elected officials in April and May spurred some revisions to the Plan & EIR.

Plan
BayArea
2040

298

letters & online
comments
received

17

meetings held
across all nine
counties



How has MTC/ABAG responded to comments received?

Letters received, as well as testimony from public hearings, have been posted on planbayarea.org.

For comments related to the Draft Plan Document/Action Plan:

Attachment B of this memorandum provides a summary response to each comment.

For comments related to the Draft Environmental Impact Report (EIR):

The **Final EIR** provides a specific technical response to each comment.



Comments & Associated Revisions – Equity and Economic Concerns

Comments:

- Support for identifying short-term solutions to address regional affordability crisis; more specificity required in Action Plan in this regard
- Greater emphasis needed on increasing job opportunities in economically-challenged communities

Response/Revisions:

- Revisions to the housing component to the Action Plan were made to incorporate feedback from stakeholders and to underscore a comprehensive produce/preserve/protect strategy to tackle the housing crisis
- The economic development component of the Action Plan was expanded to highlight the need for a diverse range of middle-wage jobs and to place a greater emphasis on economic revitalization
- Given significant comments received on this topic, additional discussion and response can be found in Attachment D of the Staff Memo



Comments:

- Concern that the Plan does not go far enough to reduce greenhouse gas emissions and decrease vehicle miles traveled
- Request for additional specificity in resource land mapping
- Improvements suggested for resilience component of Action Plan to broaden scope beyond sea level rise as the primary issue area

Response/Revisions:

- More information was added to the Strategies chapter to highlight the region's commitment to climate solutions and to various EIR mitigations
- Revisions and improvements were made to Resource Lands maps
- The resilience element of the Action Plan was expanded to emphasize a broader range of climate change impacts and to incorporate additional partner agencies



Comments & Associated Revisions – Growth Constraints

Comments:

- Local jurisdictions and residents are concerned about constraints that make it challenging to grow, leading to perception that places are “built out”
- Issues in this category ranged from water availability to local street capacity

Response/Revisions:

- A discussion of the growth related benefits and challenges was added to Chapter 4 of the Plan Document
- The Land Use Modeling supplemental report was enhanced with additional technical details on the development of the preferred land use pattern in 2016



Comments & Associated Revisions – Planning Coordination

Comments:

- Stakeholders and public sector agencies wanted to better understand how the Plan relates to the Clean Air Plan and the California Transportation Plan 2040
- Local jurisdictions need better information to assist with CEQA streamlining enabled by Senate Bills 375 and 743 and the Final Plan

Response/Revisions:

- Additional content was added to the Draft Plan to highlight its relationship to BAAQMD's Clean Air Plan and the state's California Transportation Plan 2040
- Improvements were made to various maps needed for local implementation when determining Plan consistency based on requests from stakeholders, as well as a commitment to develop web-based maps in the near future



Comments:

- A number of comments expressed opposition to the Plan process as well as skepticism about the value of planning, smart growth, and regional coordination

Response/Revisions:

- No specific changes were made in response to these comments



Comments & Associated Revisions – Land Use & Transportation

Comments:

- Local jurisdictions asked for changes to the policy levers or specific housing and jobs forecasts for their communities, beyond revisions made in the fall before adoption of the Final Preferred Scenario
- Some comments asked for projects to be added to the Final Plan

Response/Revisions:

- No changes have been made to the land use pattern or transportation investment strategy in the Draft Plan since it was approved as the Final Preferred Scenario in November 2016
- However, alternatives to the Draft Plan have been evaluated in parallel through the EIR process



The Final Air Quality Conformity Analysis demonstrates that the Plan and TIP are consistent with the federal air quality plan.

Plan
BayArea
2040

Background:

- Federal planning regulations require that we demonstrate that the transportation activities of the Plan and Amended 2017 TIP will not cause new air quality violations, worsen existing violations, or delay timely attainment of the federal air quality standards
- The Conformity Analysis was conducted consistent with the U.S. EPA's transportation-air quality conformity regulations and with the Bay Area Air Quality Conformity Protocol (MTC as Resolution No. 3757)
- The Conformity Analysis demonstrates that both the Plan and Amended 2017 TIP are consistent with ("conform to") the federal air quality plan, which is referred to as the state implementation plan (SIP)

Comments:

- Staff received no significant comments on the Draft Conformity Analysis Report

Response/Revisions – Conformity Analysis:

- Minor revisions were made to the Draft Conformity Analysis Report to provide additional background detail on federal ozone standards



The Final EIR includes responses to comments received and revisions to the Draft EIR.

Final EIR:

- **Comments on the Draft EIR** lists all agencies, organizations and individuals who submitted either written or oral comments on the Draft EIR.
- **Responses to Comments** provides responses to written and oral comments, including “Master Responses” which respond to frequently raised issues referenced by multiple commenters, the Master Responses include:
 - Population and Employment Forecasts
 - Displacement and Housing Affordability
 - Water Supply and Drought
 - SB 375 and Greenhouse Gas Emissions Analysis
 - Programmatic EIR
 - Range of Alternatives
 - MTC/ABAG Role and Authority
 - Climate Initiatives Program

The Final EIR includes responses to comments received and revisions to the Draft EIR.

Final EIR (continued):

- **Revisions to the Draft EIR** lists revisions to the Draft EIR by chapter and page, in the same order as the revisions would appear in the Draft EIR.
- **Mitigation Monitoring Reporting Program (MMRP)**
 - Outlines a program for the implementation and monitoring of the mitigation measures included in the Draft EIR
 - Identifies who will be responsible for implementing each mitigation and describes the anticipated timeframe for implementation

Draft Findings:

- **Presents the conclusions of MTC/ABAG in support of certification of the Final EIR**

TIP Amendment 2017-14 ensures consistency between the TIP and the soon-to-be-adopted Plan Bay Area 2040.

Background:

- Federal planning regulations require that the TIP be consistent with the Regional Transportation Plan
- TIP Amendment 2017-14 includes proposals to revise or remove 47 projects currently in the 2017 TIP and add 14 new projects to maintain consistency between the 2017 TIP and Plan Bay Area 2040
- The 2017 TIP as revised with TIP Amendment 2017-14 remains fiscally constrained as required by federal regulations

Comments:

- Staff received no significant comments on Draft TIP Amendment 2017-14

Response/Revisions – TIP Amendment 2017-14:

- No significant revisions were made to TIP Amendment 2017-14

Staff requests referral of the four items to the Commission and ABAG Executive Board, as detailed below, to consider for adoption.



- Section 1** – *The Bay Area Today*
- Section 2** – *What is Plan Bay Area 2040?*
- Section 3** – *Forecasting the Future*
- Section 4** – *Strategies and Performance*
- Section 5** – *Action Plan*
- Supplemental Reports**
- Environmental Impact Report**
- Air Quality Conformity Report**



This amendment to the 2017 TIP makes it consistent with the proposed Plan.

MTC Resolution 4298
Adopts Final Air Quality Conformity Analysis/ Determination

Planning Committee

MTC Resolution 4299
ABAG Resolution 09-17
Adopts Final Environmental Impact Report

Planning Committee & Administrative Committee

MTC Resolution 4300
ABAG Resolution 10-17
Adopts Final Plan Bay Area 2040

Planning Committee & Administrative Committee

MTC Resolution 4275
Adopts Amendment to 2017 Transportation Improvement Program

Planning Committee



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #:	17-2679	Version:	1	Name:	
Type:	Resolution	Status:		Commission Approval	
File created:	6/6/2017	In control:		Joint MTC Planning Committee with the ABAG Administrative Committee	
On agenda:	7/14/2017	Final action:			
Title:	Final Transportation-Air Quality Conformity Analysis for Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program, MTC Resolution No. 4298				
	Final Air Quality Conformity Determination for Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program and request referral of both items to the Commission for approval.				

Sponsors:

Indexes:

Code sections:

Attachments: [7a MTC ResNo.4298 Final Transportation-Air Quality Conformity Analysis for PBA 2040 and](#)

Date	Ver.	Action By	Action	Result
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Subject:

Final Transportation-Air Quality Conformity Analysis for Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program, MTC Resolution No. 4298

Final Air Quality Conformity Determination for Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program and request referral of both items to the Commission for approval.

Presenter:

Ken Kirkey

Recommended Action:

MTC Commission Approval

Attachments



TO: MTC Planning Committee

DATE: July 7, 2017

FR: Steve Heminger, MTC Executive Director

RE: Final Transportation-Air Quality Conformity Analysis for Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program, MTC Resolution No. 4298

MTC has prepared the Final Transportation-Air Quality Conformity Analysis (Conformity Analysis) for Plan Bay Area 2040 (Plan) and the 2017 Transportation Improvement Program, as amended by Revision Number 2017-14 (Amended 2017 TIP), in accordance with the latest U.S. Environmental Protection Agency (EPA) transportation conformity regulations and the Bay Area Air Quality Conformity Protocol (MTC Resolution No. 3757). The conformity analysis addresses only those projects identified in the financially constrained Plan and Amended 2017 TIP.

Background

The Draft Conformity Analysis was released for public review and comment on May 3, 2017. MTC held nine open houses for the Plan throughout the Bay Area. The Draft Conformity Analysis was circulated for a 30-day public review period from May 3, 2017 through June 1, 2017. MTC staff, in consultation with the multiagency Air Quality Conformity Task Force (comprised of staffs from the EPA, Federal Highway Administration, Federal Transit Administration, Caltrans, and participating congestion management agencies and transit operators), has responded to public comments received and made revisions to the Draft Conformity Analysis to provide additional background information on ozone and particulate matter standards.

The Draft Conformity Analysis was prepared using the latest planning assumptions, emissions model, and consultation provisions, including a quantitative regional emissions analysis that meets emissions budget requirements of the U.S. EPA transportation conformity rule. The Draft Conformity Analysis' approach, methodology, and findings have been prepared in consultation with the Air Quality Conformity Task Force as stipulated in MTC Resolution No. 3757. These task force meetings, which were open to the public, took place on March 23, 2017, May 25, 2017 and June 22, 2017.

Table 1 details the development and anticipated approval process of the Conformity Analysis.

Activity	Timeline
Conformity Task Force reviews MTC staff's proposed conformity approach	March 23, 2017
MTC staff conducts technical analysis and prepares draft findings	March-April 2017
MTC releases the Draft Conformity Analysis for public comment	May 3, 2017
MTC staff discusses Draft Conformity Analysis with the Conformity Task Force	May 25, 2017
Public comment period closes	June 1, 2017
MTC staff briefs the Conformity Task Force on responses to public comments	June 22, 2017
MTC Planning Committee considers approval	July 14, 2017
MTC Commission considers approval	July 26, 2017
Anticipated FHWA/FTA final approval of Conformity Analysis	September 2017

Findings

The proposed Final Conformity Analysis demonstrates that both the Plan and Amended 2017 TIP are consistent with ("conform to") the federal air quality plan, which is referred to as the state implementation plan (SIP), meaning that the transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the federal air quality standards. Based on the proposed Final Conformity Analysis, MTC staff recommends the following positive conformity findings:

1. This conformity assessment was conducted consistent with U.S. EPA's transportation-air quality conformity regulations and with the Bay Area Air Quality Conformity Protocol adopted by MTC as Resolution No. 3757.
2. The Plan and Amended 2017 TIP provide for the implementation of transportation control measures (TCMs) pursuant to the applicable federal regulations.
3. For the national carbon monoxide standard, motor vehicle emissions in the Plan and the Amended 2017 TIP are lower than the transportation conformity budget in the SIP.
4. For the national 8-hour ozone standard, motor vehicle emissions in the Plan and the Amended 2017 TIP are lower than the transportation conformity budget in the SIP.
5. For the national PM2.5 standard, motor vehicle emissions in the Plan and the Amended 2017 TIP conform to the interim emissions test for the national fine particulate matter standard.

See Agenda Item 7c for more information regarding the Plan and Agenda Item 7d for more information regarding the Amended 2017 TIP.

Action

Staff requests that the committee refer the proposed Final Conformity Analysis to the MTC Commission for approval later this month.



Steve Heminger

Attachment:

- Attachment A: MTC Resolution No. 4298

SH:HB

J:\COMMITTEE\Planning Committee\2017\07_PLNG_July 2017\7a_FinalPBA40_Conformity_v3.docx

Date: July 26, 2017
W.I.: 1412
Referred by: Planning

ABSTRACT

Resolution No. 4298

This resolution finds that Plan Bay Area 2040 and the 2017 Transportation Improvement Program, as amended by Revision Number 2017-14, are in conformance with the State Implementation Plan (SIP) to achieve National Ambient Air Quality Standards.

Further discussion of this subject is contained in the Executive Director's memorandum to the Planning Committee dated July 7, 2017.

Date: July 26, 2017
W.I.: 1412
Referred by: Planning

Re: Approval of the Transportation-Air Quality Conformity Analysis of Plan Bay Area 2040 and the 2017 Transportation Improvement Program, as amended by Revision Number 2017-14, to the State Implementation Plan for Achieving and Maintaining National Ambient Air Quality Standards

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4298

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to California Government Code Section 66500 *et seq.*; and

WHEREAS, MTC is the federally designated Metropolitan Planning Organization (MPO), pursuant to Section 134(d) of Title 23 of the United States Code (USC) for the nine-county San Francisco Bay Area region (the region); and

WHEREAS, Part 450 of Title 23 of the Code of Federal Regulations (CFR), require MTC as the MPO to prepare and update a long-range Regional Transportation Plan (RTP) every four years; and

WHEREAS, California Government Code § 65080 *et seq.* (Senate Bill 375) requires MTC to prepare and update a long-range RTP, including a Sustainable Communities Strategy (SCS) prepared in conjunction with the Association of Bay Area Governments (ABAG), every four years; and

WHEREAS, beginning in 2015 MTC commenced a comprehensive and coordinated transportation planning process to update its 2013 RTP/SCS known as Plan Bay Area and develop its 2017 RTP/SCS known as Plan Bay Area 2040 (Plan), in conformance with all applicable federal and state requirements including Senate Bill 375; and

WHEREAS, as required by Senate Bill 375, the Plan incorporates the SCS prepared jointly by MTC and ABAG for the San Francisco Bay Area; and

WHEREAS, the Plan, including both the RTP and the SCS, contains an integrated set of strategies and fiscally-constrained investments to maintain, manage, and improve the transportation system in the San Francisco Bay Area through the year 2040 and calls for development of an integrated intermodal transportation system that facilitates the efficient, economic movement of people and goods; and

WHEREAS, the Plan considers, analyzes, and reflects, as appropriate, the metropolitan transportation planning process as identified in federal regulations, and is based on reasonably available funding provisions; and

WHEREAS, MTC prepared the Plan to include both long-range and short-range strategies and actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods; and

WHEREAS, the Plan is to be adopted (MTC Resolution 4300) on the same day as this Resolution; and

WHEREAS, MTC adopted the 2017 Transportation Improvement Program (2017 TIP) on September 28, 2016, to implement the programs and policies approved in the 2013 RTP/SCS; and

WHEREAS, MTC has prepared an Amendment to the 2017 Transportation Improvement Program (Revision Number 2017-14) to maintain consistency with the programs and policies in the Plan; and

WHEREAS, the Plan and the Amended 2017 TIP must conform to the federal air quality plan, which is also referred to as the State Implementation Plan (SIP); and

WHEREAS, the San Francisco Bay Area air basin was designated by U.S. Environmental Protection Agency (U.S. EPA) as nonattainment for the fine particulate matter (PM_{2.5}) standard in December 2009, and so MTC must demonstrate conformance to this standard through an interim emission test until a PM_{2.5} SIP is approved by U.S. EPA:

WHEREAS, MTC has conducted a transportation-air quality conformity analysis for the Plan and the 2017 TIP, as amended by Revision Number 2017-14, in accordance with U.S. EPA conformity regulations and the Bay Area Air Quality Conformity Protocol (MTC Resolution No. 3757); and

WHEREAS, MTC conducted a transportation-air quality conformity analysis for the Plan and the 2017 TIP, as amended by Revision Number 2017-14, utilizing the latest planning assumptions, emissions model, and consultation provisions, including a quantitative regional emissions analysis that meets emissions budget requirements of the U. S. Environmental Protection Agency transportation conformity rule, and the Plan contributes to all required emissions reductions; and

WHEREAS, said conformity analysis is included as Attachment A of this resolution, and is incorporated herein as though set forth at length; and

WHEREAS, the conformity analysis has been circulated for 30-day public review period from May 3, 2017, through June 1, 2017; now, therefore be it

RESOLVED, that MTC makes the following conformity findings for the Plan and the 2017 Transportation Improvement Program, as amended by Revision Number 2017-14:

- (A) Conforms to the applicable provisions of the State Implementation Plan and the applicable transportation conformity budgets in the State Implementation Plan approved for the national 8-hour ozone standard and carbon monoxide standard, and to the interim emissions test for the national fine particulate matter standard; and
- (B) Provides for the timely implementation of transportation control measures (TCMs) pursuant to the applicable State Implementation Plan;

RESOLVED, that Executive Director shall forward a copy of this Resolution to the U.S. Department of Transportation for its approval of MTC's conformity findings, along with a copy of Plan Bay Area 2040 and the Amendment to 2017 Transportation Improvement Program (Revision Number 2017-14) and to such other agencies as appropriate.

METROPOLITAN TRANSPORTATION COMMISSION

Jake Mackenzie, Chair

This resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in San Francisco, California on July 26, 2017.

Date: July 26, 2017
W.I.: 1412
Referred by: Planning

Attachment A
Resolution No. 4298
Page 1 of 1

**Final Transportation-Air Quality Conformity Analysis
for Plan Bay Area 2040 and
2017 Transportation Improvement Program, as Amended by Revision Number 2017-14**

The Final Transportation-Air Quality Conformity Analysis for Plan Bay Area 2040 and the 2017 Transportation Improvement Program, as Amended by Revision Number 2017-14 is on file
in the offices
of the Metropolitan Transportation Commission, Bay Area Metro Center,
375 Beale Street, Suite 800, San Francisco, CA 94105.

Final Transportation-Air Quality Conformity Analysis: Draft Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program

Project Staff

Ken Kirkey, Director, Planning

Harold Brazil, Project Manager

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I. Introduction

The Metropolitan Transportation Commission (MTC) prepares a transportation air quality conformity analysis when MTC amends or updates its long-range regional transportation plan (RTP), and/or updates its Transportation Improvement Program (TIP) or adds or deletes regionally significant, non-exempt projects into the TIP.

The purpose of this conformity analysis is to conform Draft Plan Bay Area 2040 (RTP) and to conform the Amended 2017 TIP in accordance with the latest U.S. Environmental Protection Agency (EPA) transportation conformity regulations and the Bay Area Conformity State Implementation Plan (Conformity SIP), which is also known as the Bay Area Air Quality Conformity Protocol (MTC Resolution No. 3757). This conformity analysis addresses the 2008 national ambient air quality standard (NAAQS) for 8-hour ozone, the 8-hour national carbon monoxide standard, and the 2006 national 24-hour fine particulate matter (PM_{2.5}) standard.

This report explains the basis for the conformity analysis and provides the results used by MTC to make a positive conformity finding for Draft Plan Bay Area 2040 and the Amended 2017 TIP.

Purpose of Conformity Analysis

The Federal Clean Air Act, as amended in 1990 (CAAA) outlines requirements for ensuring that federal transportation plans, programs, and projects are consistent with (“conform to”) the purpose of the SIP. Conformity to the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards. A conformity finding demonstrates that the total emissions projected for a transportation plan (“RTP”) or program (“TIP”) are within the emissions limits (“budgets”) established by the SIP, and that transportation control measures (TCMs) are implemented in a timely fashion.

Conformity requirements apply in all non-attainment and maintenance areas for transportation-related criteria pollutants and related precursor emissions. For the Bay Area, the criteria pollutants to be addressed are ground-level ozone, carbon monoxide, and PM_{2.5}; and the precursor pollutants to be addressed include volatile organic compounds (VOC) and oxides of nitrogen (NO_x) for ozone and for PM_{2.5}. EPA’s most recent revisions to its transportation conformity regulations to implement the 1990 Federal Clean Air Act section 176 were published in the Federal Register on March 14, 2012¹.

Metropolitan Planning Organizations (MPOs) such as MTC are required to follow these regulations, and any other procedures and criteria contained in the EPA-approved Conformity SIP (Transportation Air Quality Conformity Protocol) for the Bay Area. In the Bay Area, procedures were first adopted in September 1994 to comply with the 1990 CAAA. Four subsequent amendments to the transportation conformity procedures in August 1995, November 1995, August 1997, and July 2006 have been adopted by the three co-lead agencies (MTC, Association of Bay Area Governments (ABAG), and Bay Area Air Quality Management District (BAAQMD)). MTC Resolution 3757 represents the latest San Francisco Bay Area Transportation Air Quality Conformity Protocol adopted by the three agencies in July 2006. Acting on behalf of the three agencies, the BAAQMD submitted this latest Protocol to California Air Resources Board (CARB) as a revision to the Bay Area Conformity SIP. CARB approved this proposed revision to the

¹ The current version of the regulations is available on EPA’s Transportation Conformity website at <https://www.epa.gov/state-and-local-transportation/current-law-regulations-and-guidance-state-and-local-transportation>

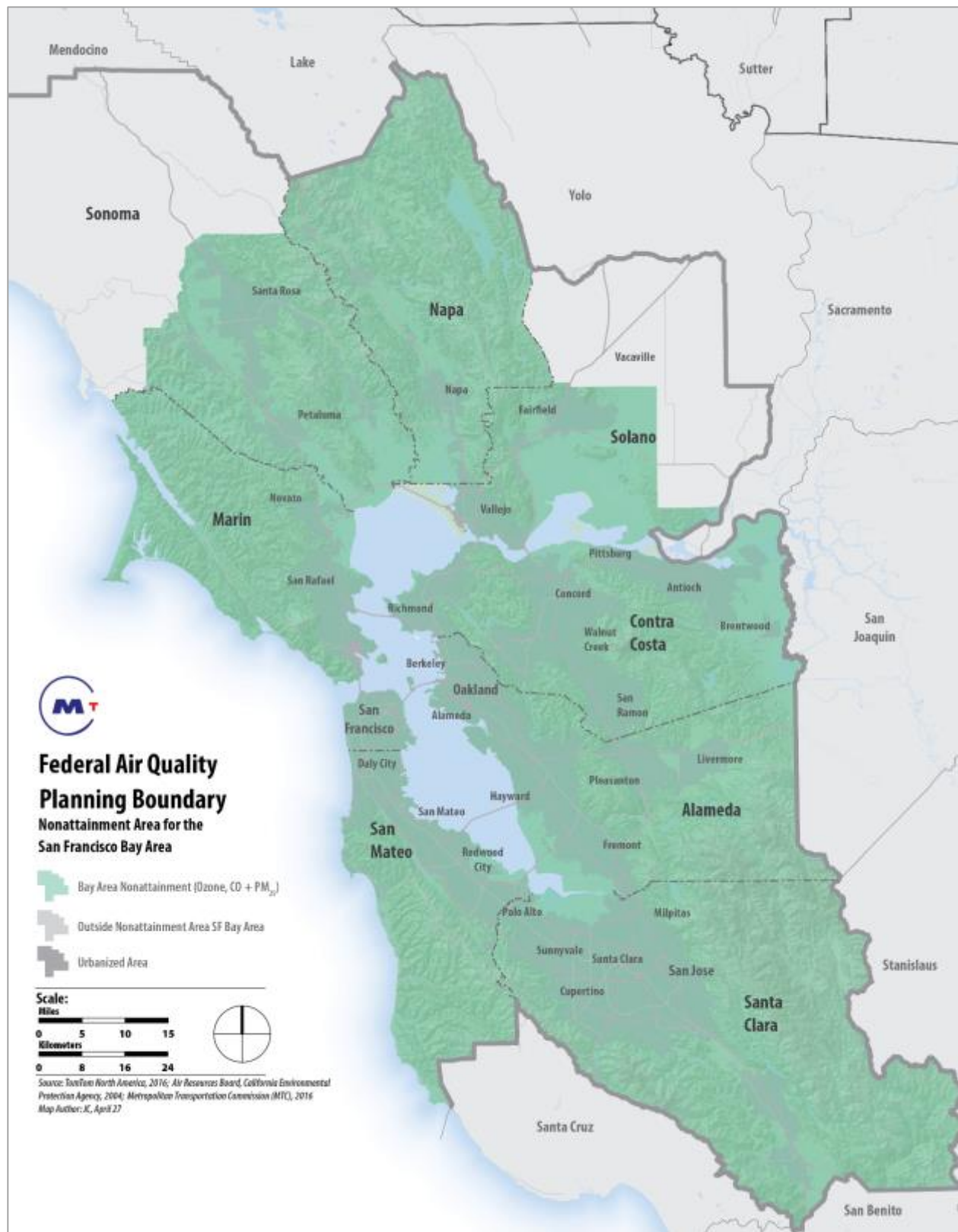


Figure 1: Map of the Non-Attainment Area for the San Francisco Bay Area

Bay Area's Conformity SIP in December 2006, and transmitted it to EPA for final action. EPA approved the Bay Area Conformity SIP in December 2007 (40 CFR Part 52).

These regulations and resolutions state in part that, MTC cannot approve any transportation plan, program, or project unless these activities conform to the purpose of the federal air quality plan. "Transportation plan" refers to the RTP. "Program" refers to the TIP, which is a financially realistic set of highway and transit projects to be funded over the next four years. A "transportation project" is any highway or transit improvement, which is included in the RTP and TIP and requires funding or approval from the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA). Conformity regulations also affect regionally significant non-federally funded projects which must be included in a conforming transportation plan ("RTP") and program ("TIP").

Status of Regional Transportation Plan

A regional transportation plan, or RTP, is a long-range plan which includes both long-range and short-range strategies and actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. State law requires that RTP's include a Sustainable Communities Strategy (SCS) to identify a forecasted land use development pattern that when integrated with the future transportation system will meet the region's greenhouse gas reduction target set by CARB. As required by federal and state planning regulations, the RTP covers a minimum planning horizon of 20 years and is updated every four years in areas which do not meet federal air quality standards ("non-attainment"). The RTP is financially constrained to ensure project costs do not exceed regionally expected transportation revenues over the planning horizon. Once adopted, the RTP guides the development of the TIP for the region.

The San Francisco Bay Area's 2017 RTP/SCS is called Draft Plan Bay Area 2040 and is an update to Plan Bay Area. Draft Plan Bay Area 2040 represents a strategic investment strategy to maintain existing transportation infrastructure, service, and system performance for Bay Area travelers through horizon year 2040. It includes a regional transportation investment strategy and subsequent list of highway, transit, local roadway, bicycle, and pedestrian projects identified through regional and local transportation planning processes. In addition, Draft Plan Bay Area 2040 includes a focused growth land use pattern designed to reduce passenger vehicle travel in an effort to meet the region's greenhouse gas reduction target set by CARB. As required by federal and state planning regulations, Draft Plan Bay Area 2040 is financially constrained meaning the identified transportation project costs are within the \$303 billion revenue forecast.

The Commission adopted Plan Bay Area on July 18th, 2013 (MTC Resolution No. 4111). In October 2015, the FHWA and FTA approved MTC's Final Amendment to Plan Bay Area (to include the Richmond-San Rafael Bridge Access Improvement Project), MTC Resolution No. 4198.

This conformity analysis serves to demonstrate that Draft Plan Bay Area 2040 conforms to the SIP. Refer to Appendix A for a detailed list of projects included in Draft Plan Bay Area 2040. See the Draft Plan Bay Area 2040 website for additional details².

² Additional information is available here: <http://2040.planbayarea.org/>

Status of Transportation Improvement Program

The federally required transportation improvement program, or TIP, is a comprehensive listing of surface transportation projects for the San Francisco Bay Area that receive federal funds, are subject to a federally required action, or are regionally significant. MTC, as the federally designated MPO, prepares and adopts the TIP at least once every four years. The TIP covers a four-year period and must be financially constrained by year, meaning that the amount of dollars committed to the projects (also referred to as “programmed”) must not exceed the amount of dollars estimated to be available. As required by federal conformity regulations, MTC must demonstrate that the TIP is consistent with (“conforms to”) the SIP and that all projects included in the TIP are consistent with the RTP, Draft Plan Bay Area 2040.

The current TIP (2017 TIP) received final federal approval on December 16, 2016, and includes projects programmed over four fiscal years from FY 2016-17 through FY 2019-20. The 2017 TIP has been revised multiple times since it was adopted, including through TIP Amendment 2017-14, which revises the 2017 TIP to ensure consistency with Draft Plan Bay Area 2040. The 2017 TIP, as revised through TIP Amendment 2017-14, contains approximately 780 projects totaling about \$9 billion over the four-year period from fiscal year 2016-17 to 2019-20.

This conformity analysis serves to demonstrate that the 2017 TIP as revised through TIP amendment 2017-14, as well as Draft Plan Bay Area 2040, conforms to the SIP. Refer to Appendix B for a detailed list of projects included in the Amended 2017 TIP.

II. Bay Area Air Pollutant Designations

National 1-Hour Ozone Standard

The Bay Area was initially designated as nonattainment for ozone on March 3, 1978. On November 6, 1991, the EPA designated the Bay Area as a moderate ozone non-attainment area. Based on “clean” air monitoring data from 1990 to 1992, the co-lead agencies—BAAQMD, MTC, and ABAG—determined that the Bay Area was attaining the 1-hour ozone standard and requested that CARB forward a re-designation request and an ozone maintenance plan to EPA.

On May 25, 1995, after evaluating 1990-1992 monitoring data and determining that the Bay Area had continued to attain the standard, the EPA redesignated the Bay Area as an ozone maintenance area. Shortly thereafter, the area began violating the standard again and on July 10, 1998, the EPA published a Notice of Final Rulemaking redesignating the Bay Area back to an ozone non-attainment area. This action became effective on August 10, 1998.

The redesignation to nonattainment triggered an obligation for the State to submit a SIP revision designed to provide for attainment of the 1-hour ozone NAAQS by November 15, 2000. This revision (the San Francisco Bay Area Ozone Attainment Plan for the 1-hour National Ozone Standard – June 1999 or “1999 Plan”) was partially approved and partially disapproved by EPA on September 20, 2001 in conjunction with a determination that the area had failed to attain by the November 2000 deadline. The attainment demonstration and its associated motor vehicle emissions budgets were among the plan elements that were disapproved.

As a result of the EPA’s finding of failure to attain and partial disapproval of the 1999 Plan, the State was required to submit a SIP revision for the Bay Area to EPA by September 20, 2002 that included an

updated volatile organic compounds (VOC) and nitrogen oxides (NOX) emissions inventory, new transportation conformity budgets, and provided for attainment of the 1-hour ozone standard no later than September 20, 2006. On November 1, 2001, CARB approved the San Francisco Bay Area 2001 Ozone Attainment Plan for the 1-Hour National Ozone Standard (2001 Plan) as a revision to the SIP. The BAAQMD and its co-lead agencies, MTC) and ABAG adopted the 2001 Plan on October 26, 2001.

The 2001 Plan contains a control strategy with seven stationary source measures, five transportation control measures (TCMs), and eleven further-study measures. In the 2001 Plan, the District also committed to strengthening the then existing Smog Check program by requesting the State Bureau of Automotive Repair to implement two VOC-reducing program elements. The new measures and on-going programs will provide 271 tons per day of combined VOC and NOX emission reductions between 2000 and 2006. The 2001 Plan also included an attainment assessment based on Bay Area data. The Bay Area co-lead agencies committed to reassess the attainment assessment in 2003 using data from the Central California Ozone Study and to submit a revised SIP to EPA in 2004 with any needed modifications to the control strategy.

On November 30, 2001, ARB submitted the 2001 Plan, which included VOC and NOx motor vehicle emissions budgets (164.0 tons per day (tpd) and 270.3 tpd, respectively) for the 2006 attainment year, to EPA for approval as a revision to the California SIP. To support the on-road motor vehicle emission inventory and transportation conformity budgets in the Plan, CARB also transmitted the San Francisco Bay Area-EMFAC2000 model to EPA for approval for the Bay Area ozone non-attainment area. On February 14, 2002, the EPA found the motor vehicle emissions budgets in the 2001 Plan adequate for transportation conformity purposes, based on its preliminary determination that the plan provided for timely attainment of the 1-hour ozone standard.

On April 22, 2004, based on air quality monitoring data from the 2001, 2002, and 2003 ozone season, EPA determined that Bay Area had attained the national 1-hour ozone standard. s. Because of this determination, requirements for some of the elements of the 2001 Ozone Attainment Plan, submitted to EPA to demonstrate attainment of the 1-hour standard, were suspended. The determination of attainment did not mean the Bay Area had been redesignated as an attainment area for the 1-hour standard. To be redesignated, the region would have had to submit a formal redesignation request to EPA, along with a maintenance plan showing how the region would continue to attain the standard for ten years. However, this redesignation request was no longer necessary upon the establishment of the new national 8-hour ozone standard.

National 8-Hour Ozone Standard

In July 1997, EPA revised the ozone standard, setting it to 80 parts per billion (ppb) in concentration-based specifically on the 3-year average of the annual 4th highest daily maximum 8-hour ozone concentrations. In April 2004, EPA issued final designations for attainment and non-attainment areas. In June 2004, EPA formally designated the Bay Area as a non-attainment area for national 8-hour ozone, and classified the region as “marginal” based on five classes of non-attainment areas for ozone, ranging from marginal to extreme.

In March 2008, EPA lowered the national 8-hour ozone standard from 80 ppb to 75 ppb. On March 12, 2009, CARB submitted its recommendations for area designations for the revised national 8-hour ozone standard. These recommendations were based on ozone air quality data collected during 2006 through 2008. The CARB recommended that the Bay Area be designated as non-attainment for the national 8-

hour ozone standard. EPA had one year to review the recommendations and were to notify states by November 12, 2009, if they planned to modify the state-recommended areas. EPA issued final designations by March 12, 2010, based on more up to date monitoring data.

On October 1, 2015, EPA strengthened the NAAQS for ground-level ozone to 70 ppb, based on extensive scientific evidence about ozone's effects on public health and welfare. The updated standards will improve public health protection, particularly for at-risk groups including children, older adults, people of all ages who have lung diseases such as asthma, and people who are active outdoors, especially outdoor workers. They also will improve the health of trees, plants and ecosystems.

In addition, because marginal 8-hour ozone areas are not required to submit an attainment demonstration SIPs (containing on-road motor vehicle emission budgets required to demonstrate conformity), the conformity finding in this report is based on the approved 1-hour ozone on-road motor vehicle emission budgets contained in the Bay Area's 2001 Plan.

Proposed implementation rule for the 2015 ozone standard was published November 17, 2016 (81 FR 81276) and proposed a framework for nonattainment area classifications and SIP requirements. In addition, the proposed rule largely follows approach adopted for the previous Classifications Rule and SIP Requirements Rule (SRR) for the 2008 ozone NAAQS.

On June 21, 2017, the Administrator of the U.S. Environmental Protection Agency (EPA) extended the deadline for designating areas for the 2015 national ambient air quality standards (NAAQS) for ground-level ozone by 1 year. The new deadline for area designations is October 1, 2018.

National PM_{2.5} Standard

In 1987, The EPA established a standard for particle pollution equal to or smaller than 10 micrometers in diameter. A decade later, the 1997 revision to the standard set the stage for change, when a separate standard was set for fine particulate matter (particles that are 2.5 micrometers in diameter and smaller). Citing the link between serious health problems and premature death in people with heart or lung disease, the 1997 revision ultimately distinguished and set forth regulation on particle pollutants known as particulate matter 2.5 (PM_{2.5}) and particulate matter 10 (PM₁₀). Based on air quality monitoring data, the Bay Area was found to be attaining the 1997 PM_{2.5} standards.

In 2006, the EPA revised the air quality standards for particle pollution. The 24-hour PM_{2.5} standard was strengthened by lowering the level from 65 micrograms per cubic meter (µg/m³) to 35 µg/ m³. The annual fine particle standard at 15 µg/ m³ remained the same. Also in 2006, the EPA published a final rule that established transportation conformity criteria and procedures to determine transportation projects that required analysis for local air quality impacts for PM_{2.5} in non-attainment and maintenance areas. The newly established criteria and procedures require that those areas designated as nonattainment areas must undergo a regional conformity analysis for PM_{2.5}. Furthermore, the procedures also mandate that areas designated as non-attainment must complete an additional project-level PM_{2.5} hot-spot analysis of localized impacts for transportation projects of air quality concern.

On December 14, 2009, EPA designated the Bay Area as non-attainment for the national 24-hour PM_{2.5} standard based upon violations of the standard over the three-year period from 2007 through 2009. Pursuant to the Clean Air Act, the Bay Area and MTC were subject to the requirement (beginning on December 14, 2010) to demonstrate that the RTP and TIP conformed to the SIP. In addition, beginning

on December 14, 2010, certain roadway and transit projects that involve significant levels of diesel vehicle traffic needed to prepare PM_{2.5} hot-spot analyses.

National 8-Hour Carbon Monoxide Standard

In April 1998, the Bay Area was re-designated to a “maintenance area” for the national 8-hour carbon monoxide (CO) standard, having demonstrated attainment of the standards. As a maintenance area, the region must assure continued attainment of the CO standard.

Approved Motor Vehicle Emissions Budgets and Conformity Tests

The Bay Area has conformity requirements for national ozone, CO, and PM_{2.5} standards. Under the ozone and CO standard, the Bay Area has to meet an on-road motor vehicle emission “budget” test. Because the Bay Area does not have on-road motor vehicle emission budgets for PM_{2.5} that have been determined to be adequate by EPA, it has to meet an emission interim test for the PM_{2.5} standard. To make a positive conformity finding for ozone and CO, MTC must demonstrate that the calculated on-road motor vehicle emissions in the region are lower than the approved budgets. To make a positive “interim” conformity finding for PM_{2.5}, MTC must meet “build not greater than no build” or “build not greater than baseline year” tests based on PM_{2.5} exhaust, tire wear, and brake wear, and NO_x as a PM_{2.5} precursor, emissions.

On-road motor vehicle emissions budgets for VOC and NO_x, which are ozone precursors, were developed for the 2006 attainment year as part of the 2001 1-hour Ozone Attainment Plan. The VOC and NO_x budgets were found to be adequate by EPA on February 14, 2002 (67 FR 8017), and were subsequently approved by EPA on April 22, 2004 (69 FR 21717). Note that under EPA’s conformity rule for the national 8-hour ozone standard, the existing 1-hour on-road motor vehicle emission budgets are to be used for conformity analyses until they are replaced.

For CO, the applicable on-road motor vehicle emissions budget was developed for the 2004 Revisions to the California State Implementation Plan for Carbon Monoxide (herein referred to as the 2004 Carbon Monoxide Maintenance Plan).

The on-road motor vehicle emission budgets are listed below:

- VOC: 164 tons per day (2006 and beyond)
- NO_x: 270.3 tons per day (2006 and beyond)
- CO: 1,850 tons per day (2003 and 2018 and beyond)

For PM_{2.5}, initially the Bay Area was required to prepare a SIP by December 2012 to show how the region would attain the standard by December 2014. In addition, although the Bay Area was designated as non-attainment for the national 24-hour PM_{2.5} standard based on monitoring data for the 2006-2008 period, the region exceeded the standard by only a slight margin.

Monitoring data shows that the Bay Area currently meets the national standards for both annual and 24-hour PM_{2.5} levels. However, because the health effects of PM are serious and far-reaching, and no safe threshold of exposure to PM has yet been identified, it is important that we continue efforts to further reduce PM emissions and concentrations.³

³ See BAAQMD’s 2017 *Clean Air Plan: Spare the Air, Cool the Climate* at: <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>

Under US EPA guidelines, a region with monitoring data showing that it currently attains an air quality standard can submit a “re-designation request” and a “maintenance plan” in lieu of a SIP attainment plan. However, the BAAQMD believes that it would be premature to submit a PM_{2.5} re-designation request for the Bay Area at this time. Instead, the BAAQMD has pursued another option provided by US EPA guidelines for areas with monitoring data showing that they currently meet the PM_{2.5} standard. In December 2011, CARB submitted a “clean data finding” request on behalf of the Bay Area. On January 9, 2013, EPA took final action and determined that the Bay Area attained the 2006 24-hour PM_{2.5} standard. EPA’s determination was based on complete, quality-assured, and certified ambient air monitoring data showing that the area monitored attainment based on the 2009-2011 monitoring period. Based on EPA’s determination, the requirements for the Bay Area to submit an attainment demonstration, together with RACMs, an RFP plan, and contingency measures for failure to meet RFP and attainment deadlines are suspended for so long as the region continues to attain the 2006 24-hour PM_{2.5} standard.

Since an approved on-road motor vehicle emissions budget for PM_{2.5} is not available for use in this conformity analysis, MTC must complete one of the two interim emissions tests:

- the build-no-greater-than-no-build test (“build/no-build test”) found at 40 CFR 93.119(e)(1), or
- the no-greater-than-baseline year emissions test (“baseline year test”), described at 40 CFR 93.119(e)(2).

Per the interagency consultation via the Air Quality Conformity Task Force meeting dated May 28, 2015, MTC elected to use the “baseline year test”. In this test, conformity is demonstrated if in each analysis year, the RTP or TIP (the “build” scenarios) on-road motor vehicle emissions are less than or equal to emissions in the “baseline year” emission inventory. The “baseline year” for the 2006 24-hour PM_{2.5} standard is the year 2008⁴.

Under a determination of conformity, the following criteria are applied:

1. The latest planning assumptions and emission models are used.
The transportation plan (“RTP”) and program (“TIP”) pass an emissions budget test using a budget that has been found adequate by EPA or an interim emissions test when budgets have not been established.
2. The transportation (“RTP”) and program (“TIP”) provide for the timely implementation of TCMs.
3. Interagency and public consultation is part of the process.

III. Conformity Analysis & Results

Approach to Conformity Analysis

The latest planning assumptions were used when preparing this conformity analysis. Regional estimates of future travel data were estimated using MTC’s land use model (referred to as “*Bay Area UrbanSim*”) and travel model (referred to as “*Travel Model One*”). This integrated model framework allows for analysis of how transportation projects affect the surrounding land use pattern, as well as how changes to residential and commercial activity affect transportation demand. *Travel Model One* (version 0.6)

⁴ Additional information is available here: <https://www.epa.gov/state-and-local-transportation/baseline-year-baseline-year-test-40-cfr-93119>

released in July 2016, is calibrated to year 2000 conditions and validated against year 2000, year 2005, and year 2010 conditions. The model generates spatially- and temporally- specific estimates of travel data—roadway usage and speed. This travel data is input into CARB’s latest Emission FACTors (EMFAC2014) model to estimate on-road motor vehicle emissions.

The EMFAC2014 model shows how California on-road motor vehicle emissions have changed over time and are projected to change in the future. This information helps CARB evaluate prospective control programs and determine the most effective, science-based proposals for protecting the environment. EMFAC2014 includes the latest data on California’s car and truck fleets and travel activity. The model also reflects the emissions benefits of CARB’s recent rulemakings, including on-road diesel fleet rules, Advanced Clean Car Standards, and the Smartway/Phase I Heavy Duty Vehicle Greenhouse Gas Regulation. The model includes updates to truck emission factors based on the latest test data. More details about the updates in emissions calculation methodologies and data are available in the EMFAC2014 Technical Support Document.⁵

*Bay Area UrbanSim*⁶ and *Travel Model One* are responsive to numerous inputs, including demographic, pricing, travel behavior, and highway and transit network assumptions. For this conformity analysis, the two models use demographic and highway and transit network assumptions consistent with Draft Plan Bay Area 2040⁷. Highway and transit networks were updated for each analysis year to reflect investments in Draft Plan Bay Area 2040 (see Appendix A) and the Amended 2017 TIP (see Appendix B). Pricing assumptions applied in *Travel Model One* include projected parking prices, gasoline and non-gasoline auto operating costs, fuel economy, bridge tolls, transit fares, and express lanes. Travel behavior assumptions include trip peaking factors, vehicle occupancy factors, and estimates of interregional commuters. Refer to Appendix C for detailed travel modeling assumptions used in this conformity analysis.⁸

Regional vehicle miles traveled (VMT) and engine starts (which are needed for emission calculations) are forecasted using a combination of output from *Travel Model One* and base year (2010) EMFAC2014 default VMT information provided by the CARB. For conformity purposes, MTC continues to employ the agreed to protocol for estimating VMT with updated 2010 base year data.

A separate process was used to develop demographic assumptions for the PM_{2.5} “baseline year” of 2008. *Bay Area UrbanSim* generates Transportation Analysis Zone (TAZ)-level data set in 5-year increments. The calculation of data for the interim year 2008 requires a multi-stop process. First, regional control totals for each attribute are calculated using straight-line extrapolations between the two adjacent 5-year increments (2005 and 2010). Next, each TAZ’s share of the regional total is calculated by extrapolation of the two adjacent 5-year increments. Finally, individual TAZ totals are calculated by multiplying the interim year TAZ share of the regional total by the regional control total.

⁵ Additional information is available here: <http://www.arb.ca.gov/msei/categories.htm>

⁶ Additional information is available here: http://2040.planbayarea.org/sites/default/files/2017-03/Land_Use_Modeling_DPBA2040_Supplemental%20Report_3-2017_0.pdf

⁷ Additional information is available here: <http://www.planbayarea.org/2040-plan/final-preferred-scenario>

⁸ Additional information is available here: http://2040.planbayarea.org/sites/default/files/2017-03/Travel_Modeling_PBA2040_Supplemental%20Report_3-2017.pdf

This document is part of the new Draft Plan Bay Area 2040 scenario planning/development effort and the technical methods and assumptions used in this effort are consistent with what is applied in this conformity analysis.

Analysis Years

The analysis years for the budget and baseline year tests are to be a year within five years from the date the analysis is done, the horizon year of the RTP and intermediate years as necessary so that analysis years are not more than ten years apart. For this conformity analysis, the analysis years 2020, 2030 and 2040 for the 2008 ozone and 2006 PM_{2.5} standards. For CO, the analysis years are 2018, 2020, 2030 and 2040. Travel data for year 2018 were interpolated between forecasted 2015 and 2020 travel data. MTC used *Travel Model One* to forecast travel data for the 2020, 2030 and 2040 analysis years. The forecasted travel data for each analysis year were then input into the EMFAC2014 model to calculate on-road motor vehicle emissions.

Consultation Process

MTC has consulted on the preparation of this conformity analysis and other conformity related issues with the Bay Area's Air Quality Conformity Task Force. The Conformity Task Force is composed of representatives of EPA, CARB, FHWA, FTA, Caltrans, MTC, BAAQMD, ABAG, the nine county Congestion Management Agencies, and Bay Area transit operators. The Conformity Task Force reviews the analysis assumptions, consults on TCM implementation issues, and reviews the results of the conformity analysis. The task force meetings are open to the public. Topics covered in past meetings of the Air Quality Conformity Task Force include the following:

February 2017 through March 2017

- PM_{2.5} Project-Level Conformity Interagency Consultations
- Discussions on Projects with Regional Air Quality Conformity Concerns

April 2017

- PM_{2.5} Project-Level Conformity Interagency Consultations
- Discussions on Projects with Regional Air Quality Conformity Concerns
- Approach to Conformity Analysis for Draft Plan Bay Area 2040 and the Amended 2017 TIP

May and June 2017

- PM_{2.5} Project-Level Conformity Interagency Consultations
- Complete the Conformity Analysis for Draft Plan Bay Area 2040 and the Amended 2017 TIP and respond to public comments

Comparison of Motor Vehicle Emissions to Budgets

As explained earlier, on-road motor vehicle emissions budgets are established in the SIP for VOCs, NO_x and carbon monoxide (CO). To make a positive conformity finding, the regional on-road motor vehicle emissions must be equal to or less than these budgets. The results of the vehicle activity forecasts and on-road motor vehicle emission calculations are described in the following section.

Ozone Motor Vehicle Emission Budgets

For VOC and NO_x, the on-road motor vehicle emission budget also reflects anticipated emission reductions from five Transportation Control Measures (TCMs) incorporated in the 2001 Ozone Attainment Plan (Table 1).

Table 1: VOC and NO_x Emissions Budgets from 2001 Ozone Attainment Plan (tons/day)

VOC	
2006 On Road Motor Vehicle Emissions	168.5
2006 Mobile Source Control Measure Benefits	(4.0)
2006 TCM Benefits	(0.5)
2006 Emissions Budget	164.0
NO _x	
2006 On Road Motor Vehicle Emissions	271.0
2006 TCM Benefits	(0.7)
2006 Emissions Budget	270.3

The vehicle activity forecasts by analysis year for Draft Plan Bay Area 2040 and the Amended 2017 TIP (the “build” scenarios) are shown in Table 2. Travel data (from MTC’s *Travel Model One*) was input into CARB’s EMFAC2014 emissions model, thereby generating regional vehicle activity and emissions estimates.

The analysis years for the budget and baseline year tests are to be a year within five years from the date the analysis is done, the horizon year of the RTP and intermediate years as necessary so that analysis years are not more than ten years apart. For this conformity analysis, the analysis years 2020, 2030 and 2040 for the 2008 ozone and 2006 PM_{2.5} standards. For CO, the analysis years are 2018, 2020, 2030 and 2040. Travel data for year 2018 were interpolated between forecasted 2015 and 2020 travel data. Travel data for 2020, 2030 and 2040 were forecasted by *Travel Model One*. The forecasted travel data for each analysis year were then input into the EMFAC2014 model to calculate on-road motor vehicle emissions.

Table 2: Vehicle Activity Forecasts

	2020	2030	2040
Vehicles in use	4,693,975	5,503,129	6,230,199
Daily VMT (1000s)	167,203	182,504	195,595
Daily Engine Starts	29,276,669	34,101,782	38,509,838

Carbon Monoxide Maintenance Plan Budget

The budget for carbon monoxide (CO) is derived from the 2004 Carbon Monoxide Maintenance Plan. The emission budget for the Bay Area is 1,850 tons per day. This budget applies to all subsequent analysis years as required by federal conformity regulation, including any interim year conformity analyses, the 2018 horizon year, and years beyond 2018.

Comparison of Estimated Regional On-Road Motor Vehicle Emissions to the Ozone Precursor and CO Budgets

The vehicle activity forecasts for Draft Plan Bay Area 2040 and the Amended 2017 TIP, Table 2, are converted to emission estimates by MTC using EMFAC2014. Tables 3 and 4 compare the results of the

various analyses with the applicable budgets. The analyses indicate that the on-road motor vehicle emissions are substantially below the budget, due in large part to the effects of cleaner vehicles in the California fleet and the enhanced Smog Check program now in effect in the Bay Area and reflected in the EMFAC2014 model. With respect to the new Maintenance Plan on-road motor vehicle emission budget for CO, Table 4 shows that calculated emissions will be well below the new budget of 1,850 tons per day in 2018 as well.

Table 3: Emissions Budget Comparisons for Ozone Precursors – Summertime Conditions (tons/day)

<i>Year</i>	<i>VOC Budget¹</i>	<i>On-Road Motor Vehicles VOC</i>	<i>TCMs²</i>	<i>Net Emissions</i>
2020	164.0	35.95	(0.3)	35.65
2030	164.0	24.04	(0.3)	23.74
2040	164.0	18.52	(0.3)	18.22

<i>Year</i>	<i>NO_x Budget</i>	<i>On-Road Motor Vehicles NO_x</i>	<i>TCMs²</i>	<i>Net Emissions</i>
2020	270.3	65.04	(0.5)	64.54
2030	270.3	32.87	(0.5)	32.37
2040	270.3	28.95	(0.5)	28.45

¹ 2001 Ozone Attainment Plan

² The transit services for TCM A Regional Express Bus Program were modeled. The emission benefits from TCM A are therefore included in the On-Road Motor Vehicles VOC and NO_x emission inventories for 2006 and beyond.

Table 4: Emissions Budget Comparisons for Carbon Monoxide – Wintertime Conditions (tons/day)

<i>Year</i>	<i>2004 CO Budget¹</i>	<i>Estimated CO</i>
2018	1,850	319.66 ²
2020	1,850	252.10
2030	1,850	147.86
2040	1,850	118.69

¹ 2004 Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for 10 Federal Planning Areas

² Estimated CO emissions for 2018 are extrapolated from the 2015 and 2020 analysis year data.

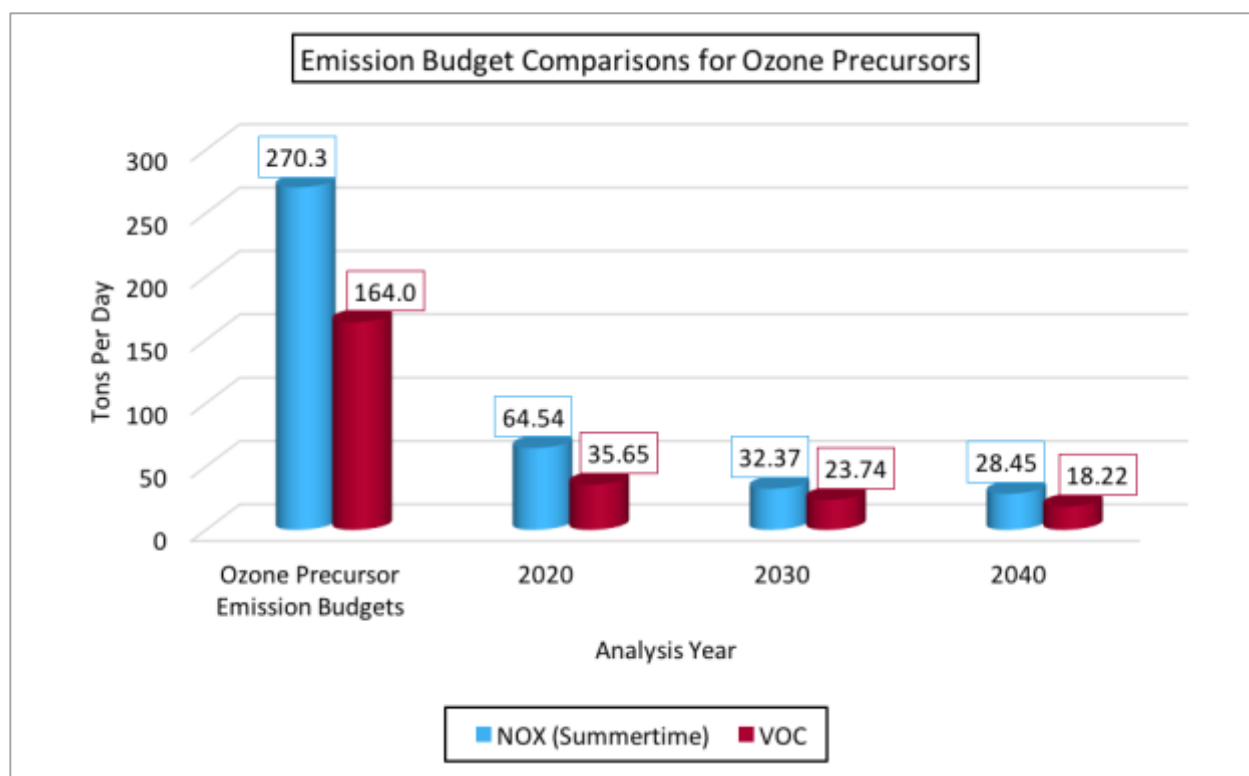


Figure 2: Emissions Budget Comparisons for Ozone Precursors

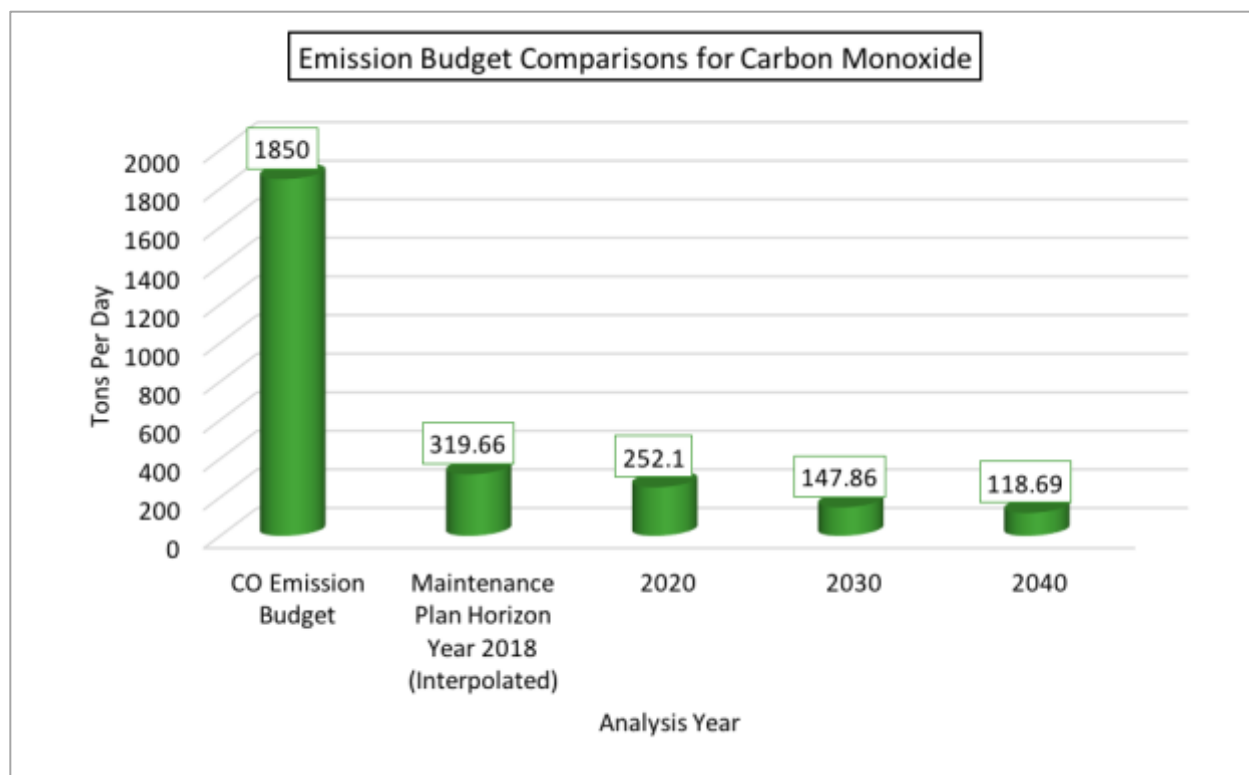


Figure 3: Emissions Budget Comparison for Carbon Monoxide

The estimated effectiveness of the various TCMs, given their current implementation status is shown in Table 5. TCMs A through E are fully implemented. They have achieved the required cumulative total emission reductions of 0.5 tons per day of VOC and 0.7 tons per day of NO_x by 2006.

Table 5: Emission Reductions for Transportation Control Measures A – E in State Implementation Plan (tons/day)

TCM	VOC Emission Reductions through December 2006	NO _x Emission Reductions through December 2006
TCM A: Regional Express Bus Program	0.20	0.20
TCM B: Bicycle/Pedestrian Program	0.04	0.03
TCM C: Transportation for Livable Communities	0.08	0.12
TCM D: Expansion of Freeway Service Patrol	0.10	0.25
TCM E: Transit Access to Airports	0.09	0.13
Total Reductions	0.5	0.7

Baseline Year Emissions Test for PM_{2.5}

For the baseline year test, emissions for both directly emitted PM_{2.5} and NO_x (as the precursor to PM_{2.5} emissions) were compared to the analysis years of 2015, 2020, 2030 and 2040. The analysis used inputs for the winter season, during which the Bay Area experiences its highest levels of PM_{2.5} concentrations.

The vehicle activity forecasts by analysis year for Draft Plan Bay Area 2040 and the Amended 2017 TIP (the “build” scenarios) are shown in Table 6. Travel data (from MTC’s *Travel Model One*) was input into CARB’s EMFAC2014 emissions model, thereby generating regional vehicle activity and emissions estimates.

Table 7 presents the results of the Baseline Year test for the PM_{2.5} emissions and the NO_x precursor for the 2006 24-hour PM_{2.5} standard. Regional conformity analyses must be completed for directly emitted PM_{2.5} (40 CFR 93.102(b)(1)). Directly emitted PM_{2.5} includes exhaust, brake and tire wear emissions.

Table 6: Vehicle Activity Forecasts for the PM_{2.5} Baseline Year Test

	2008	2020	2030	2040
<i>Baseline Year</i>				
Vehicles In Use	4,631,001	4,693,975	5,503,129	6,230,199
Daily VMT (1000s)	154,100	167,203	182,504	195,595
Engine Starts	29,299,933	29,276,669	34,101,782	38,509,838

Table 7: Emissions Comparison for the PM_{2.5} Baseline Year Test

	2008	2020	2030	2040
<i>Baseline Year</i>				
PM _{2.5}	8.26	4.52	4.44	4.60
NO _x	194.58	60.00	27.12	23.06

¹ Emissions for wintertime only

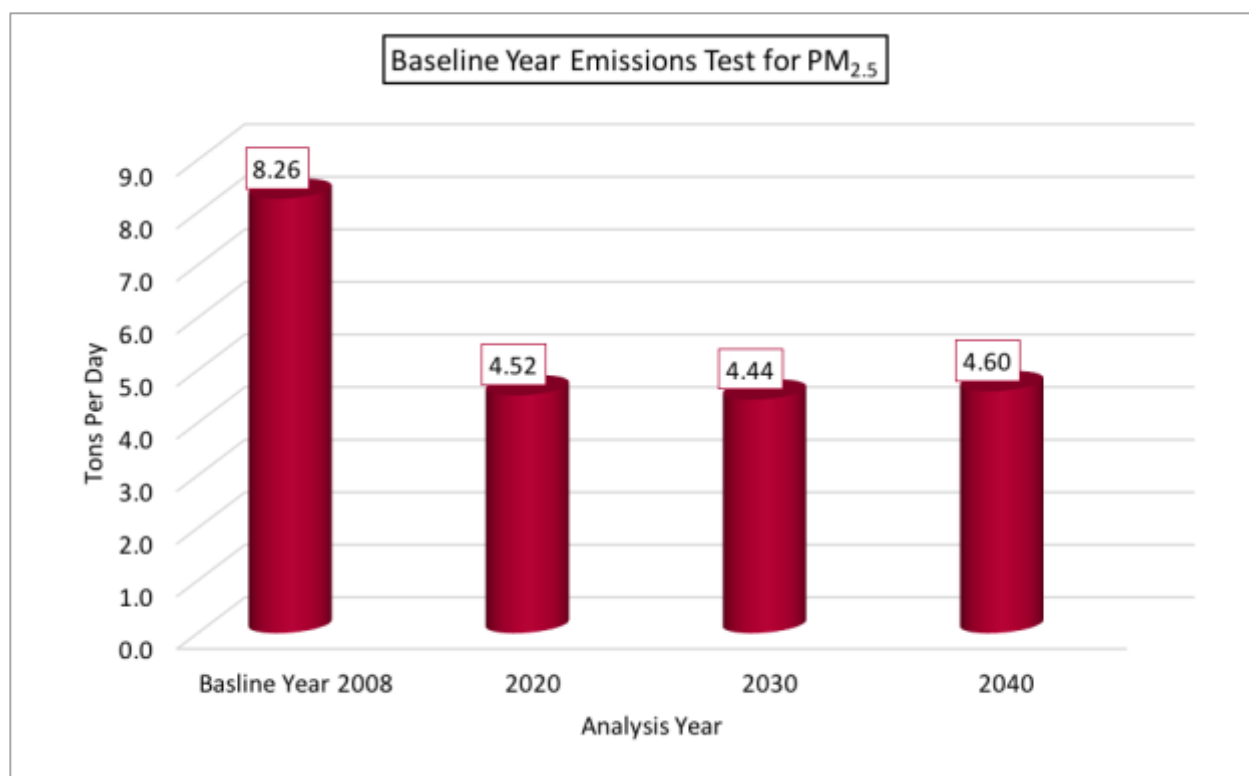


Figure 4: Baseline Year Emissions Test for PM_{2.5}

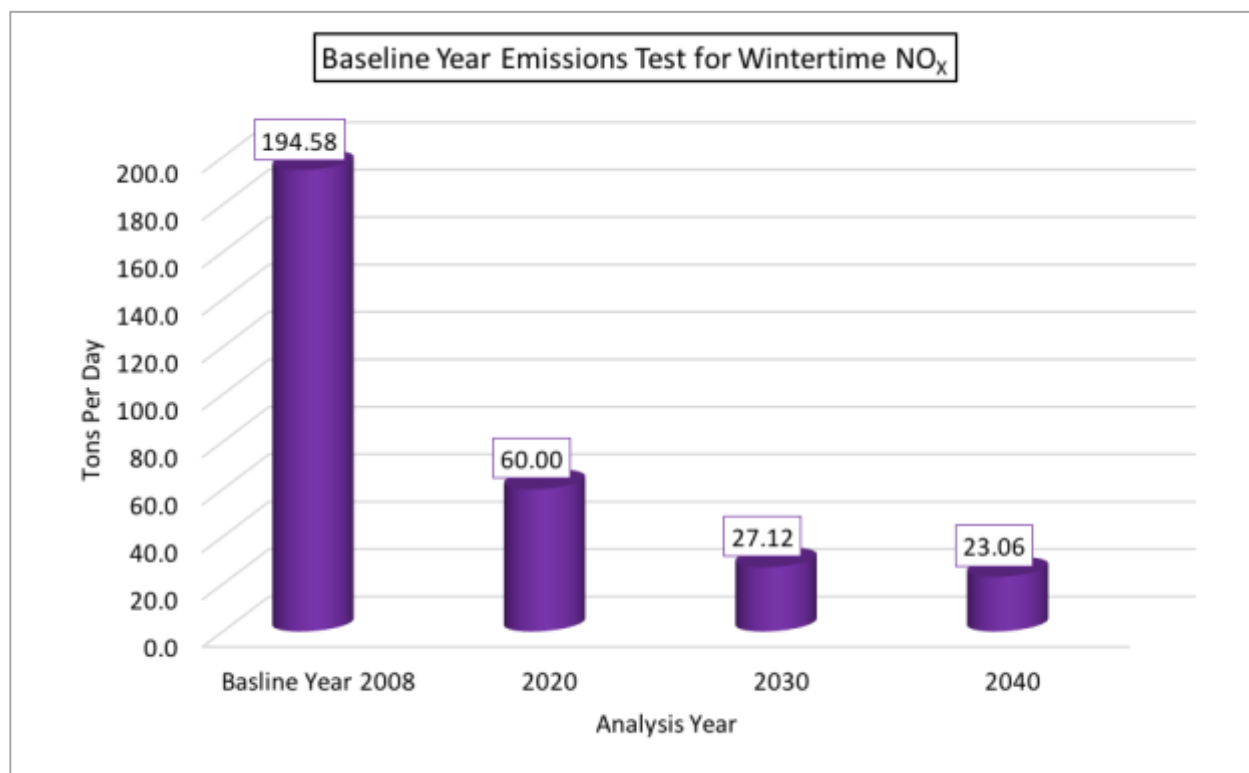


Figure 5: Baseline Year Emissions Test for Wintertime NO_x

IV. Transportation Control Measures

History of Transportation Control Measures

TCMs are strategies to reduce vehicle emissions. They include such strategies as improved transit service and transit coordination, ridesharing services and new carpool lanes, signal timing, freeway incident management, increased gas taxes and bridge tolls to encourage use of alternative modes, etc. The original set of TCMs plus the five most recent TCMs (A-E) have been fully implemented. The TCMs were added over successive revisions to the SIP (see Table 8). For more information on TCMs 1-28, which are completed, see the *Transportation Air Quality Conformity Analysis for the 2001 Regional Transportation Plan and FY 2001 Transportation Improvement Program Amendment 01-32 (February 2002)*. This report can be found in the MTC/ABAG Library.

- Twelve (12) ozone measures were originally listed in the 1982 Bay Area Air Quality Plan.
- In response to a 1990 lawsuit in the federal District Court, sixteen (16) additional TCMs were subsequently adopted by MTC in February 1990 as contingency measures to bring the region back on the “Reasonable Further Progress” (RFP) line. The Federal District order issued on May 11, 1992, found that these contingency TCMs were sufficient to bring the region back on the RFP track anticipated in the SIP. These measures became part of the SIP when EPA approved the 1994 Ozone Maintenance Plan.
- Two (2) transportation control measures from the 1982 Bay Area Air Quality Plan apply to Carbon Monoxide control strategies, for which the region is in attainment with the federal standard, and primarily targeted downtown San Jose (which had the most significant CO problem at that time.) MTC also adopted a set of TCM enhancements in November 1991 to eliminate a shortfall in regional carbon monoxide emissions identified in the District Court’s April 19, 1991, order. Carbon monoxide standards have been achieved primarily through the use of oxygenated/reformulated fuels in cars and with improvements in the Smog Check program.
- As part of EPA’s partial approval/partial disapproval of the 1999 Ozone Attainment Plan, four (4) TCMs were deleted from the ozone plan (but two of these remain in the Carbon Monoxide Maintenance Plan).
- Five (5) new TCMs were adopted as part of the new 2001 1-Hour Ozone Attainment Plan and were fully funded in the 2001 TIP and 2001 Regional Transportation Plan.

With respect to TCM 2 from the 1982 SIP, there was a protracted debate, leading to a citizens lawsuit in federal court, about the obligations associated with this TCM. On April 6, 2004, MTC prevailed in the U.S. Court of Appeals for the Ninth Circuit which concluded that TCM 2 does not impose any additional enforceable obligation on MTC to increase ridership on public transit ridership by 15% over 1982-83 levels by November 2006 (*Bayview Hunters Point Community Advocates v. Metropolitan Transportation Com’n*, (2004 WL 728247, 4 Cal. Daily Op. Serv. 2919, 2004 Daily Journal D.A.R. 4209, 9th Cir.(Cal.), Apr 06, 2004)). Thus TCM 2 has been resolved, and there are no further implementation issues to address in this TCM.

Table 8: Transportation Control Measure in the State Implementation Plan

TCM	Description
Original TCMs from 1982 Bay Area Air Quality Plan	
TCM 1	Reaffirm Commitment to 28 percent Transit Ridership Increase Between 1978 and 1983
TCM 2	Support Post-1983 Improvements in the Operators' Five-Year Plans and, After Consultation with the Operators, Adopt Ridership Increase Target for the Period 1983 through 1987
TCM 3	Seek to Expand and Improve Public Transit Beyond Committed Levels
TCM 4	High Occupancy Vehicle (HOV) Lanes and Ramp Metering
TCM 5	Support RIDES Efforts
TCM 6 ¹	Continue Efforts to Obtain Funding to Support Long Range Transit Improvements
TCM 7	Preferential Parking
TCM 8	Shared Use Park and Ride Lots
TCM 9	Expand Commute Alternatives Program
TCM 10	Information Program for Local Governments
TCM 11 ²	Gasoline Conservation Awareness Program (GasCAP)
TCM 12 ²	Santa Clara County Commuter Transportation Program
Contingency Plan TCMs Adopted by MTC in February 1990 (MTC Resolution 2131)	
TCM 13	Increase Bridge Tolls to \$1.00 on All Bridges
TCM 14	Bay Bridge Surcharge of \$1.00
TCM 15	Increase State Gas Tax by 9 Cents
TCM 16 ¹	Implement MTC Resolution 1876, Revised — New Rail Starts
TCM 17	Continue Post-Earthquake Transit Services
TCM 18	Sacramento-Bay Area Amtrak Service
TCM 19	Upgrade Caltrain Service
TCM 20	Regional HOV System Plan
TCM 21	Regional Transit Coordination
TCM 22	Expand Regional Transit Connection Ticket Distribution
TCM 23	Employer Audits
TCM 24	Expand Signal Timing Program to New Cities
TCM 25	Maintain Existing Signal Timing Programs
TCM 26	Incident Management on Bay Area Freeways
TCM 27	Update MTC Guidance on Development of Local TSM Programs
TCM 28	Local Transportation Systems Management (TSM) Initiatives
New TCMs in 2001 Ozone Attainment Plan	
TCM A	Regional Express Bus Program
TCM B	Bicycle/Pedestrian Program
TCM C	Transportation for Livable Communities
TCM D	Expansion of Freeway Service Patrol
TCM E	Transit Access to Airports

¹ Deleted by EPA action from ozone plan

² Deleted by EPA action from ozone plan, but retained in Carbon Monoxide Maintenance Plan.

Source: Bay Area Air Quality Management District, Metropolitan Transportation Commission, 2001.

Status of Transportation Control Measures

TCMs A-E were approved into the SIP as part of EPA's Finding of Attainment for the San Francisco Bay Area (April 2004). The conformity analysis must demonstrate that TCMs are being implemented on schedule (40 CFR 93.113). TCMs A-E have specific implementation steps which are used to determine progress in advancing these TCMs (see Table 9). TCMs A-E are now fully implemented.

Table 9: Implementation Status of Federal Transportation Control Measures for Ozone (A – E)

#	TCM	Description	Ozone Attainment Plan Implementation Schedule	Implementation Status
A	Regional Express Bus Program	Program includes purchase of approximately 90 low emission buses to operate new or enhanced express bus services. Buses will meet all applicable CARB standards, and will include particulate traps or filters. MTC will approve \$40 million in funding to various transit operators for bus acquisition. Program assumes transit operators can sustain service for a five-year period. Actual emission reductions will be determined based on routes selected by MTC.	FY 2003. Complete once \$40 million in funding pursuant to Government Code Section 14556.40 is approved by the California Transportation Commission and obligated by bus operators	\$40 million for this program was allocated by the CTC in August 2001. The participating transit operators have ordered and received a total of 94 buses. All buses are currently in operations. TCM A is fully implemented.
B	Bicycle / Pedestrian Program	Fund high priority projects in countywide plans consistent with TDA funding availability. MTC would fund only projects that are exempt from CEQA, have no significant environmental impacts, or adequately mitigate any adverse environmental impacts. Actual emission reductions will be determined based on the projects funded.	FY 2004 – 2006. Complete once \$15 million in TDA Article 3 is allocated by MTC.	MTC allocated over \$20 million in TDA Article 3 funds during FY2004, FY2005, and FY2006. TCM B is fully implemented.
C	Transportation for Livable Communities (TLC)	Program provides planning grants, technical assistance, and capital grants to help cities and nonprofit agencies link transportation projects with community plans. MTC would fund only projects that are exempt from CEQA, have no significant environmental impacts, or adequately mitigate any adverse environmental impacts. Actual emission	FY 2004 – 2006. Complete once \$27 million in TLC grant funding is approved by MTC	In December 2003, the Commission reaffirmed its commitment of \$27 million annually over 25 years for the TLC program as part of Phase 1 of the Transportation 2030 Plan. MTC and the county Congestion Management Agencies (CMAs) have approved over \$27 million in TLC grant funding by FY 2006. In November 2004, MTC approved \$500,000 for regional TLC

reductions will be based on the projects funded.

Community Design Planning Program, and in December 2004, MTC approved \$18.4 million in TLC funding for the regional TLC Capital program. As of December 2006, CMAs in Alameda, Marin and Sonoma counties approved an additional \$12.4 million in their county-level TLC Capital programs for a regional total of \$31.2 million.

TCM C is fully implemented.

D	Additional Freeway Service Patrol	Operation of 55 lane miles of new roving tow truck patrols beyond routes which existed in 2000. TCM commitment would be satisfied by any combination for routes adding 55 miles. Tow trucks used in service are new vehicles meeting all applicable CARB standards.	FY 2001. Complete by maintaining increase in FSP mileage through December 2006	FSP continues to maintain the operation of the 55 lane miles of new roving tow truck coverage. This level of service was maintained through 2006. FSP continues to expand its service areas. TCM D is fully implemented.
E	Transit Access to Airports	Take credit for emission reductions from air passengers who use BART to SFO, as these reductions are not included in the Baseline.	BART – SFO service to start in FY 2003. Complete by maintaining service through December 2006	Service began June 2003. Service adjustments have been made since start of revenue service. The BART to SFO service has been maintained through 2006 and is continued. TCM E is fully implemented.

V. Response to Public Comments

The following section identifies revisions to the Draft Transportation-Air Quality Conformity Analysis. The revisions are listed in the order of the appearance in which the text appears. These are minor changes that merely clarify, amplify, or make insignificant modifications to the Draft Transportation-Air Quality Conformity Analysis.

Section II. Bay Area Air Pollutant Designations

Page 4, paragraphs 1-2, under heading “National 1-Hour Ozone Standard” have been revised as follows:

~~The Bay Area was initially designated as nonattainment for ozone on March 3, 1978. On November 6, 1991, the EPA designated the Bay Area as a moderate ozone non-attainment area. Based on “clean” air monitoring data from 1990 to 1993 1992, the co-lead agencies—BAAQMD, MTC, and ABAG—determined that the Bay Area was attaining the the 1-hour ozone violations had occurred standard and requested that CARB to forward a re-designation request and an ozone maintenance plan to EPA. ¶~~

~~On May 25, 1995, after evaluating 1990-1992 monitoring data and determining that the Bay Area was classified had continued to attain the standard, the EPA redesignated the Bay Area as an ozone maintenance area, having attained. Shortly thereafter, the 1-hour national ozone area began violating the standard for five years (1990-1994). However, again and on July 10, 1998, the EPA published a Notice of Final Rulemaking re-designating redesignating the Bay Area back to an ozone non-attainment (unclassified) area. This action was due to violations of the 1-hour standard that occurred during the summers of 1995 and 1996, and became final effective on August 10, 1998. ¶~~

Page 4, after paragraph 2, under heading “National 1-Hour Ozone Standard” has been revised to include:

~~The redesignation to nonattainment triggered an obligation for the State to submit a SIP revision designed to provide for attainment of the 1-hour ozone NAAQS by November 15, 2000. This revision (the San Francisco Bay Area Ozone Attainment Plan for the 1-hour National Ozone Standard—June 1999 or “1999 Plan”) was partially approved and partially disapproved by EPA on September 20, 2001 in conjunction with a determination that the area had failed to attain by the November 2000 deadline. The attainment demonstration and its associated motor vehicle emissions budgets were among the plan elements that were disapproved. ¶~~

Page 4, paragraphs 3 and 4, under heading “National 1-Hour Ozone Standard” have been revised as follows:

~~As a result of the EPA's finding of failure to attain and partial disapproval of the 1999 Plan, the State was required to submit a SIP revision for the Bay Area to EPA by September 20, 2002 that included an updated volatile organic compounds (VOC) and nitrogen oxides (NOX) emissions inventory, new transportation conformity budgets, and provided for attainment of the 1-hour ozone standard no later than September 20, 2006. On November 1, 2001, CARB approved the San Francisco Bay Area 2001 Ozone Attainment Plan for the 1-Hour National Ozone Standard (2001 Plan) as a revision to the SIP. The BAAQMD and its co-lead agencies, MTC) and ABAG adopted the 2001 Plan on October 26, 2001. ¶~~

~~BAAQMD prepared the 2001 Plan because the Bay Area failed to attain the federal ozone standard by its 2000 deadline. As a result, EPA disapproved the Bay Area's 1999 Plan and required a new plan with an updated volatile organic compounds (VOC) and nitrogen oxides (NO_x) emissions inventory, new transportation conformity budgets, and that shows attainment of the federal ozone standard by 2006. ¶~~

Page 5, paragraphs 2 and 3, under heading "National 1-Hour Ozone Standard" have been revised as follows:

~~On November 30, 2001, ARB submitted the 2001 Plan, which included VOC and NO_x motor vehicle emissions budgets (164.0 tons per day (tpd) and 270.3 tpd, respectively) for the 2006 attainment year, to EPA for approval as a revision to the California SIP. To support the on-road motor vehicle emission inventory and transportation conformity budgets in the Plan, CARB also transmitted the San Francisco Bay Area-EMFAC2000 model to EPA for approval for the Bay Area ozone non-attainment area. On February 14, 2002, the EPA found the motor vehicle emissions budgets in the 2001 Plan adequate for transportation conformity purposes, based on its preliminary determination that the plan provided for timely attainment of the 1-hour ozone standard. ¶~~

~~On October 31, 2003, EPA proposed a finding of attainment of the national 1-hour ozone standard for the Bay Area. The proposed finding was April 22, 2004, based on air quality monitoring data from the 2001, 2002, and 2003 ozone seasons. In April 2004, EPA made a final finding season, EPA determined that the Bay Area had attained the national 1-hour ozone standard. s. Because of this finding, determination, requirements for some of the elements of the 2001 Ozone Attainment Plan, submitted to EPA to demonstrate attainment of the 1-hour standard, were suspended. The finding determination of attainment did not mean the Bay Area had been reclassified, redesignated as an attainment area for the 1-hour standard. To be reclassified, redesignated, the region would have had to submit a formal redesignation request to EPA, along with a maintenance plan showing how the region would continue to attain the standard for ten years. However, this redesignation request was no longer necessary upon the establishment of the new national 8-hour ozone standard. ¶~~

Page 5, paragraph 2, under heading "National 1-Hour Ozone Standard" has been revised as follows:

On April 15, 2004, EPA issued the first phase of the final implementation rule designating and classifying areas not meeting the federal 8-hour ozone standard. It also established a process for transitioning from implementing the 1-hour standard for ozone to implementing the more protective 8-hour ozone standard. The rule also established attainment dates for the 8-hour standard and the timing of emissions reductions needed for attainment. The 8-hour designations and classifications took effect on June 15, 2004; and one year following this effective date, EPA revoked the 1-hour standard. On July 1, 2004, EPA published a final rule amending the transportation conformity rule to address the new national 8-hour ozone standard. The amended rule stated that RTPs and TIPs in non-attainment areas must be found to conform against the new standard by one year after the effective date of designation which was June 15, 2005, for 8-hour ozone areas. ¶

Page 6, paragraphs 2-5, under heading “National 8-Hour Ozone Standard” have been revised as follows:

Concurrent with this designation rule, EPA released an additional final rule that established the approach for classifying non-attainment areas, set attainment deadlines, granted reclassification for selected non-attainment areas in California, and revoked the 1997 ozone standard for transportation conformity purposes. The grace period for showing conformity to the 2008 O₃ standard was started by the May 21, 2012, (77 FR 30088) publication of designations for this standard. The grace period for completing these conformity analyses ended on July 20, 2013. ¶

On February 13, 2015, EPA issued a final rule that addresses a range of implementation requirements for the 2008 National Ambient Air Quality Standards (NAAQS) for ground-level ozone. The EPA set the final primary and secondary standards at 75 ppb on March 12, 2008. ¶

This final action specifically: ¶

- Establishes due dates for air agencies to submit state implementation plans (SIPs) demonstrating how areas designated as non-attainment for the 2008 ozone NAAQS will meet the standards by the appropriate attainment date; ¶
- Clarifies attainment dates for each non-attainment area according to its classification (established based on air quality thresholds); ¶
- Provides guidance on nearly all aspects of the attainment planning requirements for designated non-attainment areas; ¶
- Revokes the 1997 ozone NAAQS; and ¶
- Establishes anti-backsliding requirements for areas remaining non-attainment for the 1997 ozone NAAQS. ¶

¶

This final rule addresses a range of non-attainment area SIP requirements for the 2008 ozone NAAQS, including requirements pertaining to attainment demonstrations, reasonable further progress (RFP), reasonably available control technology (RACT), reasonably available control measures (RACM), major new source review (NSR), emission inventories, and the timing of SIP submissions and of compliance with emission control measures in the SIP. ¶

Page 6, paragraph 7, under heading “National 8-Hour Ozone Standard” has been revised as follows:

~~States made recommendations to EPA in October 2016, regarding whether their areas meet or do not meet the new NAAQS and EPA intends to issue final designations by October 1, 2017. Depending on the extent of the ozone problem, non-attainment areas would have from 2020 to 2037 to meet the health standard. Areas with longer to attain must meet increasing levels of stringency set forth in the Clean Air Act.~~

Page 6, after paragraph 8, under heading “National 8-Hour Ozone Standard” has been revised as:

Proposed implementation rule for the 2015 ozone standard was published November 17, 2016 (81 FR 81276) and proposed a framework for nonattainment area classifications and SIP requirements. In addition, the proposed rule largely follows approach adopted for the previous Classifications Rule and SIP Requirements Rule (SRR) for the 2008 ozone NAAQS.

On June 21, 2017, the Administrator of the U.S. Environmental Protection Agency (EPA) extended the deadline for designating areas for the 2015 national ambient air quality standards (NAAQS) for ground-level ozone by 1 year. The new deadline for area designations is October 1, 2018.

Page 7, paragraphs 1-2, under heading “National PM_{2.5} Standard” have been revised as follows:

~~In 1987, The EPA established a standard for particle pollution equal to or smaller than 10 micrometers in diameter. A decade later, the 1997 revision to the standard set the stage for change, when a separate standard was set for fine particulate matter, which (particles that are 2.5 micrometers in diameter and smaller). Citing the link between serious health problems and premature death in people with heart or lung disease, the 1997 revision ultimately distinguished and set forth regulation on particle pollutants known as particulate matter 2.5 (PM_{2.5}) and particulate matter 10 (PM₁₀). Based on air quality monitoring data, the Bay Area was found to be attaining the 1997 PM_{2.5} standards.~~

~~In 2006, the EPA revised the air quality standards for particle pollution. Regulations for PM_{2.5} were tightened for The 24-hour fine particle PM_{2.5} standard, which lowered was strengthened by lowering the level from 65 micrograms per cubic meter (µg/m³) to 35 µg/m³. The annual fine particle standard at 15 µg/m³ remained the same. In that same year Also in 2006, the EPA published a final ruling which rule that established transportation conformity criteria and procedures to determine transportation projects that required analysis for local air quality impacts for PM_{2.5} in non-attainment and maintenance areas. From the 2006 revision, EPA had to complete designations of non-attainment areas by December 2009 for national standard for PM_{2.5}. The newly established criteria and procedures require that those areas designated as non-attainment nonattainment areas must undergo a regional conformity analysis for PM_{2.5}. Furthermore, the procedures also mandate that areas designated as non-attainment must complete an additional project-level PM_{2.5} hot-spot analysis of localized impacts for transportation projects of air quality concern.~~

Appendix A, includes clerical revisions as follows:

RTPID	2020	2030	2040
17-10-0008	Yes	Yes	Yes
17-02-0046	Yes	Yes	Yes
17-05-0019	Yes	Yes	Yes
17-09-0010	Yes	Yes	Yes
17-02-0013	Yes	Yes	Yes
17-08-0010	Yes	Yes	Yes
17-07-0033	Yes	Yes	Yes

17-02-0010	Yes	Yes	Yes
17-02-0035	Yes	Yes	Yes
17-02-0016	Yes	Yes	Yes
17-07-0070	Yes	Yes	Yes
17-02-0033	Yes	Yes	Yes
17-02-0032	Yes	Yes	Yes
17-06-0040	Yes	Yes	Yes
17-05-0020	Yes	Yes	Yes
17-08-0012	Yes	Yes	Yes
17-02-0039	Yes	Yes	Yes
17-02-0026	Yes	Yes	Yes
17-01-0047	Yes	Yes	Yes
17-01-0041	Yes	Yes	Yes
17-02-0021	Yes	Yes	Yes
17-06-0023	Yes	Yes	Yes
17-03-0011	Yes	Yes	Yes
17-10-0049	Yes	Yes	Yes
17-10-0044	Yes	Yes	Yes
17-05-0030	Yes	Yes	Yes

VI. Conformity Findings

Based on the analysis, the following conformity findings are made:

- This conformity assessment was conducted consistent with EPA's transportation conformity regulations and with the Bay Area Air Quality Conformity Protocol adopted by MTC as Resolution No. 4274.
- Plan Bay Area 2040 and the 2017 Transportation Improvement Program, as amended by Revisions Number 2017-14, provide for implementation of TCMs pursuant to the following federal regulation:
 - (1) *An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are given maximum priority to approval or funding to TCMs over other projects within their control, including projects in locations outside the non-attainment or maintenance area.*
 - (2) *If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvements projects, e.g., the Congestion Mitigation and Air Quality Improvement Program.*
 - (3) *Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan. (40 CFR Part 93.113(c)).*
- For the two ground-level ozone precursors (VOC and NO_x), motor vehicle emissions in Plan Bay Area 2040 and the 2017 Transportation Improvement Program, as amended by Revisions Number 2017-14 are lower than the applicable motor vehicle emission budgets for the 2008 national 8- hour ozone standard.
- For carbon monoxide, motor vehicle emissions in Plan Bay Area 2040 and the 2017 Transportation Improvement Program, as amended by Revisions Number 2017-14 are lower than the transportation conformity budget in the SIP.
- For PM_{2.5} and NO_x, the Baseline Year test shows that the motor vehicle emissions are lower under the Build scenario for the various analysis years when compared to the baseline year emissions scenario.

Appendix A
List of Projects in Plan Bay Area 2040

List of Plan Bay Area 2040 Transportation Projects/Programs

Appendix A

RTPID	County/ Sponsor	Title	Description	Complete and Operational By:			Included in the Model?	Referenced in the 2017 TIP
				2020	2030	2040		
17-01-0001	Alameda	Bicycle and Pedestrian Program	Projects in this category are new bicycle (on-street and off-street) and pedestrian facilities, and facilities that connect existing network gaps, including but not limited to projects that would implement these components on the following facilities: Alameda Point Trail, Bay Trail Connections and Gap Closures, East Bay Greenway, Iron Horse Trail Crossing, Union City Boulevard, Pierce Street, Shattuck Avenue, 7th Street Transit Village, Lake Merritt BART, Lakeside Complete Streets, Peralta and MLK Boulevard					Yes
17-01-0002	Alameda	Climate Program: TDM and Emission Reduction Technology	Projects in this category implement strategies and programs that reduce emissions, encourage alternative transportation modes, and manage transportation demand including but not limited to projects such as TDM program implementation, parking management, local area shuttle and paratransit services					Yes
17-01-0003	Alameda	County Safety, Security and Other	Projects in this category address safety, security and other needs, including but not limited to projects such as Central Avenue Overpass, BART Security Program					Yes
17-01-0004	Alameda	Multimodal Streetscape	Projects in this category implement multimodal or complete streets elements, including but not limited to projects such as Grimmer Boulevard Greenway, Telegraph Avenue Complete Streets, West Grand Avenue Complete Streets, Hearst Avenue Compete Streets					Yes
17-01-0005	Alameda	PDA Planning	This category includes planning studies supporting the region's PDA framework and connecting transportation and land use					
17-01-0006	Alameda	Minor Roadway Expansions	This category includes roadway capacity increasing projects (new roadways or widening/extensions of existing roadways) on minor roads such as Clement Avenue, Mariner Square, Mitchell Street, Scarlett Drive, Stoneridge Drive, Kato Road					Yes
17-01-0007	Alameda	Roadway Operations	This category includes projects that improve roadway, intersection, or interchange operations, ITS, as well as other transportation system management					Yes
17-01-0008	Alameda	Minor Transit Improvements	This category includes minor projects that improve or complement existing transit operations including but not limited to projects such as rapid bus service in Alameda Point, the Bernal Park and Ride, Line 51 project completion and capital replacement, Newark Transit Station improvements, and Dumbarton Corridor Area Transportation Improvements					Yes
17-01-0009	Alameda	New Alameda Point Ferry Terminal	Provide for new ferry terminal at Seaplane Lagoon		Yes	Yes	Yes	
17-01-0014	Alameda	I-680 Southbound Express Lanes (SR-237 to SR-84) Upgrades	To upgrade the existing toll system for the I-680 southbound express lane project. Additionally, it would also result in upgrades to the existing pavement for a near continuous access express lanes facility.					
17-01-0015	Alameda	7th Street Grade Separation East	Project replaces the substandard 7th St. roadway & pedestrian underpass at the north end of Railport Oakland Intermodal Yard (RO-IY). The new, depressed roadway allows for new rail crossings to improve connections to the future OHIT IY and project completes a missing segment of the Bay Trail.					Yes
17-01-0016	Alameda	Oakland Army Base transportation infrastructure improvements	Constructs public improvements for trade, logistics and ancillary maritime services that promote cleaner modes of transportation, efficient goods movement, congestion relief on countywide freight corridors, new jobs, and fulfills a mandate to reduce truck trips through the West Oakland community.					
17-01-0017	Alameda	Outer Harbor Intermodal Terminal (OHIT) Phases 2 and 3	OHIT consists of 3 phases. Phase 1, for the lead, support and manifest tracks, is under construction. Phase 2 has two intermodal tracks; Phase 3 has six intermodal tracks and electric cranes. The Project enables a shift of cargo from truck to rail to maximize the Port's operational potential.					Yes
17-01-0018	Alameda	7th Street Grade Separation West	The Project creates a new elevated intersection at 7th & Maritime Streets, and provides new rail access between the Oakland Army Base and the Oakland International Gateway. The Project shifts cargo from truck to rail, reduces truck congestion and emissions, and improves public access.					Yes
17-01-0019	Alameda	I-580 Integrated Corridor Mobility (ICM)	This project implements multiple traffic operation systems and strategies that will address the challenges of traffic congestion in the corridor. The project will install new and upgrade existing corridor management elements along Interstate 580. Full ICM depends on extending North Canyons Parkway to Dublin Boulevard (RTPID 17-01-0048)		Yes	Yes	Yes	
17-01-0020	Alameda	SR-262 Mission Boulevard Cross Connector Improvements	This project will increase mobility between I-680 and I-880 by widening Mission to 3 lanes in each direction throughout the I-680 interchange, rebuild the NB and SB 680 on and off ramps, and potentially grade separate Mission Blvd. from Mohave Dr. and Warm Springs Blvd.		Yes	Yes	Yes	Yes
17-01-0021	Alameda	I-880 Whipple Road Interchange Improvements	Full interchange improvements at Whipple Road/I-880, including northbound off-ramp, surface street improvements and realignment		Yes	Yes	Yes	Yes

List of Plan Bay Area 2040 Transportation Projects/Programs

Appendix A

RTPID	County/ Sponsor	Title	Description	Complete and Operational By:			Included in the Model?	Referenced in the 2017 TIP
				2020	2030	2040		
17-01-0022	Alameda	Outer Harbor Turning Basin	The project will upgrade the existing Outer Harbor Turning Basin (OHTB) at the Port of Oakland from 1,650' to 1,920' in diameter to handle ships up to 1.320' long.					
17-01-0023	Alameda	I-880 Industrial Parkway Interchange Reconstruction	Reconstruct the I-880/Industrial Parkway interchange to provide a northbound off-ramp and a southbound HOV bypass lane on the southbound loop off-ramp. Reconstruct the bridge over I-880.		Yes	Yes	Yes	Yes
17-01-0024	Alameda	I-880 A Street Interchange Reconstruction	Reconstruct interchange to widen A Street from 5 lanes to 6 lanes and add bike lanes, and provide additional lane capacity for potential future freeway widening. Project also involves modifying signals and reconfiguring intersections to improve truck-turning maneuvers.		Yes	Yes	Yes	Yes
17-01-0025	Alameda	Oakland International Airport Perimeter Dike	This project will upgrade and improve the 4.5 mile long dike protecting OAK, terminal and other facilities, roadways, transit services & trails connecting Alameda and San Leandro. Includes seismic stabilization, FEMA compliance, and protection against climate change and sea level rise.					
17-01-0026	Alameda	Minor Freight Improvements Programmatic	This program includes projects that improve freight operations and reduce impacts of freight activity. This includes but is not limited to railroad quiet zones, multimodal safety projects at crossings, freight corridor upgrades, ITS improvements, terminal lighting, seismic monitoring, rail connections between Oakland and Niles Subdivisions, truck parking facilities, rail platforms, and other projects that would implement the Alameda CTC Goods Movement plan.					Yes
17-01-0027	Alameda	Middle Harbor Road Improvements	This project identifies & implements solutions to the traffic circulation issues on Middle Harbor Rd. Solutions may include dedicated queue or turn lanes, signalization, and relocation or reconfiguration of terminal gates and recommendations for Adeline St. Bridge reconfiguration as appropriate.					
17-01-0028	Alameda	I-580/I-680 Interchange: Project Development and Phase 1 Short-term Operational Improvements	Improve capacity, operations and safety at the interchange, primarily in the westbound direction approaching the interchange. This project includes the Phase 1 short-term operational improvements.		Yes	Yes	Yes	Yes
17-01-0029	Alameda	SR-84/I-680 Interchange Improvements and SR-84 Widening	Construct interchange improvements for the Route 84/I-680 Interchange, widen Route 84 from Pigeon Pass to I-680 and construct aux lanes on I-680 between Andrade and Route 84.		Yes	Yes	Yes	Yes
17-01-0030	Alameda	I-880 Broadway/Jackson Interchange Improvements	The project proposes to improve connectivity between I-880/I-980 and Alameda and Oakland. Improvements include reconfiguration of existing ramps, demolition of existing ones, and construction of new ramps.		Yes	Yes	Yes	Yes
17-01-0031	Alameda	I-880 at 23rd/29th Avenue Interchange Improvements	Provide improvements to NB I-880 at 23rd and 29th Avenue interchange by improving the freeway on- and off-ramp geometrics, replacing the overcrossings, and modifying local streets, landscape enhancement, and construction of a soundwall.	Yes	Yes	Yes	Yes	Yes
17-01-0032	Alameda	SR-84 Widening (Ruby Hill Drive to Concannon Boulevard)	The Route Expressway - South Segment involves widening a 2.4 mile section of SR 84 (Isabel Ave) from Ruby Hill Drive to Concannon Boulevard from two lanes to four lanes.	Yes	Yes	Yes	Yes	Yes
17-01-0033	Alameda	I-580 Vasco Road Interchange Improvements	Modify I-580/Vasco Rd interchange. Widen I-580 overcrossing and add new loop ramp in southwest quadrant. Includes widening Vasco Road to 8 lanes between Northfront Road and Las Positas Road and other local roadway improvements.		Yes	Yes	Yes	
17-01-0034	Alameda	I-580 Greenville Road Interchange Improvements	Construct a new interchange at I-580/Greenville Road to replace the existing interchange. Project will include widening the undercrossing to provide six lanes, and constructing ramps to achieve a modified partial cloverleaf interchange design.		Yes	Yes	Yes	
17-01-0035	Alameda	I-580 First Street Interchange Improvements	Reconstruct and modify the I-580/First Street interchange into partial cloverleaf design with 6-lanes on First Street over I-580.		Yes	Yes	Yes	
17-01-0036	Alameda	SR-92/Clawiter Road/Whitesell Street Interchange Improvements	The project would reconstruct the SR-92/Clawiter Rd interchange to create the SR-92/Whitesell St interchange, addressing truck traffic access needs by: reconfiguring Clawiter/SR 92 interchange, creating new access to SR 92 at Whitesell St, and consolidating access for these two local roads.		Yes	Yes	Yes	Yes
17-01-0037	Alameda	Ashby I-80 Interchange with Bicycle and Pedestrian Ramps	Reconstruct the Ashby Avenue interchange, including construction of a new bridge to replace existing bridges, a roundabout interchange, and bicycle/pedestrian access over the I-80 freeway at the Ashby-Shellmound interchange.					Yes
17-01-0038	Alameda	I-580 Interchange Improvement at Hacienda/Fallon Road - Phase 2	1-580/Fallon Rd I/C Improvements (Phase 2): Reconstruct overcrossing to add lanes I-580 Hacienda Dr I/C Improvements: Reconstruct overcrossing to add lanes		Yes	Yes	Yes	Yes
17-01-0039	Alameda	I-580 SR-84/Isabel Interchange Improvements Phase 2	Complete ultimate improvements at I-580/Isabel/State Route 84 Interchange to provide 6-lanes over I-580 at the Isabel/State Route 84 Interchange and 4-lanes over I-580 at the Portola Avenue flyover.		Yes	Yes	Yes	

List of Plan Bay Area 2040 Transportation Projects/Programs

Appendix A

RTPID	County/ Sponsor	Title	Description	Complete and Operational By:			Included in the Model?	Referenced in the 2017 TIP
				2020	2030	2040		
17-01-0040	Alameda	I-80 Gilman Street Interchange Improvements	The proposed project is located in northwest Berkeley and will reconfigure the I-80/Gilman interchange. The limits for the freeway and ramp traffic operations would include I-80 from east of Buchanan Street to west of University Avenue.					Yes
17-01-0041	Alameda	I-880 Winton Avenue Interchange Improvements	This project proposes to modify the existing Winton Avenue/I-880 cloverleaf interchange to a partial cloverleaf interchange, implement Complete Street per Caltrans HDM and provide direct access to Southland Mall.		Yes	Yes	Yes	Yes
17-01-0042	Alameda	I-680 Overcrossing Widening and Improvements (at Stoneridge Drive)	Widen Stoneridge Drive overcrossing at I-680 constructing third westbound lane		Yes	Yes	Yes	
17-01-0043	Alameda	42nd Ave & High St Access Improvement at I-880 On/Off Ramp	Adjacent I-880/High St, project will widen and extend existing local roads; improve vehicles level of service, pedestrian & ADA accessibility, access to ramps/Alameda; expand the region's bike route; eliminate circuitous traffic and congestion near I-880, promote redevelopment in the Estuary Area.	Yes	Yes	Yes	Yes	Yes
17-01-0044	Alameda	I-680 Sunol Interchange Modification	Signalize Sunol @ I-680 Interchange ramps and widen Southbound on ramp	Yes	Yes	Yes	Yes	
17-01-0045	Alameda	Santa Rita Road I-580 Overcrossing Widening	Widen Southbound Santa Rita Road overcrossing at I-580 constructing third southbound through lane at Pimlico Drive and second on ramp lane to I-580 eastbound.		Yes	Yes	Yes	
17-01-0046	Alameda	Coliseum City Transit Hub	The project is a consolidated multi-modal transit hub at the existing Coliseum BART station and Amtrak Station for patrons of the future Coliseum City Transit-Oriented Development. Includes pedestrian concourse and replacement for 1000 BART parking spaces which may be shared with other uses.					
17-01-0047	Alameda	I-880 to Mission Boulevard East-West Connector	Improved east-west connection between I-880 and Route 238 (Mission Blvd.) comprised of a combination of new roadways along preserved ROW and improvements to existing roadways and intersections along Decoto Road, Fremont Boulevard, Paseo Padre Parkway, Alvarado-Niles Road and Mission Boulevard.		Yes	Yes	Yes	Yes
17-01-0048	Alameda	Dublin Boulevard - North Canyons Parkway Extension	This project will update the currently planned project by incorporating multimodal travel, and construct the street extension to connect Dublin Blvd. in Dublin with North Canyons Parkway in Livermore at Doolan Road. The existing RTP project lacks the current State, regional, and local priorities. This project was carried forward from RTPIDs 21473, 240392.		Yes	Yes	Yes	Yes
17-01-0049	Alameda	Fruitvale Avenue (Miller Sweeney) Lifeline Bridge Project	Replace the existing vehicular bridge with one structure that can provide the only Lifeline access from Alameda. Provide dedicated transit lanes, bike lanes, median and sidewalks.					
17-01-0050	Alameda	SR-84 Mowry Avenue Widening (Peralta Blvd to Mission Blvd)	Widen Mowry Ave from Peralta Blvd to Mission Blvd (State Route 84) from two to four lanes and install bike lanes and sidewalks on both sides of the street.		Yes	Yes	Yes	
17-01-0051	Alameda	Tassajara Road Widening from N. Dublin Ranch Drive to City Limit	This project will widen Tassajara Road from existing 2 lanes to 4 lanes between N/ Dublin Ranch Drive to City limit with C C County. It would add new bike lanes, construct/upgrade bus stops, and add missing sidewalks, ADA ramps, curb and gutter. Traffic signals will be upgraded.		Yes	Yes	Yes	
17-01-0052	Alameda	Auto Mall Parkway Widening and Improvements	Widen Auto Mall Parkway from four lanes to six lanes between I880 and I680 including intersection improvements and widening of the Auto Mall bridge over UPRR.		Yes	Yes	Yes	
17-01-0053	Alameda	Dougherty Road Widening	This project will complete 1.83 mile of widening of Dougherty Rd. from 4 lanes to 6 lanes from Dublin Blvd. to the county line. Some of the improvements include; class II bike lanes, landscaped median islands, street lighting, traffic signal modifications, and 1.4 miles of Bike/Ped. Class I trail.	Yes	Yes	Yes	Yes	Yes
17-01-0054	Alameda	Union City Boulevard Widening (Whipple to City Limit)	Widen Union City Boulevard to three travel lanes in each direction from Whipple Road to the City limits with Hayward.		Yes	Yes	Yes	
17-01-0055	Alameda	SR-84 Peralta Boulevard Widening (Fremont Blvd to Mowry Ave)	This project will widen Peralta Blvd (State Route 84) to four lanes with continuous bike lanes and sidewalks on both sides of the road from Fremont Blvd to Mowry Ave.		Yes	Yes	Yes	
17-01-0056	Alameda	Thornton Avenue Widening (Gateway Boulevard to Hickory Street)	The project will widen this undivided two-lane section of Thornton Avenue to a four-lane divided arterial street.		Yes	Yes	Yes	
17-01-0057	Alameda	Dublin Boulevard Widening - Sierra Court to Dublin Court	This project proposes to widen Dublin Boulevard from Sierra Court to Dublin Court in the westbound direction from two to three lanes in the City of Dublin. This project also includes the construction of Class II bike lanes.	Yes	Yes	Yes	Yes	Yes
17-01-0058	Alameda	Irvington BART Station	Construct a new BART station in Irvington PDA in Fremont on Osgood Road near Washington Boulevard as called for in the 2014 Alameda County Transportation Expenditure Plan		Yes	Yes	Yes	
17-01-0059	Alameda	Union City Intermodal Station Phase 4	Phase 4 is an at grade intermodal station to serve both AMTRAK, ACE and future Dumbarton Rail with elevated tracks and passengers platforms.					

List of Plan Bay Area 2040 Transportation Projects/Programs

Appendix A

RTPID	County/ Sponsor	Title	Description	Complete and Operational By:			Included in the Model?	Referenced in the 2017 TIP
				2020	2030	2040		
17-01-0060	Alameda	East Bay BRT	A 9.5 mile BRT line from downtown Oakland to the San Leandro BART station on International Blvd and East 14th St. with 80% dedicated lanes; 27 new hybrid buses; 34 level-boarding platform stations; real time arrival information; and transit signal priority. It also includes parking mitigations.	Yes	Yes	Yes	Yes	Yes
17-01-0061	Alameda	Ralph Appezato Memorial Parkway BRT	To create BRT infrastructure between Webster Street and the Alameda Point PDA, connecting future residents and workers on the former base (as well as existing Alameda residents) to downtown Oakland and BART via Webster Street Tube. The BRT's Alameda term	Yes	Yes	Yes	Yes	
17-01-0062	Alameda	BART to Livermore/ACE Project Development and Construction Reserve	BART is preparing a project-level Environmental Impact Report evaluating five alternatives for the BART to Livermore Extension Project. BART extension to Isabel Avenue, DMU/EMU to Isabel Avenue, Express Bus/BRT, Enhanced Bus, and No-build.					Yes
17-01-0063	Alameda	Broadway Shuttle Expansion	Planning and environmental analysis of the Broadway Shuttle Expansion project which seeks to extend the shuttle route and service hours, and upgrade the project to an Enhanced Bus or Electric Streetcar line to enhance transit circulation and mobility, and catalyze mixed-use TOD and economic develop					
17-01-0064	Alameda	Additional Local Road Preservation/Rehab	Additional funding for local streets and roads maintenance in Oakland from the City of Oakland Measure KK (Nov. 2016 ballot measure)					
17-02-0001	Contra Costa	Access and Mobility Program	This category includes projects that improve access and mobility for people with disabilities, low-income residents, and seniors, such as West County Low-Income School Bus Program, paratransit through Contra Costa County, information and outreach projects, dial-a-ride, guaranteed ride home, non-operational transit capital enhancements (i.e. bus shelters), local shuttles, lighting and security projects, and discounted transit passes.					Yes
17-02-0002	Contra Costa	Innovative Transportation Technology	This category includes projects that would implement technological advances for transportation such as connected vehicle, autonomous vehicle, and other innovations.					
17-02-0003	Contra Costa	Bicycle and Pedestrian Program	Projects in this category are new bicycle (on-street and off-street) and pedestrian facilities, and facilities that connect existing network gaps, such as Lamorinda Bicycle and Pedestrian Program, Wildcat Creek Trail, and Contra Costa County's Safe Routes to School Program					Yes
17-02-0004	Contra Costa	County Safety, Security and Other	Projects in this category address safety, security and other needs such as Lone Tree Way Undercrossing, Marsh Creek Road Curve Realignment, Cutting/Carlson grade crossing improvements, San Pablo Avenue overcrossing, Vasco Road safety improvement, and Viera Avenue Realignment					Yes
17-02-0005	Contra Costa	Multimodal Streetscape	Projects in this category implement complete streets improvements to roadways throughout Contra Costa County, such as on San Pablo Avenue, near the Del Norte and Concord BART stations, and in PDAs.					Yes
17-02-0007	Contra Costa	Minor Roadway Expansions	Funds future widening and extensions of non-regionally significant roadways such as John Muir Parkway, Slatten Ranch Road, James Donlon Blvd, Hillcrest Avenue, Sand Creek Road, San Jose Avenue and other roads throughout Contra Costa County					Yes
17-02-0008	Contra Costa	Roadway Operations	Projects in this category improve roadway operations through technology and management systems on roads throughout Contra Costa County such as Clayton Road, Treat Boulevard, Contra Costa Boulevard, St. Mary's Road, Alhambra Avenue, Mt. Diablo Boulevard, roads in downtown Lafayette and Gateway/Lamorinda Traffic Program					Yes
17-02-0009	Contra Costa	Minor Transit Improvements	Projects in this category improve or complement existing transit operations through rolling stock, park and ride lots, express bus service expansion, technology upgrades, bus transit preferential measures, eBART support service and school bus programs					Yes
17-02-0010	Contra Costa	SR4 Integrated Corridor Mobility	SR4 Integrated Corridor Mobility from I-80 to SR160, including adaptive ramp metering, advanced traveler information, arterial management system, freeway management system, connected vehicle applications		Yes	Yes	Yes	Yes
17-02-0011	Contra Costa	I-80 ICM Project Operations and Maintenance	I-80 Integrated Corridor Mobility (ICM) Project Operations and Management - Local Portion - Maintenance in Contra Costa; This project will implement Adaptive Ramp Metering (ARM) and Active Traffic Management (ATM) strategies will be employed to reduction congestion and provide incident management capabilities.	Yes	Yes	Yes	Yes	
17-02-0012	Contra Costa	I-680 Northbound Managed Lane Completion through 680/24 and Operational Improvements between N. Main and Treat Blvd	I-680 carpool lane completion thru 680/24 interchange and operational Improvements between N. Main and Treat Blvd		Yes	Yes	Yes	Yes

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17-02-0013	Contra Costa	I-680 Northbound HOV lane extension between N. Main and SR-242	Provides an HOV lane in the northbound direction between N. Main and SR242, which will shorten a gap in the HOV network which currently exists between Livorna and SR242.		Yes	Yes	Yes	Yes
17-02-0014	Contra Costa	Kirker Pass Road Northbound Truck Climbing Lane, Clearbrook Drive to Crest of Kirker Pass Road	This project will add NB truck climbing lane from Clearbrook Drive in the City of Concord to a point 1,000 beyond the crest of Kirker Pass Road. The addition will include a 12-foot dedicated truck climbing lane and a Class II bike lane within an 8-foot paved shoulder.	Yes	Yes	Yes	Yes	Yes
17-02-0015	Contra Costa	Vasco Road Byron Highway Connector Road	New road between Vasco Road and Byron Highway that increases access to the Byron Airport. Road will be 1 lane per direction with at grade intersections at both end. Project is formerly named: SR-239: Airport Connector			Yes	Yes	Yes
17-02-0016	Contra Costa	Construct SR 242/Clayton Road on and off-ramps	Construct on and off-ramp for SR 242 at Clayton Road		Yes	Yes	Yes	Yes
17-02-0017	Contra Costa	SR-239 Feasibility Studies and Project Development	Environmental and design study to construct a new State Route connecting SR4 to Interstates 205/580 near Tracy. Route alignment is not yet defined.					Yes
17-02-0019	Contra Costa	I-680/SR4 Interchange Improvements - Phases 1-3	Improve I-680/SR4 interchange by implementing: direct connectors for NB I-680 to WB SR4 (Ph1) & WB SR4 to SB I-680 (Ph2), & widening SR4 btw SR242 & Morello from 2 to 3 lanes per direction (Ph3). The 2-lane direct connectors will replace a single lane loop ramp & a single lane diagonal ramp, respectively.		Yes	Yes	Yes	Yes
17-02-0020	Contra Costa	SR-4 Operational Improvements - Initial Phases	Various operational improvements on SR-4 between SR-242 and Bailey Road, including adding auxiliary lanes in strategic locations along this corridor		Yes	Yes	Yes	Yes
17-02-0021	Contra Costa	Reconstruct I-80/San Pablo Dam Road Interchange	Phase 1 includes relocating El Portal Dr. on-ramp to WB I-80 to the north, extending the auxiliary lane along WB I-80 between San Pablo Dam Rd off-ramp and El Portal Dr on-ramp, and reconstructing the Riverside Ave pedestrian overcrossing. Phase 2 includes modifications to McBryde and SPDR I/C & Includes provisions for bicyclists and pedestrians on San Pablo Dam Rd.		Yes	Yes	Yes	Yes
17-02-0022	Contra Costa	I-680 Southbound HOV Lane between N. Main and Livorna	Through the I-680/SR 24 Interchange, this project adds an HOV lane on I-680 SB, through minor widening and restriping to narrower lanes. Existing number of mixed flow lanes will be kept the same.	Yes	Yes	Yes	Yes	Yes
17-02-0023	Contra Costa	State Route 4 Widening and Balfour Road IC Construction	Construct SR4 Bypass interchange at Balfour Rd and Widen SR4 from 2 to 4 lanes.	Yes	Yes	Yes	Yes	Yes
17-02-0024	Contra Costa	I-80/SR-4 Interchange Improvements - New Eastbound Willow Avenue Ramps	New SR4 eastbound offramp and onramp at Willow north of Palm Avenue and removal of Willow Hook Ramps		Yes	Yes	Yes	
17-02-0026	Contra Costa	I-80/Central Avenue Interchange Modification - Phases 1 & 2	Construct new signals and changeable message signs to redirect I-80 westbound on-ramp traffic during weekend peak periods to I-580, connect Pierce Street to San Mateo Street to relocate the traffic signal at Pierce Street/Central Avenue to the San Mateo Street/Central Avenue intersection, and construct other necessary improvements.		Yes	Yes	Yes	Yes
17-02-0027	Contra Costa	Construct Additional Auxiliary Lanes on I-680 - South of I-680/SR-24 Interchange	Additional I-680 NB and SB auxiliary lanes south of I-680/SR 24 Interchange, including the following locations: Alcosta Road to Bollinger Canyon Road; El Cerro Blvd to El Pintado Road; El Pintado Road to Stone Valley Road; Stone Valley Road to Livorna Road; and Livorna Road to Rudgear Road.	Yes	Yes	Yes	Yes	
17-02-0028	Contra Costa	I-80 Eastbound and Westbound Pinole Valley Road On-ramp Improvement	Improve conditions for merging onto the I-80 mainline from the eastbound and westbound Pinole Valley Road on-ramps to address vehicles accelerating uphill after stopping at ramp meter.		Yes	Yes	Yes	
17-02-0029	Contra Costa	Eastbound SR-24: Construct Auxiliary Lane, Wilder Road to Camino Pablo	Construct auxiliary lane along eastbound Highway 24 from on-ramp at Wilder Road to downtown Orinda off-ramp at Moraga Way/Camino Pablo/Brookwood Road		Yes	Yes	Yes	
17-02-0030	Contra Costa	Widen Brentwood Boulevard - Havenwood Way to north city limit; and Chestnut to Fir	Project would widen Lone Tree Way from 2 to 4 lanes for approximately 2400 linear feet. It also includes bike lanes, median islands, curb, gutter, sidewalk street lights and landscaping.		Yes	Yes	Yes	Yes
17-02-0031	Contra Costa	Widen Willow Pass Road, Lynwood Drive to SR 4	Widen Willow Pass Road from Lynwood Drive to State Route 4 from two lanes to four lanes and implement Complete Streets Improvements		Yes	Yes	Yes	
17-02-0032	Contra Costa	Widen Ygnacio Valley Road-Kirker Pass Road, Cowell to Michigan	Widen Ygnacio Valley Road from Michigan Blvd to Cowell Road from four lanes to six lanes and implement Complete Streets improvements		Yes	Yes	Yes	Yes
17-02-0033	Contra Costa	Widen Camino Tassajara Road, Windemere to County Line	Widen Camino Tassajara Road from 2-lanes to 4-lanes, including 8-foot paved shoulders and Class II bike lanes in both directions from Windemere Parkway to the Alameda/Contra Costa County Line.		Yes	Yes	Yes	Yes

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17-02-0034	Contra Costa	West Leland Road Extension	Construct new 4-lane arterial roadway with raised median, class 2 bike lanes, and sidewalks from San Marco Boulevard to Willow Pass Road, with a design speed of 55 mph.	Yes	Yes	Yes	Yes	
17-02-0035	Contra Costa	Lone Tree Way Widening	Widen Lone Tree Way to 4-lanes in order to match section west of O'Hara Avenue.		Yes	Yes	Yes	Yes
17-02-0036	Contra Costa	Pittsburg-Antioch Highway Widening	Widen existing 2-lane arterial roadway to 4-lane arterial with turning lanes at appropriate locations.	Yes	Yes	Yes	Yes	
17-02-0037	Contra Costa	Widen Main St, SR 160 to Big Break Rd	Widen Main Street from Highway 160 to Big Break Road from 4 lanes to 6 lanes.		Yes	Yes	Yes	
17-02-0038	Contra Costa	Main Street Bypass	Construct Main Street Downtown Bypass road between Vintage Parkway and 2nd Street.	Yes	Yes	Yes	Yes	
17-02-0039	Contra Costa	Hercules Train Station - All Phases	Implement all phases of the Hercules Train Station including extending John Muir Parkway with box culvert over North Channel and Bayfront Boulevard with bridge over Refugio Creek, eliminating gap in the Bay Trail West Segment by installing new trail connecting to new rail station, relocating fuel oil & fiber optic lines, constructing transit loop promenade and civic plaza, constructing parking structure, and conducting track/signal work		Yes	Yes	Yes	Yes
17-02-0040	Contra Costa	Martinez Intermodal Project: Phase 3	Constructs Martinez Intermodal Station (Phase 3), which includes an additional 425 spaces and auto/ped bridges (on top of planned 200 interim spaces).					
17-02-0041	Contra Costa	Privately Run Ferry Service including Small-Scale (non-WETA complying) Landside Improvements from Antioch, Martinez, and Hercules to San Francisco	Implement new ferry service from Antioch, Martinez, and Hercules to San Francisco. Project cost includes landside improvements and privately run ferry service, which would be provided at a lower cost than standard WETA service. Ferry service is only included in the Plan from 2020 to 2035.	Yes	Yes		Yes	
17-02-0042	Contra Costa	Richmond-San Francisco Ferry Service	Implements ferry service from Richmond to San Francisco as identified in the Water Transit Authority's Implementation and Operations Plan.	Yes	Yes	Yes	Yes	Yes
17-02-0043	Contra Costa	BART Capacity, Access and Parking Improvements	Includes projects that improve BART station capacity and implement access and parking improvement at Contra Costa BART station					Yes
17-02-0044	Contra Costa	Landside Improvements for Richmond Ferry Service	Construct landside improvements for Richmond ferry service, including expanded parking.					
17-02-0045	Contra Costa	El Cerrito del Norte BART Station Modernization, Phase 1	Project will provide improvements including, but not limited to: expansion of the paid area of the station, including a new station agent booth and new fare gates new elevators and stairwells within the paid area providing access to the platform new passenger restrooms, new public art installations					
17-02-0046	Contra Costa	Civic Center Railroad Platform Park & Ride Complex	The proposed project is the construction of an approximately 800-foot train platform along the San Joaquin Service line, which would be located north of Main Street in Oakley, between 2nd Street and O'Hara Avenue. Approximately 300 surface parking spaces, distributed in two parking lots to avoid one large surface lot off Main Street, will be included to support Park & Ride activities as well as future train riders.		Yes	Yes	Yes	Yes
17-02-0047	Contra Costa	East County Rail Extension (eBART), Phase 1	Construction of rail extension eastward from Pittsburg-Bay Point BART station with Phase 1 terminus at Hillcrest Avenue in Antioch.	Yes	Yes	Yes	Yes	Yes
17-02-0049	Contra Costa	West County High Capacity Transit Investment Study Implementation - Phase 1	Environmental, engineering and initial implementation work associated with the recommendations from the study.					
17-02-0050	Contra Costa	Brentwood Intermodal Transit Center	This project is a PNR facility in the City of Brentwood providing a transit connection to the current eBART terminus in Antioch. Tri-Delta transit would provide direct bus service from this facility which could serve as a future eBART station site in the future.		Yes	Yes	Yes	
17-02-0051	Contra Costa	I-680 Transit Improvements including Express Bus Service, ITS components, and Park & Ride Lots	I-680 Transit Improvements including Express Bus Service, ITS components, and Park & Ride Lots along the I-680 corridor from Dublin to Martinez		Yes	Yes	Yes	
17-02-0052	Contra Costa	Widen San Ramon Valley Boulevard from 2 to 4 lanes - Jewel Terrace to Podva Road	Widen San Ramon Valley Boulevard from 2 to 4 lanes - Jewel Terrace to Podva Road	Yes	Yes	Yes	Yes	Yes
17-03-0001	Marin	Bicycle and Pedestrian Program	Projects in this category are new bicycle (on-street and off-street) and pedestrian facilities, and facilities that connect existing network gaps throughout Marin County					Yes

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17-03-0002	Marin	Climate Program: TDM and Emission Reduction Technology	Projects in this category implement strategies and programs that reduce emissions, encourage alternative transportation modes, and manage transportation demand including but not limited to projects such as TDM program implementation, parking management, local area shuttle and paratransit services					
17-03-0003	Marin	County Safety, Security and Other	Projects in this category address safety and security needs including safe routes to school and coastal flood mitigation projects					
17-03-0004	Marin	Roadway Operations	Projects in this category improve roadway operations through technology and management systems on roads throughout Marin County including Sir Francis Drake and other local corridor enhancements					Yes
17-03-0005	Marin	Minor Transit Improvements	Projects in this category improve or complement existing transit operations through transit management systems, bus maintenance facility relocation, local bus and ferry service expansion, countywide bus stop improvements and access improvements to SMART stations, among other bus transit capital and facility projects					Yes
17-03-0006	Marin	Implement Marin Sonoma Narrows HOV Lane and corridor improvements Phase 2 (Marin County)	Extend US 101 HOV lane from Atherton Avenue to Marin/Sonoma County line in the northbound direction and from Rowland Boulevard to Marin/Sonoma County line in southbound direction. This project will complete the HOV lane system in Marin County from Richardson Bay Bridge to Marin/Sonoma County line.		Yes	Yes	Yes	Yes
17-03-0007	Marin	US 101/580 Interchange Direct Connector - PAED	Study, design and connection for a two lane direct connector northbound US 101 to eastbound HWY 580. The project would entail PSR, PAED and construction of a direct freeway to freeway interchange instead of local arterials. Study includes 580 westbound to south US 101.					
17-03-0008	Marin	Tiburon East Blithedale Interchange - PAED	Planning and environmental assessment of alternatives to improve the US 101/Tiburon Boulevard interchange					
17-03-0009	Marin	Access Improvements to Richmond San Rafael Bridge	Shift eastbound lane reduction 1,000 feet to the east on SFD and Improve shoulders from Larkspur Landing Circle to Anderson Drive. Improve bicycle access from Anderson Drive to Main Street. Add additional thru capacity at Bellam Boulevard off ramp from northbound 101 eastbound Interstate 580. Widen northbound Bellam off-ramp from US 101 to two lanes.	Yes	Yes	Yes	Yes	
17-03-0010	Marin	Highway Improvement Studies	Operational and capacity enhancement studies to address safety, sea level rise, and congestion on US 101, HWY 1 and HWY 37. primarily focused on Interchange and ramp modifications as well as mainline improvements. PSRs level studies are funded, PAED and advanced outreach flexibility.					
17-03-0011	Marin	Widen Novato Boulevard between Diablo Avenue and Grant Avenue	Widen Novato Blvd. between Diablo Ave. and Grant Ave. to accommodate future growth and enable roadway system to operate safely and efficiently, per City's General Plan.		Yes	Yes	Yes	Yes
17-03-0012	Marin	Sir Francis Drake Boulevard/Red Hill Avenue/Center Boulevard (known as "The Hub") - project development	Alternatives analysis, environmental and design of interchange improvements to this congested intersection. This study will include the study of a potential roundabout and improvements to this major arterial.					
17-03-0013	Marin	San Rafael Transit Center (SRTC) Relocation Project	This project involves the full or partial relocation of the Bettini Transit Center/San Rafael Transit Center (SRTC). Relocating the existing transit center is necessary because SMART rail bi-sects the transit center, which eliminates one existing bus platform and renders the remaining platforms of the transit service unusable in whole or in part.					
17-03-0014	Marin	Larkspur Ferry Terminal Parking Garage - Planning Study	This project would provide environmental, design, engineering and construction of a parking garage to augment existing inadequate parking at the Larkspur Ferry Terminal (LFT) and improve parking, traffic and pedestrian circulation around and within LFT. The parking garage would increase parking capacity from by approximately 36%, from 1,800 to 2,450 parking spaces.					Yes
17-03-0015	Marin	SMART Downtown San Rafael to Larkspur Rail Extension	Extend rail from Downtown San Rafael 2.2 miles to Larkspur SMART Station.	Yes	Yes	Yes	Yes	Yes
17-03-0016	Marin	Multimodal Streetscape	Projects in this category implement multimodal or complete streets elements					Yes
17-04-0001	Napa	Bicycle and Pedestrian Program	Countywide bicycle network expansion, countywide bicycle network maintenance & rehabilitation, countywide pedestrian network enhancements, maintenance, rehabilitation and expansion. Also, includes countywide SRTS infrastructure and non-infrastructure projects/programs.					Yes
17-04-0002	Napa	County Safety, Security and Other	Railroad crossing safety upgrades, corridor and Safety Improvements					Yes
17-04-0003	Napa	Multimodal Streetscape	Complete streets implementation and street reconstruction.					

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17-04-0004	Napa	Minor Roadway Expansions	Additional road capacity and extensions including bridge construction throughout Napa County and including along Devlin Road and Eucalyptus Drive					Yes
17-04-0005	Napa	Roadway Operations	Intersection improvements and modifications, roadway capacity enhancements, including SR 221 and Soscol Avenue, and other City of Napa intersection improvements					Yes
17-04-0006	Napa	Minor Transit Improvements	Enhanced and expanded transit services, improved commuter amenities, Vine transit maintenance and fueling station, transit fleet expansion, new transit and vehicle technology, improved signage and enhanced transit stops.					Yes
17-04-0007	Napa	Countywide Intelligent Transportation Systems Program	Technology and signalization integration, coordination and improvements.					
17-04-0008	Napa	State Route 29 Improvements	Construct SR29 to a 6-lane Parkway with improved conditions for all travel modes from Napa Junction Road to South Kelly Road and increase capacity in SR-29 from 4 lanes to 6 lanes in unincorporated Napa County, between South Kelly Road and SR 12 Jameson Canyon Road, as well as other operational and intersection improvements along the SR 29 corridor countywide.		Yes	Yes	Yes	
17-04-0009	Napa	Soscol Junction	Improvements at SR-29/SR-221/ Soscol Ferry Road.					Yes
17-04-0010	Napa	SR29 Gateway	Construct SR29 to 6-lanes for cars and improved conditions for other travel modes from American Canyon Road to Napa Junction Road		Yes	Yes	Yes	
17-05-0001	San Francisco	Bicycle and Pedestrian Program	Projects in this category are new bicycle (on-street and off-street) and pedestrian facilities, and facilities that connect existing network gaps, including Second Street Complete Streets project					Yes
17-05-0002	San Francisco	Climate Program: TDM and Emission Reduction Technology	Projects in this category implement strategies and programs that reduce emissions, encourage alternative transportation modes, and manage transportation demand including but not limited to projects such as TDM program implementation, parking management, local area shuttle and paratransit services					Yes
17-05-0003	San Francisco	County Safety, Security and Other	Projects in this category address safety and security needs including Vision Zero improvements at ramps, local road safety and security, India Basin roadway transportation improvements, and transit safety and security					Yes
17-05-0004	San Francisco	Multimodal Streetscape	Projects in this category implement multimodal or complete streets elements in San Francisco					Yes
17-05-0005	San Francisco	PDA Planning	This category includes planning studies supporting the region's PDA framework and connecting transportation and land use					
17-05-0007	San Francisco	Transit Preservation/Rehabilitation	This project provides additional funding to transit capital preservation and rehabilitation beyond what is included in the regional transit capital project (RTPID 17-10-0026)					
17-05-0008	San Francisco	Minor Roadway Expansions	This project implements roadway capacity changes to minor roads throughout San Francisco including Transit Center District Plan, Transbay Redevelopment Plan Street Network, Balboa Reservoir Street Network, Central SoMa Plan Network Changes, Central Waterfront/Pier 70 Street Network, Harney Way, HOPE SF Street Networks, Mission Bay, Mission Rock, Parkmerced, Schlage Lock, Treasure Island, Bayview, Rincon Hill, and along the Great Highway					Yes
17-05-0009	San Francisco	Roadway Operations	This project includes local road intersection improvements					Yes
17-05-0010	San Francisco	Minor Transit Improvements	This project includes the transit performance initiative, transit management systems, minor transit improvements, Muni fare programs, maintenance facility projects, and transit preferential improvements					Yes
17-05-0011	San Francisco	San Francisco Late Night Transportation Improvements	New routes and increased frequency for all-night regional and local bus service, including Muni, AC Transit, Golden Gate Transit, and SamTrans routes. This is a pilot for 5 years.				Yes	
17-05-0012	San Francisco	SFgo Integrated Transportation Management System	SFgo™ is San Francisco's Citywide ITS program. It identifies signalized and non-signalized intersections located along arterials and the Muni transit system and prioritizes them for ITS upgrades, such as controllers, cabinets, transit signal priority, fiber optic or wireless communications, traffic cameras, and variable message signs. Also improves arterial safety and pedestrian safety.					Yes

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17-05-0013	San Francisco	Expand SFMTA Transit Fleet	This project entails future expansion of the SFMTA transit fleet and needed facilities to house and maintain transit vehicles. The purpose is to meet projected future transit demand, as indicated in the SFMTA Transit Fleet Plan. It will facilitate the future provision of additional service through the procurement of transit vehicles as well as the development of needed modern transit facilities. This also includes the expansion vehicles for Geary BRT (RTPID 17-05-0021) and does not include expansion vehicles for Central Subway, which are in RTPITD 17-05-0041.			Yes	Yes	Yes
17-05-0014	San Francisco	Muni Forward (Transit Effectiveness Project)	Includes transit priority improvements along Rapid and High Frequency transit corridors, service increases, transfer and terminal investments, overhead wire changes, and street improvements in support of Vision Zero.		Yes	Yes	Yes	Yes
17-05-0015	San Francisco	Rail Capacity Long Term Planning and Conceptual Design - All	Rail capacity long term planning and conceptual design for Muni, BART, and Caltrain. Planning and conceptual engineering phase for study of major corridor and infrastructure investments along existing and potential expansion rail corridors that either expand the system or provide significant increases in operating capacity to the existing rail system.					Yes
17-05-0016	San Francisco	Better Market Street - Transportation Elements	Improve Market Street between Steuart Street and Octavia Boulevard. Includes resurfacing, sidewalk improvements, way-finding, lighting, landscaping, transit boarding islands, transit connections, traffic signals, transportation circulation changes, and utility relocation and upgrade.		Yes	Yes	Yes	Yes
17-05-0017	San Francisco	Core Capacity Implementation - Planning and Conceptual Engineering	Advance planning and evaluation of recommendations that emerge from the Core Capacity Transit Study. Examples of projects under consideration include HOV lanes on the Bay Bridge for buses and carpools; BART/Muni/Caltrain tunnel turnbacks, crossover tracks, grade separations, or other operational improvements; and a second transbay transit crossing.					
17-05-0018	San Francisco	Downtown San Francisco Ferry Terminal Expansion - Phase II	Expansion of berthing facilities along North Basin of Downtown San Francisco Ferry Terminal.					Yes
17-05-0019	San Francisco	Establish new ferry terminal at Mission Bay 16th Street	Establish New Ferry terminal to serve Mission Bay and Central Waterfront neighborhoods		Yes	Yes	Yes	Yes
17-05-0020	San Francisco	HOV/HOT Lanes on U.S. 101 and I-280 in San Francisco	Phase 1 (full implementation): Convert an existing mixed traffic lane and/or shoulder/excess ROW in each direction to HOV 3+ lanes on US 101 from SF/SM County line to I-280 interchange and on I-280 from US 101 interchange to 6th Street off ramp to enhance carpool and transit operations during peak periods. Phase 2 (planning and environmental review only): Convert Phase 1 HOV lanes to HOT/Express Lanes. Express transit to be funded with HOT lane revenues.		Yes	Yes	Yes	Yes
17-05-0021	San Francisco	Geary Boulevard Bus Rapid Transit	Implement Geary Bus Rapid Transit (BRT) to improve service between Market Street and Point Lobos Avenue. This proposal includes dedicated bus lanes, enhanced platforms, new bus passing zones, adjustments to local bus stops, turn lane restrictions, new signalization with Transit Signal Priority, real-time arrival information, low-floor buses, and safety improvements in support of Vision Zero. Expansion vehicles are included in RTPID 17-05-0013.		Yes	Yes	Yes	Yes
17-05-0022	San Francisco	Presidio Parkway	Reconstruct Doyle Drive with standard lane widths, shoulders, and a median barrier. Reconstruct interchange at State Route 1 and State Route 101 and add an auxiliary lanes between this interchange and Richardson Avenue. Transit access will be improved through the provision of extended bus bays near Gorgas Avenue to accommodate multiple transit providers, and well defined pedestrian routes. Post 2017 costs reflect annual SHOPP contributions for operations and maintenance.	Yes	Yes	Yes	Yes	Yes
17-05-0023	San Francisco	Yerba Buena Island (YBI) I-80 Interchange Improvement	Includes two major components: 1) On the east side of the island, the I-80/YBI Ramps project will construct new westbound on- and off- ramps to the new Eastern Span of the Bay Bridge; 2) On the west side of the island, the YBI West-Side Bridges Retrofit project will seismically retrofit the existing bridge structures.	Yes	Yes	Yes	Yes	Yes
17-05-0024	San Francisco	Balboa Park Station Area - Southbound I-280 Off-Ramp Realignment at Ocean Avenue	This project will realign the existing uncontrolled southbound I-280 off-ramp to Ocean Avenue into a T-intersection and construct a new traffic signal on Ocean Avenue to control the off-ramp.	Yes	Yes	Yes	Yes	

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17-05-0025	San Francisco	Balboa Park Station Area - Closure of Northbound I-280 On-Ramp from Geneva Avenue	This project would study and implement closure of the northbound I-280 on-ramp from Geneva Avenue to improve safety. Closure of the ramp would initially be a pilot project, if possible, depending on the results of traffic studies. The linked on-ramp from Ocean Avenue would remain open.	Yes	Yes	Yes	Yes	
17-05-0026	San Francisco	Bayshore Station Multimodal Planning and Design	Planning, Preliminary Engineering, and Environmental Review to re-locate the Bayshore Caltrain station and potentially extend the T-Line to the station. The project would also include inter-modal facilities and additional supporting structures and utilities.					
17-05-0027	San Francisco	Hunters Point Shipyard and Candlestick Point Local Roads Phase 1	Build new local streets within the Hunters Point Shipyard and Candlestick Point area.			Yes	Yes	Yes
17-05-0028	San Francisco	Southeast San Francisco Caltrain Station - Environmental	Planning and environmental analysis of Caltrain infill station to replace Paul Ave Station in Southeast San Francisco (e.g. Oakdale).					Yes
17-05-0029	San Francisco	Downtown Value Pricing/Incentives - Pilot, Transit Service, Supportive Infrastructure	A set of street improvements to support transit operations and cycling and pedestrian safety and comfort to support the anticipated mode shift due to the implementation of congestion pricing.		Yes	Yes	Yes	Yes
17-05-0030	San Francisco	Treasure Island Mobility Management Program: Intermodal Terminal, Congestion Toll, Transit Service, Transit Capital	New ferry service between San Francisco and Treasure Island; AC Transit service between Treasure Island and Oakland; shuttle service on-Island; bike share on-Island; priced-managed parking on-Island; Travel Demand Management program.		Yes	Yes	Yes	Yes
17-05-0031	San Francisco	Southeast Waterfront Transportation Improvements - Phase 1	Create a 5 mile multi-modal corridor of streets, transit facilities, pedestrian paths, and dedicated bicycle lanes to link the Candlestick/Hunters Point Shipyard project area to BART, T-Third light rail, Caltrain, local bus lines and future ferry service. A BRT system (included in a RTPID 17-05-0032) would use exclusive transit right-of-way, station and shelter facilities, and transit signal priority infrastructure. This project also includes express bus and enhances transit service between the Southeast Waterfront and downtown San Francisco.			Yes	Yes	Yes
17-05-0032	San Francisco	Geneva-Harney Bus Rapid Transit	Provides exclusive bus lanes, transit signal priority, and high-quality stations along Geneva Avenue (from Santos St to Executive Park Blvd), Harney Way, and Crisp Avenue, and terminating at the Hunters Point Shipyard Center. The project includes pedestrian and bicycle improvements in support of Vision Zero and connects with Muni Forward transit priority improvements west of Santos Street. This is the near-term alternative that does not rely on the full extension of Harney Way across US 101.		Yes	Yes	Yes	Yes
17-05-0033	San Francisco	Van Ness Avenue Bus Rapid Transit	Implement Van Ness Avenue Bus Rapid Transit (Van Ness BRT) to improve approximately two miles of a major north-south urban arterial in San Francisco. Project would include a dedicated lane for BRT buses in each direction between Mission and Lombard Streets. There will be nine BRT stations, with platforms on both sides for right-side passenger boarding and drop-off.	Yes	Yes	Yes	Yes	Yes
17-05-0034	San Francisco	Arena Transit Capacity Improvements	Identifies transit improvements needed to accommodate growth in Mission Bay. Improvements might include track crossovers to allow for trains to be staged; a 6-inch raised area along existing tracks; a platform extension to accommodate crowds; other trackway modifications; and a traction power study to ensure that the power grid can accommodate a large number of idling vehicles.					
17-05-0035	San Francisco	EN Trips: All Components	Implement streetscape improvements on Folsom Street between 5th and 11th Streets and on Howard Street between 4th and 11th Streets. On Folsom Street, a bi-directional cycle track, new transit bulbs and bus bulbs at intersections, and new signals would be	Yes	Yes	Yes	Yes	
17-05-0036	San Francisco	Regional/Local Express Bus to Support Express Lanes in SF	A 5-year regional/local express bus pilot to provide service to/from downtown San Francisco to/from San Francisco neighborhoods, Marin, Contra Costa, Alameda, San Mateo and Santa Clara counties to complement other freeway corridor management strategies. Some service to be funded with HOT lane revenues. See HOV/HOT Lanes on U.S. 101 and I-280 in San Francisco project. Includes vehicles.				Yes	
17-05-0037	San Francisco	Parkmerced Transportation Improvements	Implements transportation improvements for the Parkmerced development including enhanced transit service, pedestrian and bicycle facilities, intersection improvements, parking management, carshare and bikehare stations		Yes	Yes	Yes	Yes

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17-05-0039	San Francisco	Geneva Light Rail Phase I: Operational Improvements, Planning and Environmental	Planning and environmental analysis of extension of light rail track 2.7 miles along Geneva Avenue from the Green Railyard to Bayshore Boulevard and then to the existing T-Third terminus at Sunnydale Station. Project would increase operational flexibility, system resiliency, and provide a southern east west rail connection. Phase included in Plan Bay Area 2040 is for non-revenue service.					
17-05-0040	San Francisco	T-Third Mission Bay Loop	Connect the rail turnouts from the existing tracks on Third Street at 18th and 19th Streets with additional rail and overhead contact wire system on 18th, Illinois and 19th Streets. The loop would allow trains to turn around for special events and during peak periods to accommodate additional service between Mission Bay and the Market Street Muni Metro.	Yes	Yes	Yes	Yes	
17-05-0041	San Francisco	T-Third Phase II: Central Subway	Extends the Third Street Light Rail line north from King Street along Third Street, entering a new Central Subway near Bryant Street and running under Geary and Stockton Streets to Stockton & Clay Streets in Chinatown. New underground stations will be located at Moscone Center, Third & Market Streets, Union Square, and Clay Street in Chinatown. Includes procurement of four LRVs.	Yes	Yes	Yes	Yes	
17-05-0042	San Francisco	Historic Streetcar Extension - Fort Mason to 4th & King	The project would extend historic streetcar service by extending either the E-line or the F-line service from Fisherman's Wharf to Fort Mason, using the historic railway tunnel between Van Ness Ave. and the Fort Mason Center. The project will seek non-transit specific funds and will seek to improve the historic streetcar operation as an attractive service for tourists and visitors.		Yes	Yes	Yes	Yes
17-06-0001	San Mateo	Bicycle and Pedestrian Program	Projects in this category are new bicycle (on-street and off-street) and pedestrian facilities, and facilities that connect existing network gaps, including but not limited to new multi-purpose pedestrian/bicycle bridges over US 101 and sidewalk gap closures					Yes
17-06-0002	San Mateo	County Safety, Security and Other	Projects in this category address safety and security needs of San Mateo County including county-wide implementation of Safe Routes to School Program					Yes
17-06-0003	San Mateo	Multimodal Streetscape	Projects in this category implement multimodal or complete streets elements, including but not limited to projects along facilities such as El Camino Real, Bay Road, Ralston Avenue, University Avenue, Middlefield Road, Palmetto Avenue, Mission Street, Geneva Avenue, and Carolan Avenue					Yes
17-06-0004	San Mateo	Minor Roadway Expansions	This category includes roadway capacity increasing projects (new roadways, widening or extensions of existing roadways) on minor roads such as Blomquist Street, California Drive, Railroad Avenue, Manor Drive, and Alameda de las Pulgas					Yes
17-06-0005	San Mateo	Roadway Operations	County-wide Implementation of non-capacity Increasing local road Intersection modifications and channelization countywide County-wide implementation of local circulation improvements and traffic management programs countywide					Yes
17-06-0006	San Mateo	County-wide Intelligent Transportation System (ITS) and Traffic Operation System Improvements	Installation of transportation system management improvements such as Intelligent Transportation System (ITS) elements and TOS equipment throughout San Mateo County.					Yes
17-06-0007	San Mateo	Modify existing lanes on U.S. 101 to accommodate a managed lane	Modify existing lanes to accommodate an HOV lane from Whipple to San Francisco County Line and/ or an Express Lane from approximately 2 miles south of the Santa Clara County Line to San Francisco County Line. Work may include shoulder modification, ramp modifications, and interchange modifications to accommodate an extra lane. Work will be phased.	Yes	Yes	Yes	Yes	
17-06-0008	San Mateo	Add northbound and southbound modified auxiliary lanes and/ or implementation of managed lanes on U.S. 101 from I-380 to San Francisco County line	Add northbound and southbound modified auxiliary lanes and/or implementation of managed lanes on U.S. 101 from I-380 to San Francisco County line.		Yes	Yes	Yes	Yes
17-06-0009	San Mateo	Improve operations at U.S. 101 near Route 92 - Phased	US 101 operational improvements near Route 92. Project may have phased construction.					Yes
17-06-0010	San Mateo	Improve U.S. 101/Woodside Road interchange	Modifies the Woodside Road Interchange at US 101.		Yes	Yes	Yes	Yes

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17-06-0011	San Mateo	US 101 Produce Avenue Interchange	Construct a new interchange on US 101 at Produce Avenue, connecting Utah Avenue on the east side of US 101 to San Mateo Avenue on the west side of US 101. This will allow for reconfiguration of the existing southbound ramps at Produce Ave and Airport Blvd, as well incorporation of the northbound off- and on- ramps at S. Airport Blvd into the interchange design.		Yes	Yes	Yes	Yes
17-06-0012	San Mateo	U.S. 101 Interchange at Peninsula Avenue	Construct southbound on and off ramps to US 101 at Peninsula Ave to add on and off ramps from southbound 101.		Yes	Yes	Yes	
17-06-0013	San Mateo	Reconstruct U.S. 101/Broadway interchange	Reconstructs the US 101/Broadway interchange.	Yes	Yes	Yes	Yes	
17-06-0014	San Mateo	Reconstruct U.S. 101/Willow Road interchange	The project proposes to reconstruct the existing US 101/Willow Road (Route 114) Interchange within the existing alignment to a partial cloverleaf interchange. Project includes class I bike paths and class II bike lanes.	Yes	Yes	Yes	Yes	Yes
17-06-0015	San Mateo	Construct auxiliary lanes (one in each direction) on U.S. 101 from Marsh Road to Embarcadero Road	Add northbound and southbound auxiliary lanes.	Yes	Yes	Yes	Yes	
17-06-0016	San Mateo	Improve access to and from the west side of Dumbarton Bridge on Route 84 connecting to U.S. 101 per Gateway 2020 Study - Phased	Improve access to /from the west side of Dumbarton Bridge (Route 84 connecting to U.S. 101) per Gateway 2020 Study (Phased implementation of short term projects. Environmental phase only for long term projects).			Yes	Yes	Yes
17-06-0017	San Mateo	Route 101/Holly St Interchange Access Improvements	The proposed project would convert the existing full cloverleaf configuration to a partial cloverleaf design by eliminating two of the existing loop off-ramps of the interchange, and realign the diagonal on- and off-ramps into signalized T-intersections with local streets. A new pedestrian and bicycle over crossing will be constructed in the south side of Holly Street Interchange.	Yes	Yes	Yes	Yes	Yes
17-06-0018	San Mateo	Improve local access at I-280/I-380 from Sneath Lane to San Bruno Avenue to I-380 - Environmental only	Environmental assessment of local access improvements at the existing I-280 / I-380 interchange located in the City of San Bruno. The project would provide access to I-380 from the two main east-west secondary roads of Sneath Lane and San Bruno Avenue.					
17-06-0019	San Mateo	State Route 92-82 (El Camino) Interchange Improvement	Widen the existing ramps and reconfigure the existing interchange from a full cloverleaf to a partial cloverleaf. Pedestrian and bicycle improvements would be included as part of the project.	Yes	Yes	Yes	Yes	Yes
17-06-0020	San Mateo	Hwy 1 operational & safety improvements in County Midcoast (acceleration/deceleration lanes; turn lanes; bike lanes; pedestrian crossings; and trails)	Operational and safety improvements for vehicles, bicycles, and pedestrians, along the Highway 1 corridor between Half Moon Bay and Pacifica. This could include acceleration lanes, deceleration lanes, turn lanes, bike lanes, enhanced crossings, and trail network improvements.	Yes	Yes	Yes	Yes	
17-06-0021	San Mateo	Environmental Studies for 101/Candlestick Interchange	Planning and environmental analysis of the reconstruction of 101/Candlestick Interchange to full all-directional interchange with a single point cross street connection. Project would provide all-direction ramp movements controlled by new signalized intersections at the cross street connections. Interchange would join an improved Harney Way to the east, and would join the Geneva Avenue Extension to the west. Accommodate E/W crossing of planned BRT facility.					Yes
17-06-0022	San Mateo	Westbound slow vehicle lane on Route 92 between Route 35 and I-280 - Environmental Phase	Planning and environmental analysis of a westbound slow vehicle lane on Route 92 between Route 35 and I-280					
17-06-0023	San Mateo	Route 1 Improvements in Half Moon Bay	In Half Moon Bay, On Route 1: Improve safety and reduce congestion by providing protected left and right turn lanes, warranted traffic signals, two through lanes only at signalized intersections, bike lanes, pathways, bus stops, traffic signal interconnects, safety lighting, median and channelization improvements.		Yes	Yes	Yes	Yes
17-06-0024	San Mateo	Reconstruct U.S. 101/Sierra Point Parkway interchange (includes extension of Lagoon Way to U.S. 101)	Reconstruct a partial interchange and provide improved access to Brisbane, Bayshore Blvd and proposed Brisbane Baylands project. Lagoon Way extension connects to the reconstructed interchange and provides improved access to Brisbane, Daly City, and the pending 600-acre Brisbane Baylands development.		Yes	Yes	Yes	
17-06-0025	San Mateo	US 101/University Ave. Interchange Improvements	On University Avenue across US-101, between Woodland Avenue and Donohoe Street; Add bike lanes and sidewalk and modify the NB and SB off-ramps to eliminate pedestrian/bicycle conflicts and improve traffic operations.					

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17-06-0026	San Mateo	Implement incentive programs to support transit-oriented development	Implement an incentive programs to support transit-oriented developments in San Mateo County.					
17-06-0027	San Mateo	Implement supporting infrastructure and Automated Transit Signal Priority to support SamTrans express rapid bus service along El Camino Real	This project will institute necessary infrastructure and Automated Transit Signal Priority necessary to accommodate express rapid bus service along the length of El Camino Real from Palo Alto to Daly City.					
17-06-0028	San Mateo	Make incremental increase in SamTrans paratransit service - Phase	Expansion of curb-to-curb paratransit fleet and service for eligible users, compliant with ADA requirements, based on projected future demand.					
17-06-0029	San Mateo	Add new rolling stock and infrastructure to support SamTrans bus rapid transit along El Camino Real- Phase	This project will institute new rolling stock and infrastructure necessary to accommodate BRT along El Camino Real			Yes	Yes	Yes
17-06-0030	San Mateo	Environmental Clearance and Design of the Redwood City Ferry Terminal and Service	Planning and environmental analysis of the construction of a new ferry terminal, purchase of 3 new high-speed ferry vessels, and operation of new ferry service between Redwood City and San Francisco.					Yes
17-06-0031	San Mateo	Implement Redwood City Street Car - Planning Phase	Planning and environmental analysis of Redwood City Street Car Construction and Implementation					
17-06-0032	San Mateo	Route 1 San Pedro Creek Bridge Replacement and Creek Widening Project	Replace San Pedro Creek Bridge on CA 1 with a longer bridge and widen the creek channel for 100 year storm flow capacity. Provide for a class 1 multi-purpose trail on the eastern side.	Yes	Yes	Yes	Yes	
17-06-0033	San Mateo	Widen Route 92 between SR 1 and Pilarcitos Creek alignment, includes widening of travel lanes and shoulders	Widens shoulders and travel lanes to standard widths. Straighten curves at few locations.		Yes	Yes	Yes	Yes
17-06-0034	San Mateo	Construct Route 1 (Calera Parkway) northbound and southbound lanes from Fassler Avenue to Westport Drive in Pacifica	The Calera Parkway project will widen Highway 1 from four lanes to six lanes, from approximately 1,500 feet south of Fassler Avenue to approximately 2,300 feet north of Reina Del Mar Avenue, a distance of 1.3 miles, and will add a 16€™ wide landscaped median between concrete barriers from San Marlo Way to Reina Del Mar Avenue		Yes	Yes	Yes	Yes
17-06-0035	San Mateo	I-280 improvements near D Street exit	Improve the on and off-ramps and approaches for I-280 near the D Street exit in Daly City					
17-06-0036	San Mateo	Widen Skyline Boulevard (Route 35) to 4-lane roadway from I-280 to Sneath Lane - Phased	Widens Skyline Blvd. (SR 35) between I-280 and Sneath Lane. It is currently the last portion of what is otherwise a four lane roadway along Skyline Blvd. The project widens approximately 1.3 miles of the roadway into four lanes.		Yes	Yes	Yes	Yes
17-06-0037	San Mateo	Widen Millbrae Avenue between Rollins Road and U.S. 101 southbound on-ramp and resurface intersection of Millbrae Avenue and Rollins Road	Widen Millbrae Avenue between Rollins Road and US101 Southbound On Ramp and resurface the intersection of Millbrae Avenue and Rollins Road.	Yes	Yes	Yes	Yes	
17-06-0038	San Mateo	Construct a 6-lane arterial from Geneva Avenue/Bayshore Boulevard intersection to U.S. 101/Candlestick Point interchange - Environmental phase	Planning and environmental analysis of a 6-lane arterial from the Geneva Avenue at Bayshore Boulevard to 101/Candlestick Interchange. Grade separation at the Caltrain and Tunnel Ave, Class II bike lanes, on-street parking (travel lanes during peak periods), and sidewalks. Sections will be reserved for an exclusive lane BRT facility that connects to the Bayshore Multimodal Station and provides through service to BART Balboa Station.					
17-06-0039	San Mateo	Grade Separations	This project includes grade separations of the Caltrain right of way at approximately 2 to 3 high priority locations in San Mateo County, including 25th Avenue. This project is based on San Mateo County's Measure A grade separation category.					
17-06-0040	San Mateo	Extend Blomquist Street over Redwood Creek to East Bayshore and Bair Island Road	Redwood City Blomquist Street Extension and Blomquist Bridge over Redwood Creek		Yes	Yes	Yes	Yes
17-07-0001	Santa Clara	Bicycle and Pedestrian Program	Projects in this category are new bicycle (on-street and off-street) and pedestrian facilities, and facilities that connect existing network gaps, including downtown San Jose Bike Lanes					Yes
17-07-0002	Santa Clara	Caltrain Grade Separations	This project includes grade separations of the Caltrain right of way at priority locations throughout Santa Clara County					

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17-07-0003	Santa Clara	Multimodal Streetscape	Projects in this category implement multimodal or complete streets elements throughout Santa Clara County including but not limited to Los Gatos Boulevard, Monterey Road, Shoreline Boulevard, Stevens Creek Road, Downtown Sunnyvale Complete Streets, Wedgewood Avenue, West San Carlos, and Winchester Boulevard. This category also includes intersection improvements for non-expressways in Santa Clara County.					Yes
17-07-0004	Santa Clara	Additional Local Road Preservation/Rehab	This project provides additional funding to local streets and roads preservation and rehabilitation beyond what is included in the regional local roads maintenance project (RTPID 17-10-0022)					
17-07-0005	Santa Clara	Minor Roadway Expansions	This category includes roadway capacity increasing projects (new roadways or widening/extensions of existing roadways) on minor roads throughout Santa Clara County such as Buena Vista Avenue, bridges over US 101 in Gilroy, Blossom Hill Road, Lark Avenue, Pollard Road, Union Avenue, Butterfield Road, San Antonio Road, Charcot Avenue, King Road, Montague Expressway, San Carlos Street, Zanker Road, Coleman Avenue, Autumn Street, Winchester Boulevard, Center Avenue, DeWitt Avenue, Hill Road, Wastonville Road, Mary Avenue, and Wildwood Avenue					Yes
17-07-0007	Santa Clara	Affordable Fare Program	Program objective is to increase ridership by reducing the cost of transit services for low-income populations including seniors, persons with disabilities, youth and students.					
17-07-0008	Santa Clara	Implement System Operations and Management Program for Santa Clara County	This program includes projects that use technology to improve operation and management of the overall transportation system. These new technologies are collectively referred as Intelligent Transportation Systems.					Yes
17-07-0009	Santa Clara	SR 87 Technology-based Corridor Improvements	Improvements in San Jose to address mainline congestion and system reliability through the implementation of technology-based operational improvements to the freeway.					
17-07-0010	Santa Clara	Hwy. Transportation Operations System/Freeway Performance Initiative Phase 1 & 2	Implement Freeway Performance Initiative projects for Santa Clara County, which includes freeway ITS infrastructure, arterial management, incident management, emergency preparedness, and operations and maintenance of ITS infrastructure.					
17-07-0012	Santa Clara	BART Silicon Valley Extension - San Jose (Berryessa) to Santa Clara	The Berryessa Station to San Jose Extension Project would physically extend BART from the future BART Berryessa Station in San Jose to Downtown San Jose and then into Santa Clara. Project includes four new stations - Alum Rock, Downtown San Jose, Diridon, and Santa Clara. Project cost includes operating expenses - escalated capital cost is \$5.175 billion.		Yes	Yes	Yes	Yes
17-07-0013	Santa Clara	Implement El Camino Rapid Transit Project	Implement Rapid line 522 improvements in the El Camino Real/The Alameda corridor including: dedicated guideways, signal prioritization, low-floor boarding, ticket vending machines, premium stations, real-time information, and specialized vehicles.		Yes	Yes	Yes	Yes
17-07-0021	Santa Clara	Alviso Wetlands Doubletrack	Provide double track section on the UPRR Coast Subdivision from the Alameda County line to the vicinity of State Route 237. The improvements are expected to include double-tracking the segment running over the Alviso Wetlands.		Yes	Yes	Yes	
17-07-0022	Santa Clara	Environmental Studies for SR-152 New Alignment	Project includes further environmental and planning studies for the SR-152 corridor, including a new alignment and potential toll options.					Yes
17-07-0023	Santa Clara	US 101/Zanker Rd./Skyport Dr./Fourth St. Interchange Improvements	Construct a new interchange at U.S. 101/Zanker Road/Skyport Drive/Fourth Street		Yes	Yes	Yes	
17-07-0024	Santa Clara	Lawrence/Stevens Creek/I-280 Interchange	Lawrence/Stevens Creek/I-280 Interchange: Provide direct connections between Lawrence Expressway and I-280		Yes	Yes	Yes	
17-07-0025	Santa Clara	I-280/Winchester Blvd Interchange Improvements	Improve I-280/ Winchester Blvd Interchange to relieve congestion and improve operations and local circulation.		Yes	Yes	Yes	Yes
17-07-0026	Santa Clara	I-280/Wolfe Road Interchange Improvements	Modify I-280/Wolfe Road Interchange to relieve congestion and improve local circulation.		Yes	Yes	Yes	
17-07-0027	Santa Clara	US 101/Mabury Rd./Taylor St. Interchange Improvements	Construct interchange at U.S. 101/Mabury Road/Taylor Street		Yes	Yes	Yes	Yes
17-07-0028	Santa Clara	I-280 New HOV Lane from San Mateo County line to Magdalena Avenue	New HOV lane added to I-280 from existing HOV lane at Magdalena Avenue to the San Mateo County Line. Requires constructing a new lane.		Yes	Yes	Yes	
17-07-0029	Santa Clara	I-280/Saratoga Avenue Interchange Improvements	Modify I-280/ Saratoga Avenue Interchange to relieve congestion and improve local circulation		Yes	Yes	Yes	
17-07-0030	Santa Clara	I-280 Northbound Braided Ramps between Foothill Expressway and SR 85	Improve braided ramps on northbound I-280 between Foothill Expressway and Route 85.		Yes	Yes	Yes	

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17-07-0031	Santa Clara	US 101 Southbound/Trimble Rd./De La Cruz Blvd./Central Expressway Interchange Improvements	Improve interchange at U.S. 101 southbound Trimble Road/De la Cruz Boulevard/Central Expressway.		Yes	Yes	Yes	
17-07-0032	Santa Clara	I-680/ Alum Rock/ McKee Road Interchange Improvements	Reconfigure interchange, improve access for all modes of transportation, improve traffic operations and relieve congestion at the I-680/ Alum Rock and I-680/ McKee Road interchanges. Construct an Express Bus Station in the Median of I-680 to connect buses using HOV or Express Lanes with Santa Clara Alum Rock BRT Station.		Yes	Yes	Yes	
17-07-0033	Santa Clara	SR 237/Mathilda Ave. and US 101/Mathilda Ave. Interchange Improvement	The project proposes to improve local road operations on Mathilda Avenue in the City of Sunnyvale from Almanor Avenue to Innovation Way, including on- and off-ramp improvements at the State Route (SR) 237/Mathilda Avenue and US 101/Mathilda Avenue interchanges.		Yes	Yes	Yes	Yes
17-07-0034	Santa Clara	US 101 Interchanges Improvements: San Antonio Rd. to Charleston Rd./Rengstorff Ave.	Improve U.S. 101 interchanges at San Antonio Road to Charleston Road/Rengstorff Avenue including new auxiliary lane.		Yes	Yes	Yes	
17-07-0035	Santa Clara	US 101/Buena Vista Ave. Interchange Improvements	Construct a full interchange at US 101 and Buena Vista Avenue in Gilroy. The interchange includes a flyover southbound on-ramp to braid with the existing truck exit at the CHP Inspection Station. Off-ramp diagonal ramps will be constructed.		Yes	Yes	Yes	
17-07-0036	Santa Clara	SR 85 Northbound to Eastbound SR 237 Connector Ramp and Northbound SR 85 Auxiliary Lane	Widen off-ramp from Northbound SR 85 to SR 237 Eastbound to two lanes; construct auxiliary lane on Eastbound SR 237 between SR 85 on-ramp to Middlefield Rd.; construct braid off-ramp on Eastbound SR 237 between SR 85 and Dana St.		Yes	Yes	Yes	
17-07-0037	Santa Clara	SR 85/El Camino Real Interchange Improvements	Improve SR 85 auxiliary lanes between El Camino Real and SR 237, and SR 85/El Camino Real interchange.		Yes	Yes	Yes	
17-07-0038	Santa Clara	US 101/Blossom Hill Rd. Interchange Improvements	Widen interchange at U.S. 101/Blossom Hill Road.		Yes	Yes	Yes	Yes
17-07-0039	Santa Clara	US 101/Old Oakland Rd. Interchange Improvements	Improve interchange at U.S. 101/Old Oakland Road.		Yes	Yes	Yes	
17-07-0040	Santa Clara	US 101/Shoreline Blvd. Interchange Improvements	Interchange improvements at Shoreline Boulevard.				Yes	
17-07-0042	Santa Clara	SR 237/Great America Parkway WB Off- Ramps Improvements	Modify WB off-ramps at the SR 237/Great America Parkway interchange to improve traffic operations and relieve congestion.		Yes	Yes	Yes	
17-07-0043	Santa Clara	SR 237/El Camino Real/Grant Rd. Intersection Improvements	Widen Westbound SR 237 within the existing median to extend both of the left-turn lanes; lengthen the Northbound El Camino Real right-turn lane onto SR 237 starting the lane at Yuba Drive; widen the Southbound El Camino Real left-turn lane within the existing median; and construct a right-turn lane on Southbound El Camino Real for traffic accessing Westbound Grant Rd.		Yes	Yes	Yes	
17-07-0044	Santa Clara	Double Lane Southbound US 101 off-ramp to Southbound SR 87	Widen Southbound US 101 freeway connector to Southbound SR 87 to add a second lane and install TOS.	Yes	Yes	Yes	Yes	
17-07-0051	Santa Clara	Widen Calaveras Blvd. overpass from 4 to 6 lanes	Replaces the existing four lane bridge, which currently has a single sidewalk and no bicycle lane over the Union Pacific (UP) Railroad tracks, to a six lane bridge. Project will also add sidewalks and bicycle lanes in both directions.		Yes	Yes	Yes	
17-07-0056	Santa Clara	Bus Stop Improvements	Enhance transit waiting environments by improving accessibility and amenities at VTA bus stops.					
17-07-0057	Santa Clara	Frequent Core Bus Network - 15 minutes	Provide 15-minute all day bus service on VTA's highest ridership routes	Yes	Yes	Yes	Yes	
17-07-0058	Santa Clara	SR 85 Corridor Improvements - reserve amount	This program will fund corridor transit studies that improve transit connectivity and reduce traffic congestion in this corridor. It also includes a reserve amount for future projects along SR 85 that would be funded with Measure B sales tax revenue.					
17-07-0059	Santa Clara	Implement Stevens Creek Rapid Transit Project	Implement Rapid Transit improvements in the Stevens Creek corridor including: dedicated guideways, signal prioritization, low-floor boarding, ticket vending machines, premium BRT stations, real-time information, and specialized vehicles.		Yes	Yes	Yes	Yes
17-07-0060	Santa Clara	North First Street light rail speed Improvements	This project would improve light rail service and reliability along North First Street. Some of the problems in this area include signal timing issues, slow speeds (maximum speed currently restricted to 35mph), and unscheduled stops. Fencing along this corridor would allow maximum speeds to increase to 45 mph combined with improvements to signal timing.	Yes	Yes	Yes		

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17-07-0061	Santa Clara	Extend Capitol Expressway light rail to Eastridge Transit Center - Phase II	Extends the Capitol Avenue light rail line 2.6 miles from the existing Alum Rock Transit Center to a rebuilt Eastridge Transit Center. Includes the removal of HOV lanes on Capitol Expressway between Capitol Avenue and Tully Road in San Jose.		Yes	Yes	Yes	Yes
17-07-0062	Santa Clara	Extend light-rail transit from Winchester Station to Route 85 (Vasona Junction)	Extends light rail from Winchester Station to Route 85 (Vasona Junction).		Yes	Yes	Yes	Yes
17-07-0063	Santa Clara	Mineta San Jose International Airport APM connector - planning and environmental	Conduct planning and design work on a proposed project that would provide a transit link to San Jose International Airport using automated People Mover (APM) technology.					Yes
17-07-0064	Santa Clara	County Safety, Security, Noise and Other	Noise abatement program countywide - This project will implement noise reduction projects throughout Santa Clara County.					Yes
17-07-0065	Santa Clara	Caltrain Station and Service Enhancements	Projects to improve Caltrain service, system performance and stations including full EMU conversion, longer vehicles, longer platforms, level boarding, parking improvements, bike facilities, transit connectivity, other station enhancements and track reconfigurations.					Yes
17-07-0066	Santa Clara	Future Transit Corridor Studies	This program includes future transit corridor studies throughout Santa Clara County.					
17-07-0067	Santa Clara	SR 17 Corridor Congestion Relief in Los Gatos	Operational improvements for the SR 17 Corridor, including upgrading Highway 17/Highway 9 interchange to improve pedestrian and bicycle safety, mobility, and roadway operations; deploying advanced transportation technology to reduce freeway cut thru traffic in Los Gatos, including traffic signal control system upgrades in Los Gatos, traveler information system, advanced ramp metering systems and multi-modal congestion relief solutions		Yes	Yes	Yes	
17-07-0068	Santa Clara	237 WB Additional Lane from McCarthy to North First	Corridor Improvements in the cities of San Jose, Santa Clara and Milpitas to address mainline congestion and regional connectivity by the addition of SR 237 westbound auxiliary lane between McCarthy Boulevard and North First Street		Yes	Yes	Yes	
17-07-0069	Santa Clara	US 101/SR 25 Interchange	The project consists of reconfiguring the interchange at US 101 and SR 25 just south of the City of Gilroy in Santa Clara County, connecting SR 25 and Santa Teresa Boulevard, and widening the existing freeway from 4 to 6 lanes from the Monterey Street interchange to the US 101/SR 25 interchange.		Yes	Yes	Yes	
17-07-0070	Santa Clara	SR 237 Express Lanes: North First St. to Mathilda Ave.	Convert HOV to express lane in both directions		Yes	Yes	Yes	Yes
17-07-0074	Santa Clara	SR 85 Express Lanes: US 101 (South San Jose) to Mountain View	SR 85 typically has 1 HOV lane and 2 general purpose lanes in both directions with auxiliary lane in some segments. Project will convert existing HOV lane to express lane and add a second express lane between SR 87 and I-280 in both directions.		Yes	Yes	Yes	Yes
17-07-0075	Santa Clara	US 101 Express Lanes: Whipple Ave. in San Mateo County to Cochrane Road in Morgan Hill	Convert HOV Lanes to express lane and add a second express lane in some segments.		Yes	Yes	Yes	Yes
17-07-0076	Santa Clara	Santa Clara County Express Lanes Operations and Maintenance	This program includes operations and maintenance for the Santa Clara County (VTA) Express Lanes.					
17-07-0077	Santa Clara	BART – Warm Springs to Berryessa Extension (SVBX)	The project entails design, ROW, construction, equipment and Rolling Stock procurements necessary to extend BART to the future Berryessa Station in San Jose. Improvements will include track, bridges, traction electrification, stations, parking areas, fare vending equipment and other ancillary operating and/or maintenance equipment.	Yes	Yes	Yes	Yes	Yes
17-07-0078	Santa Clara	Envision Expressway (Tier 1 Expressway Plan) Major and Minor Projects	Various operational and capacity improvements to expressways in Santa Clara County comprising the Tier 1 investments from the Santa Clara County Expressway Plan. These projects include capacity improvements for Almaden Expressway, Capitol Expressway, Foothill Expressway, Lawrence Expressway, Montague Expressway, Oregon-Page Mill Expressway, San Tomas Expressway, Santa Teresa Boulevard. This project also includes the following ITS/Signal upgrades: Replace/upgrade/add fiber optic lines; upgrade equipment for new technologies; systemwide pedestrian sensors; enhance/replace bicycle and vehicle detection with new technologies on the County expressways	VARIES	Yes	Yes	Yes	Yes
17-07-0079	Santa Clara	Envision Highway Minor Projects	Includes: 1-280 NB Second exit lane to Foothill Expressway; SR 17 SB/Hamilton Ave Off-Ramp widening; San Tomas expressway at SR-17 Improvements; US101/SR 152 10th Street Ramp and Intersection Improvements; and Charcot Avenue Extension over I-880					

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17-07-0080	Santa Clara	Alum Rock/Santa Clara Street Bus Rapid Transit	Implement Rapid Transit improvements in the Santa Clara/Alum Rock route, including: dedicated guideways, signal prioritization, ticket vending machines, premium stations, real-time information, and specialized vehicles.	Yes	Yes	Yes	Yes	
17-07-0081	Santa Clara	I-880 Express Lanes: SR-237 to US-101	Convert existing HOV lane to an express lane in both directions between SR 237 and US 101		Yes	Yes	Yes	
17-07-0082	Santa Clara	SR-87 Express Lanes: I-880 to SR-85	Convert existing HOV lane to an express lane in both directions between I-880 and SR-85		Yes	Yes	Yes	
17-07-0083	Santa Clara	I-680 Express Lanes: SR-237 to US-101	Convert existing general purpose lane to an express lane in both directions between SR-237 and US-101		Yes	Yes	Yes	
17-07-0084	Santa Clara	I-280 Express Lanes: US-101 to Magdalena Avenue	Convert existing HOV lane to an express lane in both directions between US 101 and Magdalena Avenue		Yes	Yes	Yes	
17-07-0085	Santa Clara	Santa Clara County Express Lanes - Environmental and Design Phase for Future Segments	This program includes environmental and design phases for future express lane segments in Santa Clara County, including along I-880, US 101 south of Morgan Hill, and for Highway 17					
17-07-0086	Santa Clara	Santa Clara County Express Lanes - Reserve	This program includes future revenue from express lanes in Santa Clara County					
17-07-0087	Santa Clara	Widen San Tomas Expressway to 8 Lanes from Stevens Creek Blvd to Campbell Ave	Widen San Tomas Expressway from 6 to 8 Lanes from Stevens Creek Blvd to Campbell Ave.		Yes	Yes	Yes	
17-07-0088	Santa Clara	Senter Road Widening from Umbarger to Lewis	Widening Senter Road between Umbarger Rd. and Lewis Rd. from 4 to 6 lanes with improved bicycle/ped facilities and install median landscaping.		Yes	Yes	Yes	
17-07-0089	Santa Clara	South Bascom Complete Streets	On South Bascom Ave. from Parkmoor Ave. to Southwest Expressway reduce the road to two lanes and make bicycle and pedestrian improvements in the corridor.		Yes	Yes	Yes	
17-07-0090	Santa Clara	Widen Brokaw Bridge over Coyote Creek	Widen north side of the bridge to add on additional through traffic lane on westbound Brokow Road.					
17-07-0091	Santa Clara	Widen Oakland Road from 4-lanes to 6-lanes between U.S. 101 and Montague Expressway	Widens Oakland Rd. from 4 to 6 lanes between US 101 and Montague Expwy. Also provides median island landscaping and operational improvements in roadway corridor.		Yes	Yes	Yes	
17-08-0001	Solano	Access and Mobility Program	This category includes projects that improve access and mobility for people with disabilities, low-income residents, and seniors, including providing Lifeline transit service countywide and providing transit service to seniors and individuals with disabilities separate from Lifeline					Yes
17-08-0002	Solano	Bicycle and Pedestrian Program	Projects in this category are new bicycle (on-street and off-street) and pedestrian facilities, and facilities that connect existing network gaps					Yes
17-08-0003	Solano	Climate Program: TDM and Emission Reduction Technology	Projects in this category implement strategies and programs that reduce emissions, encourage alternative transportation modes, and manage transportation demand including but not limited to projects such as TDM program implementation, parking management, local area shuttle and paratransit services					Yes
17-08-0004	Solano	County Safety, Security and Other	Projects in this category address safety, security and other needs. This project includes safety improvements to state highways throughout Solano County. This also includes countywide Safe Routes to School projects.					Yes
17-08-0005	Solano	Multimodal Streetscape	Projects in this category implement multimodal or complete streets elements					Yes
17-08-0006	Solano	PDA Planning	This category includes planning studies supporting the region's PDA framework and connecting transportation and land use					
17-08-0007	Solano	Minor Roadway Expansions	This category includes roadway capacity increasing projects (new roadways or widening/extensions of existing roadways) on minor roads throughout Solano County					Yes
17-08-0008	Solano	Roadway Operations	This category includes projects that improve roadway, intersection, or interchange operations, ITS, as well as other transportation system management. This project also includes a realigning SR 113 around downtown Dixon to I-80.					Yes
17-08-0009	Solano	I-80/I-680/SR12 Interchange (Packages 2-7)	Packages 2-7 provide direct connectivity from I-680 NB to SR12 WB, widens I-680 and I-80 near the interchange, and improves connections to Red Top road off-ramp. Express lane direct connectors are included in RTPID 17-10-0061.			Yes	Yes	

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17-08-0010	Solano	Improve interchanges and widen roadways serving Solano County Fairgrounds, including Redwood Parkway	Improvements to interchanges and widening of roadways serving the Solano County Fairgrounds, including Redwood Parkway.		Yes	Yes	Yes	Yes
17-08-0011	Solano	Provide auxiliary lanes on I-80 in eastbound and westbound directions from I-680 to Airbase Parkway	Project provides Auxiliary Lanes on I-80 in the EB & WB directions from I-680 to Airbase Parkway; and removes the I-80/Auto Mall hook ramps and C-D road slip-ramp;		Yes	Yes	Yes	
17-08-0012	Solano	Construct 4-lane Jepson Parkway from Route 12 to Leisure Town Road at I-80	Constructs phase 2,3,4,6,7,8 and 10. Road costs only - bike and other special enhancements assumed from other programs (i.e. Regional Bicycle Program).		Yes	Yes	Yes	Yes
17-08-0013	Solano	Conduct planning and design studies along SR-12 corridor in Solano County	Conduct planning and design studies related to improvements from I-80 to the Rio Vista Bridge					
17-08-0014	Solano	Construct train station building and support facilities at the new Fairfield / Vacaville multimodal station	Construct train station building and expanded bicycle access for the new multimodal center serving the Capitol Corridor.	Yes	Yes	Yes	Yes	
17-08-0015	Solano	Solano MLIP Support Projects	Construct projects and operate programs to support implementation of the MLIP. Projects include expansion of transit centers, including in Vallejo and Fairfield, and new bus stops served by Solano Express; construction or expansion of Park and Ride facilities; and, replacement and maintenance of intercity buses.		Yes	Yes	Yes	Yes
17-08-0016	Solano	Vallejo Station Parking Structure Phase B	Vallejo: Baylink Ferry Terminal; Construct two phased parking structure to consolidate surface parking for ferry patrons; create a pedestrian link between bus transit facility and existing ferry terminal building adjacent to ferry parking structure.					
17-08-0017	Solano	I-80 WB Truck Scales	Project upgrades existing truck scales on WB I-80 in Solano County. Existing westbound truck scales are located on the most congested freeway segment of I-80 in Solano County. Scales are outdated and cannot process the current and future truck volumes on WB I-80. Trucks are slow to enter and leave the scales because of short ramps, adding to existing traffic congestion and safety issues on I-80.					
17-09-0001	Sonoma	Bicycle and Pedestrian Program	Projects in this category are new bicycle (on-street and off-street) and pedestrian facilities, and facilities that connect existing network gaps					Yes
17-09-0002	Sonoma	SMART Rail Freight Improvements	Improvements along publicly-owned SMART rail right-of-way to accommodate rail freight services and expansions. Programmatic category that could include freight spurs, Positive Train Control/systems and crossing upgrades, track and sidings expansions and bridge improvements.					
17-09-0003	Sonoma	Multimodal Streetscape	Projects in this category implement multimodal or complete streets elements.					Yes
17-09-0004	Sonoma	Minor Roadway Expansions	This category includes roadway capacity increasing projects (new roadways or widening/extensions of existing roadways) on minor roads such as Airport Boulevard, Caulfield Lane, Bodway Parkway, Brickway Blvd/Laughlin Rd, Corby Avenue, Dowdell Avenue, Fulton Road, Old Redwood Highway, River Road, Snyder Lane, and Jaguar Way					Yes
17-09-0005	Sonoma	Roadway Operations	This category includes projects that improve roadway, intersection, or interchange operations, ITS, as well as other transportation system management. This project also includes landscaping along US 101 HOV lanes, intersection improvements at Route 116/Route 121, local circulation in Penn Grove, Sonoma Boulevard Improvements, among other operational improvements throughout Sonoma County.					Yes
17-09-0006	Sonoma	Implement Marin Sonoma Narrows Phase 2 (Sonoma County)	Adds 1 HOV lane in each direction to US 101 from Old Redwood Highway in Petaluma to the Marin/Sonoma County line making the freeway 6 lanes wide. It includes widening and replacing the Hwy 116 separation bridges.		Yes	Yes	Yes	Yes
17-09-0008	Sonoma	Arata Lane Interchange	Construction of the Northbound on-ramp to US 101 will complete the Arata Lane interchange with US 101. This project also includes the relocation of a portion of Los Amigos Road north of Arata Lane. Rights of way have been obtained in prior phases.		Yes	Yes	Yes	
17-09-0009	Sonoma	Cotati US 101/Railroad Avenue Improvements (incl. Penngrove)	This project is the creation of a new south bound off ramp and north bound on ramp at Railroad Avenue. There continues to be growth outside of Cotati and Penngrove that will exacerbate traffic in both Penngrove and in downtown Cotati, as these are the only options to access US 101. Improvements would include safety improvements on Railroad Avenue from Petaluma Hill to US 101.			Yes	Yes	

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17-09-0010	Sonoma	Hearn Avenue Interchange	The project would replace the existing Hearn Avenue overcrossing bridge with a new bridge to accommodate four traffic lanes with bike lanes and sidewalks on both sides of the roadway. The project would also increase the bridge height clearance and improve ramp connections to US 101 and provide continuous bike lanes and sidewalks between Corby Avenue and Santa Rosa Avenue				Yes	Yes
17-09-0011	Sonoma	Shiloh Road Interchange Reconstruction	Reconstruct the Shiloh Road/US 101 interchange to provide two lanes in each direction. It is anticipated that the existing over crossing will be replaced and ramps reconfigured. It is expected that 60% of project costs will come from federal, state or regional funds.			Yes	Yes	
17-09-0012	Sonoma	Cotati Highway 116 Cotati Corridor Improvements	This project is a widening of Highway 116 between US 101 and Stony Point Road, including phased closure of driveway access to 116, the addition of signalized intersections, new bike lanes, and new sidewalk to improve the vehicle LOS, improve the safety of 116 for all modes of transportation, and create safe new corridors for pedestrian and bicyclists.	Yes	Yes	Yes	Yes	
17-09-0013	Sonoma	Petaluma Crosstown Connector and Rainier Interchange	Extend Rainier Avenue from current terminus at McDowell Boulevard westerly with a bridge crossing over the railroad tracks and the Petaluma River to a terminate at Petaluma Boulevard North. A second phase of work will construct a new interchange with the 101.		Yes	Yes	Yes	
17-09-0014	Sonoma	Farmers Lane extension between Bennett Valley Rd and Yolanda Avenue	Construct new road with travel lanes, bike lanes and sidewalks. Expand bike, pedestrian, transit, and vehicle improvements in Southeast Santa Rosa.		Yes	Yes	Yes	
17-09-0015	Sonoma	Road Diet Extension - Petaluma Boulevard South	Reduce Petaluma Boulevard from E-Street to Crystal Lane (Roundabout) from 4 through lanes to 2 through lanes and a two-way-left-turn-lane	Yes	Yes	Yes	Yes	
17-09-0016	Sonoma	SMART Petaluma Infill Station	Construct a second SMART station in the City of Petaluma including associated amenities.	Yes	Yes	Yes	Yes	
17-09-0017	Sonoma	Enhance bus service frequencies in Sonoma County	Enhance transit to achieve a 50% increase in bus service countywide - this includes Sonoma County Transit, Santa Rosa CityBus, Petaluma Transit. Project also includes BRT-like facilities in Santa Rosa.	Yes	Yes	Yes	Yes	
17-09-0018	Sonoma	SMART Rail Extension to Windsor + Environmental to Cloverdale + Bike Path	Project extends SMART from the Sonoma Airport to Windsor, implements the SMART bike path, and includes additional environmental/planning assessment of extending SMART to Healdsburg and Cloverdale.	Yes	Yes	Yes	Yes	
17-10-0001	AC Transit	AC Transit Fleet Expansion and Major Corridors	Purchases rolling stock for enhanced transbay, local, or express services.		Yes	Yes	Yes	
17-10-0003	AC Transit	San Pablo Avenue BRT	Project implements BRT along San Pablo Avenue in Alameda and Contra Costa counties. This includes a bus-only lane from 20th Street to Ashby Avenue in Alameda County and from Richmond Parkway Center to Central Avenue in Contra Costa County. Project also includes enhanced real-time info, queue jump lanes where bus-only lane is not proposed, new buses and on-board equipment, and passenger amenities.		Yes	Yes	Yes	
17-10-0004	AC Transit	Environmental Studies for Bay Bridge Contraflow Lane	This project includes further environmental and planning studies for the proposed Bay Bridge Contraflow lane, which would convert an EB lane on the bottom deck of the Bay Bridge into a peak-period WB lane in the AM period. This lane would likely be used by buses and carpool vehicles.					
17-10-0005	BART	BART Metro Program + Bay Fair Connector	Investments in support of the region's Sustainable Communities Strategy, including studies of a future Transbay Corridor rail crossing. Capital: Turnbacks/crossovers/tail track extensions (24th St, Lafayette, Glen Park, Millbrae, Dublin, Daly City, Richmond, South Hayward); Station capacity improvements (platform doors at 4 downtown SF stations, additional stairs/escalators/elevators Operating: 12-minute headways on all lines in the peak period (instead of current 15-minutes) Bay Fair Connector: Modify BART Bay Fair Station and approaches to add one or more additional tracks and one or more passenger platforms for efficient train service and operational flexibility. Includes station modernization, modifications to switches, tracks, crossovers, train control, signaling, traction power, etc.		Yes	Yes	Yes	Yes

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17-10-0006	BART	BART Transbay Core Capacity Project	<p>The Transbay Corridor Core Capacity Project is a multi-pronged effort to address capacity issues in the Transbay corridor and is in coordination with the BART Metro Program project. The project elements are:</p> <ul style="list-style-type: none"> • Communication-based train control (CBTC) system to safely enable closer headways and allow BART to operate more frequent service (12 minute frequencies); • Expansion of the rail car fleet by 306 vehicles to add cars to existing trains and operate more frequent trains; • Added traction power substations to allow more frequent service; • Expansion of the Hayward Maintenance Complex (HMC) to provide storage and maintenance capability for the expanded fleet; • Other (Unallocated contingency) <p>Financing cost is included in RTPID 17-10-0016.</p>					Yes
17-10-0007	CAHSR	California HSR in the Bay Area	This project implements the segment of California High Speed Rail that is in the Bay Area.		Yes	Yes	Yes	
17-10-0008	Caltrain	Caltrain Electrification Phase 1 + CBOSS	The Peninsula Corridor Electrification Project (PCEP) includes the electrification of the Caltrain corridor between San Francisco and San Jose, the procurement of new, Electric Multiple Unit rolling stock, and an increase in the Caltrain service levels. This project also includes CBOSS, which is the Communications Based Overlay Signal System (CBOSS) Positive Train Control necessary to monitor and control train movements as well as increase safety.		Yes	Yes	Yes	Yes
17-10-0009	GGBHTD	Golden Gate Bridge Capital and Operations	This program includes operations and maintenance for the Golden Gate Bridge.					Yes
17-10-0010	GGBHTD	Bus and Ferry Service Expansion	This program includes planned bus and ferry expansion projects such as new express bus service between East Santa Rosa and San Francisco; between Richmond and San Rafael; and between Central Marin and West San Francisco. This program also includes off-site parking and an additional Larkspur Ferry crossing.		Yes	Yes	Yes	
17-10-0011	Multi-County	Lifeline, Community Based Transportation Program, and Mobility Management	The Lifeline Transportation Program funds priority projects identified by residents in MTC's Communities of Concern through locally crafted Community-Based Transportation Plans. Projects can include community shuttles, transit services, streetscape improvements and bus stop amenities. Additionally, this program includes \$90 million for a future mobility management program. Mobility management enables communities to monitor transportation needs and to link individuals to appropriate, cost-efficient travel options					Yes
17-10-0012	Multi-County	Means-Based Fare Study Implementation	This program would implement the recommendations from MTC's Means-Based Fare Study, which launched in 2015 to determine if a transit fare program based on household income would be feasible and effective. This study will identify possible fare structures and payment methods, eligible recipients, overall program costs, and potential technical challenges.					
17-10-0013	Multi-County	Transportation Management Systems	This program replaces and rehabilitates the physical ramp meters, induction loops and cameras used to manage traffic real-time and to collect traffic data for planning purposes. This program also maintains and replaces telecommunication networks connecting all field devices with potential to transition from copper lines to fiber optics. Related to the SHOPP program (RTPID 17-10-0025)					Yes
17-10-0014	Multi-County	Bay Trail - non toll bridge segments	This program would complete the Bay Trail along the shoreline. This program does not include the segments of the Bay Trail that would cross the Bay via toll bridges.					
17-10-0015	Multi-County	Climate Program: TDM and Emission Reduction Technology	MTC's Climate Initiatives Program includes transportation demand management (TDM) strategies, car sharing, vanpool incentives, alternative fuel/vehicle initiatives, targeted transportation alternatives, trip caps and commuter benefits ordinances.					Yes
17-10-0016	Multi-County	Cost Contingency and Financing	This program includes future financing costs for capital projects such as for BART's Transbay Core Capacity Project (RTPID 17-10-0006). It also would cover contingency for major capital projects, if needed.					
17-10-0017	Multi-County	Capital Projects Debt Service	This program includes on-going payments to debt service resulting from past financing of revenue, especially for bridge toll and sales tax revenue sources.					Yes
17-10-0018	Multi-County	Goods Movement Clean Fuels and Impact Reduction Program	Program for implementing recommendations of the Freight Emission Reduction Action Plan and developing programs for impact reduction in neighborhoods with high levels of freight activity.					
17-10-0019	Multi-County	Goods Movement Technology Program	Program for deploying communications infrastructure to increase active traffic management along freight corridors and to/from the Port of Oakland					

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17-10-0020	Multi-County	New/Small Starts Reserve	This is a reserve for future FTA funds (Section 5309) that are referred to as New Starts, Small Starts, or Core Capacity funding. This reserve is for future transit projects eligible for these funds and that serve the North or East Bay.					
17-10-0021	Multi-County	Priority Development Area (PDA) Planning Grants	This program includes Priority Development Area (PDA) Planning Grants and associated programs					Yes
17-10-0022	Multi-County	Local and Streets and Roads - Existing Conditions	This program includes local streets and roads maintenance throughout the region, including pavement and non-pavement assets					Yes
17-10-0023	Multi-County	Local Streets and Roads - Operations	This program includes on-going operations of the local streets and roads throughout the region					Yes
17-10-0024	Multi-County	Regional and Local Bridges - Existing Conditions	This program includes operations and maintenance of regional and local bridges. Golden Gate Bridge operations and maintenance is in a separate program (RTPID 17-10-0009)					Yes
17-10-0025	Multi-County	Regional State Highways - Existing Conditions	This program includes operations and maintenance of the state highways within the Bay Area. This program generally implements the SHOPP, which also includes minor mobility enhancements and management systems.					Yes
17-10-0026	Multi-County	Regional Transit Capital - Existing Conditions	This program includes capital maintenance and replacement funding for the region's transit operators. Types of projects in this category mostly include replacing vehicles and fixed-guideway assets like rail that have a direct impact on service. To a lesser extent, this program includes station upgrades and replacing other assets that do not directly affect revenue service.					Yes
17-10-0027	Multi-County	Regional Transit Operations	This program covers the costs to operate the Bay Area's existing transit service every year through the Plan horizon.					Yes
17-10-0028	Multi-County	Clipper	This program covers annual operating costs of Clipper as well as the upgrade of Clipper to Clipper 2.0.					Yes
17-10-0029	Multi-County	511 Traveler Information Program	This program covers the 511 program in the Bay Area. 511 includes a transit trip planner, real-time transit information, up-to-the minute traffic information, carpool and vanpool formation services and parking information.					Yes
17-10-0030	Multi-County	SAFE Freeway Patrol	This program covers MTC's Service Authority for Freeways and Expressways, or SAFE, program. MTC-SAFE manages the Bay Area's fleet of Freeway Service Patrol tow trucks and roadside call boxes.					Yes
17-10-0031	Multi-County	Regional Transportation Emergency Management Program	This program enhances first responders' capabilities to clear traffic incidents and respond to major emergencies through integrated corridor management.					
17-10-0032	Multi-County	Regional Rail Station Modernization and Access Improvements	This program includes station modernization and access improvements for rail station throughout the region.					Yes
17-10-0033	Multi-County	Bay Area Forward	This program includes a variety of operational and multimodal improvements, including: active traffic management - upgrades to all existing ramp meters to adaptive, implementing hard shoulder running lanes, contra-flow lanes, queue warning, and ramp modifications; arterial operations - implementation of traditional time-of-day signal timing coordination, adaptive traffic signal control systems, transit signal priority, real-time traffic monitoring devices, ped/bike detection, queue-jump lanes, etc; connected vehicles - pilot deployments of vehicle-to-infrastructure (V2I) strategies; Managed Lanes Implementation Plan - pilot express bus service for routes not currently served by operators; expands park-and-ride facilities throughout the region; and supports pilot deployment of shared-mobility solutions.	VARIES	VARIES	VARIES	Yes	Yes
17-10-0034	Multi-County	San Francisco-Oakland Bay Bridge West Span Bicycle, Pedestrian, and Maintenance Path - Environmental Only	This project continues environmental and design work on the proposed bicycle, pedestrian, and maintenance path on the west span of the Bay Bridge.					
17-10-0036	Multi-County	I-580 Access Improvements Project	Project converts the right shoulder of the Richmond-San Rafael Bridge to a third freeway lane from the Sir Francis Drake Blvd. on-ramp in Marin County to the Marine Street (Richmond Parkway/Point Richmond) exit in Contra Costa County. Project also constructs a path on the north side of I-580, including the upper deck of the Richmond-San Rafael Bridge, with concrete barriers to separate bicyclists and pedestrians from westbound freeway traffic.	Yes	Yes	Yes	Yes	Yes
17-10-0037	Multi-County	Highway 37 Improvements and Sea Level Rise Mitigation PSR	Prepare multi-county study, to PID standard, on improvements to SR 37 to accommodate future sea level rise and existing congestion					

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17-10-0038	TJPA	Caltrain/HSR Downtown San Francisco Extension	The Downtown Rail Extension (DTX) will extend Caltrain commuter rail from its current terminus at Fourth and King streets and deliver the California High-Speed Rail Authority's future high-speed service to the new Transit Center. The 1.95-mile rail extension will be constructed principally below grade underneath Townsend and Second streets. The design includes an underground station at Fourth and Townsend streets, utility relocations, rail systems work, and structures for emergency exit, ventilation at six locations along the alignment, and an underground pedestrian bridge connecting the Transbay Terminal to the Embarcadero BART station. Cost includes operating expenses - capital cost is \$3.999 billion		Yes	Yes	Yes	Yes
17-10-0039	TJPA	Implement Transbay Transit Center/Caltrain Downtown Extension (Phase 1 - Transbay Transit Center)	The project has 3 components: (1) new Transbay Transit Center built on the site of the former Transbay Terminal in downtown San Francisco serving 11 transportation systems; (2) extension of Caltrain commuter rail service from its current San Francisco terminus at 4th & King Streets to a new underground terminus; and (3) establishment of a Redevelopment Area Plan with related development projects.	Yes	Yes	Yes	Yes	Yes
17-10-0040	WETA	North Bay Ferry Service Enhancement	Purchase and operate 2 new ferry vessels for WETA North Bay ferry services. Project increases frequency for the Richmond-SF and Vallejo-SF ferry lines.	Yes	Yes	Yes	Yes	
17-10-0041	WETA	Central Bay Ferry Service Enhancement	Purchase and operate 2 new ferry vessels for WETA Central Bay ferry services. Project increases frequency for the Oakland-Alameda-SF ferry line and the Harbor Bay-SF ferry line.	Yes	Yes	Yes	Yes	Yes
17-10-0042	WETA	Albany/Berkeley Ferry Terminal	Construct a new Berkeley/Albany ferry terminal, purchase 2 new ferry vessels, operate new ferry service between Berkeley/Albany and San Francisco.		Yes	Yes	Yes	Yes
17-10-0043	Multi-County	Regional Carpool Program	This program includes carpool outreach and promotion, supporting vanpools, positioning the program to rely on private sector ridematching apps, and other services. The Regional Carpool Program will support carpoolers during the launch of Bay Area Express Lanes, promote carpooling and vanpooling along high-priority congested travel corridors, and grow first/last mile carpool solutions to transit, consistent with its annual work plan. Includes MTC staff costs.					
17-10-0044	Multi-County	I-80 Express Lanes in both directions: Airbase Parkway to Red Top Road	Express Lanes on I-80 in Solano County from Red Top Road to Air Base Parkway - convert existing HOV lanes to express lanes		Yes	Yes	Yes	Yes
17-10-0045	Multi-County	I-80 Express Lanes: Westbound Bay Bridge Approaches	Express Lanes on the four westbound SFOBB bridge approaches: (1) I-80 direct connector from Powell Street to SFOBB metering lights (1.8 miles); (2) I-580 from I-80 junction to metering lights (1 mile); (3) I-880/880S direct connector from 14th Street to metering lights (1.5 miles); (4) West Grand Ave/I-880 direct connector to metering lights (0.7 miles) - convert existing HOV lanes to express lanes		Yes	Yes	Yes	
17-10-0047	Multi-County	I-680 Express Lanes: Northbound from Marina Vista to SR 242	Express Lanes on I-680 northbound from SR-242 to Marina Vista. Convert existing HOV lane to express lanes.		Yes	Yes	Yes	
17-10-0048	Multi-County	I-680 Express Lanes: Southbound from Marina Vista to Rudgear	Express Lanes on I-680 southbound from Marina Vista to Rudgear Rd. Convert existing and future SB HOV lane to express lane. Future SB HOV lane from North Main to Livorna/Rudgear is in RTPID 17-02-0022	Yes	Yes	Yes	Yes	
17-10-0049	Multi-County	I-680 Express Lanes in both directions: Livorna/Rudgear to Alcosta	Express lanes on I-680 in Contra Costa County from Alcosta Road to Livorna northbound and to Rudgear southbound - convert existing HOV lanes to express lanes		Yes	Yes	Yes	Yes
17-10-0050	Multi-County	SR-84 Express Lanes: Westbound from I-880 to Dumbarton Bridge Toll Plaza	Express Lanes on Route 84 westbound in Alameda County from I-880 through Dumbarton Bridge toll plaza - convert existing HOV lane to express lane	Yes	Yes	Yes	Yes	
17-10-0051	Multi-County	SR-92 Express Lanes: Westbound from Hesperian to San Mateo Bridge Toll Plaza	Express Lanes Route 92 WB in Alameda County from Hesperian Boulevard through San Mateo-Hayward Bridge toll plaza - convert existing HOV lane to express lane	Yes	Yes	Yes	Yes	
17-10-0052	Multi-County	I-880 Express Lanes in both directions: Hegenberger/Lewelling to SR-237	Express lane on I-880 in Alameda County from Lewelling Blvd to SR 237 Direct Connector in northbound direction, Hegenberger Rd to SR 237 Direct Connector in the southbound direction- convert existing HOV lanes to express lanes.	Yes	Yes	Yes	Yes	Yes
17-10-0053	Multi-County	I-80 Express Lanes in both directions: Carquinez Bridge to Bay Bridge	Express Lanes on westbound I-80 from Carquinez Bridge Toll Plaza to Powell St Direct Connector on eastbound I-80 from Powell St Direct Connector to Cummings Skyway. Add new express lane on eastbound I-80 from Cummings Skyway to Carquinez Bridge.		Yes	Yes	Yes	Yes
17-10-0054	Multi-County	MTC Express Lane Program Cost	Includes non-corridor activities such as centralized toll system activities, start-up program management, contingency and capitalized O&M.					Yes
17-10-0055	Multi-County	East and North Bay Express Lanes Operations and Maintenance	This program includes on-going operations and maintenance for the express lanes in the East and North Bay counties					

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RTPID	County/ Sponsor	Title	Description	Complete and Operational By:			Included in the Model?	Referenced in the 2017 TIP
				2020	2030	2040		
17-10-0056	Multi-County	East and North Bay Express Lanes Reserve	This program includes future revenue from express lanes in the East and North Bay counties					
17-10-0057	Multi-County	I-880 Express Lanes: Northbound from Hegenberger to Lewelling and bridge improvements	I-880 Northbound express lane from Lewelling Blvd to Hegenberger Rd. and reconstruct bridges at Davis Street and Marina Boulevard - widen to add an express lane and reconstruct bridges		Yes	Yes	Yes	Yes
17-10-0058	Multi-County	I-680 Express Lanes: Northbound from SR-84 to SR-237	Express lanes on I-680 in the northbound direction from SR-84 to SR-237 which involves constructing a new lane.		Yes	Yes	Yes	Yes
17-10-0059	Multi-County	I-80 Express Lanes in both directions: Airbase Parkway to I-505	I-80 Solano Express Lanes from Air Base to I-505-widen to add an express lane in each direction	Yes	Yes	Yes	Yes	
17-10-0060	Multi-County	I-680 Express Lanes: Northbound from Rudgear to SR 242 and operational improvements	Widen I-680 for a new northbound express lane between N. Main Street and Route 242 and implement operational improvements on I-680 from Rudgear to N. Main. This project complements the NB HOV lane extension through the 680/24 interchange and from N. Main to SR 242 as well as operational improvements included in RTPIDs 17-02-0012 and 17-02-0013.		Yes	Yes	Yes	Yes
17-10-0061	Multi-County	I-680 Express Lanes: I-80 westbound to I-680 southbound and I-680 northbound to I-80 eastbound direct connectors	Express lanes on I-680/I-80 interchange in Solano County - widen to add express lane direct connectors I-80 westbound to I-680 southbound and I-680 northbound to I-80 eastbound. This complements the larger interchange project of RTPID 17-08-0009.		Yes	Yes	Yes	Yes
17-10-0062	Multi-County	East and North Bay Express Lanes - Environmental and Design Phases for Future Segments	This program includes environmental and design phases for future express lane segments in Alameda and Solano counties, including along I-80, I-680, and I-580					
17-10-0063	BART	BART Seismic Safety Augmentation	Alternatives analysis and design associated with the Berkeley Hills Tunnel plus design of the A-Line structural augmentation / improvement to operability standards.					
17-10-0064	BART	Hayward Maintenance Complex Phase 1	This project increases maintenance capacity as part of its Fleet of the Future program as well as to support increased service for the Berryessa Extension. This Phase I project involves constructing an outdoor storage area for maintenance and engineering materials and equipment, building track access to new maintenance facilities from the existing mainline, and improving access for BART maintenance operations.					Yes

Appendix B
List of Projects in Amended 2017 Transportation Improvement Program

List of 2017 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Alameda	ALA050002	17-01-0007	San Leandro	SR 185- E. 14th St/ Hesperian Blvd/150th Ave	San Leandro: 150th/E. 14th/Hesperian; construct NB left turn Ln from Hesperian to E.14th, EB left turn Ln from E.14th to 150th Av & SB Ln from Hesperian to 150th and other traffic circulation	NON-EXEMPT	2040
Alameda	ALA050014	17-01-0032	ACTC	SR 84 Expressway Widening	In Livermore: Widen Route 84 from Jack London Blvd. to Pigeon Pass.	NON-EXEMPT	2020
Alameda	ALA050019	17-01-0031	ACTC	I-880 North Safety Improvements	Oakland: I-880 between 23rd Ave to 29th Ave; Reconfigure Interchange, including new ramps.	NON-EXEMPT	2020
Alameda	ALA070014	17-10-0057	San Leandro	I-880/SR 112 Overcrossing Replacement	San Leandro: at the I-880/SR 112 (Davis St.); Replace overcrossing and widening roadway including interchange landscaping and bridge architectural features.	NON-EXEMPT	2030
Alameda	ALA070042	17-10-0025	ACTC	I-880 SB HOV Lanes - Marina Blvd to Hegenberger	I-880 Corridor: From Marina Blvd in San Leandro to Hegenberger in Oakland; Construct new SB HOV lanes and reconstruction of interchanges at Marina Blvd and Davis St. and soundwall construction.	NON-EXEMPT	2040
Alameda	ALA090012	17-10-0057	San Leandro	I-880/Marina Blvd Interchange and Overcrossing Rep	San Leandro: I-880/ Marina Blvd. Replace overcrossing and widening roadway plus ramp interchange reconfiguration, intersection improvements including interchange landscaping and bridge architectural	NON-EXEMPT	2030
Alameda	ALA090016	17-01-0036	Hayward	Rt 92/Clawiter/Whitesell Interchange Improvements	Hayward: Rt 92/Clawiter Rd. Upgrade existing Clawiter interchange. Add ramps and overcrossing for Whitesell St. extension. Signalize ramp intersections.	NON-EXEMPT	2030
Alameda	ALA090018	17-01-0026	ACTC	Truck Parking Facilities in North County (Phase I)	Alameda County: Provide safe parking facilities in north part of Alameda County.	NON-EXEMPT	2040
Alameda	ALA090019	17-01-0007	ACTC	Corridor Mobility Program & Adaptive Ramp Metering	Central Alameda County: I-880/ I-238/ I-580. Install monitoring and signalization I-880, I-238 and I-580.	NON-EXEMPT	2040
Alameda	ALA090020	17-01-0007	Hayward	I-880 Auxiliary lanes at Industrial Parkway	Hayward: Construct auxiliary lanes on I-880. NB between Industrial Pkwy and Alameda Creek and SB between Industrial Pkwy and Whipple Rd	NON-EXEMPT	2040
Alameda	ALA090021	17-01-0007	Hayward	I-880 NB and SB Auxiliary lanes	Hayward: NB and SB I-880 between West A and Winton. NB I-880 between A St and Paseo Grande.	NON-EXEMPT	2040
Alameda	ALA090026	17-01-0017	Port of Oakland	Outer Harbor Intermodal Terminals (OHIT)	In Oakland: OHIT, a proposed intermodal rail complex, will be located on the former Oakland Army Base and adjacent land. This listing only includes segments implemented by the Port of Oakland. For City	NON-EXEMPT	2030
Alameda	ALA090027	17-01-0015	Port of Oakland	7th St Grade Separation and Port Arterial Improvem	In Oakland: (1) 7th Street Grade Separation project; (2) Middle Harbor Road Improvements project; and (3) Intelligent Transportation Systems and Technology (ITST) Master Plan	NON-EXEMPT	2030
Alameda	ALA110001	17-10-0041	WETA	Central Bay Operations and Maintenance Facility	WETA: Construct a central bay operations and maintenance facility.	NON-EXEMPT	2020
Alameda	ALA110002	17-01-0023	ACTC	I-880/Industrial Parkway West Interchange	At I-880/Industrial Parkway West , reconstruct interchange, add on/off-ramp lanes, widen ramp lanes, provide HOV bypass lanes and routine accommodation for bicyclists and pedestrians.	NON-EXEMPT	2030
Alameda	ALA110003	17-10-0064	BART	Hayward Shop and Yard Expansion	Expansion of the Hayward Shop and Yard to accommodate additional rail vehicles for storage, maintenance and repair.	NON-EXEMPT	2020
Alameda	ALA110046	17-01-0017	Oakland	Oakland Army Base Infrastructure Improvements	In Oakland: At former Oakland Army Base: Implementing Army Base Infrastructure Master Plan including TCIF funded OHIT improvements implemented by City of Oakland. For the related Port project, see	NON-EXEMPT	2030
Alameda	ALA110104	17-01-0001	MTC	Bay Bridge Park	Bay Bridge Park in Alameda County, in Oakland at the Oakland Touchdown of the new East Span of the Bay Bridge (Project previously titled "SFOBB Gateway Park")	NON-EXEMPT	2040
Alameda	ALA130001	17-01-0006	Fremont	Widen Kato Rd from Warren Avenue to Milmont Drive	In Fremont: Widen Kato Road from Warren Avenue to Milmont Drive. Widen Kato Road to four lanes and install bike lanes on both sides of the roadway and modify traffic signal at Kato Rd/Milmont Ave.	NON-EXEMPT	2040

*Projects with conformity analysis year 2040 reference programmatic projects or projects with a completion date after 2030 in *Plan Bay Area 2040*

List of 2017 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Alameda	ALA130005	17-01-0053	Dublin	Dougherty Road widening	Dublin: Dougherty Road from Sierra Lane to North City Limit: Widen from 4 lanes to 6 lanes	NON-EXEMPT	2020
Alameda	ALA130006	17-01-0057	Dublin	Dublin Boulevard widening	In Dublin: Dublin Blvd between Sierra Court and Dublin Court: Widen from 4 lanes to 6 lanes.	NON-EXEMPT	2020
Alameda	ALA130014	17-01-0001	Oakland	7th Street West Oakland Transit Village, Phase II	In Oakland: On 7th Street between Wood Street and Peralta Street. Project includes road diet, bicycle lanes, sidewalk enhancement, pedestrian amenities, traffic signal mods, street and pedestrian lights,	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130015	17-01-0001	Oakland	Lake Merritt BART Bikeways	Oakland: Various Streets near the Lake Merritt BART Station: Implement road diets, install high quality bikeways and curb ramps, and resurface the street	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130017	17-01-0001	Oakland	Oakland - Peralta and MLK Blvd Streetscape Phase I	Oakland: Peralta St from 3rd St to 36th St and MLK Jr. Blvd. from West Grand to 40th St: Phase 1 components include bike lanes and racks, street lights, landscaping, new sidewalks and pedestrian	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130024	17-01-0001	Oakland	Lakeside Complete Streets and Road Diet	Oakland: Along Harrison Street and Lakeside Drive between 19th Street and Grand Avenue: implement road diet and install bike and pedestrian facilities	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130025	17-01-0004	Fremont	Fremont City Center Multi-Modal Improvements	Fremont: Capital Ave from State St to Fremont Blvd: Construct roadway extension; Various locations around Fremont City Center and Fremont BART Station: Implement multi-modal improvements to	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130026	17-01-0004	Berkeley	Shattuck Complete Streets and De-couplet	Berkeley: Shattuck Ave, Shattuck Square and Berkeley Square from Allston Way to University Ave intersection: Reconfigure travel lanes and parking, repair pavement and make other improvements	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130027	17-01-0004	Newark	Enterprise Drive Complete Streets and Road Diet	Newark: Enterprise Drive between Filbert Street and approximately 350 feet west of Wells Avenue adjacent to the Dumbarton Transit Oriented Development plan area: Implement Road Diet and rehabilitate	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130028	17-01-0004	Berkeley	Hearst Avenue Complete Streets	In Berkeley: Hearst St from Shattuck Ave to Gayley/La Loma: Implement access and safety improvements to Downtown Berkeley PDA for all modes, includes a road diet from Shattuck Ave to Euclid Ave	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130032	17-10-0005	BART	BART Metro Priority Track Elements	BART: In Lafayette, Dublin and Millbrae: Provide three critical track extensions in order to provide the BART system with additional operational flexibility and additional capacity, all within existing right-of-	NON-EXEMPT	2030
Alameda	ALA130034	17-10-0058	ACTC	I-680 NB HOV/HOT Lane	Route I-680: from South of Auto Mall Parkway to State Route 84 in Alameda County, construct NB HOV/HOT Lane.	NON-EXEMPT	2030
Alameda	ALA150001	17-01-0029	ACTC	Route 84 widening, Pigeon Pass to I-680	In Alameda County: On SR-84 from Pigeon Pass to I-680 (PM 17.9/22.9): Widen roadway from 2 lanes to 4 lanes; On I-680 from SR 84 to north of Andrade Creek: Construct aux lane; On I-680: extend SB	NON-EXEMPT	2030
Alameda	ALA150003	17-01-0048	Dublin	Dublin Blvd. - North Canyons Pkwy Extension	Dublin: Between Dublin Boulevard and North Canyons Parkway: Build roadway extension	NON-EXEMPT	2030
Alameda	ALA150004	17-01-0060	AC Transit	AC Transit: East Bay Bus Rapid Transit	Alameda County: Along Broadway/ International/E 14th corridor from Oakland to San Leandro: Implement BRT including 34 stations, transit signal priority, level-boarding, shelters, off-board ticketing,	NON-EXEMPT	2020
Alameda	ALA150008	17-01-0001	ACTC	East Bay Greenway	Alameda County: Generally along the BART alignment from Lake Merritt BART station to South Hayward BART station: Install a trail facility consisting of Class I & Class IV bikeway facilities. Includes 2 road	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA150022	17-01-0002	Hayward	City of Hayward Car Sharing Services	Hayward: Various locations: Obtain car sharing services in downtown Hayward and possible additional locations through a competitive RFP process.	NON-EXEMPT - Not Regionally Significant Project	2040

*Projects with conformity analysis year 2040 reference programmatic projects or projects with a completion date after 2030 in *Plan Bay Area 2040*

List of 2017 TIP Projects by County

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County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Alameda	ALA150042	17-01-0001	Oakland	Oakland: Telegraph Ave Bike/Ped Imps and Road Diet	HSIP7-04-014: In Oakland: Telegraph Ave from 29th to 45th St: Install crosswalk enhancements, painted bulb-outs, and painted median refuges; from 29th to 41st St: Implement road diet with buffered	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA150043	17-01-0004	Oakland	Oakland: Shattuck and Claremont Bike/Ped Imps	HSIP7-04-016 Oakland: On Claremont from Telegraph to Clifton: Implement road diet with bike lanes; Shattuck at 49th, 51st, 59th St, Alactraz: Construct crosswalk enhancements, RRFBs, bulb-out,	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA150047	17-01-0004	Oakland	Oakland: Telegraph Avenue Complete Streets	In Oakland, on Telegraph Avenue between 20th St and 41st St, implement complete street project inc. road diet, buffered bike lanes, ped crossing improvements, bulbouts, bus boarding islands, traffic	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA170001	17-01-0020	ACTC	State Route 262 (Mission Blvd) Improvements	In Fremont: Mission Blvd/I-680 IC: widen Mission Blvd to 3 lanes each direction through IC, rebuild the NB and SB I-680 on and off ramps	NON-EXEMPT	2030
Alameda	ALA170004	17-01-0041	ACTC	I-880/West Winton Avenue Interchange	In Hayward: At I-880/West Winton Avenue I/C: Reconstruct I/C including reconfiguration of eastbound to southbound on ramp and new connection to Southland Mall Drive	NON-EXEMPT	2030
Alameda	ALA170005	17-01-0021	ACTC	I-880/Whipple Road Interchange Improvements	In Union City/Hayward: at I-880/Whipple Rd Interchange: Implement full interchange improvements including northbound off-ramp, surface street improvements and realignment, and bike/ped	NON-EXEMPT	2030
Alameda	ALA170006	17-10-0052	BAIFA	ALA-880 Express Lanes	In Alameda/Santa Clara Counties: On I-880 from Hegenberger to Dixon Landing (Southbound) and Dixon Landing to Lewelling (Northbound); Convert HOV lanes to express lanes. Project also references	NON-EXEMPT	2020
Alameda	ALA170008	17-01-0028	ACTC	I-580/680 Interchange HOV/HOT Widening	Alameda County: On I-580 between Hacienda Dr. and San Ramon/Foothill Road and on I-680 between Stoneridge Dr. and Amado: Widen to add one HOV/HOT lane for WB 580 to SB 680 and NB 680 to EB	NON-EXEMPT	2030
Alameda	ALA170009	17-10-0058	ACTC	Widen I-680 NB and SB for EL from SR-84 to Alcosta	Alameda County: Northbound I-680 from Route 84 to Alcosta Boulevard: Widen for express lanes	NON-EXEMPT	2030
Alameda	ALA170010	17-10-0057	ACTC	I-880 NB HOV/HOT: North of Hacienda to Hegenberger	Alameda County: I-880 in the northbound direction from north of Hacienda Ave to Hegenberger Road: Widen to provide one HOV/express lane	NON-EXEMPT	2030
Alameda	ALA170011	17-10-0033	MTC	Bay Bridge Forward - West Grand HOV/Bus Only Lane	In Oakland: Grand Avenue on-ramp: Convert shoulder to Bus/HOV only lane	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA170042	17-01-0008	ACE	ACE Platform Extensions	ACE System: At Pleasanton, Livermore, Vasco, Tracy, and Manteca stations: Extend existing ACE platforms to accommodate longer train sets	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA170043	17-01-0004	Oakland	Oakland - 14th Street Safe Routes in the City	In Oakland: On 14th St between Brush St and Oak St: Reduce travel lanes from 4 to 2, add paved Class IV protected bicycle lanes; transit boarding islands; improve ped facilities including refuges, crossings,	NON-EXEMPT	2040
Alameda	ALA170044	17-10-0005	BART	Bay Fair Connection	BART: At and near Bay Fair Station: Modify station and approaches to add one or more additional tracks and one or more passenger platforms for improved train service and operational flexibility	NON-EXEMPT	2030
Alameda	ALA170045	17-01-0038	Dublin	I-580 Interchange Imps at Hacienda/Fallon Rd, Ph 2	In Dublin: (1) I-580/Fallon Rd I/C Improvements (Phase 2): Reconstruct overcrossing to add lanes; (2) I-580 Hacienda Dr I/C Improvements: Reconstruct overcrossing to add lanes	NON-EXEMPT	2030
Alameda	ALA170046	17-01-0024	Hayward	I-880/A Street Interchange Reconstruction	Hayward: I-880/A St. I/C: Reconstruct interchange to widen A St from 5 to 6 lanes, add bike lanes, and provide additional lane capacity for potential future freeway widening, modify signals and	NON-EXEMPT	2030
Alameda	ALA978004	17-01-0047	ACTC	East-West Connector in Fremont & Union City	In Fremont & Union City: From I-880 to Route 238; Construct new 4-lane roadway and widen existing roadways. Project is phased	NON-EXEMPT	2030

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List of 2017 TIP Projects by County

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County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Alameda	ALA991081	17-01-0043	Oakland	42nd Ave. & High St. I-880 Access Improv.	Oakland: Widening and re-alignment of local streets in the vicinity of the I-880/42nd & High interchange. Includes modified traffic signals and intersection improvements.	NON-EXEMPT	2020
Contra Costa	CC-010023	17-02-0019	CCTA	I-680/SR 4 I/C Reconstruction - Phases1 & 2	At I-680/SR4: Reconstruct I-680/SR4 I/C, provide 2 lane direct connector from NB 680 to WB SR4 w/slip ramps at Pacheco Blvd, and 2 lane direct WB SR4 to SB I-680. Phases 1 and 2. Env Doc covers all	NON-EXEMPT	2030
Contra Costa	CC-030002	17-02-0039	Hercules	Hercules Intercity Rail Station	In Hercules: From I-80/SR-4 to the future train station: Extend John Muir Pkwy including Bayfront Bridge over Refugio Creek, Refugio Creek Restoration, North Channel Culvert, and multi-use trails, utilities,	NON-EXEMPT	2030
Contra Costa	CC-030004	17-02-0009	Martinez	Martinez Intermodal Station Parking Expansion	Martinez: At the Martinez Intermodal Station: Expand parking from 175 spaces to 600 spaces. Project includes adding a pedestrian and a vehicular bridge to access the parking lot.	NON-EXEMPT	2040
Contra Costa	CC-050025	17-02-0047	BART	E-BART - East Contra Costa Rail Extension	Pittsburg/Antioch: East Contra Costa County; Extend Rail Service from the Pittsburg/Bay Point Station into eastern Contra Costa County	NON-EXEMPT	2020
Contra Costa	CC-050028	17-02-0022	CCTA	I-680 SB HOV Lane Completion	Contra Costa County: I-680 from North Main Street to Livorna in the southbound direction: Construct a HOV lane	NON-EXEMPT	2020
Contra Costa	CC-050030	17-02-0004	CC County	Vasco Road Safety Improvements	Contra Costa County: Vasco Road from Walnut Blvd to the Alameda/Contra Costa County line: widen road and place concrete median barrier for 2.5 miles. Phase 1 completed a 1 mile widening segment.	NON-EXEMPT	2040
Contra Costa	CC-050076	17-02-0026	Richmond	I-80/Central Avenue Interchange Modification	I-80/Central Ave; Ph1 Construct new signals and CMS's to redirect I-80 WB on-ramp traffic during weekend peak periods to I-580. Ph2 connect Pierce to San Mateo to relocate signal at Pierce/Central Ave	NON-EXEMPT	2030
Contra Costa	CC-070008	17-02-0007	Antioch	Laurel Road Extension	Antioch: On Laurel Road between Hillcrest and SR4 Bypass; Construct new 4 lane divided extension.	NON-EXEMPT	2040
Contra Costa	CC-070009	17-02-0007	Antioch	Slatten Ranch Road Extension	Antioch: On Slatten Ranch Road between Hillcrest Avenue to Wicklow Road; Construct new 4 lane road.	NON-EXEMPT	2040
Contra Costa	CC-070011	17-02-0030	Brentwood	SR4/Brentwood Boulevard Widening - North (Phase I)	Brentwood: Widen SR4/Brentwood Boulevard from 2 to 4 lanes; Phase I: From Havenwood Avenue to Homecoming Way, including widening of bridge over Marsh Creek. traffic signal modifications, and	NON-EXEMPT	2030
Contra Costa	CC-070022	17-02-0013	CCTA	I-680 NB HOV Lane Extension between N.Main & SR242	Walnut Creek/Pleasant Hill/Concord: On I-680 between N. Main St and SR242; Extend Northbound HOV lanes.	NON-EXEMPT	2030
Contra Costa	CC-070024	17-02-0016	Concord	SR 242 / Clayton Road Interchange Improvements	Concord. Construct NB on-ramp and SB off-ramp at the SR242/Clayton Rd Interchange	NON-EXEMPT	2030
Contra Costa	CC-070035	17-02-0021	CCTA	Reconstruct I-80/San Pablo Dam Rd Interchange	San Pablo: I-80/San Pablo Dam Rd I/C: Reconstruct I/C-relocating WB El Portal on-ramp to the full I/C northwards, providing access to McBryde through a new road from SPDR I/C, and replacing Riverside	NON-EXEMPT	2030
Contra Costa	CC-070046	17-02-0005	El Cerrito	Del Norte Area TOD Complete Street Imps	El Cerrito del Norte BART Station Area: Complete Streets improvements to access, circulation and safety for bicyclists, pedestrians, local and regional bus, rapid bus, and automobile connections to BART	NON-EXEMPT	2040
Contra Costa	CC-070053	17-02-0023	CCTA	SR4: Balfour Road Interchange	Brentwood: Balfour Road/SR4; Construct new interchange.	NON-EXEMPT	2020
Contra Costa	CC-070062	17-02-0042	WETA	Richmond Ferry Service	WETA: Implement new ferry transit service between Richmond and San Francisco.	NON-EXEMPT	2020
Contra Costa	CC-070063	17-02-0007	EB Reg Park Dis	Atlas Road - New Bridge and Roadway Extension	Richmond. Point Pinole Regional Shoreline; Extend Atlas road and construct new 2 lane road bridge with a separated ped/bike trail across UPRR tracks.	NON-EXEMPT	2040
Contra Costa	CC-070075	17-02-0014	CC County	Kirker Pass Road NB Truck Climbing Lanes	Unincorporated Contra Costa County: On Kirker Pass Road from Clearbrook Drive to approximately 1,000 feet beyond the crest of Kirker Pass Road; Construct northbound truck climbing lane and paved	NON-EXEMPT	2020

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Contra Costa	CC-070078	17-02-0007	Brentwood	John Muir Parkway Extension: Ph. II	Contra Costa County: John Muir Parkway northerly from Briones Valley Rd to a logical termini on Concord Avenue: Extend roadway(1 lane + 1 bike lane per direction).	NON-EXEMPT	2040
Contra Costa	CC-070081	17-02-0015	CC County	Byron Highway - Vasco Road Connection	Contra Costa County: between Byron Highway and Vasco Road: Construct an east-west connection road	NON-EXEMPT	2040
Contra Costa	CC-090019	17-02-0007	San Ramon	Bollinger Canyon Road Widening (Alcosta to SRVB)	San Ramon: Bollinger Canyon Road between Alcosta Blvd and San Ramon Valley Blvd: Widen from six to eight lanes. Project is phased.	NON-EXEMPT	2040
Contra Costa	CC-090023	17-02-0008	Concord	Concord Clayton Road/Treat Blvd Intersection Imps.	Concord: Clayton Rd and Treat Blvd: Constructing geometric improvements and upgrade traffic signal to improve operational efficiency and increase capacity	NON-EXEMPT	2040
Contra Costa	CC-090026	17-02-0032	Concord	Ygnacio Valley Road Widening	Concord: Ygnacio Valley Road from Michigan Boulevard to Cowell Road: widen from 4 lanes to 6 lanes	NON-EXEMPT	2030
Contra Costa	CC-130002	17-02-0047	BART	eBART Railroad Avenue Station	Pittsburg: on eBART corridor at Railroad Ave: Design and construction of station	NON-EXEMPT	2020
Contra Costa	CC-130005	17-02-0008	Pleasant Hill	Golf Club Rd Roundabout and Bike/Ped Improvements	Pleasant Hill: Golf Club Rd from CC Canal Regional Trail to east of Old Quarry Rd, Old Quarry Rd from Golf Club Rd to Chilpancingo Pkwy: Install bike/ped imprvmnts, construct roundabout, and rehab	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-130006	17-02-0003	Concord	Concord BART Station Bike/Ped Access Improvements	Concord: Near the Downtown Concord BART Station: Implement bike/ped access improvements including road diets, buffered bike lanes (0.7 mi), Class 2 bike lanes (0.6 mi), and Class 3 bike routes (0.1	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-130039	17-02-0005	Pittsburg	Pittsburg Multimodal Transit Station Access Imps.	In Pittsburg: At the Northeast corner of Railroad Ave and California Ave: Construct a Kiss-n-Ride lot, add a right-turn lane on California Ave and improve multi-modal access to eBART station.	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-130043	17-10-0049	BAIFA	CC I-680 Southern Segment Express Lanes	In Contra Costa County: On I-680 between Alcosta Boulevard and Livorna Road (northbound) and between Alcosta Boulevard and Rudgear Road (southbound); Convert existing HOV lanes to express lanes.	NON-EXEMPT	2030
Contra Costa	CC-130046	17-02-0019	CCTA	I-680 / SR 4 Interchange Reconstruction - Phase 3	In Pacheco: At the I 680/Route 4 interchange: Widen SR4 in the median to provide a third lane in each direction from Morello Avenue to Port Chicago (SR242). Work includes widening of bridges within	NON-EXEMPT	2030
Contra Costa	CC-130047	17-02-0003	Richmond	37th Street Bicycle & Pedestrian Improvements	Richmond: On 37th St from Cerritto Ave to Center Ave: Install bike lanes and pedestrian countdown heads and upgrade traffic signals; On 37th from Barrett to Chanslor: Implement road diet with one lane	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-150009	17-10-0015	CCTA	CCTA - Carshare 4 All	Contra Costa and Alameda Counties: Richmond, El Cerrito, and Oakland: The program will expand carshare access at transit locations. The expansion of round-trip carsharing services will reduce car	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-150013	17-02-0010	CCTA	SR 4 Integrated Corridor Management	Contra Costa County: Along SR 4 between I-80 in Hercules to the SR 4/SR 160 Interchange in the City of Antioch: Implement Integrated Corridor Management along corridor.	NON-EXEMPT	2030
Contra Costa	CC-150017	17-02-0005	San Pablo	Rumrill Blvd Complete Streets Improvements	In San Pablo: Along Rumrill Boulevard between San Pablo Avenue to the North and Costa Avenue to the South; Complete Streets Improvements and road diet	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-170001	17-02-0052	Danville	San Ramon Valley Blvd Lane Addition and Overlay	In Danville: On San Ramon Blvd between Jewel Terrace and Podva Rd; Lane addition and rehabilitate roadway.	NON-EXEMPT	2020
Contra Costa	CC-170002	17-10-0049	BAIFA	CC-680 Northern Segment Express Lane - Southbound	In Contra Costa County: On I-680 Southbound from Benicia-Martinez Toll Plaza to El Cerro; convert HOV to express lanes and add/modify express lane elements. Project also references RTP ID 230685	NON-EXEMPT	2030

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Contra Costa	CC-170003	17-10-0060	BAIFA	CC-680 Northern Segment Express Lane - Northbound	In Contra Costa County: On I-680 Northbound from Rudgear to Benicia-Martinez Bridge; convert HOV to express lanes, add express lane elements and provide operational improvements. Project also	NON-EXEMPT	2030
Contra Costa	CC-170015	17-02-0030	Brentwood	Brentwood Blvd. Widening Phase II	Brentwood: Brentwood Blvd. between Homecoming Way and Lone Tree Way: Widen existing roadway from 2 to 4 lanes	NON-EXEMPT	2030
Contra Costa	CC-170016	17-02-0033	CC County	Camino Tassajara Realignment	Contra Costa County: Camino Tassajara between Windemere Parkway and the County Line: Realign curves and widen to four lanes	NON-EXEMPT	2030
Contra Costa	CC-170017	17-02-0012	CCTA	I-680 NB Managed Lanes/Op Improvements-Walnut Crk	Walnut Creek: NB I-680 through 680/24 I/C: Complete Managed Lane; Between N. Main and Treat Blvd: Operational Improvements	NON-EXEMPT	2030
Contra Costa	CC-170018	17-02-0020	CCTA	SR-4 Operational Improvements - Initial Phases	Contra Costa County: On SR-4 between I-680 and Bailey Road: Implement operational improvements including adding general purpose and auxiliary lanes at various locations	NON-EXEMPT	2030
Contra Costa	CC-170019	17-02-0046	Oakley	Civic Center Railroad Platform Park & Ride Complex	Oakley: Main Street between 2nd Street and O'Hara Avenue: Build 2 parking lots for multi-modal park, ride, and transit activities. Lots will serve train riders for a future train platform which includes	NON-EXEMPT	2030
Marin	MRN050034	17-03-0006	TAM	US 101 HOV Lanes - Marin-Sonoma Narrows (Marin)	Marin and Sonoma Counties: From SR 37 in Novato to Old Redwood Highway in Petaluma; Convert expressway to freeway and widen to 6 lanes for HOV lanes.	NON-EXEMPT	2030
Marin	MRN070006	17-03-0011	Novato	Novato Boulevard Widening, Diablo to Grant	Novato: Novato Blvd between Diablo and Grant Ave.: Improvements to roadway including including widening existing two/three lanes to four lanes and adding turn lanes, bike lanes, curbs, and sidewalks.	NON-EXEMPT	2030
Marin	MRN110032	17-10-0024	San Anselmo	San Anselmo - Center Blvd Bridge Replace (27C0079)	San Anselmo: Center Blvd Bridge over San Anselmo Creek, at Sycamore Ave: Replace existing 2 lane bridge with 3 lane bridge	NON-EXEMPT - Not Regionally Significant Project	2040
Marin	MRN110035	17-10-0024	Marin County	Mountain View Rd Bridge Replacement - 27C0154	Marin County: On Mountain View Rd. over San Geronimo Creek (Bridge No. 27C0154) near the intersection with Sir Francis Drake Blvd: Replace existing one-lane bridge with a new two-lane bridge	NON-EXEMPT - Not Regionally Significant Project	2040
Marin	MRN130001	17-03-0014	GGBHTD	Larkspur Ferry Terminal Parking Garage	In Larkspur: At the Larkspur Ferry Terminal (LFT): Planning studies for a new three story parking structure	NON-EXEMPT	2040
Marin	MRN150006	17-03-0005	GGBHTD	GGBHTD: Bldg Ridership to Meet Capacity Campaign	Golden Gate Bridge, Highway and Transportation District: Systemwide: Begin several marketing campaigns in the next year focusing on promoting Golden Gate Transit and Golden Gate Ferry use	NON-EXEMPT - Not Regionally Significant Project	2040
Marin	MRN150009	17-10-0036	MTC	Richmond-San Rafael Bridge Access Improvements	In Contra Costa and Marin Counties: On I-580/Richmond-San Rafael Bridge: Convert existing shoulders to an automobile travel lane (EB) and a bike/ped path, construct bike/ped path in Contra Costa	NON-EXEMPT	2020
Napa	NAP110029	17-04-0004	American Canyon	Eucalyptus Drive Realignment Complete Streets	American Canyon: Eucalyptus Dr. from Theresa Rd to Hwy 29: Extend roadway and reconfigure intersection of Eucalyptus Dr and Hwy 29 and Eucalyptus Drive and Theresa Road. Create complete street	NON-EXEMPT - Not Regionally Significant Project	2040
Napa	NAP130006	17-04-0004	American Canyon	Devlin Road and Vine Trail Extension	American Canyon: Devlin Road from the southern terminus 2,500 feet south to Green Island Road: Construct roadway extension and Class I multipurpose path	NON-EXEMPT - Not Regionally Significant Project	2040
Napa	NAP170003	17-04-0006	NVTA	NVTA- Vine Transit Bus Maintenance Facility	Napa County: At an 8 acre site in south Napa County: Construct a new transit maintenance facility for Vine Transit operations	NON-EXEMPT	2040
Regional/Multi-County	MTC050027	17-10-0042	WETA	Ferry Service - Berkeley/Albany	WETA: Berkeley/Albany: Provide ferry service from Berkeley/Albany to San Francisco.	NON-EXEMPT	2030

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Regional/Multi-County	MTC050029	17-05-0018	WETA	SF Ferry Terminal/Berthing Facilities	WETA: San Francisco: At the Ferry Terminal; Construct additional ferry docking/berthing facilities in the South Basin to improve ferry access and support WETA berthing/maintenance operational needs.	NON-EXEMPT	2030
Regional/Multi-County	REG070003	17-05-0030	WETA	Treasure Island Ferry Service	Treasurer Island: Implement new ferry transit service between Treasure Island and San Francisco/East Bay locations.	NON-EXEMPT	2030
Regional/Multi-County	REG090003	17-10-0013	MTC	Freeway Performance Initiative (FPI)	Regionwide: Design, implement and maintain ramp metering, Traffic Operation Systems (TOS), and other Freeway Performance Initiative (FPI) projects on major congested freeways throughout the region.	NON-EXEMPT	2040
Regional/Multi-County	REG090037	17-10-0006	BART	BART: Railcar Procurement Program	BART: Procure 790 Railcars (includes the replacement of 669 Railcars)	NON-EXEMPT	2030
Regional/Multi-County	REG130004	17-10-0054	BAIFA	Regional Express Lane Network	Region-wide: Program-level project costs to support the Regional Express Lane Network deployment including: Program costs (planning, coordination, & management); Centralized toll system costs;	NON-EXEMPT	2040
Regional/Multi-County	REG150001	17-01-0026	Caltrans	Oakland to San Jose Double Track (Segment 2A)	Between Oakland and San Jose: On UPRR Niles subdivision from MP 6 to MP 35, and the Coast subdivision MP 13 to MP 35, and on the Caltrain Right of Way MP 44 to MP 48: Construct a second mainline	NON-EXEMPT	2040
Regional/Multi-County	REG170004	17-10-0033	MTC	Bay Bridge Forward - Commuter Parking Initiative	Albany and Oakland: Establish commuter parking in East Bay at I-80/Buchanan Ave, I-880/High St, I-880/Fruitvale, including parking management technologies, to encourage carpool and express bus	NON-EXEMPT - Not Regionally Significant Project	2040
Regional/Multi-County	REG170005	17-10-0033	MTC	Bay Bridge Forward - Flexible On-Demand Transit	Region-Wide: Provide on-demand transit services between East Bay and San Francisco, including related supportive transportation demand management strategies.	NON-EXEMPT - Not Regionally Significant Project	2040
Regional/Multi-County	SON090002	17-03-0015	SMART	Sonoma Marin Area Rail Corridor	Between Sonoma and Marin Counties: Implement passenger rail service and non-motorized pathway on NWP rail line. Project also references RTP ID 22001	NON-EXEMPT	2020
Regional/Multi-County	VAR170003	17-10-0053	BAIFA	ALA/CC-80 and Bay Bridge Approach Express Lanes	In Alameda/Contra Costa counties; On I-80 from the Carquinez Bridge to Powell and the Bay Bridge Approaches; Convert HOV lanes to express lanes. Project also references RTP IDs 230657 and 240741	NON-EXEMPT	2030
Regional/Multi-County	VAR170013	17-10-0033	MTC	Bay Bridge Forward - Casual Carpool	In San Francisco and along I-80 corridor: Establish and improve casual carpool pick-up locations at key locations in San Francisco and along I-80 and in East Bay.	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-010015	17-10-0039	TBJPA	Transbay Term/Caltrain Downtown Ext - Ph.1	San Francisco: Transbay Transit Center; Replacement and expansion of the terminal at the present site.	NON-EXEMPT	2020
San Francisco	SF-010037	17-10-0038	SFMTA	SF Muni Third St LRT Phase 2 - New Central Subway	San Francisco: North-south alignment under 4th St. to Market, then under Geary to Stockton & under Stockton to Clay St; Extend the Light Rail line project includes procurement of four LRVs.	NON-EXEMPT	2030
San Francisco	SF-010038	17-05-0008	SF DPW	Bayview Transportation Improvements	In San Francisco: From US 101 to the Hunters Point Shipyard along: 25th, I280-Illinois; Cesar Chavez, US101-Illinois; Illinois, 25th-Cargo; Cargo, Illinois-Jennings; Jennings, Cargo-Evans; Evans, Cesar	NON-EXEMPT	2040
San Francisco	SF-050002	17-10-0038	TBJPA	Transbay Terminal/Caltrain Downtown Ext: Ph. 2	San Francisco: Transbay Terminal; Extend Caltrain commuter rail service from Fourth/Townsend to Transbay Transit Center.	NON-EXEMPT	2030
San Francisco	SF-070003	17-05-0042	SFMTA	Historic Streetcar Extension to Fort Mason	San Francisco: From Fisherman's Wharf through National Park Service lands in Aquatic Park to Fort Mason; Extend the E-line or the current F-line service.	NON-EXEMPT	2030
San Francisco	SF-070004	17-05-0021	SFMTA	Geary Bus Rapid Transit	Muni: On Geary Boulevard; Design and implement a BRT project.	NON-EXEMPT	2030
San Francisco	SF-070005	17-05-0033	SFMTA	Van Ness Avenue Bus Rapid Transit	Muni: On Van Ness Avenue from Mission to Lombard; Design and implement a BRT project. Project is phased. Project also references RTP IDs 240745 and 240471	NON-EXEMPT	2020

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San Francisco	SF-090004	17-05-0008	SF DPW	Harney Way Roadway Widening	In San Francisco: Harney Way from US 101 to Jamestown:Improvements including right-of-way engineering, land acquisition for future widening of roadway, design, landscaping and sidewalk	NON-EXEMPT	2040
San Francisco	SF-090012	17-05-0013	SFMTA	Additional Light Rail Vehicles to Expand Muni Rail	SFMTA: Procure 24 expansion light rail vehicles (LRVs).	NON-EXEMPT	2040
San Francisco	SF-090016	17-05-0031	SFMTA	Transit Center in Hunters Point	Muni:Transit Center in Hunters Point; Construct 10 bays, Low-level platform, Operator restroom, bus shelters,Electrical ductbank for MUNI power,etc	NON-EXEMPT	2040
San Francisco	SF-090018	17-05-0010	SFMTA	Oakdale-Palou Interim High-Capacity Bus Corridor	Muni: Transit Preferential improvements for the Palou Avenue corridor, including bus bulbs, up to six traffic signals with transit signal priority, new bus shelters and pedestrian safety treatments.	NON-EXEMPT	2040
San Francisco	SF-090019	17-05-0031	SFMTA	Extended Trolleybus Service into Hunters Point	SFMTA: Procure 10 electric trolley vehicles and construct 1 mile overhead wire infrastructure to extend High-Capacity Bus Service from existing transit corridor in the Bayview to Hunters Point (24	NON-EXEMPT	2040
San Francisco	SF-090020	17-05-0032	SFMTA	Geneva Harney BRT Infrastructure: Central Segment	SFMTA: From Executive Park/Harney Way under US 101 to SF/Daly City line on Geneva Avenue: Construct bus rapid transit facilities	NON-EXEMPT	2030
San Francisco	SF-090023	17-05-0032	SFMTA	Geneva Harney BRT Infrastructure: Eastern Segment	SFMTA: Bayview and Hunters Point: from Executive Park/Harney Way to Hunters Point Transit Center via Candlestick/Hunters Pt. Shipyard development: Construct extension of Geneva Harney BRT. Project	NON-EXEMPT	2030
San Francisco	SF-090032	17-05-0014	SFMTA	SFMTA: Muni Forward Capital Implementation Program	SFMTA: Design and construction of investments focused on reliability improvements, travel time reductions, and Muni route updates. This is a phased project.	NON-EXEMPT	2030
San Francisco	SF-110002	17-05-0008	SFMTA	Mission Bay/UCSF Multi-Modal Transportation Imps.	San Francisco: Mission Bay: street additions, connections, realignments, improvements and enhancements; widen I-280/Mariposa off-ramp; and construct a transit loop for the T-third light rail line.	NON-EXEMPT	2040
San Francisco	SF-110006	17-05-0027	SF DPW	Hunters Pt Shipyard and Candlestick Pt Local Roads	In San Francisco: Hunters Point Shipyard and Candlestick Point: Implement new local streets to support multi-modal mixed use development. The project is phased.	NON-EXEMPT	2040
San Francisco	SF-110045	17-05-0014	SFMTA	SFMTA: 8X Customer First Program	San Francisco: 8X line: Implement Transit Corridor Improvements including colorizing existing dedicated transit lanes, TSP, wayfinding improvements and transit arrival prediction sign, vehicle branding,	NON-EXEMPT	2030
San Francisco	SF-110049	17-05-0030	SF County TA	Treasure Island Congestion Pricing Program	San Francisco: Treasure Island: Implement Congestion Pricing Program. project is phased	NON-EXEMPT	2030
San Francisco	SF-130001	17-05-0016	SF DPW	SF- Better Market Street Transportation Elements	In San Francisco: Market St from Steuart St to Octavia Blvd: improve roadway, including resurfacing, sidewalk and transit boarding improvements, transit connections, traffic signals, transportation	NON-EXEMPT	2030
San Francisco	SF-130002	17-05-0037	SFMTA	Implement Parkmerced Street Network	In San Francisco: Implement Parkmerced Street Network (includes a new street network, traffic calming, pedestrian improvements, biking improvements, streetscape improvements, and transit/shuttle	NON-EXEMPT	2030
San Francisco	SF-130004	17-05-0030	SF County TA	Treasure Is/Yerba Buena Is Street Improvements	On Treasure Island: Implement Treasure Island/Yerba Buena Island street network Project includes a new street network, traffic calming, bike & pedestrian improvements, streetscape and transit/shuttle	NON-EXEMPT	2030
San Francisco	SF-130005	17-05-0030	SF County TA	Treasure Island Pricing Mobility Improvements	In Treasure Island: Pricing Program Mobility Improvements including Transit Capital and maintenance improvements. The project is phased	NON-EXEMPT	2030

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San Francisco	SF-130006	17-05-0031	SF DPW	Southeast Waterfront Transportation Improvements	San Francisco: Between HP Shipyard and Candlestick Pt: improve roadways to facilitate 5-mile, multi-modal corridor, connecting project area with the Bayshore Intermodal Station. Project development and	NON-EXEMPT	2040
San Francisco	SF-130007	17-05-0008	SF DPW	HOPE SF Street Network - Hunters View	In San Francisco: Hunters View in Southeast: realign existing streets and add new streets at public housing sites to improve transit, walking, and biking. Project is phased.	NON-EXEMPT	2040
San Francisco	SF-130011	17-05-0004	SF DPW	SF- Second Street Complete Streets and Road Diet	In San Francisco: On Second Street between Market and King; Design and construct a complete streets project including the removal of a vehicular travel lane from Market to Townsend	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-130015	17-05-0004	SFMTA	Mansell Corridor Complete Streets	San Francisco: Mansell Ave from University to Brazil and Persia St from Brazil to Dublin: Implement complete streets improvements, including reduced, separated and relocated vehicular lanes, and bike/ped	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-130017	17-05-0029	SF County TA	SF Downtown Congestion Pricing	San Francisco: In the downtown area: Implement a demonstration value pricing (tolls and incentives) program	NON-EXEMPT	2030
San Francisco	SF-130019	17-05-0004	SFMTA	Eddy and Ellis Traffic Calming Improvement Project	San Francisco: On Eddy St between Leavenworth and Cyril Magnin and on Ellis St between Jones and Cyril Magnin: Convert one-way streets to two-way streets and implement pedestrian and traffic calming	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-130021	17-05-0008	Port of SF	Pier 70 19th Street & Illinois Street Sidewalk	San Francisco: 19th St from Illinois St to approximately 600' east: Construct new 19th St roadway and bike/ped improvements; On Illinois Street from 18th and 19th: construct new sidewalk and other	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-150008	17-05-0008	SF County TA	Quint-Jerrold Connector Road	San Francisco: From Oakdale Ave to Jerrold Ave: Provide an alternate access route between Oakdale and Jerrold Avenues and across the Caltrain tracks, to be coordinated with Caltrain's Quint Street Bridge	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-170001	17-05-0019	Port of SF	Mission Bay Ferry Terminal	San Francisco: At the eastern terminus of 16th St: Construct new ferry landing to service San Francisco Mission Bay and Central Waterfront as a part of the Bay area ferry transit system	NON-EXEMPT	2030
San Francisco	SF-170013	17-05-0008	SF DPW	HOPE SF Street Network - Sunnysdale and Potrero	San Francisco: Sunnysdale and Potrero neighborhoods: Construct new and realigned street networks throughout the two remaining HOPE SF sites, including traffic calming pedestrian and bike network, and	NON-EXEMPT	2040
San Francisco	SF-990004	17-05-0013	SFMTA	Islais Creek Motor Coach Facility	Muni: Islais Creek Motor Coach Facility; Develop a new operating division to replace the Kirkland motor coach operating facility when it is vacated for redevelopment. Phase 2 will construct a Maintenance	NON-EXEMPT	2040
San Francisco	SF-991030	17-05-0022	SF County TA	US 101 Doyle Drive Replacement	San Francisco: US 101 (Doyle Drive) from Lombard Street/Richardson Avenue to Route 1 Interchange; Replace/rehabilitate roadway.	NON-EXEMPT	2020
San Mateo	SM-050001	17-06-0034	Pacifica	SR 1 - Fassler to Westport Drive Widening	In Pacifica: Route 1 between Fassler Ave. & Westport Dr.; Add an additional lane in each direction.	NON-EXEMPT	2030
San Mateo	SM-050027	17-06-0010	Redwood City	US 101 / Woodside Interchange Improvement	Redwood City: US101/Woodside; Reconstruct and reconfigure interchange.	NON-EXEMPT	2030
San Mateo	SM-070008	17-07-0065	Caltrain	Caltrain South Terminal Phase II and III	Phase II of this project is to construct an additional mainline track and new signal controls just north of Diridon Station. Phase III is to install an additional mainline track and signal controls just south of	NON-EXEMPT	2040
San Mateo	SM-090004	17-06-0021	Brisbane	US 101/Candlestick Interchange	In San Mateo County: U.S. 101/Candlestick Point Interchange - Planning and environmental studies for interchange reconfiguration to allow for safer and better flow of traffic	NON-EXEMPT	2040
San Mateo	SM-090007	17-06-0040	Redwood City	Blomquist Street Extension	In Redwood City: On Blomquist Street; extend from Seaport Blvd to Bair Island Road. Project may be phased.	NON-EXEMPT	2030

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San Mateo	SM-090008	17-06-0017	San Carlos	US101/Holly Interchange modification	City of San Carlos: At Holly St./ 101 Interchange Modification;Widen east bound to north bound ramp to two lanes and eliminate north bound to west bound loop	NON-EXEMPT	2020
San Mateo	SM-090009	17-06-0008	SMCTA	US 101 Aux lanes from Sierra Point to SF Cnty Line	San Mateo County: On US 101 from Sierra Point to SF County Line; Construct auxiliary lanes or managed lanes. Project also references RTP ID 240060 for managed lanes	NON-EXEMPT	2030
San Mateo	SM-090014	17-06-0009	CCAG	Improve US 101 operations near Rte 92	City of San Mateo:On US 101; Operational improvements near Route 92	NON-EXEMPT	2030
San Mateo	SM-090015	17-06-0023	Half Moon Bay	Route 1 improvements in Half Moon Bay	In Half Moon Bay: On Route 1; Improve safety on Route 1, including adding protected left and right turn lanes at Route 1, adding through lanes on Route 1 at signalized intersections, and constructing new	NON-EXEMPT	2030
San Mateo	SM-110002	17-06-0030	WETA	WETA: Redwood City Ferry Service	WETA: Redwood City; Environmental clearance and design of ferry transit service between Redwood City and San Francisco	NON-EXEMPT	2040
San Mateo	SM-110003	17-06-0011	SSF	US 101/Produce Avenue Interchange	South San Francisco: On US Highway 101 from Utah Avenue on the east side to the vicinity of Produce Avenue on the west side: Construct a local interchange	NON-EXEMPT	2030
San Mateo	SM-130021	17-06-0003	Burlingame	Carolán Ave Complete Streets and Road Diet	Burlingame: Carolán Ave between Broadway and Oak Grove Ave: Implement road diet by converting a 4-lane roadway into a 2-lane roadway with a center turn lane, Class II bike lanes, and intersection	NON-EXEMPT - Not Regionally Significant Project	2040
San Mateo	SM-150017	17-07-0075	CCAG	US 101 HOV/ HOT from Santa Clara to I-380	In San Mateo County: On US 101 between 2 miles south of the Santa Clara County Line (P.M. 50.6 in SCL) and I-380: Install an HOV/Express Lane. Project also references RTP ID 240466	NON-EXEMPT	2030
San Mateo	SM-170003	17-06-0036	San Bruno	SR-35 (Skyline Blvd) Widening from I-280 to Sneath	Widens Skyline Blvd. (SR 35) between I-280 and Sneath Lane. It is currently the last portion of what is otherwise a four lane roadway along Skyline Blvd. The project widens approximately 1.3 miles of the	NON-EXEMPT	2030
San Mateo	SM-170004	17-06-0004	Pacifica	Manor Drive Overcrossing and Milagra On Ramp	In Pacifica: Hwy 1 and Manor Drive I/C: Widen the existing overcrossing; Hwy 1 and Milagra: Construct a new on-ramp; Both intersections: install signals	NON-EXEMPT	2040
Santa Clara	BRT030001	17-07-0012	VRTA	BART - Berryessa to San Jose Extension	BART: Extend BART from Berryessa Station to San Jose and Santa Clara. (Please see expanded project description for more details.)	NON-EXEMPT	2030
Santa Clara	SCL030006	17-07-0038	San Jose	US 101 / Blossom Hill I/C Reconst & Road Widening	San Jose: US-101/Blossom Hill Rd interchange; widen Blossom Hill Road and reconstruct interchange to provide an additional lane in each direction, including the bridge structure over US-101 plus other	NON-EXEMPT	2030
Santa Clara	SCL050009	17-07-0061	VRTA	Capitol Expressway LRT Extension- Phase II	In the East Valley: The Capitol Avenue light rail line from the existing Alum Rock Transit Center to a rebuilt Eastridge Transit Center (2.6 miles): provide light rail extension	NON-EXEMPT	2030
Santa Clara	SCL070004	17-07-0027	San Jose	US 101 / Mabury New Interchange	In San Jose: US 101/Mabury interchange; Construct full interchange.	NON-EXEMPT	2030
Santa Clara	SCL090003	17-07-0005	San Jose	San Jose Charcot Avenue Extension Over I-880	San Jose: Charcot Avenue Extension over I-880; Extend new 2-lane roadway with bike lanes and sidewalks providing new multi-modal connection to the North San Jose employment center.	NON-EXEMPT	2040
Santa Clara	SCL090005	17-07-0005	San Jose	Coleman Avenue Widening from I-880 to Taylor St.	In San Jose: Coleman Ave from I880 to Taylor St: Widen from 4 to 6 lanes.	NON-EXEMPT	2040
Santa Clara	SCL090016	17-07-0022	VRTA	New SR152 Alignment Study	Santa Clara/ San Benito counties: Complete PA&ED for new alignment of SR152 between US101 and SR156 in Santa Clara and San Benito counties.	NON-EXEMPT	2040
Santa Clara	SCL090017	17-07-0005	Santa Clara Co	Montague Expwy Widening - Trade Zone-I-680	In Santa Clara County: Widen Montague Expressway between Trade Zone and I-680.	NON-EXEMPT	2040
Santa Clara	SCL090019	17-07-0063	San Jose	San Jose International Airport People Mover	In San Jose: Planning studies and environmental for automated transit service that connects the San Jose Mineta International Airport to VTA's Guadalupe LRT, Caltrain and future BART stations as well as	NON-EXEMPT	2040

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Santa Clara	SCL090030	17-07-0074	VTA	SR 85 Express Lanes	In Santa Clara County: Implement roadway pricing on SR 85 carpool lane from US 101 in San Jose to US 101 in Mountain View.	NON-EXEMPT	2030
Santa Clara	SCL090040	17-07-0062	VTA	LRT Extension to Vasona Junction	In Campbell: Extend the light-rail line from the existing Winchester Station to a new Vasona Junction Station, near Route 85.	NON-EXEMPT	2030
Santa Clara	SCL110002	17-07-0075	VTA	Santa Clara County - US 101 Express Lanes	In Santa Clara County: From Cochrane Rd. in Morgan Hill to San Mateo County line in Palo Alto: Implement roadway pricing on US 101 carpool lane	NON-EXEMPT	2030
Santa Clara	SCL110005	17-07-0077	VTA	BART - Warm Springs to Berryessa Extension	In Santa Clara County: This project will extend BART from Warm Springs to the future Berryessa Station in San Jose, California.	NON-EXEMPT	2020
Santa Clara	SCL110006	17-07-0005	San Jose	San Jose - Autumn Street Extension	In San Jose: Autumn St between Julian Street and San Carlos Street: Widen, partially realign, and extend Autumn Street to adequately accommodate projected traffic demand.	NON-EXEMPT	2040
Santa Clara	SCL110007	17-07-0078	Santa Clara Co	San Tomas Expressway Widening	In Santa Clara County: Widen San Tomas Expressway between El Camino Real and Williams Road including adding sidewalks. Project is phased.	NON-EXEMPT	2040
Santa Clara	SCL110008	17-07-0070	VTA	SR 237 Express Lanes: North 1st St to Mathilda Ave	In Santa Clara County: On SR-237 from Mathilda Ave to North 1st St.: Implement roadway pricing carpool lane; On SR-237 from I-880 to Mathilda Avenue: Operational Improvements in terms of restriping	NON-EXEMPT	2030
Santa Clara	SCL110009	17-07-0013	VTA	El Camino Real Bus Rapid Transit	In Santa Clara County: Implement Bus Rapid Transit improvements on El Camino Real/The Alameda including: dedicated guideways, signal prioritization, low-floor boarding, ticket vending machines,	NON-EXEMPT	2030
Santa Clara	SCL110010	17-07-0059	VTA	VTA: Stevens Creek Bus Rapid Transit	In Santa Clara County: Stevens Creek corridor: Implement Bus Rapid Transit improvements including dedicated guideways, signal prioritization, low-floor boarding, ticket vending machines, premium BRT	NON-EXEMPT	2030
Santa Clara	SCL130001	17-07-0033	VTA	SR 237/US 101/Mathilda Interchange Modifications	In Sunnyvale: Modify US 101/Mathilda and SR 237/Mathilda interchanges to relieve congestion and improve local circulation.	NON-EXEMPT	2030
Santa Clara	SCL150018	17-10-0015	VTA	Peery Park Rides	In Sunnyvale: Peery Park area: Implement flexible transit service as part of a trip reduction strategy	NON-EXEMPT - Not Regionally Significant Project	2040
Solano	SOL030002	17-08-0015	Fairfield	Fairfield/Vacaville Intermodal Rail Station	In Fairfield: Capitol Corridor; Construct train station with passenger platforms, pedestrian undercrossing, highway overcrossing, park and ride lot,bike and other station facilities. Project is phased.	NON-EXEMPT	2030
Solano	SOL050009	17-08-0007	Dixon	Parkway Blvd/UPRR Grade Separation	In Dixon: Parkway Blvd from Valley Glen Dr. to Pitt School Rd: Construct new 4 lane roadway and overcrossing of UPRR & Porter Rd; Pitt School Rd from south of Hillview Drive to Porter Rd: widen shoulders	NON-EXEMPT - Not Regionally Significant Project	2040
Solano	SOL070020	17-10-0061	STA	I-80/I-680/SR 12 Interchange Project	Fairfield: Improve I-80/I-680/Route 12 I/C(Ph 1), including connecting I-80 to SR 12 W, I-680 NB to SR 12W (Jameson Canyon), I-80 to I-680 (+ Express Lane Direct connectors), build local I/C and build	NON-EXEMPT	2030
Solano	SOL090001	17-10-0023	Vacaville	I-505/Vaca Valley Off-Ramp and Intersection Imprv.	Vacaville: I-505 at Vaca Valley Pkwy: Widen the southbound I-505 off-ramp at Vaca Valley Parkway to provide left turn storage and signalize the southbound ramps at the intersection of Vaca Valley	NON-EXEMPT	2040
Solano	SOL090015	17-08-0010	Solano County	Redwood-Fairgrounds Dr Interchange Imps	Solano County: I-80/Redwood St. I/C and SR 37/Fairgrounds Dr. I/C: Implement I/C and safety improvements; Fairgrounds Dr. between Redwood St. and SR 37 (2.1 lane miles): Remove left turn lane and	NON-EXEMPT	2030

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Solano	SOL110001	17-10-0044	MTC	I-80 Express Lanes - Fairfield & Vacaville Ph I&II	I-80 in Solano County from Red Top Rd to I-505: Convert existing HOV to HOT & Construct new HOT lanes from Air Base Parkway to I-505. Project also references RTP ID 230660	NON-EXEMPT	2030
Solano	SOL110003	17-08-0012	STA	Jepson: Vanden Road from Peabody to Leisure Town	Jepson Parkway segment: Vanden Road project from Peabody Road to Leisure Town Road.	NON-EXEMPT	2030
Solano	SOL110004	17-08-0012	STA	Jepson: Walters Rd Ext - Peabody Rd Widening	Jepson Parkway segment: Walters Road Extension - Peabody Widening.	NON-EXEMPT	2030
Solano	SOL110005	17-08-0012	STA	Jepson: Leisure Town Road from Vanden to Commerce	Jepson Parkway segment: Leisure Town Road from Vanden Road to Commerce. Project is phased	NON-EXEMPT	2030
Solano	SOL110006	17-08-0012	STA	Jepson: Leisure Town Road (Commerce to New Ulatis)	Reconstruct and widen Leisure, from 900 feet South of Commerce Place to South of New Ulatis Creek	NON-EXEMPT	2030
Solano	SOL110007	17-08-0015	Fairfield	Fairfield Transportation Center - Phase 3	In Fairfield: Fairfield Transportation Center; Contruct second parking structure with approximately 600 automobile parking spaces and access improvements.	NON-EXEMPT	2030
Solano	SOL110009	17-08-0015	Vacaville	Vacaville Intermodal Station - Phase 2	In Vacaville: Construction of a 137 stall surface parking lot.	NON-EXEMPT	2030
Solano	SOL110037	17-08-0004	Vallejo	Sonoma Boulevard Improvements HSIP5-04-031	Vallejo: Sonoma Blvd between Georgia St and Florida St: Implement road diet - reduce travel lanes from 4 to 3, add a two-way left-turn lane or median, and add bike lanes	NON-EXEMPT - Not Regionally Significant Project	2040
Solano	SOL990018	17-08-0008	Vallejo	I-80 / American Canyon Rd overpass Improvements	Vallejo: American Canyon Road overpass at Hwy. 80; capacity and safety improvements.	NON-EXEMPT	2040
Sonoma	SON010001	17-09-0005	Caltrans	Son 101 HOV - SR 12 to Steele & Steele Lane I/C	In Santa Rosa: On 6th St. between Morgan St and Davis St: the construction of 280 feet of roadway with two new travel lanes and a westbound left turn lane; from SR 12 to Steele Lane: follow-up	NON-EXEMPT	2040
Sonoma	SON010019	17-09-0005	Son Co TA	Son 101 HOV - Steele Lane to Windsor (North)	Santa Rosa-Windsor: US 101 btw Steele Lane in Santa Rosa and Windsor River Road in Windsor; Widen from 4 to 6 lanes for High Occupancy Vehicle (HOV) lanes and implement landscaping.	NON-EXEMPT	2040
Sonoma	SON010024	17-09-0005	Son Co TA	Son 101 HOV - Redwood Hwy to Rohnert Park Expwy	Petaluma-Rohnert Park: US 101 Btw Old Redwood Hwy in Petaluma & Rohnert Park Expwy: widening roadway from 4 to 6 lanes for HOV and implement landscaping	NON-EXEMPT	2040
Sonoma	SON050001	17-09-0004	Sonoma County	Laughlin Bridge over Mark West Crk 20C0246	Mark West Creek Bridge: Laughlin Rd/Brickway Blvd Extension; Construct new 2 lane bridge.	NON-EXEMPT	2040
Sonoma	SON070004	17-09-0006	Son Co TA	US 101 Marin/Sonoma Narrows (Sonoma)	Marin and Sonoma Counties: From SR37 in Novato to Old Redwood Highway in Petaluma, convert expressway to freeway, construct NB auxillary lane between Lakeville Highway and East Washigton Street,	NON-EXEMPT	2030
Sonoma	SON090005	17-09-0004	Son Co TA	US 101 Airport I/C (North B)	In Sonoma County: Replace Airport Blvd overcrossing and reconstruct interchange with US 101. Improve operations between Airport and Fulton. Construct soundwalls. (Project is the second phase of the	NON-EXEMPT	2040
Sonoma	SON130017	17-09-0003	Santa Rosa	Santa Rosa Cmplt Sts Road Diet on Transit Corridor	Santa Rosa: On transit corridors within two Priority Development Areas (Mendocino Ave/Santa Rosa Ave Corridor and Downtown Station Area) and in Communities of Concern: Rehabilitate roadway and	NON-EXEMPT - Not Regionally Significant Project	2040
Sonoma	SON150006	17-09-0010	Santa Rosa	US 101 Hearn Ave Interchange	Santa Rosa: US 101/Hearn Avenue over-crossing/interchange: Replace the US 101/Hearn Avenue over-crossing/interchange with a new over crossing/interchange including bike lanes, sidewalks, and re-	NON-EXEMPT	2030
Sonoma	SON150010	17-10-0015	Son Co TA	Santa Rosa Car Share	Santa Rosa: Various locations: Establish nine car share vehicles at four pods.	NON-EXEMPT - Not Regionally Significant Project	2040

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Alameda	ALA010003	17-01-0003	Alameda County	Crow Canyon Safety Improvements	Alameda County: On Crow Canyon Road: from I-580 north to the Alameda/Contra Costa County line; Safety improvements, shoulder widening and curve realignment.	EXEMPT (40 CFR 93.126) - Shoulder improvements	2040
Alameda	ALA010034	17-10-0026	AC Transit	AC Transit: Facilities Upgrade	AC Transit: Agency's facilities & equipment upgrades.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Alameda	ALA010052	17-01-0003	Newark	Central Avenue Railroad Overpass at UPRR	Newark: On Central Avenue at the Union Pacific Railroad tracks; Construct grade separation. No new lanes. Project is phased	EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
Alameda	ALA010056	17-01-0008	ACE	ACE Track Improvements.	ACE: From Stockton to San Jose: Corridor improvements for signaling, grade crossing, track and other cost associated	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Alameda	ALA030002	17-01-0003	Alameda County	Alameda: Vasco Road Safety Improvements	Livermore: On Vasco Road from 1,000' South of Dalton Ave to CC County line; Realign roadway, provide standard shoulder widths, install median barriers and add truck-climbing lanes. (Total length of	EXEMPT (40 CFR 93.126) - Truck climbing lanes outside the urbanized area	2040
Alameda	ALA030030	17-10-0026	LAVTA	LAVTA: Preventive Maintenance	LAVTA: Preventive Maintenance Program for Agency Fleet.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA050035	17-01-0001	Alameda County	Cherryland/Ashland/CastroValley /Fairview Sidwklmp	Cherryland, Ashland, Castro Valley, Fairview, San Lorenzo and other Unincorporated Areas of Alameda County: Sidewalk improvements in the vicinity of Schools within unincorporated Alameda County area.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA050079	17-01-0040	Berkeley	I-80 Gilman Interchange Reconfiguration	Berkeley: On Gilman Avenue at I-80; Reconfigure interchange providing dual roundabout at the entrance & exits from I-80 as well as the Eastshore Highway and West Frontage Road.	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2030
Alameda	ALA070009	17-01-0030	ACTC/Oak/Ala	Oakland/Alameda Freeway Access Project	Oakland: Between Oak Street and Union Street; Reconfigure interchange and intersections to improve connections between I-880, the Posey and Webster tubes and the downtown Oakland area.	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2030
Alameda	ALA070039	17-01-0001	Oakland	Oakland Waterfront Bay Trail	Oakland: From Emeryville border to San Leandro border; Construct new segments of the Bay Trail.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA070054	17-01-0018	Port of Oakland	California Inter-regional Rail Intermodal Study	Port of Oakland: Study to determine the feasibility of a freight rail shuttle system between the Port and inland points in the Central Valley.	EXEMPT (40 CFR 93.126) - Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action	2020
Alameda	ALA090022	17-10-0024	Alameda County	Estuary Bridges Seismic Retrofit and Repairs	Oakland: Seismic retrofit and repairs of 3 Oakland Estuary bridges	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Alameda	ALA090023	17-10-0024	Alameda County	Fruitvale Ave Roadway Bridge Retrofit	Alameda County: Retrofit Fruitvale Roadway Bridge a lifeline facility	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Alameda	ALA090065	17-10-0026	BART	BART: Fare Collection Equipment	BART: Systemwide: Acquire and install fare collection equipment.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA090068	17-01-0004	BART	MacArthur BART Plaza Remodel	Oakland: MacArthur BART Station: Renovate the entry plaza	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Alameda	ALA110008	17-10-0026	AC Transit	AC Transit State of Good Repair Program	AC Transit: The project is intended to bring AC Transit's revenue fleet up to a SGR by implementing new SGR process and software in order to reduce operating costs.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA110032	17-01-0004	BART	Downtown Berkeley BART Plaza/Transit Area Imps.	In Berkeley: Area around Downtown Berkeley BART Station: Streetscape improvements; design/construction of custom bus shelter, canopy design for 5 secondary BART entries and construction of one;	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Alameda	ALA110033	17-01-0003	ACTC	Alameda County Safe Routes to School	Alameda County: Countywide SR2S Program including education & outreach in various K-12 schools, ridesharing, & project development.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA110072	17-01-0004	Oakland	Lake Merritt Improvement Project	In Oakland: Adjacent to Lake Merritt: Reconfigure roadways and construct paths, walls, structures, lighting, parking and landscaping; no added capacity	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA110099	17-10-0026	ACE	ACE Preventative Maintenance	ACE Rail - Preventative maintenance activities for ACE service and associated equipment, functions, and facilities.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA110115	17-01-0001	BART	Bicycle Lockers at Capitol Corridor Stations	Capitol Corridor Joint Powers Authority (CCJPA): at Capitol Corridor Stations: Establish a bicycle storage standard for design(s), function, and procurement for secure bicycle storage	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA110120	17-10-0011	Livermore	Livermore TOD Study at I-580/SR84	In Livermore: Near I-580/SR84 I/C: Create a community-based transit-oriented development plan for local land uses and access improvements to complement a planned Phase 1 extension of the BART	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA130002	17-10-0026	AC Transit	AC Transit: Procure (27) 60' Artic Hybrid Buses	AC Transit: Purchase 27 60-foot diesel-electric hybrid articulated buses with dual-side doors for BRT service to replace older 60-foot articulated buses	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA130003	17-01-0001	Oakland	Lake Merritt to Bay Trail Bike/Ped Bridge	Oakland: Over Embarcadero and UPRR tracks under I880 between the Estuary and Lake Merritt along the Channel: Construct ADA accessible bicycle pedestrian bridge to link Bay Trail to Lake Merritt.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA130007	17-01-0062	BART	BART to Livermore Extension - Develop EIR/EIS	BART - Develop Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the BART to Livermore Extension Project (Proposed Project).	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA130008	17-10-0022	San Leandro	San Leandro Boulevard Preservation	San Leandro: San Leandro Blvd from Williams St to Hudson Ln: Pavement Preservation	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130009	17-01-0004	Pleasanton	Pleasanton Complete Streets	Pleasanton: Valley Avenue from Bernal Ave to Hopyard Road and Hopyard Road from Black Avenue to Del Val Parkway: rehabilitate and resurface pavement and installing pedestrian improvements including	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130011	17-10-0026	Livermore	Livermore Relocation and Restoration of R/R Depot	In Livermore: Relocation and rehabilitation of the Historic Depot building to a site adjacent to the UPRR tracks and the Downtown parking structure/LAVTA's Transit Center. No loss of existing transit hub	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Alameda	ALA130012	17-10-0022	Dublin	Dublin Boulevard Preservation	In Dublin: Dublin Boulevard between San Ramon Road and Village Parkway, Dublin Boulevard between San Ramon Road and Village Parkway: Pavement preservation	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130013	17-10-0022	Hayward	Hayward - Industrial Boulevard Preservation	Hayward: Industrial Boulevard from Clawiter Road to 659 ft south of Depot Road: Pavement rehabilitation	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130016	17-01-0004	Oakland	Oakland Complete Streets	In Oakland: Various federal aid eligible streets: Resurfacing and preventive maintenance including installation of ADA-compliant curb ramps, and installation (or reinstallation) of bikeway facilities	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130018	17-10-0022	Alameda County	Alameda Co-Various Streets and Roads Preservation	Unincorporated Alameda County: Various roadways including Grove Way,Lake Chabot Rd,A St,Vasco Rd, and Liberty St: Rehabilitate pavement	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130019	17-01-0004	Piedmont	Piedmont Complete Streets (CS)	Piedmont: Highland Ave (Sierra to Mountain) and Moraga Ave (Pala to City Limits): Rehabilitate pavement and upgrade pedestrian, bicycle and transit facilities within the project boundaries	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130021	17-10-0022	Emeryville	Emeryville - Hollis Street Preservation	Emeryville: Hollis Street north of Powell Street, Hollis Street (63rd Street to Ocean Avenue), Hollis Street (65th Street to 66th Street), Hollis Street (66th Street to north of 67th Street [City Limits]): Rehabilitate	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040

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Alameda	ALA130022	17-01-0004	Alameda	Alameda City Complete Streets	City of Alameda: Various Locations: Rehabilitate pavement and make minor improvements to stormwater, bike/ped, and transit facilities	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130030	17-01-0001	MTC	Improved Bike/Ped Access to East Span of SFOBB	In Oakland: In the vicinity of the East Span of the San Francisco-Oakland Bay Bridge: Construct improved bicycle and pedestrian access. Project is phased.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA130035	17-01-0001	Berkeley	Bay Trail Shoreline Access Staging Area Project	City of Berkeley: Berkeley Marina, construct segment 3 of Bay Trail Extension, construct new public restroom, and renovate existing public parking area and windsurf staging area.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150002	17-01-0003	Alameda County	Niles Canyon Rd (SR 84)/Pleasanton Sunol Rd Inter. Imps	In Sunol Area: At Niles Canyon Rd(SR 84), Pleasanton Sunol Rd and Paloma Rd intersection: intersection improvements at the four corners including installation of a traffic signal, shoulder improvements	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Alameda	ALA150005	17-01-0003	Berkeley	LeConte Elementary Safe Routes to School Imps	Berkeley: Shattuck Ave between Ward St and Russell St: Pedestrian crossing improvements near LeConte School.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150006	17-01-0003	Alameda County	Be Oakland, Be Active	Oakland: Citywide: Promote walking and cycling in 41 of Oakland Unified School District's most disadvantaged schools.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150007	17-01-0001	Alameda	Cross Alameda Trail (includes SRTS component)	City of Alameda: between Webster St and Sherman St: construct a new trail with an on-street portion.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150009	17-01-0003	Livermore	Livermore Marylin Avenue Safe Routes to School	Livermore: Marylin Avenue Elementary School: Safe Routes to School infrastructure improvements surrounding Marylin Avenue Elementary School.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150010	17-01-0001	Oakland	International Boulevard Improvement Project	Oakland: International Boulevard and East 12th Street corridor from 1st Avenue to Durant Avenue: Install pedestrian scale lighting along the corridor, repair sidewalk damage, and install curb ramps.	EXEMPT (40 CFR 93.126) - Lighting improvements	2040
Alameda	ALA150011	17-01-0004	Albany	Complete Streets for San Pablo Ave/Buchanan St.	Albany: San Pablo Ave and Buchanan St: Implement Complete Streets elements including curb extensions, high visibility crosswalks, medians, pedestrian signals and gateway improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150012	17-01-0007	Oakland	Laurel Access to Mills, Maxwell Park and Seminary	Oakland: MacArthur Boulevard from High St to Simmons St: Implement bicycle and pedestrian improvements	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Alameda	ALA150014	17-10-0026	LAVTA	LAVTA: Bus Purchase-Low Floor	LAVTA: 40' Hybrids: Replace 4 2002-Low Floor Diesel Vehicles with 4 40' Hybrids.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150015	17-10-0026	LAVTA	LAVTA: Bus Purchase-Over the Road	LAVTA: 40' Hybrids: Replace 4 2002- over the road Diesel vehicles with 4 40' Hybrids.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150016	17-10-0026	LAVTA	LAVTA: Bus Purchase-7 Hybrids	LAVTA: 35' Hybrids: Replace 7 2003- Diesel vehicles with 1 40' Hybrid and 6 35' Hybrids	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150017	17-10-0026	LAVTA	LAVTA: 5 40' Hybrids	LAVTA: 40' Hybrids: Replace 5 2000 40'Diesel Vehicles with 5 40' Hybrids	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150019	17-01-0007	LAVTA	Dublin Blvd Transit Performance Initiative	LAVTA: Dublin Blvd: Project includes implementing Adaptive Signal Control at 27 intersections, Transit Signal Priority, signal coordination, key bus stop improvements, updated customer interface portal,	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2040
Alameda	ALA150020	17-01-0007	AC Transit	AC Transit: South County Corridors	AC Transit: South Alameda County Major Corridors: Travel time improvements including Adaptive Traffic Control Systems, corridor-wide Transit Signal Priority, signal coordination and relocation of key bus	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2040
Alameda	ALA150021	17-10-0024	Caltrans	SFOBB Maintenance Complex Ph 3 Training Facility	Near Oakland, at the San Francisco Oakland Bay Bridge Toll Plaza Building. Reconstruct maintenance complex training facilities.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040

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Alameda	ALA150023	17-01-0002	Oakland	Oakland Car Share and Outreach Program	Oakland: Citywide: Oakland's car sharing program will extend dedicated car sharing spaces into public right of way and conduct outreach to disadvantaged communities and low-income groups	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Alameda	ALA150024	17-01-0003	Oakland	Oakland: High/Ygnacio/Courtland Bike/Ped Imprvmnts	In Oakland: Intersection of High Street, Courtland Avenue and Ygnacio Avenue: Implement improvements for pedestrian and bicyclist safety	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150025	17-01-0003	Oakland	Oakland Safe Routes to Schools Various Locations	In Oakland: At six school locations: Implement crossing and access improvements for pedestrians and bicyclist	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150026	17-01-0003	Alameda County	Safe Routes to School, Unincorporated Alameda Co.	In Unincorporated Alameda County: Various schools: Bicycle and pedestrian education for children walking and biking to school.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150028	17-01-0001	Alameda County	Ashland Avenue Bicycle/Ped Improvements	Ashland, Unincorporated Alameda County: Ashland Avenue between E.Lewelling Blvd and East 14th St: Widen sidewalk, Install Class II Bicycle lanes and ped lighting	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150029	17-01-0002	UCBerkeley	UC Berkeley Parking Price Auction Study	Berkeley: UC Berkeley: Conduct study to determine the real value of parking of current parking permit holders who pay a discounted rate relative to commercially available parking	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA150030	17-01-0008	BART	Ladders of Opportunity - Careers in Transit	BART: Implement new Transit Career Ladders Training Program to improve training access for traditionally underrepresented individuals by developing streamlined pathways into transportation	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150031	17-10-0026	LAVTA	LAVTA: Replacement (11) 40' Hybrid Buses	LAVTA: Purchase 11 40' hybrid buses to replace diesel buses that have exceeded their useful life	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150032	17-10-0026	LAVTA	LAVTA: Replacement (9) 30' Hybrid Buses	LAVTA: Purchase nine (9) 30' hybrid buses to replace diesel buses that have exceeded their useful life	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150033	17-10-0026	LAVTA	LAVTA: Service Vehicles (2) Trucks	LAVTA: Purchase two service trucks for use in maintenance yard and along the Wheels bus lines.	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Alameda	ALA150035	17-10-0028	LAVTA	LAVTA: Farebox Replacement	LAVTA: New Buses: Install farebox devices compliant with Clipper technology	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA150036	17-10-0026	LAVTA	LAVTA: Service Vehicles (3) Road Supervisor	LAVTA: Purchase 3 vehicles for road supervisors' use when providing roadside assistance to the fixed-route fleet. These vehicle will be outfitted with tools and equipment necessary to perform	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Alameda	ALA150037	17-10-0026	LAVTA	LAVTA: Service Vehicles (4) shift trade	LAVTA: Purchase 4 vehicles for road supervisors' use when providing roadside assistance to the fixed-route fleet. These vehicles will be outfitted with tools and equipment necessary to perform	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Alameda	ALA150038	17-10-0026	AC Transit	AC Transit: Purchase (10) Double-Deck Diesel Buses	AC Transit: Purchase (10) Double-Deck Diesel Buses to replace buses in existing fleet	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150039	17-10-0026	AC Transit	AC Transit: Purchase (10) 40' Buses-Fuel Cell ZEB	AC Transit: Replace 10 40ft urban diesel buses with Zero-emission fuel cell buses	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150040	17-10-0026	AC Transit	AC Transit: Replace (10) 40ft Urban Buses-Diesels	AC Transit: Replace 10 (of 102 in sub-fleet) 40ft urban diesel buses with diesels	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150041	17-10-0026	AC Transit	AC Transit: Replace (29) 60' Artic Buses - Diesels	AC Transit: Replace 29 60ft artic urban diesel buses with diesels	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA150044	17-01-0004	Oakland	19th St BART to Lake Merritt Urban Greenway	In Oakland: Between Broadway and Harrison Street: Improvements include sidewalk widening and bulbouts, ped crossing improvements, bikelanes, new traffic signals and signal mods, street/ped lighting,	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040

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County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Alameda	ALA150045	17-10-0026	AC Transit	AC Transit: PM - Exchange for 40ft Fuel Cell ZEB	AC Transit: Preventive maintenance program, including maintenance of buses and facilities. Project is in exchange for local funds to replace 10 (of 102 in sub-fleet) 40ft urban diesel buses with Zero-	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA150046	17-10-0026	Union C Transit	Union City Transit Rehab Two (2) Transit Buses	Union City Transit: Rehabilitate two (2) compressed natural gas (CNG) buses from 2008 that are now at their mid-life service expectancy. The vehicles have the potential to serve the transit agency longer	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA150048	17-01-0001	Berkeley	9th St Bicycle Blvd Extension Pathway Ph II	In Berkeley: Between the 9th Street Bicycle Boulevard (south of Heinz Avenue) and Murray Street: Install a shared-use path	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150049	17-01-0002	Berkeley	goBerkeley Residential Shared Parking Pilot	In Berkeley: In residential areas adjacent to Southside/Telegraph and Elmwood goBerkeley program areas: Implement parking pricing pilot; In pilot areas: Implement TDM strategies and outreach focused on	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150050	17-01-0002	Oakland	Oakland Parking and Mobility Management Project	Oakland: Montclair and select areas of Downtown: Implement demand-responsive parking management and transportation demand management initiatives	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150051	17-01-0008	LAVTA	Wheels Individualized Marketing Program	LAVTA: Systemwide: Implement a multi-pronged marketing program directed at key subsets of the riding public with the goal of converting non-users to public transit passengers	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA150052	17-10-0033	AC Transit	AC Transit: SFOBB Forward	AC Transit: Rehab 14 buses and purchase 5 new double-decker buses to expand transbay service. Includes 1 year of operating funding.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA170002	17-01-0037	ACTC	I-80/Ashby Avenue Interchange Improvements	Alameda County: I-80/Ashby IC: Reconstruct the interchange including constructing new bridge, two roundabouts and bike/ped improvements	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2030
Alameda	ALA170003	17-10-0028	Union C Transit	Union City Transit: Single Point Login Terminals	Union City Transit: Systemwide Revenue Transit Vehicles: Implement Single Point Login Terminals, Including Equipment and Programming for Clipper Card.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA170007	17-10-0023	MTC	Regional Planning Activities and PPM - Alameda	Alameda: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA170012	17-01-0003	MTC	Bay Bridge Forward-Commuter Parking Access Imps.	Albany and Oakland: Adjacent to Park and Ride lots at I-80/Buchanan Ave, I-880/High St, I-880/Fruitvale; Bicycle/pedestrian/bus stop improvements to facilitate safer access to and from lots; toll credits	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA170013	17-01-0007	Union C Transit	Union City Transit Travel Time Improvements	Union City: South Alameda County Major Corridors: Travel time improvements including Adaptive Traffic Control Systems, corridor-wide Transit Signal Priority, signal coordination and relocation of key bus	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2040
Alameda	ALA170014	17-10-0026	Union C Transit	Union City Paratransit Van Procurement	Union City Transit: Replace six (6) Union City Paratransit vans	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA170015	17-10-0026	Union C Transit	Union City Transit: Replace Paratransit Sedan	Union City Transit: Replace one (1) Union City Paratransit sedan with one (1) van	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA170027	17-10-0026	AC Transit	AC Transit: Purchase 10 Double-Decker Buses	AC Transit: Purchase 10 Double-Decker Buses for transbay service	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA170028	17-10-0026	AC Transit	AC Transit: Purchase 18 40ft Hybrid-Electric Buses	AC Transit: Purchase 18 40-ft Hybrid-Electric Buses to keep AC Transit's fleet in a state of good repair	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA170029	17-10-0026	AC Transit	AC Transit: Preventive Maintenance (Swap)	AC Transit: Preventive Maintenance (federal funding is provided for this project in exchange for AC Transit's commitment to Replace 9 40' Urban Buses - Battery using local funds)	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA170030	17-10-0026	AC Transit	AC Transit: Preventive Maintenance (Deferred Comp)	AC Transit: Preventive Maintenance (funding is incentive for delaying bus purchases)	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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Alameda	ALA170032	17-10-0026	AC Transit	AC Transit: Purchase 19 60-ft Artic Urban Buses	AC Transit: Purchase 19 60-ft Articulated Urban Buses	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA170039	17-01-0002	Union C Transit	Union City: ADA Paratransit Operating Subsidy	Union City Transit: ADA Paratransit Operating Assistance	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA170040	17-10-0013	MTC	I-880 Integrated Corridor Management	Alameda County: I-880 corridor from I-880/I-980 IC to I-880/Davis St. IC: Install intelligent transportation system (ITS) infrastructure to facilitate the active management of traffic that naturally diverts	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Alameda	ALA170041	17-10-0026	AC Transit	AC Transit: 5 Battery Electric Bus purchase	AC Transit: Purchase 5 New Flyer battery electric buses with 5 depot charging stations and installation. Includes consulting PM support from CTE.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA990052	17-10-0026	AC Transit	AC Transit: Paratransit Van Replacement	AC Transit: Amortized cost of replacing vans used for AC Transit paratransit service. Vans are operated and replaced by paratransit contractor. FTA funds programmed annually in lieu of programming for	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Alameda	ALA990076	17-01-0002	AC Transit	AC Transit: ADA Paratransit Assistance	AC Transit: ADA Paratransit Operating Subsidy.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA990077	17-01-0002	LAVTA	LAVTA: ADA Paratransit Operating Subsidy	LAVTA: ADA Paratransit Operating Subsidy	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-030001	17-02-0005	AC Transit	AC Transit: Richmond Prkwy Transit Center	Richmond: Adjacent to I-80 at the Richmond Parkway Transit Center; rehabilitation park and ride facility, traffic light installation and restriping on Blume Dr	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Contra Costa	CC-030025	17-10-0026	WCCTA	WCCTA: Preventive Maintenance Program	WestCat: Operating assistance to aid agency with preventive maintenance activities of its fleet.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-030035	17-02-0001	ECCTA	Tri-Delta: ADA Operating Assistance	Tridelta: Operating assistance to fund ADA Set Aside requirement	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-050075	17-10-0022	Danville	Crow Canyon/Camino Tassajara Intersection Imps	Danville: Camino Tassajara, fr Sycamore Valley Rd to Eastern Town limits & Crow Canyon, fr Camino Tassajara to Southern town limits; pavement rehab incl. signal, drainage, spot Sidewalk, curb/gutter &	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-070013	17-02-0035	Brentwood	Lone Tree Way Undercrossing	Brentwood: On Lone Tree Way at the UPRR track; Construct 6-lane grade separation undercrossing.	EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2030
Contra Costa	CC-070033	17-02-0003	EB Reg Park Dis	Conta Costa Parks Bike/Ped Trail Improvements	Contra Costa County: Various County Parks; Various bicycle and pedestrian trail improvements. Construction will be done in different phases.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-070065	17-02-0005	Oakley	Main Street (Previously SR4) Realignment in Oakley	Oakley: On Main St (previously State Route 4) from west of Vintage Parkway to east of 2nd St; Realign roadway, sidewalks, curb, gutters, etc. including traffic calming and signals. No additional automobile	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Contra Costa	CC-070067	17-02-0003	CCTA	Mokelumne Trail Bike/Ped Overcrossing	Brentwood: Construct a pedestrian and bicycle overcrossing near the Mokelumne Trail at State Route 4 in Brentwood.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-070092	17-10-0026	ECCTA	ECCTA: Transit Bus Replacements	Tri-Delta Transit Replacement Revenue Vehicles and associated farebox equipment	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-090001	17-02-0008	Danville	Diablo Road Imps. - Green Valley to Avenida Neuva	On Diablo Road: add EB left turn pocket at Clydesdale Dr; drainage improvements; replacement of 1300 LF retaining wall between Green Valley Rd and Clydesdale Dr; overlay; replace guardrail.	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Contra Costa	CC-110007	17-02-0003	Richmond	Richmond Transit Village: Nevin Imps BART-19th	On Nevin Ave bet 19th St and the BART Station, ped and bicycle street enhancements incl reconstruction of east entrance to the BART station, wide sidewalk, curb ramps, enhanced crosswalks, lighting,	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110066	17-02-0017	CCTA	SR 239 - New State Highway Study	SR 239 between SR4 in Brentwood and I-205 in Tracy: Conduct environmental and design studies to create a new alignment for SR239 and develop corridor improvements from Brentwood to Tracy.	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040

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Contra Costa	CC-110082	17-02-0043	BART	Walnut Creek BART TOD Access Improvements	Walnut Creek: In the vicinity of the Walnut Creek BART Station: construct public access improvements that are part of the proposed transit-oriented development	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110083	17-10-0026	CCCTA	Replace Diesel Trolleys with Electric TrolleyBuses	CCCTA: Replace four diesel trolleys with electric trolleys and install the associated infrastructure	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110084	17-02-0003	CC County	Canal Road Bicycle and Pedestrian Facilites	CC County: Canal Rd from Bailey Rd to Loftus Rd: Construct east and west bound bike lanes and close sidewalk gaps (2,350 ft in total length) on the north side of Canal Rd, other improvements include	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110099	17-10-0026	CCCTA	CCCTA - Replace 15 40' Buses	CCCTA: replace 15 40' Heavy Duty Diesel Transit Buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110100	17-10-0026	CCCTA	CCCTA - Replace 18 40' Buses	CCCTA: Replace 18 40' Heavy Duty Diesel Over the Road Buses that have reached the end of their useful life.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-130001	17-02-0020	CC County	Bailey Road-State Route 4 Interchange	In Bay Point: At the Bailey Road-State Route 4 interchange; modify ramps and Bailey Road to improve bicycle and pedestrian circulation. Project is phased.	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2030
Contra Costa	CC-130003	17-02-0003	CC County	Bailey Road Bike and Pedestrian Improvements	Bay Point: Bailey Rd from Willow Pass Rd to SR 4: Improve bicycle and pedestrian accessibility. Improvements will expand sidewalks and construct uniform bike lanes to create a corridor conducive to all	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130004	17-10-0022	CC County	Contra Costa County Various Streets & Road Preserv	CC County: Pleasant Hill Road (northbound Rancho View Dr to Reliez Valley Rd), Vasco Road (Walnut Blvd to Frisk Creek Bridge), and Byron Highway(Brentwood Blvd to Marsh Creek Rd): pavement	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130011	17-02-0005	Concord	Detroit Avenue Bicycle and Pedestrian Improvements	Concord: Detroit Ave between Clayton Rd and Monument Blvd: Complete Streets improvements including bike lanes and bike routes; pavement rehabilitation; street lighting improvements; sidewalk gap	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Contra Costa	CC-130012	17-10-0022	Concord	Concord Various Street Preservation	Concord: Concord Blvd (Port Chicago Hwy to 6th Street) and Arnold Industrial Way (Port Chicago Hwy to approximately 1100 ft westerly) Grind and replace the top 2.5" of asphalt concrete and upgrade	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130013	17-02-0008	Concord	Concord New and Upgraded Signals at Various Loc	Concord: Various Locations: Upgrade existing traffic signals, install new traffic signals, and related improvements including ADA upgrades. Includes installing an actuated Bike/Ped Traffic Signal at Oak	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Contra Costa	CC-130015	17-10-0022	Pinole	Pinole - San Pablo Avenue Preservation	Pinole: San Pablo Avenue from Pinole Shores Drive to Sunnyview Drive: Pavement Resurface, and miscellaneous concrete repairs to curbs and gutter	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130020	17-10-0022	Moraga	Moraga Various Streets and Roads Preservation	Moraga: Moraga Road from St Marys Road to Draeger Drive: Perform pavement base repairs; mill and place 2" asphalt concrete; adjust utility frame to grade; install shoulder backing; replace striping and	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130023	17-10-0022	Danville	Danville Various Streets and Roads Preservation	Danville: Sycamore Valley Road from Camino Ramon to San Ramon Valley Boulevard including the bus loop within the adjoining Park-and-Ride Lot, and El Cerro Boulevard from El Pintado Road to La Gonda	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130024	17-02-0003	El Cerrito	Ohlone Greenway Station Area Bike/Ped Improvements	El Cerrito: On Ohlone Greenway at El Cerrito del Norte & Plaza BART Stations & at intersections of Hill, Cutting, Central & Fairmount, widen path & improve ped & bike facilities; at three nodes along length	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130025	17-10-0022	Martinez	Martinez Various Streets and Roads Preservation	Martinez: Various Streets and Roads: Rehab and perform preventative pavement maintenance to roadways and modify curb ramps to meet current ADA standards	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040

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Contra Costa	CC-130026	17-10-0022	Richmond	Richmond Local Streets and Roads Preservation	Richmond: Various Streets and Roads: Rehabilitate pavement and install curb ramps	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130027	17-02-0005	CC County	Port Chicago Hwy/Willow Pass Rd Bike Ped Upgrades	Bay Point: Near the intersection of Port Chicago Hwy and Willow Pass Rd: Install bike lane, sidewalk, curb and gutter, bike/ped access improvements, and intersection channelization	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Contra Costa	CC-130029	17-02-0003	Pleasant Hill	Boyd Road/Elinora Drive SRTS Sidewalk Installation	Pleasant Hill: Along north side of Boyd Road (between Horten Ct and Liahona Ct) and east side of Elinora Dr (between Gladys Dr to Gregory Ln): Install concrete sidewalk, new curb/gutter, driveway conform,	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130030	17-10-0022	Clayton	Clayton Various Streets Preservation	Clayton: Keller Ridge Dr from Eagle Peak Ave to Elk Dr.: Rehabilitate roadway	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130031	17-10-0022	Oakley	Oakley Various Streets and Roads Preservation	Oakley: Various streets and roadways: Rehabilitate roadway including striping	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130032	17-02-0003	San Pablo	San Pablo Avenue Bicycle and Ped Improvements	San Pablo and Richmond: On San Pablo Avenue between Rumrill Blvd and Hilltop Drive: Construct sidewalks and bicycle lanes, modify existing signals to accommodate new striping (no additional	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130033	17-10-0022	Walnut Creek	Walnut Creek - North Main Street Preservation	Walnut Creek: North Main Street from San Luis Road to Geary Road: Rehabilitate roadway and upgrade traffic signal equipment to detect bicycles	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130037	17-02-0003	Moraga	Moraga Rd SRTS Bicycle and Ped Improvements	In Moraga: On Moraga Road between Campolindo High School and St. Mary's Road: Install pedestrian and bicycle facilities, including trails, sidewalks, crossings and bicycle facilities.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130038	17-02-0003	Danville	Vista Grande Street Pedestrian Improvements/SR2S	Danville: Vista Grande Street between Camino Tassajara and Diablo Road/Vista Grande Elementary School: Construct separated asphalt concrete pathway and safety enhancements to provide direct ped/bike	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130040	17-10-0022	Hercules	Hercules-Refugio Valley Road Pavement Preservation	In Hercules: Refugio Valley Road from Sycamore Avenue to Redwood Road: Resurface roadway	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130045	17-02-0003	CCCTA	CCCTA: Access Improvements Implementation	CCCTA: Various bus stops system-wide: Implement bicycle and pedestrian access improvements identified in County Connection's Access Improvement Study.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130049	17-02-0003	EB Reg Park Dis	Breuner Marsh Restoration and Public Access	City of Richmond: Breuner Marsh at Point Pinole Regional Shoreline Park: Implement public access improvements including a staging area and associated bicyle and pedestrian access improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130050	17-02-0003	EB Reg Park Dis	SF Bay Trail, Pinole Shores to Bay Front Park	Pinole: Between Pinole Shores and Bayfront Park, approximately 0.5-mile: Construct a section of the San Francisco Bay Trail. Project is phased	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-150001	17-10-0026	WCCTA	WestCAT: Replacement of (10) Paratransit Cut-Aways	WestCat: Paratransit vans: Replace (10) 2008 29ft cutaway style Paratransit Vans with (10) similar style vans	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-150002	17-02-0009	WCCTA	WestCAT: Purchase of (10) Radio systems	WestCat: Radio systems: Purchase of (10) Radio systems for (10) Cut Away Van's	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-150003	17-02-0009	WCCTA	WestCAT: Purchase of (2) Electronic Fareboxes	WestCat: Fareboxes: Purchase of (2) Fast Fare Electronic Fareboxes	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-150004	17-10-0026	WCCTA	WestCAT: Replace (1) 2003 40ft Revenue Vehicle	WestCAT: Replace (1) 2003 40 foot revenue vehicle with similar (1) 40 foot revenue vehicle	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-150005	17-10-0026	WCCTA	WestCAT: Replace (1) 40ft Rev. Vehicle with 43ft	WestCat: Replace (1) 2003 40 foot Revenue Vehicle with (1) 43 foot Double Decker vehicle	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-150006	17-10-0026	CCCTA	CCCTA: Replace 18 30' Buses	CCCTA: Replace 18 30' Heavy Duty Diesel buses that have reached the end of their useful life, four (4) of the diesel buses will be replaced with four (4) electric buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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Contra Costa	CC-150007	17-10-0026	CCCTA	CCCTA: Replace 13 35' Buses	CCCTA: Replace 13 35' Heavy Duty Diesel Buses that have reached the end of their useful life.□	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-150008	17-10-0026	CCCTA	CCCTA: Replace 3 Paratransit Vans	CCCTA: Replace 3 paratransit vans that have reached the end of their useful life.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-150010	17-02-0003	CC County	CC County - Rio Vista Elementary Ped Connection	Contra Costa County: On Pacifica Avenue between Mariners Cove Drive and Wharf Drive: Install sidewalks, bike lanes, flashing beacons, speed feedback sign, retaining wall and drainage improvements and	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-150011	17-02-0003	Pleasant Hill	Contra Costa Blvd. Improvement (Beth to Harriet)	HSIP5-04-015 In Pleasant Hill: On Contra Costa Blvd between Beth Drive and Harriet Drive: Installation of new sidewalk, bike lanes, traffic signal, landscaping and street lighting.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-150012	17-02-0009	CCCTA	REMIX Software Implementation Project	County Connection: Systemwide: Integrate REMIX mapping software into County Connection's planning process.	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Contra Costa	CC-150014	17-10-0026	WCCTA	WestCAT: Replace (1) 1998 40 ft Vehicle	WCCTA: Replace (1) 1998 Revenue Vehicle with (1) 40 ft Revenue Vehicle	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-150015	17-02-0009	WCCTA	WestCAT: Purchase (1) Fast Fare Electronic Farebox	WestCAT: Purchase and Install (1) FastFare Electronic Farebox for (1) 40 ft Revenue Vehicle	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-150016	17-02-0003	Richmond	The Yellow Brick Road in Richmond's Iron Triangle	Richmond: Various locations outlined in the the Yellow Brick Road Plan: Implement bike/ped improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-150018	17-02-0008	Walnut Creek	Walnut Creek-Parking Guidance System Pilot	Walnut Creek: Downtown core area: Implement Parking Guidance System connected to all public parking in downtown core area.	EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Contra Costa	CC-150019	17-10-0026	BART	Concord Yard Wheel Truing Facility	BART: Concord Yard: Construct a wheel truing facility which will house a dual-guage wheel truing machine to service both BART and eBART vehicle wheels.	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Contra Costa	CC-150020	17-02-0001	ECCTA	ECCTA: Non-ADA Paratransit to FR Incentive Program	ECCTA: Systemwide: Use outreach, travel training and fare incentives to move non-ADA paratransit users to FR service	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-150021	17-02-0009	WCCTA	WestCAT - AVL System with APC Element.	Western Contra Costa Transit Authority (WestCAT): Systemwide: Purchase and install a new AVL system including automatic passenger counting (APC)	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-150022	17-10-0033	WCCTA	WCCTA: Purchase of (2) Double Decker buses	WCCTA: Purchase (2) Double Decker vehicles to expand service on the Lynx Transbay Service, by adding additional capacity to trips	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-170004	17-10-0023	MTC	Regional Planning Activities and PPM - CC County	Contra Costa: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Contra Costa	CC-170006	17-10-0026	WCCTA	WestCAT: Replace (2) 2002 40ft Revenue Vehicles	WestCAT: Replace (2) 2002 40 ft Revenue Vehicles with similar vehicles	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-170007	17-02-0009	WCCTA	WestCAT: Purchase 2 Fast Fare Electronic Fareboxes	WestCAT: Purchase and Install (2) FastFare Electronic Fareboxes	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-170014	17-02-0003	San Ramon	Iron Horse Trail Bike and Pedestrian Overcrossings	In San Ramon: At the intersections of Bollinger Canyon Road and the Iron Horse Trail and Crow Canyon Road and the Iron Horse Trail: Construct two bicycle/pedestrian overcrossings	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-990045	17-02-0001	WCCTA	WestCat: ADA Paratransit Operating Subsidy	WestCAT: ADA Paratransit Operating Subsidy	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-99T001	17-10-0027	CCCTA	CCCTA: ADA Paratransit Assistance	CCCTA: ADA Paratransit Assistance to transit agency.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Marin	MRN010035	17-10-0026	GGBHTD	ACIS Radio Communications System	GGBHTD: Replace radio communications system on agency's bus fleet.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040

*Projects with conformity analysis year 2040 reference programmatic projects or projects with a completion date after 2030 in *Plan Bay Area 2040*

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Marin	MRN030010	17-10-0026	GGBHTD	GGBHTD: Fixed Guideway Connectors	Golden Gate Ferry: Systemwide: Replace/rehab fixed guideway connectors such as floats, floating barges, ramps, and gangways	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Marin	MRN050014	17-03-0001	TAM	Central Marin Ferry Access Improvements	Central Marin: From the southern terminus of the Cal Park Hill path connecting to the east/west path adjacent to E. Sir Francis Drake Blvd.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN050018	17-10-0009	GGBHTD	Golden Gate Bridge Seismic Retrofit, Phase 3B	SF/Marin County: Golden Gate Bridge; Seismic retrofit of the Golden Gate Bridge - construction of suspension span, south pier and fender.	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Marin	MRN050019	17-10-0009	GGBHTD	Golden Gate Bridge-Suicide Deterrent SafetyBarrier	Golden Gate Bridge: Build suicide deterrent system. Including design & Environmental analysis, plus analysis of alternatives & wind tunnel tests to ensure the feasibility of designs and build deterrent	EXEMPT (40 CFR 93.126) - Safer non-Federal-aid system roads	2040
Marin	MRN050025	17-10-0026	GGBHTD	GGBHTD: Facilities Rehabilitation	GGBHTD: Systemwide: Rehabilitate agency's maintenance and operating facilities and replace heavy duty operating and maintenance equipment.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Marin	MRN050033	17-03-0001	Marin County	Non-motorized Transp. Pilot Program - Marin County	Marin County; Various locations; Lump sum Non-motorized Transportation Pilot Program. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070002	17-10-0022	Mill Valley	Mill Valley - Miller Avenue Rehabilitation	HSIP5-04-009 - Mill Valley: Miller Avenue between Sunnyside Ave and Almonte Blvd: Pavement resurfacing, reconstruction of bicycle lanes, modifications to traffic islands, and improvements to sidewalk	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN070009	17-03-0001	San Rafael	San Rafael - Non-motorized Transport Pilot Program	San Rafael: Construct infrastructure, network planning, & educational programs to ascertain whether bicycling and walking can result in greater share of overall trips and reduce SOV usage.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070017	17-03-0001	TAM	TAM - Non-motorized Transportation Pilot Program	Marin County: Construct infrastructure, network planning, & educational programs to ascertain whether bicycling and walking can result in greater share of overall trips and reduce SOV usage.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070019	17-03-0001	Marin County	Marin Parklands Visitor Access, Phase 2	Marin Parklands: Pacific Way bridge at Big Lagoon: Reconstruct bridge and widen to add bike lanes. No added motor-vehicle capacity	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN090049	17-03-0001	Marin County	Non-motorized Transp. Projects - Marin County	Marin County; Various locations; Bicycle & pedestrian improvement projects	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN110010	17-03-0001	Sausalito	Sausalito - Bridgeway/US 101 Off Ramp Bicycle Imps	Sausalito: Highway 101 Off Ramp/Bridgeway/Gate 6 Intersection: Improve bicycle traffic	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN110033	17-03-0001	Marin County	Miller Creek Road Bike Lanes and Ped Improvements	In Marin County:On Miller creek road, Add Class 2 Bicycle Lanes by restriping road and intersection improvements at Miller Creek and Marinwood Avenue to enhance pedestrian and cyclist safety	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN110034	17-10-0025	TAM	Highway 101 Landscaping for Gap Closure Project	In Marin County, On Highway 101, Landscaping for the Gap Closure Project.	EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Marin	MRN110040	17-10-0026	MCTD	MCTD Preventive Maintenance	Marin Transit: Systemwide: Bus Transit Preventative maintenance	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN110041	17-10-0027	MCTD	Marin Transit Low Income Youth Pass Program	Marin Transit: Provide low-income youth free bus passes. Other local funds are made available for this project by applying STP/CMAQ funding available through the TPI program to MRN110040	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Marin	MRN110045	17-10-0026	GGBHTD	GGBHTD: Replace 7 - 40' Diesel Buses	GGBHTD: Replace seven (7) 40' Diesel Buses	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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Marin	MRN110047	17-10-0027	MCTD	MCTD: ADA Paratransit Assistance	MCTD: ADA Paratransit Assistance to transit agency.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Marin	MRN130004	17-10-0022	San Rafael	San Rafael Various Streets and Roads Preservation	San Rafael: Point San Pedro Rd from 600' north of Biscayne Dr to Riviera Dr and Del Presidio Blvd from Manual T. Freitas Parkway to Las Gallinas Ave: Resurface roadway	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN130005	17-03-0016	San Rafael	San Rafael Transit Center Pedestrian Access Imps.	San Rafael: In the vicinity of the Bettini Transit Center and the future SMART station: Upgrade existing traffic signal equipment to be compliant with rail and improve pedestrian facilities	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Marin	MRN130006	17-10-0022	Ross	Bolinas Avenue and Sir Francis Drake Intersection	Ross: On Sir Francis Drake Blvd from Winship Ave through the 100 block and on Bolinas Ave from Sir Francis Drake Blvd to Shady Ln: Rehabilitate pavement and replace the traffic signal	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN130007	17-03-0004	Marin County	North Civic Center Drive Improvements	In San Rafael: On Civic Center Drive from Merrydale Overcrossing/Scettrini Drive to Judge Haley Drive: Construct bike/ped improvements	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Marin	MRN130009	17-03-0005	Fairfax	Parkade Circulation and Safety Improvements	Fairfax: Between Sir Francis Drake Boulevard, Pacheco Avenue, Claus Drive and Broadway: Improve bicycle, pedestrian, transit, and vehicular circulation and safety around and through the Parkade in	EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2040
Marin	MRN130010	17-10-0022	Marin County	Donahue Street Road Rehabilitation Project	Marin County: Donahue St from Drake Ave. to Bridge Blvd. and Bridge Blvd. from Donahue St. to Bridgeway: Rehabilitate roadway; Donahue St. at Terners Dr. and at Bridge Blvd: Upgrade traffic signal	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN130011	17-10-0022	Novato	DeLong Avenue and Ignacio Boulevard Resurfacing	Novato: At the DeLong Avenue and Ignacio Boulevard interchanges: Reconstruct the bridge deck approaches with appropriate conforms and improved pavement surfaces to improve vehicular, pedestrian	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN130012	17-03-0001	Mill Valley	Bayfront Park Recreational Bay Access Pier Rehab	Mill Valley: Bayfront Park: Construct trail connector to Bay Trail and waterfront including a reconstruction of the pier	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN130013	17-03-0001	San Anselmo	Sunny Hill Ridge and Red Hill Trails	In San Anselmo: Near Sunny Hill and Red Hill: Construct three miles of hiking trails	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN130014	17-03-0001	Marin County	Mill Valley-Sausalito Pathway Preservation	Marin County: Mill Valley-Sausalito multiuse pathway from East Bliethedale Avenue to Almonte Boulevard in Mill Valley: Rehabilitate multi-use path	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN130015	17-03-0005	GGBHTD	GGBHTD - Transit Systems Enhancements	GGBHTD: Systemwide: systems, technology and communication enhancements to transit fleet and facilities.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Marin	MRN150003	17-03-0005	MCTD	MCTD: On Board Vehicle Equipment	MCTD: Farebox: Install fareboxes on 62 paratransit vehicles and Dial-A-Ride vehicles. Replace fareboxes on 18 fixed route vehicles	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Marin	MRN150004	17-10-0015	TAM	TAM - Car Share Canal	Marin County: Car Share CANAL is a Pilot Project to Integrate Transit, focused on Environmental Justice, Mobility, Immigration Support and Climate Protection Education. This is a non infrastructure project.	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Marin	MRN150005	17-10-0026	GGBHTD	MS Sonoma Ferry Boat Refurbishment	GGBHTD: MS Sonoma: Refurbish 38-year old ferry vessel	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN150007	17-10-0027	GGBHTD	GGBHTD: On-Board Bus and Ferry Surveys	GGBHTD: Systemwide: Conduct survey of bus and ferry passengers to collect ridership and socioeconomic data, required to support equity analyses for Title VI for fare or major service changes.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Marin	MRN150008	17-03-0001	San Rafael	Grand Avenue Bicycle Pedestrian Improvements	San Rafael: Grand Ave accross the San Rafael Canal: Construct bridge and sidewalk improvements for bicyclists and pedestrians	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN150010	17-10-0026	MCTD	MCTD - Relocate Transit Maintenance Facility	In North Eastern Marin County: Relocate contractor maintenance facilities in a centralized location, including bus parking and three maintenance bays.	EXEMPT (40 CFR 93.126) - Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771	2040
Marin	MRN150011	17-10-0026	MCTD	MCTD- Replace 2 Shuttle Vehicles	MCTD: Replace two fixed route shuttle buses that are beyond their useful life.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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Marin	MRN150012	17-10-0026	MCTD	MCTD - Replace 13 -40ft Buses	MCTD: Replace 13 40ft vehicles that are beyond their useful life	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN150013	17-10-0026	MCTD	MCTD - Emergency Radio System	MCTD: Replace radio system on fixed route shuttles and rural service to meet emergency radio requirements.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Marin	MRN150014	17-10-0026	GGBHTD	GGBHTD Ferry Major Components Rehab	GGBHTD: Systemwide: Ferry Rehab, replace major ferry components such as navigation systems, dry-dock, hull, interior, life saving equipment, propulsion and other ferry components.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN150015	17-10-0026	GGBHTD	GGBHTD Ferry Propulsion Systems Replacement	GGBHTD: Systemwide: Ferry propulsion systems: replacement of power distribution systems, propellers, engines, generators, gear boxes, etc. for Golden Gate Ferry vessels.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN150016	17-10-0022	Novato	Vineyard Road Improvements	Novato: Vineyard Road from Wilson Avenue to Sutro Avenue: Perform pavement rehabilitation, install bicycle lanes, and property owner-funded frontage improvements	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN170001	17-10-0023	MTC	Regional Planning Activities and PPM - Marin	Marin: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Marin	MRN170003	17-10-0026	MCTD	MCTD: Replace Paratransit Vehicles	MCTD: Replace 19 Paratransit Vehicles	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN170004	17-10-0026	MCTD	MCTD: Replace Paratransit Vehicles with Vans	MCTD: Replace two Paratransit Vehicles with Vans and purchase a third vehicle as a non-revenue support vehicle	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN170009	17-10-0026	GGBHTD	GGBHTD: Replace Paratransit Vehicles	GGBHTD: Replace 8 paratransit vehicles	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN170011	17-03-0001	TAM	North-South Greenway Gap Closure	Marin County: Northern Segment: US101 off-ramp over Corte Madera Creek and along Old Redwood Highway to US101 overcrossing: widen to add bike/ped path. Southern Segment: From Northern	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN970016	17-10-0009	GGBHTD	Golden Gate Bridge Seismic Retrofit, Ph: 1-3A	San Francisco /Marin Counties: Golden Gate Bridge; Seismic retrofit of the Golden Gate Bridge - construction on north and south approach viaducts, and Ft. Point Arch.	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Marin	MRN990017	17-10-0026	GGBHTD	Ferry channel & berth dredging	Golden Gate Ferry: From San Francisco to Marin County; Dredge ferry channel and berth.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Napa	NAP030004	17-10-0027	NVTA	NVTA: ADA Operating Assistance	Napa: ADA operating assistance for paratransit service	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Napa	NAP030005	17-04-0006	NVTA	Napa: Bus Stop Improvements	Napa Vine: Various bus stop improvements throughout the Napa County transit service areas. Add City/County Bus Passenger Amenities especially ADA Bus Stop Improvements.	EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Napa	NAP090003	17-04-0009	NVTA	SR 12/29/221 Soscol Junction Interchange Study	In Napa County, study alternatives to construct new southbound Route 221 to southbound Route 29 flyover (including auxiliary lane to Route 12/Route 29). TIP project is for ENV and PSE only.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2020
Napa	NAP090005	17-10-0026	NVTA	NVTA: Replace Rolling Stock	NVTA: Replace rolling stock for fixed-route, paratransit, and community shuttle fleet.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Napa	NAP090008	17-10-0026	NVTA	NVTA Equipment Replacement and Upgrades	NVTA: Napa Vine service area: Replacement and upgrades to transit equipment	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Napa	NAP110014	17-04-0001	NVTA	Napa Valley Vine Trail Design and Construction	Napa County: Various locations: Design and construction of individual segments of Vine Trail.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Napa	NAP110023	17-10-0022	Napa County	Silverado Trail Phase H Rehab	County of Napa: On Silverado Trail from Howell Mtn to Zinfandel (Phase H); rehabilitate roadway retaining existing Class II bicycle lanes	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP110026	17-10-0024	Napa County	Hardin Rd Bridge Replacement - 21C0058	Napa County: On Harding Rd at Maxwell Creek, 1.6M SE of Pope Cyn Rd: Replace existing one lane bridge with new 2-lane bridge to meet standards	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Napa	NAP110027	17-10-0024	Napa County	Loma Vista Dr Bridge Replacement - 21C0080	Napa County: Loma Vista Dr over Soda Creek, 1.4 miles north of Silverado Trail: replace existing one lane bridge with new two lane bridge to meet standards	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Napa	NAP110028	17-04-0005	Napa	California Boulevard Roundabouts	City of Napa: At at First Street/ California Blvd. and Second Street/ California Blvd: Construct roundabouts Caltrans: Construct roundabout at Northbound off-ramp of SR 29 and First Street	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Napa	NAP130003	17-10-0022	Napa County	Airport Boulevard Rehabilitation	In Napa County: On Airport Boulevard between SR 29 and Napa County Airport: Rehabilitate roadway and retrofit curb ramps at 3 intersections, retaining existing Class II bicycle lanes.	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP130004	17-04-0001	Napa	Highway 29/Napa Creek Bicycle Path Upgrade	Napa: On the North side of Napa Creek under Highway 29: Construct a Class 1 bicycle and pedestrian path	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP130007	17-04-0002	Caltrans	Hwy 29 Grayson Ave. Signal Construction	In St. Helena: At the intersection of Hwy 29 and Grayson Ave: Install three way signal with ADA ramp upgrades	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Napa	NAP130008	17-04-0001	Yountville	Hopper Creek Pedestrian Bridge and Path Project	Yountville: Along Hopper Creek from Oak Circle Open Space to Mission St: Construct multi-use pathway and a pedestrian bridge across Hopper Creek	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP130009	17-10-0022	Napa County	Silverado Trail Phase G Rehab	County of Napa: On Silverado Trail from Calistoga to Larkmead (Phase G); rehabilitate roadway retaining existing Class II bicycle lanes	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP130010	17-04-0002	Napa County	Silverado Trail Yountville-Napa Safety Improvement	In Napa County: On Silverado Trail at Yountville Crossroad: Construct intersection safety improvements; On Silverado Trail between Yountville and Napa: Install rumble strips	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Napa	NAP150001	17-04-0002	Calistoga	SR 128 and Petrified Forest Intersection Imp	In Calistoga: On SR 128 and Petrified Forest Road, convert 4-way stop controlled intersection to a traffic signal.	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Napa	NAP150003	17-04-0001	NVTA	Napa Valley Vine Trail Calistoga-St. Helena Seg.	In Napa County: From Calistoga to St. Helena: Construct multi-use trail	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP170001	17-10-0023	MTC	Regional Planning Activities and PPM - Napa	Napa: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Napa	NAP170002	17-10-0022	Napa County	Napa County: 2014 Earthquake Pavement Repair	In Napa County: On various federal-aid system roads: Repair pavement damage caused by 2014 earthquake.	EXEMPT (40 CFR 93.126) - Emergency relief (23 U.S.C. 125)	2040
Napa	NAP970010	17-10-0027	NVTA	Napa Vine Operating Assistance	Napa Vine: Operating assistance to support transit routes and services.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	BRT030004	17-10-0005	BART	BART Train Control Renovation	BART: Replace obsolete elements and subsystems of the train control system.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2030
Regional/Multi-County	BRT030005	17-10-0005	BART	BART: Traction Power System Renovation	BART: System wide: Replace obsolete elements and subsystems of the traction power system to maintain and improve reliability and safety	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2030
Regional/Multi-County	BRT97100B	17-10-0026	BART	BART: Rail, Way and Structures Program	BART: Systemwide; Replace worn out mainline rail and make other timely reinvestments in way.	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Regional/Multi-County	BRT99T01B	17-10-0005	BART	BART:ADA Paratransit Capital Accessibility Improve	BART: At various stations: Capital Access Improvements Program including, station elevator improvements, installation of hands-free emergency telephones, and tactile stair tread replacement	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2030

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Regional/Multi-County	CC-130048	17-10-0005	BART	BART Station Modernization Program	All BART Stations: Implement station access improvements, upgrade of lighting, elevator, escalator, stairs, railings, station agent booth, roof, walls, painting, and noise reduction.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2030
Regional/Multi-County	MTC050001	17-10-0015	MTC	Bay Area Commuter Benefits Program	San Francisco Bay Area: Region wide: Implement the Bay Area Commuter Benefits Program. Toll credits applied in lieu of match	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Regional/Multi-County	MTC050020	17-10-0029	MTC	Real-time Transit Information Program	San Francisco Bay Area: Regionwide; Provide real-time transit information to riders at transit stops or via telephone, wireless or internet communication.	EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Regional/Multi-County	MTC050021	17-10-0015	MTC	Safe Routes to Transit	Regionwide: Grants to fund infrastructure projects that improve bike/ped access to transit stations. Including signs, multi-use trails and bike parking.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Regional/Multi-County	REG050020	17-10-0026	BART	BART Car Exchange (Preventive Maintenance)	BART: Preventive maintenance program, including maintenance of rail cars and other system components in exchange for local funds to the BART car replacement reserve.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional/Multi-County	REG090002	17-10-0027	MTC	GL: JARC FY 09 - FY 10 - Large UA	GL: JARC FY 09 - FY 10 - Large UA. Various JARC projects in large urbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	REG090039	17-10-0022	MTC	Regional Streets and Roads Program	Regionwide: Regional Streets and Roads Program including providing assistance to Bay Area agencies to implement & maintain computerized pavement management system (PMS), implementing PTAP	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional/Multi-County	REG090042	17-10-0029	MTC	511 Traveler Information	Regionwide: Provides multimodal, accurate, reliable, and accessible traveler information on multiple dissemination platforms; serves as the go-to source during major disruptions and emergencies; and	EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Regional/Multi-County	REG090044	17-10-0013	MTC-SAFE	Incident Management Program	Regionwide: Manage congestion by implementing strategies to enhance mobility and safety, and reduce the impacts of traffic incidents, including advanced transportation management technologies and	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Regional/Multi-County	REG090045	17-10-0028	MTC	Clipper Fare Collection System	San Francisco Bay Area: Regionwide; Design, build, operate and maintain the Clipper fare collection system. Note: Translink became Clipper on 6/16/10.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Regional/Multi-County	REG090046	17-10-0013	MTC	Regional Arterial Operations & Signal Timing Prog	Regional: Develop plans to guide arterial investments, and provide project management and traffic engineering/tech assistance (including procuring traffic signal & comm. equipment and	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Regional/Multi-County	REG090051	17-10-0026	Caltrain	Caltrain: Revenue Vehicle Rehab Program	Caltrain: Systemwide: Provide overhauls and repairs/replacements to key components of the Caltrain rolling stock to maintain it in a state of good repair.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional/Multi-County	REG090054	17-10-0026	WETA	WETA: Ferry Channel & Berth Dredging	WETA: Various service areas: Dredge ferry channel, ferry basin and berth	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Regional/Multi-County	REG090055	17-10-0026	WETA	WETA: Ferry Propulsion System Replacement	WETA: Ongoing: A mid-life overhaul is scheduled when a ferry reaches approximately 12.5 years of service life. Equipment service hours and specific vessel needs may affect the timing of the projects.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional/Multi-County	REG090057	17-10-0026	WETA	WETA: Ferry Major Component Rehab/Replacement	WETA: Ferry vessels are required to undergo periodic haul-out and rehabilitation work to remain in working order over their 25-year life.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional/Multi-County	REG090065	17-10-0015	MTC	Climate Initiatives Program Public Education	Climate Initiatives Program: Regionwide, community-based social marketing campaign & support for programs to encourage sustainable transportation behavioral changes to reduce criteria pollutants and	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040

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Regional/Multi-County	REG090067	17-10-0026	WETA	WETA: Fixed Guideway Connectors	WETA: Various locations: This project will replace/rehab fixed guideway connectors such as floats, floating barges, ramps and gangways throughout the system.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Regional/Multi-County	REG110010	17-10-0015	MTC	Regional Bicycle Sharing Program	Regionwide: various locations: Implement a bikesharing program	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Regional/Multi-County	REG110011	17-10-0015	MTC	Electric Vehicle Funding Strategies	Region-wide: Support the deployment of electric vehicles in the Bay Area including approaches such as infrastructure, outreach, and other supportive strategies.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Regional/Multi-County	REG110020	17-10-0026	WETA	WETA: Facilities Rehabilitation	WETA: Various Locations: Rehabilitate ferry facilities in order to maintain existing transit services.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Regional/Multi-County	REG110028	17-10-0011	MTC	GL: FY10 JARC Mobility Management	GL: Mobility Management. Various mobility management projects in the SFO, Concord and San Jose large urbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	REG110030	17-10-0008	Caltrain	Caltrain Positive Train Control System	CBOSS/PTC is an advanced train control system that allows for automated collision prevention, improved manual collision prevention, and improved headways. The FRA has mandated PTC be in place by	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Regional/Multi-County	REG110032	17-10-0011	MTC	GL: JARC FY11-FY12 Large UA	GL: JARC FY11-FY12 Large UA. Various JARC projects in large urbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	REG110039	17-10-0011	MTC	GL: 5307 JARC Set-aside FY13-FY14 Large UA	GL: 5307 JARC Set-aside FY13 Large UA. Various 5307 (former JARC) projects in large urbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	REG110041	17-10-0027	Caltrans	GL: FTA Non-Urbanized Formula Program	GL: FTA Section 5311 Non-Urbanized Formula Program, Non-ITS portion. Projects include capital and operating assistance, capital and preventive maintenance. Projects consistent with 40 CFR Part 93.126,	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	REG110042	17-10-0011	Caltrans	GL: Elderly & Persons with Disability Program	Region-Wide: Eld. & persons with Disabilities. Prog Lump Sum Listing; Project incl. Veh. replacements, minor expansion & office equip. Consist with 40 CFR Part 93.126, 127, 128 Exempt Tables 2 & 3.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Regional/Multi-County	REG110044	17-10-0026	ACE	ACE Positive Train Control	ACE System-wide: Install an advanced train control system that allows for automated collision prevention, improved manual collision prevention, and improved headways.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Regional/Multi-County	REG130001	17-10-0024	MTC	Toll Bridge Maintenance	Region-wide: Seven state-owned toll bridges: routine maintenance of bridge facilities	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Regional/Multi-County	REG130002	17-10-0024	MTC	Toll Bridge Rehabilitation Program	Bay Area: On 7 state-owned toll bridges: Rehabilitation program	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Regional/Multi-County	REG130003	17-10-0030	MTC-SAFE	FSP and Call Box Program	Regionwide: Manage congestion by preventing and/or addressing minor & major highway incidents/events including FSP and Call Box.	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Regional/Multi-County	REG130005	17-10-0011	MTC	Transit Oriented Affordable Housing	Bay Area Region: Establish a land acquisition and land banking financing fund to maximize the production of affordable housing near transit stations	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Regional/Multi-County	REG150002	17-10-0027	Caltrans	GL: FTA 5311 Rural Area FY15	GL: FTA Section 5311 Rural Area Program, Non-ITS portion. Projects include capital and operating assistance. Projects consistent with 40 CFR Part 93.126 Exempt Table 2	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

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Regional/Multi-County	REG150003	17-10-0011	Caltrans	GL: Elderly&Persons with Disability Prog FY13-FY14	Region-Wide: Elderly & persons with Disabilities. Prog Lump Sum Listing; Project incl. Veh. replacements, minor expansion & office equip. Consist with 40 CFR Part 93.126 Exempt Table 2	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Regional/Multi-County	REG150004	17-10-0011	MTC	GL: Lifeline Cycle 4 5307 JARC	GL: 5307 JARC Set-aside FY13 Small UA and FY14-FY16 Large and Small UA. Various 5307 (former JARC) projects in large and small urbanized areas. Project is consistent with 40 CFR Part 93.126 Exempt	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	REG150005	17-10-0011	BART	Transit-Oriented Development Pilot Planning Progra	Oakland and San Francisco: Develop a comprehensive TOD strategy that fills the remaining gaps in transportation management and development implementation in the Transbay corridor	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Regional/Multi-County	REG150006	17-10-0032	Caltrain	Caltrain Station Management Toolbox	Caltrain: Systemwide: Develop tools to plan for transit-oriented development and multi-modal access improvements along the corridor. (Other Federal funds are FTA TOD Planning Program funds)	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Regional/Multi-County	REG170001	17-10-0023	MTC	Regional Planning Activities and PPM - MTC	Regional: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional/Multi-County	REG170002	17-10-0013	MTC	Transportation Management Systems	Regionwide: Implement a collective approach to freeway operations and management, including field devices that monitor travel conditions and disseminate information; response to freeway incidents; and	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Regional/Multi-County	REG170003	17-10-0029	MTC	511 Carpool and Vanpool Programs	Regional: Operate Carpool and Vanpool Programs. Toll credits applied in lieu of match; non-federal funds are non-participating	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Regional/Multi-County	REG170006	17-10-0015	MTC	Spare the Air Youth	Regional: Education and Outreach: Program designed to reduce greenhouse gas emissions and vehicle miles traveled through education and encouragement programs for youth and families.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Regional/Multi-County	REG170007	17-10-0013	MTC	MTC - Incident Management Program	Regionwide: Manage congestion by implementing strategies to enhance mobility and safety, and reduce the impacts of traffic incidents, including advanced transportation management technologies and	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Regional/Multi-County	REG170008	17-01-0002	BART	BART Integrated Carpool to Transit Access Program	BART: Program to better integrate carpool access to public transit by matching carpools through an app. The app facilitates carpool matching, payment, and parking space reservation at the BART station.	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Regional/Multi-County	REG170009	17-10-0005	BART	BART Train Seat Modification	BART: On up to 360 existing BART cars: Remove 7 seats to provide immediate relief for passengers in the peak period commute hours	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2030
Regional/Multi-County	SM-050041	17-10-0026	Caltrain	Caltrain: Signal/Communication Rehab. & Upgrades	Caltrain: Systemwide: Rehabilitate existing signal system and upgrade/replace communication equipment.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Regional/Multi-County	VAR130002	17-10-0027	MTC	GL: JARC FY12 Small UA & Rural	GL: JARC FY12 Small UA & Rural. Various JARC projects in small urbanized areas and nonurbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	VAR130003	17-10-0027	MTC	GL: New Freedom FY12 Small UA & Rural	Regional: Various Cycle 7 (FY12) New Freedom projects in small urbanized and rural areas.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	VAR130005	17-10-0027	MTC	GL: New Freedom FY12 Large UA	GL: New Freedom FY2012 Large UA. Various Cycle 5 (FY12) New Freedom projects in large urbanized areas	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	VAR150001	17-10-0027	MTC	GL: FTA 5311 Rural Area FY16	GL: FTA Section 5311 Rural Area Program, Non-ITS portion. Projects include capital and operating assistance. Projects consistent with 40 CFR Part 93.126 Exempt Table 2	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional/Multi-County	VAR150002	17-10-0023	Caltrans	GL: Pavement Resurf and/or Rehab-Fed Discretionary	Regionwide: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040

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Regional/Multi-County	VAR150003	17-05-0001	Caltrans	GL: Bike and Ped Facilities - Fed Discretionary	Regionwide: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Bicycle and pedestrian facilities (both motorized and Non-motorized)	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Regional/Multi-County	VAR170001	17-06-0001	Caltrans	GL: Safety Improvements - SRTS	GL: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Shoulder imprvmnts, increasing sight dist, traffic control devices, signals, Pavement marking, Lighting	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Regional/Multi-County	VAR170002	17-10-0025	Caltrans	GL: Highway Safety Improvement Program	GL: Safety Imprv - Highway Safety Improvement Program. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories.	EXEMPT (40 CFR 93.126) - Highway Safety Improvement Program implementation	2040
Regional/Multi-County	VAR170004	17-10-0025	Caltrans	GL: Pavement Resurfacing/Rehab SHS - Highway Maint	GL: Pavement Resurf/Rehab State Highway System - Highway Maintenance. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Pavement resurfacing and/or	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional/Multi-County	VAR170005	17-10-0013	Caltrans	GL: Safety Improvements - SHOPP Mobility Program	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Regional/Multi-County	VAR170006	17-10-0025	Caltrans	GL: Pavement Resurf./Rehab - SHOPP Roadway Presv.	Regionwide: Various Locations: Projects consistent with 40CFR93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation, Emergency relief (23 U.S.C. 125), Widening narrow	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional/Multi-County	VAR170007	17-10-0025	Caltrans	GL: Safety Imprv. - SHOPP Collision Reduction	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories	EXEMPT (40 CFR 93.126) - Guardrails, median barriers, crash cushions	2040
Regional/Multi-County	VAR170008	17-10-0025	Caltrans	GL: Emergency Repair - SHOPP Emergency Response	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories	EXEMPT (40 CFR 93.126) - Emergency relief (23 U.S.C. 125)	2040
Regional/Multi-County	VAR170009	17-10-0025	Caltrans	GL: Safety Improvements - SHOPP Mandates	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Regional/Multi-County	VAR170010	17-10-0024	Caltrans	GL: Bridge Rehab and Reconstruction - SHOPP	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Widening narrow pavements or reconstructing bridges (no additional travel lanes).	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Regional/Multi-County	VAR170011	17-10-0025	Caltrans	GL: Shoulder Imprv - SHOPP Roadside Preservation	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Fencing,Safety roadside rest areas	EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Regional/Multi-County	VAR170012	17-10-0024	Caltrans	GL: Bridge Rehab/Recon. - Local Hwy Bridge Program	GL: Local Bridge Rehab/Recon. - Local Highway Bridge Program(HBP) or Highway Bridge Replacement and Rehabilitation (HBRR). Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories.	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Regional/Multi-County	VAR170014	17-10-0033	MTC	Bay Bridge Forward - Integrated Bridge Corridor	Alameda County: Deploy ITS that integrate with SFOBB toll bridge metering lights system and Smart I-80 to improve traffic flow and information dissemination for users of the I-80, I-580, and I-880 bridge	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Regional/Multi-County	VAR170015	17-10-0025	Caltrans	GL: Pvmt Resurf/Rehab State Hwy Sys - SHOPP Minor	GL: Pavement Resurf/Rehab State Hwy System - SHOPP Minor. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional/Multi-County	VAR170016	17-09-0001	Caltrans	GL: Recreational Trails Program	Grouped Listing: Regionwide: Projects with US Recreational Grant Program Funds. Projects are consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Regional/Multi-County	VAR170017	17-10-0025	Caltrans	GL: Railroad-Highway Crossing	GL: Railroad/Highway Crossings. Projects are consistent with 40 CFR 93.126 Exempt Tables 2 categories - Railroad/highway crossing	EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
San Francisco	SF-030013	17-10-0026	SFMTA	SFMTA: Wayside Fare Collection Equipment	Muni: Replacement of life-expired fare collection equipment.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
San Francisco	SF-050014	17-05-0010	BART	BART/MUNI Direct Connection Platform	BART/MUNI: Powell Street Station: Provide a direct connection between BART & MUNI.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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San Francisco	SF-050024	17-10-0026	SFMTA	SFMTA:Train Control & Trolley Signal Rehab/Replace	SFMTA: Rehabilitate or replace elements of the Wayside/Central Train Control & trolley Signal Systems.	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
San Francisco	SF-050034	17-10-0026	SFMTA	Light Rail Vehicle Overhaul Program	Muni: Systematic overhaul of all light rail vehicles components in agency fleet.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Francisco	SF-070009	17-05-0002	Port of SF	Embarcadero Corridor Transportation Improvements	San Francisco: Embarcadero corridor (China Basin & Fisherman's Wharf); Improvements to transit services including signage, parking management strategies, bike/ped improvements & other outreach	EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
San Francisco	SF-070027	17-05-0023	SF County TA	Yerba Buena Island (YBI) Ramp Improvements	San Francisco: On east side of the Yerba Buena Island Tunnel at SFOBB; Rehabilitate existing deficient bridges on the west side of the Island.	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2020
San Francisco	SF-070029	17-10-0017	TBJPA	Transbay Transit Center - TIFIA Loan Debt Service	San Francisco, Transbay Transit Center: TIFIA Loan debt service for Phase 1 & 2. Update annual debt service amounts based on TIFIA loan agreement.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-070030	17-05-0012	SFMTA	SFGO-Corridor Management	Focused on the US 101 /Van Ness and Market Street corridors; Install new communications network and advanced traffic signal control systems with elements citywide.	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2040
San Francisco	SF-070045	17-10-0026	SFMTA	SFMTA: Trolley Coach Replacement	SFMTA: Replace 60, 1994 60' articulated Trolley Coaches with either Motor Coaches or Trolley Coaches.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-090011	17-05-0028	SF County TA	Oakdale Caltrain Station	San Francisco: Oakdale near Palou: Planning, preliminary engineering, and environmental work for a new Caltrain station and transit service adjustments to serve station.	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
San Francisco	SF-090031	17-10-0026	SFMTA	SF Muni - Preventive Maintenance	SF Muni - Preventive Maintenance	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-090035	17-10-0026	SFMTA	SFMTA: Paratransit Vehicle Replacements	SFMTA: Paratransit service across San Francisco; preserve service and replace 67 paratransit vehicles	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-110005	17-10-0022	SF DPW	Great Highway Restoration	San Francisco: Great Highway: From Sloat to Skyline Hwy: Ph 1. Restore and stabilize roadway, stop bluff slides, and protect infrastructure. Phase 2. Implement road diet by closing remaining SB lane and	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Francisco	SF-110010	17-10-0026	SFMTA	SFMTA Transportation Asset Management System	San Francisco: SFMTA wil implement an Enterprise Asset Management (EAM) system to inventory all of its major assets. By using an EAM system, SFMTA will be able to store data on age, condition, and	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-110011	17-05-0002	SF County TA	Integrated Public-Private Partnership TDM Program	San Francisco: Implement pilot TDM strategies: (a) parking cash-out programs and TDM related approaches, and (b) Muni Partners shuttle coordination and expansion. Includes program evaluation.	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
San Francisco	SF-110037	17-05-0002	SFMTA	Linked Priced Electric Bikesharing	In San Francisco and select Bay Area cities: Apply ITS technology and differential pricing with the colocation of shared electric bicycles within City CarShare's existing systems	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-110044	17-05-0010	BART	Regional Real-Time Transit Information at BART	In downtown Oakland and downtown San Francisco: at six key intermodal BART stations: add additional real time transit information displays	EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
San Francisco	SF-110050	17-10-0026	SFMTA	SFMTA: Replace 58 40' Neoplan Buses	SFMTA: Replace 58 40' Neoplan Buses originally in service in 2002 with 58 40' hybrid buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-110053	17-10-0026	WETA	WETA: Replace Ferry Vessels	WETA: Fund the replacement of all existing ferry vessels for WETA when the vessels reach the end of their useful life of 25 years.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-130003	17-05-0015	SFMTA	19th Ave. & Parkmerced M-Line Realignment Study	In San Francisco: Planning and conceptual design to extend light rail corridor into Parkmerced development project, add three new light rail stations and facilities. Add rail track and operator support	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040

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San Francisco	SF-130008	17-05-0020	SF County TA	HOV/HOT Lanes on U.S.101 and I-280 in SF	San Francisco: On US 101 from SF/SM County line to I-280 interchange and on I-280 from US 101 interchange to 6th Street offramp: Convert an existing mixed traffic lane and/or shoulder/excess ROW in	EXEMPT (40 CFR 93.126) - Planning and technical studies	2030
San Francisco	SF-130010	17-05-0030	SF County TA	Construct Treasure Island Bus Terminal Facility	San Francisco: Treasure Island: Construct Treasure Island Bus Terminal Facility	EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2030
San Francisco	SF-130014	17-05-0004	SF DPW	SF- Broadway Chinatown Complete Streets	In San Francisco: On Broadway between Columbus and the Broadway Tunnel; Design and construct a complete street project.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-130018	17-05-0003	SFDPH	SF SRTS Non-Infrastructure Program	In San Francisco: Countywide: Expansion of the existing San Francisco SRTS education and outreach program.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-130020	17-10-0026	SFMTA	SFMTA: Purchase 60 foot expansion motor coaches	SFMTA: Purchase 35 60 foot expansion motor coaches	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-130022	17-05-0001	SFMTA	Twin Peaks Connectivity Planning	San Francisco: on Twin Peaks: Develop a conceptual design that will improve access for people who walk or bicycle on Twin Peaks.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-150001	17-05-0003	SF DPW	John Yehall Chin Safe Routes to School	In San Francisco: 4 intersections near 350 Broadway Street: Construct curb extensions and a raised crosswalk.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150002	17-05-0003	SFMTA	San Francisco Safer Streets Campaign	San Francisco: Citywide: Provide high-visibility enforcement and education to reduce injuries and fatalities, caused by vehicles speeding, to people who walk and bicycle, and increase the number of people	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150003	17-05-0003	SFDPH	San Francisco Safe Routes to School (ATP)	San Francisco: Citywide: Implement effective policy, education, enforcement and outreach strategies to increase walking, biking, transit, and carpooling for ALL students in school years 2015-17.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-150004	17-05-0001	SFMTA	SFMTA Station-Area Ped and Bicycle Access Imp.	San Francisco: Citywide within fixed guideway station area radii (per FTA eligibility): Improvements to pedestrian and bicycle access to the transportation stop/station.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150005	17-10-0026	SFMTA	SFMTA - Replacement of 40' Motor Coaches	SFMTA: 40' Neoplan Buses: Replace 40' Neoplan Buses originally in service in 2002 with (85) 40'hybrid buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-150006	17-10-0026	SFMTA	SFMTA Replacement of 60' Motor Coaches	SFMTA: 60' Neoplan Buses: Replace 98 60' Neoplan Buses diesel buses originally in service in 2002 with 98 60' hybrid buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-150007	17-10-0026	SFMTA	SFMTA Farebox Replacement	SFMTA: Systemwide: Refurbish or purchase existing fareboxes and necessary support equipment to improve reliability, functionality, and the overall customer experience.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
San Francisco	SF-150009	17-05-0001	SFMTA	San Francisco Citywide Bicycle Wayfinding	San Francisco: Citywide: Implement an effective bicycle wayfinding signage system throughout San Francisco. This system will increase ridership by improving both the comfort of riding and the ability to	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150011	17-05-0003	SFMTA	San Francisco Vision Zero Safety Investment	San Francisco: along the Van Ness Corridor: Implement pedestrian and safety improvements including pedestrian bulbouts, pedestrian scale lighting, pedestrian countdown signals, ADA curb ramps, and	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150012	17-05-0002	SF County TA	San Francisco Travel Smart Rewards Pilot Program	In San Francisco: Undertake a pilot program to mitigate congestion on BART by incentivizing riders to shift travel times	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-150013	17-05-0009	SF County TA	SB I-280 Off-Ramp at Ocean Ave Realignment	San Francisco: I-280/Ocean Avenue Interchange: Realign the southbound I-280 off-ramp to Ocean Avenue into a T intersection with a new signal on Ocean Avenue	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2040
San Francisco	SF-150014	17-10-0026	SFMTA	SFMTA 30' Motor Coach Mid-Life Overhaul	SFMTA: Approximately 86 hybrid coaches: Perform midlife overhauls	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Francisco	SF-150015	17-10-0026	SFMTA	SFMTA: Replacement of 40' Trolley Coaches	SFMTA: Replace approximately 21 40' ETI electric trolley buses originally in service in 2002 with 21 40' electric trolley buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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San Francisco	SF-150016	17-05-0003	SF DPW	Lombard Street Vision Zero Project	In San Francisco: On Lombard/US-101 between Broderick St and Franklin St; Install curb extensions and other pedestrian safety and transit features. Project is phased.	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
San Francisco	SF-150017	17-05-0003	SFDPH	SF Safe Routes to School 2017-2019	San Francisco: Citywide: Implement a pilot proposal that includes innovative educational, encouragement, and evaluation activities and deliverables to increase safe walking and biking by schoolchildren	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-170002	17-10-0023	MTC	Regional Planning Activities and PPM - SF County	San Francisco: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
San Francisco	SF-170003	17-10-0033	MTC	Bay Bridge Forward-Sterling/Bryant St Managed Lane	Sterling/Bryant St. and Regionwide: Pilot Vehicle Occupancy Detection (VOD) technology and increased CHP enforcement at Sterling and other pilot sites, support planned HOV lanes to bridge; convert HOV	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
San Francisco	SF-170004	17-10-0026	SFMTA	SFMTA: Replacement of 40' Trolley Coaches	SFMTA: Purchase 40' replacement trolley coaches for the existing aging coaches.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-170005	17-10-0026	SFMTA	SFMTA: Replacement of 60' Trolley Coaches	SFMTA: Purchase 60' replacement trolley coaches for the existing aging coaches.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-170006	17-05-0001	SFMTA	SFMTA: Station-area Ped and Bike Access Improvemnt	San Francisco: Citywide: Reconfigure station areas to provide pedestrians and bicyclists more space to improve access	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-95037B	17-10-0026	SFMTA	SF Muni Rail Replacement Program	SFMTA: Systemwide - Phased design and replacement of trackway and related systems serving light rail and cable car lines.	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
San Francisco	SF-970073	17-10-0026	SFMTA	SFMTA: Cable Car Vehicle Renovation Program	San Francisco: Rehabilitate up to four Cable Car vehicles in one year - two undergoing reconstruction, one in major overhaul, and one in minor overhaul.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Francisco	SF-970170	17-10-0026	SFMTA	SFMTA: Trolley Overhead Recon. Program	San Francisco: LRT: Phased design and replacement of the overhead wires and related traction power system serving light rail and trolley coach lines.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
San Francisco	SF-990003	17-10-0026	SFMTA	Global Positioning System	Muni: Global Positioning System, Central Control, and Radio system replacement project.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
San Francisco	SF-990022	17-05-0002	SFMTA	SFMTA: ADA Paratransit operating support	Muni: ADA Paratransit Operating Subsidy.; provides funding for increased van/taxi services to people with disabilities who are prevented from using Muni's fixed route services.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Francisco	SF-99T002	17-10-0026	SFMTA	Cable Car Traction Power & Guideway Rehab	SFMTA: Cable Car Traction Power and Guideway Rehab; Repair various guideway and infrastructure & make improvements to the cable car system.	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
San Mateo	SF-010028	17-10-0008	Caltrain	Caltrain Electrification	Caltrain: From San Francisco to Gilroy: Electrification of the caltrain corridor from San Francisco to Tamien, including catenary poles, wires, power supply, track and signals, and Electric Multiple Units	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
San Mateo	SM-010002	17-06-0033	Half Moon Bay	SR 92 Shoulder Widening & Curve Correction	Half Moon Bay: Rte 92 btw eastern city limits and Pilarcitos Creek; Widen shoulders, straighten curves and improve vertical sight distances. No additional travel lanes.	EXEMPT (40 CFR 93.126) - Shoulder improvements	2030
San Mateo	SM-010047	17-06-0014	Menlo Park	US 101 / Willow Road Interchange Reconstruction	Menlo Park: US 101 at Willow Road Interchange; Reconstruct and reconfigure interchange (No additional travel lanes).	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
San Mateo	SM-010054	17-10-0026	Caltrain	San Mateo Bridges Replacement	City of San Mateo: Caltrain Corridor - Reconstruct existing Poplar, Santa Inez, Monte Diablo and Tilton railroad grade separation structures, including replacing the bridge decks, project is phased	EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
San Mateo	SM-030023	17-10-0026	SamTrans	SAMTRANS: Preventive Maintenance	SamTrans: Preventative maintenance program for agency fleet.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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San Mateo	SM-03006B	17-10-0026	Caltrain	Caltrain: Systemwide Track Rehab & Related Struct.	Caltrain: Systemwide: Rehabilitate and replace existing track, track structures and related civil infrastructure	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
San Mateo	SM-050005	17-10-0026	BART	BART: Preventive Maintenance	BART: Systemwide; Preventive Maintenance	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Mateo	SM-050040	17-10-0027	Caltrain	Caltrain: ADA Operating Set-aside	Caltrain: ADA Paratransit Operating assistance set-aside	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Mateo	SM-050051	17-06-0003	SamTrans	SR 82 - El Camino Real Grand Boulevard Initiative	El Camino Real Corridor: Ped. & transit facility enhancements, streetscape improvements including medians, wider sidewalks, bike routes & improved linkages to transit hubs & downtown.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-050053	17-06-0001	Millbrae	US 101 Millbrae Ave Bike/Ped Bridge	Millbrae: Across US 101 north of and adjacent to the existing Millbrae Avenue bridge; Construct a new 10-ft wide Class 1 mixed-use bike/ped overcrossing.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-070002	17-06-0006	CCAG	San Mateo Countywide ITS Improvements	San Mateo County: County-wide; ITS improvements at various locations in San Mateo County.	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
San Mateo	SM-070004	17-06-0003	East Palo Alto	Bay Rd Bicycle/Ped Improvements Phase II & III	E. Palo Alto: On Bay Rd btw Clarke/Illinois & Tara Rd (Ph II) & btw Tara Rd & Bay Trail (Ph. III);Improvements including resurface, streetscape, bike lanes, & other improvements.HPP #706 (remainder	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-070006	17-06-0005	East Palo Alto	US 101 University Ave Interchange Improvements	E. Palo Alto: On University Ave across US 101 btw Woodland Ave and Donahoe St; Construct Bike Lane, modify NB and SB off-ramps and intersections with overcrossing with no new lanes for off-ramps. HPP	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-070029	17-06-0016	CCAG	Dumbarton Bridge to US101 Connection Study	East Palo Alto: Dumbarton Bridge at US 101; Study of various connections between the Dumbarton Bridge and Highway 101. SAFETEA Earmark HPP #3062 (\$400K)	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-070049	17-10-0026	SamTrans	Facility/Equipment Rehabilitation/Replacement	SAMTRANS: Operating/maintenance facility/equip rehabilitation/replacement, including the provision of facility improvements for admin, maintenance, and operations at the Central Administrative facility,	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
San Mateo	SM-110012	17-06-0003	San Bruno	San Bruno Transit Corridor Pedestrian Imps	San Bruno: El Camino Real from San Bruno Avenue to Sneath Lane, San Bruno Avenue from El Camino Real to Huntington Avenue and Huntington Avenue from San Bruno Avenue to Sneath Lane. Streetscape	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110022	17-06-0002	CCAG	San Mateo County SR2S Program	San Mateo County: Countywide: Provide modularized safe routes to school programs and projects that focuses on education, encouragement, evaluation and enforcement components to all interested	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Mateo	SM-110047	17-06-0019	Caltrans	SR92/El Camino Real (SR82) Ramp Modifications	San Mateo: At the SR92/El Camino Real (SR82) interchange: Modify existing on/off rampsto improve the ingress and egress of the interchange.	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2020
San Mateo	SM-110054	17-10-0026	SamTrans	Reconfiguration of San Carlos Transit Center	San Carlos Transit Center: Reconfigure and rehabilitate the current transit center to facilitate improved safety and connections between SamTrans fixed-route bus service, Caltrain commuter rail, local	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
San Mateo	SM-110062	17-10-0026	SamTrans	Samtrans - Replace 62 1998 Gillig Buses	Samtrans: Replace 62-40' 1998 Gillig Buses, which have exceeded their useful life.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Mateo	SM-110064	17-06-0001	San Mateo	North Central Pedestrian Improvement Program	North Central San Mateo: Various locations south of Cypress Avenue: pedestrian infrastructure improvements including new curb ramps, crosswalks, curb extensions, lighting, and advanced stop bars	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110065	17-06-0005	Redwood City	Middlefield Rd and Woodside Rd Intersection Improv	In Redwood City: At the intersection of Middlefield Rd and Woodside Rd; modify intersection to provide pedestrian facilities.	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040

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San Mateo	SM-110067	17-10-0021	CCAG	Local PDA Planning - San Mateo	San Mateo County Various Agencies: Planning assistance to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs), focused on	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-110068	17-10-0026	SamTrans	SAMTRANS: Replacement of Articulated Bus Fleet	SAMTRANS: 60' articulated buses: Replace up to 55 2002 60' NABI diesel articulated buses that have exceeded their useful life.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Mateo	SM-130002	17-10-0024	Redwood City	Redwood City Various Streets Overlay	Redwood City: On Whipple Ave from Upland Rd to El Camino Real, Whipple Ave from US101 to Veterans Blvd, and Veterans Blvd from US101 to Whipple Ave: Rehabilitate the roadway, add new striping, and	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-130003	17-06-0001	SSF	SSF Citywide Sidewalk Gap Closure Project	South San Francisco: Various Streets: closes gaps in the existing pedestrian infrastructure	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130004	17-10-0024	San Mateo	Mount Diablo Ave. Rehabilitation	In the City of San Mateo: Monte Diablo Avenue from N Quebec St to N Kingston St.: Rehabilitation of local streets and roads and addition of ADA compliant curb ramps, bicycle improvements and pedestrian	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-130008	17-06-0001	Menlo Park	Menlo Park-Variou Streets Bike /Ped Improvements	Menlo Park: Various locations: Implement bicycle and pedestrian safety improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130009	17-06-0003	Millbrae	Millbrae Various Streets and Roads Preservation	Millbrae: Various Locations: Rehabilitate and replace pavement and miscellaneous concrete improvements including installing wheel chair curb ramps.	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-130011	17-06-0001	Daly City	John Daly Boulevard Bicycle /Ped Improvements	Daly City: On John Daly Blvd between Top of the Hill - Mission Street transit hub and the Daly City BART Station at Delong Street and Los Banos Ave: Implement bike/ped improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130012	17-06-0003	San Carlos	San Carlos Streetscape and Ped Improvments	San Carlos: Around the intersection of El Camino Real and Arroyo Ave: Grand Boulevard Initiatives (GBI), implement bike/ped improvements and bus pad and add pedestrian activation to a mid-block signal	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130013	17-06-0003	SSF	SSF Grand Blvd Project: Chestnut to Arroyo	South San Francisco: El Camino Real between Chestnut Ave/Westborough Blvd to Arroyo Ave: Design and construct improved pedestrian crossings with corner bulbouts, median refuges, expanded bus stop	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130015	17-06-0001	San Mateo Co	Semicircular Rd Bicycle / Ped Access Improvements	San Mateo County: On Semicircular Road between Middlefield Road and 5th Avenue; Replace existing sidewalk with ADA compliant sidewalk and install sharrows and school crossing signs; four nearby	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130016	17-06-0003	Pacifica	Palmetto Avenue Streetscape	In Pacifica: Palmetto Avenue from Bella Vista Avenue to Clarendon Road: Pavement rehabilitation and pedestrian sidewalk improvements.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130017	17-06-0001	Belmont	Ralston Avenue Pedestrian Route Improvements	Belmont: Ralston Ave. between South Rd. and Chula Vista Ave. (near Notre Dame de Namur University): Install pedestrian improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130018	17-06-0001	Belmont	Old County Road Bicycle/Pedestrian Improvements	Belmont: Old County Road from Ralston Ave to the Belmont/San Carlos City Limits: Implement bike and pedestrian route improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130019	17-06-0001	San Bruno	San Bruno Ave Street Medians Improvements	San Bruno: San Bruno Ave from Elm Ave to I-280: Implement pedestrian improvement including curb ramps, speed radar display signs, demolish existing landscape and replace and replace existing spray	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130020	17-06-0001	San Mateo	San Mateo Citywide Crosswalk Improvements	City of San Mateo: Various locations citywide: Install new high visibility crosswalks or upgrade existing crosswalks	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130022	17-06-0003	Redwood City	Middlefield Road Bicycle / Ped Improvements	In Redwood City: on Middlefield Road between Main Street and MacArthur Avenue; Modify roadway and utilities as needed to widen sidewalks and improve bike and pedestrian amenities. No vehicle travel	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130023	17-06-0006	Menlo Park	Menlo Park - Willow Rd Traffic Signal Modification	In Menlo Park: On Willow Road between Middlefield Road and Hamilton Avenue, modification of 9 traffic signals.	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2040

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San Mateo	SM-130025	17-10-0027	SamTrans	SamTrans Service Plan (SSP)	SamTrans: System-wide: Offset a reduction in price for the Day Pass by \$1.00 and install new signage for new and modified bus routes	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Mateo	SM-130026	17-10-0026	Caltrain	Caltrain Control Point Installation	Caltrain mainline: In San Carlos: Install a new control point (rail crossover)	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
San Mateo	SM-130027	17-10-0026	Caltrain	Caltrain Off-peak Marketing Campaign	Caltrain: Systemwide: Undertake a marketing campaign targeting off-peak ridership	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-130028	17-06-0001	East Palo Alto	US-101 Pedestrian/Bicycle Overcrossing	East Palo Alto: Between Clarke Avenue and Newell Road: Install a Pedestrian/Bicycle Overcrossing of US-101 to connect the west-side with the east-side of East Palo Alto for safe pedestrian/bicycle access.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130029	17-06-0002	BART	Daly City BART Station Intermodal Improvements	Daly City: At Daly City BART Station: Improve transit operations; pedestrian & bicycle access; and safety & patron experience	EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2040
San Mateo	SM-130030	17-06-0003	SSF	SSF Grand Blvd Project: Kaiser Way to McLellan	South San Francisco: Along El Camino Real between Kaiser Way and McLellan Drive: Implement bike and pedestrian enhancements, street trees, rain gardens and median landscaping as well as	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130031	17-06-0001	SF City/County	Southern Skyline Blvd. Ridge Trail Extension	San Mateo County: On the east side of SR-35 "Upper Skyline Blvd" between the intersection of Hwy 92 and Hwy 35 southward approximately 6 miles to the SFPUC Peninsula Watershed: Construct Southern	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130032	17-06-0001	San Mateo Co	Midcoast Multi-Modal Trail	San Mateo County: On Highway 1 from Alto Avenue in Miramar to Coronado Street in El Granada: Construct 3,750 feet of multi-use trail	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150001	17-10-0021	Millbrae	Millbrae Priority Development Area Specific Plan	Millbrae: PDAs Citywide: Update the current Millbrae Transit Station Area PDA and expand PDA to also include El Camino Real Corridor.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-150002	17-06-0002	San Mateo	City of San Mateo SR2S Program	City of San Mateo: Within a 0.1 to 0.5 mile radius around each of the 15 elementary and middle schools in the City: Develop and Implement a Safe Routes to School Program	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150003	17-10-0021	Redwood City	Redwood City Dwntrn Transit Area Impvmts-Streetcar	In Redwood City: Downtown: Planning study of Sequoia Station and streetcar feasibility	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-150004	17-10-0021	Belmont	Belmont Village Specific/Implementation Plan	Belmont: Belmont Village PDA: Development of an Implementation Plan	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-150005	17-10-0026	SamTrans	SAMTRANS: Replacement of 2003 Gillig Buses	SAMTRANS: 40' Gillig buses: Replacement of 60 2003 40' Gillig Buses that have reached the end of their useful life.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Mateo	SM-150006	17-10-0015	San Mateo	City of San Mateo Car Sharing Program	City of San Mateo: Citywide: Expansion of car sharing services in the City of San Mateo	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
San Mateo	SM-150007	17-10-0026	Caltrain	Map Based Real-Time Train Display for Caltrain.com	Caltrain: Provide map based real-time displays for customers on caltrain.com, and provide open-data for third-party developers.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-150008	17-10-0026	SamTrans	SamTrans - Replacement of Non-Rev Vehicles	SamTrans: Non-revenue vehicles: Replace (15) non-revenue service support vehicles	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
San Mateo	SM-150009	17-06-0001	San Carlos	US 101 Holly Pedestrian/Bicycle Overcrossing	San Carlos: At the US-101/Holly St Interchange: Construct a grade-separated multipurpose path that will connect pedestrian and bicyclist on the west side of Highway 101 to the east side of Highway 101	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150010	17-10-0026	SamTrans	SamTrans - Replacement of Cutaway Buses	SamTrans: Read- Wheels Paratransit service: Purchase replacement cutaway buses	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Mateo	SM-150011	17-10-0026	SamTrans	SamTrans - Purchase of Replacement Minivans	SamTrans: Purchase ten new replacement minivans used for ADA Paratransit service	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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San Mateo	SM-150012	17-06-0001	Daly City	Daly City Central Corridor Bike/Ped Safety Imprmnt	In Daly City: On Junipero Serra Blvd and Eastmoor Ave/San Pedro Rd/E Market St/Guad Cyn Pkwy: Install bike and ped improvements; In Daly City/Uninc San Mateo County: On west side of Mission St/El	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150013	17-06-0002	San Mateo Co	RWC 2020 Sustainable Transportation Encouragement	San Mateo County: In and around Redwood City: Safe Routes to School walk and bike audits, encouragement and education programs and community-wide transportation mode share change evaluation.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Mateo	SM-150014	17-06-0002	San Mateo County	Safe Routes to School for Health and Wellness	San Mateo County: Countywide: Implement a non-infrastructure educational program to increase the number of children who bike and walk to school with a focus on long term sustainability. Other State	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Mateo	SM-150015	17-06-0001	SSF	SSF Linden/Spruce Ave Traffic Calming Improvements	In South San Francisco: On Linden Avenue from California Ave to Miller Avenue and on Spruce Ave from Maple Ave to Lux Ave: install pedestrian/bicycling safety improvements including a class 3 bikeway.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150016	17-10-0015	San Mateo	San Mateo Downtown Parking Tech Implementation	In San Mateo: Various Locations Downtown: Replace existing parking meters, and pay stations and install parking availability signs at City facilities.	EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
San Mateo	SM-170001	17-06-0005	San Mateo Co	Hwy 1 Congestion throughput and safety improvement	In San Mateo County along 7 miles of Highway 1 between Pacifica in the north and Half Moon Bay in the south; Install raised medians, left turn lanes, acceleration lanes, and pedestrian crossings.	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
San Mateo	SM-170002	17-10-0023	MTC	Regional Planning Activities and PPM - San Mateo	San Mateo: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
San Mateo	SM-170005	17-10-0026	Caltrain	South San Francisco Caltrain Station Improvements	South San Francisco: SSF Caltrain Station: Demolish and reconstruct the existing station with a new ADA compliant station that meets current Caltrain standards	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
San Mateo	SM-170006	17-06-0001	San Mateo	East Hillsdale Boulevard Ped/Bike Overcrossing	City of San Mateo: Over US 101 at the US 101/Hillsdale Boulevard Interchange: Construct pedestrian and bicycle overcrossing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-170008	17-06-0029	SamTrans	El Camino Real Traffic Signal Priority Project	San Mateo County: On El Camino Real (State Route 82) from the Palo Alto Caltrain Station to the Daly City BART Station: Install Traffic Signal Priority system	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
San Mateo	SM-990026	17-10-0027	SamTrans	SAMTRANS: ADA Paratransit Operating Subsidy	SamTrans: ADA Paratransit Operating Subsidy.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Santa Clara	SCL010019	17-10-0025	VTA	I-880 Coleman Avenue I/C Reconfiguration	In San Jose: I-880@Coleman; Reconst. Coleman Ave. bridge & realign, reconst. all ramps accessing I-880; add new direct connector ramp to SB I-880 from Airport & Newhall plus landscaping (Garvee	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2040
Santa Clara	SCL050001	17-10-0026	VTA	VTA: Standard & Small Bus Replacement	VTA: Standard and Small Bus Replacement	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Santa Clara	SCL050002	17-10-0026	VTA	VTA: Rail Replacement Program	VTA: Throughout the Light Rail system: Replace rails (no rail expansion).	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Santa Clara	SCL050046	17-10-0027	VTA	VTA: ADA Operating Set Aside	VTA: ADA operating assistance set aside.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Santa Clara	SCL050049	17-10-0026	VTA	VTA: Rail Substation Rehab/Replacement	VTA: Guadalupe Light Rail Corridor; Rehabilitate electrical elements (such as disconnect switches, DC breakers, etc.) of traction power substations.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL050082	17-07-0001	San Jose	Bay Trail Reach 9 & 9B	In San Jose: Near Gold Street to the existing San Tomas Aquino Creek Trail; Design and construct 1.2 miles of commuter/transportation trail, pedestrian bridge, and underpasses with safety and	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Santa Clara	SCL050083	17-07-0001	San Jose	Coyote Creek Trail (Hwy 237-Story Rd)	In San Jose: from Highway 237 to Story Road; Master plan entire system, design and construction of the trail.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL090002	17-10-0025	Santa Clara Co	San Tomas Expressway Box Culvert Rehabilitation	In Santa Clara: Design, environmental clearance, and construction for rehabilitating the box culvert under San Tomas Expressway.	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Santa Clara	SCL090004	17-07-0001	San Jose	Almaden Ave & Vine St Safety Improvements	San Jose: Almaden Ave and Vine St: Construct pedestrian safety improvements.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL090031	17-07-0001	MTA	Santa Clara Caltrain Station Bike/Ped Tunnel	In Santa Clara: extend a grade-separated pedestrian tunnel at the Santa Clara Caltrain station.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL090041	17-10-0026	MTA	MTA: Photovoltaic Solar Panel Alternative Energy	MTA: On the Berryessa BART Station: parking structure: Install photovoltaic solar panels	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL090044	17-10-0026	MTA	MTA: TP OCS Rehab & Replacement	MTA: Rehabilitate and replace overhead catenary system (OCS) and associated components	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL110029	17-07-0001	San Jose	San Jose: Los Gatos Creek Reach 5 Underpass	In San Jose: Los Gatos Creek Trail between Auzerais Ave and Montgomery/Bird Ave. Construct Los Gatos Creek Trail (Reach 5b/c).	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110032	17-07-0001	Gilroy	Gilroy New Ronan Channel and Lions Creek Trails	In City of Gilroy: On Ronan channel levee from Sixth St to Leavesley Rd and Lions Creek levee from Kern to Tapestry Dr. build bicycle pedestrian trails.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110099	17-10-0026	MTA	MTA: Light Rail Bridge and Structure - SG Repair	MTA: Various Locations: Light rail bridge and structure defect investigation and repair. Stabilization measures to address Hamilton structure settlement.	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Santa Clara	SCL110100	17-10-0026	MTA	MTA: Kinkisharyo LRV Overhaul Program	MTA: Scheduled overhaul of Kinkisharyo Light Rail Vehicles.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Santa Clara	SCL110104	17-10-0026	MTA	MTA: Light Rail Track Crossovers and Switches	MTA: In the light rail system: Add light rail crossovers and switches to priority areas where crossovers are not currently available to enhance operational flexibility.	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Santa Clara	SCL110107	17-10-0022	San Jose	San Jose: Road Rehab and Ped. Facilities	In San Jose, On various streets, Rehabilitate roadway and construct pedestrian facilities.	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Santa Clara	SCL110108	17-10-0024	Santa Clara Co	Isabel Bridge Replacement (37C0089)	In Santa Clara County: Isabel Bridge (Bridge No. 37C0089) on San Antonio Valley Road, 8.3 miles east of Kincaid Rd: Replace existing one lane bridge with a two-lane bridge	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Santa Clara	SCL110121	17-07-0001	Santa Clara Co	East San Jose Pedestrian Improvements	East San Jose: Various Roads: Fill in sidewalk gaps and provide ADA enhancements within existing rights-of-way	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110125	17-10-0021	MTA	Local PDA Planning - Santa Clara	Santa Clara County Various Agencies: Planning assistance pass through to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs).	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Santa Clara	SCL130004	17-07-0003	San Jose	San Jose - Meridian Bike/Ped Improvements	San Jose: Meridian between Auzerais and Douglas: Install new bicycle lanes and sidewalks; Meridian and Auzerais: Modify signal; Douglas and Meridian: Install new traffic signal; Both intersections: Install	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130006	17-07-0001	San Jose	San Jose Citywide SRTS Program	San Jose: Near various schools: Implement bike/ped improvements such as traffic control and guide signs, enhanced crosswalks and other improvements that encourage bicycling and walking to school.	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Santa Clara	SCL130007	17-07-0001	San Jose	Jackson Ave Bicycle and Pedestrian Improvements	In San Jose: Jackson Ave between McKee Rd and Alum Rock Ave: Construct pedestrian safety and transit access enhancements including two new traffic signals and the modification of one existing signal.	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Santa Clara	SCL130010	17-07-0001	San Jose	San Jose Pedestrian Oriented Traffic Signals	In San Jose: At various key intersections: implement traffic signal controlled crossings. This project is phased.	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Santa Clara	SCL130011	17-07-0001	San Jose	St. Johns Bikeway and Pedestrian Improvements	In San Jose: On St. John St from N. Montgomery St to N. First St and along N. Almaden Blvd between W. Julian St and Carlisle St: Improve bicycle and pedestrian facilities including gap filling and signal	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Santa Clara	SCL130016	17-07-0001	San Jose	East San Jose Bikeways	East San Jose: Various locations: make improvements to the bikeway network including the installation of new bikeways, traffic calming features, public bike racks, bike-friendly signal detection and	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130022	17-07-0001	Santa Clara Co	San Tomas Aquino Spur Multi-Use Trail Phase 2	In Santa Clara: From El Camino Real/SR 82 to Homestead Road: Construct San Tomas Aquino Spur Trail Phase 2	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130026	17-07-0003	Saratoga	Prospect Rd Complete Streets	Saratoga: Prospect Road between Saratoga/Sunnyvale Rd and Lawrence Expressway and on Saratoga Ave between Highway 85 to the City Limits to the north (Lawrence Expressway): Reduce roads width to	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130027	17-07-0001	Saratoga	Saratoga Village Sidewalk Rehabilitation	In Saratoga: Along Big Basin Way between 6th street and Hwy 9: Rehabilitate sidewalk.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130028	17-07-0003	Sunnyvale	Sunnyvale/Saratoga Traffic Signal, Bike/Ped Safety	In Sunnyvale: On Sunnyvale-Saratoga Road at Mathilda: Upgrade the existing traffic signal and install new ramps, bike detection and ped signals.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130029	17-07-0003	Sunnyvale	Fair Oaks Avenue Bikeway and Street Enhancements	In Sunnyvale: Various Locations on Fair Oaks Avenue: Construct bike lanes and complete sidewalk enhancements and rehabilitation to improve pedestrian safety.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130030	17-07-0003	Sunnyvale	Maude Avenue Bikeway and Streetscape	Sunnyvale: On Maude Avenue between Mathilda Avenue and Fair Oaks Avenue: Install medians, modify roadway geometry and stripe bike lanes.	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Santa Clara	SCL130031	17-07-0001	Sunnyvale	Sunnyvale East and West Channel Multi-Use Trails	In Sunnyvale: Various locations on the Sunnyvale East Channel: construct multi-use paved trails.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130032	17-07-0001	Sunnyvale	Sunnyvale SRTS Ped Infrastructure Improvements	In Sunnyvale: At 17 school sites: Install pedestrian enhancements for school route intersections	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130034	17-07-0001	Palo Alto	Arastradero Road Schoolscape/Multiuse Trail	In Palo Alto: Along the south side of Arastradero Road between the Hetch Hetchy Los Altos Pathway and Miranda Avenue: Reconstruct the sidewalk to a multi-use trail to support Safe Routes to School	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130037	17-07-0078	Santa Clara Co	Capitol Expressway ITS and Bike/Ped Improvements	In San Jose: Capitol Expressway: Upgrade traffic signals and ITS infrastructure and install pedestrian sensors and bike detection at all intersections to allow traffic responsive and adaptive signal timing and	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Santa Clara	SCL130040	17-07-0001	VTA	Montague Expy Ped Bridge at Milpitas BART	In Milpitas: At Milpitas BART Station: Over Montague Expressway: Construct a pedestrian bridge	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130041	17-07-0001	Palo Alto	Adobe Creek/ Highway 101 Bicycle Pedestrian Bridge	Palo Alto: Where US 101 crosses Adobe Creek: Construct Bike/Ped Bridge. Project is phased	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130043	17-10-0022	Morgan Hill	Monterey Road Preservation	In Morgan Hill: On Monterey Road between East Dunne Avenue and East Middle Avenue; resurface roadway.	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Santa Clara	SCL130044	17-10-0025	VTA	I-880 Stevens Creek Landscaping	In San Jose, at the I-880/Stevens Creek interchange provide landscaping.	EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Santa Clara	SCL150001	17-07-0064	VTA	I-680 Soundwalls - Capitol Expwy to Mueller Ave	San Jose: on I-680 corridor between Capitol Expressway and Mueller Avenue: Construct soundwalls	EXEMPT (40 CFR 93.126) - Noise attenuation	2040
Santa Clara	SCL150005	17-10-0026	VTA	VTA Train to Wayside Communication System Upgrade	VTA: Communications: Upgrade the existing DOS based train-to-wayside communications (TWC) system to a Windows based system while keeping the original system's operational functionality.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Santa Clara	SCL150006	17-10-0026	VTA	VTA: Back-up Power for Elevated Stations	VTA: Various elevated stations: Replace the generators and automatic power bypass switch for elevated stations on the Guadalupe Light Rail line.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL150008	17-10-0026	VTA	VTA Track Intrusion Abatement	VTA: Various locations along trackway: Installation of fencing, barriers, signage, flashing signs, and pavement markings.	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Santa Clara	SCL150011	17-07-0008	VTA	VTA: N 1st Street LR Speed Improvements	VTA: North First Street: Implement light rail service and reliability improvements including fencing and signal timing	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040

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Santa Clara	SCL150014	17-07-0025	VTA	I-280/Winchester Study	In San Jose: I-280/Winchester Interchange: Conduct planning activities to identify and evaluate improvements in the vicinity of the I-280/Winchester Boulevard interchange.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2030
Santa Clara	SCL150015	17-07-0001	Santa Clara Co	Gilroy Moves!	Santa Clara County: Gilroy: Non-infrastructure education and encouragement services to promote walking and biking in Gilroy.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Santa Clara	SCL150017	17-07-0003	Mountain View	Mountain View El Camino Real Streetscape Study	In Mountain View: On El Camino Real within the City Limits; Develop detailed designs for sidewalks, crosswalks, lighting, landscaping, bicycle facilities and bus stops. Project will not lead directly to	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL150020	17-10-0021	San Jose	North 1st Street Urban Village Plan	In the City of San Jose: North 1st Street Urban Village area: Create a land use plan, Implementation guidelines and policies.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL150021	17-10-0021	San Jose	Berryessa BART Urban Village Plan	In San Jose: Around the Berryessa BART Station: Create new plans that will facilitate higher density uses and incentivize a mix of uses around the BART Station currently under construction.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL170001	17-10-0023	MTC	Regional Planning Activities and PPM - Santa Clara	Santa Clara: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Santa Clara	SCL170002	17-10-0032	VTA	VTA BART Phase II TOD and Station Access Planning	In Santa Clara County: In the vicinity of planned BART stations: Perform study of TOD and Station Access Planning.	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL170003	17-10-0015	Palo Alto	Palo Alto: Bay Area Fair Value CommutingMoDSandbox	In Palo Alto: Reduce Bay Area SOV commute share by using Fair Share Commuting (FVC), consisting of: Enterprise Commute Trip Reduction (ECTR) software; Mobility Aggregation (MobAg); parking feebate;	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Santa Clara	SCL170004	17-10-0026	VTA	VTA: LR Vehicle CCTV Door Monitoring System	VTA: Light Rail Vehicles: Replace existing door monitoring CCTV system	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Santa Clara	SCL170005	17-10-0026	VTA	VTA: Paratransit Vehicle Procurement	VTA: Procure vehicles and associated equipment for paratransit services.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Santa Clara	SCL170006	17-10-0026	VTA	VTA: Replace Fault Monitoring System on LRVs	VTA: On Light Rail Vehicle Fleet: Upgrade Fault Monitoring System (FMS) Network that is no longer supported by the original equipment manufacturer (OEM)	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Santa Clara	SCL170007	17-10-0026	VTA	VTA: Pedestrian Swing Gates Replacement	VTA: At various pedestrian crossing locations along the light rail system: Replace spring-hinge pedestrian swing gates	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Santa Clara	SCL170008	17-07-0064	VTA	VTA: Vasona Pedestrian Back Gates	VTA: At several Vasona Light Rail Corridor crossings: Install pedestrian gates. Scope includes installation of automatic pedestrian gates, swing gates and railings, minor civil improvements and related signal	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Santa Clara	SCL170009	17-10-0026	VTA	VTA: Chaboya Yard Well Removal	VTA: At the Chaboya Bus Operating Division: Obtain case closure and demolish the ground water remediation system and wells	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Santa Clara	SCL170010	17-10-0026	VTA	VTA: Guadalupe Train Wash Replacement	VTA: Guadalupe Light Rail Division: Replace train wash.	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Santa Clara	SCL170011	17-10-0026	VTA	VTA: Upgrade Rail Grade Crossing Control Equipment	VTA: Various Locations: Replace existing rail grade crossing equipment; such as controllers, relays, and surge panels; that have become obsolete.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL170012	17-10-0026	VTA	Santa Clara Pocket Track Light Rail Interlocking	In Santa Clara: At pocket light rail track near Levi's Stadium: Implement interlocking improvements	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL990046	17-10-0026	VTA	VTA: Preventive Maintenance	VTA: Preventive Maintenance of agency's fleet.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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Solano	SOL010006	17-10-0027	Fairfield	City of Fairfield Operating Assistance	Fairfield: Transit operating assistance	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL010007	17-10-0027	Vacaville	Vacaville Transit: Operating Assistance	Vacaville Transit: Operating Assistance	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL070012	17-08-0005	Solano County	Cordelia Hills Sky Valley	Cordelia Hill: Transportation enhancements including upgrade of pedestrian and bicycle corridors including open space acquisition along Cordelia Hill Sky Valley and McGary Road. Project is predominantly	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL070032	17-10-0026	SolTrans	SolTrans: Preventive Maintenance	SolTrans: Preventive maintenance of vehicles and equipment necessary for the maintenance of federally funded assets.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Solano	SOL090033	17-10-0026	SolTrans	SolTrans: Bus Maintenance Facility Renovation	SolTrans: Bus Maintenance Facility SolTrans: Bus Maintenance Facility Renovation, Construction of Compressed Natural Gas Facility and Upgrading electrical infrastructure for future electric bus charging	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Solano	SOL090034	17-10-0026	SolTrans	SolTrans: Bus Replacement (Alternative Fuel)	SolTrans: Replace eight 45' MCI commuter coaches as they reach their useful life.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Solano	SOL110019	17-08-0004	STA	Solano Safe Routes to School Program	In Solano County, Countywide: Implement Countywide Solano Safe Routes to School Program, including Planning, Education, and Encouragement events and materials.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Solano	SOL110025	17-10-0027	SolTrans	SolTrans: ADA Paratransit Operating Subsidy	SolTrans: ADA Paratransit Operating Subsidy	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL110035	17-08-0002	Vallejo	Vallejo Downtown Streetscape	Vallejo: Various streets in the downtown area. Pedestrian enhancements including traffic calming, restriping, parking, signs, brick pavers, street furniture and art. Project is phased	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL110040	17-10-0027	SolTrans	SolTrans: Operating Assistance	Solano County Transit: Operating Assistance	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL110041	17-10-0026	Fairfield	Fairfield-Suisun Intercity/Local Bus Replacement	Fairfield: Systemwide: Replace local/intercity buses that have exceeded their expected useful life.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Solano	SOL130005	17-08-0005	Vacaville	Allison Bicycle / Ped Improvements	Vacaville: On Allison Drive from Nut Tree Parkway to Ulati Creek: Install bike/ped infrastructure improvements, landscaping and a marquee sign	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL130007	17-08-0001	Solano County	Suisun Valley Bicycle and Pedestrian Imps	Solano County: At Mankas Corner: Construct staging area with bicycle and pedestrian improvements; At Various Locations in Solano County: Add a Class II bike lane to enhance bike access to areas	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL130012	17-08-0004	Dixon	Dixon SR2S Infrastructure Improvements	Dixon: Various locations along safe routes to schools: Implement pedestrian and bicycle improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL130014	17-08-0004	Rio Vista	SR 12 crossing with updated lighting	In Rio Vista: At SR12 crossing: Install new updated lighted crosswalk	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL130015	17-08-0004	Vallejo	Vallejo SRTS Infrastructure Improvements	In Vallejo: In the vicinity of Wardlaw Elementary School: Implement safety improvements including striping and signage improvements	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Solano	SOL130017	17-10-0027	Vacaville	Transit Marketing and Public Outreach	Vacaville: Citywide: Marketing and public outreach of City Coach transit benefits	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Solano	SOL130019	17-10-0026	SolTrans	Bus Replacement (Commuter)	SolTrans: Replace 45' diesel commuter buses which have reached the end of their useful service life with 45' compressed natural gas buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Solano	SOL130020	17-08-0001	Suisun City	Driftwood Drive Path	Suisun City: Along S. Driftwood Dr from Marina Blvd to Josiah Cir, along E. Josiah Cir between Driftwood Dr and Whispering Bay Ln, and along E. Whispering Bay Ln from Josiah Cir to approx 200 ft south of	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL150001	17-08-0003	STA	Ingraining Walking & Rolling into School Culture	Solano County: Countywide: Implement a two pronged approach to ingrain a culture of walking & rolling within 15 selected schools. The project is a collaboration between STA and Solano County Dept. of	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040

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County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Solano	SOL150002	17-08-0004	Vallejo	SR2T - Curtola Bike Path	Vallejo: On Curtola Pkwy between Lemon Street and Solano Avenue: Improve bike path	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL150003	17-08-0005	STA	SR12/Church Rd Intersection Improvements	Rio Vista: At SR12/Church Rd. Intersection: Add Standard Shoulders, EB Left Turn Lane, WB Acceleration Lane (720 ft) and Deceleration Lane (300 ft), Remove Trees in Clear Recovery Zone	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Solano	SOL150004	17-08-0004	STA	STA SR2S Infrastructure & Non-infrastructure	Solano County: At 7 schools: Implement pedestrian infrastructure improvements; At 26 schools throughout the Cities of Benicia, Rio Vista & Vallejo: Providing education outreach	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL170001	17-10-0023	MTC	Regional Planning Activities and PPM - Solano	Solano: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Solano	SOL170002	17-10-0026	SolTrans	SolTrans: Data Management Technology Enhancements	SolTrans: Procure data management systems and software	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Solano	SOL170003	17-10-0026	SolTrans	Soltrans: Facilities and Amenities Improvements	Soltrans: Systemwide: Facility and passenger amenities improvements	EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Sonoma	SON030005	17-10-0026	Son Co Transit	Sonoma Co Transit: Preventive Maintenance Program	Sonoma County Transit: Preventive maintenance program for agency fleet.	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON030012	17-10-0026	SantaRosa Bus	Santa Rosa City Bus: Transit Enhancements	Santa Rosa: Various Locations: Upgrade and improve transit facilities including amenities, accessibility, ADA compliance, pedestrian and bicycle access	EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Sonoma	SON050021	17-10-0026	Son Co Transit	Sonoma County Transit: Bus Stop Improvement	Sonoma County Transit: Throughout the service area: Acquire and install new bus stop shelters plus other improvements to bus stops	EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Sonoma	SON070008	17-09-0001	Son Co Reg Park	Bodega Bay Trail Segments 1B and 1C	Bodega Bay: Segments 1B and 1C parallel to Highway 1 from Salmon Creek Village to the southwest boundary; Construct bicycle and Pedestrian Trail (TLC Project).	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON070020	17-10-0026	SantaRosa Bus	Santa Rosa City Bus Replacement Bus Purchase	Santa Rosa CityBus: Purchase 5 Hybrid Electric Replacement Buses and 4 clean diesel buses to replace aging fixed route buses to replace fixed route buses	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON070026	17-10-0024	Sonoma County	Rehab King Ridge Bridge over Austin Crk 20C0433	In Sonoma County: On King Ridge Road, 2.3mi North of Fort Ross Road; rehabilitate one-lane bridge to 2 lanes and scour countermeasure	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Sonoma	SON090001	17-10-0024	Sonoma County	Replace Geysers Bridge over Sulpher Crk 20C0005	In Sonoma County: Bridge replacement: single lane bridges in Sonoma County with two lane bridge (Geysers Road Bridge 20C0005)	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Sonoma	SON090023	17-10-0027	SantaRosa Bus	Santa Rosa CityBus: Operating Assistance	Santa Rosa CityBus: Operating Assistance to Transit Agency	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Sonoma	SON090024	17-10-0026	SantaRosa Bus	Santa Rosa CityBus: Preventative Maintenance	Santa Rosa CityBus: Preventative Maintenance program for agency fleet	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON090025	17-10-0024	Sonoma County	Replace Chalk Hill Bridge over Maacama Crk 20C0242	In Sonoma County - Replace existing bridge no. 20C0242, on Chalk Hill Rd, Over Maacama Creek, 1 Mi S of HWY (spandrel arch bridge with approach spans with new bridge)	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Sonoma	SON090026	17-10-0024	Sonoma County	Replace Lambert Bridge over Dry Creek 20C0248	HBP: In Sonoma: Replace existing through truss bridge (Bridge No. 20C0248, Lambert Bridge Road, Over Dry Creek,0.4 Mi W of Dry Creek Rd.), that is in poor condition and has seismic deficiencies with	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Sonoma	SON090027	17-10-0024	Sonoma County	Replace West Dry Creek Bridge over Pena Ck 20C0407	In Sonoma: Replace existing four span T-beam concrete bridge (Bridge No. 20C0407, West Dry Creek Rd, Over Pena Creek, 0.7 Mi NW Yoakim Br Rd.) that is one-lane, seismically deficient and in poor	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Sonoma	SON090030	17-10-0026	Petaluma	Petaluma Transit: AVL System	Petaluma Transit: Purchase and install Automatic Vehicle Location (AVL) System on all vehicles in Petaluma Transit fixed route fleet.	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON110024	17-10-0024	Sonoma County	Replace Bohan Dillon Bridge over Gualala 20C0435	In Sonoma: Bridge No.20C0435, Bohan Dillon Road over South Fork Gualala River, 0.1 Mi N Fort Ross Road. Replace existing one-lane bridge with a new two-lane bridge	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040

*Projects with conformity analysis year 2040 reference programmatic projects or projects with a completion date after 2030 in *Plan Bay Area 2040*

List of 2017 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Sonoma	SON110025	17-10-0024	Sonoma County	Replace Hauser Bridge over Gualala River 20C0240	In Sonoma: Bridge No.20C0240,Hauser Road Bridge over over South Fork Gualala River, 5 Mi east of Seaview Road. Replace existing one-lane bridge with a new two-lane bridge	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Sonoma	SON110026	17-10-0024	Sonoma County	Replace Freestone Flat Bridge over Salmon 20C0440	In Sonoma: Bridge No.20C0440,Freestone Flat Road Bridge over Salmon Creek, 0.2 Mi E. Bohemian Way. Replace existing one-lane bridge with a new two-lane bridge	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Sonoma	SON110049	17-10-0026	Son Co Transit	Sonoma County Transit: Replacement Bus Purchase	Sonoma County Transit: Replace five 40' Orion V CNG transit coaches with five 40' CNG Low-Floor transit coaches.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON110050	17-09-0001	Son Co Reg Park	Central Sonoma Valley Trail	In the unincorporated area of Sonoma County, construct 0.42 miles of a Class I bike trail. 1)Larson Park to Flowery Elementary School and 2) along Verano Avenue from Sonoma Creek to Main Street.	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON110052	17-10-0026	Petaluma	Petaluma: Replace 2 Paratransit Cutaways FY14	In Petaluma: Replace two (2) paratransit vans for Petaluma Paratransit	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON110054	17-09-0001	Healdsburg	Healdsburg Pedestrian Safety and Access Improvmnts	In Healdsburg: At entrance to high school on Powell Ave: Implement enhanced safety pedestrian crossing. On Prince St and Sun Ct from Powell to Piper: Improve pedestrian access to high school, middle	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON130002	17-10-0022	Petaluma	Petaluma Complete Streets	In Petaluma: On Lakeville St from E. Washington St to Caulfield Ln and on East D St from the D St Bridge to Lakeville St: Rehabilitate the roadway, including striping for Class 2 Bike Lanes and adding ADA	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130003	17-09-0001	Windsor	Jaguar Way/Windsor Road Bicycle /Ped Improvements	In Windsor: Around the intersection of Jaguar Way and Windsor Road, the entrance to Windsor High School: Install a traffic signal and construct approximately 300 feet of Class II bicycle lanes and sidewalk.	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Sonoma	SON130006	17-09-0001	Santa Rosa	Downtown Santa Rosa Streetscape	Santa Rosa: Third St between Morgan and B St: Implement pedestrian improvements to channelize pedestrians to use the north side of Thrid Street at Morgan STreet and at B Street; On Santa Rosa Avenue	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Sonoma	SON130007	17-09-0001	Rohnert Park	Rohnert Park Streetscape and Pedestrian Imps	Rohnert Park: At Various locations in the Central Rohnert Park PDA: Install pedestrian and bike facility improvements	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON130008	17-10-0022	Cotati	Cotati - Old Redwood Highway S. Preservation	In Cotati: On Old Redwood Highway, between East Cotati and Myrtle Avenue; rehabilitate roadway and add pedestrian features.	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130009	17-10-0022	Rohnert Park	Rohnert Park Various Streets Preservation	In Rohnert Park: On Rohnert Park Expressway from State Farm Drive to Snyder Lane: Rehabilitation of roadway including digouts and overlay. Existing lane configuration and existing Class 2 bike lanes will	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130010	17-10-0022	Sonoma County	Sonoma County Various Streets & Roads Preservation	Sonoma County: Various locations: Rehabilitate pavement	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130012	17-09-0005	Windsor	Conde Ln/Johnson St Pedestrian Improvements	In Town of Windsor: At the intersection of Conde Lane and Johnson Street: Realign intersection to eliminate stop signs on Conde Lane. Johnson Street becomes right in and right out only. Add RRFB	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Sonoma	SON130013	17-09-0001	Windsor	Bell Rd/Market St/Windsor River Rd Ped Improvement	In Windsor: At the intersection of Bell Road-Market Street and Windsor River Road: Install a traffic signal and install pedestrian and bicycle signal equipment.	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Sonoma	SON130014	17-10-0015	Sonoma County	Sonoma County - Safe Routes to School Program	Sonoma County: Countywide: Comprehensive safe routes to school program to shift mode away from single family vehicular trips to bicycle/pedestrian/carpooling.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Sonoma	SON130015	17-10-0022	Sonoma County	Bodega Highway Pavement Rehabilitation	Bodega Hwy, beginning at the intersection of Sexton Lane and ending at the Sebastopol City Limits. The Project length is approximately 2 miles. The scope of work will includes pavement rehabilitation,	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040

*Projects with conformity analysis year 2040 reference programmatic projects or projects with a completion date after 2030 in *Plan Bay Area 2040*

List of 2017 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Sonoma	SON130016	17-09-0001	Cloverdale	Cloverdale - Safe Routes to School Phase 2	Cloverdale: Various Locations: Construct sidewalks and add Class II bike lanes	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON130020	17-09-0005	Petaluma	Petaluma Transit: Transit Signal Priority System	In Petaluma: Various intersections: Upgrade existing traffic signals to replace existing or install new Transit Signal Priority hardware on intersections within the City of Petaluma. Project is phased.	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Sonoma	SON150001	17-10-0021	Sonoma County	PDA Planning - Springs Area Plan	Sonoma Valley Springs Area: Planning to revitalize the area into a pedestrian and transit oriented mixed use corridor.	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Sonoma	SON150002	17-10-0021	Sonoma County	PDA Planning - Airport Station/Specific Plan Amend	Sonoma County: Near the proposed Sonoma Marin Area Rail Transit Airport station: Develop a new station area plan and update of the 1984 Airport Industrial Area Specific Plan in order to transform the	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Sonoma	SON150003	17-09-0001	Santa Rosa	Jennings Ave Bike & Ped RR Crossing Corridor	In Santa Rosa: At Jennings Ave and SMART railroad tracks: Construct a bicycle and pedestrian crossing and develop a Safe Routes to School service program focusing on education and awareness for the	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON150004	17-10-0026	Petaluma	Petaluma Transit: Purchase (1) Fixed Route Bus	Petaluma Transit: 40' hybrid bus: Purchase (1) new 40' Diesel Electric Hybrid Low Floor Standard Transit Bus for Petaluma Transit, replaces (1) 2003 Chevy C5500 29' medium duty bus that expended its	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON150005	17-10-0026	Petaluma	Petaluma Transit: (3) Digital Two-Way Radios	Petaluma Transit: Radios: Purchase (3) Digital Two-Way Radios for (3) new Fixed Route Buses for Petaluma Transit (goes with bus replacement project in FY 15 and FY 16).	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON150007	17-10-0027	Petaluma	Petaluma Transit: ADA Set-Aside	Petaluma Transit: Annual ADA Set-Aside	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Sonoma	SON150008	17-10-0026	SantaRosa Bus	SantaRosa Bus: Bus Replacement Purchase	SantaRosa Bus: 40' Fixed Route Vehicle: Replace an aging 40' fixed route diesel bus for operation purposes.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON150009	17-09-0005	Son Co TA	Highway 116/121 Intersection Improvement Project	In Sonoma County: At the intersection of State Routes 116 and 121, and Bonneau Road: Improve intersection	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Sonoma	SON150011	17-10-0015	Sonoma County	Sonoma SRTS High School Pilot	In Sonoma County: Countywide: Safe routes to school high school pilot program to shift mode away from single family vehicular trips to bicycle/pedestrian/carpooling/bussing.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Sonoma	SON150012	17-10-0026	Son Co Transit	Sonoma County Transit: Replacement CNG Buses	Sonoma County Transit: Replace two 40-foot compressed natural gas (CNG)-fueled buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON150013	17-10-0026	Son Co Transit	Sonoma County Transit: Replace 2006 CNG Buses	Sonoma County Transit: Replace five 40-foot CNG-fueled buses.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON150014	17-10-0026	Petaluma	Petaluma Transit: Purchase (2) Fixed Route Buses	Petaluma Transit: (2) 35' hybrid buses: Purchase (2) new 35' Diesel Electric Hybrid Low Floor Standard Transit Bus for Petaluma Transit, replaces (2) 2003 Chevy C5500 29' medium duty buses that have	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON150015	17-10-0028	Petaluma	PetalumaTransit:Clipper Equip for FixedRoute Buses	Petaluma Transit: On 3 new Fixed Route buses: Install Clipper fare equipment	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON150016	17-10-0026	Petaluma	PetalumaTransit:Comm Equip for 3 Fixed Route Buses	Petaluma Transit: On three (3) new Fixed Route Buses: Purchase and Install Automated Vehicle Locaton (AVL) and Transit Signal Priority Equipment	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON150017	17-10-0026	SantaRosa Bus	SRCityBus Non-Revenue Vehicle and Capital Equipmnt	Santa Rosa City Bus: At Transit Mall: Implement transit enhancements and purchase a replacement non-revenue vehicle	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Sonoma	SON150018	17-10-0026	SantaRosa Bus	SR City Bus: Garage Hoist for Bus Repairs	Santa Rosa City Bus: Purchase a garage hoist for repairs of the buses	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Sonoma	SON150019	17-10-0027	SantaRosa Bus	Implementation of Reimagining CityBus	Santa Rosa CityBus: Systemwide: Operating Assistance for implementing Reimagining CityBus	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

*Projects with conformity analysis year 2040 reference programmatic projects or projects with a completion date after 2030 in *Plan Bay Area 2040*

List of 2017 TIP Projects by County

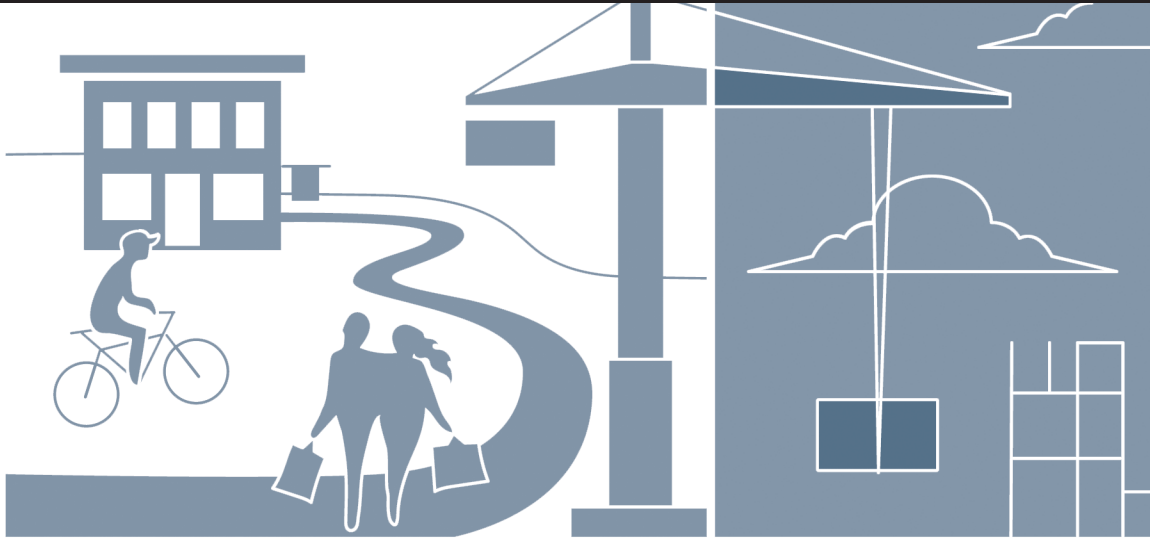
Appendix B

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Air Quality Description	Conformity Analysis Year
Sonoma	SON170001	17-09-0003	Windsor	Windsor River Road/Windsor Road/NWPRR Intersection	In Windsor: Windsor River Road/Windsor Road/SMART intersection: Rail crossing safety improvements, multi-use path, pedestrian and vehicle traffic improvements.	EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
Sonoma	SON170002	17-10-0023	MTC	Regional Planning Activities and PPM - Sonoma	Sonoma County: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Sonoma	SON170003	17-10-0027	SantaRosa Bus	Santa Rosa CityBus-paratransit operations	Santa Rosa CityBus: Provide operating assistance to Santa Rosa Paratransit.	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Sonoma	SON170004	17-10-0026	Petaluma	Petaluma: Replace 1 Paratransit Cutaway FY17	Petaluma: Replace one (1) paratransit cutaway. Replace 2007 22' Gas Starcraft with 2017 Accessible Minivan.	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON170005	17-10-0026	Petaluma	Petaluma: Transit Yard & Facilities Improvements	Petaluma: Transit Yard and Facility: Improvements to enhance security and maintain a state of good repair, including pavement repair and upgrades, video surveillance system, office security, yard lighting,	EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040

Appendix C

Travel Modeling Report

TRAVEL MODELING REPORT



**DRAFT
SUPPLEMENTAL
REPORT**



A collage of blue-toned icons representing various aspects of a community. The icons include a delivery truck, a hospital building with a cross, a high-speed train, a city skyline with children playing on a seesaw and swing, and business documents with a pie chart and a pen.

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Plan Bay Area 2040: Draft Travel Modeling Report

March 2017



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Executive Summary

This supplementary report presents selected technical results from the analysis of alternatives performed in support of the Metropolitan Transportation Commission's (MTC's) and the Association of Bay Area Government's (ABAG's) Plan Bay Area 2040 environmental impact report (EIR). A brief overview of the technical methods used in the analysis, as well as a brief description of the key assumptions made for each alternative, precede the presentation of results.

Chapter 1: Analytical Tools

MTC uses an analytical tool known as a travel model (also known as a travel demand model or travel forecasting model) to first describe the reaction of travelers to transportation projects and policies and then to quantify the impact of cumulative individual decisions on the Bay Area's transportation networks and environment. MTC's travel model is briefly described below, along with two supporting tools: a population synthesizer and a vehicle emissions model.

Population Synthesizer

MTC's travel model is an agent-based simulation. The "agents" in our case are individual households, further described by the people who form each household. In this way, the travel model attempts to simulate the behavior of the individuals and the households who carry out their daily activities in a setting described by the input land development patterns and input transportation projects and policies. In order to use this type of simulation, each agent must be characterized in a fair amount of detail.

Software programs that create lists of households and persons for travel model simulations are known as population synthesizers. MTC's population synthesizer attempts to locate households described in the 2000 Decennial Census Public Micro-sample (PUMS) data (i.e., those who responded to the old "long forms" used by the Census Bureau to collect detailed household information) in such a way that when looking at the population along specific dimensions spatially (at a level of detail below which the PUMS data is reported), the aggregate sums more or less match those predicted by other Census summary tables (when synthesizing historical populations) or the land use projections made by our land use modeling tools/procedures (when forecasting populations). For example, if our land use tools project that 60 households containing 100 workers and 45 children will live in spatial unit X in the year 2035, the population synthesizer will locate 60 PUMS households in spatial unit X and will select households in such a way that, when summing across households, the number of workers is close to 100 and the number of children is close to 45.

MTC's population synthesizer "controls" (i.e., minimizes the discrepancy between the synthetic population results and the historical Census results or the land use forecasts) along the following dimensions:

1. Household "type", i.e. individual household unit or non-institutionalized group quarters (e.g., college dorm);
2. Household income category;
3. Age of the head of household;
4. Number of people in the household;
5. Number of children under age 17 in the household;
6. Number of employees in the household; and,
7. Number of units in the household's physical dwelling (one or more than one, as in an apartment building).

Travel Model

Travel models are frequently updated. As such, a bit of detail as to which version of a given travel model is used for a given analysis is useful. The current analysis uses MTC's *Travel Model One* (version 0.6),

released in July 2016, calibrated to year 2000 conditions and validated against year 2000, 2005, 2010 and 2015 conditions¹.

Travel Model One is of the so-called “activity-based” archetype. The model is a partial agent-based simulation in which the agents are the households and people who reside in the Bay Area. The simulation is partial because it does not include the simulation of individual behavior of passenger, commercial, and transit vehicles on roadways and transit facilities (though the model system does simulate the behavior of aggregations of vehicles and transit riders). In regional planning work, the travel model is used to simulate a typical weekday – when school is in session, the weather is pleasant, and no major accidents or incidents disrupt the transportation system.

The model system operates on a synthetic population that includes households and people representing each actual household and person in the nine-county Bay Area – in both historical and prospective years. Travelers move through a space segmented into “travel analysis zones”² and, in so doing, use the transportation system. The model system simulates a series of travel-related choices for each household and for each person within each household. These choices³ are as follows (organized sequentially):

1. Usual workplace and school location – Each worker, student, and working student in the synthetic population selects a travel analysis zone in which to work or attend school (or, for working students, one zone to work and another in which to attend school).
2. Household automobile ownership – Each household, given its location and socio-demographics, as well as each member’s work and/or school locations (i.e., given the preceding simulation results), decides how many vehicles to own.
3. Daily activity pattern – Each household chooses the daily activity pattern of each household member, the choices being (a) go to work or school, (b) leave the house, but not for work or school, or (c) stay at home.
4. Work/school tour⁴ frequency and scheduling – Each worker, student, and working student decides how many round-trips they will make to work and/or school and then schedules a time to leave for, as well as return home from, work and/or school.
5. Joint non-mandatory⁵ tour frequency, party size, participation, destination, and scheduling – Each household selects the number and type (e.g., to eat, to visit friends) of “joint” (defined as two or more members of the same household traveling together for the duration of the tour) non-mandatory (for purposes other than work or school) round trips in which to engage, then

¹ Additional information is available here: <http://analytics.mtc.ca.gov/foswiki/Main/Development>.

² An interactive map of these geographies is available here:
<http://analytics.mtc.ca.gov/foswiki/Main/TravelModelOneGeographies>.

³ These “choices”, which often are not really choices at all (the term is part of travel model jargon), are simulated in a random utility framework – background information is available here:
https://en.wikipedia.org/wiki/Choice_modelling.

⁴ A “tour” is defined as a round trip from and back to either home or the workplace.

⁵ Travel modeling practice use the term “mandatory” to describe work and school travel and “non-mandatory” to refer to other types of travel (e.g., to the grocery store); we use this jargon as well to communicate efficiently with others in our space. We neither assume nor believe that all non-work/school-related travel is non-mandatory or optional.

determines which members of the household will participate, where, and at what time the tour (i.e., the time leaving and the time returning home) will occur.

6. Non-mandatory tour frequency, destination, and scheduling – Each person determines the number and type of non-mandatory (e.g., to eat, to shop) round trips to engage in during the model day, where to engage in these tours, and at what time to leave and return home.
7. Tour travel mode – The tour-level travel mode choice (e.g., drive alone, walk, take transit) decision is simulated separately for each tour and represents the best mode of travel for the round trip.
8. Stop frequency and location – Each traveler or group of travelers (for joint travel) decide whether to make a stop on an outbound (from home) or inbound (to home) leg of a travel tour, and if a stop is to be made, where the stop is made, all given the round trip tour mode choice decision.
9. Trip travel model – A trip is a portion of a tour, either from the tour origin to the tour destination, the tour origin to a stop, a stop to another stop, or a stop to a tour destination. A separate mode choice decision is simulated for each trip; this decision is made with awareness of the prior tour mode choice decision.
10. Assignment – Vehicle trips for each synthetic traveler are aggregated into time-of-day-specific matrices (i.e., tables of trips segmented by origin and destination) that are assigned via the standard static user equilibrium procedures to the highway network. Transit trips are assigned to time-of-day-specific transit networks.

The *Travel Model One* system inherits without significant modification the representation of interregional and commercial vehicle travel from MTC's previous travel model system (commonly referred to as BAYCAST or BAYCAST-90). Specifically, commercial vehicle demand is represented using methods developed for Caltrans and Alameda County as part of the Interstate 880 Intermodal Corridor Study conducted in 1982 and the Quick Response Freight Manual developed by the United States Department of Transportation in 1996. When combined, these methods estimate four classes of commercial travel, specifically: "very small" trucks, which are two-axle/four-tire vehicles; "small" trucks, which are two-axle/six-tire vehicles; "medium" trucks, which are three-axle vehicles; and, "combination" trucks, which are truck/trailer combinations with four or more axles.

Reconciling travel demand with available transportation supply is particularly difficult near the boundaries of planning regions because little is assumed to be known (in deference to efficiency – the model must have boundaries) about the land development patterns – the primary driver of demand – or supply details beyond these boundaries. The typical approach to representing this interregional travel is to first estimate the demand at each location where a major transportation facility intersects the boundary and to then distribute this demand to locations either within the planning region (which results in so-called "internal/external" travel) or to other boundary locations ("external/external" travel). MTC uses this typical approach and informs the process with Census journey-to-work flows (from the 2000 Decennial Census, specifically), which are allocated via simple method to represent flows to and from MTC's travel analysis zones and 21 boundary locations, as well as the flows between boundary locations.

The travel of air passengers to and from the Bay Area's airports is represented with static (across alternatives), year-specific vehicle trip tables. These trip tables are based on air passenger survey data

collected in 2006 and planning information developed as part of MTC's Regional Airport Planning Study⁶. Similarly, the travel of high speed rail passengers to and from the Bay Area's expected high speed rail stations is represented with static (across alternatives), year-specific vehicle trip tables. The high speed rail demand estimates are derived from the California High Speed Rail Authority's 2016 Business Plan⁷.

Vehicle Emissions Model

The MTC travel model generates spatially- and temporally-specific estimates of vehicle usage and speed for a typical weekday. This information is then input into an emissions model to estimate emitted criteria pollutants as well as emitted carbon dioxide (used as a proxy for all greenhouse gases). For the current analysis, MTC used the EMFAC 2014 version of the California Air Resources Board emissions factor software⁸.

Chapter 2: Input Assumptions

In total, 12 scenarios were simulated. Selected results are presented and discussed in the remainder of the document. Four *categories* of scenarios are included, as follows: historical, no action, planned action, and alternative actions. Historical scenarios are labeled by their year and include Year 2005 and Year 2015. The no action alternative is referred to as "No Project"; No Project simulations were performed for a 2040 forecast year. The planned action is referred to as the "Proposed Plan" (often abbreviated as "Plan") alternative; Proposed Plan Simulations were performed for 2020, 2030, 2035, and 2040. Three separate alternative scenarios are included, and are labeled "Main Streets", "Big Cities", and "Environment, Equity, and Jobs" ("EEJ"). Year 2040 simulations were conducted for each of these alternatives. The various simulation years serve different purposes: historical years demonstrate the model's ability to adequately replicate reality⁹ and provide the reader data for a familiar scenario; the California Air Resources Board established greenhouse gas targets for 2020 and 2035; the transportation plan, as guided by federal regulations, extends to 2040; and, air quality regulations require a 2030 simulation.

The above scenarios differ across four dimensions, namely: land use, roadway supply, transit supply, and prices. By land use, we mean the locations of households and jobs (of different types). Roadway supply is the physical network upon which automobiles, trucks, transit vehicles, bicycles, and pedestrians travel. Transit supply refers to the facilities upon which public transit vehicles travel (the roadway, along rail lines, ferry routes, and other dedicated infrastructure), as well as the stop locations, routes, and frequency of transit service. Prices include the monetary fees users are charged to board transit vehicles, cross bridges, operate and park private vehicles, and use express (also known as high occupancy toll) lanes.

In the remainder of this chapter, each of the six scenarios (the rows in Table 1) are discussed, organized by the above four dimensions; additional notes on "other assumptions" concludes the section. This organization should allow the reader to compare the input assumptions across scenarios.

⁶ Additional information is available here: <http://mtc.ca.gov/our-work/plans-projects/economic-vitality/regional-airport-plan>.

⁷ Additional information is available here: http://hsr.ca.gov/docs/about/business_plans/2016_BusinessPlan.pdf.

⁸ Additional information is available here: <http://www.arb.ca.gov/msei/msei.htm>.

⁹ Details of this "validation" process are available here: <http://analytics.mtc.ca.gov/foswiki/Main/Development>.

Table 1: Simulations by Year and Alternative

Alternative	Simulation Year					
	2005	2015	2020	2030	2035	2040
Historical	✓	✓				
No Project			✓		✓	✓
Proposed Plan			✓	✓	✓	✓
Main Streets			✓		✓	✓
Big Cities			✓		✓	✓
Environment, Equity, and Jobs			✓		✓	✓

Land Use

Additional information regarding the land development patterns is available in the companion supplementary report, *Summary of Predicted Land Use Responses*. Here, we provide a handful of details regarding the transformation of these land use inputs into the information needed by the travel model.

Prior to executing the travel model, the land development inputs provided by ABAG (control totals) and the UrbanSim model (distribution details) are run through the MTC population synthesizer as described above. The journey from control totals through UrbanSim and through the population synthesizer introduces very minor inconsistencies between the ABAG-estimated regional control totals, which are carried through UrbanSim, and the totals implied by the synthetic population. These inconsistencies are presented in Table 2.

Table 2: Demographic Statistics of Control and Simulated Populations

Alternative	Year	Households				Population		
		ABAG Results Households	Group Quarters	Synthetic Population	Percent Difference [†]	ABAG Results	Synthetic Population	Percent Difference
Historical	2015	2,760,000	133,000	2,875,000	-0.6%	7,571,000	7,571,000	0.0%
No Project	2040	3,427,000	176,000	3,579,000	-0.7%	9,628,000	9,567,000	-0.6%
Proposed Plan	2040	3,427,000	176,000	3,579,000	-0.7%	9,628,000	9,561,000	-0.7%
Main Streets	2040	3,427,000	176,000	3,579,000	-0.7%	9,628,000	9,563,000	-0.7%
Big Cities	2040	3,427,000	176,000	3,579,000	-0.7%	9,628,000	9,554,000	-0.8%
EEJ	2040	3,427,000	176,000	3,579,000	-0.7%	9,628,000	9,559,000	-0.7%

† – Individuals living in group quarters are considered individual households in the synthetic population and, subsequently, the travel model.

A key function of the population synthesizer is to identify each member of the representative populous with one of eight “person type” labels. Each person in the synthetic population is identified as a full-time worker, part-time worker, college student, non-working adult, retired person, driving-age student, non-driving-age student, or child too young for school. The travel model relies on these person type classifications, along with myriad other variables, to predict behavior.

Figure 1 shows the distribution of person types for the historical scenarios and the Proposed Plan alternative, from years 2005 to 2040. Interesting aspects of these distributions, which are driven by assumptions embedded in ABAG’s regional forecast, are as follows:

- The share of full-time workers peaks in 2015;
- The share of retired workers steadily increases from 2005 to 2040; and,
- The person type shares are effectively identical.

Figure 2 shows the distribution of person types across the five forecast year alternatives for year 2040.

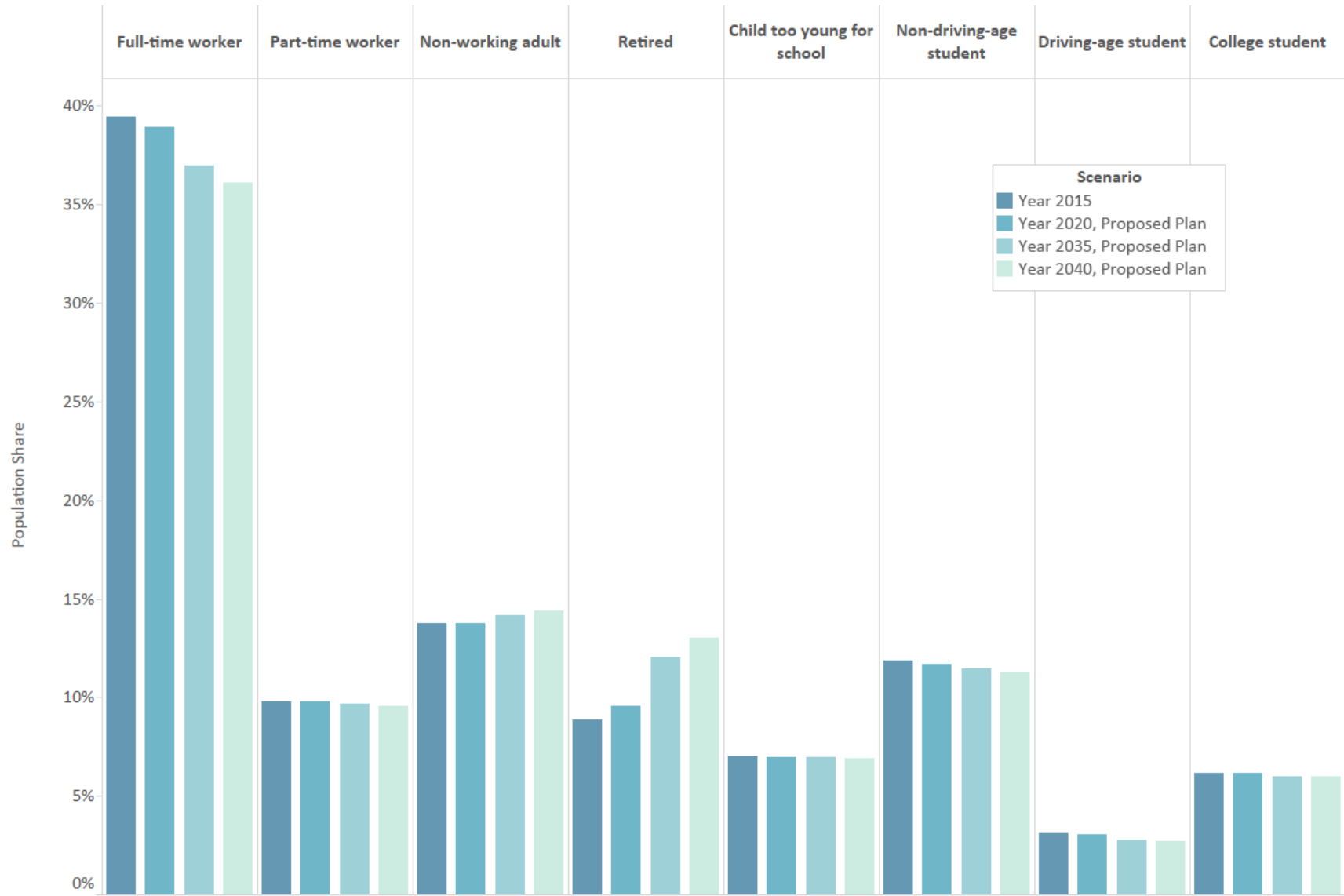


Figure 1: Historical and Forecasted Person Type Distributions for Proposed Plan Alternative

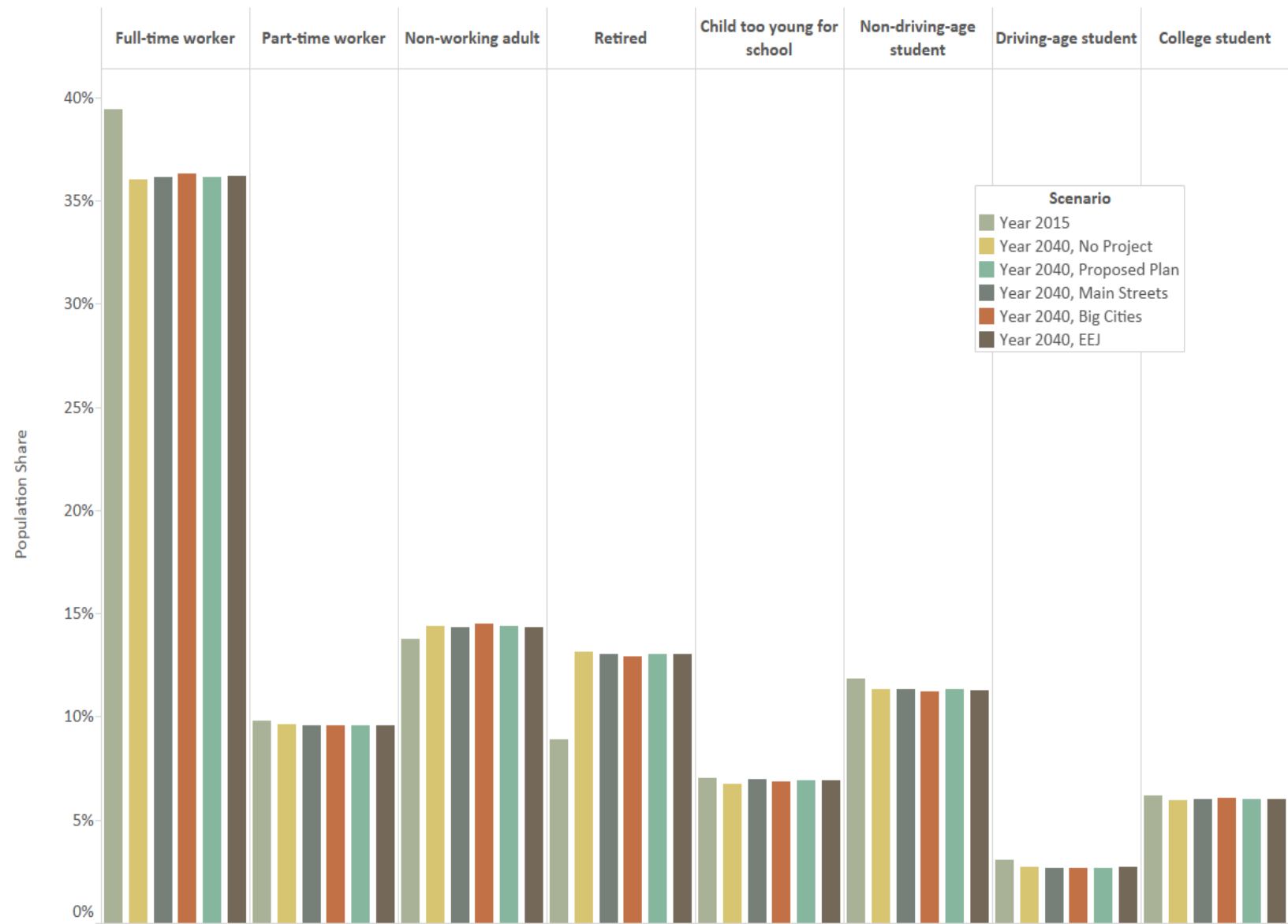


Figure 2: Year 2040 Person Type Distributions

Roadway Supply

The historical scenarios for 2005 and 2015 have a representation of roadways that reflect infrastructure that was in place in 2005 and 2015.

The No Project alternative includes projects that are either in place in 2016 or are “committed” per MTC policy. The Proposed Plan alternative includes the roadway projects included in the transportation investment strategy, which is discussed in detail elsewhere.

The Main Streets and Big Cities alternative roadway projects were detailed to MTC’s Planning Committee in May 2016¹⁰.

The Environment, Equity, and Jobs alternative starts with the No Project alternative roadway network and then adds the Proposed Plan alternative’s bus rapid transit (BRT) infrastructure and the Columbus Day Initiative intelligent transportation systems scheme. No other uncommitted roadway projects are included in the EEJ alternative.

A graphical depiction of the changes in the roadway network is presented in Figure 3 below. The chart shows the change in lane-miles (e.g., a one-mile segment of a four-lane road is four lane-miles) available to automobiles in year 2040 relative to year 2015. San Francisco County shows a decrease in lane-miles, as some roadway segments are converted to dedicated bus ways. Figure 4 shows the change in lane-miles over time for the Proposed Plan alternative.

¹⁰ For additional details, please see <https://mtc.legistar.com/View.ashx?M=F&ID=4446887&GUID=31890CF7-8A5A-4A54-BA45-4466DEF7831B>.

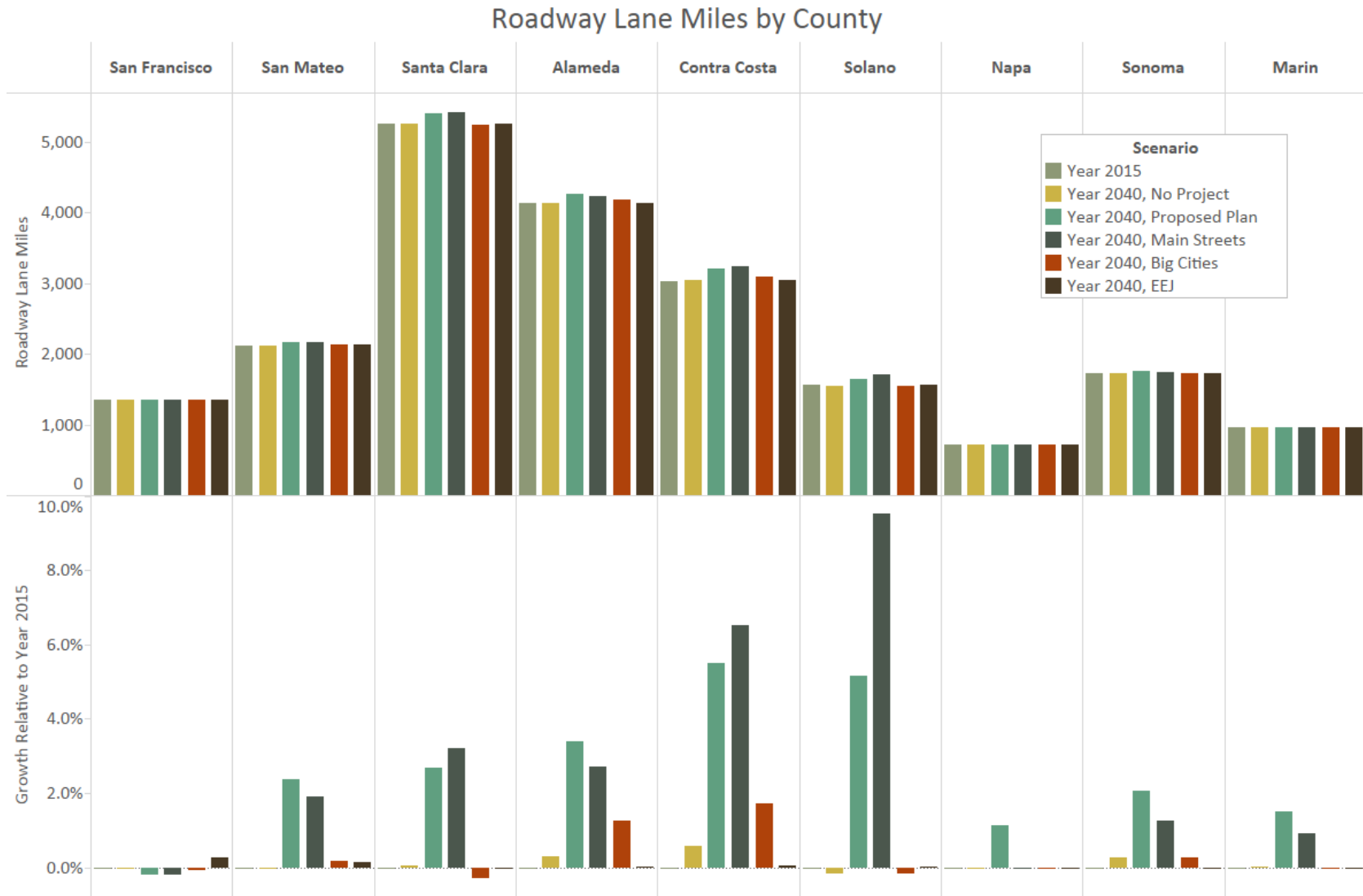


Figure 3: Year 2040 Growth in Roadway Lane Miles Available to Automobiles Relative to 2015

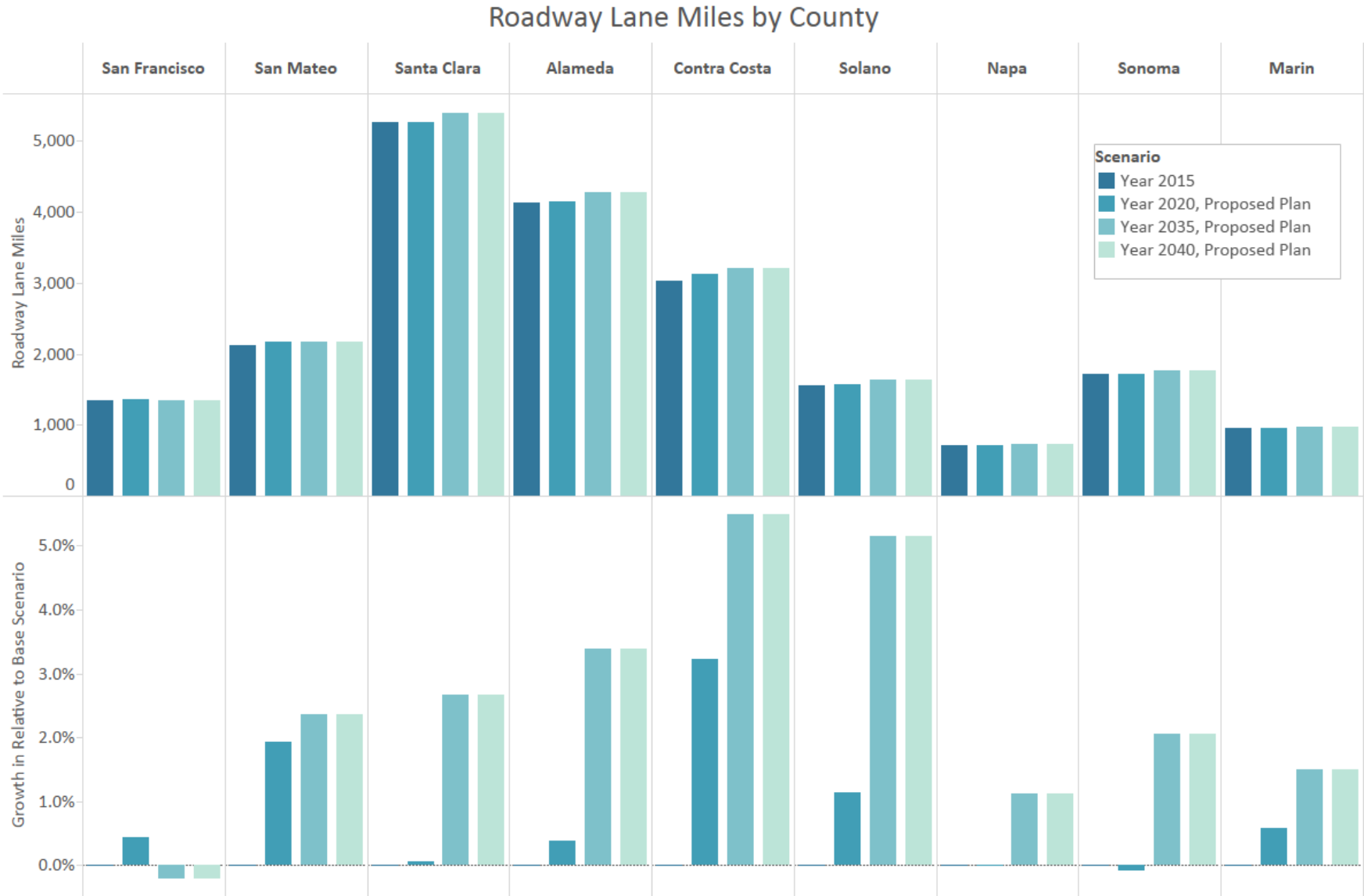


Figure 4: Growth in Roadway Lane Miles Available to Automobiles for Proposed Plan Alternative

Transit Supply

The historical scenarios for 2005 and 2015 reflect service in these years.

The No Project alternative begins with 2015 service levels and adds projects that are committed per MTC policy. The Proposed Plan alternative begins with 2015 service levels and adds both the committed projects as well as those included in the transportation investment strategy.

The Main Streets and Big Cities alternative transit projects were detailed to MTC's Planning Committee in May 2016¹¹.

The Environment, Equity and Jobs alternative begins with the Proposed Plan transit network and increases transit service frequency in some suburban areas.

A graphical depiction of these changes in transit service is presented in Figure 5 below. The chart shows the change in seat-miles (e.g., a one-mile segment of a bus with 40 seats is 40 seat-miles) in year 2040 compared to year 2015 across alternatives. Figure 6 shows the change in seat-miles over time for the Proposed Plan Alternative.

¹¹ Ibid.

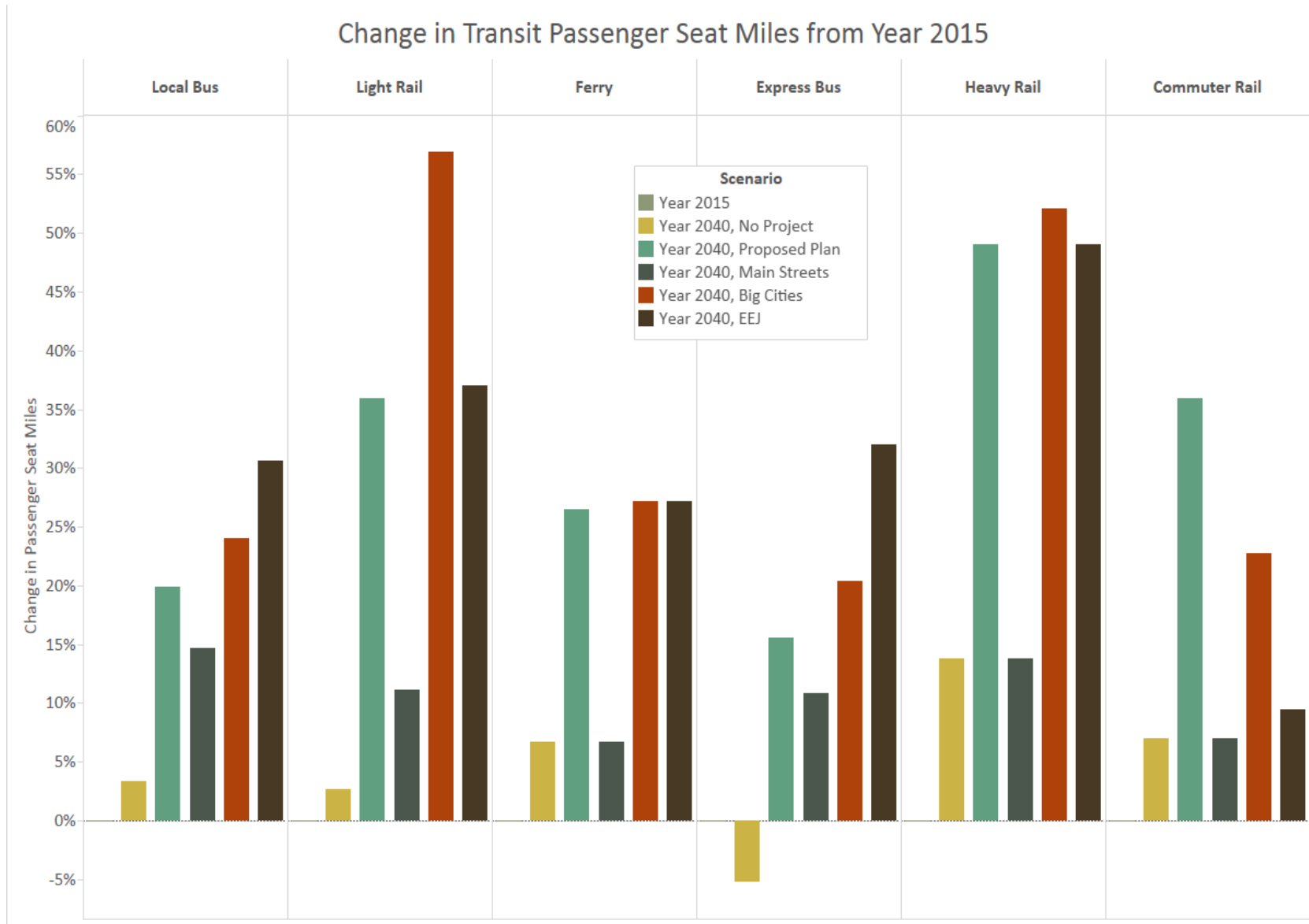


Figure 5: Year 2040 Growth in Transit Passenger Seat Miles from 2015



Figure 6: Year 2040 Growth in Transit Passenger Seat Miles from 2015 for Proposed Plan

Prices

The travel model system includes probabilistic models in which travelers select the best travel mode (e.g., automobile, transit, bicycle, etc.) for each of their daily tours (round trips) and trips. One consideration of this choice is the trade-off between saving time and saving money. For example, a traveler may have two realistic options for traveling to work: (i) driving, which would take 40 minutes (round trip) and cost \$10 for parking; or, (ii) taking transit, which would take 90 minutes (round trip) and cost \$4 in bus fare (\$2 each way). The mode choice model structure, as estimated in the early 2000s, includes coefficients that dictate how different travelers in different contexts make decisions regarding saving time versus saving money. These model coefficients value time in units consistent with year 2000 dollars, i.e. the model itself – not an exogenous input to the model – values time relative to costs in year 2000 dollars. Because re-estimating model coefficients is “expensive” (in terms of staff time and/or consultant resources), it is done infrequently, which, in effect, “locks in” the dollar year in which prices are input to the travel model. To use the model’s coefficients properly, all prices must be input in year 2000 dollars. In the remainder of this document, prices are presented both in (close to) current year dollars, to give the reader an intuitive sense as to the scale of the input prices, as well as year 2000 dollars, which are the units required by the model coefficients.

Six different types of prices are explicitly represented in the travel model: (i) bridge tolls; (ii) express lane tolls; (iii) transit fares; (iv) parking fees; (v) perceived automobile operating cost and gas taxes; and (vi) cordon tolls. A brief discussion on how the model determines each synthetic traveler’s value of time is presented next, after which the input assumptions across each of these price categories are presented.

Value of Time

The model coefficients that link the value of time with the other components of decision utilities remain constant between the baseline and forecast years, with the one exception of the coefficients on travel cost. These coefficients are a function of each synthetic individual’s value of time, a number drawn, in both the historical and forecast year simulations, from one of four log-normal distributions (see Figure 7). The means of these distributions are a function of each traveler’s household income. The value of time for children in a household is equal to two-thirds that of an adult. The means and shapes of these distributions remain constant across forecast years and scenarios.

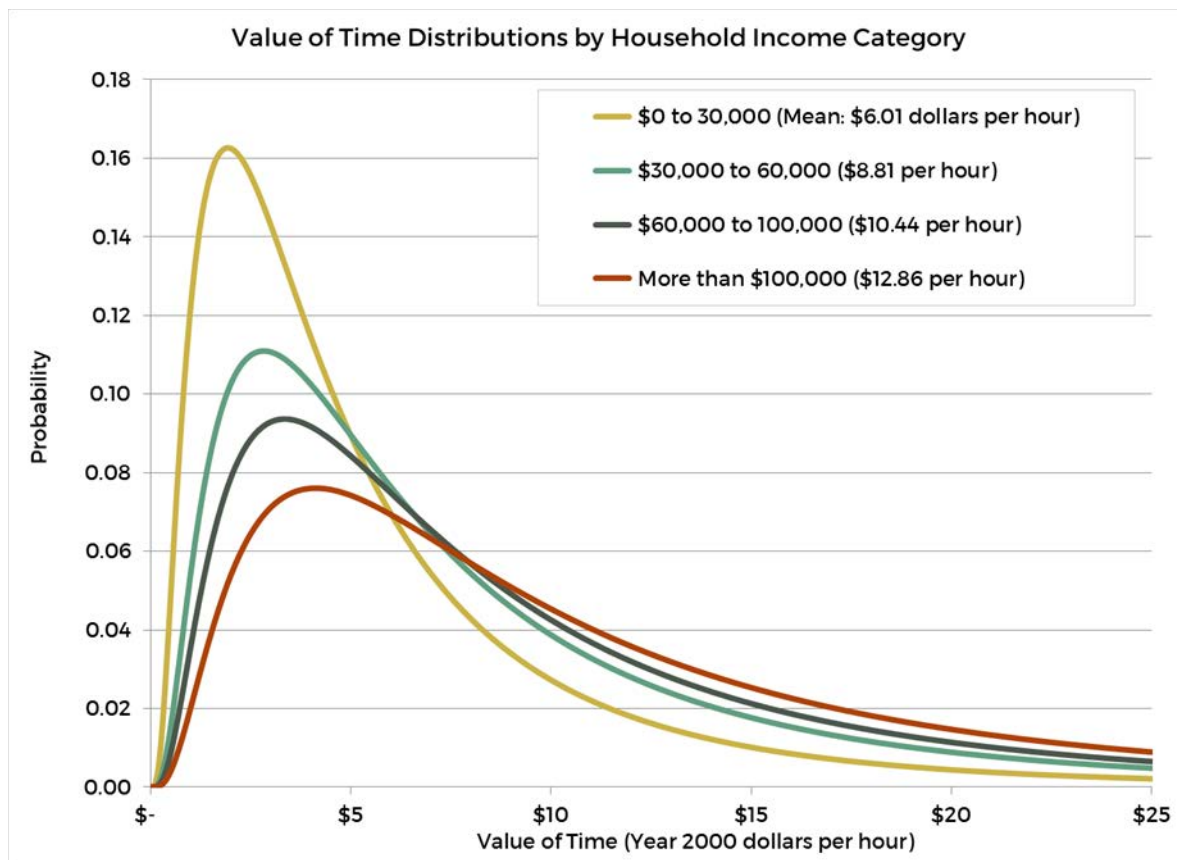


Figure 7: Value of Time Distribution by Household Income

Bridge Tolls

The bridge tolls assumed in the year 2015 baseline scenario are shown below in Table 3. Please note that Table 3 includes the price of tolls in year 2015 expressed in both year 2000 and year 2015 dollars.

The No Project alternative assumes the toll schedule in place as of July 1, 2012¹². This schedule is consistent with the year 2015 tolls presented in Table 3.

The bridge tolls assumed in the Proposed Plan, Main Streets, Big Cities and Equity, Environment, and Jobs alternatives are summarized in Table 4. Again, the price of tolls in year 2040 are expressed in year 2000 and year 2015 dollars.

¹² Complete details are available here: <http://bata.mtc.ca.gov/getting-around#/>.

Table 3: Year 2015 Common Peak Period Bridge Tolls[†]

Bridge	2-axle, single occupant toll		2-axle, carpool* toll	
	\$2000	\$2015	\$2000	\$2015
San Francisco/Oakland Bay Bridge	\$4.82	\$6.00	\$2.01	\$2.50
Antioch Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Benicia/Martinez Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Carquinez Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Dumbarton Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Richmond/San Rafael Bridge	\$4.02	\$5.00	\$2.01	\$2.50
San Mateo Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Golden Gate Bridge	\$4.02	\$5.00	\$2.41	\$3.00

† – The full toll schedule includes off-peak tolls and tolls for 3- or more axle vehicles.

* – Carpools are defined as either two-or-more- or three-or-more-occupant vehicles, depending on the bridge, and only receive a discount during the morning and evening commute periods (source: bata.mtc.ca.gov; goldengatebridge.org).

Table 4: Common Peak Period Bridge Tolls for Proposed Plan, Main Streets, Big Cities, and EEJ Alternatives[†]

Bridge	2-axle, single occupant toll		2-axle, carpool* toll	
	\$2000	\$2015	\$2000	\$2015
San Francisco/Oakland Bay Bridge	\$5.72	\$8.00	\$2.86	\$4.00
Antioch Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Benicia/Martinez Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Carquinez Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Dumbarton Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Richmond/San Rafael Bridge	\$5.01	\$7.00	\$2.50	\$3.50
San Mateo Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Golden Gate Bridge	\$4.47	\$6.25	\$3.04	\$4.25

† – The full toll schedule includes off-peak tolls and tolls for 3- or more axle vehicles.

* – Carpools are defined as either two-or-more- or three-or-more-occupant vehicles, depending on the bridge, and only receive a discount during the morning and evening commute periods (source: bata.mtc.ca.gov; goldengatebridge.org).

Express Lane Tolls

MTC's travel model explicitly represents the choice of travelers to pay a toll to use an express lane (i.e., a high-occupancy toll lane) in exchange for the time savings offered by the facility relative to the parallel free lanes. To exploit this functionality, the analyst must assign a travel price by time of day and vehicle class on each express lane link in the network. To efficiently and transparently simulate the impacts of the express lanes on behavior, we segment the express lane network in the scenarios into logical segments, with each segment receiving a time-of-day-specific per mile fee. To illustrate the detail involved in this coding, Figure 8, Figure 9, Figure 10, and Figure 11 (abstractly) present the morning commute period price for the year 2040 simulations. Please note that the simulated prices are not perfectly optimal – meaning, MTC did not analyze each corridor iteratively to find the price that maximized a pre-defined operational goal. Rather, the prices are adjusted a handful of times in an attempt to keep congestion low and utilization high. Importantly, the prices are held constant over four-hour morning (6 to 10 am) and evening (4 to 7 pm) commute periods. MTC's travel model assumes that congestion is uniform over the entire four-hour commute periods. We know this is not true, but make this assumption as a simplification. The peak one-hour within the four-hour commute period would require a higher toll than those simulated in the model.

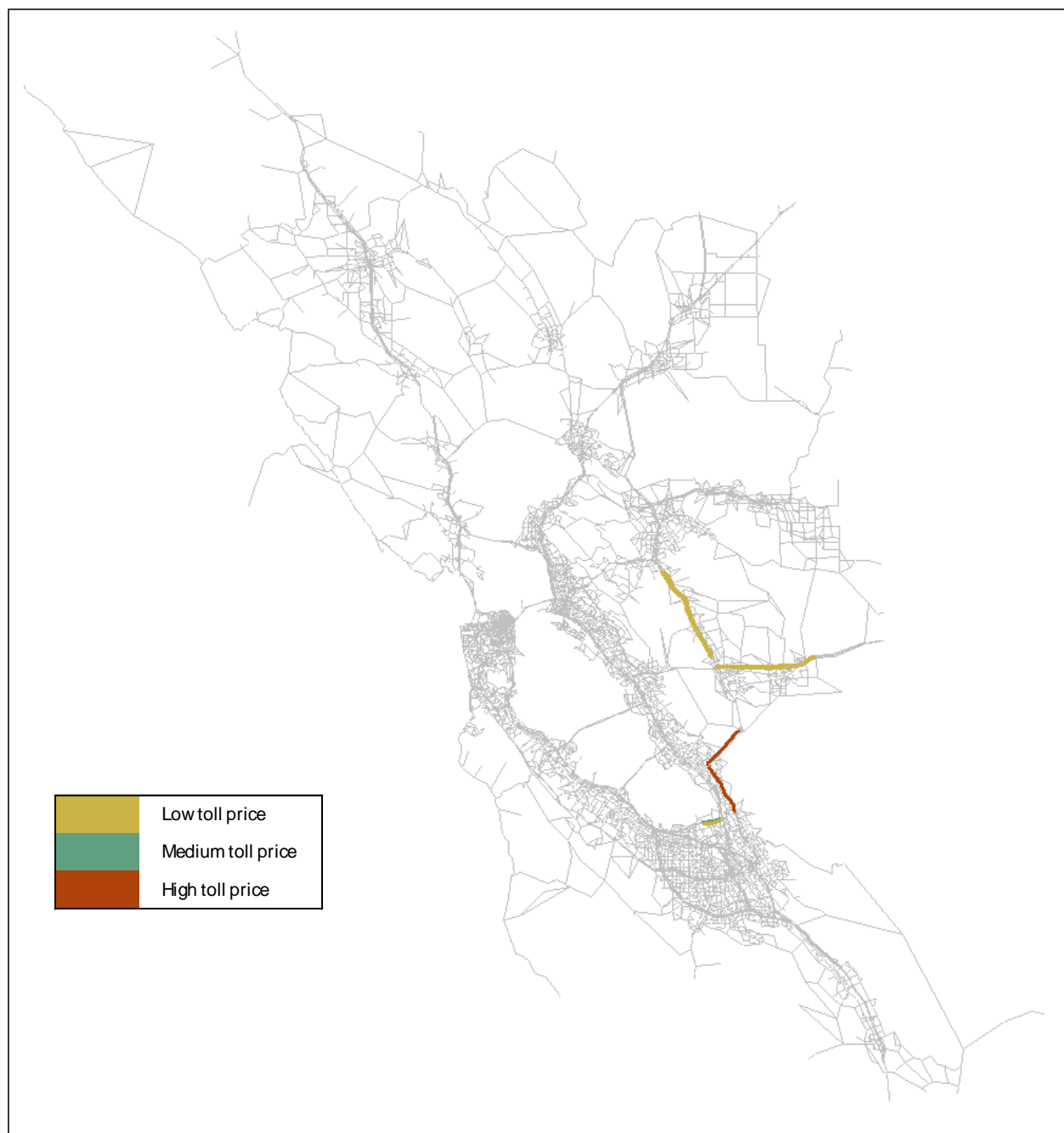


Figure 8: Morning Commute Express Lane Prices for No Project

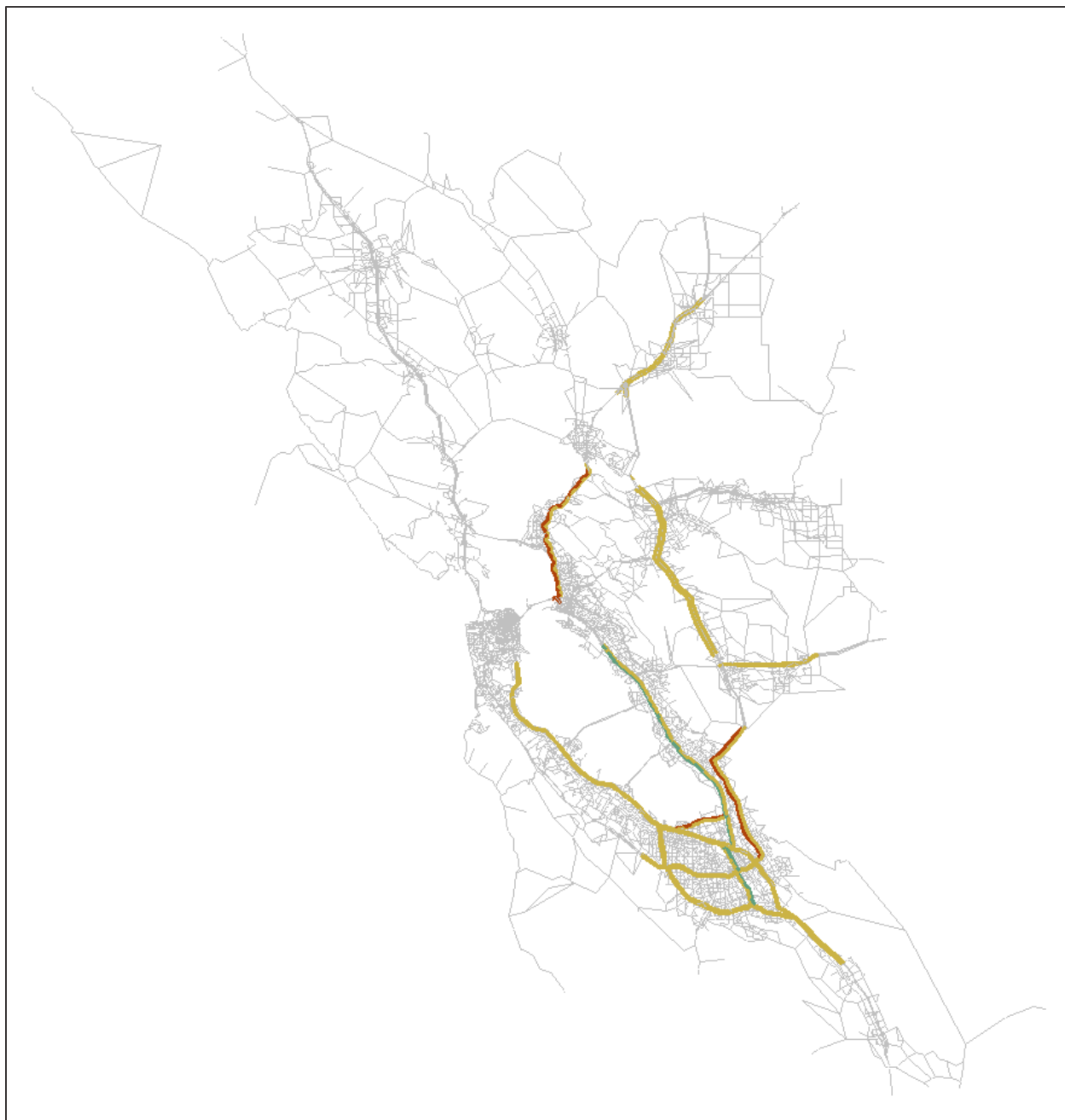


Figure 9: Morning Commute Express Lane Prices for Proposed Plan Alternative

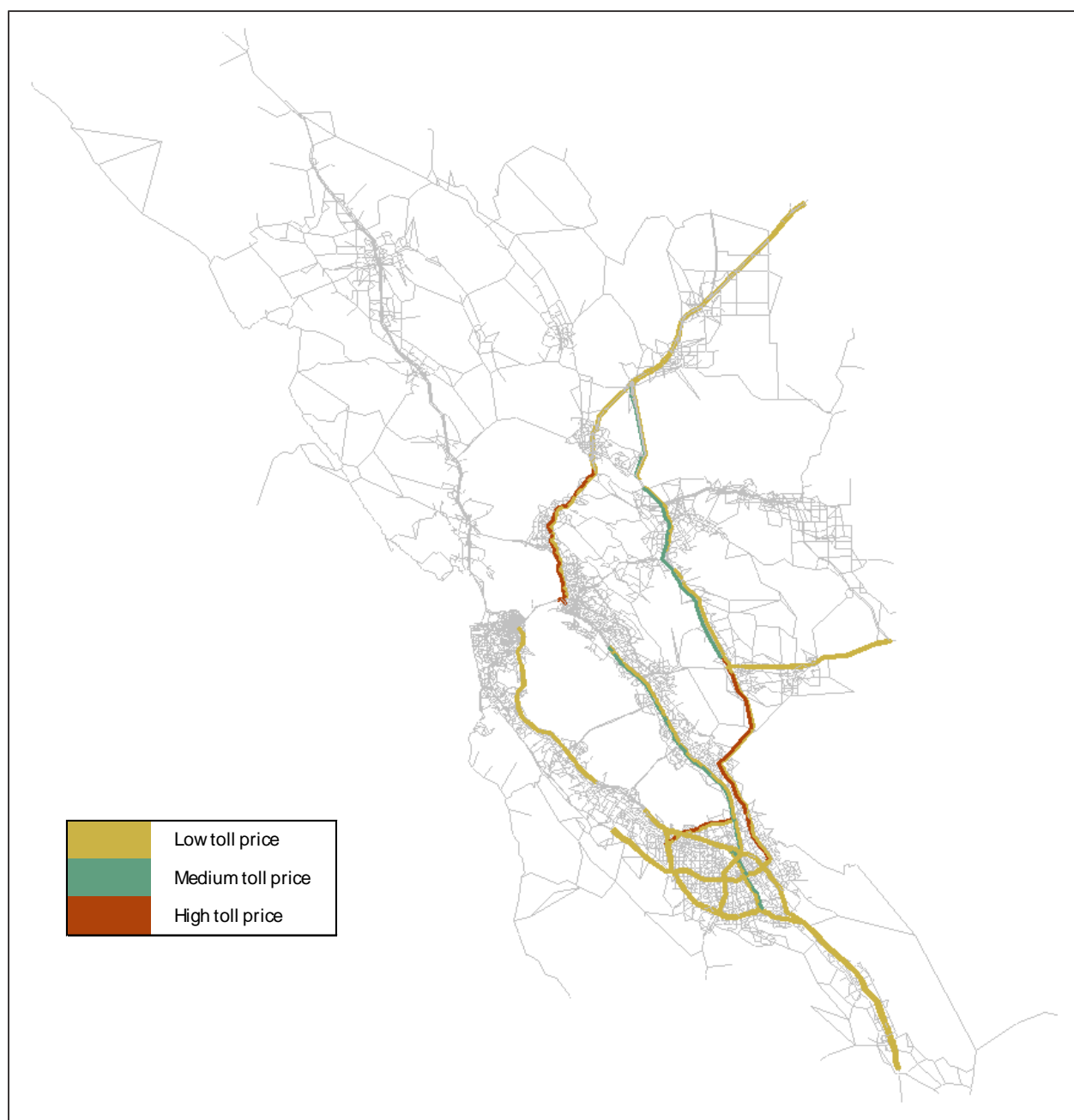


Figure 10: Morning Commute Express Lane Prices for Main Streets Alternative



Figure 11: Morning Commute Express Lane Prices for Big Cities and EEJ Alternatives

Transit Fares

The forecast year transit networks pivot off a year 2015 baseline network, i.e. the alternatives begin with 2015 conditions and add/remove service to represent the various alternatives. The transit fares in 2015 are assumed to remain constant (in real terms) in all of the forecast years. We are therefore explicitly assuming that transit fares will keep pace with inflation and that transit fares will be as expensive in the forecast year as they are today, relative to parking prices, bridge tolls, etc. As a simplification, we assume travelers pay the cash fare to ride each transit service. Table 5 includes fare prices in year 2015 expressed in both year 2000 and year 2015 dollars (i.e., the table does not include information about the cost of taking transit in the year 2000).

Table 5: Year 2015 Common Transit Fares

<i>Operator</i>	<i>Base fare</i>	
	<i>\$2000</i>	<i>\$2015</i>
San Francisco Municipal Transportation Agency (Muni)	\$1.57	\$2.25
Alameda/Contra Costa Transit (AC Transit) – Local buses	\$1.47	\$2.10
Santa Clara Valley Transportation Authority (VTA) – Local buses	\$1.40	\$2.00
Santa Clara Valley Transportation Authority (VTA) – Express buses	\$2.80	\$4.00
San Mateo County Transit (SamTrans) – Local buses	\$1.40	\$2.00
Golden Gate Transit – Marin County to San Francisco Service	\$3.67	\$5.25
County Connection (CCCTA)	\$1.40	\$2.00
Tri-Delta Transit	\$1.40	\$2.00
Livermore Amador Valley Transit Authority (Wheels, LAVTA)	\$1.40	\$2.00

Note: this is a sample, rather than an exhaustive list, of Bay Area transit providers and fares.

Parking Prices

The travel model segments space into travel analysis zones (TAZs). Simulated travelers move between TAZs and, in so doing, burden the transportation network. Parking costs are applied at the TAZ-level: travelers going to zone X in an automobile must pay the parking cost assumed for zone X.

The travel model uses hourly parking rates for daily/long-term (those going to work or school) and hourly/short-term parkers. The long-term hourly rate for daily parkers represents the advertised monthly parking rate, averaged for all lots in a given TAZ, scaled by 22 days per month, then scaled by 8

hours per day; the short-term hourly rate is the advertised hourly rate – generally higher than the rate daily parkers pay – averaged for all lots in a given TAZ. Priced parking in the Bay Area generally occurs in greater downtown San Francisco, downtown Oakland, Berkeley, downtown San Jose, and Palo Alto.

When forecasting, we assume that parking prices change over time per a simple model: parking cost increases linearly with employment density. Across the scenarios, therefore, the parking charges vary with employment density.

Perceived Automobile Operating Cost and Gas Tax

When deciding between traveling in a private automobile or on a transit vehicle (or by walking, bicycling, etc.), MTC assumes travelers consider the cost of operating and maintaining, but not owning and insuring, their automobiles. The following three inputs are used to determine the perceived automobile operating cost: average fuel price, average fleet-wide fuel economy, and non-fuel related operating and maintenance costs.

In an effort to improve consistency among regional planning efforts across the state, the Regional Targets Advisory Committee (formed per Senate Bill 375) recommended that California’s metropolitan planning organizations (MPOs) use consistent assumptions for fuel price and for the computation of automobile operating cost in long range planning. Using forecasts generated by the United States Department of Energy (DOE) in the summer of 2013 (and expressed in year 2010 dollars), the MPOs agreed¹³ to procedures to consistently estimate forecast year fuel and non-fuel-related prices. The average fleet-wide fuel economy implied by the EMFAC 2014 software is used to represent the average fleet-wide fuel economy. A summary of our assumptions are presented below in Table 6. Note that the prices in Table 6 are presented in year 2015 (i.e., current year) dollars, year 2010 dollars (the units used in the above referenced documentation), and year 2000 dollars (units of the travel model).

In all of the year 2040 scenarios save the No Project, a regional gas tax of 10 cents per gallon (\$2015 dollars) is assumed.

¹³ Please see the memorandum titled “Automobile Operating Cost for the Second Round of Sustainable Communities Strategies” dated October 13, 2014.

Table 6: Perceived Automobile Operating Cost Calculations

Measure	Analysis Year	
	2010	2040
Average fuel price (Year 2000 dollars per gallon)	\$2.51	\$4.21
Average fuel price (Year 2010 dollars per gallon)	\$3.17	\$5.26
Average fuel price (Year 2015 dollars per gallon)	\$3.61	\$6.06
EMFAC-implied fuel economy (miles per gallon)	20.10	42.36
Non-fuel-related operating cost (\$2000 per mile)	\$0.04	\$0.07
Non-fuel-related operating cost (\$2010 per mile)	\$0.05	\$0.09
Non-fuel-related operating cost (\$2015 per mile)	\$0.06	\$0.10
Perceived automobile operating cost (\$2000 per mile) †	\$0.17	\$0.17
Perceived automobile operating cost (\$2010 per mile) †	\$0.21	\$0.22
Perceived automobile operating cost (\$2015 per mile) †	\$0.24	\$0.24
† – Sum of the fuel-related operating cost (fuel price divided by fuel economy) and non-fuel-related operating cost.		

Cordon Tolls

The Proposed Plan, Big Cities and EEJ scenarios include a cordon toll in San Francisco. The scheme requires all vehicles to pay a \$6 (in 2015 dollars) fee to enter or leave the greater downtown San Francisco area during the evening commute period. The cordoned area is bounded by Laguna Street to the west, 18th Street to the south, and the San Francisco Bay to the north and east.

Other Key Assumptions

Technology currently allows large numbers of Bay Area residents to work at home. In the forecast years, MTC assumes the trend of workers working at home revealed in Census data from 1980 through 2014 will continue through 2040. Figure 12 presents the historical data, the trend, and the MTC forecasts. These telecommuting assumptions are the same across all year 2040 scenarios, including the No Project.

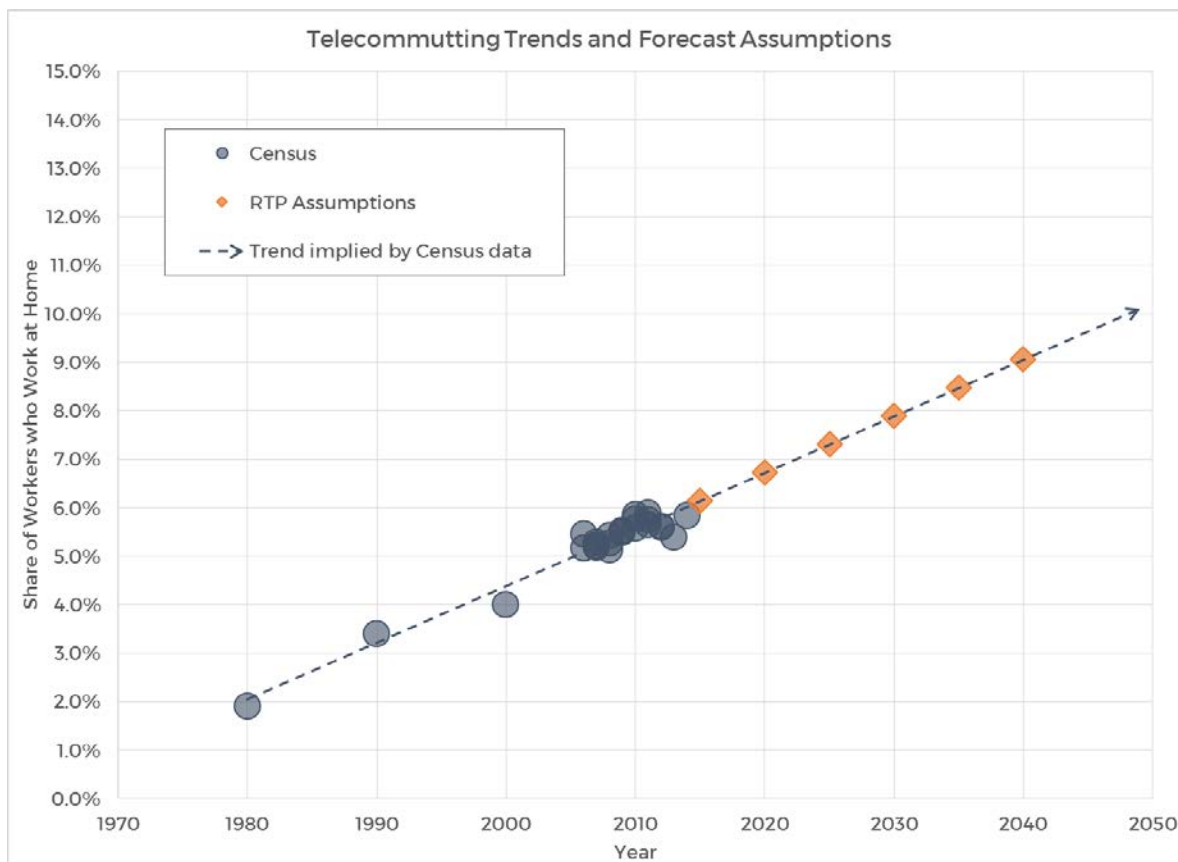


Figure 12: Work at Home Observations, Trends and Forecasts

Chapter 3: Key Results

Selected travel model results across a variety of dimensions are summarized and discussed here. The presented results are not exhaustive and are intended only to give the reader a general sense of the expected behavioral changes in response to differing input assumptions across scenarios.

Performance Targets and Equity Analysis

The purpose of this document is to describe the response of travelers to the projects and policies implemented in the scenarios described in the previous section. Information from the travel model is also used to help assess the performance of each of the scenarios per agency-adopted targets. This information is described in MTC's May 2016 Planning Committee memorandum¹⁴.

Information from the travel model also is used to analyze how different populations are impacted by the investments and policies included in each alternative. This information is described in MTC's May 2016 Planning Committee memorandum¹⁵.

¹⁴ Available here: <http://mtc.legistar.com/gateway.aspx?M=F&ID=a78d1547-7db3-4dd2-afdb-2d14fe3aec71.pdf>

¹⁵ Ibid.

Automobile Ownership

Figure 13 presents the automobile ownership rates across the four scenarios in the year 2040 simulations as well as year 2015. The differences across scenarios are not dramatic. A key finding is the general increase in zero automobile households in the Proposed Plan, Big Cities and EEJ scenarios.

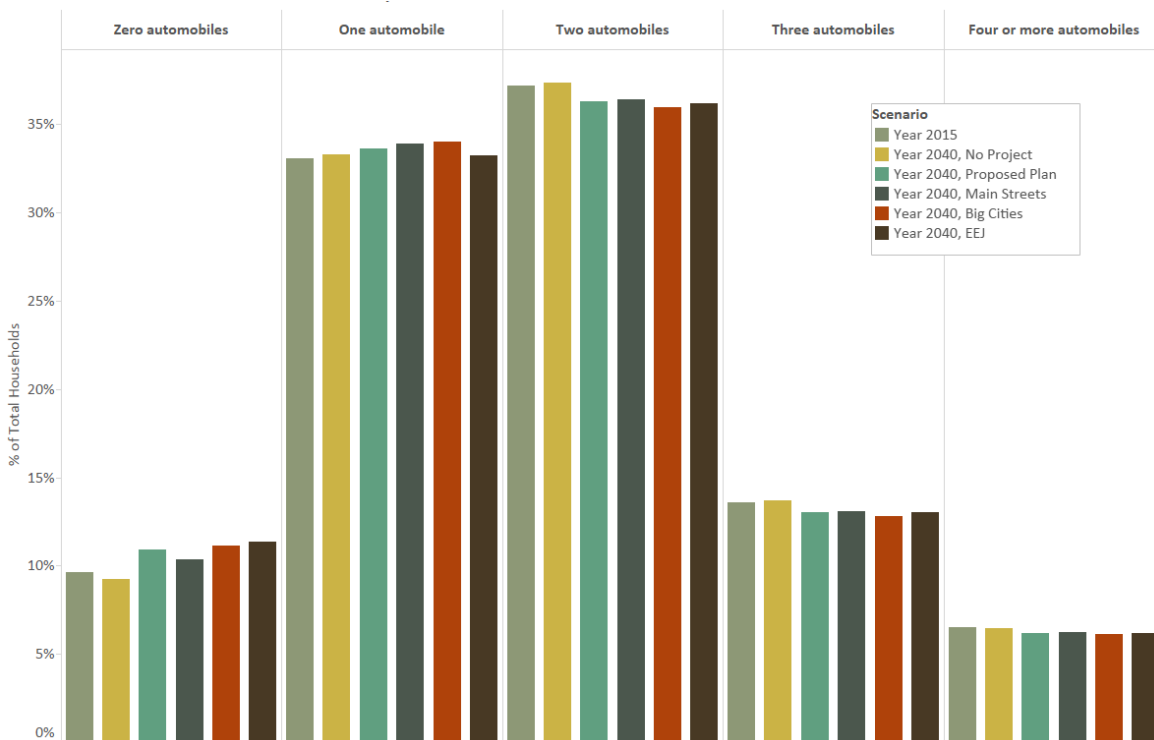


Figure 13: Year 2040 Automobile Ownership Results

Activity Location Decisions

Figure 14 and Figure 15 present the average trip distance by travel mode for all travel and for trips on work tours, respectively. The key finding here is that the Big Cities scenario brings activities slightly closer together, when compared to the 2015 baseline.

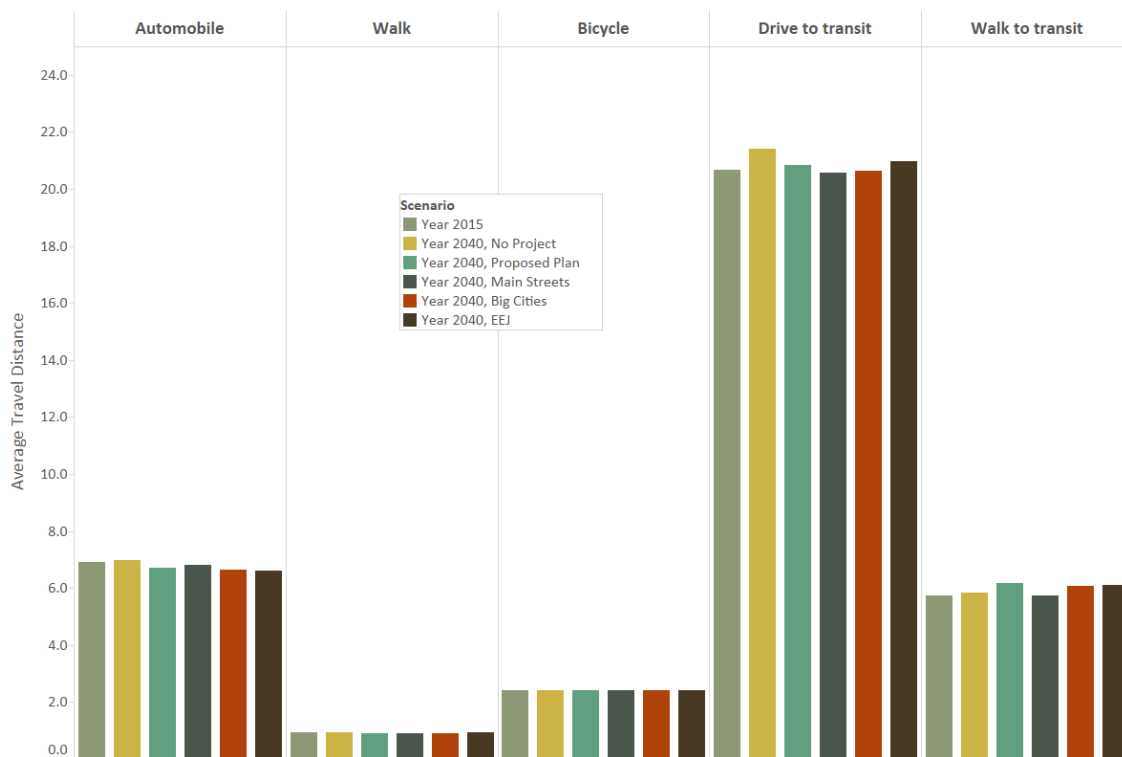


Figure 14: Year 2040 Average Trip Distance

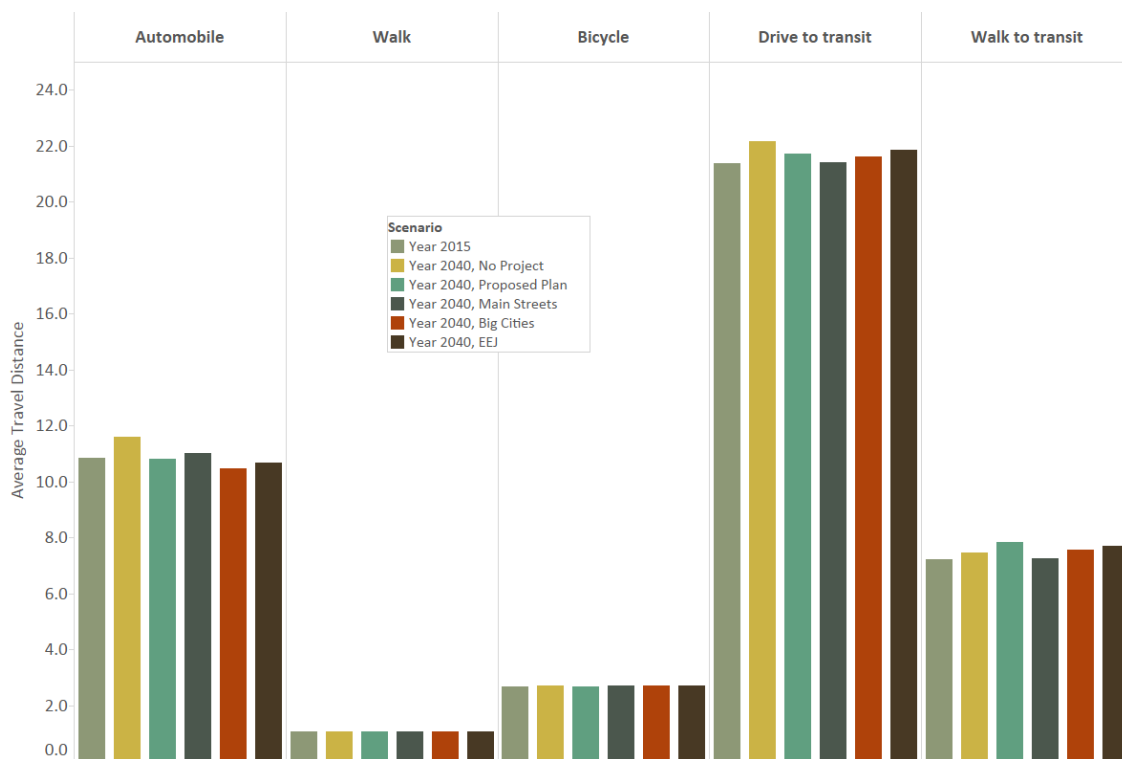


Figure 15: Year 2040 Average Trip Distance for Travel on Work Tours

Travel Mode Choice Decisions

The means by which a traveler gets from point A to point B is referred to as the travel mode. Within MTC's representation of travel behavior, five automobile-based modal options are considered, specifically:

- traveling alone in a private automobile and opting not to pay to use an express lane ("single occupant, no HOT"), an option only available to those in households who own at least one automobile;
- traveling alone in a private automobile and opting to pay to use an express lane ("single occupant, pay to use HOT"), an option only available to those who both own a car and whose journey would benefit from using the express lane facility (e.g., this option is not available to those driving through a residential neighborhood to drop a child at school);
- traveling with one passenger in a private automobile and opting not to pay to use an express lane ("two occupants, no HOT") (these travelers can use carpool lanes for which they are eligible), an option available to all households;
- traveling with one passenger in a private automobile and opting to pay to use an express lane ("two occupants, pay to use HOT"), an option available to all households provided they would benefit from using an express lane (if the express lane facility which benefits travelers allows two-occupant vehicles to travel for free, than these travelers are categorized as "two occupants, no HOT"); and,
- traveling with two or more passengers in a private automobile ("three-or-more occupants") – these travelers are allowed to travel for free on express lane facilities across all the scenarios (as well as carpool facilities).

The travel model explicitly considers numerous non-automobile options which are collapsed in these summaries into the following four options: transit, getting to and from by foot ("walk to transit"); transit, getting to or from in an automobile ("drive to transit"); walk; and, bicycle.

Figure 16 and Figure 17 present the share of trips made by various travel modes. Figure 16 shows shares of travel in automobiles by occupancy category as well as by willingness to pay to use an express lane. Overall, mode shares shift slightly towards transit in the four project scenarios compared with a slight shift towards auto travel in the No Project scenario. Figure 17 presents companion results for non-automobile travel modes, including public transit, walking, and bicycling. Here, we see a slight increase in walk-to-transit in the Big Cities and EEJ scenarios, which reflects the scenarios' increase in transit service and increasingly efficient land development patterns.

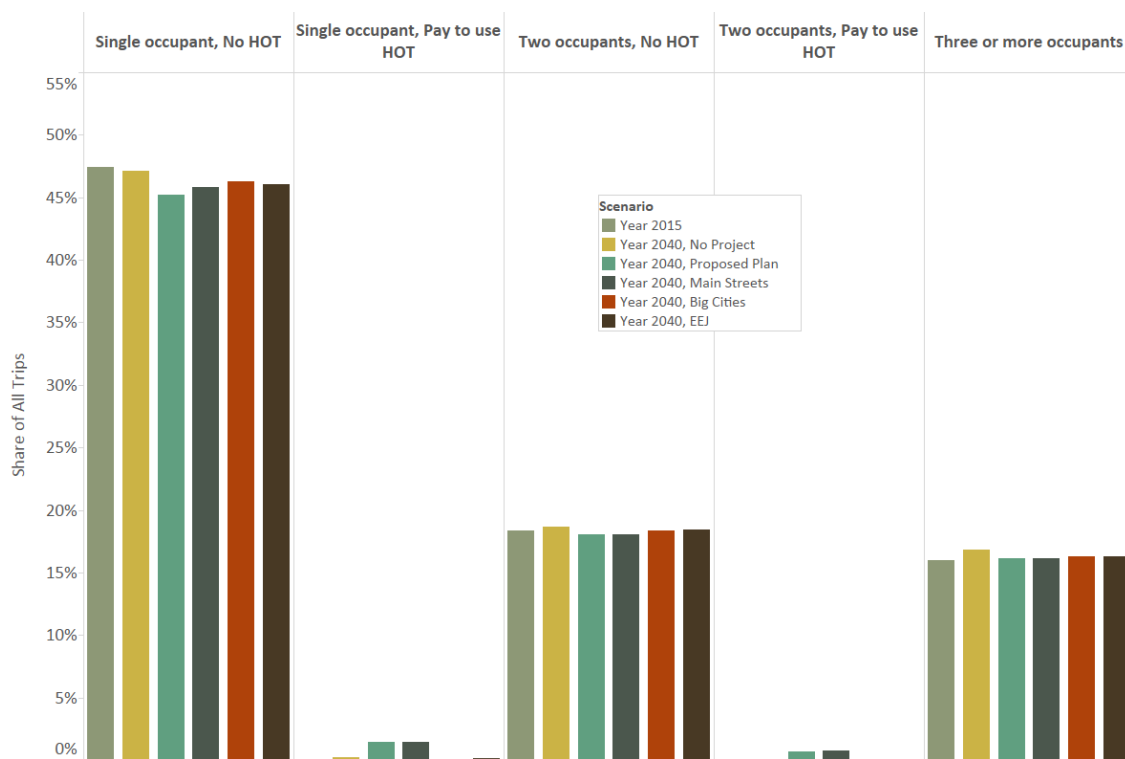


Figure 16: Year 2040 Automobile Mode Shares for All Travel

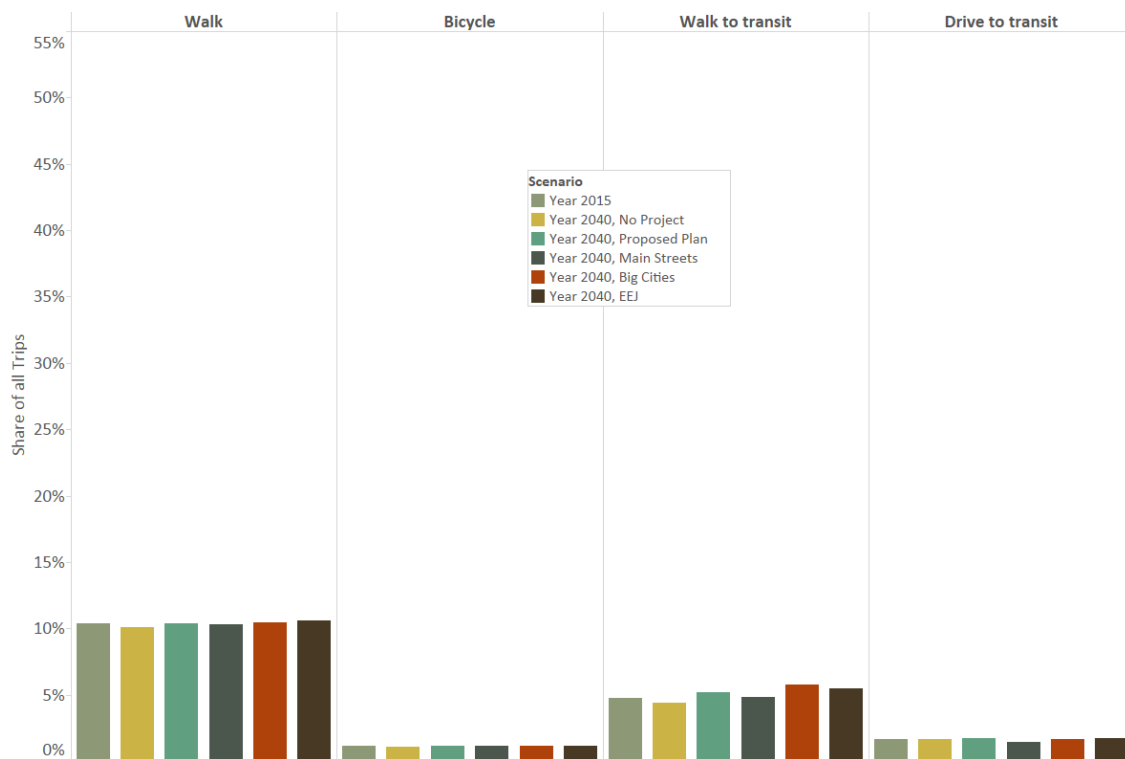


Figure 17: Year 2040 Non-Automobile Mode Shares for All Travel

Aggregate Transit Demand Estimates

Bay Area residents choosing to travel by transit are explicitly assigned to a specific transit route. As a means of organizing the modeling results, MTC groups transit lines into the following technology-specific categories:

- **Local bus:** standard, fixed-route bus service, of the kind a traveler may take to and from a neighborhood grocery store or to work, as well as so-called “bus rapid transit” service.
- **Express bus:** longer distance service typically provided in over-the-road coaches. Golden Gate Transit, for example, provides express bus service between Marin County and Downtown San Francisco.
- **Light rail:** represented in the Bay Area by San Francisco’s Muni Metro and streetcar services (F-Market and E-Caltrain), as well as Santa Clara Valley Transportation Authority’s light rail service.
- **Heavy rail:** another name for the Bay Area Rapid Transit (BART) service.
- **Commuter rail:** longer distance rail service typically operating in dedicated right-of-way, including Caltrain, Sonoma-Marín Area Rail Transit (SMART), Amtrak’s Capitol Corridor, and Altamont Commuter Express.

Figure 18 presents the estimates of transit boardings by these categories on the typical weekday simulated by the travel model. Ridership increases from about 2.3 million daily boardings in 2015 to over 3 million daily boardings in all project scenarios, and over 3.4 million boardings in the 2040 Big Cities scenario.

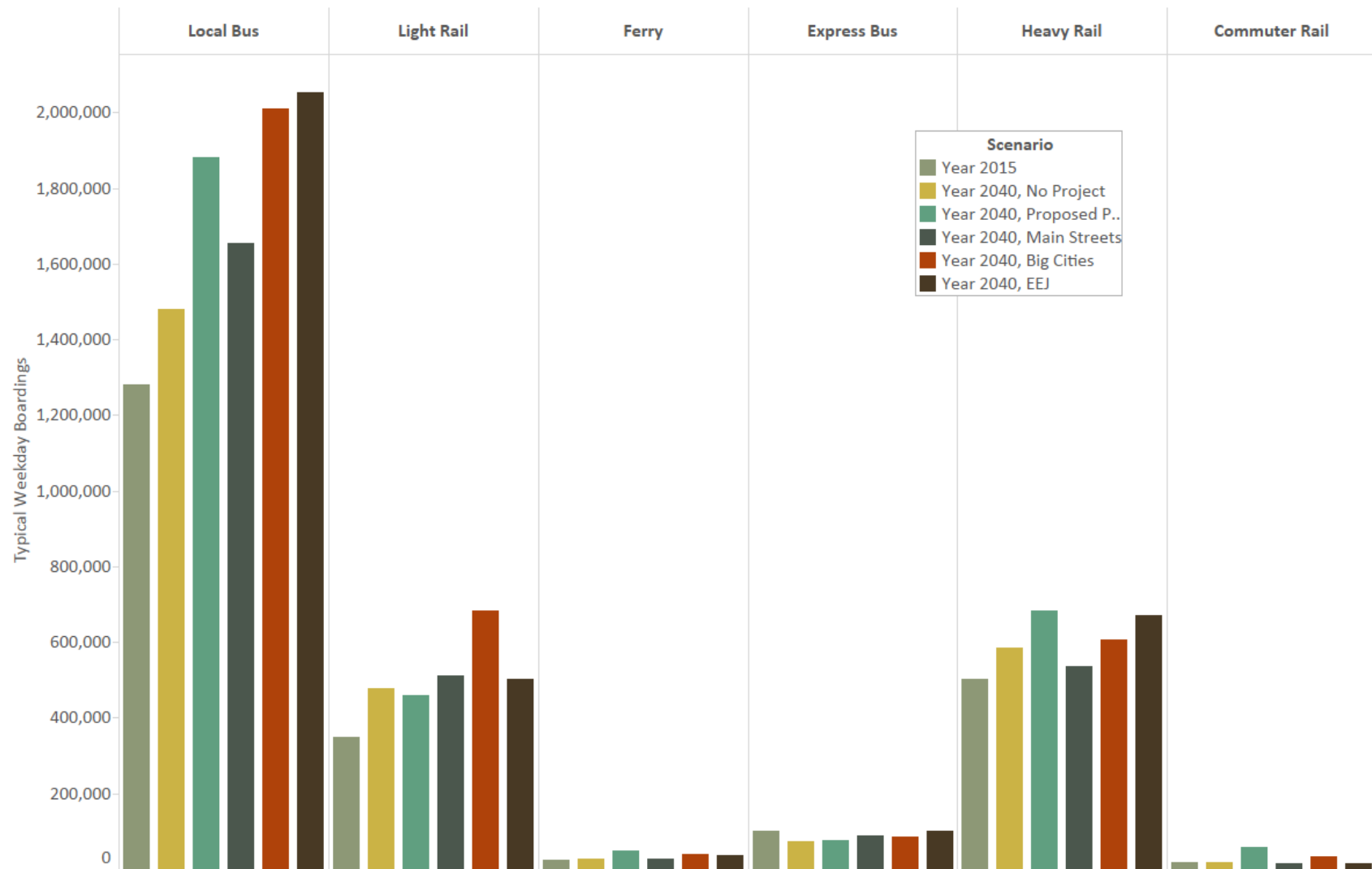


Figure 18: Year 2040 Typical Weekday Transit Boardings by Technology

Roadway Utilization and Congestion Estimates

Trips made by automobile are first aggregated into matrices identifying each trip's origin and destination, and then "assigned" to a representation of the Bay Area's roadway network. The assignment process iteratively determines the shortest path between each origin-destination pair, shifting some number of trips to each iteration's shortest path, until the network reaches a certain level of equilibrium – defined as a state in which travelers cannot change to a lower "cost" route (where cost includes monetary and non-monetary (time) expenditures). Several measures of interest are generated by the assignment process, including vehicle miles traveled, delay, and average travel speed.

Please note that MTC maintains three separate estimates of the quantity of vehicle miles traveled (VMT), as follows:

- (1) the quantity assigned directly to the highway network;
- (2) the quantity (1) plus so-called "intra-zonal" VMT (i.e., travel that occurs at a geographic scale finer than the travel model's network representation), which is computed off-line; and,
- (3) the quantity (2) adjusted to match the VMT the California Air Resources Board (CARB) believes takes place in the Bay Area (a number slightly higher than MTC's estimate).

In this document, the VMT identified as (1) in the above list is presented.

Figure 19 first segments VMT into five time periods and then scales the VMT by the number of hours in each time period. The result is the intensity of VMT by time of day as well as the increase in VMT from 2015 to 2040. Overall, VMT varies only slightly across the year 2040 alternatives, with the Big Cities and EEJ scenarios having the lowest VMT.

Figure 20 presents the average freeway speed across scenarios. Looking at the speeds during the morning and evening commute periods, we see a reduction in speed (or, said another way, an increase in congestion) from the year 2015 scenario to the year 2040 No Project scenario. Each of the alternatives improves freeway speeds.

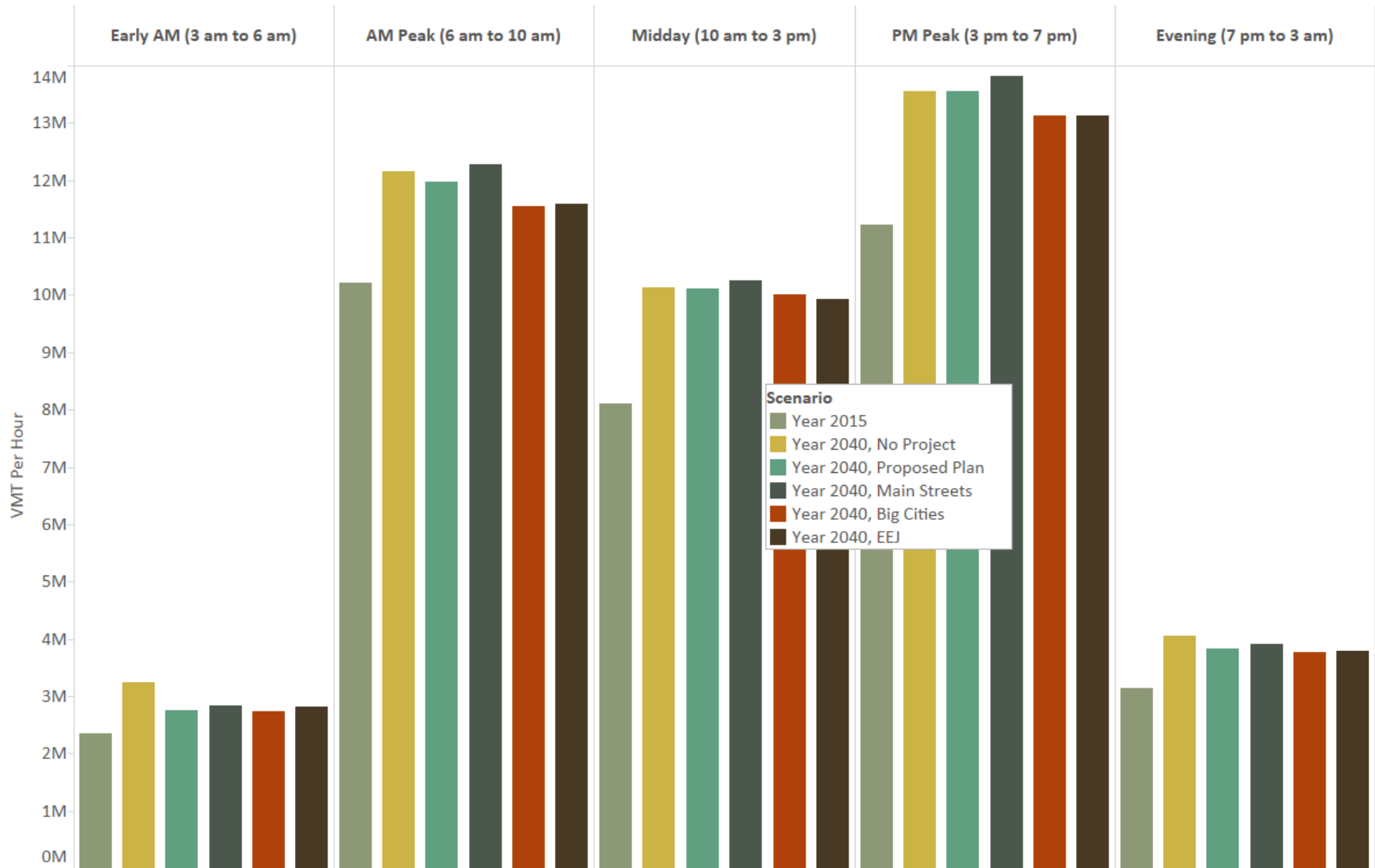


Figure 19: Year 2040 Vehicle Miles Traveled per Hour by Time Period

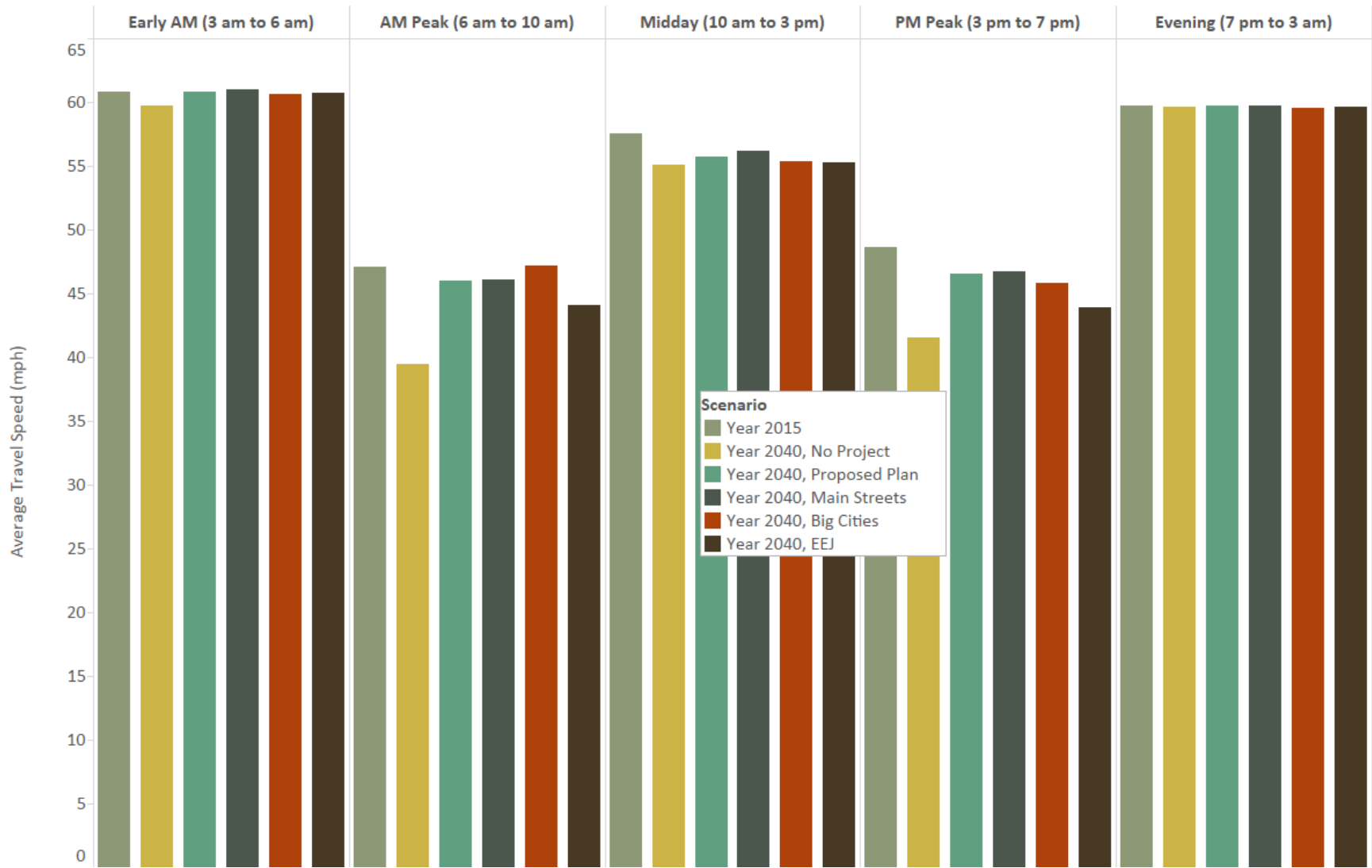


Figure 20: Year 2040 Average Vehicle Speeds on Freeways

Appendix D
List of Transportation Control Measures (TCM) Projects

Appendix D | 1

[illegible]

TCM A: Regional Express Bus
Regional Express Bus Program
Vehicle Deployment Throughout the Bay Area¹
February 18, 2009

Transit Operator	Vehicle Type	Serial Registration ²	Funds Obligated	Operating Agency	Route	Weekday Service Hours	Weekend Service Hours
Fairfield-Suisun	Over-The-Road	1M8PDMPA13P055949	11/14/2002	Fairfield-Suisun	40 Vacaville/Fairfield to Pleasant Hill/Walnut Creek BART	5:00 AM - 9:57 AM & 3:01 PM - 8:31 PM	
	Over-The-Road	1M8PDMPA83P055950	11/14/2002	Fairfield-Suisun	40 Vacaville/Fairfield to Pleasant Hill/Walnut Creek BART	5:00 AM - 9:57 AM & 3:01 PM - 8:31 PM	
	Suburban	15GCD201731111920	1/27/2003	Fairfield-Suisun - Transferred from SamTrans ⁴	30 Fairfield to Davis/Sacramento	6:08 AM - 7:05 PM	Sat Only 8:03 AM - 4:43 PM
	Suburban	15GCD201931111921	1/27/2003	Fairfield-Suisun - Transferred from SamTrans ⁴	30 Fairfield to Davis/Sacramento	6:08 AM - 7:05 PM	Sat Only 8:03 AM - 4:43 PM
Golden Gate	Over-The-Road	1M8PDMPA53P055680	11/8/2002	Golden Gate	71 Novato/San Rafael/Marin City/San Francisco	6:35 AM - 8:27 PM	Sat Only 6:59 AM - 7:28 PM
	Over-The-Road	1M8PDMPA73P055681	11/8/2002	Golden Gate	71 Novato/San Rafael/Marin City/San Francisco	6:35 AM - 8:27 PM	Sat Only 6:59 AM - 7:28 PM
	Over-The-Road	1M8PDMPA93P055682	11/8/2002	Golden Gate	72 Santa Rosa/Rohnert Park/Cotati/San Francisco	3:54 AM - 8:59 AM & 2:12 PM - 8:05 PM	
	Over-The-Road	1M8PDMPA03P055683	11/8/2002	Golden Gate	72 Santa Rosa/Rohnert Park/Cotati/San Francisco	3:54 AM - 8:59 AM & 2:12 PM - 8:05 PM	
	Over-The-Road	1M8PDMPA23P055684	11/8/2002	Golden Gate	75 Santa Rosa/Rohnert Park/Cotati - Petaluma /Marin Civic Center/San Rafael	5:02 AM - 8:35 AM & 2:59 PM - 7:18 PM	
	Over-The-Road	1M8PDMPA43P055685	11/8/2002	Golden Gate	75 Santa Rosa/Rohnert Park/Cotati - Petaluma /Marin Civic Center/San Rafael	5:02 AM - 8:35 AM & 2:59 PM - 7:18 PM	
LAVTA	Suburban	15GDD271521110872	3/25/2002	LAVTA	70X Pleasanton - Walnut Creek Express	5:09 AM - 9:16 AM & 3:19 PM - 7:42 PM	
	Suburban	15GDD271721110873	3/25/2002	LAVTA	70X Pleasanton - Walnut Creek Express	5:09 AM - 9:16 AM & 3:19 PM - 7:42 PM	
	Suburban	15GDD271921110874	3/25/2002	LAVTA	70X Pleasanton - Walnut Creek Express	5:09 AM - 9:16 AM & 3:19 PM - 7:42 PM	
	Suburban	15GDD271021110875	3/25/2002	LAVTA	70X Pleasanton - Walnut Creek Express	5:09 AM - 9:16 AM & 3:19 PM - 7:42 PM	
NCTPA	Suburban	15GCD201631111911	1/27/2003	SamTrans Transferring to NCTPA on 2/28/09	June 2009 - Calistoga/Yountville/Napa/American Canyon/Baylink Ferry Terminal	5:00 AM-6:30 PM; Peak Only	
	Suburban	15GCD201831111912	1/27/2003	SamTrans Transferring to NCTPA on 2/28/09	June 2009 - Calistoga/Yountville/Napa/American Canyon/Baylink Ferry Terminal	5:00 AM-6:30 PM; Peak Only	
Tri-Delta	Over-The-Road	1M8PDMPA63P055686	11/8/2002	Tri-Delta	300 Express Commuter Service Brentwood/Pittsburg BART	4:15 AM - 9:07 PM	
	Over-The-Road	1M8PDMPA63P055687	11/8/2002	Tri-Delta	300 Express Commuter Service Brentwood/Pittsburg BART	4:15 AM - 9:07 PM	
	Over-The-Road	1M8PDMPA63P055688	11/8/2002	Tri-Delta	300 Express Commuter Service Brentwood/Pittsburg BART	4:15 AM - 9:07 PM	
	Over-The-Road	1M8PDMPA63P055689	11/8/2002	Tri-Delta	300 Express Commuter Service Brentwood/Pittsburg BART	4:15 AM - 9:07 PM	
Vallejo	Over-The-Road	1M8PDMPA13P055627	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA33P055628	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA53P055629	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA13P055630	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA33P055631	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA53P055632	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA73P055633	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA93P055634	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA03P055635	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA23P055636	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA43P055637	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA83P055639	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Suburban	15GCD211121111974	3/7/2002	WestCat	30Z Hercules Transit Center/Martinez/BART	5:59 AM - 8:03 PM	
	Suburban	15GCD211521111975	3/7/2002	WestCat	30Z Hercules Transit Center/Martinez/BART	5:59 AM - 8:03 PM	
WestCat	Suburban	15GCD211121111976	3/7/2002	WestCat	30Z Hercules Transit Center/Martinez/BART	5:59 AM - 8:03 PM	
	Suburban	15GCD201X31111913	1/27/2003	WestCat - Transferred from SamTrans ⁴	LYNX Rodeo/Hercules/San Francisco Transbay Terminal	5:00 AM - 9:45 AM & 3:30 PM - 8:33 PM	
	Suburban	15GCD201131111914	1/27/2003	WestCat - Transferred from SamTrans ⁴	LYNX Rodeo/Hercules/San Francisco Transbay Terminal	5:00 AM - 9:45 AM & 3:30 PM - 8:33 PM	
	Suburban	15GCD201331111915	1/27/2003	SamTrans ⁴	LYNX Rodeo/Hercules/San Francisco Transbay Terminal	5:00 AM - 9:45 AM & 3:30 PM - 8:33 PM	

1. Please note: MTC does not currently have information compiled on cumulative operating hours for all of the TCRP buses. For projects where the buses have been assigned to routes receiving operating funds that are tied to required performance measures, MTC has data compiled on the annual performance of those routes.
2. Each vehicle may be deployed on any of the approved routes listed for each operator.
3. Vehicles are deployed as needed for various routes on weekdays and weekends. All transbay service does not operate on weekends, but all vehicles may be deployed on weekend transbay service.
4. SamTrans REX service was discontinued in 2007 due to low ridership; all 11 TCRP vehicles purchased for the REX service were reallocated to AC Transit, Fairfield-Suisun Transit, WestCat, and NCTPA.
5. Route 90 service was transferred from Vallejo to Fairfield-Suisun Transit in 2006.

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

SPONSOR		PROJECT NAME	AMOUNT
FY 2003-04	Alameda County	ADA Compliant Accessible Ramps	\$ 105,767
FY 2003-04	Alameda County	Tesla Road Bicycle Lanes	\$ 51,000
FY 2003-04	City of Albany	Manor Way Pedestrian Improvements	\$ 22,706
FY 2003-04	City of Berkeley	Bicycle Safety Education	\$ 30,000
FY 2003-04	City of Berkeley	Prepare plan for implementing future	\$ 31,033
FY 2003-04	City of Fremont	Bike Detectors, Bike Logo on Pavement,	\$ 128,989
FY 2003-04	City of Hayward	Installation of Wheelchair Ramps	\$ 84,198
FY 2003-04	City of Livermore	Complete Portion of S. Livermore Valley	\$ 97,301
FY 2003-04	City of Newark	Silliman Activity Center Pedestrian/	\$ 59,158
FY 2003-04	City of Oakland	Bancroft Ave. Bike Lanes (96th - Durant)	\$ 96,000
FY 2003-04	City of Oakland	Citywide Ped. Curb Ramp Program -	\$ 295,266
FY 2003-04	City of Oakland	Lake Merritt 12th St. Dam Ped/Bike	\$ 116,000
FY 2003-04	City of Oakland	Pedestrian Bulb Outs-Highland &	\$ 100,000
FY 2003-04	City of Oakland	Walk/Bike Calif. Conf. - Alameda Co.	\$ 30,000
FY 2003-04	City of Oakland	West City of Oakland Bay Trail	\$ 289,000
FY 2003-04	City of Piedmont	Sidewalk Extension and Curb Cuts	\$ 6,506
FY 2003-04	City of Pleasanton	ADA Compliant Wheelchair Accessible	\$ 38,627
FY 2003-04	City of San Leandro	Install New Curb Cuts & Upgrade	\$ 40,000
FY 2003-04	City of Brentwood	Installation of Wheelchair Ramps	\$ 30,000
FY 2003-04	City of Concord	Iron Horse Trail Rte 242 Undercrossing	\$ 36,000
FY 2003-04	City of Concord	Wren Avenue Ped. Improvements	\$ 45,000
FY 2003-04	Contra Costa County	Bicycle/Pedestrian Safety Education	\$ 21,500
FY 2003-04	Contra Costa County	Olympic Blvd. Ped. Path Phase II	\$ 115,000
FY 2003-04	City of Lafayette	Hough Avenue Sidewalk	\$ 37,000
FY 2003-04	City of Moraga	Rheem Blvd./Moraga Rd. Intersection	\$ 66,100
FY 2003-04	City of Pittsburg	Polaris Drive Bike Facility	\$ 77,500
FY 2003-04	City of San Ramon	Dougherty Road Sidewalk	\$ 25,000
FY 2003-04	Marin County	Bicycle/Pedestrian Bridge	\$ 140,000
FY 2003-04	Mill Valley	Signage Project	\$ 7,200
FY 2003-04	City of Novato	Commuter Bikeway Connection	\$ 402,286
FY 2003-04	City of Novato	Hill Road Path Connection	\$ 60,000
FY 2003-04	City of San Anselmo	Purchase & Install Bicycle Racks	\$ 15,000
FY 2003-04	Napa County	Yountville Cross Rd. Bike Lane	\$ 150,000
FY 2003-04	Yountville	Yountville Cross Rd. Bike Lane	\$ 47,000
FY 2003-04	City of Campbell	Westmont Ave. Improvement Project	\$ 43,192
FY 2003-04	City of Los Altos	Fremont Ave. Sidewalk Phase III	\$ 15,781
FY 2003-04	Los Altos Hills	Paseo Del Roble Pedestrian Bridge	\$ 9,554
FY 2003-04	City of Milpitas	Calaveras Blvd. Sidewalk & Bike Path	\$ 36,895
FY 2003-04	Mountain View	Access Ramp Installation	\$ 24,905
FY 2003-04	Mountain View	Audible Ped. Signal Installations	\$ 16,500
FY 2003-04	Mountain View	Bicycle Path Construction	\$ 13,113
FY 2003-04	Palo Alto	Baffle Replacements: Calif. Ave.	\$ 15,993
FY 2003-04	Palo Alto	Homer Ave. Ped. Bicycle Undercrossing	\$ 293,000
FY 2003-04	Palo Alto	Ped. Walkway Lighted Warning System	\$ 20,000
FY 2003-04	City of San Jose	ADA Wheel Chair Curb & Ramp Install.	\$ 100,000
FY 2003-04	City of San Jose	Certified TDA Fiscal Audit	\$ 9,000
FY 2003-04	City of San Jose	Murdock Park Bridge over San Tomas	\$ 100,000
FY 2003-04	City of San Jose	Ped & Bike Facility Signing & Striping	\$ 100,000
FY 2003-04	City of San Jose	Ped & Bike Safety Education	\$ 50,000
FY 2003-04	City of San Jose	Pedro Street Sidewalk Improvement	\$ 124,434
FY 2003-04	City of San Jose	Street Sidewalk Improvement	\$ 147,435
FY 2003-04	City of Santa Clara	Certified TDA Fiscal Audit	\$ 5,000
FY 2003-04	City of Santa Clara	Install Bike & Ped. Improvements	\$ 61,815
FY 2003-04	City of Santa Clara	Update City's Existing Bike Plan &	\$ 3,900
FY 2003-04	Santa Clara County	Bike Detector @ various Intersections	\$ 58,118

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2003-04	Santa Clara County	Path along McKee Rd. bet Staples Ave.	\$ 50,000
FY 2003-04	City of Saratoga	Saratoga Avenue Walkway Project	\$ 17,254
FY 2003-04	City of Sunnyvale	Calabazas Creek Trail	\$ 50,152
FY 2003-04	San Francisco City and County	Bicycle Projects	\$ 404,000
FY 2003-04	San Francisco City and County	Pedestrian Projects	\$ 300,000
FY 2003-04	City of Half Moon Bay	Construct Rt. 92 Bicycle Lanes and	\$ 485,146
FY 2003-04	City of Pacifica	Milagra Drive Overcrossing at State	\$ 240,000
FY 2003-04	City of San Bruno	Crystal Springs Rd. Traffic Signal	\$ 20,000
FY 2003-04	City of San Mateo	Bikeway Detection Units	\$ 30,000
FY 2003-04	City of San Mateo	Regional Bayfront Trail Upgrade	\$ 150,000
FY 2003-04	South San Francisco	Construct San Francisco Bay Trail	\$ 100,000
FY 2003-04	South San Francisco	Orange Avenue Intersection Improve.	\$ 100,000
FY 2003-04	City of Benicia	Park Road Bike/Ped Improvements	\$ 160,000
FY 2003-04	Solano County	Dixon to Davis Bike Route	\$ 125,000
FY 2003-04	City of Suisun City	Central County Bikeway	\$ 25,000
FY 2003-04	City of Healdsburg	Foss Creek Northwestern Pacific Multi-	\$ 99,695
FY 2003-04	City of Petaluma	Washington Creek Multi-Use Path	\$ 175,000
FY 2003-04	City of Santa Rosa	Sonoma Ave. Bike Lanes Phase II	\$ 50,000
FY 2003-04	Sonoma County	Old Redwood Highway Class II Bike Lanes	\$ 350,000
FY 2004-05	Alameda County	Conduct a planning study & develop	\$ 38,000
FY 2004-05	Alameda County	Conduct bicycle plan study	\$ 59,650
FY 2004-05	Alameda County	Sign & stripe 0.6 miles of 6-foot wide	\$ 100,000
FY 2004-05	City of Berkeley	Contract with a qualified consultant	\$ 34,281
FY 2004-05	City of Berkeley	Educate children about bicycle safety	\$ 30,000
FY 2004-05	City of Fremont	Stripe bike lanes, modify bike lane	\$ 121,168
FY 2004-05	City of Hayward	Design & construct ADA wheel chair	\$ 88,925
FY 2004-05	City of Newark	Design & construct ADA wheel chair	\$ 27,009
FY 2004-05	City of Piedmont	Design & construct ADA wheel chair	\$ 6,852
FY 2004-05	City of Pleasanton	Preserve Golf Course	\$ 75,000
FY 2004-05	City of San Leandro	Install curb ramps, accessible ped.	\$ 41,438
FY 2004-05	City of San Leandro	Install curb ramps, accessible ped.	\$ 50,024
FY 2004-05	City of San Leandro	Install curb ramps, accessible ped.	\$ 8,000
FY 2004-05	City of Antioch	Improve curbs, ramps, crosswalk, signs	\$ 80,000
FY 2004-05	City of Brentwood	Install lighted crosswalk and flashing lights	\$ 31,500
FY 2004-05	City of Concord	Construct 500 ft of 4-to 6-foot wide bike/ped path	\$ 45,000
FY 2004-05	City of El Cerrito	Conduct a planning study for bicycle/ped needs	\$ 26,500
FY 2004-05	City of Lafayette	Construct 125 feet of 5-foot wide	\$ 10,000
FY 2004-05	City of Martinez	Replace the two existing unsafe bridges	\$ 90,000
FY 2004-05	City of Orinda	Develop a Lamorinda Trail Map & install	\$ 28,500
FY 2004-05	City of Pittsburg	Construct Class II and Class III	\$ 51,000
FY 2004-05	City of Pittsburg	Sign & stripe 3600 feet of 13-foot wide	\$ 52,000
FY 2004-05	City of San Pablo	Install bike/ped friendly lighting	\$ 45,100
FY 2004-05	City of Walnut Creek	Construct 2040 feet of asphalt walkway	\$ 95,000
FY 2004-05	Contra Costa County	Construct 344 feet of 4.5-foot wide bike/ped path	\$ 201,000
FY 2004-05	Contra Costa County	Construct 402 feet of 5-foot wide bike/ped path	\$ 158,928
FY 2004-05	Contra Costa County	Provide bicycle & pedestrian safety	\$ 20,000
FY 2004-05	City of San Rafael	Construct 6' wide sidewalk & stripe	\$ 207,710
FY 2004-05	City of Sausalito	Construct 6' wide sidewalk & stripe	\$ 186,290
FY 2004-05	City of Calistoga	Construct 1.0 miles of Class I bike-ped path	\$ 270,881
FY 2004-05	City of Napa	Construct 2.0 miles of Class I bikeway	\$ 149,727
FY 2004-05	City of Campbell	Construct Class II bike lockers at J.D.	\$ 24,308
FY 2004-05	City of Campbell	Widen & regrade bicycle/Pedestrian	\$ 515,600
FY 2004-05	City of Cupertino	Construct 1030' bike path	\$ 107,622
FY 2004-05	City of Gilroy	Complete 881' of Uvas Creek Class I	\$ 50,000
FY 2004-05	City of Gilroy	Refurbish & replace bikeway signs, etc	\$ 10,611

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2004-05	City of Gilroy	Rehabilitate, resurface & stripe 2.5 mile path	\$ 60,666
FY 2004-05	City of Los Altos	Construct approx. 300' of concrete bike path	\$ 27,354
FY 2004-05	City of Los Altos	Replace approx. 2,800 lineal feet of bike path	\$ 17,580
FY 2004-05	City of Los Gatos	Design & construct solution to restore path	\$ 35,000
FY 2004-05	City of Morgan Hill	Install bicycle sensitive detector	\$ 36,000
FY 2004-05	City of Mountain View	Install countdown pedestrian signals	\$ 30,000
FY 2004-05	City of Mountain View	Install curb access ramps at Showers	\$ 2,381
FY 2004-05	City of Mountain View	Install curb access ramps at various	\$ 15,696
FY 2004-05	City of Mountain View	Purchase & install 14 bicycle lockers	\$ 14,506
FY 2004-05	City of Palo Alto	Construct raised pavement pedestrian path	\$ 50,000
FY 2004-05	City of San Jose	Construct 0.66 miles of Class I paved path	\$ 712,131
FY 2004-05	City of San Jose	Design & construct ADA wheel chair improvement	\$ 176,068
FY 2004-05	City of San Jose	Design & construct sidewalk for school	\$ 36,000
FY 2004-05	City of San Jose	Design & install 12' wide asphalt path	\$ 136,821
FY 2004-05	City of San Jose	Install median island ped. Refuge	\$ 185,000
FY 2004-05	City of San Jose	Install sidewalk, ADA curb ramps	\$ 90,000
FY 2004-05	City of San Jose	Provide bicycle & pedestrian safety	\$ 50,000
FY 2004-05	City of San Jose	Stripe crosswalks, paint pavements	\$ 100,000
FY 2004-05	City of Santa Clara	Perform an annual transportation	\$ 5,000
FY 2004-05	City of Santa Clara	Stripe crosswalks & paint pavements	\$ 62,148
FY 2004-05	City of Saratoga	Install continuous curb & gutter	\$ 19,357
FY 2004-05	City of Sunnyvale	Provide gates, signs, fencing and ramps	\$ 27,550
FY 2004-05	Santa Clara County	Construct a 3,300' by 5' walkway	\$ 63,403
FY 2004-05	Santa Clara County	Sign & restripe 8" stripe on shoulders	\$ 121,105
FY 2004-05	SF City/County	Bicycle safety brochures, maps, public education	\$ 31,500
FY 2004-05	SF City/County	Prelim. engineering (plan & design) of bike path	\$ 200,000
FY 2004-05	SF City/County	Purchase & install bicycle racks	\$ 95,000
FY 2004-05	SF City/County	Repair public sidewalks at various locations	\$ 115,000
FY 2004-05	SF City/County	Stripe & sign Class II bike lanes	\$ 188,500
FY 2004-05	City of Benicia	Final design plans, specs & estimate	\$ 124,573
FY 2004-05	City of Suisun City	Constr. 10' wide concrete bike path	\$ 86,000
FY 2004-05	City of Vacaville, Transit	Construct 3400 feet of Class I bike/Ped path	\$ 148,738
FY 2004-05	Solano Transportation Authority (STA)	Build bridge adjacent to existing path	\$ 76,000
FY 2004-05	City of Petaluma	Construction of pedestrian & bicycle path	\$ 54,876
FY 2004-05	City of Rohnert Park	Install 80' long bicycle & pedestrian path	\$ 160,000
FY 2004-05	City of Santa Rosa	Install directional signage & ADA signs	\$ 18,900
FY 2004-05	County of Sonoma	Construct 1.5 miles of Class I Bikeway	\$ 160,000
FY 2004-05	County of Sonoma	Conduct bicycle safety education workshop	\$ 10,000
FY 2004-05	County of Sonoma	Install 27 "Share Road" bicycle sign	\$ 15,000
FY 2004-05	County of Sonoma	Purchase 37 front loading bicycle	\$ 5,000
FY 2005-06	San Carlos	Class II bike lanes on Alameda de Las Pulgas and on Brittan Avenue; Class III bike lanes on Old County Road	\$ 20,000
FY 2005-06	San Mateo	Design of a pedestrian and bicycle bridge in the vicinity of the Hillsdale interchange of highway U.S. 101	\$ 100,000
FY 2005-06	South San Francisco	Bicycle and pedestrian crosswalk and signals at intersection of Spruce Ave. and South San Francisco Linear Park	\$ 150,000
FY 2005-06	Half Moon Bay	Construct 6600 foot Class I trail in the right of way of Highway 1 between Highway 92 and Higgins Purisima Rd.	\$ 220,000
FY 2005-06	Brisbane	Install 45 feet by 8 feet asphalt cement path adjacent to Shoreline Court; sign and restripe existing Class II bikeway	\$ 25,739

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	South San Francisco	Construct 363 feet by 12 feet asphalt bicycle and pedestrian trail near the Oyster Point Marina	\$ 36,000
FY 2005-06	San Bruno	Construct a Class II bike lane in both directions of Sneath Lane from El Camino Real to Skyline Boulevard	\$ 60,000
FY 2005-06	Daly City	Install bike lanes on Callan Blvd from King Dr to Serramonte Blvd and along Serramonte Boulevard	\$ 82,000
FY 2005-06	Burlingame	Install bike lane directional signs at 52 locations along north-south bicycle routes throughout the city	\$ 17,400
FY 2005-06	Burlingame	Install an in-pavement lighted crosswalk system across Carolan Avenue at Morrell Avenue, including new push buttons	\$ 30,000
FY 2005-06	Menlo Park	Install video detection for bikes at 3 intersections: Willow at Middlefield, Marsh at Bohannon, Marsh at Bay	\$ 44,000
FY 2005-06	San Mateo	Install bridge railing fencing on the north side of the Nineteenth Avenue Bridge over highway U.S. 101	\$ 50,000
FY 2005-06	Menlo Park	Create bicycle lanes on Bay Road between Berkeley Avenue and Willow Road, plus signage	\$ 13,600
FY 2005-06	San Mateo	Install bike detection loops at: 3rd + Claremont, 3rd + Delaware, 4th + Claremont, 4th + Delaware	\$ 40,000
FY 2005-06	Daly City	Install in-pavement lights and warning signs: Park Plaza Dr. north of Belmar, and Mission St. at Evergreen Ave.	\$ 120,000
FY 2005-06	San Mateo	Install pedestrian countdown signal heads at 27 existing signalized intersections throughout the city	\$ 50,000
FY 2005-06	Daly City	Install pedestrian countdown signal heads at 15 signalized intersections; and audible warnings at 11 of them	\$ 20,000
FY 2005-06	Burlingame	Install pedestrian countdown signal heads with audible pedestrian warnings at 8 signalized intersections	\$ 30,900
FY 2005-06	Menlo Park	Create bicycle lanes on Middlefield Road between Willow Road and San Francisquito Creek	\$ 2,400
FY 2005-06	San Mateo	Install in-pavement lighted crosswalks: 5th Ave. at Central Park; Bovet Rd. betw. Borel Ave. and El Camino Real	\$ 110,000
FY 2005-06	South San Francisco	Install pedestrian countdown signal heads at 12 existing signalized intersections throughout the city	\$ 22,000
FY 2005-06	County of San Mateo	Bike detection loops, countdown signal heads with audible warnings, upgrade pedestrian signal actuators	\$ 80,509
FY 2005-06	Sebastopol	Construct .5 mile Class I trail between Joe Rodota trail and Sebastopol Avenue and Morris Street intersection	\$ 51,356
FY 2005-06	Santa Rosa	Construct connector ramp between Joe Rodota trail and Pierson Reach of Prince Memorial Greenway trail	\$ 350,000
FY 2005-06	Windsor	Construct a 950 foot Class I trail within Keiser Park, including bridge crossing a tributary of Starr Creek	\$ 112,000

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	Contra Costa County, Health Services	Provide bicycle and pedestrian safety education to low-income county residents, particularly children	\$ 20,000
FY 2005-06	Concord	Construct 500 foot Class I trail adjacent to Galindo Crk. + Ygnacio Valley Rd betw. Alberta Way + Pebble Glen Dr	\$ 60,000
FY 2005-06	Lafayette	1030 feet x 5 feet sidewalk Sweet Dr. betw Walnut + Woodview; Woodview Dr. betw. St Mary's + Sweet Drive	\$ 110,000
FY 2005-06	Antioch	Construct curb ramps and sidewalks at Hillcrest Avenue, Somersville Road, "G" Street, and Dallas Ranch Road	\$ 110,000
FY 2005-06	Brentwood	Install pedestrian countdown signal heads + large diameter pedestrian push buttons at 12 signalized intersections	\$ 66,000
FY 2005-06	Contra Costa County, Public Works	Construct 240 feet x 5 feet sidewalk and curb ramps on Camino Tassajara and on Hansen Lane	\$ 20,000
FY 2005-06	Orinda	Replace 12 existing non-compliant curb ramps in downtown Orinda with ADA compliant ramps	\$ 45,000
FY 2005-06	San Pablo	Install in-pavement lighted crosswalks: Market Avenue at 21st St.; 23rd St. at Wilcox Ave.; 23rd St. at Stanford Ave.	\$ 180,000
FY 2005-06	Brentwood	Restripe Minnesota Ave. bike lane; install lighted crosswalk; construct 1300 feet of sidewalk, curb and gutter	\$ 31,000
FY 2005-06	San Francisco	Public sidewalk repair and reconstruction	\$ 180,000
FY 2005-06	San Francisco	Preliminary engineering of curb ramps	\$ 270,000
FY 2005-06	San Francisco	Safety brochures, maps, public outreach concerning bicycle pavement arrows, hotline, and bicycle safety advertising	\$ 45,000
FY 2005-06	San Francisco	Purchase and install bicycle racks at various locations in San Francisco as requested by the public	\$ 100,000
FY 2005-06	San Francisco	Stripe and sign bike lanes: Conservatory Drive East, San Jose Avenue ramps, Townsend Street, and elsewhere	\$ 305,000
FY 2005-06	Berkeley	Bicycle & Pedestrian Injury Prevention Program	\$ 30,000
FY 2005-06	Berkeley	Ninth Street Bicycle Boulevard extension (Project from FY01/02)	\$ 135,000
FY 2005-06	Oakland	ADA Compliant Wheelchair Accessible Ramps (Project Completed FY01/02)	\$ 294,548
FY 2005-06	Oakland	Laurel Pedestrian Project, Phase I (Project Completed FY01/02)	\$ 200,000
FY 2005-06	Oakland	MacArthur Blvd. Bicycle Lane Design (Project Completed FY01/02)	\$ 55,000
FY 2005-06	Oakland	Grand Avenue Transit and Pedestrian Improvements (Project from FY 04/05)	\$ 245,847
FY 2005-06	Oakland	ADA Compliant Wheelchair Accessible Ramps Program	\$ 121,144
FY 2005-06	Oakland	Market Street Bikeway	\$ 165,000
FY 2005-06	Oakland	Bancroft Bikeway Gap Closures	\$ 25,000
FY 2005-06	Piedmont	ADA Wheelchair Accessible Ramps and Pedestrian enhancements at Rose/Arroyo & Grand Ave	\$ 8,353
FY 2005-06	Hayward	ADA Wheelchair Accessible Ramps	\$ 109,309

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	San Leandro	Pedestrian Accessibility Improvements & Sidewalk Gap Closures	\$ 74,177
FY 2005-06	Fremont	Citywide ADA Compliant Wheelchair Accessible Ramps	\$ 158,067
FY 2005-06	Newark	History Center Complex Sidewalks and ADA Wheelchair Accessible Ramps	\$ 33,072
FY 2005-06	Union City	San Francisco Bay Trail Specific Plan (Project Completed FY01/02)	\$ 63,585
FY 2005-06	Dublin	Bicycle Master Plan	\$ 45,144
FY 2005-06	Livermore	Chestnut and N. P Street Bicycle Lanes	\$ 113,044
FY 2005-06	Alameda Co. Congestion Management Agency	Alameda Countywide Bicycle Master Plan	\$ 20,000
FY 2005-06	County of Alameda	Pedestrian Safety Improvements in the vicinity of Schools	\$ 75,775
FY 2005-06	County of Alameda	Pedestrian Safety Improvement Projects - Sidewalk Improvements	\$ 75,600
FY 2005-06	County of Alameda	Restriping Bicycle Lanes Along Various Roadways	\$ 30,000
FY 2005-06	Benicia	Stripe and sign bike lanes: Military East between East 5th Street and Park Road	\$ 25,000
FY 2005-06	Fairfield	Design McGary Road segment of Solano Bikeway Extension and complete extension feasibility study	\$ 100,000
FY 2005-06	Suisun City	Construct curb ramps and sidewalks at Whispering Bay Lane and Francisco Dr.	\$ 5,400
FY 2005-06	Suisun City	Replace existing non-compliant curb ramps in downtown Suisun City with ADA compliant ramps	\$ 11,856
FY 2005-06	Solano County	Reconstruct deck and railings, seismic retrofit, lighting and pathways to railroad trestle bridge over Putah Creek	\$ 180,000
FY 2005-06	Campbell	Implement bike lanes on Harriet Ave and Union Ave, Replace Los Gatos creek bridge, and widen Campbell Ave bridge	\$ 27,859
FY 2005-06	Campbell	Design and construct sidewalk and bike lanes and edge striping, curb and gutter along Westmont Avenue	\$ 39,992
FY 2005-06	Campbell	Widen Campbell Ave. bridge over Los Gatos Creek for bike lane and sidewalk; and reconstruct sidewalk under SR 17	\$ 240,000
FY 2005-06	Cupertino	Construct pedestrian and bicycle bridge across Interstate 280 along Mary Avenue between Homestead Rd and Meteor Dr	\$ 38,361
FY 2005-06	Los Altos Hills	Replace pedestrian bridge adjacent to the Foothill College entrance road connecting to El Monte Road	\$ 11,310
FY 2005-06	Los Gatos	Replace existing College Avenue sidewalk and fencing; and repair Los Gatos Creek Trail footbridge decking	\$ 20,000
FY 2005-06	Milpitas	Install ADA pedestrian ramps with truncated dome landings along suggested routes to schools	\$ 47,112
FY 2005-06	Morgan Hill	Identify where additional bicycle and pedestrian trails can be established adjacent to creeks and streams	\$ 32,000
FY 2005-06	Mountain View	Bicycle boulevard from Mayfield Mall area to Stevens Creek Trail, including signs, markings and signal modifications	\$ 25,000

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	Mountain View	ADA Compliant Wheelchair Accessible Ramps Program	\$ 17,000
FY 2005-06	Mountain View	Produce bicycle and pedestrian education and awareness materials, and a new bike map and multilingual flyers	\$ 5,000
FY 2005-06	Mountain View	Install "bikes wrong way" signs on existing poles along California Street and adjacent streets	\$ 5,217
FY 2005-06	Palo Alto	Bicycle boulevard along Maybell Ave and Donald Dr.: signs, markings, speed tables, & median refuge islands	\$ 75,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter to improve access to Lynhaven Elementary School	\$ 90,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter to fill gap on Borina Ave. at Saratoga Ave.	\$ 70,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter to improve access on both sides of Yerba Buena Road at Thompson Creek	\$ 47,000
FY 2005-06	San Jose	Install sidewalk, curb, gutter and ADA ramps on Carola Avenue at Clarita Avenue	\$ 110,000
FY 2005-06	San Jose	Install sidewalk, curb, gutter, pedestrian crossing and median island to provide access to Penitencia Creek County Park	\$ 62,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter on Senter Road at Burke Street	\$ 58,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter to improve access to Toyon Elementary School	\$ 45,000
FY 2005-06	San Jose	Citywide ADA Compliant Wheelchair Accessible Ramps	\$ 100,000
FY 2005-06	San Jose	Sign and stripe bicycle and pedestrian facilities, including bike lanes, bike routes, crosswalks, and bike paths	\$ 58,397
FY 2005-06	San Jose	Provide bicycle and pedestrian safety education to elementary school children and adults, purchase educational material	\$ 35,000
FY 2005-06	Santa Clara	Install and maintain bicycle and pedestrian facilities, including bike lanes, bike routes, crosswalks, and bike paths	\$ 78,180
FY 2005-06	Saratoga	Acquire right-of-way to upgrade UPRR railroad crossing in a bulb configuration to allow bicycles to cross at 90 degrees	\$ 95,000
FY 2005-06	Sunnyvale	Improve Calabazas Creek Trail with additional gates, signs, fences, ramp modifications, and a bridge across creek	\$ 182,048
FY 2005-06	County of Santa Clara	Restripe four co. expressways' shoulders with 8 inch stripes and sign to allow functioning as bicycle shoulder	\$ 50,000
FY 2005-06	Brentwood	Crosswalk and sidewalk improvements on Minnesota Avenue between Deer Creek and Sand Creek	\$ 31,000
FY 2005-06	Union City	Construct 1750 feet by 15 feet textured decorative concrete sidewalks plus 5 foot bike lanes on both sides of 11th Street	\$ 53,142
FY 2005-06	TAM	Update and complete bicycle and pedestrian master plans countywide and for cities and towns in Marin County	\$ 160,000

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	Campbell	Construct bike lanes on Harriet Avenue north of Westmont Avenue and on Union Avenue south of Campbell Avenue	\$ 24,308
FY 2005-06	Larkspur	Design + construct 13 ft wide Class I bike/pedestrian path and modify signals on Magnolia Ave. + Doherty Dr	\$ 136,668
FY 2005-06	County of San Mateo	Develop bike route data for GIS, integrate into countywide GIS files, and maintain bike route GIS data	\$ 40,000
FY 2005-06	City of Napa	Class I path along Napa Valley Wine Train right of way between Redwood Rd/SR 29 and Vallejo St/Soscol Av	\$ 85,271
FY 2005-06	American Canyon	Construct bike lanes and Class I trail adjacent to Commerce Boulevard	\$ 34,729
		Total	\$ 21,785,915

TCM C: Transportation for Livable Communities**FY 2004-05 MTC TLC Planning Program**

Project Sponsor	Project Title	TLC Grant
Alameda County		
City of Oakland	Revitalizing Foothill / Seminary: A Model for Oakland's Regional Transit Streets	\$ 75,000
City of Berkeley	Downtown Berkeley BART Plaza and Transit Area	\$ 75,000
Contra Costa County		
City of Lafayette	BART-Downtown Lafayette Pedestrian Linkages Project	\$ 20,000
San Francisco County		
San Jose/Guerrero Coalition to Save Our Streets	The San Jose/Guerrero Neighborhood Plan	\$ 75,000
San Mateo County		
Redwood City	Transit Station Sub-area Precise Plan	\$ 71,760
SamTrans	Transforming the El Camino Real to Link Caltrain Stations with Vibrant Downtowns in Redwood City, San Carlos and Belmont	\$ 63,840
Santa Clara County		
City of Sunnyvale	Murphy Avenue Streetscape Revitalization	\$ 75,000
Sonoma County		
City of Santa Rosa	Downtown Pedestrian Linkages Study	\$ 44,400
Total		\$ 500,000

FY 2004-05 MTC TLC Capital Program

Project Sponsor	Project Title	TLC Grant
City of Oakland, CEDA	Revive Chinatown – Phase 1	\$ 2,200,000
City of Union City	Union City Intermodal Station –Pedestrian connections and New East Plaza	\$ 1,124,000
Public Works Dept.		
Richmond Redevelopment Agency	Richmond Transit Village: Intermodal Transit Station	\$ 1,581,000
County of Marin	Cal-Park Hill Tunnel Rehab and Class I Bikeway	\$ 1,500,000
City of Gilroy	Monterey Streetscape Improvements – Fourth Street to Sixth Street	\$ 2,500,000
City of Morgan Hill	Morgan Hill – Depot Street Capital Improvements	\$ 2,627,000
Bay Area Rapid Transit District	Daly City BART- St. Charles Pedestrian & Bike Project	\$ 501,000
City & Co. of San Francisco	Broadway Streetscape Improvements Project – Phase II	\$ 2,000,000
Dept. of Public Works		
City of South San Francisco	BART Linear Park-Huntington Avenue to Orange Avenue	\$ 1,933,000
City of Vallejo	Vallejo Station Pedestrian Links	\$ 2,071,000
City of Petaluma/Eden Housing Inc.	Downtown River Apts Riverwalk and Streetscape Improvements	\$ 358,000
Total		\$ 18,394,000

Contingency Projects

City of Union City	Union City Intermodal Station – West Plaza Enhancements	\$ 1,713,500
Public Works Dept.		
City of Oakland, CEDA	MacArthur Transit Hub Streetscape Improvement Project	\$ 1,918,000
Town of Los Gatos	Streetscape & Gateway	\$ 2,400,000
Parks & Public Works Dept.		
City of San Leandro	East 14 th Street South Area Revitalization Project – La Palma District	\$ 1,600,000
Community Dev. Dept.		
County of Contra Costa Redevelopment Agency	North Richmond Third Street Upgrades	\$ 1,966,000

TCM C: Transportation for Livable Communities**FY 2005-06 Marin County TLC Capital Program**

Project Sponsor	Project Title	TLC Grant
Town of Fairfax	Center Boulevard Streetscape Redesign Project	\$ 500,000
County of Marin	Fireside Pedestrian and Traffic Safety Project	\$ 198,906
Town of Corte Madera	Bayside Trail Improvement Project	\$ 371,826
Total		\$ 1,070,732

FY 2005-06 Alameda County TLC Capital Program

Project Sponsor	Project Title	TLC Grant
City of Oakland	Coliseum BART Streetscape	\$ 500,000
City of Oakland	Oakland Coliseum Pedestrian Walkway	\$ 885,000
City of Oakland	W. Oakland Transit Village Streetscape Project	\$ 1,300,000
City of Oakland	MacArthur Entry Plaza & 40th Streetscape Project	\$ 1,147,000
City of Berkeley	Ashby/Ed Roberts Bicycle/Pedestrian Improvements	\$ 1,200,000
City of Union City	Pedestrian/Bicycle Improvements	\$ 2,000,000
Total		\$ 7,032,000

FY 2005-06 Sonoma County TLC Capital Program

Project Sponsor	Project Title	TLC Grant
City of Petaluma	Petaluma Blvd. Pedestrian Enhancements	\$ 485,000
City of Rohnert Park	Rohnert Park City Center Drive Improvements	\$ 1,150,000
Town of Windsor	Windsor Pedestrian Enhancements & Traffic Calming	\$ 235,000
Sonoma County Reg'l Parks	Sonoma County Santa Rosa Creek Trail	\$ 550,000
Town of Windsor	Windsor Old Redwood Hwy Pedestrian Linkages	\$ 338,000
Sonoma County Reg'l Parks	Sonoma County Bodega Bay Bicycle & Pedestrian Trail	\$ 535,000
City of Santa Rosa	Santa Rosa Courthouse Square Off-Site Improvements & Gateway Street	\$ 1,000,000
Total		\$ 4,293,000

Grand Total	\$ 31,289,732
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TCM D: Additional Freeway Service Patrol

The Bay Area FSP is a joint project of the Metropolitan Transportation Commission Service Authority for Freeways and Expressways (MTC SAFE), the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). The service is provided by private tow truck companies, selected through a competitive bid process, under contract to MTC SAFE. During the hours of operation, the vehicles and drivers are exclusively dedicated to patrolling their freeway beat. The program is intended to augment the MTC SAFE network of motorist-aid call boxes in the nine Bay Area counties.

Current Profile (as of February 2009)

A fleet of 83 trucks patrols some 550 miles of the Bay Area's freeways. Patrol routes are selected based on several factors, including a high rate of traffic and congestion, frequent accidents or stalls, and lack of shoulder space for disabled vehicles.

The FSP tow trucks operate primarily during morning and afternoon commute hours, generally from 6 a.m. to 9 a.m. or 10 a.m. and from 3 p.m. to 6 p.m. or 7 p.m., Monday through Friday. Weekend service is provided in Napa, as well as seasonally along Highway 17, and in some other locations on Sunday.

FSP tow trucks are equipped for nearly any contingency. In addition to the standard auto repair and towing equipment, they carry 5 gallons of diesel fuel, 5 gallons of unleaded gasoline, and 5 gallons of water, as well as an external speaker and public address system.

Funding

The tow trucks are financed with federal, state and local moneys. Local funds come from the MTC SAFE, which is financed by a \$1 annual vehicle registration fee in participating counties. The service costs approximately \$7 million a year to operate. Another \$2 million is invested in sophisticated communications equipment, including an automatic vehicle location system that enables CHP and Caltrans to monitor the location of the trucks and improve dispatching efficiency.

Implementation Plan

See the attached Implementation Plan, which is also available at:
http://www.fsp-bayarea.org/implementation_plan/lplan.pdf

BEAT ID	CONTRACTOR	LOCATION		BEAT LIMITS	CALTRANS ONE WAY LENGTH (IN MILES)	START DATE	ENDING DATE	WEEKDAYS			SUNDAY PM SHIFT	# OF TOW TRUCKS	# OF PICKUP TRUCKS	# OF FLATBED TRUCKS	# OF BACKUP TRUCK	NOTES	TOTAL CONTRACT HOURS	BEAT ID
		COUNTY	ROUTE					AM SHIFT	MIDDAY SHIFT	PM SHIFT								
1	Redhill Towing	ALA	980	Interstate 580 to Interstate 880	2.03	07/01/07	07/26/09	6:00-10:00		15:00-18:30	13:00-19:00	2	1			b	12,395	1
		ALA	880	7th Street to Jackson Street	2.04													
		ALA	24	Interstate 580 to Contra Costa County Line	4.39													
		CC	24	Contra Costa County Line to Oak Hill Road	6.25													
		CC/ALA	13	State Route 24 to Redwood Avenue	(4.23)										e			
2	A-One Towing Service	ALA	80	Powell Street to Contra Costa County Line	4.25	07/01/07	07/26/09	6:00-10:00	10:00-15:00	15:00-19:00	13:00 - 19:00	2	1		1	a, b, c	15,755	2
		CC	80	Alameda County Line to San Pablo Dam Road	4.34													
		ALA/CC	580	Interstate 80 to Western Drive/Pt. Molate	6.01													
3	Palace Garage	ALA	880	Alvarado-Niles Road to State Route 238	7.66	06/25/07	06/26/11	06:00-10:00		15:00-19:00	13:00-19:00	2				b,c	17,132	3
		ALA	92	Interstate 880 to Clawiter Road	1.91													
4	Palace Garage	ALA	880	Broadway to State Route 238	10.55	07/01/07	07/26/09	6:00-10:00		15:00-19:00	13:00-19:00	2	1			b	13,170	4
		ALA	238	Interstate 880 to Interstate 580	2.11													
5	K&S Tow	CC	680	Stone Valley Road to Marina Vista Road	13.89	07/02/07	07/04/11	06:00-09:00		14:00-18:30		2	1		1	b	22,523	5
		CC	24	Oak Hill Road U/C to Interstate 680	2.87													
6	B&A Body Works & Towing	SM	101	State Route 92 to SF City Limit/101 to Foster City Boulevard	14.23	07/01/07	07/05/09	6:00-10:00	10:00-15:00	15:00-19:00		2	2		1	a, b	18,754	6
		SM	92	Interstate 101 to Foster City Boulevard	1.47													
7	Redhill Towing	MRN	101	Alexander to 3rd Street/Irwin Street (Central San Rafael Exit)	10.28	07/03/05	07/06/08	6:00-10:00		15:00-19:00	13:00 - 19:00	2			1	b, c	13,090	7
		MRN	580	Highway 101 to Interstate 580 San Quentin	1.60													
8	Campbell's Towing	SCL	101	Blossom Hill Road to Ellis Street	18.40	07/01/07	07/05/09	6:00-10:00		15:00-19:00	13:00 - 19:00	2	2		1	b, c	16,808	8
		SCL	237	Highway 101 to Lawrence Expressway	2.12													
9	Campbell's Towing	SCL	280	Interstate 680/Highway 101 to Foothill Exp.	11.45	06/11/07	06/10/11	6:00-10:00		15:00-19:00		3	1		1	b	32,032	9
		SCL	85	Junction Route 280 to El Camino Real	3.3													
		SCL	87	State Route 85 to Hwy. 101	9.22													
10	Sunrise Enterprise 87	SCL-SM	101	Ellis Street to State Route 92	17.44	06/11/07	06/10/11	6:00-10:00		15:00-19:00		2	1			a, b	24,024	10
		SCL	92	Junction Route 101 to El Camino Real	0.93													
11	B&A Body Works & Towing	SF	101	Cesar Chavez to San Mateo Co. Line	2.92	06/11/07	06/12/11	6:00-10:00	10:00-15:00	15:00-19:00	10:00-16:00	2				a, b,c	22,473	11
		SF	280	San Mateo Co. Line to Highway 101	4.34													
		SM	101	Harvey Way to San Francisco Co. Line	0.41													
		SM	280	Geneva/Ocean Avenue to San Francisco Co. Line	1.77													
		SF	280	Highway 101/Interstate 280 Interchange to Sixth Street	(3.2)													
		SF	80	Cesar Chavez to Interstate 80/Fourth Street	(1.5)													
12	Ken Betts Towing	CC	80	San Pablo Dam Road to Cummings Skyway	8.39	07/09/07	07/10/11	6:00-10:00	10:00-15:00	15:00-19:00	13:00-19:00	2				a, b, c	22,473	12
13	Bill's Towing	MRN	101	Interstate 580 to Junction Route 37	9.13	06/25/07	06/26/11	6:00-10:00		14:30-18:30	13:30-18:30	2				b, c	17,282	13
14	All Ways Tow & Transport	ALA	880	Mowry Avenue to Alvarado Niles Road	5.84	07/01/07	07/24/09	6:00-10:00		15:00-19:00		2				b	8,272	14
		ALA	84	Thornton Avenue to Interstate 880	2.26													
15	Yarbrough Bros. Towing	SON	101	Wilfred Avenue to River Road	10.8	07/02/07	07/01/11	6:30-9:30		15:30-18:30		1					6,006	15
16	Lima Tow	SCL	17	Junction Route 9 to Summit Road	7.07	07/09/07	07/10/11	6:30-9:30		15:30-18:30	See separate beat 16/SC schedule	1				b, c, f	7,974	16
17	Sierra Hart	SOL	12	Interstate 80 to Napa Co. Line	2.95	07/23/07	07/24/11	6:00-10:00		15:00 -19:00	8:00-16:30 Sat. & Sun.	1 wkdy, 2 wknd				1 wkdy	15,573	17
		NAP	12	Napa Co. Line to Sonoma Co. Line	11.60													
		NAP	29	State Route 37 to Oakville Cross Road	24.0													
		SON	12	Sonoma Co. Line to Junction 116	4.90													
		NAP	29	Oakville Cross Road to State Route 128	(1.8)													
18	All Ways Tow & Transport	SCL	880	Junction Route 237 to Alameda County Line	2.08	07/01/07	07/10/09	6:00-10:00		15:00-19:00		2				b	8,112	18
		ALA	880	SCL County Line to Mowry Avenue	7.18													
19	Lima Tow	SCL	880	Junction Route 237 to Junction Route 17	8.42	07/01/07	07/10/09	6:00-9:00		15:00-19:00		2	1			b	10,647	19
		SCL	17	Junction Interstate 880 to Junction Route 9	6.88													
		SCL	237	Junction Interstate 880 to Lawrence Expressway	4.70													
20	Nelson's Tow	SM	280	Geneva/Ocean Avenue to Interstate 380	8.18	07/01/07	07/10/09	6:30-9:30		15:00-18:00		2				b	6,084	20
		SM	380	Interstate 280 to Highway 101	1.67													
21	Matos Towing & Transport	ALA	680	Scott Creek to Alcosta Boulevard	21.35	07/01/07	07/10/09	5:30-9:30		15:00-19:00		1	1	1	1	b	12,168	21
22	Palace Garage	ALA	580	Vasco Road to Santa Rita	8.25	07/23/07	07/24/11	5:30-9:30		15:30-19:00	13:00-19:00	2	1			b, c, d	25,685	22
		ALA	580	Grant Line Road to Vasco Road	8.23													
23	Campbell's Towing	SCL/ALA	680	Highway 101 to Scott Creek Road	10.17	07/01/07	07/10/09	5:30-9:30		15:00-19:00		2				b	8,112	23
24	Roadrunner Tow	SOL	680	Interstate 80 to Junction 780	14.30	07/23/07	07/22/11	6:00-9:00		15:30-18:30		1				g	6,036	24
		SOL	780	Junction 680 to Junction 80	6.42													
25	B&D Towing	CC	4	Hillcrest Avenue to Pacheco Blvd.	20.39	07/01/07	07/17/09	5:30-9:30		15:30-19:00		2	1			b	11,520	25
		CC	242	State Route 4 to Interstate 680	3.4													
26	A-One Tow Service	ALA	580	Harrison Street/Oakland Avenue to Junction Route 238	13.47	07/01/07	07/17/09	6:30-9:30		15:30-18:30		1		1		b	6,144	26
		ALA	13	Redwood Avenue to Interstate 580	(0.0)													
27	Palace Garage	ALA	580	Santa Rita Road to Junction 238	12.86	06/25/07	06/26/11	6:00-9:30		15:30-18:30	13:00-19:00	2	1			b,c	21,020	27
28	Bill's Towing	MRN/SON	101	State Route 37 to East Washington Boulevard	13.1	07/01/07	07/17/09	5:30-9:30		15:30-18:30		1				b	3,584	28
29	Roadrunner Tow	SOL	80	Magazine Street to Abernathy Road	14.04	07/09/07	07/10/11	6:00-9:00		15:30-18:30	13:00-19:00	2				b, c, h	15,020	29
30	Nelson's Tow	SM	92	State Route 1 to Highway 280	8.03	07/23/07	07/22/11	6:00-9:30		15:30-18:30		2				b	13,013	30
		SM	280	Interstate 380 to State Route 92	10.20													
		SM	92	Interstate 280 to Highway 101	4.83													
31	Campbell's Towing	SCL	101	Blossom Hill Road to East Dunne Avenue	12.6	07/01/07	07/19/09	6:00-9:00		16:00-19:00	13:00 - 19:00	2				b, c	6,900	31
32	Dick's Automotive Transport	SCL	85	Interstate 280 to Cottle Road	16.48	07/01/07	07/17/09	6:00-9:00		16:00-19:00		2				b	6,144	32
33	Yarbrough Bros. Towing	SON	101	East Washington Boulevard to Wilfred Avenue	10.26	07/24/05	07/20/08	6:00-9:00		15:30-18:30		1				b	4,482	33
34	Vacaville Tow	SOL	80	Abernathy Road to I-505 Vaca Valley Road	12.54	07/09/07	07/10/11	6:00-9:00		15:30-18:30	13:00-19:00	2				b, c, h	15,020	34
35	Palace Garage	CC	680	Alcosta Boulevard to Stone Valley Road	10.36	07/09/07	07/08/11	6:00-9:00		15:00-18:30		1				b	6,507	35
36	Ken Betts Towing	CC	4	Interstate 80 to Pacheco Blvd.	11.8	07/23/07	07/22/11	6:00-9:30		15:30-19:00		1					7,007	36
37	Vacaville Tow	SOL	80	Junction I-505 to Richards Blvd.	16.4	07/23/07	07/24/11	6:00-9:00		15:30-18:30	13:00-19:00	2				b, c, h	15,032	37
					539.67							65 wkdy, 66 wknd	15	2	8 wkdy, 7 wknd		493,973	

TCM E: Transit Access to Airports

BART to San Francisco International Airport:

S. San Francisco: From Colma BART station to the new SFO station; Extend BART system to the San Francisco International Airport.

BART Fares and Schedules

The latest BART fares and schedules (as of January 2008) can be found at:
<http://www.bart.gov/guide/brochures.aspx>

Service Adjustments

See attached document for service adjustments overtime since June 2003 through December 2006.

SFO Service Changes Over Time

Below is a list and description of service changes that have been implemented since the San Francisco Extension opening on June 22, 2003 through December 31, 2006. Some of these changes are major system changes. Other changes are more minor involving train sizing.

June 22, 2003 - SFO Initial Service

Bay Point trains provide service to Millbrae during all hours of operation, all week. Dublin trains provide service to the San Francisco Airport (SFO) during all hours of operation, all week. These routes operate on 15 minute headways during the weekday, and on 20 minute headways during evenings and on weekends. A shuttle train provides service between Millbrae and SFO on 20 minute headways during all hours of operation, all week. In addition to the base 15 minute service, three AM peak period rush trains provide service from Bay Point to Daly City, then operate express from Daly City to SFO. These three trains return during the evening peak period and operate express from SFO to Daly City, then on to Bay Point.

1. Direct service to/from Millbrae and direct service to/from SFO
2. Peak rush trains provide Bay Point line passengers direct service to/from SFO during the peak periods
3. 20 minute shuttle does not synch with the 15 minute base service during the day

February 9, 2004

Bay Point trains provide direct service to SFO, then continue to Millbrae. On the return trip these trains follow the same route back to Bay Point. This service route has been called the "Reverse L" service because the shape of the service on the SFO extension resembles a backward or reverse "L" shape. During the 3-1/2 hour AM and PM peak period on weekdays, Richmond trains provide direct service to Millbrae, then continue to SFO. On the return trip these trains follow the same route back to Richmond. This service route is referred to as the "L" service. The Richmond trains do not operate on the weekend. When the Richmond trains are operating on the extension during the week the Bay Point trains terminate at SFO and do not continue to Millbrae. At all other times (off-peak, evenings and weekends) the Bay Point trains complete the "Reverse L" service pattern. There are no other direct peak period rush trains. Service during the day (and during the peak rush) is 15 minutes, while evenings and weekends operate at 20 minute headways.

1. Provides for direct service on all extension routes to Millbrae and SFO, no need to transfer
2. 20 minute shuttle (during normal 15 minute service) replaced by 15 minute direct trains
3. During off-peak, evenings and weekends, direct service to Millbrae is through the SFO station

March 8, 2004

Train sizing adjustments: Train 361 increased from 4 to 5-car train off-peak. Train 441 changed to 10-car peak size for all PM trips instead of breaking to 5-car train on last trip. Other minor adjustments were made to the 200s and 500s.

September 13, 2004

Bay Point trains provide direct service to SFO, then continue to Millbrae. This service provides "Reverse L" service and operates during all hours of operation, all week. During the 3 hour AM and PM peak period on weekdays, Richmond trains provide direct service to SFO, then continue to Millbrae in a "Reverse L" service configuration. During the 3 hour AM and PM peak period (weekdays only) the Richmond and Bay Point trains both provide service directly to and from Millbrae/SFO. The Richmond trains do not operate on the weekend. Service during the day on each route (and during the peak rush) is 15 minutes, while evenings and weekends operate at 20-minute headways.

1. Provides for direct service on all extension routes to Millbrae and SFO, no need to transfer

2. During all hours, direct service to Millbrae is through the SFO station (but is effectively every 7.5 minutes during the 3 hour AM and PM peak periods)

December 13, 2004

Train sizing adjustments were made to better match capacity with demand, generally to shorter trains.

April 23, 2005

Train sizing adjustments: The 300 series trains on Saturday were increased from 8 to 9-car trains.

June 13, 2005

Train lengths were generally shortened to an 8-car plan in two phases, in June and August, 2005, with peak size trains running all day on the Bay Point line.

August 15, 2005

Second phase of implementing the “8-car” plan.

September 12, 2005

Dublin trains provide direct service to SFO, then continue to Millbrae in a “Reverse L” service configuration. Only the Dublin trains will provide service to the extension on weekdays and weekends. Richmond and Bay Point trains will truncate at Daly City. Service during the day (and during the peak rush) is 15 minutes, while evenings and weekends operate at 20-minute headways. Although direct service from Bay Point has been replaced with this new service, the transfer time from a Bay Point base train to SFO train (from Dublin) is only 3-4 minutes in each direction.

September 22, 2005

Extend service from Richmond and lengthen trains. Up to six consists will be lengthened from 4 to 8-car trains. Richmond trains to Daly City will be extended to Colma for two hours in the morning and two hours in the evening.

October 10, 2005

The following adjustments were made:

Weekday

- 100s - three trains lengthened
- 200s - one train lengthened, Make/Break timing changed
- 300s - several trains lengthened with a few trains reduced in size
- 400s - one train lengthened
- 500s - No change since September 22, 2005 (Make/Break timing)

Saturday

- 300s - some trains lengthened

Sunday

- 300s - some trains lengthened

December 5, 2005

The following adjustments were made:

Weekday

- 100s – 115 becomes the last AM Break train
- 300s – Train 323 and 363 increased from 8-car to 9-car trains

Saturday

- 200s – All trains are now 6-car trains during the day

January 30/31, 2006e

The following adjustments were made:

Weekday100 Series Trains (net +1)

Train 101 +1 (9 to 10 cars) peak increase

Train 115 off peak increase 4 to 5 cars

200 Series Trains (net 0)

No change

300 Series Trains (net -2)

Train 365 off peak decrease only on dispatches of 20:58, 22:19, and 23:38

Train 367 +1 (9 to 10 cars) off peak decrease only on dispatches of 21:18, 22:39, and 24:00

Train 371 -1 (10 to 9 cars)

Train 377 -1 (10 to 9 cars)

Train 381 -1 (10 to 9 cars)

Train 331 -2 (10 to 8 cars)

Train 335 +2 (8 to 10 cars)

400 Series Trains (net +2)

Train 443 -1 (9 to 8 cars) for AM peak period only

Train 445 +1 (8 to 9 cars)

Train 453 -1 (9 to 8 cars) for PM peak period only

Train 455 +2 (8 to 10 cars) and off peak increase 4 to 5 cars

500 Series Trains (net +10)

Train 501 +1 (8 to 9 cars) peak increase and off peak increase 4 to 5 cars

Train 503 +1 (8 to 9 cars) peak increase and off peak increase 4 to 5 cars

Train 505 +1 (8 to 9 cars) peak increase

Train 507 +1 (8 to 9 cars) peak increase

Train 509 +1 (8 to 9 cars) peak increase

Train 511 +1 (8 to 9 cars) peak increase

Train 513 +1 (8 to 9 cars) peak increase and off peak decrease 8 to 5 cars

Train 519 +1 (8 to 9 cars) peak increase

Train 521 +1 (8 to 9 cars) peak increase and off peak increase 4 to 5 cars

Train 523 +1 (8 to 9 cars) peak increase

Saturday

100s – no change

200s – no change

300s – All 8-car trains are now 9-car trains

400s – no change

500s – Four trains increased from 4 to 5-cars (501, 505, 511, and 515)

Sunday

200s – no change

300s – no change

500s – All trains 9-car midday and some offpeak increased from 4 to 5-cars (503, 505, and 515)

Appendix E

Methodology for Bay Area Conformity Determinations



Winston H. Hickox
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

1001 I Street • P.O. Box 2815 • Sacramento, California 95812 • www.arb.ca.gov



Gray Davis
Governor

November 30, 2001

Mr. Wayne Nastri
Regional Administrator
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

Dear Mr. Nastri:

The Air Resources Board (ARB/Board) hereby transmits the Bay Area emission factor model (SF Bay Area-EMFAC 2000) to the U.S. Environmental Protection Agency (U.S. EPA) for approval and use in the 2001 San Francisco Bay Area State Implementation Plan (Bay Area SIP) and subsequent Bay Area conformity determinations.

SF Bay Area-EMFAC 2000 is tailored specifically to the San Francisco Bay Area. The emission factors contained in SF Bay Area-EMFAC 2000, along with updated activity data from the Metropolitan Transportation Commission (MTC), provide the basis for the mobile source emissions budgets in the 2001 Bay Area SIP. SF Bay Area-EMFAC 2000 will be used for subsequent Bay Area conformity determinations. At a public meeting on November 1, 2001 the ARB Board approved SF Bay Area-EMFAC 2000 for these purposes following a 30-day public notice. At the time the Bay Area SIP was being developed, this model was the most current emission factor model available. SF Bay Area-EMFAC 2000 was based on EMFAC2000. The documentation for EMFAC2000 was publicly available beginning in May 2000 and made available for use by the Bay Area Air Quality Management District when it began developing the 2001 Bay Area SIP in November 2000.

The three Bay Area co-lead agencies responsible for developing the Bay Area SIP have committed to do a mid-course review of the Bay Area SIP by December 31, 2003 and revise the 2001 SIP by March 2004. ARB has committed to submit the revised Bay Area SIP to U.S. EPA by April 15, 2004. The mid-course review will use the most current emission factor model available at that time to develop the mobile source emissions budgets. This model will be EMFAC2001 or its successor.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

This transmittal provides documentation of the emission factors and activity data used in SF Bay Area-EMFAC 2000 to develop the 2001 Bay Area SIP. In addition, it includes the methodology ARB will be using to conduct Bay Area conformity determinations.

SF Bay Area-EMFAC 2000 Emission Factor Model Documentation

Comparison between MVEI7F/7G and SF Bay Area-EMFAC 2000

The emission factors used in the SF Bay Area-EMFAC 2000 emission factor model represent a major improvement over emission factors used in older models such as MVEI7F and MVEI7G. SF Bay Area-EMFAC 2000 exhaust hydrocarbon emission rates are significantly higher than the emission rates included in the older models. The increase in exhaust hydrocarbon rates is mainly a result of the following changes:

- More accurately reflecting real-world driving by using the Unified Cycle (UC) driving cycle rather than the Federal Test Procedure (FTP);
- Using new speed adjustment factors to better reflect how emissions change as average driving speeds change;
- Representing 45 model years, rather than only 35; and
- Incorporating new vehicle test data.

Evaporative hydrocarbon emission rates in SF Bay Area-EMFAC 2000 are also significantly higher than the older models' emission rates. The most important changes causing the increase in evaporative hydrocarbon emission rates include:

- Higher hot soak emission rates, especially for older catalyst-equipped vehicles;
- Higher running loss emission rates, based on new data; and
- Including emissions for vehicles with liquid fuel leaks.

Emission rates for oxides of nitrogen (NO_x) are also significantly higher in SF Bay Area-EMFAC 2000 than in the older models. The increased estimates of NO_x emission rates are primarily due to the following changes:

- Inclusion of "off-cycle NO_x" (i.e., NO_x emissions that were not represented in the certification driving cycle); and
- Incorporation of new vehicle test data for catalyst equipped passenger cars and light trucks.

Incorporation of Latest Standards

SF Bay Area-EMFAC 2000 also includes the effects of recently adopted standards on the emissions of the on-road fleet. The future year emission rates in SF Bay Area-EMFAC 2000 reflect the adopted standards described below.

Supplemental Federal Test Procedure

Two supplemental test procedures to the FTP were adopted by the Board in July of 1997. These new standards are applicable to passenger cars, light-duty trucks, and medium-duty vehicles weighing 8,500 pounds or less. These standards require the

control of excess emission of hydrocarbon and oxides of nitrogen during “off-cycle” operations (high speed and hard acceleration), and excess emissions associated with the use of air conditioning. The new standards are to be phased-in between 2001 and 2005.

Low Emission Vehicles (LEVII)

The second phase of Low Emission Vehicle Standards (LEVII) was adopted by the Board in November of 1998. This action imposed more stringent hydrocarbon, carbon monoxide, NO_x and exhaust particulate matter emissions standards for passenger cars, light-duty trucks and medium-duty vehicles up to 14,000 pounds sold in California beginning in 2003.

Near Zero Evaporative Standards

Also in November 1998, the Board adopted new standards for the emissions of evaporative hydrocarbons (diurnal, hot soak and resting loss). The standards were reduced from 2 grams per test (hot soak plus diurnal) for passenger cars, to 0.5 grams per test.

New On-Road Motorcycle Standards

In December of 1998, the Board adopted lower exhaust emission standards for on-road motorcycles. These standards, which may require future motorcycles to utilize catalytic converters, are applicable to new motorcycles sold in California beginning in 2004.

Off-Cycle NO_x Mitigation

In a settlement reached between the federal government, the Air Resources Board and heavy-duty engine manufacturers, several mitigation measures were agreed to regarding off-cycle NO_x emissions. In addition to ending the practice of defaulting to an advanced timing condition during extended cruise operation, several manufacturers have agreed to perform “low emission” rebuilds for in-use engines. These rebuilds will lower the emissions of the in-use fleet.

New Exhaust Emissions Standards for Urban Transit Buses

In February of 2000, the Board adopted a regulation that allows transit agencies the choice between either a diesel or alternative fuel “path” to lower emissions. Beginning in 2002, over the course of 10 years, this regulation requires increased introduction of

cleaner engine buses in transit agencies' fleets, use of cleaner diesel fuel, retrofits to reduce exhaust particulate matter (PM) emissions from older diesel buses, and use of zero-emission buses (ZEBs).

Public Review

The emission factors used in SF Bay Area-EMFAC 2000 were developed in a 3-year process and were subject to public review and comment during three workshops held in 1998, 1999, and 2000. Throughout the comment period, ARB received a number of written and verbal comments, which were addressed in the development of the emission factor model.

Further detail regarding the development of the SF Bay Area-EMFAC 2000 emission factor model may be found in the attached Technical Support Documentation. The Technical Support Documentation refers to broader work on the statewide EMFAC2000 emission factor model, but also applies to the region specific SF Bay Area-EMFAC2000.

Activity Data Documentation

The Bay Area vehicle miles traveled (VMT), VMT growth rates, and VMT-speed distributions incorporated into SF Bay Area-EMFAC 2000 represent the best current activity data estimates available. The derivation of these estimates are explained below.

Vehicle Miles of Travel

Bay Area VMT estimates for calendar year 2000 are based on the ARB VMT estimation methodology using mileage accrual rates derived from Smog Check odometer data and Department of Motor Vehicle vehicle populations (see Section 7 of the attached Technical Support Documentation for further detail on the ARB VMT estimation methodology).

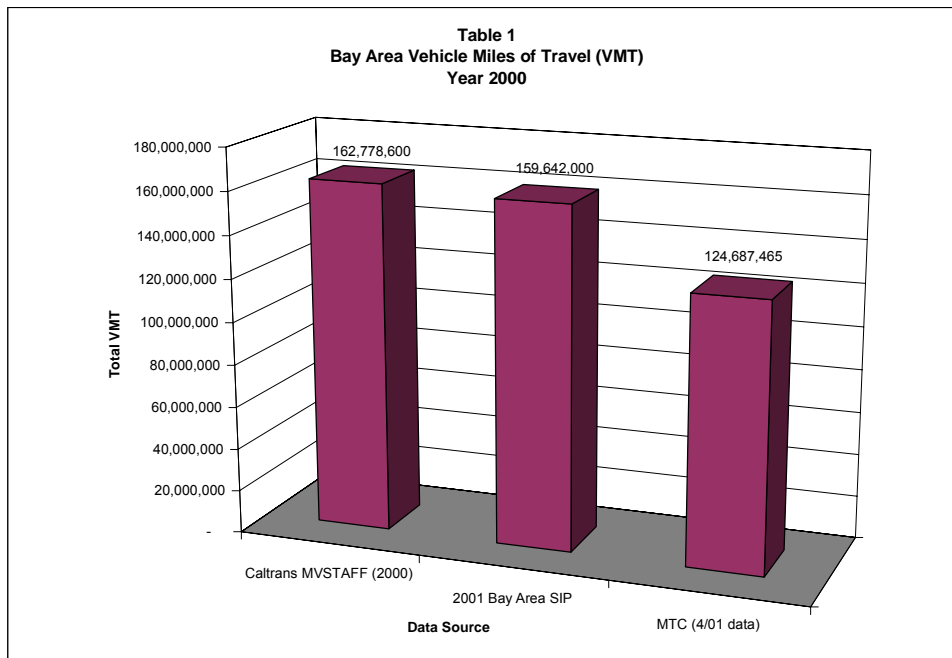
The decision to use ARB's VMT estimate instead of the VMT estimate from MTC's BAYCAST-90 travel demand model for calendar year 2000 was made in an agreement between MTC and ARB. As Table 1 illustrates, MTC's 2000 VMT estimate for the region is about 22 percent lower than both ARB and Caltrans' estimates. The ARB and Caltrans¹ methods for estimating VMT were developed independently of each other, yet fall within 1 percent of each other.

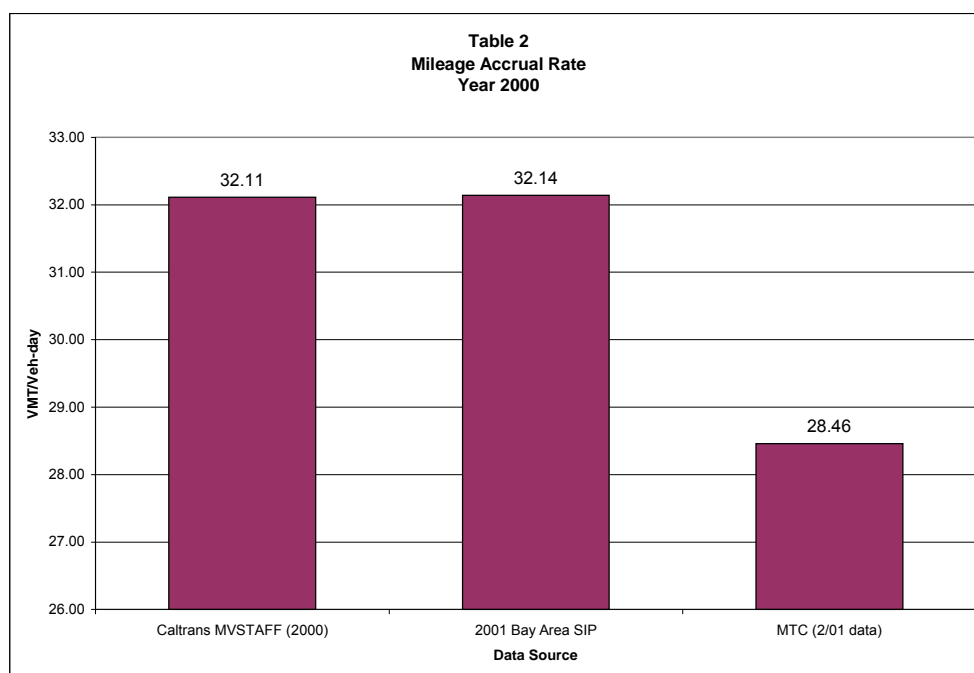
Additional justification for using the ARB VMT estimation methodology is found in the estimate of the number of miles driven by each vehicle per day (i.e., the mileage accrual

¹ Caltrans' VMT estimate was taken from the annual "Motor Vehicle Stock, Travel, and Fuel Forecast" (MVSTAFF) report. The MVSTAFF report forecasts statewide VMT based on statewide vehicle population data from the DMV, fuel consumption estimates from the Board of Equalization, and fuel economy estimates derived from the national fuel economy standards. Statewide VMT estimates are then disaggregated to the county level using county auto registration and road system mileage ratios.

rate). Table 2 compares mileage accrual rates from various data sources. MTC's estimates appear too low to be consistent with odometer readings collected in the Smog Check program. MTC's mileage accrual estimates are 11 percent lower than both Caltrans' ARB's estimates for the Bay Area.

For the purposes of the 2001 Bay Area SIP, MTC agreed to use ARB's 2000 VMT estimate. It was also agreed that the difference in VMT between ARB's and MTC's calendar year 2000 VMT estimates would be used as a "correction" for all future analysis years.





VMT Growth Rates

In the agreement between ARB and MTC, ARB agreed to use MTC's VMT growth rate as implied by the VMT estimates produced by BAYCAST-90. The rationale for this is that while ARB questions the level of travel in calendar year (CY) 2000 as estimated by MTC's travel demand model, ARB is not questioning future year growth projections included in the travel demand model.

VMT-Speed Distributions

The final pieces of activity data provided by MTC and incorporated into SF Bay Area-EMFAC 2000 are the VMT-speed distributions for two calendar years (2000 and 2005). Based on consultation between MTC and ARB staff, ARB incorporated the VMT-speed distributions into SF Bay Area-EMFAC 2000 by applying CY2000 speed distributions to CYs 2000-2003, and CY2005 speed distributions to CYs 2004+.

Methodology for Bay Area Conformity Determinations

For all Bay Area conformity determinations based on the mobile source emissions budgets set in the Bay Area SIP (using SF Bay Area-EMFAC 2000), the following step-wise methodology will be followed:

1. MTC will submit to ARB updated VMT-speed distributions and updated VMT estimates by county for all relevant analysis years. ARB will follow the procedures below for analysis years for which MTC does not submit new activity data (i.e. for which activity data does not change from MTC's original SIP submittal):
 - ARB will use the speed distributions submitted by MTC for the most recent calendar year prior to the analysis year of interest. For example, if MTC submits new VMT-speed distributions for 2005 and 2010, but not for the 2006 analysis year, the 2006 analysis year will use the speed distributions submitted for 2005. VMT-speed distributions will not be interpolated.
 - The VMT estimate for each county will be interpolated using county-specific compounded growth rates.² The interpolated VMT will then be used for the following steps.
2. ARB will calculate VMT for the portions of Sonoma and Solano Counties that fall in the San Francisco (S.F.) Air Basin. This is necessary since the SIP budgets are based on the S.F. Air Basin (which covers only the southern portions of Solano and Sonoma Counties), while the MTC VMT estimates include the full nine Bay Area counties. The county portions will be calculated by multiplying the full county VMT submitted by MTC by the VMT ratio (partial county/county) derived from SF Bay Area-EMFAC 2000.³ In year 2000, about 71 percent of Solano County, and 77 percent of Sonoma County VMT occurred in the S.F. Basin.
3. ARB will calculate the year 2000 difference in VMT between the VMT estimate included in the SF Bay Area-EMFAC 2000 runs⁴ and the VMT estimate submitted by MTC for conformity.⁵ The resulting differences by county represent the VMT "correction" between ARB and MTC's VMT estimates.
4. The VMT correction will be added by county to the submitted VMT for all analysis years, resulting in the "target" VMT estimate that will be used for the conformity modeling runs.⁶

² For example, 2006 VMT is interpolated from 2005 and 2010 VMT estimates submitted by MTC by the following equation: $VMT_{2006} = (VMT_{2010} / VMT_{2005})^{0.2} * VMT_{2005}$

³ For the S.F. Basin portions of Solano and Sonoma County VMT:

S.F. Basin County Portion $VMT_{MTC} = [S.F. \text{ Basin County Portion } VMT_{SFBayArea-EMFAC2000} / \text{Total County } VMT_{SFBayArea-EMFAC2000}] * \text{Total County } VMT_{MTC}$

⁴ SF Bay Area-EMFAC 2000 calculates VMT based on Smog Check odometer readings and DMV vehicle registration data for light duty vehicle classes, and instrumented truck data for the truck classes.

⁵ $VMT \text{ correction}_{\text{county a}} = SIP \text{ VMT}_{CY2000} - MTC \text{ VMT}_{CY2000}$

⁶ $\text{Target } VMT_{\text{county a}} = MTC \text{ VMT}_{\text{county a}} + VMT \text{ correction}_{\text{county a}}$

5. The county-specific target VMT in the conformity modeling runs will be achieved in SF Bay Area-EMFAC 2000 by modifying the county-specific vehicle populations in SF Bay Area-EMFAC 2000 using the What-if-Scenario (WIS) option. Since vehicle population and VMT are linearly related in SF Bay Area-EMFAC 2000, to obtain the “target” vehicle population, ARB staff will take the ratio between the SIP VMT estimates and the target VMT for each analysis year and apply them to the SIP vehicle population estimates for each respective analysis year.⁷
6. Once the target vehicle populations have been calculated, ARB staff will run SF Bay Area-EMFAC 2000 using the WIS option to adjust vehicle populations by county, and incorporate any updated speed distributions.
7. ARB staff will then apply control factors to the model output to adjust for emission reduction measures not included in the SF Bay Area-EMFAC 2000 emission factor model or changed since the model was developed.
8. Finally, ARB staff will compare the results to the SIP budgets for the conformity demonstration.

If you have questions regarding this submittal, you may contact me at (916) 445-4383, or have your staff contact Ms. Cynthia Marvin, Chief of the Air Quality and Transportation Planning Branch, at (916) 322-7236.

Sincerely,

/s/

Michael P. Kenny
Executive Officer

Enclosures

cc: See next page.

⁷ Target Veh Pop = [((Target VMT – SIP VMT) / SIP VMT) * SIP Veh Pop] + SIP Veh Pop

cc: (w/o Enclosures)
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Mr. Steve Heminger, Executive Director
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101 Eighth Street
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Ms. Cynthia Marvin
Air Resources Board

January 2003

Recommended Methods for Use of EMFAC2002 To Develop Motor Vehicle Emissions Budgets and Assess Conformity

As the agency charged with estimating motor vehicle emissions for air quality plans, the Air Resources Board (ARB) has improved the EMFAC modeling tool for use in combination with estimates of vehicle population and activity to develop motor vehicle emissions budgets and assess transportation conformity. The most recent version of this tool, EMFAC2002, has been transmitted to the U.S. Environmental Protection Agency (U.S. EPA) for approval for use in State Implementation Plans (SIPs) and conformity assessments. This paper describes the recommended practices for ARB, air districts, metropolitan planning agencies (MPOs) and regional transportation planning agencies (RTPAs) to use vehicle activity in conjunction with EMFAC2002 emission rates to calculate emissions budgets and conduct conformity assessments.

The vehicle activity indicators commonly used to develop emissions inventories are vehicle trips and vehicle miles of travel (VMT) by speed, vehicle class and time of day. Though not a direct measure of travel activity, vehicle population may also be a variable for these purposes, as described below.

Vehicle trips. In California, MPOs and RTPAs use demographic forecasts and travel demand models to develop estimates of current and future daily VMT, daily vehicle trips and average travel speeds for links in the transportation network. ARB separately estimates daily vehicle trips, but defines trips as the number of times a vehicle is started, rather than a number of specific daily destinations. This distinction is important; ARB and U.S. EPA studies find that vehicles are started five to six times per day, while trips associated with destinations as reported through travel surveys and predicted in travel demand models occur three to four times per day. Because start emissions and the duration of time between starts are crucial to emissions estimation, ARB equates vehicle trips with vehicle starts. Though EMFAC2002 permits model users to alter estimates of vehicle trips used to estimate emissions, ARB recommends that the model's default estimates of vehicle trips (starts), developed from instrumented vehicle studies, be used for air quality planning and conformity purposes.¹ Alternatively, for vehicle classes where appropriate local data are made available for review through the interagency consultation process, use of trip factoring or other methods to fully account for vehicle starts may be employed. Such alternative approaches should be discussed in the interagency consultation process.

¹ An exception would occur when a user chooses to factor these start-based trips to account for trip reduction programs. EMFAC2002 start-based trips rather than destination-based trips should serve as the baseline for this adjustment. The adjustment would be made through the What-If Scenario (WIS) function of EMFAC2002 as follows, where TRS denotes the trip reduction scenario:

$$\text{WIS Input TRS Trips} = \text{EMFAC Default Trips} * (\text{RTPA TRS Trips} / \text{RTPA Baseline Trips})$$

Vehicle speeds. Most travel demand models provide output of estimated average speed by time period and link that may be summarized for use in EMFAC2002. For each major vehicle class and up to 24 hourly time periods, total VMT is divided into 13 different speed “bins” (5 mph through 65 mph) and used as input to EMFAC2002. ARB recommends continuation of this current practice to develop emissions budgets and assess conformity. Travel from intrazonal trips should be assigned to the appropriate speed bin based on the speed assigned to that travel in the travel demand model. VMT for each speed bin and time period can be used as input through the WIS function of EMFAC2002. It is also possible to input this data specific to vehicle class if adequate and defensible local data are available.

Vehicle population. Vehicle trips (starts) in EMFAC2002 are estimated as a function of the number of vehicles, or vehicle population, by county. The population of each class of motor vehicle is estimated and forecast from Department of Motor Vehicles (DMV) registration data. EMFAC2002 assumes there is a relationship between vehicle population and VMT, carried through mileage accrual rates.² In the default case, the model assumes *vehicle population * mileage accrual = VMT*. ARB-preferred practice is to maintain this internal consistency, for reasons explained below.

Vehicle miles of travel. Daily VMT is both an emissions model input usually provided by MPOs/RTPAs and a model output used to estimate exhaust emissions. ARB staff reviews MPO/RTPA estimates of VMT and vehicle speeds, and supports these estimates for use in air quality plans whenever we agree they are reasonable and defensible. Use of the latest estimates of MPO/RTPA VMT and speeds in plan development facilitates the subsequent federal transportation conformity process. This is particularly important for any year for which the plan creates emissions budgets, as conformity rules allow no emissions budget exceedance, regardless of how small. As there may be some variance between default EMFAC2002 VMT and more recent MPO/RTPA estimates to be used for SIP development, we are recommending a procedure to more exactly incorporate into emissions budgets revised VMT estimates for emissions budget analysis years.

Although it is possible to directly input VMT into EMFAC2002 through the model’s WIS function, it is generally not recommended to do this independent of vehicle population because of the desire to properly estimate start and evaporative emissions tied to the size of the vehicle fleet. A change in total forecasted miles of travel implies a change either in the number of vehicles traveling those miles or in mileage accrual rates. For future years, we generally recommend making vehicle population the variable, rather than mileage accrual. Thus, VMT adjustment would usually occur through vehicle population adjustment in the model’s WIS function, according to this formula:

$$\text{WIS Input Population} = \text{EMFAC Default Population} * (\text{RTPA VMT} / \text{EMFAC Default VMT})$$

² Accrual rates are miles traveled per year as a function of vehicle age, derived from the Bureau of Automotive Repair Smog Check database as described in Section 7.1 of the EMFAC2000 Technical Support Document, found via http://www.arb.ca.gov/msei/on-road/latest_revisions.htm#pcaccrual.

The result of this modification is that emissions estimates more precisely incorporate the daily VMT provided by each MPO/RTPA to calculate exhaust emissions, and vehicle population is adjusted for consistency with this assumption of higher or lower VMT, providing similarly modified start and evaporative emissions.³ Though the emissions impact of using this approach will often be small, we believe the approach is appropriate given the desire to fully reflect the impacts of changes in travel activity on all emissions processes. Use of consistent methods in air quality plans and conformity assessments will both reduce potential conformity problems and preserve the integrity of the SIP and conformity processes.

Alternatively, local data may indicate that changes in VMT are tied more closely to changes in household or business rates of travel than to changes in vehicle ownership. Or, improved travel demand modeling may project auto ownership rates with a high degree of confidence. In such cases it may be appropriate to adjust total mileage accrual rather than vehicle population. It is also possible to derive a modified VMT forecast from adjustments to both variables in EMFAC2002. Planning agencies are encouraged to present alternative approaches for consideration in the interagency consultation process.

Recommendations

1. ARB recommends that the EMFAC2002 default estimates of vehicle trips, based on starts per day, be used for SIP development and conformity purposes. Model defaults for trips may be factored to account for trip reduction scenarios, but should not be replaced with estimates that do not account for all vehicle starts. Alternative approaches, such as the factoring of travel demand model trip outputs for appropriate classes to account for additional starts, may be considered through interagency consultation.
2. We recommend continuation of current practices for input of latest speed distributions for SIPs and conformity assessments. Travel from intrazonal trips should be assigned to the appropriate speed bin based on the speed assigned to that travel in the travel demand model.
3. To fully reflect the impacts of modified VMT forecasts on all emissions processes, in the calculation of SIP emissions budgets, and in the assessment of conformity with those budgets, vehicle population should be adjusted in EMFAC2002 proportional to the estimated VMT change. Local circumstances may alternatively support adjustment of mileage accrual rates, subject to interagency consultation.

³ After adjusting VMT through use of the population variable in the WIS function of EMFAC, a user who desires to match VMT even more exactly (to the mile instead of the tens of miles) can then adjust VMT in the WIS without disturbing the population adjustment. This is unlikely to have a discernible impact on emissions, however.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
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Legislation Details (With Text)

File #: 17-2680 **Version:** 1 **Name:**

Type: Resolution **Status:** Commission Approval

File created: 6/6/2017 **In control:** Joint MTC Planning Committee with the ABAG Administrative Committee

On agenda: 7/14/2017 **Final action:**

Title: Final Environmental Impact Report for Plan Bay Area 2040, MTC Resolution No. 4299 and ABAG Resolution No. 09-17

Final EIR and request referral of the Plan Bay Area 2040 Final EIR to the Commission and ABAG Executive Board for certification.

Sponsors:

Indexes:

Code sections:

Attachments: [7b_Final EIR PBA 2040, MTC_ResNo4299 and ABAG_ResNo09-17.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

Final Environmental Impact Report for Plan Bay Area 2040, MTC Resolution No. 4299 and ABAG Resolution No. 09-17

Final EIR and request referral of the Plan Bay Area 2040 Final EIR to the Commission and ABAG Executive Board for certification.

Presenter:

Ken Kirkey

Recommended Action:

MTC Commission Approval and ABAG Executive Board Approval

Attachments



TO: Joint MTC Planning Committee with the
ABAG Administrative Committee

DATE: July 7, 2017

FR: MTC Deputy Executive Director, Policy

RE: Final Environmental Impact Report for Plan Bay Area 2040, MTC Resolution No. 4299 and ABAG Resolution No. 09-17

MTC and ABAG staff have prepared the Proposed *Final Environmental Impact Report for Plan Bay Area 2040* (Final EIR) in accordance with the California Environmental Quality Act (CEQA). In general, the purpose of the Final EIR is to disclose the significant environmental effects of implementing the proposed Plan Bay Area 2040 (proposed Plan), identify possible ways to minimize the significant effects, and describe reasonable alternatives to the proposed Plan. As a program EIR, the Final EIR will not relieve individual project sponsors (land use or transportation) of the responsibility for complying with CEQA and/or NEPA requirements. Prior to implementation, individual projects may be required to prepare a project-level analysis to fulfill CEQA and/or NEPA requirements.

The Final EIR responds to comments addressing the Draft EIR, which was released for a 45-day public review period starting on April 17, 2017, and ending on June 1, 2017. MTC and ABAG held three public hearings on the proposed Plan, and three additional public hearings on the Draft EIR, as well as hosted nine open houses on the proposed Plan during the public comment period. The revisions, refinements, and responses to comments help to clarify and amplify the analysis in the Draft EIR. However, no significant new information was added that would trigger recirculation of the Draft EIR under CEQA. Furthermore, there were no new significant environmental impacts, or a substantial increase in the severity of any impact, identified in the comments or responses that were not already identified in the Draft EIR.

The components of the Final EIR are as follows:

1. **Comments on the Draft EIR** lists all agencies, organizations and individuals who submitted either written or oral comments on the Draft EIR.
2. **Responses to Comments** provides responses to written and oral comments, including “Master Responses” which respond to frequently raised issues referenced by multiple commenters.
3. **Revisions to the Draft EIR** lists revisions to the Draft EIR by chapter and page, in the same order as the revisions would appear in the Draft EIR.
4. **Mitigation Monitoring and Reporting Program** establishes a mitigation monitoring program for the proposed Plan.
5. **The Draft EIR** and all of the appendices thereto.

The **Draft CEQA Findings and Fact in Support of Findings and Statement of Overriding Considerations** (Findings) is an additional document attached to this staff report in support of the Final EIR. The Findings are to be adopted with the approval of the proposed Plan and state

MTC and ABAG's conclusions regarding the significance of the potential environmental effects of the proposed Plan after all feasible mitigation measures have been adopted. The Findings sets forth the specific reasons supporting MTC and ABAG's action in approving the proposed Plan, based on the Final EIR and other information in the record.

The Final EIR is available online at <http://2040.planbayarea.org/reports> and at The Hub @ 375 Beale, San Francisco, CA 94105, as well as on USB flash drives at select Bay Area libraries. For a list of library locations, visit <http://www.planbayarea.org/2040-plan/access-plan>.

Comments on the Draft EIR

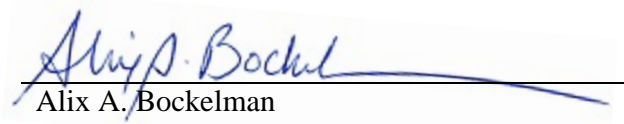
A number of comments were received during the 45-day comment period. Although several comments were received late, all letters received through June 9, 2017, are included in the Final EIR. Comments included written comment letters, email correspondence, and oral and written comments from public hearings.

Where appropriate, the information and revisions suggested in these comment letters have been incorporated into the Final EIR. As noted above, no information or revisions warrant changing the findings or conclusions of the environmental assessment.

MTC and ABAG staff will provide proposed written responses to comments submitted by public agencies 10-days prior to MTC's and ABAG's certification of the Final EIR scheduled for July 26.

Action

Staff requests that the committees refer the Final EIR to the MTC Commission and ABAG Executive Board for joint approval later this month.



Alix A. Bockelman

Attachments:

- Attachment A: MTC Resolution No. 4299 and ABAG Resolution No. 09-17
- Attachment B: Draft CEQA Findings and Fact in Support of Findings and Statement of Overriding Considerations

AAB:AN

J:\COMMITTEE\Planning Committee\2017\07_PLNG_July 2017\7b_FinalPBA40_EIR_v3.docx

Date: July 26, 2017
W.I.: 1121
Referred by: MTC Planning /
ABAG Administrative

ABSTRACT

MTC Resolution No. 4299

ABAG Resolution No. 09-17

This resolution certifies the Final Environmental Impact Report prepared for Plan Bay Area 2040 (which includes both the Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area) (SCH# 2016052041), and adopts environmental findings pursuant to the California Environmental Quality Act; a Statement of Overriding Considerations; and a Mitigation Monitoring and Reporting Program.

Further discussion of this subject is contained in the Joint MTC Planning Committee and ABAG Administrative Committee memorandum dated July 7, 2017.

Date: July 26, 2017
W.I.: 1121
Referred by: MTC Planning /
ABAG Administrative

Re: Certification of the Final Environmental Impact Report prepared for Plan Bay Area 2040 (which includes both the Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area) (SCH# 2016052041), and adoption of environmental findings pursuant to the California Environmental Quality Act; a Statement of Overriding Considerations; and a Mitigation Monitoring and Reporting Program

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4299

ASSOCIATION OF BAY AREA GOVERNMENTS
EXECUTIVE BOARD
RESOLUTION NO. 09-17

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to California Government Code Section 66500 *et seq.*; and

WHEREAS, MTC is the federally designated Metropolitan Planning Organization (MPO), pursuant to Section 134(d) of Title 23 of the United States Code (USC) for the nine-county San Francisco Bay Area region (the region); and

WHEREAS, Part 450 of Title 23 of the Code of Federal Regulations (CFR), requires MTC as the MPO to prepare and update a long-range Regional Transportation Plan (RTP) every four years; and

WHEREAS, the Association of Bay Area Governments (ABAG), a joint exercise of powers entity created pursuant to California Government Code Sections 6500 *et seq.*, is the Council of Governments and the regional land use planning agency for the San Francisco Bay Area; and

WHEREAS, California Government Code Section 65080 requires ABAG and MTC to prepare a sustainable communities strategy (SCS) for the San Francisco Bay Area; and

WHEREAS, the Plan Bay Area 2040 (“Plan”) constitutes the RTP and SCS for the San Francisco Bay Area; and

WHEREAS, the Plan, contains an integrated set of strategies and fiscally-constrained investments to maintain, manage, and improve the transportation system in the San Francisco Bay Area through the year 2040 and calls for development of an integrated intermodal transportation system that facilitates the efficient, economic movement of people and goods; and

WHEREAS, MTC and ABAG served as joint lead agencies in preparing a Programmatic Environmental Impact Report (Program EIR) (SCH# 2016052041) with the assistance of MTC staff and consultants pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code § 21000 *et seq.*) and the State CEQA Guidelines (14 Cal. Code Regs. § 15000 *et seq.*) for the Plan; and

WHEREAS, the Program EIR provides full disclosure and programmatic analysis of the potentially significant environmental effects of the Plan; and

WHEREAS, MTC and ABAG issued a Notice of Preparation (NOP) of a Draft Program EIR on May 16, 2016, and circulated the NOP for a period of 30 days pursuant to State CEQA Guidelines §§ 15082(a), 15103 and 15375; and

WHEREAS, pursuant to State CEQA Guidelines §§ 15206 and 15082, MTC and ABAG publicly noticed and held three (3) public scoping meetings between May 26, 2016, and June 2, 2016, for the purpose of soliciting comments from the public and potential responsible and trustee agencies, including details about the scope and content of the environmental information related to the responsible and trustee agencies’ areas of statutory responsibility, as well as the significant environmental issues, reasonable alternatives, and mitigation measures that the responsible and trustee agencies would need to have analyzed in the Program EIR; and

WHEREAS, MTC and ABAG received responses to the NOP from state, regional and local agencies, organizations, and individuals, which assisted MTC and ABAG in narrowing the issues and alternatives analyzed in the Draft Program EIR; and

WHEREAS, the Draft Program EIR was completed and filed with the State Office of Planning and Research (OPR) on April 14, 2017; and

WHEREAS, MTC and ABAG commenced a 45-day review period to solicit comments on the Draft Program EIR, which ended on June 1, 2017; and

WHEREAS, pursuant to State CEQA Guidelines § 15087, MTC and ABAG also provided a Notice of Availability (NOA) to all organizations and individuals who previously requested such notice and published a NOA for the Draft Program EIR on April 14, 2017, in a newspaper of general circulation. In addition, copies of the Draft Program EIR were made available at public libraries and at the offices of MTC and ABAG and electronic links to the Draft Program EIR were provided on their websites; and

WHEREAS, during the comment period on the Draft Program EIR, MTC and ABAG consulted with and requested comments from responsible and trustee agencies, other regulatory agencies, and others pursuant to State CEQA Guidelines § 15086; and

WHEREAS, during the public review period for the Draft Program EIR, MTC and ABAG held three public hearings on the Draft Program EIR and three public hearings on the Plan; and

WHEREAS, during the public review period for the Draft Program EIR, MTC and ABAG received written comment letters, email correspondence, and oral and written comments from public hearings, which are included in the Final Program EIR; and

WHEREAS, after the public review period for the Draft Program EIR ended, MTC and ABAG received additional written comment letters; and

WHEREAS, MTC and ABAG staff evaluated all comments on environmental issues received during the administrative process including all comments received during the public comment period and, after the close of the public comment period, has continued to review additional comments submitted upon receipt; and

WHEREAS, MTC and ABAG staff evaluated all comments on environmental issues received during the comment period on the Draft Program EIR and prepared written responses to these comments; and

WHEREAS, pursuant to Public Resources Code § 21092.5 and CEQA Guidelines § 15088, MTC and ABAG provided written responses to all public agencies that submitted comments on the Draft Program EIR on July 14, 2017, more than ten days prior to certification of the Program EIR; and

WHEREAS, MTC and ABAG staff prepared the Final Program EIR, consisting of: (1) comments and recommendations received from state, regional and local agencies, organizations, and individuals on the Draft Program EIR; (2) responses by MTC and ABAG to significant environmental points raised in the review and consultation process including Master Responses to comments; (3) revisions to the Draft Program EIR; (4) all appendices to the Final Program EIR; and (5) the Draft Program EIR, including all appendices and revisions thereto; and

WHEREAS, no comments made in the public hearings conducted by MTC and ABAG, or any additional information received by MTC and ABAG, have produced significant new information requiring recirculation or additional environmental review under State CEQA Guidelines § 15088.5; and

WHEREAS, State CEQA Guidelines § 15090 provides that lead agencies shall certify that the decision-making body of the lead agency has reviewed and considered the information presented in the Program EIR prior to approving a project; and

WHEREAS, State CEQA Guidelines § 15090 further provides that lead agencies shall certify that an EIR prepared for a project has been completed in compliance with CEQA; and

WHEREAS, State CEQA Guidelines § 15090 further provides that lead agencies shall certify that an EIR prepared for a project reflects their independent judgment and analysis; and

WHEREAS, certification of the Final Program EIR was placed on the agenda for the July 26, 2017, Joint MTC Commissioner and ABAG Executive Board meeting, and public notice of the meeting was circulated to the public on [July 21, 2017];

WHEREAS, MTC and ABAG have prepared CEQA Findings in compliance with Public Resources Code §§ 21081 and 21081.5, and CEQA Guidelines § 15091, which are entitled “CEQA Findings and Facts in Support of Findings and Statement of Overriding Considerations” (CEQA Findings) (attached hereto as Attachment A and incorporated herein as though set forth at length); and

WHEREAS, all of the findings and conclusions made by MTC and ABAG pursuant to this Resolution are based upon the oral and written evidence presented to it as a whole not based solely on the information provided in this Resolution; and

WHEREAS, the Plan will have significant impacts that cannot be fully mitigated to less than significant, and MTC and ABAG have prepared a Statement of Overriding Considerations in compliance with Public Resources Code § 21081 and CEQA Guidelines § 15093, included in Section 3 of CEQA Findings, which concludes that specific economic, legal, social, technological, and other benefits of the Plan outweigh the potentially significant and unavoidable impacts identified in the Final Program EIR; and

WHEREAS, each of the specific economic, legal, social, technological, and other benefits of the Plan included in the Statement of Overriding Considerations is independently sufficient to justify approval of the Plan; and

WHEREAS, MTC and ABAG have prepared a Mitigation Monitoring and Reporting Program in compliance with Public Resources Code § 21081.6 and CEQA Guidelines § 15097, included as Attachment B, to ensure compliance with the mitigation measures identified in the Final Program EIR during Plan implementation to the extent feasible; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred; and

WHEREAS, prior to taking action on the Final Program EIR, MTC and ABAG have heard, been presented with, reviewed, and considered all of the information and data in the administrative record, including the Final Program EIR, and all oral and written evidence presented to it during all meetings and hearings; now, therefore, be it

RESOLVED, that MTC and ABAG hereby certify that the foregoing recitals are true and correct and incorporated by this reference; and be it further

RESOLVED, MTC and ABAG staff prepared the Final Program EIR, consisting of: (1) the Draft Program EIR, including all appendices and revisions thereto; (2) comments and recommendations received on the Draft Program EIR, a list of persons, organizations, and public agencies commenting on the Draft Program EIR; (3) responses by MTC and ABAG to significant environmental points raised in the review and consultation process including Master Responses to comments; (4) revisions to the Draft EIR; (5) all appendices to the Final Program EIR; and (6) the Draft Program EIR, including all appendices thereto; and be it further

RESOLVED, that MTC and ABAG find the Final Program EIR satisfies all the requirements of CEQA and the State CEQA Guidelines; and be it further

RESOLVED, that MTC and ABAG find the Final Program EIR sufficiently analyzes both the feasible mitigation measures necessary to avoid or substantially lessen the Plan's potentially significant environmental impacts and a reasonable range of alternatives capable of eliminating or reducing these effects in accordance with CEQA and the State CEQA Guidelines; and be it further

RESOLVED, that MTC and ABAG find that the Plan will have significant impacts that cannot be fully mitigated to less than significant; and be it further

RESOLVED, that MTC and ABAG certify that the Final Program EIR (attached hereto as Attachment B and incorporated herein as though set forth at length) represents the independent judgment and analysis of MTC and ABAG; and be it further

RESOLVED, that MTC and ABAG, as the decision making bodies, certify the Program EIR (Attachment B) was presented to them and that they reviewed and considered the information in the Final Program EIR prior to approving the Plan; and be it further

RESOLVED, that MTC and ABAG adopt the Mitigation Monitoring and Reporting Program as required by CEQA Guidelines § 15097, which is attached hereto as Appendix A of Attachment B and incorporated fully by this reference; and be it further

RESOLVED, that MTC and ABAG make and adopt the CEQA Findings required in CEQA Guidelines § 15091, which are attached hereto as Attachment A; and be it further

RESOLVED, that MTC and ABAG adopt the Statement of Overriding Considerations as required by CEQA Guidelines § 15093, which describes numerous specific economic, legal, social, technological, and other benefits of the Plan each of which is independently sufficient to justify approval of the project, and is attached hereto as Section 3 of the CEQA Findings (Attachment A) and incorporated fully by this reference; and be it further

RESOLVED, that MTC and ABAG direct staff to immediately (within five working days): (a) file a Notice of Determination documenting these decisions (CEQA Guidelines § 15094); (b) retain a copy of the certified Final Program EIR as a public record; and (c) provide a copy of the certified Final Program EIR to the planning agencies of all member jurisdictions and each responsible agency (CEQA Guidelines § 15095).

METROPOLITAN TRANSPORTATION COMMISSION

Jake Mackenzie, Chair

This resolution was entered into by the Metropolitan Transportation Commission at a special meeting of the Commission held in San Francisco, California on July 26, 2017.

The foregoing was adopted by the Executive Board this 26th day of July, 2017.

Julie Pierce
President

Certification of Executive Board Approval

I, the undersigned, the appointed and qualified Clerk of the Board of the Association of Bay Area Governments (Association), do hereby certify that the foregoing resolution was adopted by the Executive Board of the Association at a duly called meeting held on the 26th day of July, 2017.

Frederick Castro
Clerk of the Board

Approved as To Legal Form

Adrienne D. Weil
Legal Counsel

Date: July 26, 2017
W.I.: 1121
Referred by: MTC Planning /
ABAG Administrative

Attachment A
MTC Resolution No. 4299
ABAG Resolution No. 09-17
Page 1 of 1

**CEQA Findings and Facts in Support of Findings and
Statement of Overriding Considerations**

The CEQA Findings and Facts in Support of Findings and
Statement of Overriding Considerations is on file in the offices of the
Metropolitan Transportation Commission, Bay Area MetroCenter,
375 Beale Street, Suite 800, San Francisco, CA 94105.

Date: July 26, 2017
W.I.: 1121
Referred by: MTC Planning /
ABAG Administrative

Attachment B
MTC Resolution No. 4299
ABAG Resolution No. 09-17
Page 1 of 1

Program Environmental Impact Report (EIR)

The Program Environmental Impact Report (EIR)
(with Mitigation Monitoring and Reporting Program) is on file in the offices
of the Metropolitan Transportation Commission, Bay Area MetroCenter,
375 Beale Street, Suite 800, San Francisco, CA 94105.

CEQA Findings and Facts in Support of Findings and Statement of Overriding Considerations

Introduction

ROLE OF THE FINDINGS

The following findings are hereby adopted by the Metropolitan Transportation Commission (MTC)¹ and Association of Bay Area Governments (ABAG)² Executive Board pursuant to the requirements of the California Environmental Quality Act, California Public Resources Code Section 21000 et seq. (CEQA), and the Guidelines for California Environmental Quality Act, Title 14, California Code of Regulations Section 15000 et seq. (CEQA Guidelines).

These Findings and Facts in Support of Findings relate to the approval of the 2017 update to the Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) for the San Francisco Bay Area, entitled Plan Bay Area 2040 and referred to herein as the proposed Plan. MTC and the ABAG are the Lead Agencies for the proposed Plan.

The Findings state the Commission's/Board's conclusions regarding the significance of the potential environmental impacts of the proposed Plan after all feasible mitigation measures have been adopted. These findings have been prepared to comply with the requirements of CEQA and the CEQA Guidelines and are based on information in the Draft and Final Environmental Impact Report (EIR) for the proposed Plan and on all other relevant information contained in the administrative record for the proposed Plan.

CEQA requires agencies to identify mitigation measures that would avoid or substantially lessen a project's significant impacts or potential significant impacts if such measures are feasible. The mitigation measures identified in the EIR mitigate the potential significant impacts of the proposed Plan, to the extent feasible, as described in the EIR. All mitigation measures identified in the EIR (as listed in Table ES-2 of the Draft EIR and as amended in Section 3.0 of the Final EIR) are hereby adopted by the Commission/Board. Because the proposed Plan contemplates projects that would be developed by other agencies throughout the region, MTC and ABAG find that the implementation of some mitigation measures is not within their authority. These measures can and should be implemented and monitored by the agencies responsible for implementing and overseeing individual projects. When MTC and/or ABAG are the lead agencies on a project they will ensure compliance with the identified mitigation measures by requiring them as conditions of approval for relevant projects, and if applicable, requiring individual projects to undergo CEQA compliance review prior to project approval.

The ability of MTC and ABAG to enforce mitigation measures identified within the EIR is expressly limited by statute. SB 375³ provides that the proposed Plan cannot "regulat[e] the use of land... [and does not] supersed[e] the exercise of the land use authority of cities and counties within the region." (Gov. Code, § 65080, subd. (b)(2)(K).) For this reason, unless MTC or ABAG have regulatory or approval authority over a

¹ As used herein, "MTC" refers to the agency as a whole, while the "Commission" refers to MTC's legislative body (i.e., the MTC Commissioners).

² As used herein, "ABAG" refers to the agency as a whole, while the "Board" refers to ABAG's legislative body (i.e., the Executive Board).

³ Senate Bill 375, also known as "The Sustainable Communities and Climate Protection Act of 2008."

future transportation project (including bike and pedestrian facilities) implemented pursuant to the proposed Plan, MTC and ABAG must rely on incentives to encourage implementing agencies to commit to the mitigation measures set forth in the EIR for the proposed Plan. Similarly, an implementing agency that elects to take advantage of the CEQA Streamlining provisions of SB 375 (Public Resources Code sections 21155.1, 21155.2, and 21159.28) must commit to the mitigation measures set forth in the EIR, as applicable and feasible, to address site-specific conditions. Therefore, as set forth in these Findings and more fully in the EIR, where it cannot be ensured that a mitigation measure would be implemented in all cases due to the statutory limitations on the authority of MTC and ABAG pursuant to SB 375, MTC and ABAG have concluded the impacts remain potentially significant. However, where existing regulatory requirements or permitting requirements exist, it is assumed that since these regulations are law and binding on all implementing agencies and project sponsors, it is reasonable to determine that they would be implemented, thereby reducing certain impacts to less than significant notwithstanding the limitations on MTC and ABAG's authority. (See *Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884, 906 ["a condition requiring compliance with regulations is a common and reasonable mitigation measure, and may be proper where it is reasonable to expect compliance"].)

By adopting the mitigation measures listed in the EIR and establishing a Mitigation Monitoring and Reporting Program (included in the Final EIR as Exhibit A) to ensure implementation of these mitigation measures, MTC and ABAG will ensure the corresponding significant impacts are avoided or reduced to the maximum extent feasible. Future projects must comply with CEQA, including implementation of project-specific mitigation measures where applicable and feasible.

Subsequent environmental review for specific projects identified in the proposed Plan may tier off the programmatic analysis or incorporate information from this analysis by reference (CEQA Guidelines, Sections 15150, 15152, and 15168). A project-specific EIR that tiers off the EIR for the proposed Plan may incorporate the mitigation measures set forth in the EIR where applicable and feasible (See, e.g., CEQA Guidelines, Section 15168, subd. (c)(3)). The potential streamlining benefits included in SB 375 provide local agencies and project proponents with an incentive to propose projects that are consistent with the proposed Plan and that incorporate applicable and feasible mitigation measures from the Program EIR.

The Statement of Overriding Considerations explains MTC's/ABAG's reasons for approving the proposed Plan, despite the fact that the proposed Plan will have significant and unavoidable impacts on the environment.

SCOPE OF THE ENVIRONMENTAL ANALYSIS

As required under state law, and pursuant to the role of a regional planning body, the proposed Plan provides a regional blueprint or strategy to better accommodate the region's projected growth in an equitable and efficient manner and in partnership with local governments who still retain local land use control, through coordinated land use and transportation policies, projects, and public investments. The regional forecast projects overall changes in economic activity, population growth and composition for the region as a whole, as well as household growth and composition. This projected level of growth is reasonably expected to occur in the absence of the proposed Plan and can generally be accommodated in the existing general plans of the nine counties and 101 cities of the Bay Area.

The EIR analyzes the potential significant adverse effects of the adoption and implementation of the proposed Plan. The EIR, in compliance with CEQA, is designed to inform decision-makers, other responsible agencies and the general public of the environmental consequences of the proposed Plan. In accordance with CEQA, the EIR identifies regional effects of the implementation of projects that could follow adoption of the proposed Plan. As a program-level EIR that addresses the entire nine-county, 101-city region, impacts of individual land use and transportation projects are not addressed in detail; the focus of this analysis is on addressing the impacts of implementation of the proposed Plan as a whole.

The analysis in the EIR considers the impacts of the RTP/SCS in terms of the estimated transportation project footprints and the assumed land use growth footprint, respectively. The impact discussions generally address the effects of the proposed Plan at three levels of geography: 1) at the regional level, which examines impacts on the Bay Area as a whole; 2) at the county-level, which examines impacts within each county; and 3) at the Transit Priority Areas (TPA) level, which addresses impacts within TPAs. The portion of the projected land use growth footprint located in PDAs that is outside of a TPA is captured in the County totals. Where useful for the impact analysis, GIS-based results were also reported by PDAs.

ORGANIZATION

This document identifies the Findings and Facts in Support of Findings regarding recirculation of the Draft EIR, as well as findings for each potentially significant impact identified in the Draft EIR, and findings regarding mitigation measures and alternatives proposed during the public comment period on the Draft EIR. This document identifies the Findings for Alternatives, briefly summarizing the alternatives discussed in the Draft EIR and making findings with respect to their feasibility and whether each alternative would lessen the significant environmental effects of the proposed Plan. This document also includes a Statement of Overriding Considerations setting forth the specific reasons supporting MTC's and ABAG's actions in approving the proposed Plan despite its significant environmental impacts, and concludes with a finding on the Commission's/Board's independent review and analysis of the EIR.

The findings set forth in the following sections state the Commission's/Board's reasons for making each finding and the rationale connecting the evidence to its conclusions. All records and materials constituting the record of the proceedings upon which these Findings are made are located at the Bay Area Metro Center, MTC Public Information, 375 Beale Street, Suite 800, San Francisco, California, 94105. A list of documents relied on for the EIR, Findings, alternatives analysis, and the Commission's/Board's ultimate decision on the proposed Plan is included at the end of this document as the Record of Proceedings.

Findings and Facts in Support of Findings

CEQA REQUIREMENTS

The EIR identifies significant effects on the environment, which may occur as a result of the projects contemplated by the proposed Plan.

Public Resources Code Section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such projects[.]” (Emphasis added.) The same statute states that the procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will *avoid or substantially lessen* such significant effects.” (Emphasis added.) Section 21002 goes on to state that “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.” (Pub. Resources Code, Section 21002.)

The mandate and principles set forth in Public Resources Code Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. (See Pub. Resources Code, Section 21081, subd. (a); CEQA Guidelines, Section 15091, subd. (a).) Specifically, Section 15091 of the CEQA Guidelines establishes the following requirements for findings:

No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency

makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (CEQA Guidelines, Section 15091(a)(1).)

[This finding shall be referred to herein as “Finding (1).”]

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CEQA Guidelines, Section 15091(a)(2).)

[This finding shall be referred to herein as “Finding (2).”]

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR. (CEQA Guidelines, Section 15091(a)(3).)

[This finding shall be referred to herein as “Finding (3).”]

(CEQA Guidelines, Section 15091, subdivision (a).) Thus, for each significant environmental effect identified in an EIR, the approving agency must issue a written finding reaching one or more of the three permissible conclusions described above.

As stated in Finding (2), some of the identified significant effects can be fully avoided or substantially lessened through another agency’s adoption of the mitigation measures set forth in the EIR. SB 375 makes clear that the legislation shall not be interpreted as superseding the land use authority of cities and counties. SB 375 does not require “a city’s or county’s land use policies and regulations, including its general plan, to be consistent with the regional transportation plan or an alternative planning strategy.” (Government Code, Section 65080(b)(2)(K).) Such a consistency analysis is not required because the goals and purposes of the RTP/SCS and local governmental land use plans are intentionally and fundamentally distinct. This mandate prohibits MTC/ABAG from compelling future lead agencies to adopt specific mitigation measures in approving land use projects. It is, therefore, the responsibility of each subsequent lead agency to independently review the identified mitigation measures and make a determination of the applicability and feasibility of each measure for a specific project.

Pursuant to Public Resources Code Sections 21155.2(a) and (b)(2) and Section 21159.28(a), in order to take advantage of CEQA streamlining benefits allowed under SB 375, projects that seek to tier from the EIR must incorporate the mitigation measures identified in the Mitigation Monitoring and Reporting Program or, if the identified mitigation is found to be infeasible based on substantial evidence, the project must incorporate equivalent measures that avoid or mitigate potential impacts to a less than significant level.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modifications or alternatives are not required, however, where such changes are infeasible or where the responsibility for modifying the project lies with some other agency. (CEQA Guidelines, Section 15091, subd. (a), (b).) Public Resources Code Section 21061.1 defines “feasible” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.” CEQA Guidelines Section 15364 adds another factor: “legal” considerations. (See also *Citizens of Goleta Valley v. Board of Supervisors (Goleta II)* (1990) 52 Cal.3d 553, 574-75 (concluding whether

project applicant owned alternative site for project was an appropriate legal and economic factor to consider).) Moreover, judicial decisions have held “desirability” is also an appropriate consideration. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417 [“‘[F]easibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors”]; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 998 [same].”).

With respect to a project for which significant impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project’s “benefits” rendered “acceptable” its “unavoidable adverse environmental effects.” (CEQA Guidelines, Section 15093, 15043, subd. (b); see also Pub. Resources Code, Section 21081, subd. (b).) The California Supreme Court has stated, “[t]he wisdom of approving... any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced.” (*Goleta II*, *supra*, 52 Cal.3d at p. 576.)

For purposes of these findings, the term “avoid” refers to the effectiveness of one or more mitigation measures in reducing an otherwise significant effect to a less-than-significant level. In contrast, the term “substantially lessen” refers to the effectiveness of such measure or measures in substantially reducing the severity of a significant effect, but not to a less-than-significant level. Although CEQA Guidelines Section 15091 requires only that approving agencies specify that a particular significant effect is “avoid[ed] or substantially lessen[ed],” these findings, for purposes of clarity, in each case specify whether the effect in question has been reduced to a less than significant level, or has simply been substantially lessened but remains potentially significant. Moreover, although Section 15091, read literally, does not require findings to address environmental effects that an EIR identifies as merely “potentially significant,” these findings nevertheless fully account for all such effects identified in the EIR.

These findings constitute the Commission’s/Board’s best efforts to set forth the evidentiary and policy basis for its decision to approve the proposed Plan in a manner consistent with the requirements of CEQA. To the extent these findings conclude that various proposed mitigation measures outlined in the EIR are feasible, within its responsibility and jurisdiction, and have not been modified, superseded or withdrawn, the Commission/Board hereby binds MTC/ABAG to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations.

FINDINGS REGARDING RECIRCULATOIN OF THE DRAFT EIR

The Draft EIR analyzed impacts associated with the draft proposed Plan released April 3, 2017. Since the release of the draft proposed Plan and Draft EIR, in response to public comments, MTC/ABAG considerations and continued staff analysis, there have been several text changes incorporated into the final proposed Plan. There have also been modifications to the Draft EIR, as documented in the Final EIR.

Under Section 15088.5 of the CEQA Guidelines, recirculation of an EIR is required when “significant new information” is added to the EIR after public notice is given of the availability of the Draft EIR for public review but prior to certification of the Final EIR. The term “information” can include changes in the project or environmental setting, as well as additional data or other information. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. “Significant new information” requiring recirculation includes, for example, a disclosure showing that:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The above standard is “not intend[ed] to promote endless rounds of revision and recirculation of EIRs.” (*Laurel Heights Improvement Assn. v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1132) “Recirculation was intended to be an exception, rather than the general rule.” (*Ibid.*)

CEQA case law emphasizes that “[t]he CEQA reporting process is not designed to freeze the ultimate proposal in the precise mold of the initial project; indeed, new and unforeseen insights may emerge during investigation, evoking revision of the original proposal.” (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 736-737; see also *River Valley Preservation Project v. Metropolitan Transit Development Bd.* (1995) 37 Cal.App.4th 154, 168, fn. 11.) “‘CEQA compels an interactive process of assessment of environmental impacts and responsive project modification which must be genuine. It must be open to the public, premised upon a full and meaningful disclosure of the scope, purposes, and effect of a consistently described project, with flexibility to respond to unforeseen insights that emerge from the process.’ [Citation.] In short, a project must be open for public discussion and subject to agency modification during the CEQA process.” (*Concerned Citizens of Costa Mesa, Inc. v. 33rd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 936; *Citizens for East Shore Parks v. State Lands Com.* (2011) 202 Cal.App.4th 549, 563 [“Administrative agencies not only can, but should, make appropriate adjustments... as the environmental review process unfolds.”].)

The Commission/Board hereby finds that the changes made to the proposed Plan clarify and/or correct the text of the proposed Plan, but do not result in any changes that would have environmental effects. The potential impacts from the final proposed Plan fit within the range of impact analysis contained in the EIR. There are no substantial changes in the proposed Plan or the circumstances under which the proposed Plan is being undertaken, that necessitate revisions of the EIR. Nor has new information become available. The final proposed Plan does not result in any new impacts, nor does it cause the level of significance for any previously identified impacts to change. The circumstances, impacts, and mitigation requirements identified in the EIR remain applicable to the final proposed Plan, and support the finding that the final proposed Plan does not raise any new issues and does not cause the levels of impacts identified in the EIR to be exceeded.

Further, the changes to the Draft EIR described in the Final EIR supplement or clarify the existing language. Clarifications and corrections to the text, tables, and figures do not alter the conclusions of the Draft EIR. Each of the modifications to the mitigation measures is analyzed herein, and the Commission/Board concludes that the measures as revised are substantially equivalent to, or more effective than, the wording and intent of the original measures as they appeared in the Draft EIR.

In sum, no changes made to the proposed Plan or the EIR since release of the Draft EIR involve “significant new information” triggering recirculation because the changes do not result in any new significant environmental effects, any substantial increase in the severity of any previously identified significant effects, or otherwise trigger recirculation. Instead, the modifications are either environmentally benign or environmentally neutral, and thus represent the kinds of changes that commonly occur as the environmental review process works towards its conclusion. The Commission/Board hereby determines, based on the

standards provided in Section 15088.5 of the CEQA Guidelines, that recirculation of the Draft EIR is not required.

FINDINGS REGARDING SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The following subsection lists each significant or potentially significant environmental impact by issue area in the order it appears in the EIR, the mitigation measures identified for each impact in the EIR, the CEQA Finding or Findings applied by the Commission/Board, and the Facts in Support of each Finding. This discussion does not attempt to describe the full analysis of each environmental impact contained in the EIR. A full documentation of the environmental analysis and conclusions is in the EIR and the Record of Proceedings identified at the end of this document and incorporated herein by reference.

The Commission/Board has determined the adoption of feasible mitigation measures, alternatives, and proposals incorporated into the proposed Plan will reduce impacts to some extent, but in some instances the impact will not be reduced to a level that is deemed “less than significant,” thus some impacts remain Significant and Unavoidable. The Statement of Overriding Considerations contains additional information explaining the reasons for the Commission’s/Board’s decision to approve the proposed Plan despite potentially significant environmental effects that MTC/ABAG cannot mitigate to less-than-significant levels.

TRANSPORTATION

Impact

2.1-3 Implementation of the proposed Plan could result in a significant increase in per capita VMT on facilities experiencing level of service (LOS) F compared to existing conditions during AM peak periods, PM peak periods, or during the day as a whole (LOS F defines a condition on roads where traffic volumes exceed capacity, resulting in stop-and-go conditions for extended periods of time). A significant increase in LOS F-impacted per capita VMT is defined as greater than 5 percent. (Draft EIR, p. 2.1-28)

Mitigation Measures

2.1-3 (a) MTC, in its role as a funding agency, and implementing agencies shall support the advancement of corridor-level plans and implementation of projects located on severely congested (LOS F) facilities.

2.1-3 (b) Transportation demand management (TDM) strategies shall be incorporated into individual land use and transportation projects and plans, as part of the planning process. Local agencies shall incorporate strategies identified in the Federal Highway Administration’s publication: *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (August 2012) into the planning process (FHWA 2012). For example, the following strategies may be included to encourage use of transit and non-motorized modes of transportation and reduce vehicle miles traveled on the region’s roadways:

- ▲ include TDM mitigation requirements for new developments;
- ▲ incorporate supporting infrastructure for non-motorized modes, such as, bike lanes, secure bike parking, sidewalks, and crosswalks;
- ▲ provide incentives to use alternative modes and reduce driving, such as, universal transit passes, road and parking pricing;
- ▲ implement parking management programs, such as parking cash-out, priority parking for carpools and vanpools;

- ▲ develop TDM-specific performance measures to evaluate project-specific and system-wide performance;
- ▲ incorporate TDM performance measures in the decision-making process for identifying transportation investments;
- ▲ implement data collection programs for TDM to determine the effectiveness of certain strategies and to measure success over time; and
- ▲ set aside funding for TDM initiatives.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measure described above to address site-specific conditions. The implementing agency would ensure that transportation demand management measures are incorporated into projects to the extent feasible. Implementation of the mitigation measure at a project-level would encourage sustainable modes of transportation and reduce the potential for the proposed Plan to increase VMT on congested facilities. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Finding

Changes or alterations within the responsibility and jurisdiction of MTC or ABAG have been required in, or incorporated into, the proposed Plan to address this impact to the extent feasible. Additionally, changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which avoid or substantially lessen the significant environmental effect as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Finding

- A. The EIR evaluates the change in the amount of per capita automobile travel on road facilities experiencing the worst level of service (LOS) and the hours of congestion experienced by motorists. The analysis is conducted on a regional and county-level basis. LOS is a qualitative rating scale that describes how well a transportation facility performs from the traveler's perspective on a range from A (least congested) to F (most congested). (Draft EIR, p. 2.1-28.)
- B. Under the proposed Plan, per capita VMT on severely congested facilities (LOS F) would increase compared to existing conditions at both the regional level, and for a subset of Bay Area Counties and time periods, as specified in the Draft EIR. (Draft EIR, pp. 2.1-29 to 2.1-31.)
- C. The proposed Plan would minimize congestion through a number of regional policies and investment strategies, including implementation of transit capacity increases along fixed guideways to provide congestion-immune alternatives to freeway and arterial corridors, expansion of the Freeway Performance Initiative, and the projected land use pattern, which would emphasize focused growth in Transit Priority Areas and shorten commute distances by bringing jobs and housing closer together; and continued funding of the OneBayArea Grant (OBAG) program to accelerate development initiatives in Priority

Development Areas and Transit Priority Areas through infrastructure projects. (Draft EIR, p. 2.1-32.) However, as these policies have not yet been implemented, their effectiveness is not known at this time.

- D. The increase in per capita VMT on facilities experiencing LOS F represents a significant impact compared to existing conditions. To assess whether implementation of these specific mitigation strategies would result in measurable traffic congestion reductions, implementing actions may need to be further refined within the overall parameters of the proposed Plan and matched to local conditions in any subsequent project-level environmental analysis.
- E. The proposed mitigation measures are expected to reduce the overall impact, by encouraging sustainable modes of transportation and reducing the potential for the proposed Plan to increase VMT on congested facilities.
- F. LOS is a qualitative evaluation measure that describes how well a transportation facility performs from the traveler's perspective. Roadway congestion, while an inconvenience to drivers, is not itself an environmental impact. (See Pub. Resource Code, § 21099, subd. (b)(2) ["automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to [CEQA]"].)

Impact

2.1-7 Implementation of the proposed Plan could cause a disruption to the ongoing operations of the applicable regional or local area transportation system because of construction activities. (Draft EIR, p. 2.1-36)

Mitigation Measures

2.1-7 Implementing agencies shall require implementation of best practice strategies regarding construction activities on the transportation system and apply recommended applicable mitigation measures as defined by state and federal agencies. Examples of mitigation measures include, but are not limited to, the following:

- ▲ prepare a transportation construction plan for all phases of construction;
- ▲ establish construction phasing/staging schedule and sequence that minimizes impacts of a work zone on traffic by using operationally-sensitive phasing and staging throughout the life of the project;
- ▲ identify arrival/departure times for trucks and construction workers to avoid peak periods of adjacent street traffic and minimize traffic affects;
- ▲ identify optimal delivery and haul routes to and from the site to minimize impacts to traffic, transit, pedestrians, and bicyclists;
- ▲ identify appropriate detour routes for bicycles and pedestrians in areas affected by construction;
- ▲ coordinate with local transit agencies and provide for relocation of bus stops and ensure adequate wayfinding and signage to notify transit users;
- ▲ preserve emergency vehicle access;
- ▲ implement public awareness strategies to educate and reach out to the public, businesses, and the community concerning the project and work zone (e.g., brochures and mailers, press releases/media alerts);
- ▲ provide a point of contact for residents, employees, property owners, and visitors to obtain construction information, and provide comments and questions;

- ▲ provide current and/or real-time information to road users regarding the project work zone (e.g., changeable message sign to notify road users of lane and road closures and work activities, temporary conventional signs to guide motorists through the work zone); and
- ▲ encourage construction workers to use transit, carpool, and other sustainable transportation modes when commuting to and from the site.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant (LS-M) because it would require, as part of the planning, design, and engineering for future projects, that the implementing agency implement measures to minimize overall disruptions and ensure that overall circulation in a project area is maintained to the extent possible, with particular focus on ensuring transit, pedestrian, and bicycle connectivity. Implementation of the mitigation measure at a project-level would reduce the impacts from construction activities on the transportation system and traffic.

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Finding

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Finding

- A. The projected changes in land use and transportation projects in the proposed Plan would require construction activity for individual projects during implementation of the proposed Plan. Although construction activities would be short term, intermittent, and geographically dispersed, construction activities associated with implementing the projected land use growth and transportation projects could interfere with normal operations of the transportation system. The specific construction activities associated with projects under the proposed Plan would be finalized at the time individual projects are proposed. However, transportation-related impacts could occur from travel lane closures, detours, and/or congestion resulting from increased truck traffic on local roads as construction vehicles and workers travel to and from project sites. (Draft EIR, p. 3.1-36.)
- B. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies apply best practices strategies regarding construction activities on the transportation system to reduce disruption to the ongoing operations of the applicable regional or local area transportation system.

AIR QUALITY

Impact

2.2-2 Implementation of the proposed Plan could result in a substantial net increase in construction-related emissions. (Draft EIR, p. 2.2-32)

Mitigation Measures

2.2-2 When screening levels are exceeded (see Table 2.2-8 on pages 2.2-37 through 2.2-38 of the Draft EIR or those most currently updated by BAAQMD), implementing agencies and/or project sponsors shall implement measures, where applicable, feasible, and necessary based on project- and site-specific considerations, that include, but are not limited to the following:

Construction Best Practices for Exhaust

- ▲ The applicant/general contractor for the project shall submit a list of all off-road equipment greater than 25 horsepower (hp) that would be operated for more than 20 hours over the entire duration of project construction, including equipment from subcontractors, to BAAQMD for review and certification. The list shall include all information necessary to ensure the equipment meets the following requirement:
 - 1) Be zero emissions OR 2) have engines that meet or exceed either EPA or ARB Tier 2 off-road emission standards; and 3) have engines that are retrofitted with an ARB Level 3 Verified Diesel Emission Control Strategy (VDECS), if one is available for the equipment being used. Equipment with engines that meet Tier 4 Interim or Tier 4 Final emission standards automatically meet this requirement; therefore, a VDECS would not be required.
 - Idling time of diesel powered construction equipment and trucks shall be limited to no more than two minutes. Clear signage of this idling restriction shall be provided for construction workers at all access points.
 - All construction equipment shall be maintained and properly tuned in accordance with the manufacturers' specifications.
 - Portable diesel generators shall be prohibited. Grid power electricity should be used to provide power at construction sites; or propane and natural gas generators may be used when grid power electricity is not feasible.

Construction Best Practices for Dust

- ▲ All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. For projects over five acres in size, soil moisture should be maintained at a minimum of 12 percent. Moisture content can be verified by lab samples or a moisture probe.
- ▲ All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- ▲ All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. Dry power sweeping should only be performed in conjunction with thorough watering of the subject roads.
- ▲ All vehicle speeds on unpaved roads and surfaces shall be limited to 15 mph.
- ▲ All roadway, driveway, and sidewalk paving shall be completed as soon as possible. Building pads shall be paved as soon as possible after grading.
- ▲ All construction sites shall provide a posted sign visible to the public with the telephone number and person to contact at the Lead Agency regarding dust complaints. The recommended response time for

corrective action shall be within 48 hours. BAAQMD's Complaint Line (1-800-334-6367) shall also be included on posted signs to ensure compliance with applicable regulations.

- ▲ All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- ▲ Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- ▲ Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- ▲ The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- ▲ All trucks and equipment, including their tires, shall be washed off before leaving the site.
- ▲ Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.
- ▲ Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- ▲ These BMPs are consistent with recommendations in BAAQMD's CEQA guidelines and Planning Healthy Places (BAAQMD 2010b, BAAQMD 2016). Applicable mitigation measures shall be required at the time grading permits are issued.

Significance After Mitigation

The measures described above would minimize PM₁₀ and PM_{2.5} dust emissions and minimize exhaust emissions of diesel PM through the use of readily available, lower-emitting diesel equipment, and/or equipment powered by alternative cleaner fuels (e.g., propane) or electricity, as well as on-road trucks using particulate exhaust filters.

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the project's impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Finding

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Finding

- A. Impacts of the proposed Plan related to construction-related emissions are generally regional in nature. Construction equipment and processes are generally similar between land use and transportation projects, except that transportation projects could result in more paving and concrete activity and tend to be larger than land use projects. (Draft EIR, p. 2.2-32.)
- B. With respect to construction equipment, EPA and ARB have adopted rules and regulations establishing criteria pollutant and hazardous emissions limits for diesel powered on-road vehicles and off-road equipment. The current EPA and ARB rules and emission standards are in the process of being implemented and are therefore reasonably foreseeable. They will continue to be phased in through 2023 and are expected to reduce diesel PM emissions by 98 percent or more when compared to vehicles and equipment built before 2004 and still in operation, based on EMFAC2014 model outputs. (Draft EIR, p. 2.2-32.)
- C. EPA and ARB regulations of on-road and off-road engines target the primary sources of emissions at construction sites. These include on-road heavy-duty trucks and off-road equipment, such as aerial lifts, backhoes, forklifts, and loaders. In addition, ARB's clean fuel standards would reduce emissions from all internal combustion engines and their stationary and portable equipment regulations would reduce emissions from the smaller equipment used at construction sites, such as portable generators and tub grinders. (Draft EIR, p. 2.2-32.)
- D. The proposed Plan includes up to 365 transportation projects that either modernize or expand existing transportation infrastructure. The proposed Plan would also accommodate land use growth in the Plan area of approximately 630,000 new households and a net increase of 95 million square feet of non-residential uses. Although EPA and ARB have adopted stringent air diesel PM emission regulations for construction equipment, these regulations alone cannot assure that all projects consistent with the proposed Plan would use only the lowest emissions-generating construction equipment. Additionally, dust emissions from construction activity would occur from the disturbance of unpaved sites and material handling. Construction could also occur at any point under the Plan build-out period and could potentially occur over a short period of time, resulting in substantial construction-related emissions on a daily basis. (Draft EIR, p. 2.2-32.)
- E. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies apply best practices strategies regarding construction-related emissions to minimize PM₁₀ and PM_{2.5} dust emissions and minimize exhaust emissions of diesel PM.

Impact

- 2.2-3 Implementation of the proposed Plan could result in a net increase of emissions of criteria pollutants from on-road mobile and land use sources compared to existing conditions, including emissions of ROG, NOX, CO, PM₁₀, and PM_{2.5}, as the SFBAAB is in non-attainment for ozone, PM₁₀, and PM_{2.5} standards. (Draft EIR, p. 2.2-36)**

Mitigation Measures

- 2.2-3(a)** MTC and ABAG, in partnership with BAAQMD, and implementing agencies, shall use existing air quality and transportation funds and seek additional funds to continue to implement BAAQMD and ARB programs (e.g., Carl Moyer) aimed at retrofits and replacements of trucks and locomotives.

2.2-3(b) MTC and ABAG, in partnership with BAAQMD and the Port of Oakland, and other agency partners, shall work together to secure incentive funding to reduce mobile PM emissions from mobile exhaust and entrained PM sources such as tire wear, break wear, and roadway dust.

2.2-3(c) MTC and ABAG, in partnership with local air districts, and implementing agencies shall implement Mitigation Measures 2.1-3 (a) and 2.1-3 (b).

2.2-3(d) When screening levels are exceeded (see Table 2.2-8 of the Draft EIR or those most currently updated by BAAQMD), implementing agencies and/or project sponsors shall implement measures, where applicable, feasible, and necessary based on project- and site-specific considerations, that include, but are not limited to those shown in Table 2.2-13 in the Draft EIR, or are updated by BAAQMD or within CalEEMod.

Significance After Mitigation

The exact reductions from Mitigation Measure 2.2-3(a) through 2.2-3(d) are not known at this time.

The measure described above for individual projects (Mitigation Measure 2.2-3 (d)) would reduce operational emissions. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the project's impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt some or all of the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Finding

Changes or alterations within the responsibility and jurisdiction of MTC or ABAG have been required in, or incorporated into, the proposed Plan to address this impact to the extent feasible. Additionally, changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which avoid or substantially lessen the significant environmental effect as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Finding

- A. The area-source emissions of criteria pollutants and precursors, including ROG, NO_x, CO, PM₁₀, and PM_{2.5}, would increase over the planning horizon of the proposed Plan because of the net increase in land use development. The majority of new ROG emissions would come from consumer products, CO emissions from landscaping equipment, and NO_x, PM₁₀, and PM_{2.5} emissions from natural gas use. ARB and the three air districts in the region have policies in place that regulate emissions from architectural coatings and hearths. ARB also has four existing consumer product regulations. The State is also exploring ZNE building standards that would reduce emissions of criteria pollutants from natural gas use. However, these regulations alone cannot assure that all projects consistent with the proposed Plan would not exceed existing levels. (Draft EIR, p. 2.2-36.)
- B. The proposed transportation projects would result in a net increase in VMT; however, mobile source emissions of criteria pollutants ROG, NO_x (summertime and wintertime), and CO in the region would

decrease between 2015 and 2040, the planning horizon for the proposed Plan. When compared to existing conditions, emissions associated with development under the proposed Plan would be reduced. The primary reason for these reductions is the increasingly stringent emission controls adopted by ARB for new vehicle engines and fuels, including the Truck and Bus Regulation, the Enhanced Smog Check Program, the Diesel Risk Reduction Plan and fleet turnover. Additionally, the land use pattern in the proposed Plan concentrates future growth at higher densities around existing and proposed transit investments, which would reduce driving and motor vehicle emissions. (Draft EIR, pp. 2.2-37 – 2.2-38).

- C. Conversely, mobile-source PM_{2.5} and PM₁₀ emissions would increase during the proposed Plan's timeframe compared to existing conditions. The higher levels of PM_{2.5} and PM₁₀ emissions in 2040 conditions are primarily a function of the growth in VMT, with some contributions from tire and brake wear and exhaust. Exhaust emissions of PM_{2.5} and PM₁₀ would not increase at the same rate as VMT because of the stringent emission controls that would take effect with fleet turnover. Daily VMT is projected to increase when comparing the proposed Plan to existing conditions, but to a large degree, these increases would be offset by improvements to the vehicle fleet. PM control programs implemented by local air districts, would also contribute to the emission reductions relative to VMT. (Draft EIR, pp. 2.2-37 – 2.2-38).
- D. In total, the proposed Plan would result in a net decrease in ROG, NOX, and CO emissions. However, there would be a net increase in PM emissions. Therefore, the proposed Plan could cause a net increase of emissions of criteria pollutants from mobile and area-sources compared to existing conditions. (Draft EIR, p. 2.2-38).
- E. The proposed mitigation measures are expected to reduce the overall impact, by partnering with state and local agencies to (1) secure funding aimed at retrofits and replacement of trucks and locomotives; (2) reduce PM emissions from tire wear, brake wear and road dust; (3) encourage sustainable modes of transportation and reducing the potential to increase VMT on congested facilities; and (4) when implementing agencies apply best practices strategies to minimize operational emissions of criteria pollutants.

Impact

- 2.2-5 Implementation of the proposed Plan could result in a net increase in sensitive receptors located in Transit Priority Areas (TPA) where: (a) TACs or PM_{2.5} concentrations result in cancer risk levels greater than 100 in a million or a concentration of PM_{2.5} greater than 0.8 µg/m³; or (b) TACs or PM_{2.5} concentrations result in noncompliance with an adopted Community Risk Reduction Plan. (Draft EIR, p. 2.2-41)**

Mitigation Measures

2.2-5(a) When locating sensitive receptors in TAC risk areas, as identified in Figures 2.2-3 to 2.2-13 of the Draft EIR, implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific consideration that include, but are not limited to the following:

- Install, operate and maintain in good working order a central heating, ventilation and air conditioning (HVAC) system or other air intake system in the building, or in each individual unit, that meets or exceeds a minimum efficiency reporting value (MERV) of 13 (MERV-16 for projects located in the West Oakland Specific Plan area) or higher. The HVAC system shall include the following features: Installation of a high efficiency filter and/or carbon filter to filter particulates and other chemical matter from entering the building. Either high efficiency particulate air (HEPA) filters or American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) certified 85% supply filters shall be used.

- ▲ Maintain, repair and/or replace HVAC system on an ongoing and as needed basis or shall prepare an operation and maintenance manual for the HVAC system and the filter. The manual shall include the operating instructions and the maintenance and replacement schedule. This manual shall be included in the Covenants, Conditions and Restrictions (CC&Rs) for residential projects and/or distributed to the building maintenance staff. In addition, the applicant shall prepare a separate homeowners manual. The manual shall contain the operating instructions and the maintenance and replacement schedule for the HVAC system and the filters.
- ▲ Install passive electrostatic filtering systems with low air velocities (i.e., less than 1 mph).
- ▲ Individual and common exterior open space and outdoor activity areas proposed as part of individual projects shall be located as far away as possible within the project site boundary, face away major freeways, and shall be shielded from the source (i.e., the roadway) of air pollution by buildings or otherwise buffered to further reduce air pollution for project occupants.
- ▲ Locate air intakes and design windows to reduce PM exposure (e.g., windows nearest to the roadway do not open).
- ▲ If sensitive receptors are located near a distribution center, residents shall not be located immediately adjacent to a loading dock or where trucks concentrate to deliver goods.
- ▲ Sensitive receptors within buildings shall be located in areas upwind of major roadway traffic to reduce exposure to reduce cancer risk levels and exposure to PM_{2.5}.
- ▲ Planting trees and/or vegetation between sensitive receptors and pollution source. Trees that are best suited to trapping PM shall be planted, including one or more of the following species: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid poplar (*Populus deltoids X trichocarpa*), California pepper tree (*Schinus molle*) and Redwoods (*Sequoia sempervirens*).
- ▲ Loading docks shall be required to include electric hookups for visiting trucks.
- ▲ Idling of heavy duty diesel trucks at these locations shall be prohibited or limited to no more than 2 minutes.
- ▲ If within the project site, existing and new diesel generators shall meet ARB's Tier 4 emission standards.
- ▲ Emissions from diesel trucks shall be reduced through establishing truck routes to avoid residential neighborhoods or other land uses serving sensitive populations, such as hospitals, schools, and child care centers. A truck route program, along with truck calming, parking and delivery restrictions, shall be implemented to direct traffic activity at non-permitted sources and large construction projects.

These BMPs are consistent with recommendations in BAAQMD's CEQA guidelines and Planning Healthy Places (BAAQMD 2011, BAAQMD 2016).

Significance After Mitigation

The mitigation measures described above would reduce exposure of new sensitive receptors to levels of cancer risk and PM_{2.5} concentration reductions of 40 to 90 percent, depending on their applicability to a proposed project. See Appendix D for more information on the effectiveness of each mitigation measure.

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources Code sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. Additional site-specific analysis would be needed when a project is proposed in these areas to determine the actual level of exposure and whether feasible mitigation exists for the project to implement to reduce its level of cancer risk exposure to less than 100 in a million and PM_{2.5} concentrations less than 0.8 µg/m³. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the project's impact would be less than significant with mitigation (LS-M).

Moreover, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Further, there may be instances in which site-specific or project-specific conditions preclude the reduction of all project impacts to less-than-significant the exposure criteria (as described above). Therefore, this impact would be **significant and unavoidable (SU)** for purposes of this program-level review.

Finding

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Finding

- A. The proposed Plan would result in land use growth, including land uses that would locate sensitive receptors, throughout the Plan area. A geospatial analysis was used to compile cancer risk levels and PM_{2.5} concentrations associated with all stationary and mobile sources and identify areas in and within 1,000 feet of a Transit Priority Area. Areas where these cancer risk levels and/or PM_{2.5} concentrations are exceeded (TAC Risk Areas), tend to occur along high-volume freeways and roadways, high-use rail lines, locations near numerous stationary-sources, and locations where a single stationary-source has very high estimated cancer risk levels or PM_{2.5} concentration. Although TAC and diesel PM emissions would decrease through 2040 in the Plan area, it is possible that sensitive receptors may locate within the risk areas identified in the Draft EIR. (Draft EIR, p. 2.2-41.)
- B. In jurisdictions with an adopted Community Risk Reduction Plan (“CRRP”), any proposed project that includes sensitive land uses and or receptors should be evaluated against the standards and mitigation measures in those adopted plans. MTC does not have the jurisdiction to require that new land uses under the proposed Plan be built in locations that would exceed TAC and PM concentrations deemed noncompliant by an applicable CRRP. The proposed Plan would also result in additional traffic and congestion along existing corridors and could result in localized increases in mobile-source TAC and PM_{2.5} near existing sensitive receptors already located near existing corridors. Therefore, the proposed Plan could locate sensitive receptors in areas where TACs or fine particulate matter concentrations result in increased cancer risk levels or which are in non-compliance with an adopted CRRP. (Draft EIR, p. 2.2-41.)
- C. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies apply best practices strategies regarding TAC risk areas to reduce the overall cancer risk levels and PM_{2.5} near sensitive receptors and ensure compliance with applicable CRRPs.
- D. The final wording of Mitigation Measure 2.2-5(a) as reflected in these findings, differs from, but is equivalent to or exceeds, the measure as it appears in the Draft EIR. The wording was changed to clarify the intended TAC risk areas to which the mitigation applies, in response to a comment received on the Draft EIR. (FEIR, p. 2-293, 3-6.) The Commission/Board finds that the proposed final wording of this measure is substantially equivalent to, or more effective than, the wording and intent of the original mitigation measure.

Impact

2.2-6 Implementation of the proposed Plan could result in changes in TAC and or PM_{2.5} exposure levels that disproportionately impact minority and low-income populations. (Draft EIR, p. 2.2-54)

Mitigation Measures

2.2-6(a) MTC/ABAG shall partner with BAAQMD and local lead agencies to develop a program to install air filtration devices in existing residential buildings, and other buildings with sensitive receptors, located near freeways or sources of TACs and PM_{2.5}.

2.2-6(b) MTC/ABAG shall partner with BAAQMD to develop a program to provide incentives to replace older locomotives and trucks in the region to reduce TACs and PM_{2.5}.

2.2-6(c) MTC and ABAG, in partnership with local air districts, and implementing agencies shall implement Mitigation Measures 2.1-3 (a) and 2.1-3 (b).

2.2-6(d) Implement Mitigation Measure 2.2-5(a).

Significance After Mitigation

The proposed Plan could result in changes in TAC and or PM_{2.5} exposure levels that disproportionately impact minority and low-income communities. These impacts would vary across counties. The mitigation measures identified above would result in less emissions in and lower exposure levels to the minority and low-income communities. However, the exact reductions are not known at this time. Therefore, this impact would remain significant and unavoidable (SU).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt some or all of the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Finding

Changes or alterations within the responsibility and jurisdiction of MTC or ABAG have been required in, or incorporated into, the project to address this impact to the extent feasible. Additionally, changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency. However, specific economic, legal, social, technological, or other considerations make it infeasible to avoid or substantially lessen the impact even with implementation of the identified measures. (Finding (3)).

Facts in Support of Finding

- A. Overall TAC and PM_{2.5} exhaust emissions from diesel and gasoline vehicles decrease throughout the Bay Area between existing conditions in 2015 and the proposed Plan's horizon year 2040, largely due to the implementation of ARB's On-Road Heavy-Duty Diesel Vehicle Regulations (Draft EIR, p. 2.2-54). Between CARE (Community Air Risk Evaluation) communities and non-CARE communities there are slight differences in the percent reductions expected in 2040 under the proposed Plan. Although exhaust-related emissions would decrease in the region between 2015 and 2040, the CARE communities in the region would experience higher total TAC and PM_{2.5} emissions between 2015 and 2040 in comparison with non-CARE portions of the Region. Total PM_{2.5} emissions would also increase in the Plan area as a whole.

Therefore, the proposed Plan could disproportionately impact TAC and PM_{2.5} exposure levels in minority and low-income communities. (Draft EIR, pp. 2.2-54 to 2.2-56.)

- B. The proposed mitigation measures are expected to reduce the overall impact to the extent feasible, by partnering with state and local agencies to (1) install air filtration devices in existing buildings with sensitive receptors near freeways or sources of TACs and PM_{2.5}; (2) incentivize replacement of older trucks and locomotives in the region; (3) encouraging sustainable modes of transportation and reducing the potential to increase VMT on congested facilities; and (4) when implementing agencies apply best practices strategies regarding TAC risk areas to reduce the overall cancer risk levels and PM_{2.5} near sensitive receptors and ensure compliance with applicable CRRPs.
- C. The proposed Plan includes \$5 billion of goods movement investment, including \$350 million for a clean-fuel and impact reduction program. This programmatic investment will help to implement recommendations from the *Freight Emissions Reduction Action Plan*. Chapter 5 of the *Freight Emissions Reduction Action Plan* includes an analysis of various zero emission truck and rail scenarios, and concludes that the Bay Area should prioritize implementation of a Range-Extended Electric Vehicle (REEV) with engine (for urban delivery trucks) and yard switching using dual-mode electric locomotives with battery-assist (tender) cars. The proposed Plan also includes \$400 million for Smart Deliveries and Operations.
- D. Actions to decarbonize the energy systems, such as through transitioning to electrified vehicles, are key priorities of BAAQMD's 2017 *Clean Air Plan*. MTC/ABAG is currently consulting with BAAQMD, the City of Oakland, the Port of Oakland, and other local agencies to develop funding mechanisms for programs such as electrified cargo handling equipment deployment.
- E. The final wording of Mitigation Measure 2.2-6(d) as reflected in these findings, differs from, but is equivalent to or exceeds, the measure as it appears in the Draft EIR. The wording was changed to clarify the cross-referenced measure identified in Mitigation Measure 2.2-6(d), in response to a comment received on the Draft EIR. (FEIR, p. 2-293, 3-6.) The Commission/Board finds that the proposed final wording of this measure is substantially equivalent to, or more effective than, the wording and intent of the original mitigation measure.

LAND USE AND PHYSICAL DISPLACEMENT

Impact

- 2.3-1** Implementation of the proposed Plan could increase the risk of displacement for a substantial number of existing residents, necessitating the construction and preservation of additional affordable housing elsewhere within the region. (Draft EIR, p. 2.3-26)

Mitigation Measures

2.3-1 Implementing agencies and/or project sponsors shall implement, where feasible and necessary, the mitigation measures described throughout this EIR to address the effects of displacement that could result in the construction of replacement housing, including Mitigation Measures 2.2-2 (air quality); 2.3-2, 2.3-4, and 2.3-5 (land use); 2.5-5 (sea level rise); 2.6-1, 2.6-5, and 2.6-6 (noise); 2.9-1 through 2.9-5 (biological resources); 2.10-1 and 2.10-3 through 2.10-5 (visual resources); 2.11-1 through 2.11-5 (cultural resources); and 2.13-4 (hazards).

Significance After Mitigation

Implementation of this mitigation measure would reduce potentially significant impacts to a less-than-significant level with mitigation (LS-M), as explained in the impact discussions related to each impact and mitigation measure.

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources Code sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measure described above, to the extent feasible, to address site-specific conditions. MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measure, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains **potentially significant and unavoidable (SU)** for purposes of this program-level review.

Finding

Changes or alterations within the responsibility and jurisdiction of MTC or ABAG have been required in, or incorporated into, the project to address this impact to the extent feasible. Additionally, changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency. However, specific economic, legal, social, technological, or other considerations may make it infeasible to implement the identified measures to avoid or substantially lessen the impact. (Finding (3)).

Facts in Support of Finding

- A. Displacement risk is a function of the location and availability of affordable housing near major job centers in a growing regional economy. As the growth in jobs (particularly those that pay higher wages) outpaces the supply of housing (particularly those that are affordable to lower-income households), the cost of housing inevitably rises faster than wages for all workers. In such market conditions, higher-income workers are better positioned to compete for the limited supply of housing opportunities, resulting in a higher risk of displacement for all other residents. To the extent that the private or the public sectors can provide more market rate and deed-restricted affordable housing in these communities, this risk subsides. (Draft EIR, p. 2.3-24.)
- B. The Bay Area is currently facing a severe housing shortage, leading to significant displacement pressures on the region's lower-income residents. These risks are expected to continue to increase with or without the adoption of the proposed Plan. To the extent that the proposed Plan provides incentives to local jurisdictions to plan for and build new housing at all income levels, preserve existing affordable housing, and implement anti-displacement policies and programs, the future risk of displacement will be lower than what can be anticipated otherwise. Specifically, the proposed Plan decreases the risk of overall displacement compared to the No Project Alternative. (Draft EIR, p. 2.3-24.)
- C. Adoption of the proposed Plan does not authorize entitlements for or construction projects in the region. Rather, the proposed Plan is a regional strategy that sets a vision for future development, which must still be reviewed, analyzed and approved by local governments, which retain full control over local land use authority. Despite these limitations, the proposed Plan addresses displacement risk by increasing resources for affordable housing and non-automobile transportation access in lower-income neighborhoods, and by supporting economic opportunities across the region that benefit existing residents. The proposed Plan recommends several strategies, including (1) Advance funding and legislative solutions for housing; (2) Continue recent housing successes in the One Bay Area Grant (OBAG) program, including the Naturally Occurring Affordable Housing (NOAH) preservation fund, JumpStart program, and funding for transportation conditioned on RHNA performance (80k by 2020 initiative); (3) Spur housing production at all income levels and invest directly in affordable housing; (4) Use housing

performance to prioritize funding for long-range transportation projects; (5) Strengthen policy leadership on housing; and (6) Close data gaps for housing. (Draft EIR, pp. 2.3-24 to 2.3-25.)

- D. Under SB 375, the proposed Plan must identify sufficient areas in the region to house all the projected population. The proposed Plan's housing targets are derived from the Regional Housing Control Total per the 2014 settlement agreement signed with the Building Industry Association (BIA), which increases the housing forecast by adding the number of housing units necessary to accommodate potential growth in in-commuters from outside the region. The Regional Housing Control Total estimated the total number of units needed to accommodate all of the residents in the region plus the number of housing units that correspond to the potential in-commuter increase. Incorporating the Regional Housing Control Total into the proposed Plan ensures sufficient capacity such that the entire regional workforce added under the Plan is housed within the Bay Area with no net increase in in-commuting from other counties outside the region. Thus, the projected land use strategy would accommodate the projected growth in the Bay Area of 666,000 new household and 688,000 new jobs between 2015 and 2040. Implementation of the proposed Plan would not result in displacement at the regional scale. (Draft EIR, pp. 2.3-25 to 2.3-26.)
- E. At the local level, displacement can result in physical effects both directly and indirectly. Redevelopment of a site would require demolition of the existing residential units resulting in direct impacts. Projected redevelopment and new housing is included in the overall land use strategy and development footprint of the proposed Plan, and as a result the associated physical environmental impacts from this development are analyzed throughout the EIR. The full impacts from the projected redevelopment and new housing construction would depend on site-specific conditions and project design details that cannot be known at this time, though significant impacts that may result from this change include: transportation, air quality, land use and physical development, climate change and greenhouse gases, noise, biological resources, visual resources, cultural resources, public utilities and facilities, hazards, and public services and recreation. The potential for indirect (or secondary) impacts results from economic factors potentially driving some households to find other housing because of rising rents. When these forces result in housing further from jobs, household commutes may increase thus affecting air quality, noise, traffic, etc. The land use and transportation modeling of the proposed Plan takes into account projected demographic shifts, thus the physical impacts associated with changing commute patterns from relocation of households of lower income workers within the region are captured in the Draft EIR analysis and were a factor in determining the significance of physical changes in the environment, consistent with the requirements of CEQA. Displacement of existing residential units may also necessitate the construction of replacement housing elsewhere. Many of these construction-related impacts are identified as potentially significant, thus implementation of the proposed Plan would result in similar potentially significant impacts. (Draft EIR, p. 2.3-26.)
- F. Transportation projects that require the expansion of existing, or designation of new, rights-of-way have the potential to result in the direct displacement of existing housing that must be removed for infrastructure development. Generally, to minimize environmental impacts and project costs, it is common practice to design the footprint of new transportation projects within existing rights-of-way as much as feasible. However, development of some projects, such as roadway widening, roadway extension, and transit expansion projects, could result in the disturbance and/or loss of residential and business uses. In particular, the proposed Plan includes: California High Speed Rail in the Bay Area, and BART and Caltrain extension projects, which would be located in urban areas and could cause displacement of businesses and residents. The degree of the disruption would generally depend on the size and extent of the project and the resulting need for new right-of-way. Proposed transportation projects were assumed to affect approximately 25,000 additional acres across the Bay Area. This is a conservative assumption intended to avoid a risk of understating the impact. The replacement of these housing units would result in environmental impacts, which are described throughout the EIR. Impacts that would be significant are associated with: transportation, air quality, land use and physical development, climate change and

greenhouse gases, noise, biological resources, visual resources, cultural resources, public utilities and facilities, hazards, and public services and recreation. Because transportation projects included in the proposed Plan are assumed to result in displacement of existing residential units and businesses, necessitating the construction of replacement construction elsewhere. Many of these construction-related impacts are identified as potentially significant in the EIR, thus implementation of the proposed Plan would result in similar potentially significant impacts. (Draft EIR, pp. 2.3-26 to 2.3-27.)

- G. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to address the effects of displacement that could result in the construction of replacement housing, including Mitigation Measures 2.2-2 (air quality); 2.3-2, 2.3-4, and 2.3-5 (land use); 2.5-5 (sea level rise); 2.6-1, 2.6-5, and 2.6-6 (noise); 2.9-1 through 2.9-5 (biological resources); 2.10-1 and 2.10-3 through 2.10-5 (visual resources); 2.11-1 through 2.11-5 (cultural resources); and 2.13-4 (hazards).
- H. The final wording of Mitigation Measure 2.3-1 as reflected in these findings, differs from, but is equivalent to or exceeds, the measure as it appears in the Draft EIR. The wording was changed to correct the cross-reference to the measure related to sea level rise (2.5-5). (FEIR, p. 3-7.) The Commission/Board finds that the proposed final wording of this measure is substantially equivalent to, or more effective than, the wording and intent of the original mitigation measure.

Impact

2.3-2 Implementation of the proposed Plan could physically divide an established community. (Draft EIR, p. 2.3-27)

Mitigation Measures

2.3-2 Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project and site-specific considerations that include, but are not limited to:

- ▲ New transportation projects within urban areas shall be required to incorporate design features such as sidewalks, bike lanes, and bike/pedestrian bridges or tunnels that maintain or improve access and connections within existing communities and to public transit.
- ▲ Through regional programs such as the One Bay Area Grants (OBAG), MTC/ABAG shall continue to support planning efforts for locally sponsored traffic calming and alternative transportation initiatives, such as paths, trails, overcrossings, bicycle plans, that foster improved neighborhoods and community connections.

Significance After Mitigation

Implementation of Mitigation Measure 2.3-2 would reduce the potentially significant impact of division of an established community because it would implement design features that would improve access and connections within existing communities and to public transit, which would reduce the effects of separation on existing communities. Regional programs, such as OBAG would help to incentivize these types of efforts. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. While MTC/ABAG have authority to distribute funds associated with OBAG, projects would remain subject to the discretion of local agencies. Therefore, it cannot be ensured that this mitigation measure would be

implemented in all cases, and this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. The land use growth footprint is located primarily within areas that are currently developed. This growth would primarily occur in Contra Costa, Solano, Santa Clara, and Alameda counties. The majority of the new development would occur as infill development, in accordance with the adopted land use plans and zoning ordinances of the cities and counties in the Plan area. Forecasted development under the proposed Plan would create more centralized areas of residential areas and commercial centers and would not create features that would physically divide established communities. Construction activities could result in transportation-related effects from travel lane closures, detours, and/or temporary congestion from increased truck traffic on local roads resulting from increased truck traffic on local roads as construction vehicles and workers travel to and from project sites. These temporary effects would be minimized with the use of best practice strategies for construction activities. The development of new housing units and employment land uses within established communities would typically occur on vacant or underutilized sites and would not result in the physical division of established communities. (Draft EIR, p. 2.3-27.)
- B. The proposed Plan includes a variety of transportation projects, including regional transit projects, local transit projects, road pricing improvements, highway and roadway improvements, and Port of Oakland projects. Most of the major proposed transportation projects would be located in existing rights-of-way, meaning they would not contribute to a worsening of separation within existing communities. Some projects in the proposed Plan, such as bridges and undercrossings, could improve or expand interconnections between neighborhoods and communities that are currently separated by major transportation corridors. Additionally, many proposed projects, such as expansion of transit services, are intended to improve mobility and accessibility and may, as a result, improve community connectivity. However, larger infrastructure projects, such as California High Speed Rail and Caltrain and BART expansion projects, may require the acquisition of land in existing communities, which may divide established communities. Thus, the proposed transportation projects could result in physical division of established communities by placing structures in places that could divide several established communities throughout the region. (Draft EIR, p. 2.3-28.)
- C. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies incorporate design features into new transportation projects that improve access and connections within existing communities.

Impact

- 2.3-4 Implementation of the proposed Plan could directly or indirectly convert substantial amounts of important agricultural lands and open space (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) or lands under Williamson Act contract to non-agricultural use. (Draft EIR, p. 2.3-31)

Mitigation Measures

2.3-4 Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project-and site-specific considerations that include, but are not limited to those identified below.

- ▲ require project relocation or corridor realignment, where feasible, to avoid agricultural land, especially Prime Farmland;
- ▲ maintain and expand agricultural land protections such as urban growth boundaries;
- ▲ compensatory mitigation may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning (RAMP), as deemed appropriate by the permitting agencies;
- ▲ require acquisition of conservation easements on land at least equal in quality and size as mitigation for the loss of agricultural land; and/or
- ▲ institute new protection of farmland in the project area or elsewhere through the use of long-term restrictions on use, such as 20-year Farmland Security Zone contracts (Government Code Section 51296 et seq.) or 10-year Williamson Act contracts (Government Code Section 51200 et seq.).

Significance After Mitigation

Implementation of Mitigation Measure 2.3-4 would reduce the potentially significant impact of conversion of important agricultural land or open space or lands under a Williamson Act Contract to other uses because it would require avoidance or compensation for converted lands. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Projected growth would be largely infill within the urbanized footprint; however, a portion of the projected development area (approximately 1,624 acres) overlaps with Farmland of Local importance, Farmland of Statewide Importance, Prime Farmland, and Unique Farmland; and approximately 3,500 acres of land designated for grazing. Additionally, the land use growth footprints overlap with approximately 200 acres of lands that are under Williamson Act contract. Approximately 450 acres of projected development overlaps with protected open space land. The largest overlaps are anticipated in Napa, San Francisco,

Solano, and Alameda Counties. With the exception of San Francisco, all counties in the Bay Area protect open space and agricultural lands by county-wide land use measures. Additionally, some cities have Urban Growth Boundaries (UGB) to limit sprawl and protect agricultural land. Generally, this means that if a project falls outside a UGB, there are regulatory measures in place to aid local jurisdictions in farmland protection, though these growth measures vary in effectiveness and enforcement, and there are many cities without UGBs. (Draft EIR, pp. 2.3-31 to 2.3-33.)

- B. Generally, the effects of transportation projects on agricultural land and open space are similar to those of planned land use development. Transportation projects in the proposed Plan have the potential to convert 540 acres of farmland and 1,200 acres of grazing land, or less than one percent of all agricultural land in the Plan area. Of the potentially affected farmland, the majority (69 percent) is Grazing Land, 13 percent is Farmland of Local Importance, 14 percent is Prime Farmland, and the remainder is made up of Farmland of Statewide Importance and Unique Farmland. Further, approximately 250 acres across six counties are under Williamson Act contract. This represents 0.02 percent of all Williamson Act land in the Plan area. Transportation projects in the proposed Plan area have the potential to affect 630 acres of protected open space. This represents a small amount (0.05 percent) of open space land in the growth area. The likelihood of farmland and open space conversion increases where transportation projects are located at the edges of existing urban areas, along waterways, or over hills separating urban areas. The extent of this area would depend on the final scale and design of proposed projects. Some conversion could be substantial, depending on the amount and type of farmland that is converted. (Draft EIR, pp. 2.3-34.)
- C. Together, land use and transportation projects in the proposed Plan have the potential to convert agricultural lands and open space to urban uses. The overall amount of these conversions relative to the resources would be small. However, because some conversion could be substantial within a county or local municipality, the conversion of agricultural or open space land as a result of land use or transportation projects is considered potentially significant. (Draft EIR, p. 2.3-35.)
- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require avoidance or compensation for converted agricultural, open space or Williamson Act lands.

Impact

- 2.3-5 Implementation of the proposed Plan could directly or indirectly result in the loss of forest land, conversion of forest land to non-forest use, or conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. (Draft EIR, p. 2.3-36)**

Mitigation Measures

2.3-5 Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project-and site-specific considerations including but not limited to those identified below.

- ▲ require project relocation or corridor realignment, where feasible, to avoid forest land;
- ▲ maintain and expand forest land protections such as urban growth boundaries;
- ▲ compensatory mitigation may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning (RAMP), as deemed appropriate by the permitting agencies; and/or
- ▲ require acquisition of conservation easements on land at least equal in quality and size as mitigation for the loss of forest land.

Significance After Mitigation

Implementation of Mitigation Measure 2.3-5 would reduce the potentially significant impact of conversion of forest or timberland to other uses because it would require avoidance or compensation for converted lands. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Land converted from timberland to other use would have direct effects related to the loss of timber crops production. Indirect effects would occur to the extent that conversion creates fragmentation of timberland and adjacent use conflicts or hinders existing transportation access to timberlands. A total of 467 acres of forestland overlap with the planned growth area. The majority of forestland that overlaps with the planned growth area is located in Santa Clara. Less than 5 acres of forestland is located within TPAs. In addition, current timberland or forest land zoning exists in Contra Costa, Sonoma, and San Mateo counties. The majority of projected development in the proposed Plan would occur on existing urban land, thereby minimizing impacts on forest land or timberland. Some Bay Area cities have UGBs to limit sprawl and protect forest land and timberland. While the potential conversion of 467 acres of forest and timberland is considered potentially significant (PS), it represents a small fraction of all Plan area forest land and timberland. (Draft EIR, p. 2.3-36.)
- B. Overall, there are transportation projects in seven counties (excluding Napa and Solano) with the potential to impact 180 acres of forest land or timberland. This is less than one percent of overall forest and land timberland acres in the Plan area. The majority of this forestland is located in Santa Clara (114 acres), followed by San Francisco (28 acres), Contra Costa (20 acres), Sonoma and Alameda (5 acres each), and San Mateo (3 acres). Less than half an acre of forestland is located where transportation projects are proposed in Marin. The buffer used to quantify potential impact of intersection improvements is necessarily general—a 100 to 500 foot area—and likely to be a conservative estimate of disturbance. The likelihood of forest land and timberland conversion increases where transportation projects are located at the edges of existing urban areas, along waterways, or in areas currently separating urban areas. The extent of this impact will depend on the final scale and design of proposed projects. (Draft EIR, p. 2.3-37.)
- C. Although the potential amount of conversion from projected land use and transportation projects is minimal, because the proposed Plan could result in conversion of forest land to urbanized uses the impact is potentially significant. (Draft EIR, p. 2.3-37.)

- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require avoidance, maintain and expand forest land protections, or require compensation or conservation easements for converted forest lands.

ENERGY

None

CLIMATE CHANGE AND GREENHOUSE GASES

Impact

2.5-3 Implementation of the proposed Plan could substantially conflict with the goal of SB 32 to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030. (Draft EIR, p. 2.5-42)

Mitigation Measures

2.5-3 Consistent with the recommendations in the Draft 2017 Scoping Plan, implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ MTC and ABAG, in partnership with the BAAQMD, shall work with the counties and cities in the Bay Area to adopt qualified GHG reduction plans (e.g., CAPs). The CAPs can be regional or adopted by individual jurisdictions, so long as they meet the standards of a GHG reduction program as described in CEQA Guidelines Section 15183.5. At the regional level, the cumulative emissions reduction of individual CAPs within the region or a regional CAP should demonstrate an additional Bay Area-wide reduction of 24 MMTCO₂e from land uses and on-road transportation compared with projected 2040 emissions levels already expected to be achieved by the proposed Plan. (This is based on the 2015 Bay Area land use and on-road transportation emissions of 52 MMTCO₂e, an interpolated statewide GHG reduction target of 60 percent below 1990 levels by 2040, and a two percent increase in statewide emissions between 1990 and 2015). The CAP(s) should also show a commitment to achieving a downward trajectory in emissions post-2040 to meet statewide goals of reducing GHG emissions by 80 percent below 1990 levels by 2050, per S-03-05.
- ▲ These reductions can be achieved through a combination of programs, including ZNE in new construction, retrofits of existing buildings, incentivizing and development of renewable energy sources that serve both new and existing land uses, and other measures so long as the overall 32 MMTCO₂e reduction (by 2040) can be demonstrated. This target can be adjusted if statewide legislation or regulations would reduce GHG emissions, so long as a trajectory to achieve this target in the Bay Area is maintained.

Implementation of CAPs in the region would help to reduce both GHG and area source emissions from the land use projects that would be constructed under the proposed Plan, as well as reducing GHG emissions from existing uses. However, this may require installation of renewable energy facilities on houses and businesses, construction of community-serving facilities such as small-scale solar farms, or other actions. These additional facilities, if needed, could require in additional land conversion, resulting in similar environmental impacts associated with land use development described throughout this EIR.

Significance After Mitigation

Mitigation, via CAPs for individual jurisdictions, or other programs, including retrofitting existing buildings, installing renewable energy facilities that replace reliance on fossil-fuel power in the region, alterations in the vehicle fleet (toward more non-fossil fuel-powered vehicles) and other measures would be required to meet the goals needed to attain the 2030 targets. Thus, compliance with the CAP measure, throughout the Bay Area, is needed to assure mitigation to a less than significant level (LS-M).

However, there is no assurance that this level of mitigation would be accomplished throughout the Bay Area. Additional regulatory action that results in substantial GHG reductions throughout all sectors of the State economy and based on State-adopted regulations would likely be needed to attain such goals, and they are beyond the feasible reach of MTC/ABAG and local jurisdictions. The 2017 Scoping Plan Update being prepared by ARB is the first step toward regulatory action that could help attain 2030 goals.

Moreover, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measure, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Even with full implementation of the mitigation measure, forecasted emissions would not be reduced to target levels under SB 32. Therefore, this impact would be **significant and unavoidable (SU)**.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Land use and transportation emissions under the proposed Plan would be reduced by 13 percent from 2015 to 2040. Although this reduction would meet AB 32 targets, it would not meet 2030 targets under SB 32, which would require a reduction of 41 percent in GHG emissions between 2015 and 2030, which is equivalent to the formal target of achieving 40 percent below 1990 levels by 2030. (Draft EIR, p. 2.5-42.)
- B. In 2015, land use and transportation accounted for 52 MMCO_{2e} in the Bay Area. Consequently, the proposed Plan would need to achieve 21 MMTCO_{2e} in reductions from land use and transportation between 2015 and 2030 to be consistent with SB 32 and subsequently, would place the proposed Plan along the trajectory needed to meet the 2050 target identified under S-03-05. The proposed Plan would only achieve a reduction of 7 MMTCO_{2e} from 2015 land use and on-road transportation emissions. In further consideration of long term goals, to remain on a trajectory toward the IPCC goals of GHG emissions of 80 percent below 1990 levels by 2050, the proposed Plan would need to achieve a target of reduction in 2040 of 60 percent below 1990 GHG levels. This would require a reduction, based on full attainment of growth projections, to 32 MMCO_{2e} in 2040. (Draft EIR, p. 2.5-42.)
- C. The ability to meet the 2030 target (and, subsequently, the 2040 target) is tied, in large part, to statewide actions mandated by new legislation or regulations. This was the same issue that faced achievement of AB 32's far less aggressive 2020 targets, and these goals are expected to be achieved, in large part, because of State legislation and regulation. For instance, the state-mandated Renewable Portfolio Standard (RPS) requires that all utilities provide 50 percent of their electricity via renewable sources by 2030. The existing Cap-and-Trade program, which is set to expire in 2020, allows large GHG emitters to achieve major emissions reductions through regulatory actions that set a cap over GHG emissions allowances, and provide for regulated purchase of offsets that reduce GHG emissions. This program will require State legislative action that, if passed, would substantially reduce GHG emissions past 2020 in all economic sectors, and help achieve 2030 goals and beyond. Because these regulations are under development, they cannot be relied upon as part of this analysis to demonstrate compliance with the 2030 targets in the Bay Area. Importantly, this is not unique to the Bay Area; all MPO's in California are faced with the same challenge. Thus, without sufficient State legislation and regulation, attainment of 2030

goals is extremely difficult. In addition, ARB recommends GHG reduction plans be developed by local jurisdictions (e.g., cities and counties) to reduce land use-related emissions. (Draft EIR, p. 2.5-42.) ARB is in the process of updating the Scoping Plan (2017 Draft Scoping Plan Update, as cited in the Draft EIR page 2.5-15) to reflect the state-wide 2030 GHG emissions reduction target of 40 percent below 1990 levels. The 2017 Draft Scoping Plan Update identifies several programs that are mandated to meet this statewide GHG target. These programs, summarized in part on Draft EIR pages 2.5-15, include: providing 50 percent of electricity via renewable sources by 2030; reducing carbon intensity of fuels; maintaining GHG standards for vehicles including adding over 4 million zero-emission vehicles to the road system by 2030; continuing the Cap-and-Trade program and strengthening it to meet declining caps (e.g., lower GHG emissions), and also to achieve co-benefits such as reducing toxic air emissions; and several other programs. No single program, in isolation, will allow the state to achieve the 2030 goal. It will require success in each program to meet the goal. (Final EIR, p. 2-13.)

- D. MTC/ABAG has developed a land use and transportation strategy that meets SB 375 goals and places the Bay Area on a downward trajectory in GHG emissions, which sets it on a path toward meeting longer-term GHG reduction goals. There are no additional land use strategies available to feasibly bridge the gap between the proposed Plan GHG emissions and 2030 (and beyond) targets. In the absence of State and local jurisdictional action it is not possible to demonstrate compliance with the SB 32 GHG reduction targets. Therefore, the proposed Plan may conflict with an applicable plan, policy, or regulation adopted to reduce emissions of GHGs. This impact is considered potentially significant. (Draft EIR, p. 2.5-43.)
- E. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies adopt qualifying GHG reduction plans that demonstrate an additional Bay Area-wide reduction of 24 MMTCO_{2e} from land uses and on-road transportation compared with projected 2040 emissions levels already expected to be achieved by the proposed Plan.

Impact

2.5-5 Implementation of the proposed Plan could result in a net increase in transportation projects within areas projected to be regularly inundated by sea level rise by midcentury. (Draft EIR, p. 2.5-45)

Mitigation Measures

Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

2.5-5(a) MTC and ABAG shall continue coordinating with BCDC, in partnership with the Bay Area Regional Collaborative and regional agencies and other partners, to conduct vulnerability and risk assessments for the region's transportation infrastructure. These assessments will build upon MTC and BCDC's Adapting to Rising Tides Program projects. Evaluation of regional and project-level vulnerability and risk assessments will assist in the identification of the appropriate adaptation strategies to protect transportation infrastructure and resources, as well as land use development projects, that are likely to be impacted. The *Adaptation Strategies* (see Appendix F of this Draft EIR) includes a list of potential strategies that can mitigate the impacts of sea level rise. In most cases, more than one adaptation strategy will be required to protect a given transportation project or land use development project, and the implementation of the adaptation strategy will require coordination with other agencies and stakeholders. As MTC and BCDC conduct vulnerability and risk assessments for the region's transportation infrastructure, the *Adaptation Strategies* should serve as a guide for selecting adaptation strategies, and should be expanded as additional strategies are identified.

2.5-5(b) Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to, coordination with BCDC, Caltrans, local jurisdictions (cities and counties), Park Districts, and other transportation agencies

to develop Transportation Asset Management Plans that consider the potential impacts of sea level rise over the life cycle of threatened assets.

2.5-5(c) Implementing agencies shall require project sponsors to incorporate the appropriate adaptation strategy or strategies to reduce the impacts of sea level rise, changes in precipitation and storm events on specific local transportation and land use development projects, where feasible, based on project- and site-specific considerations. Potential adaptation strategies are included in the Adaptation Strategies (see Appendix F of this Draft EIR).

Significance After Mitigation

Any increase in transportation projects within the area projected to be inundated by sea level rise is considered significant. Selection and implementation of appropriate mitigation measures and adaptation strategies may reduce the impact associated with sea level rise to less than significant on a project-by-project basis. The appropriate adaptation strategies would be selected as part of the future project-level analysis and planning. At this time, sufficient detail is not available to identify which adaptation strategy or strategies would be the most effective for each individual transportation project. In addition, successful implementation of the mitigation measures and adaptation strategies requires participation by other agencies and stakeholders.

This EIR includes a range of adaptation strategies to guide local jurisdictions, regional agencies, and transportation agencies in identifying strategies that are appropriate for transportation and development projects that may experience regular future inundation by sea level rise.

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)**.

Findings

Changes or alterations within the responsibility and jurisdiction of MTC or ABAG have been required in, or incorporated into, the proposed Plan to address this impact to the extent feasible. Additionally, changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which avoid or substantially lessen the significant environmental effect as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Approximately 510 acres associated with 50 transportation projects under the proposed Plan are located, partially or wholly, within areas projected to be regularly inundated (i.e., inundated multiple times each year) by sea level rise by midcentury. The full list of transportation projects that are located within or partially within areas projected to be regularly inundated (i.e., inundated multiple times each year) by sea level rise by midcentury is provided in Appendix E of the Draft EIR. Because the proposed Plan would result

in portions of some transportation projects being constructed in areas projected to be inundated by sea level rise, this impact is considered potentially significant. (Draft EIR, pp. 2.5-45 to 2.5-46.)

- B. The proposed mitigation measures are expected to reduce the overall impact, by (1) partnering with BCDC and other regional agencies to conduct vulnerability and risk assessments for the region's transportation infrastructure; and (2) encouraging implementing agencies to (i) implement measures to coordinate development of Transportation Asset Management Plans that consider the potential impacts of sea level rise over the life cycle of threatened assets; and (ii) require project sponsors to incorporate the appropriate adaptation strategy or strategies to reduce the impacts of sea level rise on specific local transportation and land use development projects.
- C. The final wording of Mitigation Measures 2.5-5(a), 2.5-5(b), and 2.5-5(c), as reflected in these findings, differs from, but is equivalent to or exceeds, the measure as it appears in the Draft EIR. The wording was changed to correct the cross-reference to the impact the measure addresses, and to reflect minor clarifications regarding partner agencies. (FEIR, pp. 2-213, 3-12.) The Commission/Board finds that the proposed final wording of this measure is substantially equivalent to, or more effective than, the wording and intent of the original mitigation measure

Impact

2.5-6 Implementation of the proposed Plan could result in an increase in land use development within areas regularly inundated by sea level rise by midcentury. (Draft EIR, p. 2.5-47)

Mitigation Measures

Implement Mitigation Measures 2.5-5(a), 2.5-5(b), and 2.5-5(c) under Impact 2.5-5.

Significance After Mitigation

Any increase in projected land use development within areas projected to be regularly inundated by sea level rise is considered a significant impact. Selection and implementation of the appropriate mitigation measures and adaptation strategies could reduce the impact associated with sea level rise to a less-than-significant level. However, the appropriate adaptation strategies would be selected as part of future project-level analysis and planning. At this time, sufficient detail is not available to identify which adaptation strategy or strategies would be the most effective at protecting the projected land use development within the sea level rise inundation zone. In most cases, regional strategies that protect large developed areas would be the most effective at protecting the affected development, but successful implementation of regional adaptation strategies requires participation by other agencies and stakeholders.

This EIR includes a range of adaptation strategies to guide local jurisdictions, regional agencies, and transportation agencies in identifying strategies that are appropriate for transportation and projected development that may experience regular future inundation by sea level rise.

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources Code sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Further, there may be instances in which site-specific or project-specific conditions preclude the reduction of

all project impacts to less-than-significant levels. For purposes of a conservative analysis, therefore, this impact remains **significant and unavoidable (SU)** for this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of MTC or ABAG have been required in, or incorporated into, the proposed Plan to address this impact to the extent feasible. Additionally, changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which avoid or substantially lessen the significant environmental effect as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Implementation of the proposed Plan would result in an increase of nearly 700 acres of projected land uses which would be regularly inundated by sea level rise by midcentury. This impact is considered potentially significant. (Draft EIR, pp. 2.5-47 to 2.5-48.)
- B. The proposed mitigation measures are expected to reduce the overall impact, by (1) partnering with BCDC and other regional agencies to conduct vulnerability and risk assessments for the region's transportation infrastructure; and (2) encouraging implementing agencies to implement measures to coordinate development of Transportation Asset Management Plans that consider the potential impacts of sea level rise over the life cycle of threatened assets.

NOISE

Impact

- 2.6-1 Implementation of the proposed Plan could result in exposure of persons to or generation of temporary construction noise levels and/or ground vibration levels in excess of standards established by local jurisdictions or other applicable regulatory agencies. (Draft EIR, p. 2.6-20)**

Mitigation Measures

Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- 2.6-1(a)** To reduce construction noise levels, implementing agencies and/or project sponsors shall:

- ▲ comply with local construction-related noise standards, including restricting construction activities to permitted hours as defined under local jurisdiction regulations (e.g.; Alameda County Code restricts construction noise to between 7:00 am and 7:00 pm on weekdays and between 8:00 am and 5:00 pm on weekend);
- ▲ properly maintain construction equipment and outfit construction equipment with the best available noise suppression devices (e.g. mufflers, silencers, wraps);
- ▲ prohibit idling of construction equipment for extended periods of time in the vicinity of sensitive receptors;
- ▲ locate stationary equipment such as generators, compressors, rock crushers, and cement mixers a minimum of 50 feet from sensitive receptors, but further if possible;

- ▲ erect temporary construction-noise barriers around the construction site when adjacent occupied sensitive land uses are present within 75 feet;
- ▲ use noise control blankets on building structures as buildings are erected to reduce noise emission from the site; and
- ▲ use cushion blocks to dampen impact noise from pile driving.

2.6-1(b) To reduce construction vibration levels, implementing agencies and/or project sponsors shall comply with the following:

- ▲ to minimize disturbance of receptors within 550 feet of pile-driving activities, implement “quiet” pile-driving technology (such as pre-drilling of piles and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; and
- ▲ to reduce structural damage, where pile driving is proposed within 50 feet of an older or historic building, engage a qualified geotechnical engineer and qualified historic preservation professional (for designated historic buildings only) and/or structural engineer to conduct a pre-construction assessment of existing subsurface conditions and the structural integrity of nearby (i.e., within 50 feet) historic structures that would be exposed to pile-driving activity. If recommended by the pre-construction assessment, for structures or facilities within 50 feet of pile-driving activities, the project sponsors shall require ground vibration monitoring of nearby historic structures. Such methods and technologies shall be based on the specific conditions at the construction site such as, but not limited to, the pre-construction surveying of potentially affected historic structures and underpinning of foundations of potentially affected structures, as necessary. The pre-construction assessment shall include a monitoring program to detect ground settlement or lateral movement of structures in the vicinity of pile-driving activities and identify corrective measures to be taken should monitored vibration levels indicate the potential for building damage. In the event of unacceptable ground movement with the potential to cause structural damage, all impact work shall cease and corrective measures shall be implemented to minimize the risk to the subject, or adjacent, historic structure.

Significance After Mitigation

Implementation of Mitigation Measures 2.6-1(a) would provide substantial reduction in day and night construction noise and vibration levels by ensuring proper equipment use: locating equipment away from sensitive land uses; and requiring the use of enclosures, shields, and noise curtains (noise curtains typically can reduce noise by up to 10 dB [EPA 1971]). To the extent that an individual project adopts and implements all feasible mitigation measures described above, construction-noise levels could be reduced by 10 dB, bringing sound levels to acceptable levels. Greater reductions may be achieved and the frequency and intensity of construction-related noise at nearby receptors may be further reduced, depending on actual construction activities and proximity to receptors. Implementation of Mitigation Measure 2.6-1(b) would further reduce vibration impacts by requiring the use of quieter pile-driving technology and ensuring the proper considerations are taken to minimize vibration impacts to adjacent structures. This impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Construction of projected development, including transportation projects, could result in temporary noise and vibration impacts associated with construction, and other related activities. Construction activities would require the use of various noise-generating construction equipment such as dozers, forklifts, jackhammers, trucks, and other equipment. Forecasted development under the proposed Plan would range from high intensity regional center development of high and midrise offices and residences in San Francisco, Oakland and San Jose, to low-rise development in rural towns such as Sebastopol and Graton. Construction noise standards vary throughout the Plan area, but generally limit construction activities to times when noise would have the least effect on nearby land uses (i.e., during the daytime). Consequently, depending on the extent of construction activities involved and the proximity of construction to existing receptors, localized construction-related noise effects may vary substantially throughout the Plan area. Based on reference noise levels for typical types of construction equipment, construction noise could reach levels of 92.8 dBA L_{eq} and 97.0 dBA L_{max} at 50 feet from construction sites. These levels could exceed local construction-related noise standards and thresholds, depending on proximity to existing land uses and duration of construction activities. (Draft EIR, p. 2.6-20.)
- B. Construction activities may result in varying degrees of temporary ground vibration and noise, depending on the specific construction equipment used and activities involved. When considering new construction, pile driving generates the highest vibration levels and is, therefore, of greatest concern when evaluating construction-related vibration impacts. According to FTA, vibration levels associated with pile driving are 1.518 in/sec PPV at 25 feet. Based on FTA's recommended procedure for applying a propagation adjustment to these reference levels, vibration levels from pile driving could exceed Caltrans recommended level of 0.5 in/sec PPV with respect to the structural damage for older structures within 50 feet of pile driving activities. Therefore, because the majority of projected development would occur in already developed and urban areas, the potential exists for pile driving to occur within 50 feet of a historic or old building. (Draft EIR, pp. 2.6-20 to 2.6-21.)
- C. Vibration levels can also result in interference or annoyance impacts for residences or other land uses where people sleep, such as hotels and hospitals. According to FTA, vibration levels associated with pile driving are 112 VdB at 25 feet (FTA 2006). FTA vibration annoyance potential criteria depend on the frequency of the vibration events. When vibration events occur more than 70 times per day, as would likely be the case with pile driving, they are considered "frequent events." Frequent events in excess of 72 VdB are considered to result in a significant vibration impact. Based on FTA's recommended procedure for applying propagation adjustments to these reference levels, vibration levels from pile driving could exceed FTA recommended guidance for "frequent events" within 550 feet of an existing sensitive land use. (Draft EIR, p. 2.6-21.)
- D. Construction-related noise and vibration impacts of transportation projects, similar to land use development, would depend on the extent of construction being undertaken, proximity to existing sensitive land uses, and applicable noise standards. Transportation projects are proposed throughout the Bay Area and would have the potential for localized noise and vibration impacts, particularly when pile driving or

other similar invasive foundation work would be required. Based on reference noise levels for typical types of construction equipment, construction-noise could reach levels of 92.8 dBA L_{eq} and 97.0 dBA L_{max} at 50 feet from future proposed construction sites. Construction-related noise levels could exceed Caltrans recommended levels of 86 dBA L_{max} , would likely exceed FTA construction noise criteria (i.e., ambient levels plus 10 dB) depending on the location of construction, and could exceed local construction-related noise standards and thresholds, depending on proximity to existing land uses and duration of construction activities. (Draft EIR, p. 2.6-21.)

- E. Transportation projects involving roadway expansion, new transit lines, new overpasses or roadways, or other related invasive foundation work would likely require pile driving. It is unknown at this time where specific pile driving activities would be required and to what extent they would occur. Therefore, it is possible that pile driving and other vibration-inducing construction activities could occur near existing sensitive land uses. Specifically, the potential exists for pile driving to occur within 50 feet of an older building, exceeding Caltrans recommended levels for structural damage, and within 550 feet of an existing sensitive land use, exceeding FTA recommended levels for vibration annoyance. (Draft EIR, pp. 2.6-21 to 2.6-22.)
- F. Projected development and implementation of development and transportation projects have the potential to result in substantial construction noise and vibration levels such that nearby receptors could be adversely affected and applicable noise standards exceeded. Construction and vibration from projected development and transportation projects would be considered potentially significant. (Draft EIR, p. 2.6-22.)
- G. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require measures to reduce noise and vibration levels from construction activities.

Impact

2.6-2 Implementation of the proposed Plan could result in long-term permanent increases in traffic-noise levels that exceed applicable thresholds. (Draft EIR, p. 2.6-23)

Mitigation Measures

Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

2.6-2 For all new development that could be located within the 70 dBA CNEL noise contour of a roadway (within 270 feet of the roadway's centerline based on freeways with the greatest volumes in the region), a site-specific noise study shall be conducted by a qualified acoustical engineer or noise specialist, to evaluate noise exposure at new receptors and recommend appropriate measures to reduce noise exposure. To reduce exposure from traffic-noise, lead agencies and/or project sponsors shall consider mitigation measures including, but not limited to those identified below:

- ▲ design adjustments to proposed roadway or transit alignments to reduce noise levels in noise sensitive areas (e.g., below-grade roadway alignments can effectively reduce noise levels in nearby areas);
- ▲ use techniques such as landscaped berms, dense plantings, reduced-noise paving materials, and traffic calming measures in the design of their transportation improvements;
- ▲ contribute to the insulation of buildings or construction of noise barriers around sensitive receptor properties adjacent to the transportation improvement;
- ▲ use land use planning measures, such as zoning, restrictions on development, site design, and buffers to ensure that future development is noise compatible with adjacent transportation facilities and land uses;

- ▲ construct roadways so that they are depressed below-grade of the existing sensitive land uses to create an effective barrier between new roadway lanes, roadways, rail lines, transit centers, park- n-ride lots, and other new noise generating facilities; and
- ▲ maximize the distance between noise-sensitive land uses and new noise-generating facilities and transportation systems.

Significance After Mitigation

Implementation of Mitigation Measure 2.6-2 would result in substantial reductions in traffic-noise. Depending on barrier construction, up to 10 dBA in noise reduction is typically feasible (FHWA 2006), which would be adequate to bring the highest modeled traffic noise levels of 76.2 dBA CNEL to below the 70 dBA CNEL threshold. Site design, including proximity to the noise source, can achieve varying degrees of noise reduction depending on the distance to the source. Building construction methods can typically achieve at a minimum a 25-dB exterior-to-interior noise reduction, but much higher levels of reduction are achievable through additional wall insulation and sound proofing techniques. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. The proposed Plan envisions a mixture of development and redevelopment land use growth patterns throughout the Plan area, primarily in PDAs and TPAs. Projected development projects would generate new vehicle trips, and these trips would be distributed on existing and Plan-related roadways. Significant impacts from traffic-noise would result if noise levels exceed the noise levels expressed in the Significance Criteria, or if traffic noise levels result in a substantial increase in noise, defined by 1.5 dBA if existing traffic noise exceeds thresholds or 3 dBA if existing noise levels do not exceed noise thresholds. (Draft EIR, pp. 2.6-23 to 2.6-25.)
- B. Average noise levels on freeways under existing conditions exceed applicable noise thresholds of 70 dBA CNEL in every county within the region. In addition, existing noise levels on expressways exceed 70 dBA CNEL in Napa and Sonoma counties. Existing average noise levels on smaller roads such as major arterials and collectors do not currently exceed levels of 65 dBA CNEL (i.e., threshold applied to roads other than freeways/expressways) in any county. In areas where traffic-noise levels currently exceed thresholds, it would continue to exceed thresholds with implementation of the proposed Plan. Implementation of the proposed Plan would result in increases in traffic-related noise ranged from 0.1 dB to 3.4 dB, with a majority of the increases being below 1 dB. Freeways in San Mateo County currently exceed 70 dBA CNEL

and would experience an average increase of 3.4 dB, which would be considered substantial. Freeways and Expressways in Sonoma County currently exceed applicable noise thresholds and with the proposed Plan, expressways would result in a substantial increase in noise. (Draft EIR, pp. 2.6-23 to 2.6-25.)

- C. With regard to interior noise thresholds of 45 dBA CNEL, buildings provide varying degrees of exterior-to-interior noise reduction but typically can achieve a minimum 25 dBA reduction. Thus, receptors within areas experiencing noise levels below the exterior noise thresholds of 70 dBA CNEL would also experience acceptable interior noise levels of 45 dBA CNEL. Freeway 70 dBA CNEL contours within the Plan area range from a minimum distance of 153 feet to a maximum distance of 268 feet from the freeway centerlines. With implementation of the proposed Plan, freeway 70 dBA CNEL contours within the Plan area would range from a minimum distance of 155 feet to a maximum distance of 281 feet from the freeway centerlines, an increase of 13 feet. Thus, given that freeways within the area currently exceed 70 dBA CNEL (up to 268 feet from the freeway centerlines) and would continue to exceed 70 dBA CNEL (up to 281 feet from the freeway centerline) with the proposed Plan, the interior noise thresholds may also be exceeded in these areas resulting in excessive noise levels (i.e., 70 dBA CNEL land use compatibility and traffic-noise threshold) and a substantial permanent noise increase at existing and future projected development. (Draft EIR, p. 2.6-25.)
- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to implement site and project specific measures that will reduce noise exposure to sensitive receptors.

Impact

2.6-3 Implementation of the proposed Plan could result in long-term permanent increases in rail transit noise levels that exceed applicable thresholds. (Draft EIR, p. 2.6-31)

Mitigation Measures

To reduce transit-related noise exposure to existing or proposed development within 50 feet of a rail transit line, implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

2.6-3(a) When finalizing development project site plans, noise-sensitive outdoor use areas shall be sited as far away from adjacent noise sources as possible and site plans shall be designed to shield noise-sensitive spaces with buildings or noise barriers whenever possible.

2.6-3(b) When finalizing development project site plans or transportation project design, sufficient setback between occupied structures and the railroad tracks shall be provided to minimize noise exposure to the extent feasible.

2.6-3(c) Prior to project approval, the implementing agency for a transportation project shall ensure that the transportation project sponsor applies the following mitigation measures (or other technologically feasible measures) to achieve a site-specific exterior noise level of 70 dBA CNEL (or other applicable local noise standard) and interior noise level of 45 dBA CNEL at sensitive land uses, as applicable for transit projects:

- ▲ use of sound reduction barriers such as landscaped berms and dense plantings,
- ▲ locate rail extension below grade as feasible,
- ▲ use of damped wheels on railway cars,
- ▲ use of vehicle skirts,
- ▲ use under car acoustically absorptive material, and

- ▲ install sound insulation treatments for impacted structures.

Significance After Mitigation

Implementation of the above mitigation measure would ensure that site-specific planning would include all technologically feasible measures to reduce transit noise to the extent possible. Further, site planning and building construction would be developed to achieve the necessary noise reduction, based on site-specific parameters. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Transit-noise exposure would vary greatly depending on proximity to existing noise sources (i.e., transit corridors) and ambient noise levels. Transit-noise exposure would vary greatly depending on proximity to existing noise sources (i.e., transit corridors) and ambient noise levels. Noise from rail-transit can vary depending on the frequency of trains passing throughout the day, the type of train (i.e., electric or diesel), whether or not a warning horn is used, and the type of track (i.e., elevated or not). Based on available data for Caltrain lines within the region, 24-hour noise levels can range from 70 dBA CNEL/Ldn at 50 feet from the track to 82 dBA CNEL/Ldn at 45 feet from the track. (Draft EIR, p. 2.6-26.)
- B. Forecasted land uses placed in close proximity to existing rail-transit lines could be exposed to noise levels that exceed applicable exterior noise thresholds of 70 dBA CNEL. In many cases, interior noise thresholds would be met within new development even without additional insulation or advanced acoustical construction methods. However, due to the variability in noise levels generated from transit lines and the potential for projected land use growth footprints to be located in close proximity to these sources, it is likely that exterior and interior noise thresholds would be exceeded at residences within 50 feet of the tracks, thus exposing new sensitive receptors to excessive noise levels. (Draft EIR, p. 2.6-27.)
- C. Transit expansion projects would occur in multiple areas within the Plan area, but would occur primarily in urbanized areas and near existing transit facilities. Increases in transit-related noise could occur throughout the region as transit lines are expanded and service frequency increased. However, noise levels would vary greatly depending on the type of transit facility and proximity to existing sensitive land uses. Because transit noise impacts would vary greatly depending on local conditions, these impacts are addressed at the local level below. The degree of this potential impact would depend upon the type (diesel or electric powered) and frequency of rail pass-by events and the existing ambient noise level at the existing receptor. Expanding or building new transit lines in areas without existing rail lines would result in

a new substantial noise source that could result in excessive noise exposure depending on the type of existing land uses and proximity to the new noise sources. Further, it is likely that new rail lines would have similar noise levels that could exceed applicable exterior (i.e., 70 dBA CNEL) and interior (i.e., 45 dBA CNEL) noise thresholds at existing sensitive land uses. (Draft EIR, p. 2.6-27.)

- D. Regarding noise at existing transit facilities, trains could generate noise levels of up to 82 dBA CNEL/Ldn, and transit lines are currently located in urbanized areas near major roads and freeways, where noise levels are currently high, where a 1.5 dBA increase in transit-noise would be considered substantial. Given the projected population growth in the region, it is likely that additional transit services and potentially increased frequency of passenger trains would be required in the future to meet increasing demand. The proposed Plan includes major investments that create new transit lines or boost frequencies on existing lines. Thus, it is expected that implementation of the proposed Plan would result in a 1.5 dBA or more increase in transit-noise. Increases in transit noise on existing facilities would result in potentially significant. (Draft EIR, p. 2.6-28.)
- E. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to implement measures that will (1) shield outdoor use areas from adjacent noise sources; (2) setback development from rail tracks to minimize noise exposure; and (3) employ sound-reducing features into transit projects.

Impact

2.6-4 Implementation of the proposed Plan could result in long-term permanent increase in transit-vibration levels that exceed applicable thresholds. (Draft EIR, p. 2.6-29)

Mitigation Measures

To reduce vibration effects from rail operations, implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

2.6-4(a) When finalizing site plans for a development or transportation project, implementing agencies shall conduct a project-level noise and vibration assessments for new residential or other sensitive land uses to be located within 200 feet of an existing rail line. These studies shall be conducted by a qualified acoustical engineer or noise specialist to determine vibration levels at these projects and recommend feasible mitigation measures (e.g., insulated windows and walls, sound walls or barriers, distance setbacks, or other construction or design measures) that would reduce vibration-noise to an acceptable level.

2.6-4(b) Prior to project approval, the implementing agencies shall ensure that project sponsors apply the following mitigation measures to achieve FTA recommended vibration levels of 72 VdB at residential land uses, or other applicable standard, for rail extension projects:

- ▲ use of high resilience (soft) direct fixation fasteners for embedded track;
- ▲ install ballast mat, or other approved technology for the purpose of reducing vibration, for ballast and tie track; and
- ▲ conduct regular rail maintenance including rail grinding, wheel truing to re-contour wheels, providing smooth running surfaces.

Significance After Mitigation

Implementation of the above measures could provide a reduction of 15 to 20 VdB (FTA 2006), which would be adequate to reduce vibration levels to below 72 VdB within 200 feet. To the extent that an individual project

adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Many of the projected development areas in the proposed Plan are purposely located along existing and projected transit corridors to help facilitate a reduction in VMT in the region. Locating residential land uses in proximity to transit could also result in exposure of the future residents to vibration levels in excess of guidelines established by FTA or Caltrans. Unlike noise impacts from transportation which are assessed in terms of 24-hour noise levels (i.e., CNEL, L_{dn}), vibration impacts are assessed relative to peak vibration levels. (Draft EIR, p. 2.6-29.)
- B. The proposed Plan could facilitate the construction of sensitive land uses within portions of the Plan area where known vibration sources exist, primarily in the TPAs located along the existing active railroad corridors. In some areas within the region, future projected development could be exposed to frequent vibration events (i.e., more than 70 trains per day), occurring adjacent to rail lines used by BART, Caltrain, Amtrak, or others. Based on this frequency of train passing events, the FTA recommended level for which human disturbance would occur is 72 VdB. Thus, based on the Generalized Ground Surface Vibration curves in the FTA guidance, projected development within 200 feet of an existing railroad could exceed the recommended threshold for human disturbance of 72 VdB for sensitive receptors that are exposed to a higher frequency of vibration events (i.e., 70 or more trains passing by in one day. Consequently, land use projects could be exposed to vibration effects that exceed vibration thresholds. (Draft EIR, p. 2.6-29.)
- C. Transit expansion projects would occur in multiple areas within the region but would occur primarily in urbanized areas and near existing transit facilities. Increases in transit-related vibration as a result of the proposed Plan could occur throughout the region as transit lines are expanded and service frequency increased. However, vibration levels would vary greatly depending on the type of transit facility and proximity to existing sensitive land uses. Because vibration impacts would vary greatly depending on the local conditions, these impacts are addressed at the local level below. Extension of rail transit service to new areas of the Bay Area could result in exposure of existing sensitive land uses to vibration levels in excess of vibration thresholds. (Draft EIR, pp. 2.6-29 to 2.6-30.)
- D. The degree of increased vibration exposure would depend upon the type (diesel or electric powered) and frequency of rail pass-by events and the existing soil conditions at the existing receptor. Expanding or building new transit lines in unserved areas would result in a new substantial vibration source that could result in vibration effects that exceed FTA recommended levels (i.e., 72 VdB) within 200 feet of the source.

In addition, because new or expanded rail lines could result in vibration levels that exceed applicable criteria (i.e., 72 VdB) within 200 feet, when compared to existing conditions where no rail currently exists, vibration levels would substantially increase (i.e., more than 1.5 VdB). Some of the rail extension projects included within the proposed Plan would result in potentially significant impacts resulting from excessive vibration exposure to existing sensitive receptors along the extended transit alignment and permanent substantial increases in vibration levels. (Draft EIR, p. 2.6-30.)

- E. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to implement measures that will (1) incorporate vibration-noise reducing features into new development; and (2) employ vibration-reducing features into rail transit projects.

Impact

2.6-5 Implementation of the proposed Plan could result in general increases in ambient noise and associated exposure of sensitive receptors to new or additional stationary noise sources in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. (Draft EIR, p. 2.6-31)

Mitigation Measures

Mitigation Measures 2.6-2, 2.6-3, and 2.6-5.

2.6-5 To reduce exposure to new and existing sensitive receptors from non-transportation noise associated with projected development, implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ Local agencies approving land use projects shall require that routine testing and preventive maintenance of emergency electrical generators be conducted during the less sensitive daytime hours (per the applicable local municipal code). Electrical generators or other mechanical equipment shall be equipped with noise control (e.g., muffler) devices in accordance with manufacturers' specifications.
- ▲ Local agencies approving land use projects shall require that external mechanical equipment, including HVAC units, associated with buildings incorporate features designed to reduce noise to below 70 dBA CNEL or the local applicable noise standard. These features may include, but are not limited to, locating equipment within equipment rooms or enclosures that incorporate noise reduction features, such as acoustical louvers, and exhaust and intake silencers. Equipment enclosures shall be oriented so that major openings (i.e., intake louvers, exhaust) are directed away from nearby noise-sensitive receptors.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M) because stationary noise sources would be designed to comply with local noise codes. Further, community noise complaints associated with human activity are addressed at the local level and enforced by the applicable regulatory agency.

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Typical community operational noise sources include small mechanical devices (e.g., lawn mowers, leaf blowers), parks and playgrounds, restaurants and bars, commercial uses, and industrial plants. Stationary sources may include HVAC units, delivery trucks loading and unloading at commercial land uses, and other equipment associated with commercial and industrial land uses (e.g., pumps, back-up generators, auto body shops). Because traffic noise is generally the primary noise source within communities, modeled traffic-noise was used to characterize existing ambient levels. Larger urban areas (e.g., San Francisco, Oakland, San Jose) within close proximity to freeways currently exceed 70 dBA CNEL and, therefore, in these areas a substantial permanent increase in noise would be considered 1.5 dB or more. Other areas, urban or rural, are less likely to exceed exterior levels of 65 dBA CNEL and therefore an increase of 3 dB or more would be considered substantial in other areas within the region. (Draft EIR, p. 2.6-31.)
- B. Projected development would result in new residential, commercial, and industrial land use development that could include stationary sources (e.g., HVAC units, mechanical equipment) and community noise that could expose existing receptors to excessive noise levels or result in a substantial permanent increase in noise. Noise levels from HVAC equipment vary substantially depending on unit efficiency, size, and location, but generally range from 45 to 70 dB L_{eq} at a distance of 50 feet. Reference noise-level measurements of emergency generators with rated power outputs from 50 to 125 kilowatts (kw) result in noise levels ranging from 61 to 73 dB L_{eq} and 63–84 dB L_{max} at a distance of 45 feet. Based on reference noise values and accounting for typical usage factors of equipment used for commercial loading/unloading, noise levels could reach 82 dB L_{eq} and 86 dB L_{max} at a distance of 50 feet. (Draft EIR, p. 2.6-31.)
- C. Implementation of the proposed Plan would result in increased development within areas already experiencing high noise levels. Although specific locations for these noise sources are not known at this time, considering the projected high density of land development in already urbanized areas, it is possible that projected land use development (and associated noise sources) could result in exposure to existing sensitive receptors to noise levels above 70 dBA CNEL (exterior), 45 dBA CNEL (interior), or a substantial increase in noise (i.e., 1.5 dB). In addition, projected land use development could place new sensitive land uses in areas where existing ambient noise exceeds the land use compatibility thresholds of 70 dBA CNEL (exterior) and 45 dBA CNEL (interior). (Draft EIR, p. 2.6-32.)
- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to implement measures that will (1) reduce noise exposure to sensitive receptors; (2) shield outdoor use areas from adjacent noise sources; (3) setback development from rail tracks to minimize noise exposure; (4) employ sound-reducing features into transit projects; and (5) reduce noise from mechanical equipment.

Impact

- 2.6-6 Implementation of the proposed Plan could result in exposure of people residing or working in the planning area to excessive noise levels where an airport land use plan is adopted or, where such a plan has not been adopted, within two miles of a public airport, public use airport, or private airstrip. (Draft EIR, p. 2.6-33)**

Mitigation Measures

To reduce exposure from airport-related noise, implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

2.6-6 Local lead agencies for all new development proposed to be located within an existing airport influence zone, as defined by the locally adopted airport land use compatibility plan or local general plan, shall require a site-specific noise compatibility. The study shall consider and evaluate existing aircraft noise, based on specific aircraft activity data for the airport in question, and shall include recommendations for site design and building construction to ensure compliance with interior noise levels of 45 dBA CNEL, such that the potential for sleep disturbance is minimized.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the appropriate design and building construction would ensure interior noise levels of 45 dBA CNEL, and this impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. There are 26 public use and military airports and numerous private airstrips throughout the Plan area. Many of the public airports are in urbanized areas where the proposed Plan envisions new development. Most of these airports and airfields have an active Airport Land Use Compatibility Plan (ALUCP) (or the equivalent) to discourage incompatible land uses within the vicinity of the airport. The FAA Part 150 program encourages airports to prepare noise exposure maps that show land uses that are incompatible with high noise levels and these are often included within the ALUCP. Thus, the potential exists for forecasted development pursuant to the proposed Plan to occur in areas of 65 dBA CNEL or 70 dBA CNEL, exceeding recommended airport noise thresholds of 65 dBA CNEL for residential land uses and the project-specific land use compatibility thresholds of 70 dBA CNEL. (Draft EIR, p. 2.6-33.)

- ## GEOLOGY AND SEISMICITY

WATER RESOURCES

BIOLOGICAL RESOURCES

2.9-1a Implementation of the proposed Plan could have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (Draft EIR, p. 2.9-33)

2.9-1(a) Implementing agencies shall require project sponsors to prepare biological resource assessments for specific projects proposed in areas containing, or likely to contain, habitat for special-status plants and wildlife. The assessment shall be conducted by qualified professionals pursuant to adopted protocols and agency guidelines. Where the biological resource assessments establish that mitigation is required to avoid direct and indirect adverse effects on special-status plant and wildlife species, or compensate for unavoidable effects, mitigation shall be developed consistent with the requirements of CEQA, USFWS, CDFW, and local regulations and guidelines, in addition to requirements of any applicable and adopted HCP/NCCP or other applicable plans developed to protect species or habitat. Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ In support of CEQA, NEPA, CDFW, and USFWS review and permitting processes for individual proposed Plan projects, pre-project biological surveys shall be conducted as part of the environmental review process to determine the presence and extent of sensitive habitats and/or species in the project vicinity. Surveys shall follow established methods and shall be conducted at times when the subject species is most likely to be identified. In cases where impacts to state- or federally-listed plant or wildlife species are possible, formal protocol-level surveys may be required on a species-by-species basis to determine the local distribution of these species. Coordination with the USFWS and/or CDFW shall be conducted early in the planning process at an informal level for projects that could adversely affect federal or state candidate,

proposed, threatened, or endangered species to determine the need for consultation or permitting actions. Projects shall obtain incidental take authorization from the permitting agencies as required before project implementation.

- ▲ Project designs shall be reconfigured, whenever practicable, to avoid special-status species and sensitive habitats. Projects shall minimize ground disturbances and transportation project footprints near sensitive areas to the extent practicable.
- ▲ Project activities in the vicinity of sensitive resources shall be completed during the period that best avoids disturbance to plant and wildlife species present to the extent feasible.
- ▲ Individual projects shall minimize the use of in-water construction methods in areas that support sensitive aquatic species, especially when listed species could be present.
- ▲ In the event that equipment needs to operate in any watercourse with flowing or standing water where special-status species may be affected, a qualified biological resource monitor shall be present to alert construction crews to the possible presence of such special-status species.
- ▲ If project activities involve pile driving or vibratory hammering in or near water, interim hydroacoustic threshold criteria for protected fish species shall be adopted as set forth by the Interagency Fisheries Hydroacoustic Working Group, as well as other avoidance methods to reduce the adverse effects of construction to sensitive fish, piscivorous birds, and marine mammal species.
- ▲ Construction shall not occur during the breeding season near riparian habitat, freshwater marshlands, and salt marsh habitats that support nesting bird species protected under the Endangered Species Act, Migratory Bird Treaty Act, or California Fish and Game Code (e.g., yellow warbler, tricolored blackbird, Ridgway's rail, etc.).
- ▲ A qualified biologist shall locate and fence off sensitive resources before construction activities begin and, where required, shall inspect areas to ensure that barrier fencing, stakes, and setback buffers are maintained during construction.
- ▲ For work sites located adjacent to special-status plant or wildlife populations, a biological resource education program shall be provided for construction crews and contractors (primarily crew and construction foremen) before construction activities begin.
- ▲ Biological monitoring shall be considered for areas near identified habitat for federal- and state-listed species, and a "no take" approach shall be taken whenever feasible during construction near special-status plant and wildlife species.
- ▲ Efforts shall be made to minimize the adverse effects of light and noise on listed and sensitive wildlife.
- ▲ Project activities shall comply with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of special-status species.
- ▲ Compensatory mitigation for unavoidable loss of habitat or other impacts to special-status species may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning (RAMP), as deemed appropriate by the permitting agencies.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M) because these mitigation measures would require pre-project surveys and biological monitoring, avoidance or minimization of project-related disturbance or loss of special-status species, and coordination with permitting agencies as required prior to project implementation.

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. The list of Special-status species that would be potentially affected by the proposed Plan was generated from a GIS-based analysis of project proximity to documented special-status species occurrences, as well as proximity to critical habitat designated by USFWS and NMFS. (Draft EIR, Appendix K, Table K-1.) Additional, non-listed species (i.e., not listed under the FESA or CESA) that are not consistently tracked by CDFW in the CNDDDB but are afforded protections under the California Fish and Game Code and/or the Migratory Bird Treaty Act were also considered. In addition, it is known that the CNDDDB includes historical occurrences for species that may no longer be extant at a given location and this also likely leads to an overestimation of development impacts on special-status species in the EIR. (Draft EIR, p. 2.9-33.)
- B. Growth forecasts for the Bay Area project that by 2040 the region will support an additional 2.1 million residents and 688,000 jobs, resulting in 666,000 new households. The proposed Plan calls for focused housing and job growth concentrated primarily in already urbanized areas and along existing transit corridors. The land use growth footprint covers 18,700 acres of land in the Bay Area. Within that area 7,400, or approximately 40 percent of the land use growth footprint would be located in TPAs. In addition, the proposed Plan identifies Priority Conservation Areas (PCAs), which are regionally significant open space areas for which there is broad consensus regarding long-term protection but which face development pressures in the near-term. (Draft EIR, p. 2.9-33.)
- C. Implementation of the land use development pattern under the proposed Plan could result in regional impacts on special-status species. Approximately 84 percent of the land use growth footprints would occur in proximity to known special-status species occurrences. Approximately 69 percent of these land use growth footprints are located in Alameda, Santa Clara, and San Francisco counties. Potential regional effects on special-status species could occur as a result of habitat fragmentation, increased human intrusion into wildland areas, introduction of invasive species, disruption of migratory corridors, and a resulting regional reduction in biological diversity. (Draft EIR, p. 2.9-33.)
- D. Potential localized effects on special-status species include the temporary and permanent removal or conversion of vegetation and habitat necessary for species breeding, feeding, dispersal, or sheltering. Construction and/or ongoing operations could result in direct mortality of special-status plants and wildlife, entrapment in open trenches, and general disturbance because of noise or vibration during pile-driving, earthmoving, and other construction activities. Construction-generated fugitive dust accumulation on surrounding vegetation and construction-related erosion, runoff, and sedimentation could degrade the quality of adjacent vegetation communities, affecting their ability to support special-status plants and wildlife. Habitat fragmentation and disruption of migratory corridors, could also occur on a local level,

potentially affecting local populations by making them more vulnerable to extirpation. Because land use changes under the proposed Plan could result in the disturbance or loss of special-status plant and wildlife species and habitats, this impact is considered potentially significant. (Draft EIR, pp. 2.9-33 to 2.9-34.)

- E. The implementation of proposed transportation projects would incrementally affect adjacent wetlands, woodlands, shrublands, and grasslands, as well as associated plant and wildlife species. Because the proposed transportation projects are mainly concentrated along existing transportation corridors, regional habitat loss and fragmentation is expected to be lower than if projects were entirely new construction or sited in previously undeveloped areas. Nonetheless, of the 196 individual transportation projects with mapped footprints in the Plan area, 174 (89 percent) were identified as occurring in proximity to known special-status species occurrences. Approximately 87 percent of these projects are located in Alameda, Contra Costa, Santa Clara, San Mateo, and San Francisco counties. Additionally, these and other transportation projects could contribute to regional and local habitat loss and fragmentation. Long-term increases in the volume of vehicular traffic and major expansions of existing roads or development of new roads in rural areas are expected to result in increased vehicle-related wildlife mortalities and injuries of common and special-status wildlife species. This effect would be most pronounced in rural areas, where roads traverse larger expanses of natural habitats. Because the proposed Plan transportation projects may result in the disturbance or loss of special-status plant and wildlife species and habitats, this impact is considered potentially significant. (Draft EIR, p. 2.9-34.)
- F. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to employ protective measures for impacted species and habitat.

Impact

- 2.9-2 Implementation of the proposed Plan could have a substantial adverse effect on riparian habitat, federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal), or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, through direct removal, filling, hydrological interruption, or other means. (Draft EIR, p. 2.9-38)**

Mitigation Measures

Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

2.9-2 Mitigation measures that shall be considered by implementing agencies and/or project sponsors based on project- and site-specific considerations include, but are not limited to:

- ▲ Implementing agencies shall require project sponsors to prepare biological resource assessments for specific projects proposed in areas containing, or likely to contain, jurisdictional waters and/or other sensitive or special-status communities. These assessments shall be conducted by qualified professionals in accordance with agency guidelines and standards.
- ▲ In keeping with the “no net loss” policy for wetlands and other waters, project designs shall be configured, whenever possible, to avoid wetlands and other waters and avoid disturbances to wetlands and riparian corridors to preserve both the habitat and the overall ecological functions of these areas. Projects shall minimize ground disturbances and transportation project footprints near such areas to the extent practicable.
- ▲ Where avoidance of jurisdictional waters is not feasible, project sponsors shall minimize fill and the use of in-water construction methods, and place fill only with express permit approval from the appropriate

resources agencies (e.g., USACE, RWQCB, CDFW, BCDC, and CCC) and in accordance with applicable existing regulations, such as the Clean Water Act or local stream protection ordinances.

- ▲ Project sponsors shall arrange for compensatory mitigation in the form of mitigation bank credits, on-site or off-site enhancement of existing waters or wetland creation in accordance with applicable existing regulations and subject to approval by the USACE, RWQCB, CDFW, BCDC, and CCC. If compensatory mitigation is required by the implementing agency, the project sponsor shall develop a restoration and monitoring plan that describes how compensatory mitigation will be achieved, implemented, maintained, and monitored. At a minimum, the restoration and monitoring plan shall include clear goals and objectives, success criteria, specifics on restoration/creation/enhancement (plant palette, soils, irrigation, etc.), specific monitoring periods and reporting guidelines, and a maintenance plan. The following minimum performance standards (or other standards as required by the permitting agencies) shall apply to any wetland compensatory mitigation:

 - Compensation shall be provided at a minimum 1:1 ratio for restoration and preservation, but shall in all cases be consistent with mitigation ratios set forth in locally applicable plans (e.g., general plans, HCP/NCCPs, etc.), or in project-specific permitting documentation. Compensatory mitigation may be a combination of onsite restoration/creation/enhancement or offsite restoration, preservation, and/or enhancement. Compensatory mitigation may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning (RAMP), as deemed appropriate by the permitting agencies.
 - In general, any compensatory mitigation shall be monitored for a minimum of five years and will be considered successful when at least 75 percent cover (or other percent cover considered appropriate for the vegetation type) of installed vegetation has become successfully established.
- ▲ In accordance with CDFW guidelines and other instruments protective of sensitive or special-status natural communities, project sponsors shall avoid and minimize impacts on sensitive natural communities when designing and permitting projects. Where applicable, projects shall conform to the provisions of special area management or restoration plans, such as the Suisun Marsh Protection Plan or the East Contra Costa County HCP, which outline specific measures to protect sensitive vegetation communities.
- ▲ If any portion of a special-status natural community is permanently removed or temporarily disturbed, the project sponsor shall compensate for the loss. If such mitigation is required by the implementing agency, the project sponsor shall develop a restoration and monitoring plan that describes how compensatory mitigation will be achieved, implemented, maintained, and monitored. At a minimum, the restoration and monitoring plan shall include clear goals and objectives, success criteria, specifics on restoration/creation/enhancement (plant palette, soils, irrigation, etc.), specific monitoring periods and reporting guidelines, and a maintenance plan. The following minimum performance standards (or other standards as required by the permitting agencies) shall apply to any compensatory mitigation for special-status natural communities:

 - Compensation shall be provided at a minimum 1:1 ratio for restoration and preservation, but shall in all cases be consistent with mitigation ratios set forth in locally applicable plans (e.g., general plans, HCP/NCCPs, etc.) or in project-specific permitting documentation. Compensatory mitigation may be a combination of onsite restoration/creation/enhancement or offsite restoration, preservation, and/or enhancement. Compensatory mitigation may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning (RAMP), as deemed appropriate by the permitting agencies.
 - In general, any compensatory mitigation shall be monitored for a minimum of five years and will be considered successful when at least 75 percent cover (or other percent cover considered appropriate for the vegetation type) of installed vegetation has become successfully established.
- ▲ Compliance with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of jurisdictional wetlands or special-status natural communities.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M). These measures would require that sensitive habitat be avoided to the extent feasible and that sensitive habitats that cannot be avoided are restored following construction, or if the habitat cannot be restored, that the project proponent compensates for unavoidable losses in a manner that results in no net loss of sensitive habitats and meets applicable regulatory requirements. Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Approximately three percent of the land use growth footprint, located primarily in Alameda, Contra Costa, Santa Clara, and San Mateo Counties, was identified where future forecasted development could have the potential to directly or indirectly affect wetlands and other waters. The majority of potentially affected wetlands were associated with estuarine and marine deepwater habitats around San Francisco Bay and the Carquinez Strait, or freshwater emergent wetlands and freshwater ponds in a variety of locations. Potential impacts on wetlands include the temporary disturbance, or permanent loss, of jurisdictional waters, including wetlands; loss or degradation of stream or wetland function; incremental degradation of wetland habitats; and fragmentation of streams and wetlands. Jurisdictional waters in the region vary from relatively small, isolated roadside areas, wet meadows, and vernal pools to major streams and rivers, bays and estuaries, to tidal, brackish, and freshwater marshes. Any fill of jurisdictional waters associated with proposed land development would be considered a significant impact. (Draft EIR, p. 2.9-38.)
- B. In addition to direct habitat loss, implementation of forecasted development under the proposed Plan could increase the potential for stormwater runoff to carry a variety of pollutants into wetlands, rivers, streams, and San Francisco Bay through increases in impervious surfaces. Construction runoff often carries grease, oil, and heavy metals (because of ground disturbance) into natural drainages. Furthermore, particulate materials generated by construction could be carried by runoff into natural waterways and could increase sedimentation impacts. In accordance with USACE, EPA, USFWS, RWQCB, and CDFW guidelines, a goal of “no net loss” of wetland acreage and value is required, wherever possible, through avoidance of the resource. Where avoidance is not possible, mitigation for wetland impacts would be based on project-specific wetland mitigation plans. Impacts on jurisdictional waters could be potentially significant. (Draft EIR, pp. 2.9-38 to 2.9-39.)
- C. 106 transportation projects were identified that could have the potential to directly or indirectly affect wetlands and other waters. Potential transportation project effects are similar to those discussed above for land use changes and development. A standard of “no net loss” of wetland acreage and value is

required, wherever possible, through avoidance of the resource. Where avoidance is not possible, mitigation for wetland impacts would be based on project-specific wetland mitigation plans. Impacts on jurisdictional waters resulting from implementation of transportation projects would be potentially significant. (Draft EIR, pp. 2.9-39 to 2.9-40.)

- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to employ protective measures for impacted riparian habitat and protected wetlands.

Impact

2.9-3 Implementation of the proposed Plan could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery sites. (Draft EIR, p. 2.9-42)

Mitigation Measures

2.9-3 Implementing agencies shall require project sponsors to prepare detailed analyses for specific projects affecting ECA lands to determine what wildlife species may use these areas and what habitats those species require. Projects that would not affect ECA lands but that are located within or adjacent to open lands, including wildlands and agricultural lands, shall also assess whether or not significant wildlife corridors are present, what wildlife species may use them, and what habitat those species require. The assessment shall be conducted by qualified professionals and according to applicable agency standards.

Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ constructing wildlife friendly overpasses and culverts;
- ▲ fencing major transportation corridors in the vicinity of identified wildlife corridors;
- ▲ using wildlife-friendly fences that allow larger wildlife such as deer to get over, and smaller wildlife to go under;
- ▲ limiting wildland conversions in identified wildlife corridors;
- ▲ retaining wildlife-friendly vegetation in and around developments; and
- ▲ complying with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures to protect wildlife corridors.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M). These mitigation measures would require assessments of whether significant wildlife corridors are present in project areas, minimizing wildland conversions in identified wildlife corridors, implementing wildlife-friendly design features, and compliance with regulations and policies to protect wildlife corridors.

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. The Bay Area encompasses large areas of wildlands that provide habitat for both common and rare plants and wildlife and some of these areas were mapped as Essential Connectivity Areas (ECAs). The ECAs are not regulatory delineations but are identified as lands likely important to wildlife movement between large, mostly natural areas at the statewide level. A total of 13 ECAs occur within the nine Bay Area counties and are typically centered along the region's mountain ranges. These areas are composed primarily of wildlands, but may also include some agricultural and developed areas (mostly rural residential) and many are bisected by major roadways. (Draft EIR, p. 2.9-42.)
- B. Land use growth footprints in the Plan area overlap with approximately 1,040 acres of mapped ECAs, primarily in Santa Clara (550 acres), Napa (120 acres), and Alameda Counties (120 acres). However, these land use growth footprints are located primarily in already urbanized corridors along major highways or other existing transportation routes where migratory corridors have already been fragmented and degraded to the point that their function as linkages is either limited or lost entirely. On a local level, areas including waterways, riparian corridors, and contiguous or semi-contiguous expanses of habitat, are likely to facilitate wildlife movement, even through urbanized areas throughout the region. In some cases, development projects may directly encroach on wildlife corridors, particularly when direct habitat removal occurs or when sites are located adjacent to open space or streams. Substantial encroachment on local wildlife corridors would be considered a potentially significant impact. (Draft EIR, p. 2.9-42.)
- C. Transportation projects could result in impacts on ECAs because of roadway and rail expansions in Napa, Sonoma, Solano, Contra Costa, Alameda, San Mateo, and Santa Clara counties. Transportation projects in the Plan area overlap with approximately 1,930 acres of mapped ECAs. The majority of potential effects would occur in Solano, Alameda, and Santa Clara counties. However, many of these transportation projects are expansions or enhancements of existing highways or other transportation routes with existing urban corridors established along them. In these areas, migratory corridors have already been fragmented and degraded to the point that their function as linkages is either limited or has been lost entirely. (Draft EIR, p. 2.9-42.)
- D. Transportation projects could result in impacts on ECAs because of roadway and rail expansions in Napa, Sonoma, Solano, Contra Costa, Alameda, San Mateo, and Santa Clara counties. Transportation projects in the Plan area overlap with approximately 1,930 acres of mapped ECAs. The majority of potential effects would occur in Solano, Alameda, and Santa Clara counties. However, many of these transportation projects are expansions or enhancements of existing highways or other transportation routes with existing urban corridors established along them. In these areas, migratory corridors have already been fragmented and degraded to the point that their function as linkages is either limited or has been lost entirely. Substantial encroachment on local wildlife corridors would be considered a potentially significant impact. (Draft EIR, p. 2.9-42.)
- E. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to employ measures to protect wildlife corridors.

Impact

2.9-5 Implementation of the proposed Plan could have the potential to substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species. (Draft EIR, p. 2.9-45)

Mitigation Measures

2.9-5 Implementing agencies and/or project sponsors shall implement mitigation measures, where feasible and necessary based on project-specific and site-specific considerations that include but are not limited to:

- ▲ Implement Mitigation Measures 2.9-1(a), 2.9-1(b), 2.9-2, and 2.9-3.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M), for the same reasons described previously for implementation of Mitigation Measures 2.9-1(a), 2.9-1(b), 2.9-2, and 2.9-3.

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. As described in Impacts 2.9-1a, 2.9-1b, and 2.9-2, implementation of the projected development and transportation projects under the proposed Plan could adversely affect special-status species and sensitive natural communities. This is considered a potentially significant impact. (Draft EIR, p. 2.9-45.)
- B. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to employ protective measures for impacted riparian habitat and protected wetlands, critical habitat, and impacted species and habitat.

VISUAL RESOURCES

Impact

2.10-1 Implementation of the proposed Plan could have a substantial adverse effect on a scenic vista. (Draft EIR, p. 2.10-10)

Mitigation Measure

2.10-1 Implementing agencies and/or project sponsors shall implement measures where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ reduce the visibility of construction staging areas by fencing and screening these areas with low contrast materials consistent with the surrounding environment, and by revegetating graded slopes and exposed earth surfaces at the earliest opportunity;
- ▲ site or design projects to minimize their intrusion into important viewsheds;
- ▲ use see-through safety barrier designs (e.g. railings rather than walls);
- ▲ develop interchanges and transit lines at the grade of the surrounding land to limit view blockage;
- ▲ design landscaping along highway corridors in rural and open space areas to add natural elements and visual interest to soften the hard edged, linear travel experience that would otherwise occur; and
- ▲ identify, preserve, and enhance scenic vistas to and from hillside areas and other visual resources.

Significance After Mitigation

Mitigation Measure 2.10-1 would reduce significant impacts to scenic vistas because it would modify site design and provide development recommendations that would minimize visual intrusion on important viewsheds. However, because site conditions are unique, it cannot be concluded with certainty that all significant viewshed impacts could be avoided. Therefore, there may still be instances in which viewshed impacts are significant and unavoidable (SU).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level analysis.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency. Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions. However, specific economic, legal, social, technological, or other considerations make it infeasible to avoid or substantially lessen the impact even with implementation of the identified measures. (Finding (3)).

Facts in Support of Findings

- A. Changes to short-range views of scenic vistas would occur at a site-specific level and would consist of effects that would be experienced at discrete locations. Future development projects would be subject to the requirements of local policies and regulations, and most jurisdictions have specific general plan policies to protect important scenic vistas and views of other scenic resources. Denser or more compact development in some parts of the region may block panoramic views or views of landscape features or landforms from public and individual properties because increasing densities on existing footprints could result in taller buildings and/or buildings placed more closely together. In addition, construction-related activities such as cranes, backhoes, staging areas, and stockpiling of materials could temporarily affect views of a scenic vista. Thus, depending on the location of the viewer, scenic vistas may be substantially

altered, and short-range impacts on views of scenic vistas would be potentially significant. (Draft EIR, p. 2.10-11.)

- B. Localized effects on visual resources are associated with site-specific impacts, which are effects that could be experienced at discrete locations rather throughout the region. Transportation projects included in the proposed Plan could require the removal of landscaping, temporary traffic changes, temporary signage, and construction staging areas. Larger projects, such as expansion of regional transit lines, and construction of train stations and parking structure could take long periods of time (e.g., several years) to complete, require substantial grading activities, and the presence of construction equipment and stockpiling of materials. Construction of such projects could take several months to several years, and have the potential to result in long-term effects on views from discrete locations depending on the size of projects. (Draft EIR, p. 2.10-16.)
- C. The extent to which there would be impacts on scenic vistas from new transportation projects would depend on the type of project and its location relative to viewers. Expansion of transit lines could introduce new features into an existing view. New features could have a substantial adverse effect on scenic vistas through the introduction of rail lines, large signs, new intersections, and new transit centers in areas that do not currently have similar types of features, and they could contrast with the nature and character of the existing localized view. Thus, scenic vistas could be substantially altered because of the presence of construction activities and new transportation project features. (Draft EIR, p. 2.10-16.)
- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to include design features and screening measures that will protect scenic vistas.

Impact

2.10-3 Implementation of the proposed Plan could substantially degrade the existing visual character or quality of the site and its surroundings. (Draft EIR, p. 2.10-18)

Mitigation Measure

2.10-3 Implementing agencies and/or project sponsors shall implement measures where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ minimize impacts of design through compliance with MTC's Station Area Planning Manual;
- ▲ require that the scale, massing, and design of new development provide appropriate transitions in building height, bulk, and architectural style that are sensitive to the physical and visual character of surrounding areas;
- ▲ contour the edges of major cut and fill slopes to provide a finished profile that is appropriate to the surrounding context, using shapes, textures, colors, and scale to minimize contrasts between the project and surrounding areas; and
- ▲ implementing agencies shall require project sponsors to conduct shadow studies for four-story high (and higher) buildings and roadway facilities to identify and implement development strategies for reducing the impact of shadows on public open space, where feasible. Study considerations shall include, but are not limited to, the placement, massing, and height of structures, surrounding land uses, time of day and seasonal variation, and reflectivity of materials. Study recommendations for reducing shadow impacts shall be incorporated into the project design as feasible based on project- and site-specific considerations.

Significance After Mitigation

Mitigation Measure 2.10-3 would reduce significant impacts to visual character or quality because it would modify site design and provide development recommendations that would result in projects that would be

consistent in appearance to their surroundings. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program level analysis.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Development resulting from the proposed Plan could cast shadows in such a way as to substantially degrade the existing visual/aesthetic character or quality of a public place for a sustained period of time. Shadow impacts are greatest in existing urbanized areas with dense, proximate, multi-story structures, such as urban centers and downtowns. However, implementation of the proposed Plan could increase density and intensity of growth in some locations to a level greater than currently planned, particularly in less urbanized areas. Therefore, the potential for impacts to visual character and quality is considered potentially significant. (Draft EIR, p. 2.10-19.)
- B. New transportation projects span all nine Plan area counties but are especially clustered in Santa Clara County around the densely-populated areas of Santa Clara, Downtown San Jose, and Milpitas; in central and western Alameda County; and in San Francisco. These new projects could potentially affect the character of an existing community. Some transportation projects in the proposed Plan that expand or extend existing rights-of-way could impact community character by increasing visual contrast in the community and therefore would constitute a potentially significant impact. (Draft EIR, p. 2.10-19.)
- C. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to include site and project design features that will minimize its impact on visual character or quality.

Impact

2.10-4 Implementation of the proposed Plan could add a visual element of urban character to an existing rural or open space area or add a modern element to a historic area. (Draft EIR, p. 2.10-20)

Mitigation Measure

- ▲ In addition to Mitigation Measure 2.10-3, the following measure would apply to impacts on visual resources in rural or historic areas.
- ▲ **2.10-4** Implementing agencies and/or project sponsors shall implement measures where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ Conduct project-specific review of new development in rural or historic areas to ensure that new development is compatible in scale and character with the surrounding area by:
 - promoting a transition in scale and architecture character between new buildings and established neighborhoods; and
 - requiring pedestrian circulation and vehicular routes to be well integrated.
- ▲ Where sound walls are proposed, require sound wall construction and design methods that account for visual impacts as follows:
 - use transparent panels to preserve views where sound walls would block views from residences;
 - use landscaped earth berm or a combination wall and berm to minimize the apparent sound wall height;
 - construct sound walls of materials whose color and texture complements the surrounding landscape and development;
 - design sound walls to increase visual interest, reduce apparent height, and be visually compatible with the surrounding area; and
 - landscape the sound walls with plants that screen the sound wall, preferably with either native vegetation or landscaping that complements the dominant landscaping of surrounding areas.

Significance After Mitigation

Mitigation Measure 2.10-4 would reduce significant impacts where urban uses are introduced to non-urban areas because it would result in site design modification and provide development recommendations that would result in projects that are compatible in scale and character with the surrounding area. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program level analysis.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Development resulting from the proposed Plan could cause substantial visual impacts by adding a visual element of urban character to an existing rural or open space area or adding a modern element to a historic area. The greatest impacts at the regional scale would result from high density residential projects and high intensity non-residential projects located in low density, rural, or historic areas, where the visual contrast between the project and existing conditions would be the most apparent. (Draft EIR, p. 2.10-20.)

- B. In developed areas with historic districts or a large number of historic structures, density changes could result in a substantial change in local character or the introduction of a modern element to a historic area. While many local ordinances protect historic resources, these ordinances would not in all cases reduce potential impacts from adding a modern element to a historic area. Collectively, individually minor visual impacts may become substantial over time. This would be a potentially significant. (Draft EIR, pp. 2.10-20 to 2.10-21.)
- C. Approximately 24,000 acres of transportation projects have been identified in the proposed Plan that could result in substantial visual impacts in the region through the introduction of new facilities and infrastructure. Major projects span all nine Plan area counties, but are especially clustered in Santa Clara County around the densely-populated areas of Santa Clara, Downtown San Jose, and Milpitas; in central and western Alameda County; and in San Francisco. (Draft EIR, p. 2.10-21.)
- D. Projects located in areas with known historical sites, or located in communities with established historic preservation programs, or involving activities that would introduce new visual elements or disturb the existing terrain have the potential to result in significant historic resource impacts. These projects could potentially reduce the aesthetic and physical integrity of historic districts and buildings which represent important examples of periods of California's history. A higher incidence of conflict with historical sites is expected to occur in urban areas with buildings that are more than 45 years old; this would include TPAs, which are located within urbanized areas. Projects located in or traversing rural lands could also have significant impacts through the introduction of new visual elements to a rural or open space area or related to sites that are singular examples of a historical setting or structures whose historic value and significance have not been previously evaluated and recognized. This would be a potentially significant impact. (Draft EIR, p. 2.10-21.)
- E. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to include site and project design features that will (1) minimize its impact on visual character or quality; and (2) ensure compatibility of project scale and character in rural and historic areas.

Impact

2.10-5 Implementation of the proposed Plan could create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. (Draft EIR, p. 2.10-22)

Mitigation Measure

2.10-5 Implementing agencies and/or project sponsors shall implement measures where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ Design projects to minimize light and glare from lights, buildings, and roadways facilities.
- ▲ Minimize and control glare from transportation projects through the adoption of project design features that reduce glare. These features include:
 - planting trees along transportation corridors to reduce glare from the sun;
 - landscaping off-street parking areas, loading areas, and service areas; and
 - shielding transportation lighting fixtures to minimize off-site light trespass.
- ▲ Minimize and control glare from land use and transportation projects through the adoption of project design features that reduce glare. These features include:
 - limiting the use of reflective materials, such as metal;
 - using non-reflective material, such as paint, vegetative screening, matte finish coatings, and masonry;

- screening parking areas by using vegetation or trees; and
- using low-reflective glass.
- ▲ Impose lighting standards that ensure that minimum safety and security needs are addressed and minimize light trespass and glare associated with land use development. These standards include the following:
 - minimizing incidental spillover of light onto adjacent private properties and undeveloped open space;
 - directing luminaries away from habitat and open space areas adjacent to the project site;
 - installing luminaries that provide good color rendering and natural light qualities; and
 - minimizing the potential for back scatter into the nighttime sky and for incidental spillover of light onto adjacent private properties and undeveloped open space.

Significance After Mitigation

Mitigation Measure 2.10-5 would reduce significant impacts to light and glare because it would result in the modification of site design and would provide standards that would minimize the effects of light and glare. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program level analysis.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Projected development resulting from the proposed Plan could create new substantial sources of light and glare at the regional scale that cause a public hazard, disrupt scenic vistas, and brighten the night sky. In more rural areas of the region, where existing sources of light and glare are not as prevalent, the impact of new sources would be potentially significant. (Draft EIR, p. 2.10-22.)
- B. The limited number of new proposed facilities in rural areas could introduce a new source of light and glare. However, the marginal increases in light and glare from additional vehicle headlights, new reflective signage, new streetlights, new intersection control devices, and other lighting ancillary to transportation projects are considered less than significant because in most cases, new transportation projects would be aligned with forecasted development projects and existing facilities; however, several transportation projects in rural areas could introduce light and glare to areas where no sources existed previously, which would constitute a potentially significant impact. (Draft EIR, p. 2.10-23.)

- C. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to include site and project design features that will minimize the impacts that result from new sources of light and glare in rural areas.

CULTURAL RESOURCES

Impact

2.11-1 The proposed Plan could cause a substantial adverse change in the significance of a historic resource as defined in Guidelines Section 15064.5 or eliminate important examples of major periods of California history. (Draft EIR, p. 2.11-28)

Mitigation Measure

2.11-1 Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ Realign or redesign projects to avoid impacts on known historic resources where possible.
- ▲ Require a survey and evaluation of structures greater than 45 years in age within the area of potential effect to determine their eligibility for recognition under State, federal, or local historic preservation criteria. The evaluation shall be prepared by an architectural historian, or historical architect meeting the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The evaluation should comply with CEQA Guidelines section 15064.5(b), and, if federal funding or permits are required, with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. § 470 et seq.). Study recommendations shall be implemented.
- ▲ If avoidance of a significant architectural/built environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts, or plans for alteration or adaptive re-use of a historical resource that follows the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings*.
- ▲ Comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect historic resources.

Significance After Mitigation

Implementation of Mitigation Measure 2.11-1 would reduce impacts associated with historic resources because it would require the performance of professionally accepted and legally compliant procedures for the avoidance of known historic resources and the evaluation of previously undocumented historic resources. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining

provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Historic resources are specific to their local context, and as such, impacts on these resources resulting from the proposed Plan would occur at the local level. In the Plan area, there are 727 historic resources individually listed on the NRHP (which automatically lists them on the CRHR); 883 listed only on the CRHR; 249 historical landmarks, and 1,353 historic bridges identified on the Caltrans Local Bridge Survey. The greatest concentration of historic resources listed on both the NRHP and the CRHR occurs in San Francisco, with 181 resources. Alameda County has the second highest number of NRHP- and CRHR-listed historic resources, with 147. However, Alameda County has the highest number of historic resources listed only on the CRHR with 302, while San Francisco has the second highest number listed only on the CRHR with 242 resources. (Draft EIR, p. 2.11-28.)
- B. Projects located in areas with known historical sites, or located in communities with established historic preservation programs, or involving activities that would introduce new visual elements or disturb the existing terrain have the potential to result in significant historic resource impacts. These projects could potentially reduce the aesthetic and physical integrity of historic districts and buildings which represent important examples of periods of California's history. A higher incidence of conflict with historical sites is expected to occur in urban areas with buildings that are more than 45 years old; this would include TPAs, which are located within urbanized areas. Given the magnitude and location of new development and transportation improvements involving construction activities in the proposed Plan, it is possible that significant impacts on historic resources could occur. (Draft EIR, p. 2.11-28.)
- C. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to include site and project design features that will avoid or minimize the impacts on historical resources.

Impact

2.11-2 The proposed Plan could cause a substantial adverse change in the significance of a unique archaeological resource as defined in Guidelines Section 15064.5 or eliminate important examples of major periods of California history or prehistory. (Draft EIR, p. 2.11-29)

Mitigation Measures

2.11-2 Implementing agencies and/or project sponsors shall implement the following measures where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ Before construction activities, project sponsors shall retain a qualified archaeologist to conduct a record search at the appropriate Information Center to determine whether the project area has been previously surveyed and whether resources were identified. When recommended by the Information Center, project sponsors shall retain a qualified archaeologist to conduct archaeological surveys before construction activities. Project sponsors shall follow recommendations identified in the survey, which may include activities such as subsurface testing, designing and implementing a Worker Environmental Awareness Program, construction monitoring by a qualified archaeologist, avoidance of sites, or preservation in place.
- ▲ In the event that evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., ceramic shard, trash scatters, lithic scatters), all ground-disturbing activity in the area of the discovery shall be halted until a qualified

archaeologist can assess the significance of the find. If the find is a prehistoric archeological site, the appropriate Native American group shall be notified. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan shall be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the project applicant to avoid disturbance to the resources, and if complete avoidance is not feasible in light of project design, economics, logistics, and other factors, follow accepted professional standards in recording any find including submittal of the standard DPR Primary Record forms (Form DPR 523) and location information to the appropriate California Historical Resources Information System office for the project area.

- ▲ Project sponsors shall comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect archaeological resources.

Significance After Mitigation

Implementation of Mitigation Measure 2.11-2 would reduce impacts associated with archaeological resources because it would require the performance of professionally accepted and legally compliant procedures for the discovery of previously undocumented significant archaeological resources. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Archaeological artifacts are by nature specific to their local context, and as such, impacts on these resources resulting from the proposed Plan would occur at the local level. New development and transportation projects could result in archaeological impacts if construction activities include the disturbance of previously-identified or unidentified archaeological resources. Projects involving excavation, grading, or soil removal in previously undisturbed areas have the greatest likelihood to encounter significant archaeological resources which could represent important examples of periods of California's prehistory. Likewise, the establishment of staging areas, temporary roads, and other temporary facilities necessary for construction activities has the potential to impact these cultural resources. (Draft EIR, pp. 2.11-29 to 2.11-30.)
- B. The nine counties of the Plan area have only a few archaeological sites that have been listed on either the NRHP or CRHR. Marin and San Francisco counties have five sites that are listed on both the NRHP and

CRHR; Sonoma County has four; Santa Clara has two; and San Mateo has one. Archaeological sites only listed on the CRHR are slightly more numerous; Contra Costa County has 41; Santa Clara County has 31; Sonoma County has 17; Alameda County has 12; Napa County has 11; Solano County has five; Marin County has four; and San Francisco County has two. (Draft EIR, p. 2.11-30.)

- C. Both rural land conversion and urban infill have the potential to disturb cultural resources, though impacts in rural areas are more likely to contain intact archaeological resources that are situated in their historic context; because these areas are less likely to have been subject to previous ground disturbance. Because proposed individual development and transportation projects have the potential to adversely affect archaeological resources thereby eliminating important examples of periods of California's prehistory, these impacts are considered potentially significant. (Draft EIR, pp. 2.11-30 to 2.11-31.)
- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to implement measures that will avoid or minimize the impacts on archaeological resources.

Impact

2.11-3 The proposed Plan could have the potential to destroy, directly or indirectly, a unique paleontological resource or site or unique geologic feature. (Draft EIR, p. 2.11-32)

Mitigation Measures

2.11-3 Implementing agencies and/or project sponsors shall implement measures where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ Before construction activities, project sponsors shall conduct a record search using an appropriate database, such as the UC Berkeley Museum of Paleontology to determine whether the project area has been previously surveyed and whether resources were identified.
- ▲ If record searches indicate that the project is located in an area likely to contain important paleontological, and/or geological resources, such as sedimentary rocks which have yielded significant terrestrial and other fossils, project sponsors shall retain a qualified paleontologist to train all construction personnel involved with earthmoving activities about the possibility of encountering fossils. The appearance and types of fossils likely to be seen during construction will be described. Construction personnel will be trained about the proper notification procedures should fossils be encountered.
- ▲ If paleontological resources are discovered during earthmoving activities, the construction crew will be directed to immediately cease work in the vicinity of the find and notify the implementing agencies and/or project sponsors. The project sponsor will retain a qualified paleontologist for identification and salvage of fossils so that construction delays can be minimized. The paleontologist will be responsible for implementing a recovery plan which could include the following:
 - in the event of discovery, salvage of unearthened fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster-jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits;
 - recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;
 - laboratory preparation (cleaning and repair) of collected fossil remains to a point of curation, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;

- cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;
- transferal, for storage, of cataloged fossil remains to an appropriate repository, with consent of property owner;
- preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection; and
- project sponsors shall comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect paleontological or geologic resources.

Significance After Mitigation

Implementation of Mitigation Measure 2.11-3 would reduce impacts associated with paleontological resources because construction workers would be alerted to the possibility of encountering paleontological resources, and professionally accepted and legally compliant procedures for the discovery of paleontological resources would be implemented in the event of a find. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Paleontological and geological resources are by nature specific to their local context, and as such, impacts on these resources resulting from the proposed Plan would occur at the local level. There are approximately 5,735 sites at which fossil remains have been found in the nine-county area, with the greatest concentration of 2,561 occurring in Contra Costa County and the second highest of 925 in San Mateo County. Napa County had the fewest paleontological sites at 151. Most paleontological resources were from the Miocene epoch (1,525), while the fewest were found from the Jurassic period (49). (Draft EIR, p. 2.11-32.)
- B. The degree and extent of impacts would depend upon project location, and as such, project-specific analysis would be required to determine the precise area of impact and the importance of any paleontological or geologic resource identified within a proposed alignment or project area. Because proposed individual development projects have the potential to adversely affect paleontological and geologic resources on a regional and localized level, these impacts are considered potentially significant. (Draft EIR, p. 2.11-32.)

- C. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to implement measures that will avoid or minimize the impacts on paleontological resources.

Impact

2.11-5 The proposed Plan could cause a substantial adverse change in the significance of a TCR as defined in PRC Section 21074. (Draft EIR, p. 2.11-34)

Mitigation Measures

2.11-5 If the implementing agency determines that a project may cause a substantial adverse change to a TCR, and measures are not otherwise identified in the consultation process required under PRC Section 21080.3.2, implementing agencies and/or project sponsors shall implement the following measures where feasible and necessary to address site-specific impacts to avoid or minimize the significant adverse impacts:

- ▲ Within 14 days of determining that a project application is complete, or to undertake a project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects in the lead agency's jurisdiction. If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. The lead agency must begin the consultation process with the tribes that have requested consultation within 30 days of receiving the request for consultation. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.
- ▲ Public agencies shall, when feasible, avoid damaging effects to any TCR (PRC Section 21084.3 (a)). If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, new provisions in the PRC describe mitigation measures that, if determined by the lead agency to be feasible, may avoid or minimize the significant adverse impacts (PRC Section 21084.3 (b)). Examples include:

 - (1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - (2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - (A) Protecting the cultural character and integrity of the resource
 - (B) Protecting the traditional use of the resource
 - (C) Protecting the confidentiality of the resource.
 - (3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - (4) Protecting the resource.

Significance After Mitigation

Implementation of Mitigation Measure 2.11-5 would reduce impacts associated with TCRs because it would require the performance of professionally accepted and legally compliant procedures for the identification of TCRs associated with subsequent projects. To the extent that an individual project adopts all feasible mitigation measures described above, the impact would be less than significant (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measure(s) described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Tribal Cultural Resources (“TCRs”) are by nature specific to their local context, and as such, impacts on these resources resulting from the proposed Plan would occur at the local level. MTC sent letters to 17 Native American Tribes in compliance with AB 52. Only the Yocha Dehe Wintun Nation replied to the August 12, 2016 letter. Independent of the letters sent by MTC, the Lone Band of Miwok Indians and the Amah Mutsun Tribal Band sent letters requesting consultation pursuant to AB 52. MTC requested consultation meetings with all three tribes; however, no tribes responded. Consequently, no tribal concerns or TCRs have been identified. (Draft EIR, p. 2.11-34.)
- B. Subsequent discretionary projects may be required to prepare site-specific project-level analysis to fulfill CEQA requirements, which may include additional AB 52 consultation that could lead to the identification of TCRs. Although no resources within the Plan area have been identified as meeting any of the PRC Section 5024.1(c) criteria, it is possible that TCRs could be identified during analysis of subsequent projects. Therefore, the proposed Plan would have a potentially significant (PS) impact on TCRs. (Draft EIR, pp. 2.11-34 to 2.11-35.)
- C. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to implement measures that will avoid or minimize the impacts on Tribal Cultural Resources.

PUBLIC UTILITIES

Impact

2.12-1 Implementation of the proposed Plan could result in insufficient water supplies available to serve development implemented as part of the Plan from existing entitlements and resources. (Draft EIR, p. 2.12-27)

Mitigation Measures

2.12-1(a) Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ For projects that could increase demand for water, project sponsors shall coordinate with the relevant water service provider to ensure that the provider has adequate supplies and infrastructure to

accommodate the increase in demand. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements shall be identified in each project's CEQA documentation.

- ▲ Implement water conservation measures which result in reduced demand for potable water. This could include reducing the use of potable water for landscape irrigation (such as through drought-tolerant plantings, water-efficient irrigation systems, the capture and use of rainwater) and the use of water-conserving fixtures (such as dual-flush toilets, waterless urinals, reduced flow faucets).
- ▲ Coordinate with the water provider to identify an appropriate water consumption budget for the size and type of project, and designing and operating the project accordingly.
- ▲ For projects located in an area with existing reclaimed water conveyance infrastructure and excess reclaimed water capacity, use reclaimed water for non-potable uses, especially landscape irrigation. For projects in a location planned for future reclaimed water service, projects should install dual plumbing systems in anticipation of future use. Large developments could treat wastewater onsite to tertiary standards and use it for non-potable uses onsite.

2.12-1(b) Implementing agencies and/or project sponsors shall require the construction phase of transportation projects to connect to reclaimed water distribution systems for non-potable water needs, when feasible based on project- and site-specific considerations.

2.12-1(c) Implementing agencies and/or project sponsors shall require transportation projects with landscaping to use drought-resistant plantings or connect to reclaimed water distribution systems for irrigation and other non-potable water needs when available and feasible based on project- and site-specific considerations.

Significance After Mitigation

Implementation of Mitigation Measures 2.12-1(a), 2.12-1(b), and 2.12-1(c) would reduce impacts associated with water supply because they would require that land use and transportation project sponsors coordinate with water suppliers to ensure adequate water supplies exist or comply with project-level CEQA review and incorporate on-site water conservation strategies, water budgeting, and incorporation of recycled water for non-potable use. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. The major water suppliers in the region are projected to be able to supply adequate water for their projected service populations through 2040 during normal years, with the exception of Solano County

Water Agency which expects to meet water demand projections up to 2030, but has not analyzed beyond that horizon. The combined population projections of the water supply agencies for 2040 (9,883,000) exceed the 2040 regional population projections for the proposed Plan (approximately 9,627,500). As a result, there may be adequate water supplies across the entire region to serve expected growth under the proposed Plan. The enforcement of SB 610 (2001) and SB 221 (2001) by local jurisdictions should ensure that an adequate water supply is available for large residential developments prior to their approval. (Draft EIR, p. 2.12-27.)

- B. Projected growth under the proposed Plan would not occur evenly around the region; therefore, the proposed Plan could result in population or job growth beyond what is assumed in current UWMPs and could result in a localized water supply shortage. At a regional level, changes in land use projected development from the proposed Plan may result in insufficient water supplies requiring the acquisition of additional water sources and the imposition of conservation requirements. Further, California, including the Plan area, may face future water supply challenges associated with climate change-related periods of drought. The increase in population-, household-, and jobs-related demand on water supply coupled with potentially reoccurring drought conditions may result in insufficient water supply to serve the Plan area. For these reasons, these impacts are considered potentially significant. (Draft EIR, pp. 2.12-27 to 2.12-28.)

Multiple drought years could affect water supplies and are addressed by water suppliers in urban water management plans, which are required for agencies that provide water in quantities of over 3,000 acre-feet per year or to 3,000 or more customers. Water agencies plan for drought through multiple stages, defined by each district, based on historic shortages experienced during three sequential multiple dry years. For example, the Marin Municipal Water District identifies three stages of water rationing, which correlate to restrictions and prohibitions on end users (MMWD 2016). The Santa Clara County Water Agency identifies five stages of drought, which correlate to short-term water use reductions and actions (public information campaigns, fines) (Santa Clara County Water District 2016). The Zone 7 Water Agency, which provides water to the East Bay, identifies four water shortage stages that correlate to actions ranging from voluntary conservation to surcharges and prohibitions on some water uses (Zone 7 Water Agency 2016). Regardless of planning completed by individual water purveyors, the Draft EIR concludes that at a regional level, changes in land use projected development could result in insufficient water supplies. These water supplies may be further limited because of the effects of climate change-related periods of drought (Draft EIR Impact 2.12-1). For this reason, this impact is considered significant and unavoidable.

Based on case law in California. “CEQA should not be understood to require assurances of certainty regarding long-term future water supplies at an early phase of planning for large land development projects” (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 432). This is because other statutes addressing the coordination of land use and water planning demand that water supplies be identified with more specificity at each step as land use planning and water supply planning move forward from general phases to more specific phases (*Id.* at pages 432-434, citing Gov. Code, § 66473.7 and Wat. Code, §§ 10910-10912). Plans that must be updated on a periodic basis provide ample opportunity for agencies to address and respond to maturing risks to long-term water supply projections (*Sonoma County Water Coalition v. Sonoma County Water Agency* (2010) 189 Cal.App.4th 33, 56). (Final EIR, p. 2-10.)

Moreover, based on the region’s existing and projected future population, significant water supply issues exist within the region. The EIR discloses and discusses these issues; however, the proposed Plan will not resolve the region’s pre-existing water supply issues. Nor does the proposed Plan create the projected future growth. Rather, the proposed Plan accommodates growth that is projected to occur regardless, and does so in a way that has the potential to lessen significant water supply issues within the region. Specifically, the proposed Plan focuses future growth within already developed areas. This development

pattern has two distinct benefits. First, the proposed Plan should help protect the region's water supply by reducing development pressure in rural areas; areas where per capita water use is typically higher. Second, approximately two-thirds of the water used by Bay Area water agencies comes from nonlocal sources, primarily the Sierra Nevada and the Sacramento-San Joaquin Delta (Delta). As a result, the region relies on a diverse network of water infrastructure including aqueducts and storage facilities to convey supplies to its residents. By concentrating future growth within already developed areas, the proposed Plan benefits from existing water supply infrastructure and reduces the need for new water infrastructure to be developed to service new areas.

Finally, while the region's population has continued to grow, demand management and conservation programs have helped keep the overall increase of water use in the Bay Area stable (see Draft EIR Figure 2.12-5). In other words, per capita water use has substantially declined in the region over the last quarter century. The continued urban densification promoted by the proposed Plan – in addition to the continued implementation of water conservation, reuse and recycling programs by local water agencies and municipalities – will help to continue the downward trajectory of per capita water consumption within the region resulting from the California Water Conservation Act of 2009, which calls for a 20 percent reduction in per capita water use by 2020, the California Urban Water Management Planning Act, water efficiencies in landscaping and local water conservation measures, including tiered pricing. (Final EIR, p. 2-11.)

- C. The construction of new roadway capacity, bicycle and pedestrian facilities, transit facilities; maintenance on existing transportation facilities; and operation of new and existing facilities could increase the demand for water for construction activities such as concrete mixing or dust control and operational activities such as landscape irrigation or services such as restrooms and drinking fountains. Although these increases in demand are anticipated to be small on a per project basis, the collective demand from all of the projects taken together could increase water demand in such a way as to exceed water supply agencies' projected demand. Because transportation projects under the proposed Plan may be constructed in locations with constrained water supplies, especially during a dry year, these impacts are considered potentially significant. (Draft EIR, p. 2.12-28.)
- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to (1) ensure water is efficiently used and conserved; (2) use reclaimed water to the extent feasible; and (3) use drought resistant landscaping and reclaimed water for irrigation in transportation projects.

Impact

2.12-2 Implementation of the proposed Plan could result in a determination by the wastewater treatment provider which serves or may serve development implemented as part of the proposed Plan that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (Draft EIR, p. 2.12-30)

Mitigation Measure

2.12-2 Implementing agencies and/or project sponsors shall implement mitigations measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ During the design and CEQA review of individual future projects, implementing agencies and project sponsors shall determine whether sufficient wastewater treatment capacity exists for a proposed project. These CEQA determinations must ensure that the proposed development can be served by its existing or planned treatment capacity. If adequate capacity does not exist, project sponsors shall coordinate with the relevant service provider to ensure that adequate public services and utilities could accommodate the

increased demand, and if not, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.

- Implementing agencies and/or project sponsors shall also require compliance with Mitigation Measure 2.12(a), and MTC shall require implementation of Mitigation Measures 2.12(b), and/or 2.12(c) listed under Impact 2.12-1, as feasible based on project- and site-specific considerations to reduce water usage and, subsequently, wastewater flows.

Significance After Mitigation

Projects Implementation of Mitigation Measure 2.12-2 would reduce impacts related to exceedance of existing wastewater capacity because application of this mitigation would require that land use and transportation projects comply with project-level CEQA review and incorporate on-site water conservation strategies, water budgeting, and incorporation of recycled water for non-potable use as mandated by Mitigation Measures 2.12-1(b), 2.12-1(c), and 2.12-2 listed above, which would reduce the generation of wastewater. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. Further, because the measures are tied to existing regulations that are law and binding on responsible agencies and project sponsors, it is reasonable to determine that they would be implemented. Therefore, with the incorporation of mitigation measure 2.12-2, this impact would be **less than significant with mitigation (LS-M)**.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG will avoid or substantially lessen the significant environmental effect as identified in the final EIR because they are legally required to be implemented by such other agency (Finding (2)).

Facts in Support of Findings

- A. Increased volumes of wastewater from forecasted growth under the proposed Plan could exceed the wastewater treatment capacity of individual treatment facilities, if not properly planned. Wastewater generation rates are closely tied to population growth, and the total population is expected to grow by approximately 27 percent across the Bay Area by 2040; therefore, wastewater generation could increase by up to 27 percent, which would be within the existing regional capacity. Furthermore, wastewater generation per capita would be expected to decrease by 2040 as compared to baseline conditions because of implementation of regional- and state-wide water conservation measures. However, wastewater is not conveyed between different treatment agencies. One wastewater facility could approach its treatment capacity and require expansion, whereas other plants in the region may have substantial available capacity. (Draft EIR, p. 2.12-30.)
- B. Overall, the proposed Plan would result in a population growth of 27 percent and a household growth of 24 percent from 2015 to 2040. Some counties are projected to grow households by more than the regionwide rate of 24 percent, such as Santa Clara County at 33 percent, while most others would grow less, such as Napa County at 12 percent and San Mateo County at 17 percent. Areas with the most growth also are most likely to need additional wastewater treatment capacity. Therefore, the counties wherein growth would be focused, such as Alameda County (29 percent), Contra Costa County (27 percent), San Francisco County (29 percent), and Santa Clara County (33 percent), also are the locations where treatment plant expansion is most likely. Because the changes to the land use pattern under the proposed

Plan may result in insufficient wastewater treatment capacity, these impacts are considered potentially significant. (Draft EIR, p. 2.12-30.)

- C. Transportation projects would not affect wastewater treatment capacity, except in circumstances where an area has a combined stormwater and wastewater conveyance system. In those instances, extra stormwater runoff caused by additional impervious surface from roadway and some transit projects may require additional wastewater treatment capacity in localized locations. As a result of the possibility of impacts on combined drainage systems resulting in insufficient wastewater treatment capacity, these impacts are considered potentially significant. (Draft EIR, p. 2.12-30.)
- D. The proposed mitigation measures will reduce the overall impact, because existing regulations require implementing agencies to require projects to (1) ensure water is efficiently used and conserved; (2) use reclaimed water to the extent feasible; (3) use drought resistant landscaping and reclaimed water for irrigation in transportation projects; and (4) determine wastewater treatment capacity during CEQA review and identify necessary infrastructure improvements.

Impact

2.12-3 Implementation of the proposed Plan could require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts. (Draft EIR, p. 2.12-31)

Mitigation Measures

2.12-3(a) Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ During the design and CEQA review of individual future projects, implementing agencies and project sponsors shall determine whether sufficient stormwater drainage facilities exist for a proposed project. These CEQA determinations must ensure that the proposed development can be served by its existing or planned drainage capacity. If adequate stormwater drainage facilities do not exist, project sponsors shall coordinate with the appropriate utility and service provider to ensure that adequate facilities could accommodate the increased demand, and if not, infrastructure and facility improvements shall be identified in each project's CEQA determination. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.
- ▲ For projects of greater than 1 acre in size, reduce stormwater runoff caused by construction by implementing stormwater control best practices, based on those required for a SWPPP.
- ▲ Model and implement a stormwater management plan or site design that prevents the post-development peak discharge rate and quantity from exceeding pre-development rates.

2.12-3(b) Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ Transportation projects shall incorporate stormwater control, retention, and infiltration features, such as detention basins, bioswales, vegetated median strips, and permeable paving, early into the design process to ensure that adequate acreage and elevation contours are planned.

2.12-3(c) Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ Transportation projects implemented by Caltrans or subject to Caltrans review shall adhere to Caltrans' Stormwater Management Plan, which includes best practices to reduce the volume of stormwater runoff and pollutants in the design, construction and maintenance of highway facilities.

Significance After Mitigation

Implementation of Mitigation Measures 2.12-3(a), 2.12-3(b), and 2.12-3(c) would reduce impacts associated with exceedances of existing stormwater drainage capacity because application of such mitigation would require that land use and transportation projects comply with project-level CEQA review, incorporate on-site stormwater control practices, and develop and implement stormwater management plans or stormwater control design features. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. The total land use growth footprint of the proposed Plan covers 18,726 acres including an increase in the total urban footprint of 6,581 acres, a roughly 0.2 percent increase over existing conditions. Development of the remaining acres outside of existing urban areas could be composed of a variety of land uses and impervious surfaces (paved areas, building rooftops, parking lots, etc.) that could result in incremental increases in the volume and rate of stormwater runoff, and possibly require the expansion or construction of new stormwater drainage facilities. (Draft EIR, pp. 2.12-3 to 2.12-32.)
- B. Urban infill can also increase impervious surfaces by converting permeable vacant or underused parcels into land with more paving or structures; some redevelopment can reduce the amount of impervious surface, however, by converting pavement or buildings into permeable paving or landscape. Redevelopment can also increase the amount and rate of runoff by discharging greater amounts of water on a site than exists before development, typically because of excessive landscape irrigation. (Draft EIR, p. 2.12-32.)
- C. The successful and continued implementation of Provision C.3 requirements should help mitigate increases in runoff flows from new development and redevelopment projects through post-construction controls such as LID techniques. The infill nature of the proposed Plan's development pattern, combined with existing stormwater regulations, would result in less-than-significant impacts on the stormwater capacity of existing systems. However, development outside of urbanized areas could require the construction of new stormwater drainage systems, and this impact would be potentially significant. (Draft EIR, p. 2.12-32.)
- D. Development of new roadway projects as part of the proposed Plan could create new impervious areas by converting existing permeable surfaces into impervious surfaces through the expansion of existing roadways and construction of new traffic lanes. The proposed Plan calls for the addition of approximately

500 lane miles, consisting of freeway, expressway, and arterial lane-miles, to be constructed in the region, a two percent increase over existing conditions. As with land development, the construction activities associated with transportation projects can be a source of additional stormwater runoff. In locations with a combined stormwater and wastewater conveyance system, this increase in runoff could impact wastewater treatment capacity as well. (Draft EIR, p. 2.12-32.)

- E. Overall, while existing regulations would apply to transportation project construction to minimize these effects, the more stringent and effective Caltrans NPDES Stormwater Regulations only apply to some transportation projects. In addition, new roadway lane miles in areas lacking adequate stormwater drainage capacity could require expanded systems. As a result, the potential stormwater capacity impacts related to transportation improvements from implementation of the proposed Plan are considered potentially significant. (Draft EIR, p. 2.12-33.)
- F. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to (1) determine wastewater treatment capacity during CEQA review and identify necessary infrastructure improvements; (2) implement measures to reduce stormwater runoff; (3) incorporate stormwater control, retention and infiltration features; and (4) implement measures to reduce stormwater volume from highway facilities.

Impact

2.12-4 Implementation of the proposed Plan could require or result in the construction of new or expanded water and wastewater treatment facilities, the construction of which could cause significant environmental effects. (Draft EIR, p. 2.12-34)

Mitigation Measures

2.12-4 Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ For projects that could increase demand on water and wastewater treatment facilities, project sponsors shall coordinate with the relevant service provider to ensure that the existing public services and utilities could accommodate the increase in demand. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.

Further, Mitigation Measures 2.12-1(a), 2.12-1(b), 2.12-1(c), and 2.12-2 would reduce water demand and wastewater generation, and subsequently reduce the need for new or expanded water and wastewater treatment facilities. Mitigation Measures 2.12-3(a), 2.12-3(b), and 2.12-3(c) would also mitigate the impact of additional stormwater runoff from land use and transportation projects on existing wastewater treatment facilities.

Significance After Mitigation

Implementation of Mitigation Measure 2.12-4 would reduce impacts associated with exceeding existing water and wastewater treatment capacity because application of such mitigation would require that land use and transportation projects comply with project-level CEQA review. Additionally, as stated above, implementation of Mitigation Measures 2.12-1(a), 2.12-1(b), 2.12-1(c), and 2.12-2 would lower water demand and wastewater generation, thus reducing the potential need to for facilities. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. It is possible that the increase in population, households, and jobs in the region would result in a need for new or expanded water and wastewater treatment facilities to accommodate demand that exceeds the capacity at existing facilities. Much of the new treatment capacity is likely to be through expansion of existing facilities, because 99 percent of projected development is expected to occur within the existing urban footprint and therefore could connect to existing conveyance and treatment systems. (Draft EIR, p. 2.12-34.)
- B. Environmental impacts could occur from both the construction process, including air quality, stormwater runoff, and noise. The conversion of underdeveloped land could result in the loss of agricultural land, increased stormwater runoff, loss of habitat, and damage to visual and cultural resources, among other impacts. Because the land use pattern of the proposed Plan may result in construction of new or expanded water and wastewater treatment facilities, the construction of which may have site specific impacts, these impacts are considered potentially significant. (Draft EIR, p. 2.12-34.)
- C. It is not anticipated that transportation projects would have an effect on water treatment demand. However, in circumstances where an area has a combined stormwater and wastewater conveyance system, transportation projects could have an effect on wastewater treatment demand. These impacts are considered potentially significant. (Draft EIR, p. 2.12-34.)
- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to (1) ensure water is efficiently used and conserved; (2) use reclaimed water to the extent feasible; (3) use drought resistant landscaping and reclaimed water for irrigation in transportation projects; (4) implement measures to reduce stormwater runoff; (5) incorporate stormwater control, retention and infiltration features; and (6) implement measures to reduce stormwater volume from highway facilities.

Impact

2.12-5 The proposed Plan would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and comply with federal, state, and local statutes and regulations related to solid waste. (Draft EIR, p. 2.12-35)

Mitigation Measures

2.12-5 Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ providing an easily accessible area that is dedicated to the collection and storage of non-hazardous recycling materials
- ▲ maintaining or re-using existing building structures and materials during building renovations and redevelopment
- ▲ using salvaged, refurbished or reused materials, to help divert such items from landfills
- ▲ for transportation projects, diverting construction waste from landfills, where feasible, through means such as:
 - the submission and implementation of a construction waste management plan that identifies materials to be diverted from disposal
 - establishing diversion targets, possibly with different targets for different types and scales of development
 - helping developments share information on available materials with one another, to aid in the transfer and use of salvaged materials; and
- ▲ applying the specifications developed by the Construction Materials Recycling Association (CMRA) to assist contractors and developers in diverting materials from construction and demolition projects, where feasible (RMC 2006).

Significance After Mitigation

Implementation of Mitigation Measure 2.12-5 would reduce impacts associated with solid waste generation because it would require that land use and transportation projects apply landfill diversion strategies including re-using building materials, maintaining structures where applicable, developing construction waste management plans, and using guidance from CMRA. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. The expected growth in the region's population would result in an increase in solid waste production to accommodate future growth, an increase from 7,609,000 to 9,522,300 during the buildout of the proposed Plan. CalRecycle estimates that the average resident in California disposes of 4.7 pounds of trash per day as of 2015. Assuming an average diversion (to recycling) rate of 50 percent, as required by AB 939, the region's solid waste generation would increase from approximately 8,940 tons of solid waste

per day and 3.3 million tons per year, to approximately 11,190 tons per day and 4.08 million tons per year. Further, assuming California meets its goal of achieving the 75 percent diversion rate initiative by 2020, future rates of disposal post 2020 would be 5,594 tons per day and 2.04 million tons per year. In addition, the construction of new housing and non-residential uses would generate solid waste from activities such as demolition, grading, and excavation. (Draft EIR, pp. 2.12-35 to 2.12-36.)

- B. All but five (i.e., Clover Flat Landfill, Newby Island Sanitary Landfill, Guadalupe Sanitary Landfill, and Recology Hay Road) of the seventeen landfills active in the region have an estimated closure date before the year 2040. It is unlikely these remaining landfills, which make up around 18 percent of the region's existing remaining capacity, could accommodate the solid waste disposal needs of the entire region. Future growth in the region may require the expansion of existing facilities or construction of new landfills, the identification of waste disposal capacity outside of the region, and/or larger reductions in solid waste generation or diversion rates to serve the projected level of development. Because the land use pattern of the proposed Plan may result in insufficient landfill capacity, these impacts are considered potentially significant. (Draft EIR, p. 2.12-36.)
- C. Roadway and transit construction and maintenance projects in the proposed Plan have the potential to generate a substantial amount of solid waste during construction. This waste can come from typical construction activities, such as grading, excavation, and removal of existing structures. The operation of transportation facilities may also generate solid waste. The amount of this waste is difficult to predict, but it could result in an exceedance of local landfill capacities for transportation projects constructed in the future closer to expected closure dates of the landfills. These impacts are considered potentially significant. (Draft EIR, p. 2.12-36.)
- D. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to implement landfill diversion strategies to reduce the region's rate of solid waste generation.

HAZARDS

Impact

2.13-4: Implementation of the proposed Plan could result in projects located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment. (Draft EIR, p. 2.13-28)

Mitigation Measures

2.13-4 Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:

- ▲ If the project is located on or near a hazardous materials and/or waste site pursuant to Government Code Section 65962.5, or has the potential for residual hazardous materials and/or waste as a result of location and/or prior uses, the project sponsor shall prepare a Phase I ESA in accordance with the American Society for Testing and Materials' E-1527-05 standard. For work requiring any demolition or renovation, the Phase I ESA shall make recommendations for any hazardous building materials survey work that shall be done. All recommendations included in a Phase I ESA prepared for a site shall be implemented. If a Phase I ESA indicates the presence or likely presence of contamination, the implementing agency shall require a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented.

Significance After Mitigation

Preparation of, and compliance with, a Phase I ESA for properties at risk of potential hazardous materials and/or waste contamination would avoid adverse impacts associated with build-out. Soil management plans or soil contingency plans required by Mitigation Measure 2.13-4 would include procedural measures to protect and isolate suspected contaminated materials to avoid adverse effects to the workers or public. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as applicable, to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. There are approximately 21,600 documented sites of contamination in some stage of DTSC or SWRCB oversight in the Plan area. These sites range from small releases that have had localized effects on private property and have already been remediated to large scale releases from long-term historical industrial practices that have had wider ranging effects on groundwater. In addition, construction activities that disturb subsurface materials could encounter previously unidentified contamination from past practices or placement of undocumented fill or even unauthorized disposal of hazardous wastes. Encountering these hazardous materials could expose workers, the public or the environment to adverse effects depending on the volume, materials involved, and concentrations. (Draft EIR, p. 2.13-28.)
- B. With the notable exceptions for streamlining projects in TPAs and siting public schools, there are no general regulatory requirements to conduct a Phase I ESA or PEA, or subsequent investigation of potential contamination. Therefore, because it cannot be assumed these practices would regularly occur, the impacts related to changes in land use and transportation projects from implementation of the proposed Plan are considered potentially significant. (Draft EIR, p. 2.13-29.)
- C. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to perform Phase I ESAs, and Phase II ESAs when appropriate, when projects are located on or near a hazardous materials and/or waste site pursuant to Government Code Section 65962.5, or has the potential for residual hazardous materials and/or waste as a result of location and/or prior uses. Public Services and Recreation

Impact

2.14-1 Implementation of the proposed Plan could result in the need for new or modified facilities, the construction of which causes significant environmental impacts, in order to maintain acceptable

service ratios, response times or other performance objectives for schools, police protection, fire protection, emergency medical, and other public facilities. (Draft EIR, p. 2.14-10)

Mitigation Measure

2.14-1 Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include but are not limited to:

- ▲ Prior to approval of new development projects, local agencies shall ensure that adequate public services, and related infrastructure and utilities, will be available to meet or satisfy levels identified in the applicable local general plan or service master plan, through compliance with existing local policies related to minimum levels of service for schools, police protection, fire protection, medical emergency services, and other government services (e.g., libraries, prisons, social services). Compliance may include requiring projects to either provide the additional services required to meet service levels, or pay fees towards the project's fair share portion of the required services pursuant to adopted fee programs and State law.

Significance After Mitigation

To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M) because it would require project-specific evaluations of public services in order to meet additional demand with the provision of additional services or a project's contribution toward provisions of additional services.

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measure described above to address site-specific conditions. However, MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measure, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore, this impact remains **significant and unavoidable (SU)** for purposes of this program-level review.

Findings

Changes or alterations within the responsibility and jurisdiction of another public agency and not MTC or ABAG can and should be adopted by such other agency, which would avoid or substantially lessen the significant environmental effect, as identified in the final EIR (Finding (2)). Projects taking advantage of CEQA streamlining provisions of SB 375 (PRC sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures to address site-specific conditions to reduce impacts. However, MTC and ABAG cannot require local implementing agencies to adopt the identified mitigation measures. Therefore, specific economic, legal, social, technological, or other considerations make implementation of the mitigation infeasible (Finding (3)).

Facts in Support of Findings

- A. Implementation of the proposed Plan would convert approximately 5,800 acres of undeveloped land to urban uses, which represents an approximately 0.2 percent increase in the amount of developed land over 2015 conditions. Comparatively, the projected household growth represents a 24 percent increase under Plan buildout (2040) over 2015 household conditions, and the projected number of jobs represents a 17 percent increase under 2040 buildout over 2015 conditions, indicating that implementation of the proposed Plan would result in more dense and intense development than existing conditions, largely as infill development. (Draft EIR, p. 2.14-10.)
- B. Implementation of the proposed Plan would increase overall population in the region and each county, which would result in increased demand for services. As the population grows, demand for schools and other general government services and facilities (e.g., libraries, jails, animal control) would increase. Increases in residential and non-residential land uses would increase the number of service calls for

emergency services and police and fire protection. While higher density and intensity of new growth in the region should limit the need for new/modified facilities, existing emergency service organizations may need to expand their capacity and increase their fleet of ambulances, police cars, firetrucks, and other emergency-related resources to compensate for additional growth, and in cases where demand exceeds capacity, new facilities may be required. (Draft EIR, p. 2.14-10.)

- C. With respect to increased demand for school-related services, the composition of residential land uses from proposed changes in land use would vary as future development or redevelopment occurs. The generation of additional primary and secondary school-age children and the ability of individual schools to accommodate them is dependent on the type of housing, demographics, and the available capacity of the elementary, middle, and high schools that would accommodate them. In the cases where increased growth exceeds the capacity of schools and other government-related services and facilities, implementation of the proposed Plan could require additional or modified facilities to ensure acceptable levels of service. (Draft EIR, p. 2.14-10.)
- D. In cases where regional growth results in the need for new facilities to meet increased demand, short-term construction impacts could occur on a project-by-project basis. For example, the construction of a new school may cause adverse short-term traffic impacts or short-term air quality impacts associated with the use of heavy-duty equipment. Therefore, impacts related to new or modified schools, police, fire, emergency medical, and other government services are considered potentially significant. (Draft EIR, p. 2.14-12.)
- E. The proposed mitigation measures are expected to reduce the overall impact when implementing agencies require projects to comply with minimum levels of service policies and the payment of fair-share fees towards the costs of improving those services.

FINDINGS REGARDING GROWTH INDUCEMENT

CEQA requires a discussion of the ways in which a project could be growth inducing. CEQA also requires a discussion of ways in which a project may remove obstacles to growth, as well as ways in which a project may set a precedent for future growth. CEQA Guidelines Section 15126.2(d) identifies a project as growth inducing if it fosters economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. New employees from commercial and industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. Examples of development that would indirectly facilitate or accommodate growth include the installation of new roadways or the construction or expansion of water delivery/treatment facilities.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, it should not be assumed that induced growth is necessarily significant or adverse. The analysis in the Draft EIR examines the following potential growth-inducing impacts related to adoption and implementation of the proposed Plan:

1. Foster population growth and construction of housing;
2. Eliminate obstacles to population growth;
3. Foster economic growth;
4. Affect service levels, facility capacity, or infrastructure demand; and
5. Encourage or facilitate other activities that could significantly affect the environment.

(See Draft EIR pp. 3.2-6 – 3.2-8.) In summary, the proposed Plan accommodates growth to achieve better regional outcomes related to balancing jobs, housing, and population, increasing density and intensity of land use in order to lower greenhouse gas emissions, and achieving a better balance between land use strategies and transportation investments. This growth is not under the authority or control of MTC or ABAG. As dictated by existing state law, it will occur in a manner substantially consistent with local general plans, regional values and visions, and state and federal requirement. The proposed Plan accounts for growth likely to occur through 2040 and makes assumptions about location and design that promote regional environmental benefits. While the effects of growth inducement can be considered an adverse impact under CEQA, the proposed Plan accommodates projected growth and implements state mandates to integrate land use and transportation decision-making in a way that achieves improved environmental and social outcomes. Under the proposed Plan, GHG emissions and other environmental impacts would be lessened relative to what may otherwise occur absent the regional strategies embodied in the proposed Plan.

FINDINGS REGARDING SIGNIFICANT IRREVERSIBLE CHANGES

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Section 15126.2(c) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

While use of nonrenewable energy and fuel; conversion of agriculture, open space, and habitat; release of pollutants emissions into the atmosphere; and climate change effects are in and of themselves generally irreversible resource commitments, the fact that the proposed Plan changes (slows) the rate of use of these resources is a beneficial outcome. Overall, implementation of the proposed Plan would commit existing and future generations to a more efficient use of nonrenewable resources than under presently planned conditions. (See Draft EIR pages 3.2-1 through 3.2-2.) Irretrievable commitments of non-renewable resources associated with the projected change in land use and transportation projects in the proposed Plan would include the following, which are analyzed in various sections of Chapter 2 of the Draft EIR, as noted.

1. Consumption of significant amounts of nonrenewable energy for construction, maintenance, and operation of new development or transportation projects. This is discussed in Section 2.4, “Energy.”
2. Use of building materials, fossil fuels, and other resources for construction, maintenance, and operation of new development or transportation improvements. This is addressed in Section 2.4, “Energy.”
3. Conversion of some resource lands, such as agricultural land, habitat areas, and other undeveloped lands into urbanized land or transportation uses. This is addressed in several sections, including Section 2.4, “Energy” and Section 2.9, “Biological Resources.”
4. Degradation of ambient air quality through the increase of harmful particulate matter caused by a cumulative increase in vehicle exhaust. This is addressed in Section 2.2, “Air Quality.”
5. Emission of greenhouse gases that would contribute to global climate change. This is addressed in Section 2.5, “Climate Change and Greenhouse Gases.”

FINDINGS REGARDING MITIGATION MEASURES AND PROJECT ALTERNATIVES PROPOSED BY COMMENTERS

Comments on the Draft EIR have suggested additional mitigation measures and/or modifications to the measures or alternatives recommended in the Draft EIR. In considering specific recommendations from commenters, MTC/ABAG have been cognizant of the legal obligation under CEQA to substantially lessen or avoid significant environmental effects to the extent feasible. It is recognized that comments frequently offer thoughtful suggestions regarding how a commenter believes that a particular mitigation measure or alternative can be modified, or perhaps changed significantly, in order to more effectively, in the commenter's eyes, reduce the severity of environmental effects. The Commission/Board is also cognizant, however, that the mitigation measures recommended in the EIR represent the professional judgment and long experience of the MTC/ABAG expert staff and environmental consultants. It is thus the position of the Commissioners/Board that these recommendations should not be altered without considerable thought and compelling analysis. Thus, in considering commenters' suggested changes or additions to the mitigation measures and alternatives as set forth in the EIR, MTC/ABAG, in determining whether to accept such suggestions, either in whole or in part, have considered the following factors, among others: (i) whether the suggestion relates to an environmental impact that can already be mitigated to less than significant levels by proposed mitigation measures in the Draft EIR; (ii) whether the proposed language represents a clear improvement, from an environmental standpoint, over the draft language that a commenter seeks to replace; (iii) whether the proposed language is sufficiently clear as to be easily understood by those who will implement the mitigation as finally adopted; (iv) whether the language might be too inflexible to allow for pragmatic implementation; (v) whether the suggestions are feasible from an economic, technical, legal, or other standpoint; and (vi) whether the proposed language is consistent with the project objectives.

[INSERT TABLE HERE.]

As is often evident from the specific responses given to specific suggestions, MTC/ABAG have spent a considerable amount of time carefully considering and weighing proposed mitigation language and project alternatives. In response, MTC/ABAG developed alternative language addressing the same issue that was of concern to a commenter or explained why changes to the EIR were not required to address the concerns of the commenter. In no instance, however, did MTC/ABAG fail to take seriously a suggestion made by a commenter or fail to appreciate the sincere effort that went into the formulation of suggestions. The Commission/Board finds that the responses to comments in the Final EIR are supported by substantial evidence and that the Final EIR provides adequate and appropriate responses to all comments on the Draft EIR, including all comments proposing mitigation measures or alternatives. The Commission/Board, therefore, incorporates those responses into these findings.

Findings and Facts in Support of Findings for Alternatives

Public Resources Code Section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives ... which would substantially lessen the significant environmental effects of such projects." CEQA requires an EIR to consider a reasonable range of alternatives to a proposed project or to the location of the proposed project which would "feasibly attain most of the basic objectives of the project" (CEQA Guidelines, Section 15126.6(a)). Section 15126.6, subdivision (f) of the CEQA Guidelines limits the alternatives that must be considered in the EIR to those "that would avoid or substantially lessen any of the significant effects of the project."

Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause one or more potentially significant adverse environmental effects that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first

determine whether, with respect to such impacts, there remain any Project alternatives that are both environmentally superior and feasible within the meaning of CEQA.

This Section describes how MTC and ABAG developed the range of alternatives analyzed in the EIR, summarizes the proposed Plan's potentially significant and unavoidable impacts, discusses the project objectives including the statutory objective to achieve the CO₂ emission targets established pursuant to SB 375, and considers the merits and feasibility of each of the alternatives.

RANGE OF ALTERNATIVES

MTC and ABAG conducted a screening process to identify potential alternatives to the proposed Plan and to ultimately identify a range of reasonable alternatives for evaluation in this EIR. This process involved initial alternative analysis to develop Plan alternatives, public input, and development of a preferred Plan alternative.

Transportation and land use scenario analyses were conducted between 2015 and 2016 by MTC and ABAG to inform development of the proposed Plan. The scenario development process began in early 2015 with open houses to solicit public input on updated goals and performance targets. Through these open houses, MTC Commissioners and ABAG's Executive Board members considered and approved a list of Plan goals and targets. These goals and targets were used to inform three scenarios illustrating the effects of different housing, land use, and transportation strategies for development of the proposed Plan. The scenarios were also based on transportation projects submitted during the call for projects, and shaped by the regional growth and revenue forecasts. The three scenarios were included in Attachment A of the Notice of Preparation (NOP) for the EIR (see DEIR Appendix A) and are briefly summarized as follows:

- ▲ **Main Street Scenario:** This scenario disperses future household and job growth into the downtowns of all Bay Area communities, and emphasizes the expansion of express lanes, increases in highway capacity, and increases to suburban bus service to dispersed job centers.
- ▲ **Connected Neighborhood Scenario:** This scenario emphasizes expected growth in population and jobs in areas near major transit corridors, and emphasizes transit efficiency investments, the most cost-effective transit expansion projects in the highest-growth areas, and includes a limited set of highway efficiency investments.
- ▲ **Big Cities Scenario:** This scenario concentrates future household and job growth into the Bay Area's three largest cities: San Jose, San Francisco, and Oakland, and emphasizes core capacity and connectivity by expanding the South Bay transit system and linking regional rail systems into the heart of San Francisco and San Jose.

MTC staff evaluated these scenarios against adopted performance targets to measure how well they addressed regional goals including climate protection, transportation system effectiveness, economic vitality and equitable access. During the months of May and June 2016, staff conducted three public scoping meetings across the region. In total, staff received 69 written and oral comments. While there were no comments received on the proposed CEQA alternatives, three additional CEQA alternatives were proposed by commenters: (1) Environment, Equity and Jobs Alternative; (2) Modified Big Cities Alternative; and (3) Modified No-Project Alternative.

Based upon performance, and in response to feedback from the MTC Commission, ABAG Executive Board, the public, and many different stakeholder organizations, MTC and ABAG developed and adopted a Final Proposed Plan Scenario (the proposed Plan). MTC staff also determined that the Main Street and Big Cities Scenarios were appropriate to bring forward as CEQA alternatives to the proposed Plan for analysis in the EIR because they could avoid or lessen significant effects of the project, meet most of the project objectives, and are potentially feasible. In addition, based on comment letters received in response to the NOP, the Plan alternatives included the Equity, Environment, and Jobs (EEJ) alternative. The selected alternatives are defined by unique land use development patterns and transportation investment strategies. Each of the alternatives

maintain the same growth forecast, and forecast of reasonably available transportation revenues to ensure the alternatives analysis provided an “apples to apples” comparison with the proposed Plan.

The proposed Plan is a planning document covering nine counties and 101 cities with a horizon date more than twenty years into the future. In 2015, the region had 4.01 million jobs, 2.76 million households, and 7.57 million people. The proposed Plan accommodates projected growth for an additional 688,000 jobs, 666,000 households, and 2.06 million people by 2040. Given the proposed Plan’s expansive purpose and its inherently programmatic nature, MTC and ABAG understand that the number of additional potential alternatives that could be formulated is endless. (See *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal.App.3d 1022, 1028-1029 [acknowledging that “there are literally thousands of ‘reasonable alternatives’ to the proposed project... [but stating that] both the California and federal courts have recognized, ‘[the] statutory requirements for consideration of alternatives must be judged against a rule of reason.’ [Citations].”].)

The proposed Plan and each of the alternatives assume the level of growth that MTC/ABAG have forecasted for the region, as described in Master Response 1, Population and Employment Forecasts. Neither the proposed Plan, nor its alternatives, are growth inducing. The projected level of growth in the regional forecast is reasonably expected to occur in absence of the proposed Plan and can generally be accommodated in the existing general plans of the 9 counties and 101 cities of the Bay Area. Federal and State regulations require MTC as the Bay Area’s MPO to plan for a period of not less than 20 years into the future using the most recent assumptions of population growth (Draft EIR, page 1.2-4). The alternatives to the proposed Plan are designed to accommodate the same households and jobs projections. The proposed Plan alternatives, described in Draft EIR Section 3.1, “Alternatives to the Proposed Plan,” are defined by their land use policies, which influence the respective forecasted development patterns and transportation investment strategies for each alternative, in a way that when combined, represent regional strategies to accommodate the region’s projected growth in a more sustainable manner. The majority of impacts of the proposed Plan and alternatives are anticipated to be similar in type and magnitude, with differences in impacts revolving around the location and size of land use growth and transportation project footprints assessed in the Draft EIR. (Final EIR, p. 2-16.)

The Commission/Board finds that the alternatives analysis is sufficient to inform the Commission/Board and the public regarding the tradeoffs between the degree to which alternatives could reduce environmental impacts and the corresponding degree to which the alternatives would hinder achievement of the project objectives and/or be infeasible. Comparing the potential impacts of the four alternatives analyzed in the EIR illustrates that impacts of the proposed Plan are largely a result of the influx of 2.06 million new residents through 2040, its expansive reach (covering 9 counties and 101 cities), and due to the limitations on MTC and ABAG’s ability to enforce mitigation measures identified in the program EIR. Pursuant to SB 375, any alternative proposed would confront these same obstacles because the proposed Plan, by statute, must “house all the population of the region, including all economic segments of the population, over the course of the planning period” and no version of the proposed Plan is authorized to “regulate[] the use of land... [or] supersede[] the exercise of the land use authority of cities and counties within the region.” (Gov. Code, § 65080, subds. (b)(2)(B), (b)(2)(K).) After reviewing all proposed alternatives raised by commenters and in consideration of the above obstacles and limitations, the Commission/Board finds that the range of alternatives studied in the EIR reflects a reasonable analysis of various types of alternatives that would potentially be capable of reducing the environmental effects of the proposed Plan. The examination of this broad range of alternatives was an iterative effort with significant community involvement, which informed the Commission/Board in their development and refinement of potential Plan alternatives. The four alternatives analyzed in the EIR (as well as the proposed Plan) cover a comprehensive range of reasonable possibilities in support of the final action of the Commission/Board.

The factors that may be considered by a lead agency in evaluating alternatives analyzed in an EIR include (1) the ability to avoid or substantially lessen potentially significant environmental impacts of the proposed project, (2) the ability to achieve project objectives including the statutory objective to achieve the CO₂

emission reduction targets established pursuant to SB 375, and (3) feasibility of the alternatives. Each of these considerations is discussed in more detail below as it relates to the proposed Plan.

1. The Ability of an Alternative to Avoid or Substantially Lessen Potentially Significant and Unavoidable Environmental Impacts

CEQA does not require a lead agency to consider adopting project alternatives simply because they perform better than a proposed project in some respects. In considering whether to adopt a specific project alternative, CEQA requires the lead agency to determine whether the alternative has the potential to avoid or substantially lessen the proposed project's potentially significant and unavoidable impacts. (Pub. Resources Code, § 21002.) Per the EIR analysis, the proposed Plan results in the following potentially significant and unavoidable impacts:

- ▲ Impact 2.1-3: Increase in per capita vehicle miles traveled at Level of Service F at AM peak hours, at PM peak hours, and for the day as a whole when compared to existing conditions.
- ▲ Impact 2.1-7: Disruption to the ongoing operations of regional and local transportation systems due to construction activities.
- ▲ Impact 2.2-2: Substantial net increase in construction-related emissions.
- ▲ Impact 2.2-3: Increased emissions of criteria pollutants from on-road mobile and land use sources over existing conditions, including ROG, NO_x, CO, PM₁₀, and PM_{2.5}, and the SFBAAB is in non-attainment for ozone, PM₁₀, and PM_{2.5} standards.
- ▲ Impact 2.2-5: Net increase in sensitive receptors located within TPP corridors where (a) TACs or fine particulate matter (PM_{2.5}) concentrations result in a cancer risk greater than 100/million or a concentration of PM_{2.5} greater than 0.8 µg/m³; or (b) TACs or PM_{2.5} concentrations are not in compliance with an adopted Community Risk Reduction Plan.
- ▲ Impact 2.2-6: Changes in TAC or PM_{2.5} emissions levels disproportionately impact minority and low-income populations.
- ▲ Impact 2.3-1: Residential or business disruption or displacement of substantial numbers of existing population and housing necessitating construction and preservation of affordable housing elsewhere in region.
- ▲ Impact 2.3-2: May divide established neighborhoods or communities as result of expansion of transportation infrastructure.
- ▲ Impact 2.3-4: Conversion of substantial amounts of important agricultural lands and open space or lands under Williamson Act contract to non-agricultural use.
- ▲ Impact 2.3-5: Loss of forest land, conversion of forest land to non-forest use, or conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.
- ▲ Impact 2.5-3: Conflict with SB32 goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030.
- ▲ Impact 2.5-5: Net increase in transportation investments within areas that may be regularly inundated by sea level rise by midcentury.
- ▲ Impact 2.5-6: Increase in land use development within areas that may be regularly inundated by sea level rise by midcentury.
- ▲ Impact 2.6-1: Exposure of persons to or generation of temporary construction noise levels and/or groundborne vibration levels in excess of standards established by local jurisdictions or transportation agencies.

- ▲ Impact 2.6-2: Increased traffic volumes that could result in long-term, permanent increases to noise levels that exceed applicable noise thresholds.
- ▲ Impact 2.6-3: Long-term, permanent increases in rail transit noise levels that could exceed applicable noise thresholds.
- ▲ Impact 2.6-4: Increased vibration exposure from transit sources that exceed applicable thresholds.
- ▲ Impact 2.6-5: Increased ambient noise and exposure of sensitive receptors to new or additional stationary noise sources that exceed applicable local standards or other agency standards.
- ▲ Impact 2.6-6: Increased exposure of people residing or working in the planning area to excessive noise levels within an area covered by an adopted airport land use plan, or within two miles of a public airport, public use airport, or private airstrip.
- ▲ Impact 2.9-1(a): Substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- ▲ Impact 2.9-2: Substantial adverse effect on riparian habitat, federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.), or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, through direct removal, filling, hydrological interruption, or other means.
- ▲ Impact 2.9.3: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery sites.
- ▲ Impact 2.9.5: Substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species.
- ▲ Impact 2.10-1: Adversely affect a scenic vista.
- ▲ Impact 2.10-3: Substantially degrade the existing visual character or quality of the site and its surroundings.
- ▲ Impact 2.10-4: Affect visual resources by adding a visual element of urban character to an existing rural or open space area or adding a modern element to a historic area.
- ▲ Impact 2.10-5: Adversely affect visual resources by creating new substantial sources of light and glare, which would adversely affect day or nighttime views in the area.
- ▲ Impact 2.11-1: Cause a substantial adverse change in the significance of a historic resource or eliminate important examples of major periods of California history.
- ▲ Impact 2.11-2: Cause a substantial adverse change in the significance of a unique archaeological resource or eliminate important examples of major periods of California history or prehistory.
- ▲ Impact 2.11-3: Destroy, directly or indirectly, a unique paleontological resource or site or unique geologic feature.
- ▲ Impact 2.11-5: Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in PRC Section 21074.
- ▲ Impact 2.12-1: Result in insufficient water supplies from existing entitlements and resources to serve expected development.
- ▲ Impact 2.12-2: Result in inadequate wastewater treatment capacity to serve projected demand in addition to the wastewater treatment provider's existing commitments.

- ▲ Impact 2.12-3: Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities as a result of new development, which could cause significant environmental impacts.
- ▲ Impact 2.12-4: Require or result in the construction of new or expanded water and wastewater treatment facilities as a result of new development, which could cause significant environmental impacts.
- ▲ Impact 2.12-5: Result in insufficient landfill capacity to serve new development while complying with applicable regulations.
- ▲ Impact 2.13-4: Locate projects on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- ▲ Impact 2.14-1: Result in the need for new or modified facilities, the construction of which causes significant environmental impacts, in order to maintain adequate schools, emergency services, police, fire, and park and other public facilities.

Of the above 38 potentially significant and unavoidable impacts, 35 can be mitigated to a less than significant level by mitigation measures (which if necessary and feasible are required of projects taking advantage of CEQA Streamlining provisions of SB 375), but are nevertheless considered potentially significant and unavoidable because MTC and ABAG cannot require local implementing agencies to adopt the mitigation measures.

Pursuant to CEQA a lead agency may reject a project alternative that is incapable of avoiding or substantially lessening the proposed project's potentially significant and unavoidable impacts. (See *Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal.App.3d 515, 521.) Even if a project alternative is capable of avoiding or substantially lessening one or more potentially significant and unavoidable impacts of a proposed project, if the alternative will result in other potentially significant and unavoidable impacts not caused by the proposed project, then the lead agency may determine the alternative is not environmentally superior to the proposed project and reject it on that ground.

2. The Ability of an Alternative to Achieve Basic Project Objectives

In evaluating the merits of alternatives analyzed in the EIR the lead agency must consider the relationship between each alternative and the project objectives.

In September and November 2015, the Commission and the Executive Board jointly adopted thirteen performance targets to guide the proposed Plan's development. Primary objectives include meeting GHG targets established by the California Air Resources Board and providing a plan that houses 100 percent of the region's growth by income level with no increase in in-commuters:

- ▲ The proposed Plan must address climate change by reducing CO2 emissions: the regional plan must meet or exceed a seven percent reduction in per-capita emissions from cars and light-duty trucks by 2020 and a 15 percent reduction by 2035 relative to 2005 levels.
- ▲ The proposed Plan must house 100 percent of the region's projected growth by income level without displacing low-income residents, and with no increase in in-commuters over the proposed Plan baseline year. As calculated for the proposed Plan pursuant to a settlement agreement entered into with the Building Industry Association (BIA) Bay Area, the Regional Housing Control Total is 820,400.

Additionally, the following thirteen performance targets are used in the EIR to inform the project objectives, in satisfaction of CEQA Guidelines Section 15124(b):

Goal	Performance Target/Project Objectives
Climate Protection	Reduce per-capita CO2 emissions from cars and light-duty trucks by 15 percent

Goal	Performance Target/Project Objectives
Adequate Housing	House 100 percent of the region's projected growth by income level without displacing current low-income residents and with no increase in in-commuters over the Plan baseline year
Healthy and Safe Communities	Reduce adverse health impacts associated with air quality, road safety, and physical inactivity by 10 percent
Open Space and Agricultural Preservation	Direct all non-agricultural development within the urban footprint (existing urban development and UGBs)
Equitable Access	Decrease housing and transportation (H+T) costs share for lower-income households
	Increase the share of affordable housing in PDAs, TPAs or high-opportunity areas by 15 percent
	Do not increase the share of low- and moderate-income renter households in PDAs, TPAs, or high-opportunity areas that are at risk of displacement
Economic Vitality	Increase by 20 percent the share of jobs accessible within 30 minutes by auto or within 45 minutes by transit in congested conditions
	Increase by 38 percent the number of jobs in predominantly middle-wage industries
	Reduce per-capita delay on the Regional Freight Network by 20 percent
Transportation System Effectiveness	Increase non-auto mode share by 10 percent
	Reduce vehicle operations and maintenance costs due to pavement conditions by 100 percent
	Reduce per-rider transit delay due to aged infrastructure by 100 percent
Note: The base year for the targets, unless specified under target methodology documentation, is 2005. Additional information is available in MTC Resolution 4204, Revised and associated methodology memoranda. The Adequate Housing target relates to the Regional Housing Control Total per the settlement agreement signed with the Building Industry Association (BIA), which increases the housing forecast by the housing equivalent to in-commute growth.	

In determining whether to adopt or reject an environmentally superior alternative, CEQA permits a lead agency to consider the ability of an alternative to fulfill the project objectives. (*Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715 [decision makers may reject an alternative that does not fully satisfy the objectives associated with a proposed project]; *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1507-1508 [upholding findings rejecting reduced density alternative because it met some but not all of the applicant's project objectives]; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000-1001 [court found that the lead agency was legally justified in rejecting environmentally superior alternatives because they were undesirable from a policy standpoint because they failed to achieve what the agency regarded as primary objectives of the project].) Although lead agencies commonly consider the ability of an alternative to achieve the project objectives in combination with evaluating its feasibility, these are two separate although overlapping inquiries. (CEQA Guidelines, § 15126.6, subd. (c).)

3. Feasibility of Alternatives

Under CEQA, "(f)feasible means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (CEQA

Guidelines, §§ 15091, subd. (a)(3), 15364.) The issue of feasibility of alternatives arises twice in the CEQA process, once when the EIR is prepared, and again when CEQA findings are adopted. When assessing feasibility in an EIR, the EIR preparer evaluates whether an alternative is “potentially” feasible. Potentially feasible alternatives are suggestions by the EIR preparers which may or may not be adopted by lead agency decisionmakers. When CEQA findings are made as part of the EIR certification process, the lead agency decisionmaking body independently evaluates whether the alternatives are actually feasible, including whether an alternative is impractical or undesirable from a policy standpoint. (*California Native Plant Society*, *supra*, 177 Cal.App.4th at pp. 998, 1001; *City of Del Mar*, *supra*, 133 Cal.App.3d at pp. 416-417.) A lead agency’s determination regarding the feasibility of a project alternative must be supported by substantial evidence in the administrative record.

Section 15126.6(f)(1) through (3) of the CEQA Guidelines provides a discussion of factors that can be taken into account in determining the feasibility of alternatives. These factors include but are not limited to:

- ▲ Site Suitability;
- ▲ Economic Viability;
- ▲ Availability of Infrastructure;
- ▲ Consistency with Local and Regional Plans;
- ▲ Other Plans or Regulatory Limitations;
- ▲ Jurisdictional Boundaries / Regional Context;
- ▲ Property Ownership and Control;
- ▲ Ability to Ascertain Potential Impacts; and
- ▲ Remote or Speculative Nature of the Alternative.

Decisionmakers enjoy considerable discretion in determining whether a particular alternative set forth in an EIR, including the environmentally superior alternative, is “infeasible” and thus may be rejected without violating CEQA. As the California Supreme Court has emphasized, “[t]he wisdom of approving . . . any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced.” (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 576 (*Goleta II*).) As stated in the concurring opinion in *California Native Plant Society v. City of Santa Cruz* (2007) 177 Cal.App.4th 957, CEQA does not require an agency to choose the environmentally superior alternative. It simply requires the agency to consider environmentally superior alternatives, explain the considerations that led it to conclude that those alternatives were infeasible, weigh those considerations against the environmental harm that the proposed project would cause, and make findings that the benefits of those considerations outweighed the harm. (177 Cal.App.4th at pp. 1000-1001 (conc. opn. of Mihara, J.).)

Agency decisionmakers are free to reject an alternative that they consider undesirable from a policy standpoint, provided that any such decision reflects “a reasonable balancing of the relevant economic, environmental, social, and technological factors.” (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417.) In *City of Del Mar*, the petitioner municipality (Del Mar), in attempting to force the approval of an alternative development project less dense than what its sister city (San Diego) had proposed and approved, asserted that the respondent lead agency “ha[d] misconstrued the scope of CEQA’s infeasibility requirement” by equating “feasibility” with “desirability.” The Court of Appeal disagreed. Emphasizing that San Diego had attempted to accommodate various economic and social factors in reaching its land use decision, the court reasoned as follows: “‘feasibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors.” (*Id.* at p. 417.)

The agency may also reject an environmentally superior alternative based on economic infeasibility. For example, evidence indicating that a proposed alternative would generate less tax revenue than a project as proposed is a legitimate ground for rejecting the alternative as infeasible. (*Foundation for San Francisco's Architectural Heritage v. City and County of San Francisco* (1980) 106 Cal.App.3d 893, 913 [noting that CEQA “specifically provides for the weighing of economic, social and ‘other’ conditions ”]; see also Pub. Resources Code § 21002.1, subd. (c).) In *Foundation for San Francisco's Architectural Heritage*, which involved a challenge to a proposed retail project requiring the demolition of an existing historical structure, the respondent lead agency's decisionmakers properly rejected project alternatives that called for the rehabilitation of the existing structure. The lead agency's analysis showed that the alternatives would have generated between 15 and 20 percent less sales tax revenue for the city than would have been created by the project as proposed. This information, combined with other data regarding the economic costs of the alternatives, constituted “substantial evidence” supporting the decision makers' finding that the alternatives were infeasible. (*Id.* at pp. 913-914.)

As the *Foundation for San Francisco's Architectural Heritage* decision makes clear, the broad definition of feasibility under CEQA does not limit the thought process of agency decision-makers to the question of whether a proposed alternative is infeasible due to purely financial considerations. Rather, the definition impliedly recognizes the inevitable need to allow an agency to consider the policy ramifications of their actions, while requiring them generally to strive to find means to avoid or reduce significant environmental damage where reasonably possible.

SUMMARY OF ALTERNATIVES ANALYZED IN THE EIR

The EIR for the proposed Plan considers three alternatives (Alternatives 2, 3 and 4) to the proposed Plan in addition to the CEQA-required analysis of a No Project alternative (Alternative 1). A full description of the alternatives and alternative selection process is in Chapter 3.1 of the DEIR. The alternatives are as follows:

(1) Alternative 1: No Project

The No Project Alternative illustrates trends assumed under adopted local general plans and zoning without an adopted regional SCS plan, and assuming no new transportation projects beyond those currently under construction or those that have both full funding and environmental clearance. This alternative would result in substantially lower levels of household growth in PDAs and TPAs than the proposed Plan, lower levels of job growth in PDAs, and similar levels of job growth in TPAs. Growth would, therefore, be more dispersed than under the proposed Plan. In comparison to the proposed Plan, the No Project Alternative would result in higher household growth in Peninsula and South Bay counties, and higher job growth in South Bay counties. In comparison to the proposed Plan, there are no regional strategies in the No Project Alternative to focus growth into specific geographic areas within the region. Instead, growth would occur consistent with current general plans and zoning, and without consideration of a consolidated strategy that considers all nine counties and 101 cities in the Bay Area. The No Project Alternative includes substantially lower funding for all types of transportation projects than the proposed Plan. This alternative would result in a substantially smaller transportation project footprint than the proposed Plan.

(2) Alternative 2: Main Streets

The Main Streets Alternative aims to reduce adverse environmental impacts by dispersing future household and job growth into the downtowns of all Bay Area communities. This scenario offers the most dispersed growth pattern (excluding the No Project), meaning cities outside of the region's largest — Oakland, San Jose and San Francisco — are likely to see higher levels of growth. An emphasis on multi-family and mixed-use development in downtowns would provide opportunities for households of all incomes to live near a mix of jobs, shopping, services, and other amenities. This alternative assumes higher levels of household growth in PDAs than the proposed Plan, and lower levels of household growth in TPAs, job growth in PDAs, and job growth

in TPAs. In comparison to the proposed Plan, the Main Streets Alternative would result in higher household growth in North Bay and South Bay counties, and higher job growth in East Bay counties. In comparison to the proposed Plan, the Main Streets Alternative includes strategies to disperse growth into the downtowns of all Bay Area communities. To support this growth pattern and not adversely impact the transportation system performance, the Main Streets Alternative emphasizes the expansion of express lanes, increases in highway capacity, and increases to suburban bus service to dispersed job centers. This scenario also includes significant investment for maintaining roadways.

(3) Alternative 3: Big Cities

This Big Cities Alternative aims to reduce adverse environmental impacts by concentrating future household and job growth into the Bay Area's three largest cities (San Jose, San Francisco and Oakland) and their neighboring communities well served by transit. This alternative offers the most compact growth pattern, meaning cities that are distant from the region's largest — Oakland, San Jose and San Francisco — are likely to see the lowest levels of growth. This alternative relies on the region's largest urban communities to accommodate even more compact growth to enable residents and workers to take transit, bike or walk to clusters of jobs, stores, services, and other amenities. This alternative assumes lower levels of household and job growth in PDAs than the proposed Plan, and higher levels of household and job growth in TPAs. In comparison to the proposed Plan, the Big Cities Alternative would result in substantially higher household growth in Peninsula and South Bay counties, and higher job growth in South Bay counties. In comparison to the proposed Plan, the Big Cities Alternative includes strategies to focus more growth in the Bay Area's three largest cities than the proposed Plan. To support this growth pattern and not adversely impact the transportation system performance, the Big Cities Alternative would emphasize core capacity and connectivity by expanding the South Bay transit system and linking regional rail systems into the heart of San Francisco and San Jose. This scenario also includes congestion pricing in San Francisco and significant investment in transit maintenance.

(4) Alternative 4: Environment, Equity and Jobs

The Environment, Equity, and Jobs (EEJ) Alternative was analyzed in the original Plan Bay Area EIR in 2013. It has been updated to reflect input submitted during the NOP process and to adhere to the planning assumptions in the proposed Plan (e.g., regional forecasts and transportation projects) to create a second version of the EEJ Alternative. This alternative aims to reduce the risk of displacement in urban communities of concern and reduce adverse environmental impacts due to the expansion of the transportation system. The EEJ Alternative includes similar levels of household growth in PDAs and TPAs as the proposed Plan, and lower levels of job growth in PDAs but higher levels of job growth in TPAs. In comparison to the proposed Plan, the EEJ Alternative would result in higher household growth in East Bay and South Bay counties, and higher job growth in East Bay and Peninsula counties. In comparison to the proposed Plan, the EEJ Alternative includes strategies to focus more growth in high-opportunity areas than the proposed Plan. To support this growth pattern and not adversely impact the transportation system performance, the EEJ Alternative emphasizes investment in local bus operations in suburban high-opportunity areas to serve lower-income residents, and reduces funding for highway expansion and modernization. This alternative assumes imposition of a two-cent-per-mile vehicle-miles-traveled (VMT) tax on higher-income travelers.

ABILITY TO REDUCE IMPACTS AND FEASIBILITY OF ALTERNATIVES ANALYZED IN EIR

Based on impacts identified in the EIR, and other reasons documented below, the Commission/Board finds that adoption and implementation of the proposed Plan as revised by the Final EIR and the final Plan, is the most desirable, feasible, and appropriate action and rejects the other alternatives as infeasible based on consideration of the relevant factors identified herein.

Alternative 1: No Project

Ability of the No Project Alternative to Substantially Reduce or Avoid Potentially Significant and Unavoidable Environmental Impacts

The No Project Alternative would result in a number of potentially significant and unavoidable impacts that are not caused by the proposed Plan. Specifically, the No Project Alternative would result in the following additional potentially significant and unavoidable impacts: (1) increased per-trip commute travel time (Impact 2.1-1); (2) increased per-trip non-commute travel time (Impact 2.1-2); (3) inconsistency with air quality plans (Impact 2.2-1); (4) result in wasteful, inefficient, or unnecessary consumption of energy (Impact 2.4-1); (5) failure to incorporate energy efficiency measures into project features or increase use on renewable energy sources (Impact 2.4-2); and (6) failure to reduce per capita CO₂ emissions below emissions targets per SB 375 (Impact 2.5-1).

Additionally, the No Project Alternative may increase the significance of several of the proposed Plan's potentially significant and unavoidable impacts including greater impacts associated with per-capita VMTs on congested facilities (Impact 2.1-3), increased emissions of criteria pollutants (Impact 2.2-3), displace substantial numbers of existing residents or businesses (Impact 2.3-1), increase in conversion of agricultural land and open space to urbanized land (Impact 2.3-4), increase in conversion of forest land to urbanized land (Impact 2.3-5), increase in impacts on species identified as candidate, sensitive, or special-status (Impact 2.9-1(a)), increase in interference with the movement of fish or wildlife species or use of native wildlife nursery sites (Impact 2.9-3), substantially reduce the habitat of a fish or wildlife species, or drop its population below self-sustaining levels, or threaten to eliminate or substantially reduce the number or range of protected plant or animal species (Impact 2.9-5), increase in impact to scenic vistas (Impact 2.10-1), substantially degrade the existing visual character or quality (Impact 2.10-3), increase in potential to add urban character to rural areas or modern elements to historic areas caused by land use development (Impact 2.10-4), increase in light and glare impacts caused by land use development (Impact 2.10-5), increase in potential to disturb or destroy historical resources caused by land use development (Impact 2.11-1), increase in potential to disturb or destroy archeological resources caused by land use development (Impact 2.11-2), increase in potential to disturb or destroy paleontological and/or geological resources caused by land use development (Impact 2.11-3), increased potential to disturb human remains outside dedicated cemeteries (Impact 2.11-4), increased potential to cause a substantial adverse change to a Tribal Cultural Resource (Impact 2.11-5), increase in potential to result in insufficient water supplies available to serve new development (Impact 2.12-1), and increase in potential need for new or expanded stormwater drainage facilities (Impact 2.12-3).

As demonstrated in the EIR, the No Project Alternative will not avoid any of the proposed Plan's potentially significant and unavoidable impacts. Similarly, the EIR demonstrates that although the No Project Alternative will lessen some of the proposed Plan's potentially significant and unavoidable impacts, it will not substantially lessen any of those impacts to a less than significant level.

In summary, while the No Project Alternative may have some benefits as compared to the proposed Plan, the No Project Alternative is not environmentally superior to the proposed Plan because it (1) does not avoid or substantially lessen any of the proposed Plan's potentially significant and unavoidable impacts, and (2) results in several additional potentially significant and unavoidable impacts not caused by the proposed Plan. (*City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 921.) Therefore, the Commission/Board finds that the No Project Alternative is not environmentally superior to the proposed Plan and rejects the alternative on this ground.

Ability of the No Project Alternative to Attain Project Objectives

The No Project Alternative is not consistent with SB 375, as modeled CO₂ emissions do not meet the SB 375 targeted reductions for per capita car and light duty truck GHG emissions in 2035. Because complying with SB 375 is one of the fundamental objectives of the project, MTC/ABAG concludes that the No Project

Alternative substantially fails to meet the project objectives for this reason alone. (*In re Bay-Delta* (2008) 43 Cal.4th 1143, 1165.)

Additionally, as compared to all other alternatives, the No Project Alternative would (1) lead to the smallest reduction in adverse health impacts associated with air quality, road safety, and physical inactivity, (2) fail to direct non-agricultural development within the urban footprint, (3) result in the largest increase share of lower-income residents' household income consumed by transportation and housing, (4) lead to the smallest increase in the share of affordable housing in PDAs, TPAs, or high-opportunity areas, (5) leads to the largest increase in the share of low- and moderate-income renter households in PDAs, TPAs, or high-opportunity areas that are at risk of displacement, (6) results in the largest decrease in the share of jobs accessible within 30 minutes by auto or within 45 minutes by transit in congested conditions, (7) lead to the only increase in per-capita delay on the Regional Freight network, (8) leads to the largest increase in vehicle operating and maintenance costs due to pavement conditions, and (9) results in the smallest reduction in per-rider transit delay due to aged infrastructure.

For each of these reasons, the Commission/Board finds that the No Project Alternative is incapable of achieving the Plan's basic objectives. The Commission/Board, therefore, rejects the No Project Alternative as a result of its inconsistency with the project objectives. (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 991-992.)

Feasibility of the No Project Alternative

As discussed above, for the purposes of CEQA "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account legal and other factors. (CEQA Guidelines, §§ 15091, subd. (a)(3), 15364.) SB 375 requires the SCS for each region to "set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board." (Gov. Code, § 65080, subd. (b)(2)(B).) SB 375 also requires that the Regional Housing Needs Allocation (RHNA) be consistent with the development pattern included in an adopted SCS. (Gov. Code, § 65584.04, subd. (i).) Because the Commission/Board finds the proposed Plan constitutes a feasible plan to achieve the greenhouse gas emission reduction targets for the region, adopting an alternative plan that fails to achieve the targets would be inconsistent with the requirements of SB 375. (*Ibid.*) While MTC/ABAG could adopt the No Project alternative and meet the federal planning requirements, MTC and ABAG may not, without violating its legal obligations pursuant to SB 375, adopt an RTP that excludes an SCS capable of achieving the region's GHG emissions reductions targets where feasible to do so.

Therefore, because the No Project Alternative fails to achieve the greenhouse gas emission reduction targets for the region and would otherwise violate MTC's and ABAG's legal obligations, adopting the No Project Alternative is infeasible as a matter of law. (*Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1039-1040.)

Conclusions Regarding the Merits and Feasibility of the No Project Alternative

The Commission/Board finds that each of the reasons articulated above independently demonstrate that the No Project Alternative does not warrant its approval in lieu of the proposed Plan. Therefore, the Commission/Board rejects the No Project Alternative.

Alternative 2: Main Streets

Ability of the Main Streets Alternative to Substantially Reduce or Avoid Potentially Significant and Unavoidable Environmental Impacts

The Main Streets Alternative will lessen some of the proposed Plan's potentially significant and unavoidable impacts including a decrease in conversion of forest land to urbanized land (Impact 2.3-5), decrease in potential for long-term permanent increase in traffic-noise levels above thresholds (Impact 2.6-2), decrease in potential for long-term permanent increase in transit-noise levels above thresholds (Impact 2.6-3), decrease in potential for long-term permanent increase in transit-vibration levels above thresholds (Impact 2.6-4), decrease in potential to expose sensitive receptors to new or additional stationary noise sources in excess of local standards (Impact 2.6-5), decrease in impacts on species identified as candidate, sensitive, or special-status (Impact 2.9-1(a)), decrease in impacts on riparian habitat, protected wetlands, or other sensitive natural communities (Impact 2.9-2), decreased potential to substantially reduce the habitat of a fish or wildlife species, or drop its population below self-sustaining levels, or threaten to eliminate or substantially reduce the number or range of protected plant or animal species (Impact 2.9-5), decrease in impact to scenic vistas (Impact 2.10-1), substantially degrade the existing visual character or quality (Impact 2.10-3), decrease in potential to add urban character to rural areas or modern elements to historic areas caused by land use development (Impact 2.10-4), decrease in light and glare impacts caused by land use development (Impact 2.10-5), decrease in potential to disturb or destroy historical resources caused by land use development (Impact 2.11-1), decrease in potential to disturb or destroy archeological resources caused by land use development (Impact 2.11-2), decrease in potential to disturb or destroy paleontological and/or geological resources caused by land use development (Impact 2.11-3), decreased potential to disturb human remains outside dedicated cemeteries (Impact 2.11-4), decreased potential to cause a substantial adverse change to a Tribal Cultural Resource (Impact 2.11-5), decrease in potential to result in insufficient water supplies available to serve new development (Impact 2.12-1), and a decrease in potential need for new or expanded stormwater drainage facilities (Impact 2.12-3). The Main Streets Alternative, however, would not avoid or lessen any of the proposed Plan's potentially significant and unavoidable impacts to a less than significant level.

The Main Streets Alternative would result in additional potentially significant and unavoidable impacts that are not caused by the proposed Plan. Specifically, the Main Streets Alternative would result in the following additional potentially significant and unavoidable impacts: (1) increased per-capita VMT (Impact 2.1-4); and (2) increased potential to fail to reduce per capita CO₂ emissions below emissions targets per SB 375 (Impact 2.5-1). Moreover, the Main Streets Alternative may increase the significance of several of the proposed Plan's potentially significant and unavoidable impacts including greater impacts associated with per-capita VMTs on congested facilities (Impact 2.1-3), increased emissions of criteria pollutants (Impact 2.2-3), displace substantial numbers of existing residents or businesses (Impact 2.3-1), increase in conversion of agricultural land and open space to urbanized land (Impact 2.3-4), and an increase in interference with the movement of fish or wildlife species or use of native wildlife nursery sites (Impact 2.9-3).

In summary, while the Alternative performs similarly to the proposed Plan in many respects and may have some benefits as compared to the proposed Plan, the Main Streets Alternative is not environmentally superior to the proposed Plan because it (1) does not avoid or substantially lessen any of the proposed Plan's potentially significant and unavoidable impacts, and (2) results in additional potentially significant and unavoidable impacts not caused by the proposed Plan. (*City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 921.) Therefore, the Commission/Board finds that the Main Streets Alternative is not environmentally superior to the proposed Plan and rejects the alternative on this ground.

Ability of the Main Streets Alternative to Attain Project Objectives

The Main Streets Alternative is not consistent with SB 375, as modeled CO₂ emissions do not meet the SB 375 targeted reductions for per capita car and light duty truck GHG emissions in 2035. Because complying with SB 375 is one of the fundamental objectives of the project, MTC/ABAG concludes that the No Project Alternative substantially fails to meet the project objectives for this reason alone. (*In re Bay-Delta* (2008) 43 Cal.4th 1143, 1165.)

The Main Streets Alternative fails to achieve 10 of the 13 project objectives. The Alternative also joins the No Project Alternative as the only Alternatives that fail to direct all non-agricultural development within the urban footprint. As compared to all other alternatives, while the Main Streets Alternative would lead to the largest reduction in vehicle operating and maintenance costs due to pavement conditions, it would also (1) lead to the third smallest increase in the share of affordable housing in PDAs, TPAs, or high-opportunity areas, (2) lead to the third largest increase in the share of low- and moderate-income renter households in PDAs, TPAs, or high-opportunity areas that are at risk of displacement, and (3) tie the No Project Alternative with the smallest increase in non-auto mode share.

Therefore, while the Main Streets Alternative substantially outperforms the proposed Plan with respect to one project objective, and nominally better with respect to two others, the Commission/Board finds the Alternative is overall less capable of achieving the full scope of project objectives. (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 991-992.)

Feasibility of the Main Streets Alternative

As discussed above, for the purposes of CEQA “feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account legal and other factors. (CEQA Guidelines, §§ 15091, subd. (a)(3), 15364.) SB 375 requires the SCS for each region to “set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.” (Gov. Code, § 65080, subd. (b)(2)(B).) SB 375 also requires that the Regional Housing Needs Allocation (RHNA) to be consistent with the development pattern included in an adopted SCS. (Gov. Code, § 65584.04, subd. (i).) Because the Commission/Board finds the proposed Plan constitutes a feasible plan to achieve the greenhouse gas emission reduction targets for the region, adopting an alternative plan that fails to achieve the targets would be inconsistent with the requirements of SB 375. (Ibid.) While MTC could adopt the Main Streets Alternative and meet the federal planning requirements, MTC and ABAG may not, without violating its legal obligations pursuant to SB 375, adopt an RTP that excludes an SCS capable of achieving the region’s GHG emissions reductions targets where feasible to do so.

Therefore, because the Main Streets Alternative fails to achieve the greenhouse gas emission reduction targets for the region and would otherwise violate MTC’s and ABAG’s legal obligations, adopting the Main Streets Alternative is infeasible as a matter of law. (*Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1039-1040.)

Conclusions Regarding the Merits and Feasibility of the Main Streets Alternative

The Commission/Board concludes that the Main Streets Alternative is not environmentally superior to the proposed Plan and is less capable of achieving the full array of project objectives. Additionally, the Commission/Board finds that the Main Streets Alternative is not feasible and does not warrant approval in lieu of the proposed Plan. Therefore, the Commission/Board rejects the Main Streets Alternative.

Alternative 3: Big Cities

Ability of the Big Cities Alternative to Substantially Reduce or Avoid Potentially Significant and Unavoidable Environmental Impacts

The Big Cities Alternative will lessen many of the proposed Plan’s potentially significant and unavoidable impacts including decreased emissions of criteria pollutants (Impact 2.2-3), decrease in conversion of

agricultural land and open space to urbanized land (Impact 2.3-4), a decrease in conversion of forest land to urbanized land (Impact 2.3-5), decrease in impacts on species identified as candidate, sensitive, or special-status (Impact 2.9-1(a)), decrease in impacts on riparian habitat, protected wetlands, or other sensitive natural communities (Impact 2.9-2), decrease in interference with the movement of fish or wildlife species or use of native wildlife nursery sites (Impact 2.9-3), decreased potential to substantially reduce the habitat of a fish or wildlife species, or drop its population below self-sustaining levels, or threaten to eliminate or substantially reduce the number or range of protected plant or animal species (Impact 2.9-5), decrease in impact to scenic vistas (Impact 2.10-1), reduced potential to substantially degrade the existing visual character or quality (Impact 2.10-3), decrease in potential to add urban character to rural areas or modern elements to historic areas caused by land use development (Impact 2.10-4), decrease in light and glare impacts caused by land use development (Impact 2.10-5), decrease in potential to disturb or destroy historical resources caused by land use development (Impact 2.11-1), decrease in potential to disturb or destroy archeological resources caused by land use development (Impact 2.11-2), decrease in potential to disturb or destroy paleontological and/or geological resources caused by land use development (Impact 2.11-3), decreased potential to disturb human remains outside dedicated cemeteries (Impact 2.11-4), decreased potential to cause a substantial adverse change to a Tribal Cultural Resource (Impact 2.11-5), decrease in potential to result in insufficient water supplies available to serve new development (Impact 2.12-1), and a decrease in potential need for new or expanded stormwater drainage facilities (Impact 2.12-3).

Other potential environmental impacts caused by the Big Cities Alternative are similar to those of the proposed Plan in many respects. However, as determined by the EIR, the Big Cities Alternative would result in additional potentially significant and unavoidable impacts that are not caused by the proposed Plan. Specifically, the Big Cities Alternative would result in the following additional potentially significant and unavoidable impacts: (1) a significant increase in per-trip travel time for non-commute travel by any mode (Impact 2.1-2); and (2) increased per-capita VMT (Impact 2.1-4). The Alternative may also increase the significance of one of the proposed Plan's potentially significant and unavoidable impacts: an increased potential to displace substantial numbers of existing residents or businesses (Impact 2.3-1).

In summary, the Big Cities Alternative would have mixed environmental results similar to those of the proposed Plan. The Big Cities Alternative would lessen – although not substantially lessen – many of the proposed Plan's significant and unavoidable impacts, but would cause two potentially significant and unavoidable impacts not otherwise caused by the proposed Plan and would increase one of the proposed Plan's potentially significant and unavoidable impacts. The Transportation section of the EIR explains that SB 743 (2013) changes the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact. (See Pub. Resource Code, § 21099, subd. (b)(2) [“automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to [CEQA]”].) Thus, ABAG/MTC, in considering the environmentally superior alternative, believes this legislative directive de-emphasizes the importance of traffic congestion. Therefore, compared comprehensively against the number of impacts that the Big Cities Alternative decreases, the Big Cities Alternative would be the environmentally superior alternative. Overall, the Commission/Board finds that the Big Cities Alternative is environmentally superior to the proposed Plan albeit only marginally. As discussed further below, the alternative is less capable of achieving the project objectives and is infeasible for economic and policy reasons.

Ability of the Big Cities Alternative to Attain Project Objectives

The Big Cities Alternative fails to meet 8 of the 13 project objectives. As compared to all of the other alternatives, while the Big Cities Alternative would lead to the largest reduction in per-capita delay on the Regional Freight Network, it would also (1) lead to the second smallest increase in the share of affordable housing in PDAs, TPAs, or high-opportunity areas, (2) lead to the second largest increase in the share of low- and moderate-income renter households in PDAs, TPAs, or high-opportunity areas that are at risk of

displacement, and (3) result in the third largest increase in vehicle operating and maintenance costs due to pavement conditions.

Therefore, while the Big Cities Alternative performs similarly to the proposed Plan with respect to five of the project objectives, the Commission/Board finds the Alternative is overall less capable of achieving the full scope of project objectives. (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 991-992.)

Feasibility of the Big Cities Alternative

As discussed above, for the purposes of CEQA “feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account legal, social, and other factors. (CEQA Guidelines, §§ 15091, subd. (a)(3), 15364.) The Big Cities Alternative proposes to house more people in the region’s core where housing is most needed to alleviate the imbalance between supply and demand, rather than at the region’s periphery. However, the level of growth accommodated in the region’s core also leads to a higher level of displacement risk than the proposed Plan (+9% vs +5%), therefore the Commission/Board finds that the Big Cities Alternative is infeasible for social/policy reasons related to this increased risk of displacement. (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 998; *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 416-417.)

Because SB 375 does not vest land use regulation authority in MTC or ABAG and “the most recent planning assumptions [including] local general plans and other factors” are to be utilized, local jurisdictions will necessarily play a key role in the success of the proposed Plan. (Gov. Code, § 65080, subd. (b)(2)(B), (K).) In recognition of these facts, MTC and ABAG sought input from local jurisdictions in developing the proposed Plan. For example, local jurisdictions nominated existing neighborhoods served by transit and supported by local plans (both existing and to-be-completed) as Priority Development Areas (PDAs) to concentrate future growth.

The Big Cities Alternative diverges from the PDA approach developed through extensive coordination with local jurisdictions. Instead, the Big Cities Alternative proposes a different growth pattern with the intention of increasing residential and commercial development capacity in TPAs within and near the region’s three largest cities. The growth pattern proposed in the Big Cities Alternative deviates more substantially from the existing distribution of households than all other alternatives considered. Based on MTC’s and ABAG’s discussions with local jurisdictions during the process of preparing for this RTP/SCS cycle, the Commission/Board finds that the residential growth pattern and levels contemplated by the Big Cities Alternative are unlikely to be implemented by some local jurisdictions. This conclusion is particularly true for growth contemplated by the Big Cities Alternative in areas where local jurisdictions have not planned for or do not currently anticipate levels of growth commensurate with the Big Cities Alternative’s vision. While SB 375 does not compel an SCS to be fully constrained by existing land use policies, it does require “the most recent planning assumptions [including] local general plans and other factors” to be utilized. (Gov. Code, § 65080, subd. (b)(2)(B).) The Commission/Board finds the significant difference between existing zoning and general plan land use designations and those that would be required to implement the Big Cities Alternative render the Big Cities Alternative infeasible from this additional policy perspective. (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 998; *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 416-417.)

The Big Cities Alternative also diverges from the region’s balanced transportation investment strategy approach developed through extensive coordination with congestion management agencies, transit operators, and local jurisdictions. Instead, the Big Cities Alternative emphasizes a different transportation investment strategy in order to support the forecasted development pattern, thereby redirecting funds towards a different set of transportation investments. Redirecting funds, which may have traditionally funded roadway and highway projects, and to a lesser degree transit capital projects, to transit operations would require a

significant change in policy and funding decisions at the state and regional level. Based on MTC's and ABAG's collaboration with CMAs, transit operators, and local jurisdictions to identify local needs and priorities during the process of preparing for this RTP/SCS cycle, and the required changes in policy and funding decisions at the state and regional level, the Commission/Board finds that the transportation investment strategy contemplated by the Big Cities Alternative is unlikely to be implemented.

The Commission/Board finds the significant difference between the transportation investments identified in existing countywide transportation plans and those that would be required to implement the Big Cities Alternative render the Big Cities Alternative infeasible from this additional policy perspective.

Conclusions Regarding the Merits and Feasibility of the Big Cities Alternative

CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, legal, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. (CEQA Guidelines, § 15021, subd. (d).) Although the EIR finds that the Big Cities Alternative is the environmentally superior alternative, the Commission/Board concludes that the alternative is less capable of achieving the project objectives and is infeasible based on a number of financial, legal and policy considerations. For each of these reasons, the Big Cities Alternative does not warrant approval in lieu of the proposed Plan. Therefore, the Commission/Board rejects the Big Cities Alternative.

Alternative 4: Environment, Equity and Jobs

Ability of the Environment, Equity and Jobs Alternative to Substantially Reduce or Avoid Potentially Significant and Unavoidable Environmental Impacts

Potential environmental impacts caused by the Environment, Equity and Jobs Alternative, designed by the environmental and equity stakeholders, are similar to those of the proposed Plan in many respects. The Environment, Equity and Jobs Alternative would lessen the following potentially significant and unavoidable impacts of the proposed Plan, but would not avoid or lessen these impacts to less than significant, including decreased emissions of criteria pollutants (Impact 2.2-3), decreased potential to physically divide an established community (Impact 2.3-2), decrease in conversion of agricultural land and open space to urbanized land (Impact 2.3-4), decrease in potential for long-term permanent increase in traffic-noise levels above thresholds (Impact 2.6-2), decrease in potential to expose sensitive receptors to new or additional stationary noise sources in excess of local standards (Impact 2.6-5), and a decrease in impacts on riparian habitat, protected wetlands, or other sensitive natural communities (Impact 2.9-2).

The Alternative may also increase the significance of several of the proposed Plan's potentially significant and unavoidable impacts including greater impacts associated with per-capita VMTs on congested facilities (Impact 2.1-3), increased conversion of forest land to urbanized land (Impact 2.3-5), increase in impacts on species identified as candidate, sensitive, or special-status (Impact 2.9-1(a)), increase in interference with the movement of fish or wildlife species or use of native wildlife nursery sites (Impact 2.9-3), substantially reduce the habitat of a fish or wildlife species, or drop its population below self-sustaining levels, or threaten to eliminate or substantially reduce the number or range of protected plant or animal species (Impact 2.9-5), increase in impact to scenic vistas (Impact 2.10-1), substantially degrade the existing visual character or quality (Impact 2.10-3), increase in potential to add urban character to rural areas or modern elements to historic areas caused by land use development (Impact 2.10-4), increase in light and glare impacts caused by land use development (Impact 2.10-5), increase in potential to disturb or destroy historical resources caused by land use development (Impact 2.11-1), increase in potential to disturb or destroy archeological resources caused by land use development (Impact 2.11-2), increase in potential to disturb or destroy paleontological and/or geological resources caused by land use development (Impact 2.11-3), increased potential to disturb human remains outside dedicated cemeteries (Impact 2.11-4), increased potential to cause a substantial

adverse change to a Tribal Cultural Resource (Impact 2.11-5), increase in potential to result in insufficient water supplies available to serve new development (Impact 2.12-1), and increase in potential need for new or expanded stormwater drainage facilities (Impact 2.12-3).

In summary, while the Alternative performs similarly to the proposed Plan in many respects and may have some benefits as compared to the proposed Plan, the Environment, Equity and Jobs Alternative is not environmentally superior to the proposed Plan because it does not avoid or reduce any of the proposed Plan's potentially significant and unavoidable impacts to a less than significant level. (*City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 921.) Therefore, the Commission/Board finds that the Environment, Equity and Jobs Alternative is not environmentally superior to the proposed Plan and rejects the alternative on this ground.

Ability of the Environment, Equity and Jobs Alternative to Attain Project Objectives

The Environment, Equity and Jobs Alternative fails to meet 9 of the 13 project objectives. The Alternative also joins the No Project Alternative as the only Alternative that fails to reduce per-capita delay on the Regional Freight Network. As compared to all of the other alternatives, while the Environment, Equity and Jobs Alternative would tie with the Big Cities Alternative for the largest reduction in per-capita greenhouse gas emissions, it would also lead to the second largest increase in vehicle operating and maintenance costs due to pavement conditions. For all other project objectives, the Environment, Equity and Jobs Alternative would lead to similar or the same level of attainment to the proposed Plan.

Therefore, while the Environment, Equity and Jobs Alternative performs similarly to the proposed Plan with respect to 11 of the project objectives, the Commission/Board finds the Alternative is overall less capable of achieving the full scope of project objectives. (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 991-992.)

Feasibility of the Environment, Equity and Jobs Alternative

The Commission/Board finds the Environment, Equity and Jobs (EEJ) Alternative infeasible for financial, legal, social, and associated policy reasons. (CEQA Guidelines, §§ 15091, subd. (a)(3), 15364.) The EEJ Alternative would shift new housing units from the region's core to specified suburban locations to improve transit and job access to those areas. As a result, the EEJ Alternative would have more development in areas further removed from currently existing and funded high frequency transit service. To account for this additional growth, the Alternative proposes to increase transit service, which in turn would increase overall ridership.

Further, because SB 375 does not vest land use regulation authority in MTC or ABAG and "the most recent planning assumptions [including] local general plans and other factors" to be utilized, local jurisdictions will necessarily play a key role in the success of the proposed Plan. (Gov. Code, § 65080, subd. (b)(2)(B), (K).) In recognition of these facts, MTC and ABAG sought input from local jurisdictions in developing the proposed Plan. For example, local jurisdictions nominated existing neighborhoods served by transit and supported by local plans (both existing and to-be-completed) as Priority Development Areas (PDAs) to concentrate future growth.

The EEJ Alternative diverges from the PDA approach developed through extensive coordination with local jurisdictions. Instead, the EEJ Alternative proposes a different growth pattern with the intention of reducing residential displacement and supporting affordable housing. The growth pattern proposed in this EEJ Alternative deviates from the existing distribution of households. The EEJ Alternative performs similarly to the proposed Plan in terms of the increase in risk of displacement (5 percent increase for both); however, the EEJ Alternative achieves this result because it directs growth to areas that do not have the same increased risk factors for displacement as the more transit-oriented PDA growth areas do. Based on MTC's and ABAG's discussions with local jurisdictions during the process of preparing for this RTP/SCS cycle, the

Commission/Board finds that the residential growth pattern and resultant small geography projections contemplated by the EEJ Alternative are unlikely to be implemented by some local jurisdictions. This conclusion is particularly true for growth contemplated by the EEJ Alternative in areas where local jurisdictions have not planned for or do not currently anticipate levels of growth commensurate with the EEJ Alternative's vision. As such, the benefit of having one of the lowest risks of displacement among the alternatives (one that is substantially similar to the proposed Plan's risk) is unlikely to be realized. While SB 375 does not compel an SCS to be fully constrained by existing land use policies, it does require "the most recent planning assumptions [including] local general plans and other factors" to be utilized. (Gov. Code, § 65080, subd. (b)(2)(B).) The Commission/Board finds the significant difference between existing zoning and general plan land use designations and those that would be required to implement the Alternative render the Alternative infeasible from this additional policy perspective. (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 998; *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 416-417.)

Like the Big Cities Alternative discussion above, the EEJ Alternative also diverges from the region's balanced transportation investment strategy approach developed through extensive coordination with congestion management agencies, transit operators, and local jurisdictions. Instead, the EEJ Alternative emphasizes a different transportation investment strategy in order to support the forecasted development pattern, thereby redirecting funds towards a different set of transportation investments. Redirecting funds, which may have traditionally funded roadway and highway projects, and to a lesser degree transit capital projects, to transit operations would require a significant change in policy and funding decisions at the state and regional levels. Based on MTC's and ABAG's collaboration with CMAs, transit operators, and local jurisdictions to identify local needs and priorities during the process of preparing for this RTP/SCS cycle, and the required changes in policy and funding decisions at the state and regional levels, the Commission/Board finds that the transportation investment strategy contemplated by the EEJ Alternative is unlikely to be implemented.

Conclusions Regarding the Merits and Feasibility of the Environment, Equity and Jobs Alternative

The Commission/Board concludes that the Environment, Equity and Jobs Alternative is not environmentally superior to the proposed Plan and is less capable of achieving the full array of project objectives. Additionally, the Commission/Board finds that the Environment, Equity and Jobs Alternative is not feasible and does not warrant approval in lieu of the proposed Plan. Therefore, the Commission/Board rejects the Environment, Equity and Jobs Alternative.

Statement of Overriding Considerations

As set forth in the Findings, MTC/ABAG approval of the proposed Plan will result in significant adverse environmental effects that cannot be avoided even with the adoption of all feasible mitigation measures, and there are no feasible project alternatives which would mitigate or substantially lessen the impacts. While the alternatives to the proposed Plan analyzed in the EIR differed from the proposed Plan in important ways that provided for a meaningful comparison, the overall differences in environmental impacts of the proposed Plan and the Alternatives were minimal. The Big Cities Alternative was identified as the Environmentally Superior Alternative because it would result in the lowest overall level of environmental impacts, although only marginally lower, as compared to all alternatives. (Draft EIR, pp. 3.1-90 – 3.1-99.) In determining whether to approve the Project, CEQA requires MTC and ABAG to balance the benefits of the proposed Plan, including various economic, social, and technological factors, against its significant and unavoidable environmental impacts. (See *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417.) "Overriding considerations are intended to show the 'balance' the agency struck in weighing 'the benefits of a proposed project against its unavoidable environmental risks.'" (*Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 356.)

In this case, each of the alternatives had various environmental advantages and disadvantages, but none of the alternatives performed significantly better than the proposed Plan. Furthermore, as discussed in detail in the findings related to the rejection of alternatives, during the environmental review MTC and ABAG identified key aspects of the alternatives that render them inferior to the proposed Plan in terms of feasibility. Thus, although the proposed Plan provides similar environmental benefits as compared to the other alternatives, it has a higher probability of successful implementation.

This Statement of Overriding Considerations sets forth the specific reasons supporting MTC's and ABAG's actions in approving the proposed Plan. In making this Statement of Overriding Considerations in support of the findings of fact and the project, MTC and ABAG have considered the information contained in the Findings and in the documents comprising the record of proceedings for the project.

CEQA Guidelines Section 15093(a) provides the following guidance for a statement of overriding considerations:

CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

The results of the environmental analysis on the proposed Plan are discussed in detail in the Draft EIR, the Final EIR, and the Findings. MTC and ABAG reached the conclusions below pursuant to Public Resources Code Section 21081 and State CEQA Guidelines Section 15093. The following statements describe the proposed Plan's benefits considered by decision makers in determining whether to adopt the proposed Plan despite its potentially significant adverse environmental effects. MTC and ABAG conclude that any one of the statements below is independently sufficient to justify approval of the project. The substantial evidence supporting the various benefits of the project can be found in the preceding Findings, which are incorporated by reference into this section, and in the documents found in the Record of Proceedings.

Statement 1: The Proposed Plan exceeds the per capita passenger vehicle and light truck CO₂ emission reduction targets established by the California Air Resources Board for the San Francisco Bay Area pursuant to SB 375.

Implementation of the proposed Plan will reduce per-capita GHG emissions 10 percent by 2020 (surpassing CARB's interim seven percent target) and 16 percent by 2035 (surpassing CARB's 15 percent target). The proposed Plan achieves these GHG reductions by incorporating innovative approaches to the integration of land use and transportation planning. GHG emissions reductions result from more compact development patterns, increased investments in public transit infrastructure, as well as enhanced funding of climate initiatives.

Statement 2: The Proposed Plan houses all the population.

The proposed Plan presents a development pattern to build enough housing within the region to accommodate the household growth associated with all demographic change and employment growth, including in-commuter households.

Statement 3: The Proposed Plan promotes measures to better serve low income communities.

The proposed Plan includes a nearly \$70 billion "Equity Roadmap" that makes major investments toward bus operations (\$62 billion); increases in bus service and other improvements (\$5 billion); county access initiatives

(\$1 billion); and lifeline, mobility management, and means-based fare programs (\$900 million). The investment strategy funds existing bus operations as well as significant increases in bus service through 2040 at a higher annual rate than the original Plan Bay Area. Several of the region's transit operators, including AC Transit, VTA and others, have increased service since the previous plan was adopted.

The proposed Plan directs \$800 million to the Lifeline Transportation Program, which will fund priority projects identified by residents in MTC's Communities of Concern. The Lifeline Program implements locally crafted Community-Based Transportation Plans, which MTC also funds, and can include community shuttles, transit services, streetscape improvements and bus stop amenities. Additionally, the investment strategy directs \$90 million for a future mobility management program. Through partnerships with transportation service providers, mobility management enables communities to monitor transportation needs and to link individuals to appropriate, cost-efficient travel options. This strategy is especially key to the region's ability to address growth in the Bay Area's population of seniors and persons with disabilities.

The proposed Plan includes Bay Area county programs that will contribute \$300 million to similar initiatives such as an affordable-fare program in San Francisco, a low-income school bus program in Contra Costa County, and expanded late-night transportation operations for workers traveling from San Francisco. Counties will invest another \$700 million in expanding paratransit services that directly benefit persons with disabilities, many of whom are also seniors.

Statement 4: The Proposed Plan includes an Action Plan to address areas where it falls short of the project objectives.

The proposed Plan projects that housing affordability challenges will intensify if the region does not take significant corrective steps. As a path forward, MTC and ABAG developed an Action Plan to focus on performance targets where the proposed plan is moving in the wrong direction, as well as emerging issues that require proactive regional policy solutions. The Action Plan proposes a multi-pronged strategy to address housing affordability, the region's widening income disparities and economic hardships faced by low and middle-income workers, and finally the Bay Area's vulnerabilities to natural disasters such as earthquakes and floods. These three issue areas— Housing, Economic Development, and Resilience— form the core of the Action Plan.

Statement 5: The Proposed Plan directs new non-agricultural development within the 2010 urban footprint.

By concentrating new development in existing neighborhoods, the proposed Plan helps protect the region's natural resources, water supply, and open space by reducing development pressure on rural areas. The region's greenbelt of agricultural, natural resource, and open space lands is a treasured asset that both contributes to the region's quality of life and supports regional economic development, and the proposed Plan encourages the retention of these assets by directing all non-agricultural development within the existing urban footprint and by supporting the continuation of agricultural activities in rural communities. By comparison, 47 percent of growth in the No Project Alternative would occur in greenfield development outside of the current urban footprint. (Draft Performance Assessment, p. 55.) While a small amount of agricultural land and open space could be converted under the proposed Plan (as shown in the Draft EIR, pp. 2.3-44 through 2.3-56), these lands are located within the urban footprint and were already identified in local land use plans or local or county growth regulations for potential development prior to the development of the proposed Plan.

Statement 6: The collaborative approach to development provides the best opportunity to create a sustainable future for the Bay Area.

Local jurisdictions play an essential role in the implementation of any RTP/SCS. To achieve an efficient and compact development pattern that local agencies support, the proposed Plan concentrates growth in Priority Development Areas (PDAs) that were recommended by local jurisdictions. Additionally, the proposed Plan was

developed through intensive consultation and collaboration with the public, local transportation agencies, cities and counties, and other stakeholders. In particular, the proposed Plan's forecasted development pattern was guided by collaborative engagement with cities and counties via plan workshops, presentations to local planning directors, and one-on-one engagement with local jurisdictions after release of the region's draft preferred scenario and prior to adoption of the final preferred scenario. While it was not possible to meet the demands of all stakeholders or to achieve each of the Plan's ambitious targets, this proposed Plan meets the legal requirements for an RTP/SCS and envisions a more efficient and sustainable Bay Area. The proposed Plan is also consistent with SB 375's requirement to "utilize the most recent planning assumptions considering local general plans and other factors." (Government Code Section 65080(b)(2)(B).) Furthermore, the collaborative approach to developing the proposed Plan through local jurisdiction input and support gives this Plan the greatest likelihood of success as compared to the other alternatives that were considered.

Statement 7: The Proposed Plan reduces daily vehicle hours of delay and reduces per-capita delay on the regional freight network.

The proposed Plan reduces the forecasted daily vehicle hours of delay for the region's street and highway network relative to the other alternatives. The proposed Plan's balanced land use and transportation investment strategy – including a strategic mix of transit and highway maintenance, modernization, and expansion investments – leads to significant reductions in daily recurring and non-recurring delay relative to the other alternatives. The proposed Plan also increases economic vitality by reducing per-capita delay on the Regional Freight Network by 29%.

Statement 8: The Proposed Plan decreases average trip times.

The proposed Plan's balanced transportation investment strategy – mix of transit and highway maintenance, modernization, and expansion investments – leads to decreases in average trip times across all modes of transport, for both commute and non-commute trips, relative to the other alternatives.

Statement 9: The Proposed Plan directs significant funding to increasing transit operations as well as moving the transit system toward a state of good repair.

Plan Bay Area 2040 directs the vast majority of funding to maintain the assets and infrastructure of the existing transportation system. Plan Bay Area 2040 fully funds transit operating needs for existing transit services while also funding the majority of remaining high-priority transit capital needs. When evaluated for cost-effectiveness and support for the Plan's performance targets, maintaining transit capital assets was one of the Bay Area's highest performing investments, exhibiting high cost-effectiveness relative to most other transit expansion and highway projects. For this reason, this Plan directs almost 30 percent of discretionary funding to paying down the region's transit maintenance backlog. This emphasis on "fix it first"—directing funding towards the preservation and maintenance of transit assets—reduces per-rider delay due to aged transit infrastructure by 75 percent.

Statement 10: The Proposed Plan decreases per capita energy use compared to existing conditions.

Under the proposed Plan, per capita energy consumption would decrease due to shifts in land use patterns that favor more dense housing. Due to space efficiency, multifamily units consume less energy than single family homes. According to a study from the Energy Information Administration, multi-family residential units, when compared to single family residential units, are 44 percent more efficient on a per unit basis in terms of consumption of electricity and 35 percent more efficient with natural gas consumption.

Statement 11: The Proposed Plan leads the Bay Area in the right downward trajectory towards the 2050 GHG emissions reduction targets.

Reducing GHG emissions through regional land use and transportation planning requires a long-term vision of a more sustainable Bay Area. While statewide action mandated by new legislation or regulations will be necessary to achieve longer-term targets, the proposed Plan's compact and efficient land use and transportation planning will have GHG reduction benefits beyond 2035 and will help put the Bay Area on a path toward sustainability and preserve local agencies' ability to achieve even greater GHG reductions than expected.

Conclusion

In summary, MTC and ABAG find that the proposed Plan balances the location of new development regionally, directs housing towards jobs (and vice versa), locates new development within the existing urbanized areas, links transportation projects with land development goals, targets the type and location of transportation investments to more efficiently make use of existing infrastructure, and promotes balanced, compact growth in a manner that exceeds the per capita passenger vehicle and light truck CO₂ emission reduction targets established by the California Air Resources Board for the San Francisco Bay Area pursuant to SB 375. Therefore, based upon the goals and objectives identified in the proposed Plan and the Final EIR, following extensive public participation and testimony, and notwithstanding the impacts that are identified in the Final EIR as being potentially significant and which arguably may not be avoided, lessened, or mitigated to a level of insignificance, MTC and ABAG, acting pursuant to Public Resources Code Section 21081 and Section 15093 of the State CEQA Guidelines, hereby determine that specific economic, legal, social, environmental, technological, and other benefits and overriding considerations of the proposed Plan sufficiently outweigh any remaining unavoidable, adverse environmental impacts of the proposed Plan and that the proposed Plan should be approved.

In reaching this conclusion and approving the proposed Plan:

1. MTC and ABAG have considered the information contained in the Final EIR and fully reviewed and considered all of the public testimony, documentation, exhibits, reports, and presentations included in the record of these proceedings. MTC and ABAG specifically find and determine that this Statement of Overriding Considerations is based upon and supported by substantial evidence in the record.
2. MTC and ABAG have carefully weighed the benefits of the proposed Plan against any adverse impacts identified in the Final EIR that could not be feasibly mitigated to a level of insignificance. While MTC and ABAG have required all feasible mitigation measures, some impacts remain potentially significant.
3. This Statement of Overriding Considerations applies specifically to those impacts found to be potentially significant and unavoidable as set forth in the Final EIR and the record of these proceedings.

Independent Review and Analysis

Under Public Resources Code Section 21082.1, subdivision (c), the lead agency must: (1) independently review and analyze the EIR; (2) circulate draft documents that reflect its independent judgment; and (3) as part of the certification of an EIR, find that the EIR reflects the independent judgment of the lead agency.

The Commission/Board hereby certifies that the EIR was prepared, published, circulated and reviewed in accordance with the requirements of CEQA and the State CEQA Guidelines, and constitutes an adequate, accurate, objective and complete Final Environmental Impact Report in full compliance with the requirements of CEQA and the State CEQA Guidelines.

The Commission/Board has independently reviewed the EIR and has considered the information contained in the EIR. The EIR reflects the Commission's/Board's independent judgment and analysis.

Record of Proceedings

In accordance with Public Resources Code Section 21167.6, subdivision (e), the record of proceedings for the Commission's/Board's EIR, findings, alternatives analysis, and ultimate decision on the Plan includes the documents identified below.

- ▲ The NOP for the preparation of the Draft EIR;
- ▲ Public notices issued by MTC and ABAG in conjunction with the proposed Plan;
- ▲ All comments submitted by agencies or members of the public during the comment period on the NOP;
- ▲ Final Environmental Impact Report for Plan Bay Area 2040, July 2017 (includes all appendices);
- ▲ Draft Environmental Impact Report for Plan Bay Area 2040, April 2017 (includes all appendices);
- ▲ *Plan Bay Area 2040*, July 2017 and all supporting supplemental reports, including:
 - ▼ *Equity Analysis Report*;
 - ▼ *Transportation-Air Quality Conformance Analysis*;
 - ▼ *Land Use Modeling Report*;
 - ▼ *Regional Forecast of Jobs, Population and Housing*;
 - ▼ *Scenario Planning Report*;
 - ▼ *Statutorily-required Maps*;
 - ▼ *Glossary*;
 - ▼ *Native American Tribal Outreach Report*;
 - ▼ *Public Engagement Program Report*;
 - ▼ *Financial Assumptions Report*;
 - ▼ *Freight Emissions Reduction Action Plan*;
 - ▼ *Investment Strategy Report*;

- *Project List;*
- *Local Streets and Roads, Bridges and State Highway Needs Assessment;*
- *Transit Operating and Capital Needs and Revenue Assessment; and*
- *Travel Modeling Report;*
- ▲ Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by MTC or ABAG in connection with the Plan;
- ▲ Any documentary or other evidence submitted to MTC/ABAG at such information sessions, public meetings, and public hearings;
- ▲ Any staff reports presented to MTC/ABAG, including attachments and presentation materials;
- ▲ Any and all resolutions adopted by MTC/ABAG regarding the Plan, and all staff reports, analyses, and summaries related to the adoption of those resolutions;
- ▲ Any correspondence between MTC/ABAG and ARB regarding the proposed Plan, including the June 23, 2016 Technical Methodology to Estimate Greenhouse Gas Emissions, the April 12, 2017 revised Technical Methodology to Estimate Greenhouse Gas Emissions, and the May 3, 2017 initial review letter from ARB;
- ▲ ARB's 2008 Climate Change Scoping Plan, 2014 First Update to the Climate Change Scoping Plan, and 2017 Draft Climate Change Scoping Plan Update;
- ▲ Matters of common knowledge to MTC and ABAG, including, but not limited to federal, state, and local laws and regulations;
- ▲ Any documents expressly cited in these findings, in addition to those cited above; and
- ▲ Any other materials required for the record of proceedings by Public Resources Code Section 21167.6, subdivision (e).

The documents constituting the record of proceedings are available for review by responsible agencies and interested members of the public by appointment during normal business hours at the offices of the Metropolitan Transportation Commission, 375 Beale Street, Suite 800, San Francisco, California 94105. The custodian of these documents is MTC's Public Information Officer.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #:	17-2681	Version:	1	Name:	
Type:	Resolution	Status:		Commission Approval	
File created:	6/6/2017	In control:		Joint MTC Planning Committee with the ABAG Administrative Committee	
On agenda:	7/14/2017	Final action:			
Title:	MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040				
	Presentation of revisions to the Draft Plan and request referral of the Final Plan to the Commission and ABAG Executive Board for adoption.				

Sponsors:

Indexes:

Code sections:

Attachments: [7c MTC ResNo4300 and ABAG ResNo10-17 Final PBA 2040.pdf](#)
[7c Handout-Enterprise Report on Publicly Owned Land for Consideration in Plan Bay Area 2040.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040

Presentation of revisions to the Draft Plan and request referral of the Final Plan to the Commission and ABAG Executive Board for adoption.

Presenter:

Ken Kirkey

Recommended Action:

MTC Commission Approval and ABAG Executive Board Approval

Attachments



TO: Joint MTC Planning Committee with the
ABAG Administrative Committee

DATE: July 7, 2017

FR: Steve Heminger, MTC Executive Director

RE: MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040

Background

On March 31, 2017, MTC and ABAG released for public review the Draft Plan Bay Area 2040 (Draft Plan), along with the Draft Environmental Impact Report (Draft EIR). The public comment period closed on June 1, 2017. This milestone was the most recent step in a multi-year process that began in 2015, marking the beginning of the final phase of Plan Bay Area 2040 – final revisions and adoption of the Final Plan Bay Area 2040 (Plan). Staff presented comments received at public workshops and at EIR hearings, as well as through letters and other forums, at your June committee meeting.

Staff is requesting that the MTC Planning Committee send **MTC Resolution 4300 (Attachment A)** to the Commission to consider approval of the Plan. The ABAG Administrative Committee will concurrently request **ABAG Resolution No. 10-17 (Attachment A)** to the ABAG Executive Board to consider for approval for approval of the Plan. The Commission is scheduled to consider approval of the Air Quality Conformity Determination and the amended 2017 Transportation Improvement Program (TIP). In addition, both boards will consider approval of the Plan and the Final EIR simultaneously on the evening of July 26, 2017.

Key Themes – Comments and Responses

While all comments are posted on the MTC website for your review and consideration, staff would like to highlight six key themes reflected in the comments received as well as revisions between the Draft Plan and Final Plan. The Action Plan, as the most recently developed component of the Draft Plan, received the greatest share of the overall feedback.

A redlined version of the Plan can be found in **Attachment A** of the joint resolution, highlighting changes between the Draft Plan and Final Plan. A full list of summary comment responses and associated revisions can be found in **Attachment B**, and feedback from the MTC Policy Advisory Council can be found in **Attachment C**. As noted in the June 2017 committee memo on public outreach for the Draft Plan, all comment letters have been posted to the following URL:
<http://www.planbayarea.org/get-involved/your-comments/draft-plan-bay-area-2040-spring-2017>.

Equity and Economic Concerns

Comments: A significant number of stakeholders and members of the public commented on how the Plan needs to identify short-term solutions to deal with the regional affordability crisis. Outreach to community-based organizations identified a need to further define how the region will help increase job opportunities in economically-challenged communities.

Actions Taken: Revisions to the Action Plan were made to incorporate feedback from stakeholders and to underscore a comprehensive produce/preserve/protect strategy to tackle the housing crisis. The economic development component of the Action Plan was expanded to highlight the need for a diverse range of middle-wage jobs and to place a greater emphasis on economic revitalization. Given significant comments received on this topic, additional discussion and response can be found in **Attachment D**.

Environment & Resilience

Comments: Environmental stakeholders commented that the Plan does not go far enough to reduce GHG and VMT. Open space advocates requested revisions to various maps highlighting resource lands across the nine-county region. Additional policy ideas were provided for consideration in the resiliency component of the Action Plan.

Actions Taken: Revisions and improvements were made to Resource Lands maps; more information was added to the Strategies chapter to highlight the region's commitment to climate solutions and to various EIR mitigations. The resilience element of the Action Plan was expanded to emphasize a broader range of climate change impacts and to incorporate additional partner agencies.

Growth Constraints

Comments: Comments submitted to MTC/ABAG expressed concern that communities have capacity limitations that will make it difficult to grow in the coming years, ranging from water to local streets.

Actions Taken: A discussion of the benefits and challenges related to growth was added to Chapter 4 (Strategies and Performance) of the Plan Document. The Land Use Modeling supplemental report was enhanced with additional technical details on the development of the preferred land use pattern in 2016.

Planning Coordination

Comments: Public-sector agencies requested that MTC and ABAG further define how the Plan relates to other major planning efforts and that we provide additional guidance to support local implementation of the Plan.

Actions Taken: Additional content was added to the Draft Plan to highlight its relationship to BAAQMD's Clean Air Plan and the state's California Transportation Plan 2040. Improvements were made to various maps needed for local implementation when determining Plan consistency based on requests from stakeholders, as well as a commitment to develop web-based maps in the near future.

General Opposition

Comments: A number of comments expressed opposition to the Plan process as well as skepticism about the value of planning, smart growth, and regional coordination.

Actions Taken: No specific changes were made in response to these comments.

Land Use & Transportation Investment Requests

Comments: A handful of local jurisdictions, as well as residents concerned about growth in their communities, requested that land use forecasts be further revised beyond changes made in fall 2016.

Actions Taken: No changes have been made to the land use pattern or transportation investment strategy in the Draft Plan since it was approved as the Final Preferred Scenario in November 2016. However, alternatives to the Draft Plan have been evaluated in parallel through the EIR process.

Action

Staff requests that the committees act to refer the Final Plan Bay Area 2040 to the Commission and ABAG Board for joint approval later this month.



Steve Heminger

Attachments:

- Attachment A: MTC Resolution No. 4300 and ABAG Resolution No. 10-17
- Attachment B: Summary of Responses and Revisions from Public Comment Letters
- Attachment C: Plan Bay Area 2040 Action Plan: Policy Advisory Council Suggestions
- Attachment D: MTC/ABAG Initiatives to Address Affordability and Displacement

SH:DV

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Date: July 26, 2017
W.I.: 1121
Referred by: MTC Planning

ABSTRACT

MTC Resolution No. 4300

This resolution adopts Plan Bay Area 2040, which includes both the Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area.

Further discussion of this subject is contained in the Executive Director's memorandum to the MTC Planning Committee and ABAG Administrative Committee dated July 7, 2017.

Date: July 26, 2017
W.I.: 1121
Referred by: Planning

Re: Adoption of Plan Bay Area 2040

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4300

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to California Government Code Section 66500 *et seq.*; and

WHEREAS, MTC is the federally designated Metropolitan Planning Organization (MPO), pursuant to Section 134(d) of Title 23 of the United States Code (USC) for the nine-county San Francisco Bay Area region (the region); and

WHEREAS, Part 450 of Title 23 of the Code of Federal Regulations (CFR), require MTC as the MPO to prepare and update a long-range Regional Transportation Plan (RTP) every four years; and

WHEREAS, California Government Code § 65080 *et seq.* requires MTC to prepare and update a long-range RTP, including a Sustainable Communities Strategy (SCS) prepared in conjunction with the Association of Bay Area Governments (ABAG), every four years; and

WHEREAS, the RTP is subject to review and revision, pursuant to California Government Code §§ 66513 and 65080; and

WHEREAS, on July 18, 2013, MTC adopted Plan Bay Area and 2013 Federal Transportation Improvement Program (TIP) Amendment and found them to be in conformance with the State Implementation Plan (SIP) as required by the Federal Clean Air Act (42 U.S.C. § 7401 *et seq.*); and the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) *Metropolitan Planning Rule*, 23 CFR 450; and the San Francisco Bay Area Transportation Air Quality Conformity Protocol (MTC Resolution 3757), which establish the Air Quality Conformity Procedures for MTC's TIP and RTP; and

WHEREAS, beginning in spring 2015 MTC commenced a comprehensive and coordinated transportation planning process to develop its 2017 RTP/SCS with a 2040 horizon year known as Plan Bay Area 2040 (Plan), in conformance with all applicable federal and state requirements including Senate Bill 375;

WHEREAS, as required by California Government Code § 65080 *et seq.* (Senate Bill 375), the Plan incorporates the SCS prepared jointly by MTC and ABAG for the San Francisco Bay Area; and

WHEREAS, the Plan, including both the RTP and the SCS, which is attached hereto as Attachment A, and incorporated herein as though set forth in length, contains an integrated set of strategies and fiscally-constrained investments to maintain, manage, and improve the transportation system in the San Francisco Bay Area through the year 2040 and calls for development of an integrated intermodal transportation system that facilitates the efficient, economic movement of people and goods; and

WHEREAS, on September 24, 2014 the original Plan Bay Area, as adopted in July 2013, and the 2015 Transportation Improvement Program were found to be in conformance with the State Implementation Plan (MTC Resolution No. 4176); and

WHEREAS, MTC conducted an air quality analysis of the Plan using the latest planning assumptions, emissions model, and consultation provisions, including a quantitative regional emissions analysis that meets emissions budget requirements of the U. S. Environmental Protection Agency transportation conformity rule, and the Plan contributes to all required emissions reductions; and

WHEREAS, adoption of, and the conformity determination for, the proposed 2017 TIP has been determined simultaneously with the Plan for consistency purposes (MTC Resolution No. 4298); and

WHEREAS, ABAG developed the Regional Growth Forecast for Jobs, Population and Housing planning purposes through 2040 (Forecast) by working with local jurisdictions, and the Forecast projects growth based on existing land use plans and policies, and demographic and economic trends; and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(G), in preparing the SCS MTC and ABAG considered spheres of influence adopted by the Local Agency Formation Commissions within the San Francisco Bay Area; and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(E), federal public participation requirements, and MTC's Public Participation Plan (MTC Resolution No. 4174), the Plan, including both the RTP and the SCS, was developed through a strategic, proactive, comprehensive public outreach and involvement program, which included: an adopted public participation plan; routine distribution of information to local/regional media; advertising in local and regional newspapers; distribution of public information materials, such as brochures and newsletters; a dedicated website; meetings with representatives from each county's board of supervisors and city councilmembers; noticed public hearings to receive testimony on the Plan and the Programmatic Environmental Impact Report (EIR); subregional workshops to facilitate public comment on the Plan; and interagency coordination and involvement; and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(B), the Plan's SCS (i) identifies the general location of uses, residential densities, and building intensities within the region; (ii) identifies areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the RTP taking into account net migration into the region, population growth, household formation and employment growth; (iii) identifies areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to California Government Code § 65584; (iv) identifies a transportation network to service the transportation needs of the region; (v) gathers and considers the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of California Government Code § 65080.01; (vi) considers the state housing goals specified in California Government Code

§§ 65580 and 65581; and (viii) allows the RTP to comply with Section 176 of the Federal Clean Air Act (42 U.S.C. § 7506); and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(B), in preparing the Plan's SCS, ABAG was responsible for identifying the general location of uses, residential densities, and building intensities within the region; identifying areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the RTP taking into account net migration into the region, population growth, household formation and employment growth; identifying areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to California Government Code § 65584; gathering and considering the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of California Government Code § 65080.01; and considering the state housing goals specified in California Government Code §§ 65580 and 65581; and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(B), in preparing the Plan's SCS, MTC was responsible for identifying a transportation network to service the transportation needs of the region; and allowing the RTP to comply with Section 176 of the Federal Clean Air Act (42 U.S.C. Sec. 7506); and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(B), in preparing the Plan's SCS, MTC and ABAG were jointly responsible for setting forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve the greenhouse gas emission reduction targets adopted by the California Air Resources Board (CARB) for the San Francisco Bay Area; and

WHEREAS, CARB set the per capita greenhouse gas emission reduction targets for automobiles and light trucks for the San Francisco Bay Area at 7 percent by 2020 and 15 percent by 2035 from a 2005 base year; and

WHEREAS, as demonstrated in the Program EIR certified for the Plan, the SCS sets forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and polices, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve the regional greenhouse gas emission targets set by CARB for the region; and

WHEREAS, prior to taking action on the Plan, MTC has heard, been presented with, reviewed, and considered all of the information and data in the administrative record, including the Final Program EIR, and all oral and written evidence presented to it during all meetings and hearings; and

WHEREAS, MTC and ABAG intend to assist implementing agencies in determining whether a proposed project qualifies for development incentives associated with the Plan by developing advisory guidelines for evaluating consistency; and

WHEREAS, adoption of the Plan is accompanied by adoption of the 2017 TIP (MTC Resolution No. 4298) and certification that the Final Environmental Impact Report for the Plan complies with the California Environmental Quality Act (CEQA) (MTC Resolution No. 4299); now, therefore, be it

RESOLVED, that MTC certifies that the foregoing recitals are true and correct and incorporated by this reference; and be it further

RESOLVED, that MTC finds that the Plan, including both the RTP and the SCS, meets the requirements of Senate Bill 375 (Steinberg, 2008) as codified in California Government Code § 65080, subdivision (b); and be it further

RESOLVED, that MTC finds that the Plan complies with the requirements of all other applicable laws; and be it further

RESOLVED, that MTC does hereby adopt the Plan as included as Attachment A, as well as all associated supplemental reports, subject to additional minor or non-substantive technical corrections and editorial changes (Final Plan); and be it further

RESOLVED, that MTC directs its staff to publish the Final Plan.

METROPOLITAN TRANSPORTATION COMMISSION

Jake Mackenzie, Chair

This resolution was entered into by the
Metropolitan Transportation Commission at a
special meeting of the Commission held in
San Francisco, California on July 26, 2017.

Date: July 26, 2017
W.I.: 1121
Referred by: Planning

Attachment A
Resolution No. 4300

Revised Plan Bay Area 2040



Plan BayArea 2040

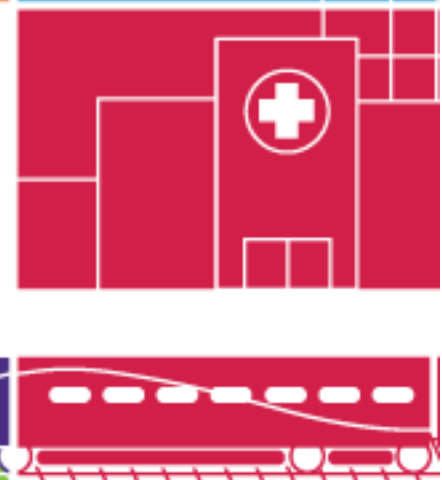
DRAFT PLAN
with Edits
June 2017



METROPOLITAN
TRANSPORTATION
COMMISSION



Association
of Bay Area
Governments



The Bay Area Today

The San Francisco Bay Area since the 1800s has drawn people from around the world seeking fortune, education, innovation, natural beauty and a near-perfect climate — and sometimes all of the above. Through cycles of boom and bust, the Bay Area has grown to be the fourth largest metropolitan region in the United States today, with over 7.6 million people residing in the nine-county, 7,000 square-mile area. In recent years, the Bay Area economy has experienced record employment levels during a technology boom rivaling the “dot-com” era of the late 1990s.

The latest boom has extended not only to the South Bay and Peninsula — the traditional hubs of Silicon Valley — but also to neighborhoods in San Francisco and cities in the East Bay, most notably Oakland. In addition to bringing vitality and wealth, the rapidly growing and changing economy has also created significant challenges: adequate and affordable housing for people of all income levels, the displacement of long-time residents and a transportation system stretched past its limits.

Today a very successful economy has contributed to housing, transportation and environmental challenges that pose a risk to the region’s dynamism and diversity. Plan Bay Area 2040 addresses these challenges with a focus on urgent regional needs. As an update to the region’s long-range transportation plan and sustainable communities strategy, Plan Bay Area 2040 projects household and employment growth in the Bay Area over the next 24 years, provides a roadmap for accommodating expected growth, and connects it all to a transportation investment strategy that strives to move the Bay Area toward key regional goals for the environment, economy and social equity.

FIGURE 1.1 A snapshot of the Bay Area’s “Vital Signs.”

Staff note: Figure available on Plan Bay Area 2040 website and in plan document. [Figure 1.1 will be updated with 2016 data where available.](#)

Caption: For 25 years the Bay Area has seen steady population growth coupled with “boom-and-bust” jobs cycles. Population and employment are now at their highest levels ever. Over this time home prices and list rents have fluctuated significantly and are now at or near record levels. Freeway congestion delay per commuter and weekday rail ridership are also currently at record levels.

Source: Vital Signs; U.S. Census Bureau, 1990–2016; California Employment Development Department, 1990–2015; Zillow, 1997–2015; U.S. Census Bureau/American Community Survey, 1990–2015; realAnswers, 1994–2015; Metropolitan Transportation Commission, 1998–2015; Federal Transit Administration, 1991–2014

For more information and the latest data, go to vitalsigns.mtc.ca.gov

The Regional Housing Crisis

No matter what, the future will bring major challenges. Overburdened infrastructure, climate change, disruptive technological innovation and the changing regional and national economy are just some of the many issues that will call for coordinated and concerted regional action. One challenge above all, however, requires immediate attention: housing.

The Bay Area's housing affordability and neighborhood stability crisis has been decades in the making.

Although the housing crisis has many components, the foundation of the crisis is simple: there simply isn't enough housing, whether market-rate or affordable, given the growing number of residents and jobs.

Instead of increasing housing supply to accommodate household and employment growth, for example, many local governments slowed permitting over time. At the same time, the state and federal government have pulled back support for affordable housing. Given a limited supply of both market-rate and affordable housing, combined with strong demand driven by exceptional regional economic performance, rents and home prices have risen rapidly. Today the Bay Area may have the most severe housing crisis of any of the nation's large metro areas and, at this time, there are limited policy tools to help address the problem at a regional level

Supply, Demand, and the Impacts of Income Inequality

The Bay Area's rate of housing construction first started to lag in the mid-1970s. Each subsequent decade has seen lower levels of overall housing construction, as seen in Figure 1.2. Since 1990, other metropolitan regions with strong economies and growing populations, such as Washington D.C., Seattle and Denver, have permitted housing units at significantly higher rates than the Bay Area. Housing permitting in the Bay Area has been much more akin to slower growing, older metropolitan regions such as Philadelphia and New York.

FIGURE 1.2 The historical trend for annual permitted housing units in the Bay Area.

Staff note: Figure available on Plan Bay Area 2040 website and in plan document.

Caption: This graph shows the historical trend of permitted units for both single-family and multi-family units in the Bay Area, stretching back several decades. As can be seen, annual growth in permitted units stagnated even during the employment booms of the 1990s and 2010s.

Source: Vital Signs; Construction Industry Research Board, 1967–2010; California Homebuilding Foundation/Construction Industry Research Board, 2011–2015

There has been a particular mismatch between employment growth relative to growth in housing supply. Overall, the Bay Area added nearly two jobs for every housing unit built since 1990. The deficit in housing production has been particularly severe in terms housing affordable to lower and middle-wage workers, especially in many of the jobs-rich, high-income communities along the Peninsula and in Silicon Valley. The booming regional economy combined with increased household formation among the millennial generation has further contributed to an ever-more acute housing crunch.

The housing crisis has also been exacerbated by a widening income gap between high- and low-income households. As seen in Table 1.1, the total number of households in the nine- county Bay Area increased by 20 percent from 1990 to 2015. The vast majority of this growth, however, was concentrated among households earning \$150,000 or more annually, with the remaining growth among households earning less than \$35,000 a year. Over a period spanning 25 years, there was a net decrease in the number of households earning between \$35,000 and \$149,999 in the Bay Area, as these households declined from 64 percent to 52 percent of total households in the region.

TABLE 1.1 A comparison of the number of households by income level in the Bay Area over a 25-year period from 1990 to 2015.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Caption: From 1990 to 2015, households earning more than \$150,000 a year have greatly increased their share of the total number of households in the region, and comprised a vast majority of the regional growth in households over the same period. As a share of total households, those earning between \$35,000 and \$149,999 have declined significantly, and in absolute numbers have either stagnated or decreased.

Source: U.S. Census Bureau, 1990; U.S. Census Bureau/American Community Survey, 2015 (Social Explorer).

These dynamics have had significant implications for the Bay Area housing market. With the increased number of higher income households and most income growth going to the top 20 percent, demand for housing has remained very strong at the upper end of the market. Conversely it has become more difficult for low- and middle-wage households to compete for market-rate housing as a larger pool of high-wage workers bid up a limited housing supply. This has further intensified competition for limited affordable housing opportunities.

Policy Contributors to the Housing Crisis

What led to such a mismatch between housing supply and demand? Why does the Bay Area today lack so much needed housing, especially housing affordable to lower-and middle-income households? The causes of this situation are complex and there are many competing interpretations of the available evidence, including a range of economic and demographic factors that extend beyond the Bay Area itself.

Generally, however, the policy contributors — things that local, regional, and state government have the power to address or alleviate — fall into a few interrelated categories: regulatory barriers and tax policy challenges that act to restrict the production of all types of housing, especially infill development, and insufficient support for affordable housing.

Regulatory Barriers and Tax Policy Challenges

Although the availability of developable land in the Bay Area is limited due to topography and protected conservation lands, state and local regulations often prevent instead of promote higher-density, mixed-use development in urban infill areas. Lengthy review processes in many communities stall transit-oriented projects long enough to make them infeasible, leading to the loss of grant funding and private investment that would otherwise flow into cities along with desperately needed new housing. The California Environmental Quality Act (CEQA) often acts as another obstacle to both affordable and market-rate housing. Although CEQA has been essential to improving air quality and protecting natural habitats, the law is sometimes used as a litigation tool for blocking projects that are otherwise designed to advance California's environmental policy objectives such as reducing greenhouse gas (GHG) emissions.

In addition, the current approach to taxation creates incentives to attract development that maximizes sales tax revenues and minimizes costs for public services (such as schools, police and social services),

rather than encouraging more balanced approaches to land use. This trend — the so-called “fiscalization of land use” — has discouraged housing development and small business growth in many communities. The tax revolt measures of 40 years ago, such as Proposition 13 and other restrictions on new funding sources, caused many jurisdictions to view housing as a fiscal loser because property tax rates were capped below the cost of delivering services compared to retail or commercial development. Commercial property owners also often lack the motivation to develop vacant parcels since the cost of holding these properties is relatively low and a potential windfall from rising land values over time is relatively high.

Finally, as part of the 2011 Budget Act, the California Legislature approved the dissolution of the state’s 400+ redevelopment agencies. California is now one of a small number of U.S. states that lack tax increment financing to support urban infill development.

Reduced Support and Insufficient Progress in Building Affordable Housing

In addition to the regulatory and tax policy challenges cited above, recent years also have seen major reductions in funding for affordable housing programs at both the state and federal levels. There has also been insufficient progress in the production of “naturally occurring” affordable housing — unsubsidized rental units that are affordable to low- and moderate-income households. This has severely affected the region’s low- and moderate-income households by further reducing the supply of new and existing affordable housing, whether government-subsidized or market-rate, especially given median wage deflation from 2000–2013.

Since 2000, for example, there have been cuts of over 50 percent to federal affordable housing programs, and most remaining federal funds go to rehabilitation rather than increasing supply. At the state level, the aforementioned dissolution of redevelopment agencies eliminated a large source of funding for affordable housing, including a loss of more than \$200 million for the Bay Area in 2011 alone, according to Enterprise Community Partners and the Non-Profit Housing Association of Northern California.

The production of housing affordable to low- and moderate-income households has lagged behind production of housing affordable to higher-income households, with the most significant shortfall occurring in the moderate or “middle income” category — housing that is typically produced by the market without subsidy in most metro regions. From 1999 to 2014, the Bay Area issued permits for only about 35 percent of the units required to meet the needs of vulnerable populations such as low-income families, seniors and the homeless. This left over 100,000 needed affordable housing units unbuilt.

At the same time, much of the older housing stock that typically forms the backbone of “naturally occurring” affordable housing is located in higher density, transit rich areas that have experienced gentrification pressures and the loss of affordable units, further exacerbating the challenges of decades-long sluggish affordable housing production. Moving forward, the annual funding needed to build an adequate supply of low- and moderate-income housing through cost-restricted units rather than through market mechanisms is estimated at \$1.4 billion annually, according to the Association of Bay Area Governments (ABAG).

Impacts on the Region’s Present and Future

The housing crisis raises major concerns about negative impacts to the region. Affordability, a primary concern of Bay Area residents, continues to be a major challenge. This in turn poses risks to the Bay Area’s socioeconomic diversity, transportation system, environmental goals and robust economy.

Housing Affordability

Housing affordability has significantly worsened over time. Home prices are at record levels in some counties and near record levels in the rest. Rent payments have nearly doubled in real dollars since the 1970s. While median wages are near the top nationally, the Bay Area has by far the highest median home sale prices of any major metro region in the country, as shown in Figure 1.3. The region is now also home to three of the five most expensive rental markets in the nation, according to Zillow.

FIGURE 1.3 Median home sale prices by metro area from 1997 to 2016.

Staff note: Figure available on Plan Bay Area 2040 website and in plan document.

Caption: Over the last 20 years the Bay Area has seen one of the “spikiest” real estate markets in the country, with bigger booms and busts than other large metros. In particular, prices have risen much faster in the Bay Area coming out of the recent Great Recession.

Source: Vital Signs; Zillow, 1997–2016.

The prospects and benefits of home ownership are simply out of reach for many Bay Area households. Amid the affluence and new wealth generated in the post-recession era, approximately 24 percent of the Bay Area’s population lives below 200 percent of the federal poverty level, and the vast majority of households with annual incomes below \$50,000 experience an excessive housing cost burden, as shown in Figure 1.4.

FIGURE 1.4 Share of income spent on housing by Bay Area households in 2015, segmented by income level.

Staff note: Figure available on Plan Bay Area 2040 website and in plan document.

Caption: A significant majority of households earning less than \$35,000 in the Bay Area spent more than 50 percent of their household income on housing in 2015.

Source: Vital Signs; U.S. Census Bureau/American Community Survey, 2015

Displacement and Quality of Life Concerns

While the cost of housing has increased significantly for both owner and renter households, renters are at a higher risk for displacement during periods of growth and expansion. Currently there are ~~over a half million~~ hundreds of thousands of lower-income households at risk of displacement in the Bay Area, with the majority of them living in San Francisco, Santa Clara and Alameda counties.

The lack of adequate tenant protections — or availability of subsidized or “naturally affordable” market-rate units in neighborhoods with quality transit service and other amenities — has accelerated the displacement of lower-income residents and even many businesses from the region’s core urban areas.

~~Currently, low and moderate income renters face displacement risk in the majority of Bay Area cities, and more than half of low income households live in neighborhoods at risk of or already experiencing~~

~~displacement and gentrification pressures, according to researchers at the Center for Community Innovation at UC Berkeley.~~ As shown in Map 1.1, displacement is no longer just a San Francisco problem, but a region-wide challenge.

MAP 1.1 Displacement and gentrification trends in the Bay Area.

Staff note: Map available on Plan Bay Area 2040 website and in plan document.

Caption: Scholars at UC Berkeley looked at regional housing, income and other demographic data to analyze and predict where gentrification and displacement are occurring, or likely to occur in the future. Among the researchers' key findings is that not only are many low income neighborhoods experiencing displacement, higher income neighborhoods are also rapidly losing their existing low income populations. In addition, "[n]eighborhoods with rail stations, historic housing stock, and rising housing prices are especially at risk of losing low-income households."

Source: Urban Displacement Project /University of California, Berkeley, 2016.

Given insufficient support for affordable housing, many individuals who perform important but lower-paying jobs face either substandard or overcrowded ~~and unhealthy~~ housing; costly, long-distance work commutes; or sometimes even homelessness — the most severe expression of the region's housing shortage. Rising prices in the region's core have driven many ~~low-and-moderate~~lower-income households to outlying jurisdictions farther away from jobs, transit and amenities, even as low and middle wage job growth has been concentrated in San Francisco, the West Bay and South Bay. This further contributes to more development pressures on open space and agricultural land, more pollution from passenger vehicles, adverse health impacts, higher transportation costs and greater levels of highway and transit congestion.

SIDEBAR: Beyond the Bay Area

While roughly 97 percent of the Bay Area workforce lives in the nine-county region, ongoing regional affordability challenges mean thousands more households are moving east to the San Joaquin Valley and Sacramento metro area every year. Although home prices are lower, these areas lack the same proximity to higher-paying jobs as some Bay Area communities. While many have relocated by choice, others have been displaced by gentrification and rising rents.

Goods movement hubs have also increasingly chosen to locate just east of the region's boundaries, taking advantage of lower land prices and lower prevailing wages. At the same time, firms want to remain in close proximity to the Bay Area, both to deliver goods to the region's residents and businesses and to maintain access to existing seaports, airports and industrial facilities.

These two trends — combined with limited transportation capacity — have resulted in growing congestion, especially at the Interstate 580 Altamont Pass gateway in eastern Alameda County and the Interstate 80 gateway in Solano County. In both cases, neighboring counties are taking on housing and commercial development unable to occur in the highly regulated, high-cost Bay Area development market. Senate Bill 375 (Steinberg, 2008) was enacted to encourage regions like the Bay Area to find solutions to this challenge, which has disproportionately affected lower-~~and middle~~-income residents and burdened them with hours-long commutes on crowded

roads, buses or trains. In contrast to the original Plan Bay Area, Plan Bay Area 2040 plans for enough housing to accommodate not only the initial forecast of households but also the additional increment of projected in-commuters. At the same time, MTC is working collaboratively with the Sacramento and San Joaquin regions to improve transportation connectivity and boost the competitiveness of the “megaregional” economy.

Transportation

The impacts of the booming economy and wider housing crisis, and resulting disconnect between where people live and where people work, has contributed to record levels of freeway congestion and historic crowding on transit systems like Bay Area Rapid Transit (BART), Caltrain and San Francisco’s Municipal Railway (SF Muni). For example:

- Overall commute time is at the highest level on record, as are time spent and miles traveled in highway congestion. As of 2015 the Bay Area’s most notorious traffic bottlenecks included US-101 in San Francisco and I-80 in Alameda and Contra Costa Counties.
- Average weekday BART ridership is at the highest level on record. Two out of three BART trips now begin or end at the four downtown San Francisco stations, with Montgomery and Embarcadero stations approaching 90 to 100 percent station capacity during peak periods. Peak direction, rush-hour trains regularly exceed BART’s standard maximum of 107 passengers per car.
- Caltrain’s daily ridership more than doubled in the last 10 years, from approximately 30,000 in 2006 to a record 62,400 in 2016. The 10 highest-demand trains operated by Caltrain now have ridership exceeding 100 percent of seated capacity.
- SF Muni continues to be the region’s most heavily-used transit system; ridership has grown by six percent in the last decade. Morning peak-hour ridership in the Market Street tunnel has grown by one-third in the last five years and several Muni Metro lines are at capacity during peak travel times.

These congestion and capacity challenges are already imposing costs on the Bay Area in terms of environmental impacts and lost time, and are likely to increase in the future without meaningful action to improve the jobs-housing balance in the region.

Productivity and Economic Output

Over the medium- and long-term, the Bay Area’s housing crisis and its attendant transportation challenges could act as a significant drag on the region’s future economic growth and dynamism. Companies will have to contend with an artificially limited employment base, potential workers will be denied access to the benefits of a highly productive regional economy, and the maxed-out transportation network could limit the growth of regional job centers.

There is a significant body of research showing that housing supply constraints lead to significant productivity, income and welfare losses. Researchers at UC Berkeley and the University of Chicago estimated the United States loses out on trillions of dollars in potential economic output because of regulatory housing supply constraints in just two regions: the New York metro area and San Francisco Bay Area.

Researchers at Harvard have posited that the increasing prevalence of land use restrictions led to increased income inequality over the last 30 years compared to the period from 1940 to 1980, when the ability to move from low-productive to high-productive regions led to income convergence and decreased inequality.

Our « Legacy of Leadership » in the Environment, Transportation and the Economy
The challenges of the housing crisis are undeniably daunting. However, the Bay Area has risen to the occasion many times to address seemingly intractable policy issues. Whether the environment, transportation or economy, the Bay Area has a history of coming together to address shared challenges.

Environmental Achievements

Local and regional action in the 20th century protected the Bay Area from unchecked sprawl, degrading air quality and a shrinking bay. Starting in the 1960s amidst a regional outcry over pollution and the filling of the Bay, the San Francisco Bay Conservation and Development Commission was created to discourage bay fill and restore wetlands. Since 1969, the surface area of San Francisco Bay has grown by nearly 19,000 acres. Similarly, the Bay Area Air Quality Management District (Air District) was tasked with improving the region's air quality. Between 1999 and 2015, for example, regional annual average particulate matter concentrations declined by 39 percent. These air quality improvements are estimated to have added a full year to residents' lifespans, according to the Air District.

MAP 1.2 Historical Development Pattern and ~~Resource~~ Agricultural Lands

Staff note: Map available on Plan Bay Area 2040 website and in plan document. Map 1.2 will adjust labels for Orinda and Lafayette to better reflect their east-west alignment. The map title change will also be reflected in the legend.

Source: California Department of Conservation, 2014; others.

A strong local movement to protect greenfield development also emerged during the latter half of the 20th century to protect farm lands and open space. Local governments adopted urban growth boundaries and helped lead a “focused growth” strategy with support from environmental groups and regional agencies to limit sprawl, expand recreational opportunities and preserve scenic and natural resources. Despite strong economic growth and population increases since the end of the Great Recession, the Bay Area has experienced less greenfield development than in decades past, a result that can be attributed to smart local policies.

“Self-Help” in Transportation

Faced with declining support from the federal and state government, the Bay Area adopted a “self-help” approach toward funding transportation. Starting with a pioneering effort led by Santa Clara County in 1984, eight of the nine Bay Area counties have enacted local transportation sales taxes.

Bay Area voters also approved Regional Measure 1 in 1998 and Regional Measure 2 in 2004, which together raised tolls on the Bay Area's seven state-owned toll bridges — and billions of dollars for important transportation projects in the bridge corridors and their approaches, as seen in Map 1.3. Altogether, voter-approved “self-help” measures generated some \$2.5 billion for Bay Area transportation in 2016 alone, as shown in Figure 1.5. Although the region has many transportation

needs and challenges, these needs can be alleviated through sufficient and continued resource investment.

FIGURE 1.5 “Self-Help” funding for transportation in the Bay Area.

Staff note: Figure available on Plan Bay Area 2040 website and in plan document.

Caption: Bay Area voters have approved a variety of measures beyond transit operator revenues and the typical local, state, and federal sources to help fund transportation needs.

Source: Metropolitan Transportation Commission, 2016

MAP 1.3 Key Projects Delivered By Voter-Approved Regional Measures

Staff note: Map available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016.

(Re)Inventing the Economy

Faced with a rapidly changing and evolving world, the Bay Area has reinvented its economy several times in the last half century. An economy dependent on defense spending and financial headquarters in the 1980s was transformed first by an explosion in high-tech manufacturing and later by software and computer-related design and services as semiconductor and computer manufacturing shifted offshore. More recently, new innovations from social media to biotechnology have been incubated in the region. The Bay Area today is widely recognized as the global center for technological innovation, with countless metropolitan regions across the world trying to replicate the Bay Area’s success.

Although the reinvention of the Bay Area economy was aided by a number of fortunate events, it was also facilitated by the deliberate effort of people and institutions. As demonstrated by a research team at UCLA, dense networks of business, government, academia, and civil society saw the emergence of the new economy and actively worked to ensure its health and success in the region.

A Call to Action

What all these examples show is that the Bay Area can solve serious problems when citizens and key institutions — including business, government, academia, and the non-profit sector — come together to work toward common goals.

Thus far, the Bay Area’s residents and communities have not made the same commitment to solve the housing crisis. Yet there is no more time to wait. Failure to establish regional consensus and take concerted action will put the region’s historic economic, environmental and transportation accomplishments at risk. Unlike many other policy areas, housing policy is something local governments have significant control over.

The Bay Area must therefore pursue a multi-pronged strategy that emphasizes the construction of new homes for residents of all incomes, the protection of the region’s most vulnerable households, and the need to advocate for more financial resources to pursue local and regional solutions. This strategy —

and the avenues through which it may be executed — is further discussed in the final section of this document, “Action Plan”.

If the Bay Area rises to this challenge, future residents will be able to look back and say that the region built on its past successes to achieve broadly shared goals: abundant and affordable housing close to jobs and transit; clean air; clean water; a protected shoreline; and healthier, wealthier and more resilient communities in a great 21st century metropolitan region.

What is Plan Bay Area 2040?

Plan Bay Area 2040 is a state-mandated, integrated long-range transportation and land use plan. As required by Senate Bill 375, all metropolitan regions in California must complete a Sustainable Communities Strategy (SCS) as part of a Regional Transportation Plan. In the Bay Area, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are jointly responsible for developing and adopting a SCS that integrates transportation, land use and housing to meet greenhouse gas reduction targets set by the California Air Resources Board (CARB).

The region adopted its previous plan — Plan Bay Area — in July 2013. As the Bay Area’s first regional transportation plan to include a Sustainable Communities Strategy, the original Plan Bay Area charted a course for reducing per-capita greenhouse gas emissions through the promotion of more compact, mixed-use residential and commercial neighborhoods near transit.

SIDEBAR: MTC and ABAG

The Metropolitan Transportation Commission (MTC) is the transportation planning, financing and coordinating agency for the nine-county San Francisco Bay Area. MTC is the federally designated Metropolitan Planning Organization and the state designated Regional Transportation Planning Agency for the region. MTC is responsible for preparing and updating a long-range regional transportation plan every four years that identifies the strategies and investments needed to maintain, manage and improve the region’s transportation network.

The Association of Bay Area Governments (ABAG) serves as the Council of Governments for the region. As required by state law, ABAG updates the Regional Housing Need Allocation (RHNA) every eight years, allocates specific housing targets to individual cities and counties, and develops the regional forecast of jobs, population and housing. MTC and ABAG ~~are currently in the process of merging~~recently consolidated their staffs to more effectively and efficiently develop an integrated long-range transportation and land use plan.

Plan Bay Area supported Priority Development Areas (PDAs) selected and approved by city and county governments with planning grants, technical assistance, and prioritization for regional and state transportation and affordable housing funds.

Plan Bay Area 2040 is a limited and focused update that builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic and financial trends from the last four years.

What Does Plan Bay Area 2040 Do?

Plan Bay Area 2040 provides a roadmap for accommodating projected household and employment growth in the nine-county Bay Area by 2040 as well as a transportation investment strategy for the region. Plan Bay Area 2040 details how the Bay Area can make progress toward the region’s long-range transportation and land use goals.

Plan Bay Area 2040:

- Describes where and how the region can accommodate 820,000 new projected households and 1.3 million new jobs between now and 2040;
- Details a regional transportation investment strategy given \$303 billion in expected revenues from federal, state, regional and local sources over the next 24 years;
- Complies with Senate Bill 375, the state’s sustainable communities strategy law, which integrates land use and transportation planning and mandates both a reduction in greenhouse gas emissions from passenger vehicles and the provision of adequate housing for the region’s 24- year projected population growth.

Plan Bay Area 2040 encompasses the entire Bay Area, including the nine counties and the 101 cities and towns that make up the region. The plan is constrained by the amount of expected transportation revenues and expected household and employment growth.

Plan Bay Area 2040 neither funds specific transportation projects nor changes local land use policies. Importantly, individual jurisdictions retain all local land use authority. But Plan Bay Area 2040 does set a roadmap for future transportation investments and identify what it would take to accommodate expected growth.

SIDEBAR: Connecting the Dots: Plan Bay Area 2040 and the California Transportation Plan 2040

Plan Bay Area 2040 establishes a vision for the Bay Area that closely aligns with the broad goals of the state of California. The plan’s goals to promote economic vitality, ensure social equity, and protect the environment directly link to the policy framework established in “California Transportation Plan 2040” by the California Department of Transportation. Central to both plans are greenhouse gas, or carbon dioxide (CO₂), emissions reduction targets designed to tackle climate change in the years to come. Similarly, both plans prioritize fixing an aging transportation system, focusing future growth, and directing increased funding towards non-auto mode of travel. It may seem challenging to achieve a consensus in a state of over 39 million people and a region of nearly 8 million people; bBoth multiyear planning efforts, however, reflect a relatively consistent vision for moving forward for the region’s 8 million people and the states 39 million people. The key to implementation will be working together across local, regional, state and federal levels to achieve these shared goals.

SIDEBAR: Connecting the Dots: Plan Bay Area 2040 and the Air District’s 2017 Clean Air Plan

The Bay Area Air Quality Management District (Air District) is the region’s air pollution control agency. In April 2017, the Air District adopted the 2017 Clean Air Plan, which provides a regional strategy to protect public health and the climate. The Clean Air Plan describes how the region will continue progress toward attaining all state and federal air quality standards and eliminating health risk disparities from exposure to air pollution. The Clean Air Plan further defines a vision and regional climate protection strategy for transitioning to a post-carbon economy and achieving ambitious greenhouse gas reduction targets for 2030 and 2050. While Plan Bay Area

2040 has a requirement to reduce per-capita CO₂ emissions from passenger vehicles by 2035, the Air District’s plan addresses a much wider range of pollutants from a much larger number of sources. To that end, Plan Bay Area 2040 is “one piece of the puzzle.” Additional policies and investments beyond Plan Bay Area 2040 are needed to meet the Air District’s more ambitious targets.

Engaging the Public

Developing a multi-billion dollar plan for the region is no simple task. It is a multi-year process involving four regional agencies, nine counties, 101 towns and cities, elected officials, transit operators, planners, community-based organizations, business organizations, non-profits and the general public.

Despite this complexity, public participation is critical to an open process in which all interested residents have the opportunity to provide input and share their vision for what the Bay Area will look like decades from now. Highlights from Plan Bay Area 2040’s public participation process ~~through 2016~~ included ~~nearly 120 over 190~~ public meetings ~~plus of which 18-27 were~~ open houses (~~two-three~~ in each of the nine Bay Area counties); partnerships with five community organizations working in low-income communities and communities of color; public hearings on the draft plan and its environmental impact report; a robust online presence; numerous meetings with local elected officials, planning directors, and transportation officials; ~~a-two~~ summits with Native American tribal leaders; a housing forum; and a telephone poll of some 2,040 Bay Area residents.

~~Additional public engagement opportunities beginning in spring 2017 will inform adoption of Plan Bay Area 2040 in September 2017.~~

For more information on Plan Bay Area 2040’s outreach and engagement process, please see the [Public Outreach and Public Participation Report](#) and the [Native American Tribal Consultation Report](#).

Setting Goals and Targets to Address Challenges

After receiving feedback from stakeholders and the public, MTC and the ABAG Executive Board established seven goals and 13 performance targets to measure Plan Bay Area 2040’s effectiveness in addressing the major challenges facing the region.

Senate Bill 375 mandates two of these targets. First, Plan Bay Area 2040 must address climate change by reducing per-capita CO₂ emissions from cars and light-duty trucks. Second, Plan Bay Area 2040 must include sufficient housing for all of the region’s projected population growth, regardless of income.

TABLE 2.1 Final adopted goals and performance targets for Plan Bay Area 2040.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Caption: Plan Bay Area 2040 includes seven goals and 13 performance targets covering three broad areas: the environment, equity and the economy. The aggressive and somewhat aspirational targets enable the plan to be evaluated by its performance in areas identified as key regional concerns, including equitable access, economic vitality, and transportation system effectiveness.

The performance targets were the result of a robust public process and reflect MTC and ABAG's commitment to go beyond Plan Bay Area 2040's legal requirements.

Source: Metropolitan Transportation Commission - Resolution No. 4204, Revised, 2015

MTC and the ABAG Executive Board voluntarily adopted 11 additional targets as shown in Table 2.1. Key goals for Plan Bay Area 2040 included tackling the Bay Area's inequities through improved affordability and lessened displacement risk, ensuring a robust economy and protecting the environment for future generations. These targets are aggressive and some are quite aspirational. Yet they reflect MTC and ABAG's commitment to take a more holistic view of the possibilities of integrated regional planning by going beyond the plan's legal requirements.

For more information on the development of Plan Bay Area 2040's performance targets, please see the [Performance Assessment Report](#).

The next section, "Forecasting the Future," will review the primary inputs to Plan Bay Area 2040.

Forecasting the Future

What will the Bay Area look like in 2040? This chapter provides an overview of the primary “inputs” to Plan Bay Area 2040: 24-year regional household, employment and transportation revenue forecasts. These forecasts form the basis of the proposed land use pattern and transportation investment strategy described in the next section, “Strategies and Performance.”

Employment and Household Projections

ABAG and MTC forecast that between 2010 and 2040 the Bay Area will see increases in the number of jobs, population and households. Key features of the regional forecast include:

- Growth of 1.3 million jobs between 2010 and 2040, with nearly half of those jobs — over 600,000 — already added between 2010 and 2015.
- An increase of over 2 million people between 2010 and 2040. Almost one-fourth of this projected growth occurred between 2010 and 2015.
- An increase of approximately 820,000 households. Only 13 percent of this growth occurred between 2010 and 2015, as household formation was held back in part by financial conditions coming out of the Great Recession. The pace of future household growth is expected to increase as the population ages and more working-aged adults enter the region.

These 2040 projections, as shown in Table 3.1, represent a moderate increase over 2040 estimates from the original Plan Bay Area and incorporate the region’s strong growth since 2010.

TABLE 3.1 Bay Area population, employment, and household projections.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Association of Bay Area Governments, 2016

For more information on Plan Bay Area 2040’s employment and household projections, please see the [Regional Forecast of Jobs, Population and Housing](#).

Employment

With an additional 1.3 million jobs in the Bay Area, increasing numbers of residents are expected to work in professional and service-sector jobs as well as in health and education. Construction jobs, which were still depressed in 2010, will also expand.

Despite increases in output and demand in all sectors, employment is projected to decline in a few sectors due to higher productivity or relocation to lower-cost sites outside the region. Jobs in manufacturing and resource extraction industries, for example, have been declining for decades and are expected to continue decreasing.

Table 3.2 illustrates select employment sectors that are expected to either grow or decline by 2040.

TABLE 3.2 Job growth trends in select Bay Area employment sectors by 2040.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Caption: The Bay Area is projected to see strong employment growth in sectors such as construction, health and education, and professional and managerial services. Manufacturing and resource extraction industries are expected to continue declining, as they have for decades.

Source: Association of Bay Area Governments, 2016

Employment growth in the region is expected to slightly outpace the nation, with the Bay Area's share of total U.S. employment continuing to expand.

Households

With an additional 2 million people, the Bay Area's residents in 2040 will be older and more diverse, as shown in Figures 3.1 and 3.2. The number of school- aged children (5 to 17 years old) will decline in relative terms, while the number of people 65 and over will account for more than half of all population growth in the region.

FIGURE 3.1 Bay Area population by age, 2010 and 2040.

Staff note: Figure available on Plan Bay Area 2040 website and in plan document. Figure 3.1 will be modified so that the identifying years underneath the pie charts say, "2010 Share" and "2040 Share".

Source: Association of Bay Area Governments, 2016

FIGURE 3.2 Bay Area population by race/ethnicity, 2010 and 2040.

Staff note: Figure available on Plan Bay Area 2040 website and in plan document. Figure 3.2 will be modified so that an asterisk () is added next to "Other", with a corresponding footnote indicating that "* Asian/Other refers to Asian, Pacific Islander, and other multiracial/multiethnic categories."*

Source: Association of Bay Area Governments, 2016

This segment of the population will grow to approximately 22 percent of the population by 2040, an increase from roughly 12 percent in 2010. By 2040, there will be no clear majority or plurality in terms of race/ethnicity in the Bay Area. As population groups, Whites, Hispanics and Asians/Other will each account for approximately one-third of the region's population.

Projections of household growth assume that household size will be constrained by costs and affected by a greater share of multigenerational households, plus more two-person senior households as the gap between male and female longevity narrows. In addition, barring action by policymakers, "in-commuting" by individuals – those who commute into the region from surrounding areas but might otherwise live closer to their jobs if they were able to find housing to suit their needs – could increase by as many as 53,000. In the following section, Plan Bay Area 2040 presents a development pattern to build enough housing within the region to accommodate the household growth associated with all demographic change and employment growth, including in- commuter households.

Transportation Projections

Concurrently with jobs and household projections, Plan Bay Area 2040 estimates how much it will cost to operate and maintain the existing transportation system over the next 24 years, as well as the amount of revenues reasonably expected over that time period. What are the costs to provide existing transit service every year through 2040? What are the costs of maintaining the existing transportation infrastructure through 2040? How much money is available to pay for these two components? Answering these questions, as well as identifying the locations of future housing and job centers, is important for determining where to spend the Bay Area's transportation resources.

Estimating Costs to Operate and Maintain Existing System

MTC worked with local jurisdictions, transit operators, and the California Department of Transportation (Caltrans) to develop cost estimates for operating and maintaining the Bay Area's transit system, local street and road network, the state highway system, and local and regional bridges.

The costs to operate and maintain the highway system also includes a growing need to maintain the hardware required for traffic management projects like ramp meters and dynamic signs. As shown in Table 3.3, to reach a state of good repair – meaning that roads are maintained at their optimum levels, transit assets are replaced at the end of their useful lives and existing service levels for public transit are maintained – the Bay Area will need to spend an estimated total of \$254 billion over the next 24 years.

TABLE 3.3 Costs to operate and maintain the existing transportation system.

*Staff note: Table available on Plan Bay Area 2040 website and in plan document. Table 3.3 will be modified so that the four asterisk (****) next to where it says "Total" are removed, as there is no corresponding reference underneath the table.*

Source: Metropolitan Transportation Commission, 2016

For more information on Plan Bay Area 2040's needs assessment for transit and roads, please see the [Needs Assessment Reports](#).

Requests for Modernization and Expansion Projects

MTC also worked with partner agencies to determine funding needs for projects that would expand capacity and increase system efficiency beyond operating and maintaining the existing system.

In the Call for Projects for Plan Bay Area 2040, transit agencies requested almost \$200 billion for transportation projects. Combined with the funding required to provide existing transit service and improve asset conditions, identified transportation needs and project requests for the region between now and 2040 totaled nearly half a trillion dollars.

Gauging Our Financial Resources

Like other metropolitan regions, the Bay Area receives transportation funding from a vast array of federal, state, regional, and local sources. As shown in Figure 3.3, the total 24-year forecast of expected transportation revenue for Plan Bay Area 2040 is \$303 billion, estimated in year of expenditure (YOE) dollars.

FIGURE 3.3 Forecasted transportation revenues for Plan Bay Area 2040.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016.

What differentiates the Bay Area from many other regions is the significant share of local and regional funding — approximately two-thirds of forecasted revenues are from regional and local sources such as transit fares, dedicated sales tax programs, and bridge tolls.

Making up the remainder of revenue sources are state and federal revenues (mainly derived from fuel taxes) and anticipated revenues (unspecified revenues from various sources that can reasonably be expected to become available within the plan horizon).

For more information on Plan Bay Area 2040’s financial assumptions, please see the [Financial Assumptions Report](#).

Committed Revenues and Expenditures

Only a modest share of the \$303 billion in transportation funding is flexible. The vast majority of funding is committed to specific purposes or projects because of the revenue source or voter-approved expenditure plans.

Projects could also have prior funding commitments due to an on-going project timeline. In determining funding assumptions for Plan Bay Area 2040, the Bay Area must first take stock of these existing and on-going commitments.

As shown in Table 3.4, half of the region’s existing commitments relate to operating and maintaining transit, with the majority of this funding comprised of locally generated transit fares and county sales taxes.

TABLE 3.4 Committed revenues by function for Plan Bay Area 2040.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016

The remaining committed funds are directed to operate and maintain roads or are committed to specific projects (such as those under construction today). The remaining revenues are considered “discretionary,” meaning they can be flexibly applied to various transportation purposes within the constraints of the funding source.

Discretionary funds are important not only because of their flexibility, but also because they reflect future revenues the region can leverage to influence policy and implementation. These future discretionary revenues total \$74 billion, approximately 24 percent of the total projected Plan Bay Area 2040 revenues, as shown in Table 3.5.

TABLE 3.5 Discretionary funding sources for Plan Bay Area 2040.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016

The next section, “Strategies and Performance,” will explain the forecasted development pattern of household and employment growth, and how transportation funding resources will be invested to support it.

Strategies and Performance

Given the state of the Bay Area today and the 24-year forecast of jobs, households and transportation revenues, how will the region get from where it is now to where it needs to be in the future? ABAG and MTC developed a variety of land use and transportation scenarios that distributed the total amount of expected growth across the region.

These scenarios were evaluated against adopted performance targets to measure how well they addressed regional goals including climate protection, transportation system effectiveness, economic vitality and equitable access. Based upon performance and feedback, MTC and ABAG developed and adopted a Final Preferred Scenario. This scenario provided both a regional pattern of household and employment growth by the year 2040 and a corresponding transportation investment strategy.

Focused Growth

Plan Bay Area 2040 largely reflects the foundation and regional growth pattern established in the original Plan Bay Area. Plan Bay Area 2040's core strategy is "focused growth" in existing communities along the existing transportation network. This strategy allows the best "bang for the buck" in achieving key regional economic, environmental and equity goals: it builds upon existing community characteristics, efficiently leverages existing infrastructure and mitigates impacts on areas with less development. Key to implementing the focused growth strategy are Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs) identified, recommended and approved by local governments.

- **Priority Development Areas (PDAs) -**

Plan Bay Area 2040 focuses growth and development in nearly 200 PDAs. These existing neighborhoods are served by public transit and have been identified as appropriate for additional, compact development.

- **Priority Conservation Areas (PCAs) -**

Plan Bay Area 2040 helps preserves over 100 regionally significant open spaces which have a broad consensus for long-term protection but which face nearer-term development pressures.

PCAs and PDAs complement one another: by promoting compact development in established communities with high-quality transportation access, there is less development pressure on the region's vast and varied open spaces and agricultural lands.

Motivating Smarter Land Use Decisions

Given existing real estate market conditions, land use controls, and infrastructure needs, many PDAs may not be able to accommodate forecasted growth and may require additional policy interventions to increase their development potential. As a result, MTC and ABAG modeled a range of policy and investment strategies in Plan Bay Area 2040 to increase development potential in PDAs and influence the overall regional growth pattern, as shown in Table 4.1. These policies can help motivate land use and support the success of a focused growth strategy in the locally identified PDAs that already house much of the Bay Area's existing development.

TABLE 4.1 Key land use assumptions.
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Staff note: Table available on Plan Bay Area 2040 website and in plan document. Bullet point #4 will be modified to say: "Assume all for-profit housing developments in cities with PDAs make 10 percent of units deed-restricted in perpetuity."

Source: Metropolitan Transportation Commission, 2016

These measures are not prescriptive, and there are many potential public policy options that could help the Bay Area attain its adopted targets. These strategies [presented here](#) are simply illustrations of what it would take to accommodate [expected](#) future growth within existing communities, while striving toward the region's 2040 economic, environmental and equity goals. [Growth can, of course, bring challenges such as limited water resources, funding for schools, and traffic congestion, in addition to bringing benefits.](#) Working with jurisdictions [to appropriately balance different interests as appropriate to while](#) implementing these or other similar policies will be key to achieving the land use goals of Plan Bay Area 2040.

For more information about Plan Bay Area 2040's land use model and assumptions, see the [Land Use Modeling Report](#).

Local Control

It is important to emphasize that the region's cities and counties retain local land use authority and that local jurisdictions will continue to determine where future development occurs. Plan Bay Area 2040 is supported through implementation efforts such as neighborhood-level planning grants for PDAs and local technical assistance. The plan does not mandate any changes to local zoning rules, general plans or processes for reviewing projects; nor is the plan an enforceable direct or indirect cap on development locations or targets in the region. As is the case across California, the Bay Area's cities, towns and counties maintain control of all decisions to adopt plans and to permit or deny development projects.

Plan Bay Area 2040 also does not establish new state-mandated [Regional Housing Needs Allocation](#) (RHNA) numbers for any jurisdiction. RHNA operates on an eight-year cycle, with the next iteration not due until the next update to the plan in 2021.

Because RHNA numbers are not at stake this cycle, MTC and ABAG have characterized this update to the Bay Area's long-range plan as limited and focused.

Overview of Household and Employment Growth Pattern

Overall, the regional pattern of households and employment in 2040 is not significantly different from the pattern observed in 2010. Plan Bay Area 2040 concentrates both household and employment growth in the "Big 3 Cities" of San Jose, San Francisco and Oakland, as well as the east and west Bayside corridors along the region's core transit network.

The Bay Area's 101 cities and towns are classified into three key "subregions" in order to conceptualize the regional growth pattern presented in Plan

Bay Area 2040:

- **Big 3 Cities** – the Bay Area's three largest cities: San Jose, San Francisco and Oakland

- **Bayside** – generally describes cities directly adjacent to the San Francisco Bay, including Hayward, San Mateo, San Rafael and Richmond
- **Inland, Coastal and Delta** – generally describes cities just outside of Bayside, such as Walnut Creek, Dublin, Santa Rosa, Antioch, Brentwood and Fairfield

MAP 4.1 Bay Area subregions.

Staff note: Map available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016

By 2040, the Big 3 Cities and Bayside subregions will contain 72 percent of the Bay Area’s total households and 77 percent of the region’s total jobs, which is a slightly higher concentration of households and jobs compared to 2010. As shown in Tables 4.2 and 4.3, Big 3 Cities will see about 46 percent of the region’s household growth and about 44 percent of the region’s job growth, while Bayside communities will see about 33 percent of the region’s household growth and 40 percent of projected employment growth.

TABLE 4.2 Household growth by Bay Area subregion.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016.

TABLE 4.3 Employment growth by Bay Area subregion.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016

Inland, Coastal and Delta areas will see comparatively less growth. The concentration of housing and jobs in PDAs also will remain significant, with 77 percent of the Bay Area’s household growth and 55 percent of its job growth occurring in PDAs.

In terms of employment, Plan Bay Area 2040 anticipates a modest shift from the growth pattern adopted in the original Plan Bay Area and incorporates the substantial employment growth experienced since 2010 in Bayside communities and in the cities of San Jose, San Francisco and Oakland. These areas contain the majority of the Bay Area’s commercial space, both now and in the future.

As shown in Maps 4.2 and 4.3, 83 percent of all household and employment growth will be in four of the Bay Area’s nine counties: Santa Clara, Alameda, San Francisco and Contra Costa. On both an absolute and percentage basis, the five remaining counties will see modest growth over the next 24 years.

MAP 4.2 Household growth by county.

Staff note: Map available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016

MAP 4.3 Employment growth by county.

Staff note: Map available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016

Emphasizing higher levels of growth in PDAs and building upon what already exists means that many neighborhoods, particularly established single-family home neighborhoods, will see minimal change in the coming decades. Approximately 70 percent of projected household growth will be concentrated in just 15 Bay Area cities, as will 74 percent of employment growth. Besides the Big 3 Cities, other cities such as Richmond, Emeryville, Concord and Mountain View, will also serve as key locations for the Bay Area’s future households and jobs.

For a complete list of household and employment numbers by jurisdiction, please see the [Land Use Modeling Report](#).

The concentrated household and employment pattern presented here further underscores the need for a Bay Area transportation system that is efficient, well-maintained and modern. Otherwise, a focused growth strategy cannot succeed.

Key Transportation Strategies, Investments and Projects

Plan Bay Area 2040 develops a blueprint for short- term and long-term transportation investments to support the plan’s focused growth strategy. Investment priorities for the next 24 years reflect a primary commitment to “Fix It First,” a key emphasis area in the original Plan Bay Area as well.

As shown in Table 4.4, approximately 90 percent of Plan Bay Area 2040’s investments focus on operating, maintaining and modernizing the existing transportation system. Plan Bay Area 2040 also directs almost two-thirds of future funding to investments in public transit, mostly to ensure that transit operators can sustain existing service levels through 2040.

TABLE 4.4 Plan Bay Area 2040 funding distribution.

Staff note: Table available on Plan Bay Area 2040 website and in plan document. This table will be modified to reflect updated funding figures, with funds moved from the cost contingency category to the modernization category. Under Investment Strategy, “Modernization”, “Transit Modernization and Efficiency” under “Regional Discretionary Funding” will be modified from “9” to “10” billions of dollars.

Source: Metropolitan Transportation Commission, 2016.

FIGURE 4.1 Plan Bay Area 2040 funding distribution.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016

- **Operate and Maintain:** This strategy includes projects that replace transit assets, pave local streets and state highways, and operate the transit system.

- **Modernize:** This strategy includes projects that improve the existing system without significantly increasing the geographical extent of the infrastructure. Electrifying Caltrain and portions of the express lane network are two major investments in this category.
- **Expand:** This strategy includes projects that extend fixed-guideway rail service or add lanes to roadways. Extending Caltrain to downtown San Francisco and BART into Silicon Valley, as well as implementing express lanes on US-101 in San Mateo and Santa Clara counties, are major investments in this category.
- **Debt Service and Cost Contingency:** This includes on-going debt service and financing costs as well as a cost contingency for expansion projects.

The allocation of committed funds supports growth in the Bay Area’s established communities, directing approximately 72 percent of these funds to operate and maintain existing infrastructure, as shown in Figure 4.1. Table 4.5 lists the 10 highest-cost Plan Bay Area 2040 modernization and expansion investments.

TABLE 4.5 Top 10 Plan Bay Area 2040 investments.

Staff note: Table available on Plan Bay Area 2040 website and in plan document. This table will be modified to reflect updated funding figures, with funds moved from the cost contingency category to the modernization category. The “Investment (\$ billions)” figure for “BART Transbay Core Capacity Project + BART Metro Program” will be updated from “4.2” to “4.6” billions of dollars.

Source: Metropolitan Transportation Commission, 2016.

The allocation of committed funds supports growth in the Bay Area’s established communities, directing approximately 72 percent of these funds to operate and maintain existing infrastructure, as shown in Figure 4.1. Table 4.5 lists the 10 highest-cost Plan Bay Area 2040 modernization and expansion investments.

For more information about Plan Bay Area 2040’s transportation investment strategy, see the [Investment Strategy Report](#).

SIDEBAR: Environmental Impacts and Mitigation Measures in Plan Bay Area 2040

The Environmental Impact Report (EIR) for Plan Bay Area 2040 discloses potential environmental impacts and recommended mitigation measures of implementing the plan. The EIR includes a Mitigation, Monitoring, and Reporting Program that identifies who will be responsible for implementing identified mitigation measures and the required timing for implementation.

The EIR addresses impacts associated with projected growth and impacts associated with the projected land use and assumed transportation projects. Where a significant or potentially significant impact may occur, mitigation measures are provided.

Significant unavoidable impacts are those that cannot be mitigated to a less-than-significant level. To the extent that an individual project adopts and implements all feasible mitigation

measures described for each significant impact, many of the impacts listed would be reduced to a less than-significant level. However, MTC/ABAG cannot require local implementing agencies to adopt most of the mitigation measures, and it is ultimately the responsibility of a lead agency for each project to determine and adopt mitigation.

Therefore, several impacts have been identified as significant and unavoidable for purposes of the program level review. Projects taking advantage of CEQA streamlining provisions of SB 375 must apply the mitigation measures described in the EIR as necessary and feasible to address site-specific conditions. For more information on environmental impacts and mitigation measures in Plan Bay Area 2040, review the Environmental Impact Report.

Strategy 1. Operate and Maintain

Plan Bay Area 2040 directs the vast majority of funding to maintain the assets and infrastructure of the existing transportation system. Plan Bay Area 2040 fully funds transit operating needs for existing transit services while also funding the majority of remaining high-priority transit capital needs (mostly replacing vehicles and fixed guideway infrastructure such as rail tracks and power systems). When evaluated for cost-effectiveness and support for the Plan's performance targets, maintaining transit capital assets was one of the Bay Area's highest performing investments, exhibiting high cost-effectiveness relative to most other transit expansion and highway projects. For this reason, this Plan directs almost 30 percent of discretionary funding to paying down the region's transit maintenance backlog. Despite this investment, a remaining need of almost \$15 billion remains as shown in Table 4.6, most of which is needed to replace non-vehicle assets for BART and Muni.

TABLE 4.6 Plan Bay Area 2040 transit operating and maintenance strategy.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Association of Bay Area Governments, 2016

The next largest regional discretionary investment is for operations and maintenance of the Bay Area's local streets and roads. Between committed sources and future sources such as a potential regional gas tax, Plan Bay Area 2040 directs over \$35 billion for local streets and roads, which prioritizes operations expenses and costs to improve pavement condition. This still leaves a gap of almost \$8 billion to maintain existing pavement as well as non-pavement assets like signals, storm drains and sidewalks. Consequently, the regional pavement condition index, a measure of the quality of pavement on a scale from 0 (failed) to 100 (brand-new), decreases from 66 in 2015 to 62 in 2040.

Funding for maintenance on state highways and bridges is included in Plan Bay Area 2040 mostly as committed funding since MTC does not influence where this money is spent. Plan Bay Area 2040 assumes a two-dollar toll increase on all state-owned bridges, with \$1 added in 2019 and another \$1 added in 2024. Some of this future discretionary funding would be used for additional maintenance to the Bay Area's bridges. Included in cost projections for operating and maintaining the Bay Area's existing transportation system is a reserve for future cost increases, financing costs, and debt service.

Strategy 2. Modernize

The Bay Area's transportation infrastructure, mostly built in the 20th century, will require significant upgrading to handle the travel volumes and travel needs of the 21st century. Modernization is critical to

expand capacity on crowded BART lines, improve speeds on heavily used bus lines, add safe bicycle facilities on busy roads, install new technologies to smooth traffic flow, and redesign interchanges to handle greater traffic volumes.

Plan Bay Area 2040 invests 16 percent of total revenue and 26 percent of discretionary revenue in this category, which includes cost-effective projects like freeway operation strategies and San Francisco's two congestion pricing projects, as well as a number of bus rapid transit (BRT) lines. The plan also directs funding for pilot projects related to the evolving technology landscape for transportation, which could increase efficiency and safety across the region's freeways and arterials. These pilot projects include testing vehicle-to-vehicle and vehicle-to-infrastructure technology.

Transit Modernization and Efficiency

In addition to investments in transit capital maintenance, Plan Bay Area 2040 will replace transit infrastructure through "modernization" projects that replace existing assets with infrastructure that supports either additional or more reliable service. Two examples of this type of project are Caltrain Electrification and BART Transbay Core Capacity projects. These projects replace vehicles and control systems with infrastructure that increases capacity and enables more frequent and reliable operations.

This category also includes strategic investments in transit efficiency throughout the Bay Area. These efficiency projects yield significant benefits due to planned housing growth in PDAs along light rail corridors in Santa Clara County as well as the growth of job centers in Sonoma County.

Project examples include bus rapid transit along El Camino Real and increased service for Santa Rosa CityBus. Additional bus rapid transit projects include Geary BRT and San Pablo BRT, which would serve increasingly densifying corridors in San Francisco and along the I-80 corridor in the East Bay, respectively.

Roadway Performance

The Bay Area consistently ranks as one of the most congested metropolitan areas in the nation. With today's mature system of roadways and increased demands on available financial resources, it is no longer possible – if it ever was – for the region to build its way out of congestion. Instead, Plan Bay Area 2040 invests in ways to operate existing highways and arterials more efficiently.

Plan Bay Area 2040 invests \$17 billion over the next 24 years to support projects and programs that will boost system efficiency through technology and bottleneck relief. One such program is Bay Area Forward, which would implement a suite of strategies that improve the speed, reliability, and person throughput of roadways and transit service and prepare the Bay Area for technological advancements in transportation.

Critical to these strategies will be the modernization of infrastructure used to monitor travel conditions and facilitate responses to freeway incidents. In addition, efforts like San Francisco's cordon pricing program – with projects such as the Treasure Island and downtown San Francisco cordons – ~~and as well as~~ the Regional Express Lane Network will leverage revenues generated from pricing to improve the existing system's efficiency while providing alternatives to driving.

Key Transit and Road Improvements

The following maps show priority transit and road projects from the Plan Bay Area 2040 investment strategy. These projects reflect a mix of committed and discretionary investments, with local, state and

federal investments all in support. The maps show key regional transit projects, local transit projects, highway and arterial projects, and pricing projects.

For more information on these and other Plan Bay Area 2040-funded projects and programs, please see the [Online Project Database](#).

MAP 4.4 Regional Transit System Improvements.

Staff note: Map available on Plan Bay Area 2040 website and in plan document. Map 4.4 will adjust labels for Orinda and Lafayette to better reflect their east-west alignment. Map 4.4 will also be adjusted to include major improvements that are not able to be mapped (top 3 high-cost projects/programs). In addition, airport icons will be added for SFO, OAK, SJC, and STS and "major airports" will be added to the legend. A military icon will be added for Travis Air Force Base and "major military base" will be added to the legend. Privately-funded/privately-operated ferry routes will be removed from this map for consistency purposes. Footnote text stating "Note that projects expected to be complete before July 2017 (Plan adoption date) are shown as part of the existing network." will be removed as it is no longer applicable.

Source: Metropolitan Transportation Commission, 2016.

MAP 4.5 Local Transit System Improvements.

Staff note: Table available on Plan Bay Area 2040 website and in plan document. Map 4.5 will adjust labels for Orinda and Lafayette to better reflect their east-west alignment. Map 4.5 will also be adjusted to include major improvements that are not able to be mapped (top 3 high-cost projects/programs). In addition, airport icons will be added for SFO, OAK, SJC, and STS and "major airports" will be added to the legend. A military icon will be added for Travis Air Force Base and "major military base" will be added to the legend. A footnote will be added to Map 4.5 indicating that the map is zoomed in as no existing or proposed light rail and bus rapid transit lines are included in the fiscally-constrained plan for the North Bay. Footnote text stating "Note that projects expected to be complete before July 2017 (Plan adoption date) are shown as part of the existing network." will be removed as it is no longer applicable.

Source: Metropolitan Transportation Commission, 2016.

MAP 4.6 Highway System Improvements.

Staff note: Table available on Plan Bay Area 2040 website and in plan document. Map 4.6 will adjust labels for Orinda and Lafayette to better reflect their east-west alignment. The text for Project #9 will be modified to read "Integrated Corridor Management (I-680 to SR-84)" and not "SR-4". Map 4.6 will also be adjusted to include major improvements that are not able to be mapped (top 3 high-cost projects/programs). In addition, airport icons will be added for SFO, OAK, SJC, and STS and "major airports" will be added to the legend. A military icon will be added for Travis Air Force Base and "major military base" will be added to the legend. Footnote text

stating “Note that projects expected to be complete before July 2017 (Plan adoption date) are shown as part of the existing network.” will be removed as it is no longer applicable.

Source: Metropolitan Transportation Commission, 2016.

MAP 4.7 Road Pricing Improvements.

Staff note: Table available on Plan Bay Area 2040 website and in plan document. Map 4.7 will adjust labels for Orinda and Lafayette to better reflect their east-west alignment. In addition, airport icons will be added for SFO, OAK, SJC, and STS and “major airports” will be added to the legend. A military icon will be added for Travis Air Force Base and “major military base” will be added to the legend. Footnote text stating “Note that projects expected to be complete before July 2017 (Plan adoption date) are shown as existing.” will be removed as it is no longer applicable.

Source: Metropolitan Transportation Commission, 2016.

SIDEBAR: Express Lanes

The Bay Area is becoming more familiar with [Express Lanes](#) as they become more widespread along Interstates 580 and 680, as well as State Route 237. Express lanes are carpool lanes that give solo drivers the choice to pay a toll for a more reliable trip.

Carpools and buses can still use the lanes free of charge. Express lanes are a high- tech way to take advantage of available capacity in under-used carpool lanes and to improve traffic management and reliability on well-utilized carpool lanes.

With toll revenue, express lanes can offer enhanced enforcement to catch cheaters, access control to manage merging and weaving, and more cameras and sensors to quickly identify and respond to incidents. Plan Bay Area 2040 continues funding for completing the highest priority Express Lane segments. Most involve conversion of existing carpool lanes, while a smaller share would widen freeways to create new express lanes and to close gaps in the Bay Area’s existing carpool lane network.

Express Lane toll revenue would first fund the operations and maintenance of the lanes. Plan Bay Area 2040 invests \$450 million of discretionary revenue to complete the financing package for implementing the new Express Lanes.

SIDEBAR: Goods Movement

Plan Bay Area 2040 is the Bay Area’s first regional plan with dedicated discretionary revenue allocated toward goods movement to implement the recommendations of the [Regional Goods](#)

[Movement Plan](#). This investment strategy includes significant funding for increasing efficiency at the Port of Oakland by reducing rail-truck conflicts and improving bottlenecks at interchanges along the truck freight network.

Additionally, the investment strategy carves out \$350 million for a clean fuel and impact-reduction program, which was a major element of the Regional Goods Movement Plan.

Key strategies include:

- **Modernizing Infrastructure:** projects to improve operations and increase rail access at the Port of Oakland, including 7th Street Grade Separation, Outer Harbor Intermodal Terminal, and Oakland Army Base transportation components; highway projects and interchange improvements along freight corridors such as I-880, I-80, US-101, I-580, I-680, and State Route 4.
- **Clean Fuels and Impact Reduction:** future program for implementing the recommendations of the [Freight Emission Reduction Action Plan](#) and developing programs for impact reduction in neighborhoods with high levels of freight activity.
- **Smart Deliveries and Operations:** future program for deploying communications infrastructure to increase active traffic management along freight corridors and to/from the Port of Oakland.

TABLE 4.7 Plan Bay Area 2040 goods movement investments.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016.

Supporting Focused Growth and Reducing Greenhouse Gas Emissions

In addition to significant transit and roadway performance investments to encourage focused growth, Plan Bay Area 2040 directs funding to neighborhood active transportation and complete streets projects, climate initiatives, lifeline transportation and access initiatives, safety programs and PDA planning.

These programs directly support major Plan Bay Area 2040 goals by assisting Priority Development Areas, emphasizing connections to high-quality transit, and reducing greenhouse gas emissions. As in the original Plan Bay Area, this plan makes a significant contribution to increasing the convenience and safety of walking and bicycling. Plan Bay Area 2040 continues to provide flexibility for congestion management agencies to fund eligible projects under the [One Bay Area Grant \(OBAG\) program](#), including transportation infrastructure that supports infill development such as bicycle and pedestrian improvements, local street repair, and planning activities, while also providing specific funding opportunities for [Safe Routes to Schools](#) projects and Priority Conservation Areas.

FIGURE 4.2 Distribution formula for OBAG 2 County Program.

Staff note: Figure available on Plan Bay Area 2040 website and in plan document. Some of the numbers in the distribution formula are incorrect and will be modified. "RHNA Affordable" was listed as 18% but should be 12%; "Production Affordable" was listed as 8% but should be 18%.

Source: Metropolitan Transportation Commission, 2016.

Caption: The five-year, \$916 million One Bay Area Grant (OBAG 2) Program is the second cycle of funding integrating the Bay Area's federal transportation program with California's climate laws and the regional Sustainable Communities Strategy. OBAG 2 will fund projects from 2017-18 through 2021-22 and will support local transportation, housing, land use, and environmental goals. OBAG 2 is divided into a County Program and a Regional Program. County Program funds are distributed based on factors such as population, past housing production and future housing commitments.

FIGURE 4.3 Project selection results for the OBAG 1 program.

Staff note: Figure available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016.

Caption: The inaugural One Bay Area Grant Program (OBAG 1) was adopted by MTC in 2012 to guide \$818 million in federal funds over the five year period from 2012-13 through 2016-17. The chart provides a breakdown of all the funding programmed during the grant cycle. As can be seen, OBAG funds supported a variety of regional needs such as transit (including Clipper), highways and roadways, Safe Routes to School and bicycle and pedestrian planning, as well as planning activities, climate initiatives and conservation.

Finally, the transportation investments and land use development pattern in Plan Bay Area 2040 will not be sufficient on their own to reach the Bay Area's statutory 2035 ~~CO₂ GHG~~ emissions reduction targets. Over half the plan's required reductions will be achieved through strategies that are part of MTC's [Climate Initiatives Program](#). The program's primary objectives are to invest in strategies that reduce transportation-related emissions and vehicle miles traveled and encourage the use of cleaner fuels through incentives, education, policies and programs. The Climate Initiatives Program focuses on three primary strategies:

1. Transportation Demand Management Strategies, including bicycle and pedestrian networks, transit, targeted transportation alternatives, trip caps, and commuter benefits ordinances
2. Car Sharing and Vanpool Incentives, including private sector-ride matching applications that target utilization of Express Lane corridors, free bridge tolls, first/last mile solutions to transit, and other strategies.
3. Alternative Fuel and Vehicle Strategies, including plug-in electric vehicle infrastructure and charging stations, incentives for plug-in vehicles – especially for lower- and middle-income households, promotion of emission reduction technology, and marketing and education efforts.

se include transportation demand management programs, alternative fuel/ vehicle strategies and car sharing. Additionally, Plan Bay Area 2040 includes regional carpool incentives such as ride-matching applications along Express Lane corridors and county-sponsored climate programs that also will promote demand management strategies and emission reduction technology. These strategies incorporate emerging trends and technological advances to efficiently reduce CO₂ emissions and provide more equitable and affordable travel options for all Bay Area residents. Plan Bay Area 2040 directs \$526

million to the regional Climate Initiatives Program, \$56 million for incentivizing higher levels of carpooling and \$212 million for county-sponsored initiatives.

For more information on how travel demand is modeled in Plan Bay Area 2040, please see the *Summary of Predicted Traveler Responses Report*.

SIDEBAR: Transportation Equity Roadmap

Plan Bay Area 2040 includes a nearly \$70 billion “Equity Roadmap” that makes major investments toward bus operations (\$62 billion); increases in bus service and other improvements (\$5 billion); county access initiatives (\$1 billion); and lifeline, mobility management, and means-based fare programs (\$900 million). The investment strategy funds existing bus operations as well as significant increases in bus service through 2040 at a higher annual rate than the original Plan Bay Area. Several of the region’s transit operators, including AC Transit, VTA and others, have increased service since the previous plan was adopted.

Plan Bay Area 2040 directs \$800 million to the [Lifeline Transportation Program](#), which will fund priority projects identified by residents in MTC’s Communities of Concern. The Lifeline Program implements locally crafted Community-Based Transportation Plans, which MTC also funds, and can include community shuttles, transit services, streetscape improvements and bus stop amenities. Additionally, the investment strategy directs \$90 million for a future mobility management program. Through partnerships with transportation service providers, mobility management enables communities to monitor transportation needs and to link individuals to appropriate, cost-efficient travel options. This strategy is especially key to the region’s ability to address growth in the Bay Area’s population of seniors and persons with disabilities.

County programs will contribute \$300 million to similar initiatives such as an affordable-fare program in San Francisco, a low-income school bus program in Contra Costa County, and expanded late-night transportation operations for workers traveling from San Francisco. Counties will invest another \$700 million in expanding paratransit services that directly benefit persons with disabilities, many of whom are also seniors.

~~Additionally, Plan Bay Area 2040 includes regional carpool incentives such as ride-matching applications along Express Lane corridors and county-sponsored climate programs that also will promote demand-management strategies and emission reduction technology. Plan Bay Area 2040 directs \$526 million to the regional Climate Initiatives Program, \$56 million for incentivizing higher levels of carpooling and \$212 million for county-sponsored initiatives.~~

~~For more information on how travel demand is modeled in Plan Bay Area 2040, please see the *Summary of Predicted Traveler Responses Report*.~~

Strategy 3. Expand

The remaining 10 percent of funding is directed toward a set of transit extensions and roadway expansions. The BART extension to San Jose and Santa Clara, as well as the Caltrain Downtown San Francisco Extension, for example, will provide new rail links to the hearts of the Bay Area’s two largest

cities. These projects are top regional priorities for [Federal New Starts](#) funding over the next five years. This category also includes VTA’s planned light rail extensions for the Capitol Expressway and Vasona lines, SMART extensions to Larkspur and Windsor, and a \$640 million reserve for future New Starts priorities.

The largest transit expansion project in this category is the Bay Area segment of California High-Speed Rail, with a price tag of over \$8 billion for the Bay Area alone.

Also in this category are select roadway expansions along highways and arterials throughout the region, the largest being new Express Lanes along U.S. 101 from San Francisco to Morgan Hill in the South Bay. This project is expected to reduce congestion and to increase commuters’ choices along several of the most congested freeway segments in the Bay Area.

A sum of all investments that would significantly increase transit capacity in core locations is in Table 4.8.

TABLE 4.8 Plan Bay Area 2040 core capacity projects.

Staff note: Table available on Plan Bay Area 2040 website and in plan document. This table will be modified to reflect updated funding figures, with funds moved from the cost contingency category to the modernization category. The “Investment (\$ billions)” figure for “Transbay Corridor” location will be updated from “5.5” to “5.9” billions of dollars.

Source: Metropolitan Transportation Commission, 2016

Sidebar: Core Capacity Transit

Plan Bay Area 2040 invests almost \$24 billion – 10 percent of its funding and 15 percent of discretionary funding – to increasing transit capacity throughout the region’s core, connecting jobs and people between San Francisco and Silicon Valley via transit expansion and modernization projects. Several of these projects are key to the implementation of MTC’s [Core Capacity Transit Study](#), a collaboration of MTC and five of the region’s major transit operators. The Study identifies short-, mid- and long-term strategies to relieve the transit capacity and reliability challenges facing travel to and from the San Francisco core.

Major projects include:

- Extending BART to Silicon Valley
- Extending Caltrain to downtown San Francisco
- Increasing frequencies and capacity on BART
- Electrifying and modernizing Caltrain
- Extending light rail service in Santa Clara County
- Increasing bus and rail frequencies throughout San Francisco

- Further design work on a new transbay transit tube

Plan Performance

As previously described, the land use and transportation pattern described above is required by law to achieve two things by 2040: a reduction in per-capita CO₂ emissions from passenger vehicles and adequate housing for the Bay Area’s expected population growth. Plan Bay Area 2040 successfully achieves both of these targets. How does Plan Bay Area 2040 do at meeting the rest of the voluntary, aggressive and aspirational performance targets adopted by MTC and ABAG?

As seen in Table 4.9, of the 13 total adopted performance measures, Plan Bay Area 2040 achieves five targets, including the two mandatory targets. Plan Bay Area 2040 is moving in the right direction on another four, but is unfortunately moving in the wrong direction on four performance targets.

<p>TABLE 4.9 Results of Plan Bay Area 2040 target assessment.</p> <p><i>Staff note: Table available on Plan Bay Area 2040 website and in plan document.</i></p> <p><u>Source:</u> Metropolitan Transportation Commission, 2016</p>

For more information about Plan Bay Area 2040’s performance, please see the [Performance Assessment Report](#).

Environment

On the environment front, Plan Bay Area 2040 is particularly successful at protecting the climate and preserving open space and agricultural lands. Plan Bay Area 2040’s per-capita CO₂ emissions reductions meet and exceed the Senate Bill 375 target for year 2035 thanks in part to robust funding of the [Climate Initiatives Program](#). Similarly, Plan Bay Area 2040 protects thousands of acres of land from development and fully achieves its ambitious open space and agricultural preservation target.

However, Plan Bay Area 2040’s “Fix It First” emphasis means that only 10 percent of the plan’s investments are directed toward expanding capacity-constrained freeways and transit lines. This resulted in limited performance improvements for travel mode shift and public health.

Economy

On the economy front, Plan Bay Area 2040 maintains middle-wage jobs, improves goods movement and reduces congestion. Unfortunately, financial constraints lead to challenges in attaining all of Plan Bay Area 2040’s transportation targets, including maintenance and modernization of the region’s aging transportation infrastructure and improving access to jobs.

Without additional funding, the Bay Area will be unable to achieve an ideal state of good repair by year 2040, particularly for pavement conditions on streets, roads and highways.

Equity

Finally, regional affordability and equity challenges, including displacement risks, are expected to worsen by 2040 despite the inclusion of a range of aggressive assumptions about affordable housing subsidy strategies. Without new funding sources to construct significant numbers of affordable housing units, Plan Bay Area 2040 is only slightly growing the existing share of affordable housing in PDAs or transit-rich, high-opportunity communities, rather than doubling it per the adopted target.

While Plan Bay Area 2040 performs better than any other transportation and land use scenario previously evaluated for displacement risk – notably reducing the number of at-risk households by 89,000 compared to the “No Project” conditions described below – it still results in elevated risk levels compared to year 2010. Increases in displacement risk are forecast to be significantly greater outside Communities of Concern in Plan Bay Area 2040.

Sidebar: Equity Analysis for Plan Bay Area 2040

MTC and ABAG conducted a detailed analysis at multiple stages of the plan development process to ensure that policies and projects included in Plan Bay Area 2040 benefit disadvantaged populations, including low-income and minority populations, at the same level, or better, than non-disadvantaged populations.

The equity analysis includes both the federally-required disparate impact and non-discriminatory (Title VI) and environmental justice analyses, as well as an overall performance analysis based on equity measures adopted by MTC in January 2016 (Resolution 4217).

In addition, MTC’s commitment to environmental justice is embodied in two Environmental Justice Principles adopted by the Commission in 2007. The adopted principles affirm MTC’s ongoing commitments to:

- Create an open and transparent public participation process that empowers low-income communities and communities of color to participate in decision-making that affects them; and
- Collect accurate and current data essential to defining and understanding the presence and extent of inequities, if any, in transportation funding based on race and income.

In spring 2015, MTC and ABAG formed the Regional Equity Working Group (REWG) to advise staff on the equity analysis’s development, including identifying equity measures, defining communities of concern and developing the methodology for assessment. The REWG brought together stakeholders from around the Bay Area representing low-income and minority communities; seniors and persons with disabilities; staff representing local jurisdictions, transit agencies and county congestion management agencies (CMAs); public health departments; and community-based organizations and advocacy groups. All REWG meetings were open to the public.

For more information, please see the Plan Bay Area 2040 [Draft Equity Analysis Report](#).

Plan Bay Area 2040’s performance on housing and transportation affordability is particularly disconcerting as shown in Table 4.10. For lower-income households, housing and transportation costs as a share of income go from 54 percent of household income in 2005 to 67 percent of household income in 2040. This performance is far off-trajectory compared to Plan Bay Area 2040’s stated goals.

TABLE 4.10 Ranking of ~~Draft~~ Plan Bay Area 2040 performance against targets.

Staff note: Table available on Plan Bay Area 2040 website and in plan document.

Source: Metropolitan Transportation Commission, 2016.

All this said, Plan Bay Area 2040's performance along key measures remains significantly better than a potential future with "No Project"; that is, a future without Plan Bay Area 2040's recommended land use and transportation strategies. In particular, under a "No Project" alternative the Bay Area would see higher levels of per-capita ~~CO₂~~ emissions, more loss of open space and agricultural lands, greater levels of displacement, more delay in the freight network, even higher housing and transportation costs, and much higher levels of transportation operating and maintenance costs due to deteriorating transportation asset conditions.

It is important to emphasize once again that these targets were aggressive, and it is therefore not surprising that Plan Bay Area 2040 falls short on meeting some of the adopted performance targets. As seen in the preceding section, the Bay Area has significantly more resources and tools available to address its transportation needs compared to its housing needs.

To truly address affordability and equity challenges, an engaged public and government at all levels will need to act. In particular, the Bay Area will need more aggressive policies and significantly more funding to deal with the housing crisis, as described in the next section, "Action Plan."

Action Plan

The Bay Area's housing and transportation crisis reflects the cumulative impacts of the region's robust job market and acute failure to keep pace with housing need, especially near growing job centers. Plan Bay Area 2040 projects these problems will intensify if the region does not take significant corrective steps. As a path forward, MTC and ABAG developed an "Action Plan" to focus on performance targets where the plan is moving in the wrong direction, as well as emerging issues that require proactive regional policy solutions.

MTC and ABAG propose a multi-pronged strategy to address housing affordability, the region's widening income disparities and economic hardships faced by low and middle-income workers, and finally the Bay Area's vulnerabilities to natural disasters such as earthquakes and floods. These three issue areas – Housing, Economic Development, and Resilience – form the core of the Action Plan.

Sidebar: ~~Connection to Targets~~ Action Plan Objectives

The recommendations in this Action Plan are intended to address multiple Plan Bay Area 2040 performance target areas.

- **Housing:** ~~Share~~ Lower the share of income spent on housing and transportation costs, lessen displacement risk, and increase the availability of affordable housing affordable to low- and moderate-income households
- **Economic development:** ~~Access~~ Improve transportation access to jobs, increase middle wage job creation, and ~~pavement maintenance~~ maintain the region's infrastructure
- **Resilience:** Enhance Climate ~~climate~~ protection and adaptation efforts, strengthen open space protections, ~~and create~~ healthy and safe communities, and protect communities against natural hazards

Similar to past regional achievements in the environment, transportation, and economy, successfully addressing these needs during the implementation of Plan Bay Area 2040 will require a shared commitment among regional policymakers, local governments and civic organizations, as well as robust public engagement and participation. MTC and ABAG will provide biannual reports on Action Plan progress and implementation to meetings of the Joint MTC Planning Committee and ABAG Administrative Committee during the early part of the regional planning process for the next Plan Bay Area.

Housing Production, Preservation, and Protection

As described earlier in "The Bay Area Today", the region faces many housing challenges, from skyrocketing costs to overcrowded housing to long commutes. Regional agencies, however, currently lack the tools, resources, and authority to directly address the identified issues of production, affordability and displacement. identified earlier in "The Bay Area Today." In response, the Action Plan recommends pursuing more ambitious funding, legislative, and policy solutions at the state, regional, and local levels as well as strengthening and expanding existing regional housing initiatives ~~and pursuing more ambitious policy solutions at the state, regional, and local levels~~. Regional agencies ~~are committed to partnering~~ will partner with state and local governments, business leaders, and non-governmental organizations to identify and implement game-changing housing solutions that will facilitate improved housing performance by: 1.) Producing more housing, particularly housing affordable to very low-, low-

and moderate-income households; 2.) Preserving existing housing that is affordable to very low-, low- and moderate-income households; and 3.) Lessening displacement risks faced by existing residents. Many of the solutions will require changes in state law and development of new funding formulas that do not currently exist.

Sidebar: What actions have the regional agencies already implemented for housing?

To date, regional agencies have largely focused housing actions on funding planning grants, conducting the Regional Housing Needs Allocation (RHNA), allocating transportation funds to reward cities that plan for and produce housing, using existing fund sources for limited direct investments in affordable housing, providing best practices and technical assistance, and advocating for statewide legislative proposals to reduce barriers to housing production.

More specifically, MTC and ABAG have:

- Produced Regional Housing Needs Allocations (RHNA) and monitored RHNA performance by income-level.
- Invested in the Transit Oriented Affordable Housing (TOAH) revolving loan fund.
- Linked approximately \$600 million in One Bay Area Grant (OBAG) funds to the adoption of an approved housing element and conditioned nearly \$20 billion in transit expansion priorities on minimum zoning densities via MTC's TOD policy.
- Awarded 51 PDA Planning grants to-date, which have led to increased zoning-planning capacity for 70,000 housing units, 110,000 jobs and 26 million square feet of commercial development. PDA Plans remove barriers to infill development by creating a predictable permitting process aligned with community objectives.
- Adopted a new OBAG framework in 2016 to increase incentives and direct investments for affordable housing.
- Convened regional committees for housing including the Housing Forum, Housing Subcommittee of the Regional Planning Committee, and the upcoming-CASA initiative.
- Supported CEQA modernization and created an online guide to CEQA streamlining provisions.

Two upcoming-new endeavors will improve the region's ability to address its chronic housing affordability challenges. The recent integration of MTC and ABAG staff will lead to more effective long-range planning and increase the region's housing policy capacities. The newly created CASA initiative will be bringing together diverse interests to develop a bold new strategy for housing production and preservation and production. Together These these work-efforts will expand data gathering and technical assistance and likely evaluate and recommend a range of legislative, regulatory, financial, and market-related funding and policy measures measures needed to help provide for the region's housing needs at all income levels.

Sidebar: CASA – The Committee to House the Bay Area

MTC and ABAG are helping to coordinating-coordinate the CASA, the Committee to House the Bay Area. This initiative is bringing together a multi-sector set of partners to identify and agree upon significant regional solutions that address the region's chronic housing challenges and advance equity and economic health in the nine-county Bay Area. Through stakeholder engagement,

research, and interviews, CASA will develop a comprehensive regional approach to the housing crisis, focusing on increasing housing supply, improving housing affordability, and strengthening preservation and anti-displacement measures. Objectives include a suite of legislative, financial, policy, and regulatory recommendations, with partners agreeing on a path forward and working together on implementation. A final report is scheduled for release by the end of 2018. ~~a multi-sector blue-ribbon committee that will bring together diverse interests to identify game-changing solutions to the region's chronic housing affordability challenges. Core to this strategy will include an effort to replicate the region's success in generating local revenues for transportation by pursuing a regional "self-help" strategy for funding housing investments. A multi-county fee or bond measure, for example, could be among the suite of recommendations put forward by CASA.~~

Table 5.1 Plan Bay Area 2040 "Action Plan" recommendations for housing.

This action plan makes the following recommendations for Housing:

Housing Actions	Partners and Timeframe
Advance regional "self-help" funding and financing solutions for housing: Develop a plan for generating regional revenues for the production and preservation of housing affordable to low- and moderate-income households (which could include measures such as a parcel tax, commercial linkage fee, or other dedicated funding). Evaluate the creation of innovative financing tools, such as a regional infill Infrastructure Bank, a land bank, or a Regional Housing Trust Fund, to support new housing or infrastructure improvements.	MTC/ABAG, CASA committee, local jurisdictions 1-2 years (evaluate) 2-4 years (execute)
Advance state funding legislative and legislative funding solutions for housing: Support state legislative or funding opportunities that advance the objectives of this Action Plan, including securing a permanent source of affordable housing funding, increasing community stabilization and lessening displacement risk, reducing costs and barriers to housing development, incentivizing developers to create work-force and low-income housing, incentivizing the creation of accessory dwelling units, as well as other measures that will contribute to increased supply of both market-rate and affordable housing. Implement the recommendations of CASA, in coordination with ABAG's Regional Planning Committee.	State legislature, MTC/ABAG, CASA committee, local jurisdictions 2 YEARS
Continue recent housing successes: Implement the housing initiatives adopted in the One Bay Area Grant (OBAG) program, including the Naturally Occurring Affordable Housing (NOAH) preservation fund, JumpStart program, and funding for transportation conditioned on RHNA performance (80k by 2020 initiative).	MTC/ABAG, CMAs 4 YEARS
ContinueBuild on recent housing policy successes: Implement the housing and community stabilization initiatives adopted in the second cycle of the One Bay Area Grant (OBAG) program from 2017-18 to 2021-22, such as the Preservation Pilot (previously known as NOAH), 80k by 2020 initiative, Transit-Oriented Affordable Housing (TOAH) fund, and JumpStart program to encourage equitable and sustainable development. Evaluate the performance of these strategies and applicability of	MTC/ABAG, CMAs, CASA 4 YEARS

expanding these types of loan and direct investment programs for future funding programs.	
Spur housing production at all income levels and invest directly in affordable housing Evaluate expanded policies connecting transportation funding to housing production and performance: Analyze the applicability feasibility of incentivizing housing production Seek and seek to include housing provisions or conditions where appropriate in with pertinent existing and upcoming new transportation funding sources (including planning grants), with particular emphasis on housing affordable to very low-, low- and moderate-income households as well as anti-displacement and community stabilization. analyze applicability for additional regional funding sources to incentivize housing production and affordability. Develop a strategy for the use of public land proximate to major transit assets to facilitate the development of housing affordable to low- and moderate-income households through conditions and provisions on funding sources. Report to the Commission on all discretionary funding sources where such housing provisions and conditions may be added. Continue to monitor and evaluate PDA performance.	MTC/ABAG, <u>CASA</u> , the Partnership, regional leaders, <u>local jurisdictions, transit operators</u> <u>2-4 YEARS</u> <u>1-2 years (evaluate)</u> <u>2-4 years (execute)</u>
Use housing performance to prioritize funding for long-range transportation projects: Continue to evolve RTP/SCS Project Performance methods to seek stronger alignment between prioritizing transportation projects and housing performance.	MTC/ABAG, CMAs 4 YEARS
Provide technical assistance and best practices to local jurisdictions related to the transformation of “opportunity areas”: Assist local agencies as they envision upgrades to low-intensity office parks and retail centers to create mixed-use, mixed-income neighborhoods with significant housing.	MTC/ABAG, <u>local jurisdictions, CASA</u> <u>1-4 years (on-going)</u>
Strengthen technical assistance and policy leadership for housing and community stabilization policy leadership on housing: Expand and transform regional agency technical assistance for local jurisdictions <u>that is</u> tailored to both Bay Area-wide challenges and challenges unique to specific parts of the region, <u>including best practices to support new housing (e.g., heights that support more units and allow projects to “pencil out” without compromising neighborhood character).</u> Focus areas for technical assistance could include guidance on implementing state legislation for <u>transit-oriented development and the production of housing production affordable to low- and moderate-income households,</u> guidance on housing preservation and <u>locally appropriate community stabilization and anti-displacement policies, supporting healthy infill development,</u> and coordination of neighboring jurisdictions along transit corridors and in sub-regions to identify shared solutions to housing challenges. <u>Explore new and expanded community stabilization and anti-displacement policies to support low-income renters, including incentives for landlords to keep existing rents affordable.</u>	MTC/ABAG, <u>local jurisdictions, BAAQMD, CMAs, CASA</u> <u>2-4 YEARS</u> <u>1-4 years (on-going)</u>
Close data gaps and improve information accessibility for housing: Continue to collect, analyze, and disseminate <u>information data</u> about housing opportunity sites <u>and vacant lands,</u> zoning, development trends	MTC/ABAG 1-4 YEARS <u>(on-going)</u>

and policy implementation by local governments to inform local, regional, and state policy development and evaluation, including PDA performance; ~~create~~ Create accessible database of major development and publicly owned sites. Create an online Policy Directory with examples of ordinances being implemented at the local level to address community stabilization. Continue to evolve RTP/SCS Project Performance methods to seek stronger alignment between prioritizing transportation projects and housing performance.

Source: Metropolitan Transportation Commission and Association of Bay Area Governments, 2017.

Economic Development

Creating a more affordable region also requires a Bay Area economy with greater economic opportunity and mobility for all the region’s residents and jurisdictions. The coming years could bring many threats to low- and middle-wage jobs through technological advancement or continued economic globalization. ~~The~~ The Action Plan therefore recommends expanding regional economic development capacity through establishing an Economic Development District while also focusing on increasing pathways to middle-wage jobs, preserving infrastructure and increasing affordable transportation access to job centers.

Regional agencies – in partnership with business, workforce agencies and local jurisdictions – are working to establish a regional Economic Development District and accompanying Economic Development Strategy. This work will advance regional solutions related to business expansion and retention, workforce training, housing and workspace, and infrastructure improvements. This work will also enable the region to compete for public and private funding that can help leverage local assets in places poised for growth, particularly in communities of concern and other economically distressed areas.

Long-term economic growth also requires infrastructure investment. While the region has made substantial transportation investments, it still has unmet capital maintenance needs exceeding \$50 billion and some of the worst transit crowding and traffic congestion in the nation. Relieving transit crowding and increasing transit access will require broad regional coordination and planning as well as significant state-funding to address shortfalls related to transportation maintenance and infrastructure. The region should also continue advocating for increases in funding for critical expansion projects, as well as maintenance of existing infrastructure.

Table 5.2 Plan Bay Area 2040 “Action Plan” recommendations for economic development.

This Action Plan makes the following recommendations for Economic Development:

Economic Development Actions	Partners and Timeframe
Coordinate regional economic solutions <u>for growing and retaining businesses, particularly for middle-wage sectors and increase funding for economic development</u> ; <u>Identify areas of economic development that could benefit from a regional approach including connecting businesses with growth opportunities within the Bay Area; prioritizing transportation investments that directly grow local businesses; identifying solutions for workforce housing needs; and creating a forum for discussing skill gaps</u>	MTC/ABAG, <u>local jurisdictions</u> , economic organizations, EDA , megaregional partners 1-2 years

<p><u>between existing community college programs and the needs of trade sectors. Continue work on developing the region's Economic Development District and implement the action plan of the Comprehensive Economic Development Strategy.</u></p>	
<p><u>Access infrastructure and workforce training funding for economic development:</u> Establishing an Economic Development District will enable the region to compete for federal economic and workforce development funding from the United States Economic Development Administration (EDA). Potential funding uses could include, for example, incentivizing job growth in jobs-poor cities and assistance with downtown revitalization. Additional relevant grant opportunities include: seed funding for commercializing clean energy technology and public works funding to upgrade roadway, sewer, and water infrastructure. This funding could be used to support a clean-technology sector that would support dual objectives of reducing emissions from transportation and other sources as well as up-skilling the Bay Area manufacturing labor force.</p>	<p>MTC/ABAG, industry partners, economic organizations, EDA, megaregional partners 1-4 years</p>
<p><u>Strengthen middle-wage job career paths for goods movement:</u> Facilitate entry to middle-wage jobs in industries such as transit, clean/green energy and technologies, natural and resilient infrastructure, construction, and goods movement through enhanced coordination and training. Implement the recommendations of the Megaregional Goods Movement Cluster Study, which will focus on emerging industries and middle-wage jobs.</p>	<p>MTC/ABAG, freight businesses, industry partners, megaregional partners 1-4 years</p>
<p><u>Increase transportation access to growing and potential job centers:</u> Broaden core capacity transit study partnership to cover a larger geography to plan for major transportation capital investments; move forward on planning efforts for a second Transbay Tube and on construction efforts for the California High Speed Rail system; continue to evaluate a means-based fare or other methods for reducing or eliminating transportation costs for lower-wage workers and students; evaluate expanded support for local transit systems that address first-mile, last-mile problems; and evaluate transportation improvements that could facilitate downtown revitalization in areas needing economic development.</p>	<p>MTC/ABAG, transit agencies, the Partnership, megaregional partners, local jurisdictions, transit operators 2-4 years</p>
<p><u>Preserve existing infrastructure:</u> Advocate for new revenues for transportation and continue focusing on "Fix It First" investments in keeping with long-standing MTC policy.</p>	<p>MTC/ABAG, state legislature 1 year</p>
<p><u>Preserve and enhance existing industrial landsSupport regional growth by balancing housing, transit-oriented jobs, and industrial uses:</u> Establish criteria for Priority Production Enterprise Areas to encourage local jurisdictions to plan for space needed for manufacturing, distribution and repair while assessing ways of meeting other critical needs such as housing and assess areas that could be converted to housing or mixed use development; evaluate potential incentives that could be used to support companies that locate offices in transit-rich as opposed to auto-centric areas; and evaluate the use of last-mile transportation solutions to connect communities with warehouses and</p>	<p>MTC/ABAG, local jurisdictions 2-4 years</p>

<u>industrial jobs that cannot be located in downtowns due to land requirements.</u>	
<u>Close data gaps and improve information accessibility: Continue to collect, analyze and disseminate data about economic development opportunity sites and vacant lands, zoning, jobs and industry trends and policy implementation by local governments to inform local, regional, and state policy development and evaluation, including PDA performance. Evaluate potential refinements and improvements to regional agencies' economic modeling capacity.</u>	<u>MTC/ABAG</u> <u>1-4 YEARS (on-going)</u>

Source: Metropolitan Transportation Commission and Association of Bay Area Governments, 2017.

Resilience

In response to emerging and increasingly pressing threats to the Bay Area's communities, ecosystem and economy, the Action Plan recommends continuing and expanding existing resilience efforts and developing creative funding solutions to implementing resilience projects. Resilience efforts help the region protect assets and people from natural disasters like earthquakes, floods, landslides, and fires as well as prepare for climate change hazards like sea level rise, extreme storms, and droughts. Resilience underpins the achievement of many other goals in the plan such as housing, infrastructure, and economic development that may be significantly compromised by the impacts of disasters or climate change.

Regional agencies have initiated several programs advancing resilience against sea level rise, flooding, and extreme events including earthquakes. In 2010, the Bay Conservation and Development **District Commission** (BCDC) kicked off the Adapting to Rising Tides program, which evaluated vulnerability and risk along the shoreline of several communities and continues to be a platform for sharing best practices. More recently, the Bay Area Regional Collaborative (BARC), along with BCDC, have been awarded planning and design grants for assessing transportation vulnerability and developing design solutions for climate-related challenges.

Sidebar: Recent Funding Successes for Resilience

Two recent grant awards will significantly advance the regional dialogue on climate vulnerability and develop workable solutions:

- Caltrans and the Bay Area Toll Authority allocated \$1.2 million to continue to conduct a regional vulnerability assessment for transportation infrastructure, Priority Development Areas (PDA), Priority Conservation Areas (PCA) and disadvantaged and vulnerable communities. In addition to a regional vulnerability assessment, the project goals include developing a regional framework for identifying solutions and strategies to address vulnerability on an ongoing basis.*
- The Rockefeller Foundation awarded a \$4.6 million grant to create the Bay Area: Resilient by Design Challenge. Bay Area leaders will work with international design teams to develop innovative and implementable design solutions for climate-related challenges in 10 sites across the Bay Area region. This project will last through 2018.*

Regional agencies have also collaborated with the Environmental Protection Agency, FEMA, and the California Earthquake Authority on recommendations for resilient housing, both for earthquakes and flooding. This collaboration established the Resilient Housing Policy Initiative that helps jurisdictions access analysis and policy tools for the seismic retrofit of existing housing. The region should expand these efforts through outreach and technical assistance, as well as develop financial solutions to resilient housing and green infrastructure, especially for communities with high social vulnerability and exposure to natural hazards.

Many stakeholders and subject matter experts such as NGOs, universities, local jurisdictions, special districts, and asset owners like utilities, parks districts, airports, and private property owners are critical to the success of the Resilience Action Plan.

Table 5.3 Plan Bay Area 2040 “Action Plan” recommendations for resilience.

This Action Plan makes the following recommendations for Resilience.

Develop a regional governance strategy for climate adaptation projects: Develop an institutional strategy for managing, coordinating, and implementing regional and local projects related to <u>sea-level rise</u> <u>climate change adaptation</u> .	BARC, MTC/ABAG, BCDC, Caltrans, local jurisdictions 2-4 years
Provide stronger policy leadership on resilient housing and infrastructure: Expand guidance on resilient housing policies for earthquake, flooding, and fire, working in coordination with state and federal agencies and focusing on communities with high social vulnerability and exposure to natural hazards. Strengthen infrastructure lifelines to ensure that utilities can provide services under a variety of conditions and future scenarios.	MTC/ABAG, local jurisdictions 1-4 years
Create new funding sources for adaptation and resilience: Pursue new funding opportunities, including innovative financing, for <u>resilience planning and implementation, including</u> retrofits of buildings, retrofits of existing infrastructure, and infrastructure solutions to protect against flooding, earthquakes, and exposure to environmental health risks.	MTC/ABAG, BARC, BCDC 1-4 years
Establish and provide a resilience technical services team: Broadly share <u>data</u> , best practices and grant opportunities for climate adaptation and natural hazard mitigation. Continue to assess <u>built environment and social</u> vulnerabilities and identify workable solutions through public and private avenues. <u>Integrate-Investigate how to incorporate</u> resilience into Priority Development Area (PDA) planning and <u>Complete Streets requirements</u> .	BARC, MTC/ABAG, BCDC 1-2 years
Expand the region’s network of natural infrastructure: Coordinate regional programs to preserve and expand natural features that reduce flood risk, strengthen biodiversity, enhance air quality, <u>and</u> improve access to urban and rural public space, <u>mitigate urban heat island effects, and enhance health</u> . Leverage existing initiatives—including Priority Conservation Areas (PCAs), the Resilient by Design Challenge, <u>the Bay Trail and other regional trails</u> , San Francisco Estuary	MTC/ABAG*, BCDC, <u>Coastal Conservancy</u> , jurisdictions, utilities <u>* includes Bay Trail and San Francisco Estuary Partnership</u> 1-4 years

Partnership, and Bay Restoration Authority—and partner with special districts and cities.	
Establish the Regional Advance Mitigation Program (RAMP): Advance mitigation for infrastructure projects to strengthen regional biological conservation priorities. Work to secure off-site compensatory mitigation lands for multiple infrastructure projects in-advance of environmental reviews to improve both project delivery and conservation outcomes.	MTC/ABAG, Caltrans, RAMP coalition** 1-4 years <u>** includes Coastal Conservancy</u>
<u>Source:</u> Metropolitan Transportation Commission, Association of Bay Area Governments, Bay Area Regional Collaborative, 2017.	

Proposed Changes to Plan Bay Area 2040 Supplemental Reports

The following changes are proposed to the Plan Bay Area 2040 Supplemental Reports:

Equity Analysis Report	A typo on page 6-4 will be corrected – for footnote #4, 1 percent and 7 percent statistics are reversed.
Forecast Report	A discussion of trends affecting the employment forecast will be added, including automation.
Investment Strategy Report	Add clarification that County Transportation Plans are a basis for Plan Bay Area 2040 but that projects must go through the performance analysis.
Investment Strategy Report	One-two paragraphs on military base transport needs and projects will be added as well as an expanded discussion of airports.
Investment Strategy Report	A paragraph on federal Congestion Management Program compliance will be added.
Investment Strategy Report	Tables will be updated to reflect updated funding figures, with funds moved from the cost contingency category to the modernization category.
Investment Strategy Report	A paragraph on Express Lanes will be rephrased and other major highway expansion projects will be added to the relevant tables.
Investment Strategy Report	Specific Express Lanes segments will be listed out under the Horizon list.
Investment Strategy Report	A mention of major specific trails, including Delta Trail, will be added.
Land Use Modeling Report	A short paragraph will be added discussing how the land use pattern addresses airport land use compatibility within the influence area (2 mile radius of airport) and how existing zones/general plans likely account for much of that compatibility.
Land Use Modeling Report	Specifics on subsidies and inclusionary zoning will be added based on currently-public materials (e.g. GitHub).
Land Use Modeling Report	The report will be expanded with more information on baseline calibration and model development, among other details.
Project List	Projects will be updated to reflect updated funding figures, with funds moved from the cost contingency category to the modernization category.
Public Engagement Report	A paragraph on ports, airports, and goods movement engagement will be added, in addition to a reference to the Freight Emissions Reduction Action Plan.

RTP Checklist	The final Caltrans Regional Transportation Plan checklist will be added as a supplemental report to the microsite.
Scenario Planning Report	Additional information on the public process to craft scenarios will be added to provide more clarity on this topic.
Statutorily-Required Plan Maps	A legal disclaimer will be added to all Statutorily-Required Maps similar to what is in the primary plan document ("Map is for general information...").
Statutorily-Required Plan Maps	Labels for Orinda and Lafayette will be adjusted to better reflect their west-east alignment.
Statutorily-Required Plan Maps	All existing Resource Lands maps will be retitled as "Resource Lands: Agriculture".
Statutorily-Required Plan Maps	A new 9-county map will be added titled "Resource Lands: Water and Wildlife". Data from Figure 2.12-3 in the Environmental Impact Report will be used for Watersheds and blue crosshatching will be used to indicate zones. Watersheds do not need be labeled. Data from the California Department of Fish and Wildlife for "Wildlife-Rich Areas" using BioRankSW value of 5 will be used to identify such zones.
Statutorily-Required Plan Maps	Legends for supplemental report maps will be fixed to add missing population numbers.
Statutorily-Required Plan Maps	A URL will be added to the CEQA streamlining map; an ArcGIS Online map will be created for this purpose.
Statutorily-Required Plan Maps	A URL will be added for the density/intensity maps; ArcGIS Online maps will be created for this purpose.
Statutorily-Required Plan Maps	Source information will be added to maps as needed.
Statutorily-Required Plan Maps	Density/intensity will be removed and SB 743 Transit Priority Areas will be added to the Transit Priority Areas map.

[Staff Reference: version 5 \(7/7/2017\)](#)

**ASSOCIATION OF BAY AREA GOVERNMENTS
EXECUTIVE BOARD**

RESOLUTION NO. 10-17

**RE: ADOPTION OF THE SUSTAINABLE COMMUNITIES STRATEGY IN PLAN
BAY AREA 2040**

WHEREAS, the Association of Bay Area Governments (ABAG), a joint exercise of powers entity created pursuant to California Government Code Sections 6500 *et seq.*, is the Council of Governments and the regional land use planning agency for the San Francisco Bay Area; and

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to California Government Code Section 66500 *et seq.*; and

WHEREAS, MTC is the federally designated Metropolitan Planning Organization (MPO), pursuant to Section 134(d) of Title 23 of the United States Code (USC) for the nine-county San Francisco Bay Area region (the region); and

WHEREAS, Part 450 of Title 23 of the Code of Federal Regulations (CFR), require MTC as the MPO to prepare and update a long-range Regional Transportation Plan (RTP) every four years; and

WHEREAS, California Government Code § 65080 *et seq.* requires MTC to prepare and update a long-range RTP, including a Sustainable Communities Strategy (SCS) prepared in conjunction with the Association of Bay Area Governments (ABAG), every four years; and

WHEREAS, the RTP is subject to review and revision, pursuant to California Government Code §§ 66513 and 65080; and

WHEREAS, on July 18, 2013, MTC adopted Plan Bay Area and 2013 Federal Transportation Improvement Program (TIP) Amendment and found them to be in conformance with the State Implementation Plan (SIP) as required by the Federal Clean Air Act (42 U.S.C. § 7401 *et seq.*); and the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) *Metropolitan Planning Rule*, 23 CFR 450; and the San Francisco Bay Area Transportation Air Quality Conformity Protocol (MTC Resolution 3757), which establish the Air Quality Conformity Procedures for MTC's TIP and RTP; and

WHEREAS, beginning in spring 2015 MTC commenced a comprehensive and coordinated transportation planning process to develop its 2017 RTP/SCS with a 2040 horizon year known as Plan Bay Area 2040 (Plan), in conformance with all applicable federal and state requirements including Senate Bill 375;

**ASSOCIATION OF BAY AREA GOVERNMENTS
RESOLUTION NO. 10-17**

WHEREAS, as required by California Government Code § 65080 *et seq.* (Senate Bill 375), the Plan incorporates the SCS prepared jointly by MTC and ABAG for the San Francisco Bay Area; and

WHEREAS, the Plan, including both the RTP and the SCS, which is attached hereto as Attachment A, and incorporated herein as though set forth in length, contains an integrated set of strategies and fiscally-constrained investments to maintain, manage, and improve the transportation system in the San Francisco Bay Area through the year 2040 and calls for development of an integrated intermodal transportation system that facilitates the efficient, economic movement of people and goods; and

WHEREAS, on September 24, 2014 the original Plan Bay Area, as adopted in July 2013, and the 2015 Transportation Improvement Program were found to be in conformance with the State Implementation Plan (MTC Resolution No. 4176); and

WHEREAS, MTC conducted an air quality analysis of the Plan using the latest planning assumptions, emissions model, and consultation provisions, including a quantitative regional emissions analysis that meets emissions budget requirements of the U. S. Environmental Protection Agency transportation conformity rule, and the Plan contributes to all required emissions reductions; and

WHEREAS, adoption of, and the conformity determination for, the proposed 2017 TIP has been determined simultaneously with the Plan for consistency purposes (MTC Resolution No. 4298); and

WHEREAS, ABAG developed the Regional Growth Forecast for Jobs, Population and Housing planning purposes through 2040 (Forecast) by working with local jurisdictions, and the Forecast projects growth based on existing land use plans and policies, and demographic and economic trends; and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(G), in preparing the SCS MTC and ABAG considered spheres of influence adopted by the Local Agency Formation Commissions within the San Francisco Bay Area; and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(E), federal public participation requirements, and MTC's Public Participation Plan (MTC Resolution No. 4174), the Plan, including both the RTP and the SCS, was developed through a strategic, proactive, comprehensive public outreach and involvement program, which included: an adopted public participation plan; routine distribution of information to local/regional media; advertising in local and regional newspapers; distribution of public information materials, such as brochures and newsletters; a dedicated website; meetings with representatives from each county's board of supervisors and city councilmembers; noticed public hearings to receive testimony on the Plan and the Programmatic Environmental Impact Report (EIR); subregional workshops to facilitate public comment on the Plan; and interagency coordination and involvement; and

**ASSOCIATION OF BAY AREA GOVERNMENTS
RESOLUTION NO. 10-17**

WHEREAS, pursuant to California Government Code § 65080(b)(2)(B), the Plan's SCS (i) identifies the general location of uses, residential densities, and building intensities within the region; (ii) identifies areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the RTP taking into account net migration into the region, population growth, household formation and employment growth; (iii) identifies areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to California Government Code § 65584; (iv) identifies a transportation network to service the transportation needs of the region; (v) gathers and considers the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of California Government Code § 65080.01; (vi) considers the state housing goals specified in California Government Code §§ 65580 and 65581; and (viii) allows the RTP to comply with Section 176 of the Federal Clean Air Act (42 U.S.C. § 7506); and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(B), in preparing the Plan's SCS, ABAG was responsible for identifying the general location of uses, residential densities, and building intensities within the region; identifying areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the RTP taking into account net migration into the region, population growth, household formation and employment growth; identifying areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to California Government Code § 65584; gathering and considering the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of California Government Code § 65080.01; and considering the state housing goals specified in California Government Code §§ 65580 and 65581; and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(B), in preparing the Plan's SCS, MTC was responsible for identifying a transportation network to service the transportation needs of the region; and allowing the RTP to comply with Section 176 of the Federal Clean Air Act (42 U.S.C. Sec. 7506); and

WHEREAS, pursuant to California Government Code § 65080(b)(2)(B), in preparing the Plan's SCS, MTC and ABAG were jointly responsible for setting forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve the greenhouse gas emission reduction targets adopted by the California Air Resources Board (CARB) for the San Francisco Bay Area; and

WHEREAS, CARB set the per capita greenhouse gas emission reduction targets for automobiles and light trucks for the San Francisco Bay Area at 7 percent by 2020 and 15 percent by 2035 from a 2005 base year; and

**ASSOCIATION OF BAY AREA GOVERNMENTS
RESOLUTION NO. 10-17**

WHEREAS, as demonstrated in the Program EIR certified for the Plan, the SCS sets forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve the regional greenhouse gas emission targets set by CARB for the region; and

WHEREAS, prior to taking action on the Plan, ABAG has heard, been presented with, reviewed, and considered all of the information and data in the administrative record, including the Final Program EIR, and all oral and written evidence presented to it during all meetings and hearings; and

WHEREAS, MTC and ABAG intend to assist implementing agencies in determining whether a proposed project qualifies for development incentives associated with the Plan by developing advisory guidelines for evaluating consistency; and

WHEREAS, adoption of the Plan is accompanied by adoption of the 2017 TIP (MTC Resolution No. 4298) and certification that the Final Environmental Impact Report for the Plan complies with the California Environmental Quality Act (CEQA) (MTC Resolution No. 4299 and ABAG Resolution No. 09-17); now, therefore, be it

RESOLVED, that ABAG certifies that the foregoing recitals are true and correct and incorporated by this reference; and be it further

RESOLVED, that ABAG finds that the SCS in the Plan, meets the requirements of Senate Bill 375 (Steinberg, 2008) as codified in California Government Code § 65080, subdivision (b); and be it further

RESOLVED, that ABAG finds that the SCS in the Plan complies with the requirements of all other applicable laws; and be it further

RESOLVED, that ABAG does hereby adopt the SCS in the Plan as included as Attachment A, as well as all associated supplemental reports, subject to additional minor or non-substantive technical corrections and editorial changes (Final Plan); and be it further

RESOLVED, that ABAG directs MTC staff to publish the Final Plan.

The foregoing was adopted by the Executive Board this 26th day of July, 2017.

Julie Pierce
President

**ASSOCIATION OF BAY AREA GOVERNMENTS
RESOLUTION NO. 10-17**

Certification of Executive Board Approval

I, the undersigned, the appointed and qualified Clerk of the Board of the Association of Bay Area Governments (Association), do hereby certify that the foregoing resolution was adopted by the Executive Board of the Association at a duly called meeting held on the 26th day of July, 2017.

Frederick Castro
Clerk of the Board

Approved as To Legal Form

Adrienne D. Weil
Legal Counsel

Summary of Responses and Revisions from Public Comment Letters

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
128	Hunter, Steven	Thank you for your comment. With regards to your comment that the Plan adds people to the region, it is not an accurate portrayal of the planning effort. The Draft Plan merely identifies how we can accommodate future growth that is forecasted to occur. With regards to traffic congestion, it should be noted that the Draft Plan actually exceeds the congestion reduction target set by MTC/ABAG.	No action recommended.
129	Phillips, Wayne	Thank you for your comment. Staff concurs with the comment author that increased adoption of scooters and other lightweight vehicles can be beneficial to the region.	No action recommended.
130	Phillips, Wayne	Thank you for your comment. Staff concurs with the comment author that increased adoption of scooters and other lightweight vehicles can be beneficial to the region.	No action recommended.
131	Phillips, Wayne	Thank you for your comment. Staff concurs with the comment author that increased adoption of scooters and other lightweight vehicles can be beneficial to the region.	No action recommended.
132	Warkentin, Vivian	Thank you for your comment. The boards of MTC and ABAG are made up of elected officials who were appointed to represent their cities and counties on the regional level.	No action recommended.
133	Mayben, Bill	Thank you for your comment. In the context of the EIR, MTC and ABAG explored a more decentralized scenario known as Main Streets. What the analysis demonstrated was that a decentralization of jobs does not necessarily yield better environmental outcomes, as the author suggested. For additional comments, refer to the EIR response.	No action recommended.
134	Caffrey, Cathleen	Thank you for your comment. The Draft Plan invests in new and better buses as part of fleet replacement processes over the coming years. The Draft Plan also boosts bus service on a number of operators to improve conditions for riders.	No action recommended.
135	Building Industry Association of the Bay Area	Thank you for your comments. With regards to home ownership, MTC and ABAG are recommending solutions that benefit both those who rent and those who own. The appropriate forum for discussing additional targets, given that targets were	Add language related to bringing down the cost of housing construction to housing Action Plan. Add legal disclaimer to all Statutorily-Required Maps

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		<p>approved in 2015 by MTC and ABAG, would be at the start of the next Plan cycle. Similarly, RHNA methodology concerns would best be handled at that time.</p> <p>With regards to multifamily housing, the Plan does not specifically seek to limit single-family housing but rather make it easier to build multi-family housing. Multi-family housing, especially when built in proximity to public transit, has many important benefits that support Plan goals, including the potential to lower GHG emissions and reduce auto mode share.</p> <p>Staff will review your suggestion for additional analysis on subsidies associated with Plan Bay Area 2040. Staff will review your proposal to add language relating to cost of construction and will include the disclaimer on statutorily-required Plan maps.</p> <p>With regards to your comments on the Action Plan, we will make some edits to resolve some of your concerns.</p>	<p>similar to what is in Plan Doc ("Map is for general information...").</p> <p>Replace "zoning" with "planned" on page 72.</p> <p>Refine language with regards to industrial lands in Action Plan.</p>
136	North Bay Leadership Council	<p>Thank you for your comments.</p> <p>With regards to home ownership, MTC and ABAG have traditionally remained neutral on this topic, trying to find solutions that benefit both those who rent and those who own. The appropriate forum for discussing additional targets, given that targets were approved in 2015 by MTC and ABAG, would be at the start of the next Plan cycle. Similarly, RHNA methodology concerns would best be handled at that time.</p> <p>With regards to multifamily housing, the Plan does not specifically seek to limit single-family housing but rather make it easier to build multi-family housing. Multi-family housing, especially when built in proximity to public transit, has many important benefits that support Plan goals, including the potential to lower GHG emissions and reduce auto mode share.</p> <p>Staff will review your suggestion for additional analysis on subsidies associated with Plan Bay Area 2040. Staff will review your proposal to add language relating to cost of construction and will include the</p>	<p>Add language related to bringing down the cost of housing construction to housing Action Plan.</p> <p>Add legal disclaimer to all Statutorily-Required Maps similar to what is in Plan Doc ("Map is for general information...").</p> <p>Replace "zoning" with "planned" on page 72.</p> <p>Refine language with regards to industrial lands in Action Plan.</p>

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		<p>disclaimer on statutorily-required Plan maps.</p> <p>With regards to your comments on the Action Plan, we will make some edits to resolve some of your concerns.</p>	
137	Brennan, Sabrina	Thank you for your comment; please refer to the EIR for a response given that your comment focused primarily on the environmental analysis.	No action recommended.
138	Jacobs, Ethan	Thank you for your comment. Funding to further study a west span bike path on the Bay Bridge is included in the Plan. The project was identified as low-performing through the project performance assessment due to a low benefit-cost ratio, but the decision to not include project construction in the Plan will be considered again as part of the next planning cycle in 2021.	No action recommended.
139	Grimes, Peta	Thank you for your comment. The Plan does assume continued growth in telecommuting over time; however, many jobs will continue to require "face time" with coworkers. Similarly, the expectation of continued service sector job growth where in-person interaction is essential means that telecommuting will remain a small but important component of commuting.	No action recommended.
140	6 Wins for Social Equity Network, NPH, & Greenbelt Alliance	MTC and ABAG staff have met directly with the comment author since this letter was submitted to discuss concerns and proposed revisions.	Make changes to the Action Plan to reflect areas of agreement between 6 Wins and MTC/ABAG based on discussion in recent meetings.
141	Gallo, Gloria	Thank you for your comment. Travel modeling for the Plan does incorporate capacity constraints on arterials and highways, meaning that the impacts discussed in this comment letter are already reflected in forecasts and affect the growth pattern. It should also be noted that Marin's growth forecast remains lower than in past regional planning cycles.	No action recommended.
142	Skinner, Rebecca E.	Thank you for your comment. Staff appreciate your recognition that the Draft Plan is a step in the right direction.	No action recommended.
143	Smith, Ron	Thank you for your comment. The Draft Plan invests in maintenance, safety and security of public transit systems across this region to	No action recommended.

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		mitigate some of the concerns raised by this letter.	
144	Reeder, Ken	Thank you for your comment. MTC and ABAG recognize the challenges associated with growth in any community in the region, including Fairfield. We will review your comment and consider adding language about these pressures to the Final Plan.	Add discussion related to the benefits and challenges posed by growth, including localized traffic, school crowding, water constraints, etc.
145	Bay Area Transportation Working Group	<p>Thank you for your comment. Per-capita GHG reduction is the central goal of Senate Bill 375. Refer to the EIR for a detailed VMT analysis.</p> <p>While the Draft Plan does indeed fund the majority of the proposed Express Lane Network, it also spends billions of dollars on transit projects designed to reduce VMT. Roadway capacity expansion only accounts for 3% of all funding in the Draft Plan.</p>	No action recommended.
146	Marin Info	Thank you for your comment. Transit-oriented development has been shown to reduce vehicle miles traveled and associated GHG. For more information on this topic, refer to the detailed EIR response on focused growth from the original Plan Bay Area (2013).	No action recommended.
147	Hayes, Michael J.	Thank you for your comment. Priority Development Areas must be approved by the majority of a city council or county board of supervisors. Senate Bill 375 requires the region to plan for expected growth, as the region has no policy levers to "stabilize" overall population in the region.	No action recommended.
148	Transportation Solutions Defense and Education Fund (TRANSDEF)	<p>Thank you for your comments; please also refer to comment responses in the EIR.</p> <p>With regards to mode shift, MTC and ABAG would respectfully disagree that the Plan continues a trend of urban sprawl; after all, it achieves the target to grow solely in areas within current urban growth boundaries, rather than agricultural land/greenfields. Auto dependence does go down, albeit not to the same degree envisioned in target set by the Commission and ABAG Board. And while there are road projects in the Plan, the Plan is heavily focused on operations, maintenance, and transit expansion rather than new highways.</p> <p>Refer to the EIR for a response to the GHG</p>	No action recommended.

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		<p>target concerns raised, including Climate Initiatives. More information on the Climate Strategies can be found in the Travel Modeling supplemental report. Also, refer to the EIR for a discussion of why the Smart Growth alternative was rejected.</p> <p>Commentary on the county planning guidelines are outside the scope of this planning process. It should be noted that county plans are a key input to the RTP/SCS, but projects are evaluated further and not all CTP projects are included in the fiscally-constrained Draft Plan. Notably, several major highway expansions were removed through the Plan's project performance assessment.</p> <p>SB 375 is clear that it is focused on GHG per-capita reduction rather than VMT reduction. Moreover, it does not require that every project in a Plan reduce GHG or VMT - just that the overall Plan meet its per-capita GHG targets overall.</p> <p>Staff cannot comment on VTA service levels as those are outside our control, although based on the latest available information, their 2017 service restructure is cost-neutral and focused on redistributing service rather than reducing it.</p>	
149	Contra Costa Transportation Authority	<p>Thank you for your comments.</p> <p>MTC/ABAG recognize and acknowledge your disappointment with regards to the failure of Measure X.</p> <p>MTC/ABAG continue to believe it is feasible for growth to be focused in PDAs - local policies are really the key to making this happen. Staff agrees that the housing production rate in Plan Bay Area 2040 is faster than in years past - in part because the region has underproduced housing in recent decades and needs to catch up with the strong regional demand. The Draft Plan was also tasked with ensuring sufficient housing is built within the region as opposed to Bay Area housing being produced in the San Joaquin Valley (triggering in-commuting). Additional information is available in the EIR master response related to this topic.</p>	No action recommended.

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		<p>MTC/ABAG share CCTA's concern about rising traffic volumes over the Altamont Pass, but we believe land use strategies should be the primary approach to dealing with this trend. The proposed TriLink tollway project was identified as low-performing through the project performance assessment.</p> <p>With regards to innovative technologies, MTC/ABAG staff look forward to continued collaboration on this topic and intend to incorporate this much more deeply in our next plan cycle.</p>	
150	Martin, William L.	Thank you for your comment. MTC and ABAG recognize the importance of green building, including water-neutral development, to achieve sustainability goals for the region. While this is generally outside the scope of the Plan, we will consider how this may be incorporated into our work the coming years.	No action recommended.
151	FTL HUB	Thank you for your comment. The Plan does envision a changing workforce with service sector jobs rising - but jobs in resources and manufacturing (at a greater risk from automation) declining over time. Staff will review to determine if additional clarification can be added to the Draft Plan or its supplemental reports.	Add discussion of trends affecting employment forecast, including automation, to Land Use Modeling Report.
152	Alameda County Transportation Commission	Thank you for your comment. MTC/ABAG will, as you suggest, continue to work closely with local governments on housing issues, with economic development agencies on job creation, and with key partners on sea level rise.	No action recommended.
153	City of Orinda	Thank you for your comment. We will correct the map labels to making the location of Orinda and Lafayette. While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.	Adjust labels for Orinda and Lafayette to better reflect their west-east alignment on Map 1.2, Maps 4.4-4.7, and supplemental report maps.
154	Cavette, Chris	Thank you for your comment. The transportation investment package for the Draft Plan was approved as final in November 2016, and it included both of these projects.	No action recommended.

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155	Remick, K	Thank you for your comment. MTC/ABAG agree that incentivizing conversion to electric vehicles is an appropriate climate initiative in urban, suburban, and rural contexts.	No action recommended.
156	West Contra Costa Transportation Advisory Committee	Thanks for your comments on additional transportation solutions for Western Contra Costa County. While these projects were not submitted for evaluation or inclusion in the fiscally constrained investment package, MTC and ABAG remain open and interested in reviewing such projects as part of future long-range planning cycles. The transportation investment package for the Draft Plan was approved as final in November 2016.	No action recommended.
157	Fariss, Marcia	Thank you for your comment. The boards of MTC and ABAG are made up of elected officials who were appointed to represent their cities and counties on the regional level.	No action recommended.
158	Fernwood, Mark	Thank you for your comments. The Draft Plan does not directly "assign" housing to a particular city or location; free market mechanisms are assumed to be the primary driver of the region's housing market in the decades to come. Construction of additional deed-restricted affordable housing merely fills a gap for lower-income households that cannot find market-rate housing they can afford.	No action recommended.
159	Brown, Doreen	Thank you for your comment. The Draft Plan specifically highlights the current housing crisis, featuring a map showcasing the risk of displacement on page 13. The Draft Plan ultimately performs much better on displacement risk than No Project, although the region continues to move in the wrong direction. MTC and ABAG hope that efforts like the Action Plan and CASA will help us change course in the coming years.	No action recommended.
160	Jensen, Cheriell	Thank you for your comment. The boards of MTC and ABAG are made up of elected officials who were appointed to represent their cities and counties on the regional level.	No action recommended.
161	Livermore Amador Valley Transit Authority	Thank you for your comments. MTC and ABAG are fully supportive of "Fix It First" and strive to establish a level playing field for all transit operators. The Draft Plan does invest in the Tri-Valley through road and transit projects, and the Tri-Valley will be served by more frequent BART service in the years to come under the Draft Plan.	No action recommended.

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		Furthermore, as your letter notes, the Draft Plan includes funding for further project development on the BART to Livermore/BART to ACE project.	
162	Shroyer, Toni	Thank you for your comment. Staff will forward this comment to the MTC and ABAG boards.	No action recommended.
163	Schwartz, Jeffrey A.	Thank you for your comment. The boards of MTC and ABAG are made up of elected officials who were appointed to represent their cities and counties on the regional level. It should be noted that RHNA was not updated or altered during this cycle of Plan Bay Area.	No action recommended.
164	Hensel, Peter	Thank you for your comment. Staff will forward this comment to the MTC and ABAG boards. Refer to the EIR comment response for additional information.	No action recommended.
166	Lavaroni, Julia	Thank you for your comment. For the record, development of Plan Bay Area 2040 is required under SB 375. Climate Initiatives are insufficient on their own to meet the CARB target. MTC and ABAG acknowledge that affordability and displacement risk are likely to rise under the Draft Plan and developed the Action Plan for this very reason.	No action recommended.
167	Shiner, Daniel	Thank you for your comment. While traffic congestion is indeed getting worse, it should be noted that Marin County is only taking on 1% of all future regional growth.	No action recommended.
168	Schmid, Greg	Thank you for your comment. More information on the growth forecasts can be found in the Regional Forecast supplemental report; more information about water impacts can be found in the EIR and the associated comment response.	No action recommended.
169	DeGeorge, Andrea	Thank you for your comment. We respectfully disagree with your perspective on the Draft Plan.	No action recommended.
170	Drew, Pam	Thank you for your comment. MTC and ABAG agree that infrastructure is also important for the region, connecting jobs and housing. The Draft Plan is intended to shine a spotlight on housing, which MTC and ABAG believe has now reached crisis levels. Demand has well exceeded supply in every county in the region, including Marin. Because MTC and ABAG have no ability to reduce growing demand to live in the Bay	No action recommended.

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		Area, we instead look for ways to channel that growth in a manner that minimizes impacts on the environment and on existing communities.	
171	Bay Area Regional Health Inequities Initiative	<p>Thanks for your comments; comments related to the EIR will be responded to through that process.</p> <p>With regards to Resilience, staff believes it is important to focus on sea level rise and natural disasters. Language has already been included with regards to vulnerable populations. MTC/ABAG intend to add language about green/resilience-focused jobs to the Economic Development section.</p> <p>With regards to Economic Development, MTC/ABAG will review your comments for potential incorporation into the document.</p> <p>With regards to Housing, MTC and ABAG will consider adding language to Chapter 1 highlighting overcrowding and unhealthy housing. Language has already been included on legislative solutions in the Action Plan; MTC/ABAG will consider underscoring displacement risk in the final draft.</p>	<p>Under the economic development Action Plan, add green/resilience-type jobs under the middle-wage category.</p> <p>Under the economic development Action Plan, add an emphasis on further improving economic modeling capabilities.</p> <p>Expand commentary of overcrowded and unhealthy housing in the problem statement on housing in Chapter 1.</p> <p>Under the housing Action Plan, revise language to more directly address displacement risk.</p>
172	Bay Area Rapid Transit	<p>Thank you for your comments. MTC/ABAG recognize the importance of Fix It First and key core capacity investments, as noted in the Draft Plan. The Draft Plan also includes Clipper 2.0 funding. Staff will consider adding language to the Action Plan related to BART's housing comments. Staff will also consider adding references to middle-wage transit jobs to the Action Plan.</p> <p>With regards to interregional commuting, the Draft Plan recognizes the importance of the megaregion but also aligns with the goal of SB 375 – to provide housing inside the region to avoid inducing growth outside the Bay Area. This does not mean that additional investments at regional gateways should never be considered to provide capacity for existing travelers, but it should be done thoughtfully and strategically.</p> <p>With regards to new technologies, staff has identified this as a priority for the next long-range plan, and MTC/ABAG has already kicked off a next-generation mobility study to determine how to tackle it.</p>	<p>Add top 3 high-cost projects/programs each to Maps 4.4-4.7, including BART Core Capacity, in "Not Mapped" box at bottom.</p> <p>Add reference to housing near transit, and housing development on public lands, in Action Plan housing section.</p> <p>Add reference to transit middle-wage jobs in Economic Development Action Plan.</p>

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173	Legal Services of Northern California	<p>Thank you for your comments. We recognize the unique challenges of Solano County, as well as issues like housing and transportation that cross the 9-county region.</p> <p>With regards to housing, MTC/ABAG acknowledge the value of local measures to address challenges like displacement. The Action Plan does include a suite of proposed actions to tackle affordability challenges by MTC and ABAG, but we concur that the actions you suggest would need to be on a local level.</p> <p>With regards to transportation, MTC/ABAG concur with your comments. The Plan does include bus frequency improvements in Solano County to address the concerns raised, as well as the higher-priority projects mentioned.</p>	No action recommended.
174	Ditching Dirty Diesel Collaborative	<p>Thank you for your comments. With regards to item #1, staff believes the current language is broad enough to capture goods movement projects. Staff believes the current list of partners is sufficient.</p> <p>With regards to item #2, air quality is not a primary issue related to resilience. Staff does not believe these comments are relevant.</p> <p>With regards to item #3, the Action Plan is focused on targets moving in the wrong direction. While health & safety are critical, the Plan does move in the right direction, while falling short of the target.</p> <p>With regards to item #4, staff will consider adding a reference to equity & vulnerable communities under resilience.</p> <p>With regards to item #5, staff will consider adding a reference to health benefits.</p> <p>For additional detail, refer to the EIR comment response.</p>	<p>For item #4 under the Resilience Action Plan, acknowledge EJ and a special emphasis on vulnerable populations.</p> <p>For item #5 under the Resilience Action Plan, acknowledge health benefits of natural infrastructure.</p>
175	Kovac, Ferenc	<p>Thank you for your comments. For residents of suburban and rural communities, the Draft Plan does indeed have a number of investments to improve their transportation experience. State of good repair investments will replace buses and repave roads in these locations. Additional transit services - for example, express buses in Solano County -</p>	No action recommended.

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		will improve their mobility to major job centers. With regards to household size, the UrbanSim land use model used to develop forecasts, as well as the associated control totals, already incorporate the household size issue you raised.	
176	City and County of San Francisco; San Francisco Planning Department; San Francisco County Transportation Authority; San Francisco Municipal Transportation Agency	<p>Thank you for your comments on the Draft Plan and the work completed over the course of the last two years.</p> <p>With regards to housing, MTC and ABAG look forward to working with San Francisco through the CASA effort. We believe the CASA effort can serve as a forum to explore what it would take to reach the Plan's ambitious targets, including policy effectiveness analyses. Staff will also consider your recommended definition of "housing performance" as we revise the Draft Plan. Additional information on the commercial development fee concept should be available through the Land Use Modeling supplemental report.</p> <p>With regards to economic development, staff will review and consider your proposed additions related to construction jobs, automation impacts, and industrial lands. With regards to resilience, staff intends to engage the public on this issue in a greater manner in the years to come through efforts like the Resilient by Design challenge. MTC and ABAG recognize the importance of NGOs and universities in this evolving field, as well as the importance of resiliency in achieving other Plan goals.</p>	<p>Add reference to construction jobs as middle-wage jobs.</p> <p>Add reference to automation in text before Action Plan table, discussing how it may threaten low- and middle-wage jobs in the coming years.</p> <p>Add reference to role of NGOs, universities under technical services in Resilience Action Plan.</p> <p>Add reference to how resilience is necessary to achieve other goals (such as housing) in text before the Action Plan table.</p>
177	Greenbelt Alliance	<p>Thank you for your comments. MTC and ABAG appreciate the recommendations for data sources related to resource areas. Staff will work to incorporate additional resource lands in the maps based on the requirements identified in Senate Bill 375. As water and wildlife are specifically called out in the law, staff intends to focus on incorporating these into the Statutorily-Required Maps supplemental report using data from public agencies. Staff will also consider relabeling Map 1.2 to indicate that it focuses on agricultural lands. As carbon sequestration is not identified in SB 375 as a type of resource lands, staff does not propose to incorporate that layer at this time.</p>	<p>For Map 1.2 in Chapter 1, change the title to "Historical Development Pattern and Agricultural Lands". Also change "Resource Lands" to "Agricultural Lands" in the legend.</p> <p>In the Statutorily-Required Maps supplemental report, retitle all existing Resource Lands maps as "Resource Lands: Agriculture".</p> <p>Add new 9-county map</p>

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		MTC and ABAG appreciate your recognition that the Policy Protection maps are sufficient in terms of data layers shown.	<p>titled "Resource Lands: Water and Wildlife". Use data from Figure 2.12-3 in DEIR for Watersheds and use blue crosshatching to indicate zones. Watersheds need not be labeled. For Use data from California Department of Fish and Wildlife for "Wildlife-Rich Areas" using BioRankSW value of 5 to identify such zones.</p> <p>Finally, fix glitch in legends of supplemental report maps where population numbers are missing.</p>
178	Town of Hillsborough	<p>Thank you for your comments. The UrbanSim land use model incorporates many of the constraints that you raise here - zoning, for example. Additional employment may be a result of additional telecommuting, or businesses run from one's home - it does not necessarily require a commercial property in the town.</p> <p>While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.</p>	No action recommended.
179	Cagnon, Charles	<p>Thank you for your comment. Staff respectively disagrees and notes that many other metrics - ranging from transit ridership to economic output to unemployment - have all improved over the past four years. Ultimately, any long-range plan must be judged based on its performance over the decades, rather than just a narrow window of a few years.</p>	No action recommended.
180	Rames, Linda	<p>Thank you for your comment. Staff disagrees with the assertions related to Chapter 1 - feedback received to date indicates that it is a useful foundation for the more detailed discussion of the housing crisis later in the document. MTC/ABAG agree that local control remains under the Draft Plan; implementation will focus on finding mutually workable solutions on the local</p>	<p>Correct typo on page 77 - "Bay Conservation and Development Commission".</p>

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		level to carry out the Plan's vision. With regards to Marin City, this PDA was specifically approved by the Marin County Board of Supervisors as a location for future growth, given its major bus transit center. With regards to the BCDC reference - we have fixed that typo.	
181	Save Marinwood	Thank you for comments; a brief response to each is provided below. MTC and ABAG are concerned about the risk of displacement impacts, although the analysis shows that under No Project conditions, displacement risk would rise even faster. With regards to automation impacts, we are currently funding a research project to explore this more fully and plan to incorporate in the next Plan cycle. On resiliency, we have included specific action items on the topic of earthquakes. With regards to business cycles, we agree that there will be booms and busts, which is why the job growth forecast is not an extrapolation of the last 5 years but incorporates decades of data. With regards to UrbanSim, we have worked with jurisdictions to resolve data glitches. On sea level rise, we evaluated this through the EIR process and identified mitigations. On quality of life, we believe we have captured many of these issues through specific targets like access to jobs and public health. On infrastructure, local jurisdiction typically pay for costs through impact fees. With regards to representation and outreach, we have interacted with thousands of individuals through the course of the planning cycle; MTC and ABAG reps are local elected officials. With regards to taxation, the Plan does not implement any taxes; it is merely a vision for growth and investment.	No action recommended.
182	Lee, Miguelle	Thank you for your comment. We respectfully disagree with your perspective on the Draft Plan.	No action recommended.
183	Paczonay, Joe	Thank you for your comment. We respectfully disagree with your perspective on the Draft Plan.	No action recommended.
184	Delta Protection Commission	Thanks for your comments on the UGB assumptions in the Draft Plan. The Plan supports future trail development through programmatic categories in the various Bay Area counties, as reflected in the adopted investment strategy.	Add reference to Bay Trails and other regional trails to Resiliency Action Plan. Add mention to Investment Strategy

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			Report of specific major trails.
185	Dizon, Nora	Thank you for your comment. The Draft Plan does include significant funding for highways and streets as well - not only for state of good repair but also for major projects like the I-80/I-680/SR-12 interchange improvements in Solano County. That being said, transit also has a role to play in Solano. Although rail stations remain limited, local and regional bus service expansion in Solano County is included in the fiscally constrained Plan.	No action recommended.
186	California Department of Transportation, District 4	<p>Thank you for your comments. It should be noted that Senate Bill 1 was not signed into law until after the Draft Plan was published. In part, the additional funds generated under Senate Bill 1 are reflected through existing financial assumptions that already forecasted new revenues. This law is consistent with the Draft Plan's "fix it first" prioritization. A more comprehensive integration of Senate Bill 1 revenues into the regional planning process will take place as part of the next Plan cycle; fully incorporating these revenues in the Draft Plan would be infeasible given the timeline for Plan adoption.</p> <p>Refer to the EIR comment responses for all other EIR-related comments.</p> <p>With regard to Plan comments, staff disagrees that the original PBA approach contributed to the housing crisis. Rather, a failure of housing production at all income levels for many decades got us to this point.</p> <p>Staff will consider adding additional information to the Draft Plan indicating how the Plan relates to CTP 2040.</p> <p>Staff will add clarification related to congestion pricing reference on page 49. Staff will also add primary air carrier airports to maps as well as Travis AFB. Caltrans should consider that major airport access projects have already been completed over the past 15 years, including BART to SFO and OAK. Airport-bound trips are fully captured in the travel demand modeling for performance targets analysis. Nearby interchange projects and express lanes will</p>	<p>Add sidebar to Chapter 2 briefly discussing nexus between PBA 2040 and CTP 2040 (state transportation plan), including goals/policies and how local/regional/state can work together</p> <p>Rephrase sentence on page 49 to specifically identify San Francisco's congestion pricing projects as TI and SF cordon (see names on map).</p> <p>Add airport icons for SFO, OAK, SJC, and STS to Maps 4.4-4.7. Add to legend as "major airports". Add Travis AFB with some sort of military icon to Maps 4.4-4.7, and show in legend as "major military base".</p> <p>Add short paragraph to Land Use Modeling Report discussing how land use pattern addresses airport LU compatibility within the influence area (2 mile radius of airport) and how existing zones/general plans likely account for much of that.</p> <p>Add brief reference to airports in resilience</p>

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		<p>provide smaller-scale benefits to airports as shown on Map 4.6 and 4.7. Finally, the investment strategy includes further studies of SJC transit improvements.</p> <p>As part of the land use modeling for Plan Bay Area 2040, existing zoning data from general plans was incorporated into the UrbanSim model. Such zoning would likely reflect land use policies related to airport compatibility. Staff will consider adding a brief discussion of this to the Land Use Modeling report.</p> <p>Staff will consider adding a brief discussion of military needs and nearby projects to the investment strategy supplemental report.</p> <p>Staff will make the necessary revisions to address checklist issues as well.</p>	<p>writeup - SLR, disaster recovery, etc.</p> <p>Add 1-2 paragraphs on military base transport needs and projects to investment strategy; expand airport discussion in investment strategy report as needed.</p> <p>Add 1 paragraph on port, airports, goods movement engagement in Plan to Public Engagement Report; reference Freight Action Plan.</p> <p>Add 1 paragraph on federal CMP compliance to investment strategy report.</p> <p>Add sidebar on EIR mitigations to Plan Document to comply with checklist requirement.</p>
187	San Francisco Estuary Partnership	Thank you for your comment. Issues related to water and water quality are addressed through the Draft EIR.	Add Estuary Partnership to some of the Resilience Action Plan items as a partner.
188	City of Pleasanton	Thank you for your comments on potential transportation improvements in the Tri-Valley. Many of these projects can fit within programmatic categories for Alameda County already funded by Plan Bay Area 2040. With regards to the proposed BART extension, the Draft Plan includes funding for further planning and design activities associated with that project.	No action recommended.
189	Greenbelt Alliance, et al.	Thank you for your comments. With regards to "expanding natural infrastructure" as proposed in the Action Plan, it should be noted that the Action Plan is designed to focus on areas where the Plan is falling short. Given strong performance on target #4, we do not believe it is appropriate to add all your proposals given that they go outside the realm of resilience. We would also note that the Plan already has billions in funding for trails, bikeways, etc., as noted in the Investment Strategy & Project List.	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		Refer to the EIR for a response on the topic of mitigation measures. MTC/ABAG will consider edits to the housing Action Plan to provide greater emphasis on infill housing.	
190	Bay Planning Coalition	<p>Thank you for your comment. MTC/ABAG recognize your concerns about CEQA/NIMBY opposition. Staff believes collaboration with local jurisdictions is the best way to address these challenges. MTC/ABAG is unclear what the comment letter means by "electrifying" BART as it is already powered by electricity (unlike Caltrain). With regards to goods movement, most goods movement projects were non-capacity-increasing and thus exempt from benefit-cost assessment during this cycle; this could be re-evaluated in the next planning cycle.</p> <p>Staff will consider adding a sidebar discussing the nexus between the Draft Plan and BAAQMD's broader regional vision. With regards to resilience, we appreciate the support for addressing governance and funding for resilience in the Action Plan.</p>	Add sidebar on connection between Clean Air Plan and Plan Bay Area 2040.
191	City of Brisbane	Thank you for your comments on the land use pattern incorporated in the Draft Plan. The Draft Plan includes specific language underscoring local control of land use. While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.	No action recommended.
192	Louie, Denise	Thank you for your comments. Staff recommends comment author refer to the Draft EIR, which addresses many of the topic areas raised in her letter.	No action recommended.
193	Public Advocates Inc.	<p>Thank you for your extensive comments.</p> <p>Refer to the EIR for responses on the EIR and Equity Report. Most importantly, MTC/ABAG would like to underscore that the land use pattern does account for displacement - some lower-income residents priced out to edge communities are residing in those places in 2040, which means that the environmental impacts are captured in full. This is the strength of using an economic model like UrbanSim to conduct the analysis.</p>	Add additional specifics to Land Use Modeling Report.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<p>With regards to the Land Use Modeling Report, SB 375 requires the region plan for housing for all - i.e., that there can be no outflow of residents out of the region to become new in-commuters. Refer to the Regional Forecast report for additional information. Staff will consider adding additional information to the Land Use Modeling Report about the specifics on subsidies and inclusionary zoning.</p> <p>Staff disagrees with the comment author's assertions about UrbanSim model biases. Given that the housing market is economically-driven, the use of the UrbanSim model is entirely appropriate. Select policies designed to improve housing affordability can be incorporated, contingent upon sufficient data and time for model calibration.</p> <p>With regards to OBAG modeling, it is possible to incorporate geographical preference. But at this time, many of the other funding requirements requested for modeling by 6 Wins cannot be incorporated. We will consider prioritizing these for future development, contingent on necessary quantitative data to determine policy efficacy.</p>	
194	350 Bay Area	<p>Thank you for your comment. Staff will consider adding a sidebar discussing the nexus between the Draft Plan and BAAQMD's broader regional vision. Staff would note that MTC and ABAG are primarily responsible for the SB 375 targets set by CARB. Other statewide GHG targets are discussed in the EIR.</p> <p>With regards to the EEJ Alternative, the respective boards of MTC and ABAG will have the opportunity to fully consider it in July.</p> <p>Your comments on the land use pattern are noted. Policies are more limited in terms of shifting the location of jobs as compared to housing.</p> <p>With regards to transportation, while expanding the system is important, maintaining what we have already built is</p>	Add sidebar on connection between Clean Air Plan and Plan Bay Area 2040.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		even more important for sustainability. The region cannot focus growth in existing communities without maintaining and modernizing our core assets.	
195	Marin County Department of Public Works	<p>Thank you for your comment on local streets and roads funding. Transit maintenance, operations, and expansion are considered critical to reduce GHG emissions per the requirements of SB 375. Ultimately, there was not enough money in the fiscally-constrained plan to boost local streets & roads funding to the same level as the original Plan.</p> <p>It should be noted that Senate Bill 1 was not signed into law until after the Draft Plan was published. In part, the additional funds generated under Senate Bill 1 are reflected through existing financial assumptions that already forecasted new revenues. This law is consistent with the Draft Plan's "fix it first" prioritization. A more comprehensive integration of Senate Bill 1 revenues into the regional planning process will take place as part of the next Plan cycle; fully incorporating these revenues in the Draft Plan would be infeasible given the timeline for Plan adoption.</p>	No action recommended.
196	Sierra Club	<p>Thank you for your comments. With regards to modal shift, MTC/ABAG acknowledge it is hard to move the needle given that 90% of funding is needed for O&M and modernization - and that funding is limited. This fiscal constraint is a federal planning requirement, however.</p> <p>Refer to the EIR for responses on EIR-related comments, including Climate Initiatives.</p> <p>With regards to your comments on public transit, the Draft Plan fully funds existing operations and expands service on a number of different operators (note that the Needs Assessment focuses on existing operations, while service expansion is detailed in the Project List).</p> <p>Staff will forward along your suggestions with regards to increased local requirements for Complete Streets and OBAG to the MTC/ABAG boards to help move the needle on key targets. MTC Resolution 3765</p>	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<p>currently guides agency requirements on Complete Streets.</p> <p>Sea level rise is appropriately addressed in the Action Plan; both sea level rise and water availability are addressed in the EIR context.</p>	
197	Town of Corte Madera	<p>Thanks for your comment. While there are some differences in housing and job forecasts between the city and the regional plan, the estimates for the Draft Plan reflect the regional control totals and policy assumptions included in the Final Preferred Scenario. For these reasons, they may differ somewhat from local plans.</p> <p>While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.</p> <p>Sea level rise is a major regional challenge - refer to the EIR for a discussion of mitigations, etc.</p>	No action recommended.
198	San Mateo County	<p>Thank you for your comments. For more information, refer to EIR comment responses.</p> <p>With regards to your specific questions, Asian/Other refers to Asian, Pacific Islander, and other multiracial categories. Data was not available to break the pie chart into more detailed slices.</p> <p>MTC and ABAG concur with your comment that greater integration of the Bay Area's fragmented public transit system would be beneficial. In part, the Draft Plan addresses this by investing further in the Clipper 2.0 program to enable even more seamless transfers. Ongoing collaboration between operators is also a critical element to integrating the system; MTC will continue to facilitate this dialogue through the Partnership and other working groups in the coming years.</p> <p>Staff concurs with the comment that ongoing public participation, especially in underserved communities, is critical for the Action Plan. While we recognize the unique character of each site and community in the</p>	<p>Add * to Figure 3.2 next to Other, and add footnote indicating that "* Asian/Other refers to Asian, Pacific Islander, and other multiracial/multiethnic categories."</p> <p>Add reference to public engagement/participation in the context of Action Plan implementation.</p> <p>Add reference to healthy housing/overcrowding reduction to housing Action Plan.</p> <p>Add reference to clean/green jobs in economic development Action Plan.</p> <p>Add reference to broad range of impacts from climate change beyond just SLR in Resilience</p>

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<p>region, no changes are proposed to the adopted preferred land use pattern at this time in Moss Beach and El Granada.</p> <p>Staff will consider adding new language to the Action Plan related to healthy housing, displacement risk, and clean industries. With regards to resilience, staff believes many of these issues are touched on in the economic development Action Plan. We will consider adding language related to other impacts of climate change such as heat impacts.</p>	Action Plan (heat, floods, AQ, wildfires, etc.)
199	East Bay Regional Park District	<p>Thanks for your comments focusing on the resiliency aspect of Plan Bay Area 2040. Staff will consider adding to existing actions to incorporate your suggestions.</p>	Add language to Resiliency Action Plan noting categories of stakeholders that need to be included, including parks agencies that own lands at risk.
200	Santa Clara Valley Transportation Authority	<p>Thank you for your comments on employment; MTC and ABAG also seek a balanced land use pattern in the coming decades. Staff is considering adding a reference to the role of local jurisdictions in housing implementation. Staff will continue to explore successful strategies for housing like Measure A.</p> <p>On housing, staff does not readily have available General Plan projections for comparison. Staff is considering adding a reference towards housing near transit on page 74.</p> <p>Staff will review the Land Use Modeling Report to determine if any enhancements can be made. The final CEQA streamlining map will be made available on the web with the methodology (which was based upon the advice of OPR experts on this matter). Staff will also consider adding density and intensity maps to the web for consistency determination purposes.</p> <p>Refer to EIR comment responses for the remainder of the letter.</p>	<p>Add reference to role of local jurisdictions in housing Action Plan; add a reference to housing near transit to housing Action Plan</p> <p>Consider expanding Land Use Modeling Report with additional detail on modeling assumptions.</p> <p>Add URL to CEQA streamlining map to Statutorily-Required Plan Maps; create ArcGIS Online map for this purpose.</p> <p>Add URL for density/intensity maps; create ArcGIS Online maps.</p>
201	6 Wins Network	<p>Thank you for your comments. See responses to prior 6 Wins letter as well as EIR responses. The Equity, Environment, and Jobs alternative was appropriately updated given time and resources available during the scoping process. Refer to EIR master</p>	Correct typo on page 6-4 of Equity Report - footnote 4 - 1 percent and 7 percent stats are reversed.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<p>response on this topic as well.</p> <p>Staff will correct the typo on displacement risk results in the Equity Report.</p>	
202	City of Livermore	<p>Thanks for your comments on Plan Bay Area 2040 - we appreciate your support for the overall framework and emphasis on housing. We believe the current language is sufficient in terms of identifying that the land use assumptions are not prescriptive but that they are what would be needed to achieve the regional land use vision identified in this Plan. MTC and ABAG do not believe it is unreasonable to assume that inner-ring suburbs, which are not currently producing housing to the same extent as the Tri-Valley, will ultimately accelerate their housing production in the coming decades.</p> <p>With regards to additional transit options, the Draft Plan does include design and planning work for the BART to Livermore project you are referencing. However, the full project - including construction - was not submitted for consideration during the Call for Projects. Staff will review the merits of that project in a future planning cycle.</p>	No action recommended.
203	Bay Area Stormwater Management Agencies Association	<p>Thanks for your comments. MTC/ABAG recognize the importance of sustainable streets that are resilient to flooding, sea level rise, etc. Because the Action Plan is focused on actions MTC and ABAG could lead - and your comment focuses on changing local jurisdictions' decision-making - staff will consider to incorporate your comment under the technical services action item. We will also consider your other proposed revisions in that context, while recognizing that related impacts on water addressed through the EIR process.</p>	<p>Rephrase last sentence of action #4 under Resilience to "Integrate resilience into Priority Development Area (PDA) planning and Complete Streets requirements".</p> <p>Better acknowledge other impacts from climate change other than sea level rise in the Action Plan.</p> <p>Rephrase second sentence of action #5 under Resilience to highlight air quality and urban heat island effects.</p>
204	Vision Zero Network	<p>Thanks for your comments on road safety. It should be noted that MTC will be setting annual targets on road safety starting in 2018 which may address some of the concerns raised. In part, the Draft Plan's limited progress on health and safety is due to limited funding for projects beyond operating</p>	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		and maintaining the existing system, an inability to fully capture safety projects' benefits, and a highly-mature region with existing built-out infrastructure.	
205	Petritz, David	Thank you for your comment. Staff cannot identify any location in the document where Sonoma, Solano and Napa are identified as exurbs. With regards to growth, the Plan forecasts most growth will occur in the Central and South Bay, with more limited development along corridors like US-101/SMART. PCA determinations are made after cities submit these proposals to MTC/ABAG.	No action recommended.
206	City of Vacaville	Thank you for your comment. Staff will inform the boards of MTC and ABAG of your support for Main Streets EIR alternative. With regards to Maps 4.4 and 4.5, the maps focus on rail, ferry and BRT projects. The Draft Plan does indeed include additional funding for bus service expansion in Solano County to connect Solano residents to the rest of the Bay Area.	Add footnote to Map 4.5 indicating that map is zoomed in as no existing or proposed light rail and bus rapid transit lines are included in the fiscally-constrained plan for the North Bay.
207	California Coastal Commission	Thank you for your comments. Staff recommends the commenter refer to the EIR, which addresses many of the topic areas raised in this letter.	Add California Coastal Commission to several items for the Resiliency Action Plan.
208	Pfeifer, Linda	Thank you for your comment. Additional information on the growth projections is included in the Land Use Modeling supplemental report.	No action recommended.
209	East Bay Transportation & Logistics Partnership	Thank you for your comment. MTC/ABAG appreciate your support for Plan Bay Area 2040.	No action recommended.
210	City of Sunnyvale	<p>Thank you for your comment. While there are some differences in housing and job forecasts between the city and the regional plan, the estimates for the Draft Plan reflect the regional control totals and policy assumptions included in the Final Preferred Scenario. For these reasons, they may differ somewhat from local plans.</p> <p>While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.</p>	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
211	Pfeiff, Donna	Thanks for your comment. The Draft Plan does include funding for additional Golden Gate express bus service in line with your suggestion - this information can be found in the Project List database on the Plan Document website.	No action recommended.
212	Bourret, Faye	Thank you for your comment. Staff will forward this comment to the MTC and ABAG boards.	No action recommended.
213	Unknown	Thank you for your comment. We respectfully disagree with your perspective on the Draft Plan.	No action recommended.
214	R, Gilberto	Thank you for your comment. MTC and ABAG recognize your concerns about housing, the environment, and transportation. We believe that the Draft Plan addresses many of these issues head on, while identifying solutions in the Action Plan to take short-term action and make further progress.	No action recommended.
215	Transportation Solutions Defense and Education Fund	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	Clarify that CTPs are a basis for Plan but projects must go through performance analysis in Investment Strategy Report. Add info on Climate Initiatives strategies to Chapter 4. Post final RTP checklist as a supplemental report on Plan website.
216	Wong, Karolyn	Thank you for your comment. Staff recognizes the concerns of the comment author with regards to racial inequities. While it was not possible to forecast where different racial groups will live in the future using existing models, this issue is addressed in the Equity Analysis Report in greater detail.	No action recommended.
217	Alameda, Contra Costa, Marin and San Mateo Local Agency Formation Commissions (LAFCos)	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
218	Gibson, Kenneth	Thank you for your comment. Additional details on the Plan can be found in the numerous supplemental reports at 2040.planbayarea.org. With regards to water pricing, that topic is generally outside the scope of the regional transportation/land use plan.	No action recommended.
219	Citroen, Leslie	Thank you for your comment. The Draft Plan does attempt to tackle the jobs-housing mismatch; however, existing policy levers are more limited in terms of encouraging job growth in inland locations.	No action recommended.
220	Solomon, Barbara	Thank you for your comment. Staff will forward this comment to the MTC and ABAG boards.	No action recommended.
221	City of Dublin	<p>Thank you for your comment. While there are some differences in housing forecasts for Dublin PDAs, the estimates for the Draft Plan reflect the regional control totals and policy assumptions included in the Final Preferred Scenario. For these reasons, they may differ somewhat from local plans.</p> <p>While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.</p>	No action recommended.
222	Arbuckle, Nancy	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	No action recommended.
223	City of Sausalito	<p>Thanks for your comment. While there are some differences in housing and jobs forecasts for Sausalito, the estimates for the Draft Plan reflect the regional control totals and policy assumptions included in the Final Preferred Scenario. For these reasons, they may differ somewhat from local plans.</p> <p>While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.</p>	No action recommended.
224	City of San Jose	Thank you for your comments. As noted in prior letters to San Jose, MTC and ABAG refined the land use policy assumptions between the Draft and Final Preferred to better align with San Jose's vision for	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<p>housing and jobs. Because the regional plan is based on a different forecast and a suite of policies - and is generated based on an economically-driven model rather than a traditional visioning process - the growth distribution was expected to be similar to but not the same as Envision San Jose 2040.</p> <p>Staff believes the analysis of the Big Cities alternative worked to capture many of San Jose's concerns about the insufficient jobs growth in San Jose.</p> <p>While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.</p>	
225	Ditching Dirty Diesel Collaborative	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	No action recommended.
226	City and County of San Francisco	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	No action recommended.
227	Peak, Tina	<p>Thank you for your comment. Under the terms of MTC and ABAG's settlement agreement with the Building Industry Association, all EIR alternatives must have the same control totals. Therefore it is not possible to evaluate a so-called "zero growth alternative" while complying with the settlement agreement.</p> <p>Refer to the EIR for responses on water supply/availability.</p> <p>Nearly all regional plans across the country anticipate more jobs than housing units, because multiple employed residents often share a single housing unit ("two-income households"). Plan Bay Area 2040 does start to address the housing shortage the region faces by increasing the rate of housing production going forward.</p>	No action recommended.
228	Tuolumne River Trust	<p>Thank you for your comment. Refer to the EIR for a response on water issues raised, as well as proposed corrections to data tables.</p> <p>The Draft Plan does make progress towards addressing the jobs/housing imbalance. The office caps policy was primarily included to</p>	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		incorporate caps already on the books, rather than going beyond that. Additional job growth in San Francisco would align well with the robust housing growth that city is taking on. Your recommendation to study an alternative with drastically different job growth totals would conflict with MTC/ABAG's settlement agreement with the Building Industry Association.	
229	Magdole, John	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	No action recommended.
230	Bay Area Water Supply and Conservation Agency	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	No action recommended.
231	City of Santa Rosa	<p>Thank you for your comment. While there are some differences in housing and jobs forecasts for Santa Rosa, the estimates for the Draft Plan reflect the regional control totals and policy assumptions included in the Final Preferred Scenario. For these reasons, they may differ somewhat from local plans.</p> <p>While the jobs and housing growth forecasts have not changed since the Final Preferred Scenario was adopted in November, MTC/ABAG staff would be willing to meet in-person or by phone to further discuss your continued concerns.</p>	No action recommended.
232	City of San Rafael	<p>Thank you for your comment. With regards to OBAG 2, that program was finalized by MTC in 2016 and will not be altered as a result of language in the Plan Document. To clarify, all the Plan says is that funds are distributed based on population, past housing production, and future housing commitments. While cities generally do not directly build housing, a city can be more or less supportive of new development going forward to alter its competitiveness for funding.</p> <p>With regards to the water comments, refer to the EIR response.</p>	No action recommended.
233	Marin Audubon Society	Thank you for your comment. The appropriate forum for discussing additional goals or targets, given that goals and targets were approved in 2015 by MTC and ABAG, would be at the start of the next Plan cycle.	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<p>Many of the issues raised are dealt with in the EIR context.</p> <p>With regards to SR-37, the Plan includes funding for future studies to improve that corridor. However, construction projects on SR-37 were not submitted during the Call for Projects process.</p> <p>Refer to the EIR for responses to remaining comments.</p>	
234	Caltrain	<p>Thank you for your comment. Caltrain Electrification is showcased on pages 50-51 as a major regional project. The CalMod Phase 2 project within Santa Clara County is recognized in the fiscally-constrained Project List posted on 2040.planbayarea.org/reports.</p> <p>MTC/ABAG will review the Caltrain Electrification project costs and contact your staff with any further questions. Refer to the EIR response regarding crowding.</p>	No action recommended.
235	Brown, Monica	<p>Thank you for your comment. Plan Bay Area 2040 does not include any major capital projects on SR-37; rather, it funds ongoing planning. The toll road proposal would be evaluated in a future planning cycle, assuming that the North Bay counties' CMAs submit it for consideration.</p> <p>With regards to public transit, the Draft Plan invests in additional local and express bus service in Solano County, as well as a new Fairfield/Vacaville Capitol Corridor station for intercounty mobility.</p>	No action recommended.
236	Delta Stewardship Council	Thank you for comments. We look forward to working with your agency on implementation in the years to come.	No action recommended.
237	Eklund, Pat	<p>Thank you for your comment. MTC and ABAG do not plan on adding a water section to the Action Plan. However, this topic has been appropriately addressed through the EIR process. Water planning typically takes place on a local rather than a regional level. However, staff is adding a brief discussion related to the benefits and challenges associated with growth (including water availability). Staff is also adding a reference to the role of the Estuary Partnership in the Action Plan.</p> <p>At this time, MTC/ABAG do not propose</p>	<p>Add discussion related to the benefits and challenges posed by growth, including localized traffic, school crowding, water constraints, etc.</p> <p>Add Estuary Partnership to some of the Resilience Action Plan items as a partner.</p>

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<p>changing the technical assumptions of the land use aspect of the Draft Plan, as this would affect the adopted forecasted development pattern. As noted in the Draft Plan, these are illustrative policies but demonstrate what sorts of policies might help achieve the land use vision established in the Plan.</p> <p>Staff concurs with comments associated with sea level rise. This issue is at the core of the Resiliency Action Plan, and staff will provide technical assistance to local jurisdictions in the years to come. This issue is also explored further in the EIR.</p> <p>With regards to transportation funding levels, the investment strategy outlined in the Draft Plan matches the Final Preferred Scenario adopted by MTC and ABAG in November 2016.</p> <p>With regards to UrbanSim, staff will continue to review all options available for land use models in the years to come. However, at this time, MTC/ABAG staff believe that UrbanSim is the best available tool to test the effects of policies on the regional growth pattern and to craft Plan Bay Area 2040.</p>	
238	AC Transit	<p>Thanks for your comments. With regards to mode shift, MTC and ABAG recognize the challenges associated with mode shifts in a funding-constrained environment. We have sought to fully fund many O&M categories, but this leaves limited funding for expansion projects. Given that most expansion projects are not traditional highway investments, funding constraints are the primary challenge, not the allocation breakdown between roads and transit.</p> <p>With regards to transbay constraints, MTC/ABAG believe that the growth pattern in the Plan starts to tackle the demand side of the equation. Remember that the land use pattern is not a mere vision - it is an economic forecast based on specific policy actions to shift growth. These actions were selected, in part, to better balance housing and jobs in the East Bay.</p> <p>Given that transit operating accounts for the</p>	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		majority of all dollars in the Plan, staff believes the current levels included in the Draft Plan are sufficient given funding constraints. Additional information is available in the Transit Needs Assessment; service enhancements are expected on AC Transit, both in terms of frequency boosts and new BRT lines. We would be happy to consider additional AC Transit BRT projects if they are submitted in a future Plan cycle. Only International & San Pablo BRT lines were submitted this cycle, and both were ultimately included in the Plan.	
239	Zone 7 Water Agency	Thank you for your comment. MTC and ABAG believe that water resources are appropriately discussed in the EIR context. Staff is adding language about challenges related to growth to the Plan Document to briefly acknowledge this issue.	Add discussion related to the benefits and challenges posed by growth, including localized traffic, school crowding, water constraints, etc.
240	SV@Home	<p>Thank you for your comment. Staff will review the Housing Action Plan to see if any additional specificity can be added. With regards to implementation, MTC's Vital Signs already tracks jobs-housing fit through housing affordability and jobs by wage level metrics.</p> <p>At this time, MTC/ABAG do not propose changing the technical assumptions of the Draft Plan, as this would affect the ultimate land use distribution. MTC/ABAG believe the 10 percent assumption is already aggressive in many communities with PDAs, while others will go above and beyond. For example, San Francisco recently reduced its share with the goal of increasing the total number of affordable units produced.</p> <p>With regards to transit, the Plan continues to invest in transit service and expansion to serve underserved communities.</p>	No action recommended.
241	Public Advocates et al.	Thank you for the comments included in your petition. As discussed above, staff met directly with 6 Wins to discuss these issues and has developed revisions accordingly.	Make changes to the Action Plan to reflect areas of agreement between 6 Wins and MTC/ABAG based on discussion in recent meetings.
243	Alameda County Water District	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
244	Diermeyer, Sonia	Thank you for your comments. As most of these comments are related to the EIR, please refer to the EIR response.	No action recommended.
WEB-1	Richard Hall	Thank you for your comment. Please refer to the original Plan Bay Area EIR master response discussing the benefits of smart growth to better understand how higher-density development yields transportation benefits for the region.	No action recommended.
WEB-2	Annemarie Kemeny	Thank you for your comment. The Plan does envision a changing workforce with service sector jobs rising - but jobs in resources and manufacturing (at a greater risk from automation) declining over time. Staff will review to determine if additional clarification can be added to the Draft Plan or its supplemental reports.	Add discussion of trends affecting employment forecast, including automation, to Land Use Modeling Report.
WEB-3	Roderick Llewellyn	The full project list is included in the Reports section of the Plan Bay Area 2040 Document website under Project List.	No action recommended.
WEB-4	Robert S. Allen	Thank you for your comment. Given that the Call for Projects took place in 2015-16, staff recommends sharing this project concept with your CMA for submission in the next long-range planning cycle.	No action recommended.
WEB-5	Aaron Sage	Thank you for your comment - MTC/ABAG are correcting this typo.	Correct photo caption to note that Oakland is the third largest city.
WEB-6	Marian Paroo	Comment field was blank.	No action recommended.
WEB-7	Jessica	The Draft Plan website has a translation feature for Spanish and Chinese - this aligns with MTC's Public Participation Plan requirements.	No action recommended.
WEB-8	Robin Furner	The online comment system allows you to submit a comment to the DEIR.	No action recommended.
WEB-9	Stephen Bingham	Thank you for your comment. MTC and ABAG did explore pricing options as part of the Environment, Equity, and Jobs alternative studied in the EIR context.	No action recommended.
WEB-10	Mary Holman	Thank you for your comment. Staff will forward this comment to the MTC and ABAG boards.	No action recommended.
WEB-11	Alan Scotch	Thank you for your comment. It should be noted that Senate Bill 375 requires that Plan Bay Area 2040 focus on the statutory greenhouse gas reduction target, as well as the statutory housing target to house the region's population.	No action recommended.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
WEB-12	L Edson	Thank you for your comment. Staff will forward this comment to the MTC and ABAG boards.	No action recommended.
WEB-13	Robert Miltner	Thank you for your comment. Staff will forward this comment to the MTC and ABAG boards.	No action recommended.
WEB-14	Susan	Thank you for your comment. The Plan itself does not affect the economic makeup of the region; those trends are occurring outside of the scope of the Plan and the future forecasts merely reflect them.	No action recommended.
WEB-15	Kevin Burke	Thank you for your comment. MTC and ABAG have historically advocated for housing reforms similar to those suggested in your comment, and the agencies are likely to continue doing so in the future.	No action recommended.
WEB-16	Alfred Twu	Thank you for your comment. Priority development areas are nominated by local jurisdictions, meaning that MTC and ABAG do not currently have the authority to designate additional areas per your suggestion.	No action recommended.
WEB-17	Stephen Nestel	Thank you for your comment. Staff will forward this comment to the MTC and ABAG boards.	No action recommended.



Attachment C - Agenda Item 7c

HANDOUT COMMISSION Agenda Item 3
METROPOLITAN Bay Area Metro Center
TRANSPORTATION 375 Beale Street
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Memorandum

TO: MTC Commission DATE: June 21, 2017
FR: MTC Policy Advisory Council W.I. 1114
RE: Plan Bay Area 2040 Action Plan: Policy Advisory Council Suggestions

At its Wednesday, May 10, 2017 meeting, the Policy Advisory Council held small group discussions on the Plan Bay Area 2040 Action Plan subjects. At its June 14, 2017 meeting, the Council subsequently met again to reduce the discussion down to a smaller list of policy suggestions to forward to the Commission for consideration. Below is that list that relates to the three subject topics of the Action Plan: housing, economic development and resilience.

Housing

- Use publicly-owned lands* to create housing that is affordable (at higher densities)
- Create land banks and/or trusts to create housing that is affordable (at higher densities)
- Incentivize developers to create workforce and low-income housing
- Develop policies to retain existing housing and avoid displacement, including:
 - Incentivize landlords to keep rents/housing affordable
 - Assist low-income renters
- Incentivize the creation of accessory dwelling units or secondary units on existing housing stock

Economic Development

- Consider a means-based fare (that includes student-discounted or free fares) with the goal of regional implementation and coordination
- Study the possibility of repurposing existing lands as mixed-use centers, inclusive of housing
- Improve Plan Bay Area modeling to more effectively incorporate jobs and economic development impacts

Resilience

- Create a Regional Resource Center in order to:
 - Consolidate efforts and information
 - Educate the public
 - Provide technical assistance
 - Provide a resource for speakers
 - Provide a resource for data
- Expand the focus of the Action Plan to incorporate social resilience, vulnerability and impact
- Search for an ongoing funding source for resiliency implementation (as opposed to strictly planning funds)
- Create a regional policy to reopen road facilities for access to as many transportation modes as possible soon after a major disaster, rather than leaving roads/systems closed to all modes simply because they are not accessible to some modes.
- Define which agency has statutory authority over which resilience-related issues (does there need to be one regional leadership group for this purpose?)

*lands owned by transit agencies, government agencies, school districts, etc.

MTC/ABAG Initiatives to Address Affordability and Displacement

Background

Plan Bay 2040 focuses on the region's chronic housing affordability challenges including the ongoing and vexing problem of displacement. While the Plan improves the region's forecasted performance on these issues in comparison to the "No Project" scenario, conditions are expected to worsen over time. By 2040, the share of lower-income household income required for housing and transportation costs is expected to increase by 13 percentage points and the share of lower-income households at risk of displacement is expected to increase by 5 percentage points.

While these are disappointing results, Plan Bay Area 2040—a long-range regional blueprint for growth and investment—has only limited tools to correct these trends. At its core, the Plan comprises a transportation investment strategy and a forecasted development pattern—the latter of which is statutorily barred from pre-empting local land use authority. Moreover, the regional agencies currently lack the tools, resources, and authority to directly address identified issues of production, affordability, and displacement. Multiple entities at the local, regional, and state levels must take significant corrective steps to address these problems. This shared commitment forms the foundation of the Action Plan, which recommends a series of specific steps, including the advancement of regional self-help funding and financing solutions, state legislative and funding solutions, and evaluation of further opportunities to connect transportation funding to housing production and performance.

The draft Action Plan has undergone significant revisions in response to public comments and in consultation with affordable housing and equity advocacy groups. At the same time, MTC/ABAG staff acknowledge the deep frustration and sense of urgency that the regional agencies should do more to analyze, diagnose, or direct funding to correct these issues. The purpose of this document is to describe the planning, funding, and policy work undertaken by the regional agencies over the last several years on affordability and displacement, and reiterate the agencies' commitment to address these issues moving forward within the constraints of our authority. Specifically, the document:

- Reviews the Plan Bay Area 2040 approach to forecasting and analyzing the risk of displacement;
- Describes past and present ongoing initiatives by MTC/ABAG on affordable housing and displacement;
- Describes past and present ongoing initiatives by MTC on planning and funding transportation solutions for disadvantaged populations; and
- Lays out next steps with an emphasis on the Plan Bay Area 2040 Action Plan and CASA, the Committee to House the Bay Area.

Plan Bay Area 2040 Approach to Forecasting the Risk of Displacement

Plan Bay Area 2040 describes a range of factors contributing to the lack of affordable housing in the Bay Area, including state and local regulations and tax policy, a lack of funding, and the gentrification pressures affecting the stock of "naturally occurring" affordable housing in higher density, transit-rich areas. These factors, coupled with the lack of adequate tenant protections, has worked to accelerate the displacement of lower-income residents and even many businesses from the region's core urban areas.

In response to this stark reality, Plan Bay Area 2040 worked to include a specific performance target related to displacement risk. While there is currently no precise tool available to predict which and what number of households would be displaced from a given neighborhood, current research allows planners to measure existing and future displacement risk. The methodology used is based on work

by the Regional Early Warning System for Displacement (REWS) study by the Center for Community Innovation at UC Berkeley (www.urbandisplacement.org). It is important to note that this approach highlights areas where lower-income households are potentially vulnerable to displacement; however, this study does not “predict” which specific neighborhoods will experience displacement, or how many households will be displaced in the future.

With a numeric target for ensuring displacement risk does not increase between the baseline and horizon years, ABAG and MTC are signaling the importance of this issue at the regional level. At the same time, regional agencies and stakeholders recognize that more specific local strategies will be needed beyond the scope of the Plan. The broader trend of risk is a function of job growth and wage disparities without an equal or greater expansion of adequate affordable housing at all income levels. The performance target relies upon a consistent geography as target #6 (affordable housing), emphasizing minimization of displacement risk for low- and moderate-income renters who live in PDAs, TPAs (transit priority areas, per Senate Bill 375), or high-opportunity areas (as defined under target #6). This ensures consistency between the region’s goals for affordable housing and minimization of displacement risk.

Displacement risk was calculated by measuring the decline of low and moderate-income households in PDAs, TPAs, or high-opportunity areas between the target baseline year and 2040. In order to forecast the risk of displacement in 2040 relative to conditions in the baseline year, the analysis compared the following data points [note that “lower-income” is defined as including both low- and moderate-income households; i.e., quartiles 1 and 2 for household income]:

- Number of lower-income households in the target baseline year in each TAZ; and
- Number of lower-income households in each TAZ in 2040 based on UrbanSim output (land use model)

Due to model limitations which make it impossible to identify household tenure by income level, all lower-income households are included in the target calculation. Only zones designated as PDAs, TPAs, or high-opportunity areas that lost lower-income households are included in the target calculation per the adopted language.

The analysis estimated which zones (i.e., TAZs) gained or lost lower-income households; those zones that lost lower-income households over the time period would be flagged as being “at risk of displacement.” The share of lower-income households at risk of displacement would be calculated by dividing the number of lower-income households living in TAZs flagged as PDAs, TPAs, or high-opportunity areas with an increased risk of displacement by the total number of lower-income households living in TAZs flagged as PDAs, TPAs, or high-opportunity areas in 2040.

The relative risk of displacement for each Plan scenario was estimated using this methodology, comparing to trends between year 2000 and year 2010 to establish baseline risk levels. Relative risk is varied between scenarios, since each scenario allocated households across the region based on different growth patterns.

Displacement risk was also considered in the Plan Bay Area 2040 Equity Analysis Report, which performs further analysis on the risk by location (including inside and outside Communities of Concern¹). The analysis concludes that the proposed Plan decreases the share of affordable housing units in Communities of Concern by less than one percentage point. Despite this relatively neutral result, the proposed Plan performs better than two of the other three EIR alternatives in Communities

1 Communities of Concern are defined by MTC as census tracts that have a concentration of both minority and low-income residents, or that have a concentration both of low-income residents and any three or more of the following six disadvantage factors: persons with limited English proficiency, zero-vehicle households, seniors aged 75 years and over, persons with one or more disabilities, single-parent families, and renters paying more than 50 percent of their household income on housing

of Concern. The exception is the EEJ scenario, which increases the share of affordable housing by 3 percentage points. The proposed Plan, however, performs better in the remainder of the region, which is the area outside Communities of Concern but still within PDAs, TPAs and high opportunity areas, by increasing the share of affordable units by 3 percentage points. This is better than, or as good as, the other EIR alternatives.

The Equity Analysis Report's study of displacement risk was conducted in close cooperation with the Regional Equity Working (REWG) group, which advises MTC/ABAG staff and is composed of stakeholders from around the region representing low-income and minority communities; seniors and persons with disabilities; staff representing local jurisdictions, transit agencies and county congestion management agencies (CMAs); public health departments; and community-based organizations and advocacy groups. All REWG meetings were open to the public. Moving forward, MTC/ABAG will continue to refine the methodology, data collection and modeling capabilities for the equity analysis. For more information, please refer to the Plan Bay Area 2040 Equity Report at <http://2040.planbayarea.org/reports>.

MTC/ABAG Initiatives on Affordable Housing and Displacement

Recognizing the increasing link between transportation and land use policy including housing affordability, MTC has used its authority and creativity within the legal framework of individual transportation funding sources to create incentives for the production of housing and focused growth. MTC has played this role since the late 1990s through the Transportation for Livable Communities (TLC) Program, the Housing Incentive Program, the PDA Planning program and most recently through the One Bay Area Grant (OBAG) program.

In its role as the federally-designated metropolitan planning organization (MPO) and state-designated Regional Transportation Planning Agency (RTPA), MTC programs and allocates on the order of \$1.5 billion in transportation dollars annually. Of the amounts it programs and allocates, nearly 100 percent is stipulated by law or regulation to be used for transportation purposes. Transportation funding resources have detailed eligibility requirements and restrictions, and MTC has worked within these requirements to encourage a link between housing and transportation. Since MTC does not have the authority to take transportation dollars and use them for housing purposes, MTC has been judicious when linking transportation funding eligibility to housing policies.

MTC's One Bay Area Grant (OBAG) Program provides the clearest example of this transportation and housing link. OBAG is composed of federal transportation program apportionments from the regional Surface Transportation Block Grant Program (STP) and Congestion Mitigation and Air Quality Improvement (CMAQ) Programs. STP funds, in particular, provide more flexibility than most other federal transportation funding sources. Now known as *OBAG 2*, the second round of OBAG funding is projected to total roughly \$916 million to fund projects from 2017-18 through 2021-22. The OBAG 2 program is divided into a Regional Program, managed by MTC, and County Program, managed by the nine Bay Area Congestion Management Agencies (CMAs).

The OBAG 2 County Program totals \$386 million from FY 2018-2022. It provides funding directly to the nine Bay Area counties by a formula that takes into account both current population and future housing growth, for investment in a variety of transportation projects selected locally, with an emphasis on investments in PDAs. By contrast, most transportation fund sources allocated by formula rely on distribution factors such as road miles and gasoline sales. In the approval of OBAG 2 in July 2016, the MTC Commission also took action on several housing –related items related to the County program, including 1) a requirement that CMAs must adopt a specific scoring methodology for funding allocation to projects within PDAs or Transit Priority Areas (TPAs) that rewards jurisdictions with the most effective housing anti- displacement policies; and 2) a requirement that general law cities and counties must adopt a surplus land resolution by the date the

CMAs submit their OBAG 2 project recommendations to MTC. The resolution must verify that any disposition of surplus land undertaken by the jurisdiction complies with the State Surplus Land Act, as amended by AB 2135 in 2014.

Staff submitted detailed guidance to the CMAs on these issues via a technical memorandum dated October 7, 2016. This is located here:

http://mtc.ca.gov/sites/default/files/OBAG2_Housing_Policies_Guidance_October_2016.pdf

In terms of regional programs, the following OBAG 2 programs place a strong emphasis on affordable housing or anti-displacement:

PDA Planning Program- Over the last several years, MTC has awarded 51 PDA Planning grants, which have resulted in increased planning capacity for 70,000 housing units, 110,000 jobs and 26 million square feet of commercial development. In OBAG 2, the PDA Planning Program will give priority to cities with high risk of displacement in order to support the development of local policies and programs. A portion of this program will also be dedicated to the Community-based Transportation (CBTP) grant program. These locally-led plans address the mobility needs of low-income households in the region's 35 Communities of Concern. Grant funds will be used to update CBTPs that are in many cases more than 10 years old.

Housing Production Incentive- As part of the OBAG 2 framework, MTC will develop a challenge grant program- the "80K by 2020 Challenge"- for the production of affordable housing. The purpose of the program is to reward jurisdictions that produce the most housing units at the very low, low, and moderate income levels. The proposed concept for this program is to set a six year target for production of low and moderate income housing units (2015 through 2020) based on the housing unit needs identified through the Regional Housing Needs Allocation (RHNA) for 2014-22. The target for the proposed challenge grant period is 80,000 low and moderate income units (35,000 very low, 22,000 low and 25,000 moderate units). The units would need to be located in PDAs or in TPAs. Additionally, to be credited towards reaching the production targets, very low and low income units need to be deed restricted; moderate income units do not require deed restriction to be credited in the program. At the end of the production challenge cycle, MTC will distribute grant funds to the jurisdictions that contribute the most toward reaching the regional production target. To keep the grant size large enough to serve as an incentive for housing production, the grant program would be limited to no more than the top ten producers of affordable housing units, or fewer, if the 80,000 unit target is reached by less than ten cities. Staff will provide annual progress reports on production of affordable housing units.

Naturally-Occurring Affordable Housing (NOAH)- Consistent with the OBAG 2 framework and PDA Planning Program, this revolving loan fund will be established as a complement to the existing Transit Oriented Affordable Housing (TOAH) loan products for new construction. In 2011, MTC committed \$10 million in seed funding to the TOAH fund, which provides flexible, affordable loans to developers for the purchase of properties near transit for the development of affordable housing, retail space, and other critical services such as child care centers, fresh food outlets and health clinics. By supporting growth along transit corridors in Priority Development Areas, TOAH promotes compact land use patterns, which aligns with the region's Sustainable Community Strategy. MTC committed an additional \$10 million to the fund in 2014. NOAH loans would be used to buy apartment buildings to create long-term affordability where displacement risk is high and to secure long-term affordability in currently subsidized units that are set to expire. NOAH investments will be made in PDAs or Transit Priority Areas.

In a few limited cases, MTC has been able to partner with a sales tax agency to exchange transportation dollars for more flexible funds to help fund pilot programs – TOAH and NOAH – that are direct investments in housing or housing loan programs. The dollars that have been used to fund these \$20 million in investments are not an on-going or reliable funding stream so MTC has not scaled up these programs or relied upon them in the assumptions about future funding programs.

MTC/ABAG also provide other venues for regional coordination and advocate for state legislative change on behalf of the region. A sampling of these activities is as follows:

Local funding tools and mechanisms - MTC/ABAG will continue to advocate for finding a replacement for redevelopment funding that was lost in 2011. Redevelopment Agencies (RDAs) had the authority to assemble parcels and pay for infrastructure improvements necessary to promote infill development. RDAs were the largest source of funding and financing for these improvements as well as affordable housing in the state. With the demise of RDAs, the Bay Area lost about \$1 billion in annual tax-increment financing for affordable housing projects, critical infrastructure improvements, and economic development projects in designated areas.

Federal funding for housing and community development programs – MTC/ABAG will continue to advocate for stabilizing and potentially growing housing-related programs and funding at the federal level, including the HOME Investment Partnership Program and the Community Development Block Grants, which help local jurisdictions increase the supply of a variety of workforce housing opportunities. In recent decades, though, funding for both programs has fallen drastically.

Ongoing Collaboration – MTC/ABAG will continue convene regional committees for housing including the Housing Forum, Housing Subcommittee of the Regional Planning Committee, and the upcoming CASA initiative, which is described in more detail below.

MTC's Initiatives on Funding Transportation Solutions for Disadvantaged Populations

Minorities, low-income residents, and other transportation-disadvantaged populations directly benefit from investments in public transportation. In the Bay Area, low-income residents accounted for 25 percent of the region's total population in 2014, but they took 52 percent of the region's transit trips in the same year. Similarly, residents from racial and ethnic minorities represent 59 percent of the region's population, and yet account for 62 percent of all transit trips. Recognizing the key role of the public transportation system in meeting the mobility and access needs of the region's low-income, minority, and other transportation-disadvantaged populations, Plan Bay Area 2040 allocates almost 64 percent of the total plan revenue, or about \$194 billion of \$303 billion over a 24-year period, to the operations, modernization and expansion of public transportation. That two-thirds funding commitment is considerably in excess of public transit's market share of all trips.

MTC's commitment to addressing the mobility and access needs of low-income, minority and other transportation-disadvantaged populations such as seniors and people with disabilities is reflected in the ongoing programs and planning efforts described below.

Community-Based Transportation Planning Program. In 2002, MTC created the Community-Based Transportation Planning (CBTP) Program to provide planning grants for low-income communities to identify and prioritize transportation projects, programs and services that would improve their residents' mobility and access. Funding is provided to county congestion management agencies (CMAs) to implement a collaborative planning process involving residents, community- and faith-based organizations, transit operators, local jurisdictions, and

MTC, among other stakeholders. As of December 2016, more than 35 CBTP grants have been completed across the region. The second round of the One Bay Area Grant program (OBAG 2), adopted in 2016, includes \$1.5 million to update these plans, and to develop new community-based plans for Communities of Concern identified in the proposed Plan.

Lifeline Transportation Program. In 2005, MTC created the Lifeline Transportation Program (LTP) to fund projects and programs that meet mobility and access needs of low-income populations in the region. Since 2005, MTC has awarded over \$255 million in LTP funds to more than 280 projects, across all nine counties. LTP projects are administered by CMAs and involve determining the eligibility of grant proposals and appointing local review teams to evaluate outcomes. LTP projects must address transportation gaps or barriers identified in CBTP or other local planning efforts in low-income neighborhoods. The type of projects funded through LTP include: fixed-route bus service, transit stop improvements, pedestrian and bicycle access improvements, transportation services for seniors and children, community shuttles, and auto loan programs. Plan Bay Area 2040 directs an additional \$800 million, or \$33 million annually, to continue the LTP.

Regional Means-Based Transit Fare Study. In 2015, MTC launched a study to evaluate the feasibility and effectiveness of implementing a transit fare subsidy program based on household income. The Regional Means-Based Transit Fare Study includes three main objectives: make transit more affordable for low-income residents, move toward a more consistent regional standard for fare discounts, and avoid worsening transit operators' service levels or financial performance. MTC formed a technical advisory committee, composed of transit operators, community groups, and other stakeholders, to advise staff on the scope and methodology for the analysis. Key areas of focus for the study include identifying the following: possible fare structures and payment methods, eligible recipients, overall program costs, potential funding sources, impact on transit agencies' fare revenue, relationships to existing discounts, and any anticipated technical challenges. The final report is expected to be completed by mid-2017. Plan Bay Area 2040 directs an additional \$150 million to implementation of the Means-Based Study.

Bicycle and Pedestrian Investments and Efforts. MTC's active transportation planning program supports multiple initiatives related to bicycling and walking in the region, including MTC's Complete Streets policies and programs, Bay Area Bike Share program, Bike to Work and Spare the Air Youth programs, and the San Francisco Bay Trail and Water Trail. Investing in the bicycle and pedestrian network, bike share programs, safety improvements and encouragement efforts can benefit transportation-disadvantaged communities that rely on active modes for a higher share of essential trips.

Plan Bay Area 2040 directs \$5.1 billion to bicycle and pedestrian improvements in the region over the plan period. In the nearer-term, when the Bay Area Bike Share expansion program launches in summer 2017, first-year membership will be available for low-income residents for only \$5 and the marketing campaign will include broadened community outreach. After the first year, low-income members will pay only \$5 per month to keep riding.

Coordinated Public Transit–Human Services Transportation Plan. MTC's Coordinated Public Transit–Human Services Transportation (Coordinated) Plan seeks to improve transportation coordination in the region to address the transportation needs of low-income populations, seniors and persons with disabilities. Consistent with requirements established by the Fixing America's Surface Transportation (FAST) Act, MTC is currently updating the Coordinated Plan to coincide with the adoption of the proposed Plan. MTC's current Coordinated Plan was adopted in 2013. Federal law requires that projects selected for funding under the Elderly Individuals and Individuals with Disabilities (Section 5310) be derived from a locally developed, coordinated public transit-human services transportation plan. Federal law also requires that the plan be

developed through a process that includes representatives of public, private, and non-profit transportation and human services providers. Plans must identify the transportation needs of low-income populations, seniors and persons with disabilities; provide strategies for meeting these needs; and prioritize transportation services for funding and implementation. This draft Plan is consistent with the 2013 Coordinated Plan.

Paratransit: MTC sets aside 10 percent of FTA's Section 5307 program funds for Americans with Disabilities Act (ADA)-compliant paratransit service. The program provides approximately \$20 million annually to eligible paratransit service in urbanized areas. In addition to 5307 funds, the State Transportation Account (STA) provides approximately \$8 million annually for eligible paratransit service.

Other Transit Programs: MTC partners with Caltrans to administer the Section 5310 funds to meet the mobility needs of seniors and people with disabilities in the Bay Area. The program provides approximately \$4.5 million annually to eligible projects in the region. Section 5310 funds are distributed to states to provide grants for nonprofit agencies that provide transportation services to seniors and people with disabilities. In the last cycle of funding (fiscal years 2013 and 2014), 56 percent of Section 5310 funding was used for mobility management, 32 percent for purchasing vehicles, and 12 percent for operations. Section 5311 provides funds for transit capital projects and operations in non-urbanized areas. These funds are also eligible for paratransit service. The program provides approximately \$1.5 million annually to eligible projects in rural communities.

San Francisco Bay Area Goods Movement Plan. In early 2016, MTC published the San Francisco Bay Area Goods Movement Plan, which is closely integrated with the Alameda County Transportation Commission's countywide planning efforts. The plan identifies five key goals, many of which benefit communities of concern. These include: increasing economic growth and prosperity; reducing environmental and community impacts and improving the quality of life in communities most affected by goods movement; providing safe, reliable, efficient and well-maintained freight movement facilities; promoting innovative technology strategies to improve efficiency; and preserving and strengthening the multi-modal transportation system that supports freight movement.

Regional Climate Initiatives. Plan Bay Area 2040 directs \$794 million toward climate initiatives to reduce greenhouse gas emissions and other pollutants. Examples of initiatives include: commuter benefits (a pre-tax commute program), car-sharing, vanpooling, a Clean Vehicle Feebate Program, smart driving strategies, a vehicle buy-back and purchase incentive program, a regional electric vehicle charger network, and the climate initiatives innovative grants. Low-income people of color may be most vulnerable to impacts of climate change. If structured well, efforts to reduce emissions could benefit all residents in the region, including vulnerable populations.

Next Steps: Plan Bay Area 2040 Action Plan

Plan Bay Area 2040 paints a stark picture of the region's affordability and displacement problems. While MTC/ABAG have been working on multiple fronts to orient much of their planning and funding efforts toward these issues, the fact remains the Bay Area will need to pursue a multi-pronged strategy to address the ongoing housing affordability crisis, including the production of new homes at all income levels, protection of households at-risk of displacement, and dedication of additional financial resources to pursue effective solutions. To that end, the Plan Bay Area 2040 Action Plan recommends strengthening and expanding existing regional housing initiatives and pursuing more ambitious policy solutions at the state, regional, and local levels.

As noted in the Action Plan, two new endeavors will improve the region's ability to address its chronic housing affordability challenges. First, the recent integration of MTC and ABAG staff will lead to more effective long-range planning and increase the region's housing policy capacities. Second, the newly created CASA initiative is bringing together diverse interests to develop a bold new strategy for housing production, preservation, and protection. Together these efforts will expand data gathering and technical assistance and recommend a range of legislative, funding and policy measures to help provide for the region's housing needs at all income levels.

CASA is bringing together a multi-sector set of partners to identify and agree upon significant regional solutions that address the region's chronic housing challenges and advance equity and economic health in the nine-county Bay Area. Through stakeholder engagement, research, and interviews, CASA will develop a comprehensive regional approach to the housing crisis, focusing on increasing housing supply, improving housing affordability, and strengthening preservation and anti-displacement measures. Objectives include a suite of legislative, financial, policy, and regulatory recommendations, with partners agreeing on a path forward and working together on implementation. A final report is scheduled for release by the end of 2018.

Additionally, the Action Plan proposes a series of other steps with an eye toward housing production, preservation, and anti-displacement, including:

- Advance regional “self-help” funding and financing solutions for housing
- Advance state legislative and funding solutions
- Building on recent housing policy successes
- Evaluate expanded policies connecting transportation funding to housing production and performance
- Provide technical assistance and best practices to local jurisdictions related to the transformation of “opportunity areas”
- Strengthen technical assistance and policy leadership for housing and community stabilization
- Close data gaps and improve information accessibility

Please refer to the Plan Bay Area 2040 document at <http://2040.planbayarea.org/> to view the full Action Plan.



July 11, 2017

Mr. Ken Kirkey
Planning Director
Metropolitan Transportation Commission
375 Beale Street
San Francisco, CA 94105

Re: Enterprise Report on Publicly Owned Land for Consideration in Plan Bay Area 2040

Dear Ken,

As the update to Plan Bay Area 2040 nears adoption, we write to support the proposed changes to the Action Plan and inform you of a relevant new report authored by Enterprise Community Partners (Enterprise), [Public Benefit from Publicly Owned Parcels: Effective Practices in Affordable Housing Development](#).

Enterprise is the leading provider of the development capital and expertise it takes to create decent, affordable homes and rebuild communities. For more than 30 years, Enterprise has introduced neighborhood solutions through public-private partnerships with financial institutions, governments, and community organizations. We have raised and invested more than \$23.4 billion in equity, grants and loans to help build or preserve more than 358,000 affordable rental and for-sale homes to create vital communities throughout the country.

We hope you will consider incorporating these leading practices and recommendations in Plan Bay Area 2040 and other policy work to overcome challenges to creating housing, especially affordable housing, through the process of developing publicly-owned land.

Prioritizing the Bay Area's limited publicly-owned land for affordable housing development is a critical strategy for preserving the long-term affordability and vitality of the region. The report includes relevant case studies from across the country, including vanguard policies from our own region, that can accelerate affordable and mixed-income housing production. To date, MTC has identified over 400 developable publicly-held parcels in transit-oriented locations to help bring about Plan Bay Area's vision of affordable and sustainable growth in the Bay Area. We hope that this report and the website we've developed for this effort, [Public Parcels for Homes](#), will continue to move equitable development on these sites forward.

Thank you in advance for your thoughtful consideration of this new report. Please let us know if you and your staff have any questions. We would be happy to present this work to CASA or your team, and/or set up a time to talk about if there are additional ways to leverage your work on the ground to create an equitable, sustainable, and vibrant Bay Area for generations to come.

Sincerely,

A handwritten signature in black ink, appearing to read "Rich Gross".

Rich Gross
Vice President
Northern California Market Leader

Cc: Martha Silver, Clerk of the Committee, MTC

Public Benefit from Publicly Owned Parcels: Effective Practices in Affordable Housing Development

By Michael A. Spotts, Genevieve Hale-Case and
Ahmad Abu-Khalaf





Public Benefit from Publicly Owned Parcels: Effective Practices in Affordable Housing Development

By Michael A. Spotts, Genevieve Hale-Case and Ahmad Abu-Khalaf

ACKNOWLEDGEMENTS

This research was made possible through the generous support of the JPMorgan Chase Foundation. We also appreciate the contributions of dozens of practitioners who were interviewed, attended roundtable discussions and/or participated in surveys as part of the research process. Finally, we would like to thank the city of Seattle, King County (Washington), King County Metro Transit and the Washington State Housing Finance Commission for their support in offering insight and shaping this research project.

Additional thanks are due to the following people for their contributions and assistance:

Sherri Alms	Kelly Gonzalez	Marty Koistra	Lisa Sturtevant
Emily Alvarado	Hillary Hamilton	JoAnne LaTuchie	Arthur Sullivan
Maria Barrientos	John Hersey	Julia Levitt	Lisa Vatske
Becky Bicknell	Betsy Hunter	Brian Lloyd	Steve Walker
Erik Blank	Thatcher Imboden	Sarah Lovell	Jeremy Wilkening
Mark Ellerbrook	Joel Ing	Laurie Olson	Maiko Winkler-Chin
Joe Ferguson	Monica Joe	Bob Peterson	Mariia Zimmerman
Lincoln Ferris	Jared Jonson	Gary Prince	Rich Zwicker
Chris Fiori	Rand Juliano	Miriam Roskin	
Sibyl Glassby	Rebekah King	Daniel Schned	

Finally, we would like to acknowledge our Enterprise colleagues who contributed to this paper:

Susan Anderson	Nicole Gudzowsky	Odetta Macleish-White	Geeta Rao
Melissa Bondi	Andrew Jakabovics	James Madden	Victoria Rowe-Barreca
Shaun-Dae Clark	M.A. Leonard	Suzanne Probst	Bill Wright
Elizabeth Ginsburg			

ABOUT ENTERPRISE COMMUNITY PARTNERS

Enterprise is a proven and powerful nonprofit that improves communities and people's lives by making well-designed homes affordable. We bring together the nationwide know-how, partners, policy leadership and investments to multiply the impact of local affordable housing development. Over 35 years, Enterprise has created nearly 470,000 homes, invested \$28.9 billion and touched millions of lives. Join us at www.EnterpriseCommunity.org.

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EXECUTIVE SUMMARY

Communities across the country are facing a range of challenges to ensuring access to safe, decent and affordable homes, particularly for low- and moderate-income households. To confront these challenges, both public and private-sector stakeholders must utilize a range of programs, policies and tools to improve housing affordability and create more vibrant, healthy and opportunity-enriching neighborhoods. A particularly promising approach is through the use of publicly owned parcels for affordable housing and other community benefits. In a constrained financial environment, these properties can be an asset, regardless of market strength. In strong markets, creative use of public sites can expand opportunities for affordability in an environment in which mission-driven developers struggle to compete for sites against better-funded market-rate developers. In struggling markets or neighborhoods, publicly owned parcels offer an important opportunity to catalyze development and seed revitalization activities.

While publicly owned parcels are assets for creating community benefits, there are significant challenges associated with the planning, solicitation and development process. Developers working on public sites generally must overcome the same challenges that are inherent in multifamily, mixed-use and/or affordable housing development, which can add time, cost and complexity to the development process. These challenges for publicly owned parcels are often exacerbated by the real and perceived differences between the goals and strategies of the public and private sector.

Publicly owned parcel development can take many forms and is impacted by a range of factors, including but not limited to:

- Federal, state and/or local regulations governing the use and disposition of public sites
- Site characteristics such as size, shape and topography
- Existing infrastructure (or the lack thereof)
- Current zoning and use restrictions, and the likelihood of potential changes to code
- The use, form and scale of the surrounding parcels and neighborhood

These and other factors influence the development possibilities on a given site, the range of potential community benefits and the approach taken by the public agency.

Despite complexities, there are successful examples of publicly owned parcel development throughout the country. Public agencies can and do establish overall policies and site-by-site processes that effectively balance agency needs with community goals. The following recommendations are based both on real-world experiences and ideas for process improvements from practitioners experienced in the publicly owned parcel development process. A full list of recommendations can be found in Appendix D.

Adopting Agency Policies

Public agencies can establish leadership in improving process efficiency and providing affordable housing by adopting overarching goals and policies appropriate to the relevant portfolio, community need and resources available. These “table-setting” plans and activities can streamline the process for developing individual solicitations and provide greater certainty and clarity to the developer community.

- Pipeline and process management: An initial step is for an agency to take stock of the publicly owned parcels under its control, creating a full inventory. This effort should be complemented by robust engagement with the community and other agencies to determine community needs and opportunities across the portfolio. It should then prioritize sites accordingly, considering the capacity of staff to undertake development projects. Policies and procedures for developing individual sites should minimize cross-agency overlap and bureaucratic inefficiencies and be designed to encourage robust developer participation.
- Providing community benefits: Public agencies should conduct a continuous, clear and transparent communication process to identify community needs and opportunities for using publicly owned parcels to meet those needs. This should include engaging with existing planning efforts, exploring options for co-location with community facilities, establishing goals and mechanisms to support affordable housing and working across agencies to ensure that there are adequate resources to fund affordable housing and other community benefits.

Site-Based Principles and Recommendations for Efficient and Equitable Development

Even the most effective public agency policies must be translated into individual site-based efforts to be successful. The combination of efficient agency-wide and solicitation-specific policies can encourage developer participation and competition and increase the likelihood that publicly owned parcel developments could realize substantial community benefits. There are several broad principles that cut across site typology:

- Ensure that each given site has a clearly defined and reasonable set of goals and priorities based on an analysis of site characteristics, community and infrastructure needs, and the trade-offs between various competing priorities.
- Create a clear chain of command for decision-making, designating a single lead agency where possible. Efforts should be made to avoid regulatory overlap or duplication and to facilitate an efficient approval process.
- Be judicious in application of infrastructure requirements, with a particular focus on parking requirements.
- Consider subdividing larger sites if agency capacity or the developer network is limited and/or to encourage competition.
- Consider partnerships to secure permanent affordability.
- Create back-up plans in the event of market disruptions.
- Proactively address affordability impact on surrounding neighborhoods.

In applying the above principles, public agencies must consider the characteristics of the individual site. The optimal approach will vary widely depending on scale, existing use, surrounding uses and neighborhood form and infrastructure needs, among other factors. Just as there is no one-size-fits-all approach to agency policies, individual solicitations should be tailored to the unique site characteristics and community needs. The following recommendations pertain to the specific needs of common site typologies.

- **Typology 1:** Small sites. These sites have often been acquired through tax delinquency or represent extraneous square footage adjacent to other uses. Active surrounding uses may be present, but vacancy or abandonment may be creating problems. Though such publicly owned parcels may not justify intensive agency staff effort for any single site, there are opportunities for site aggregation or packaging parcels in a single solicitation. Agencies should work to reduce complexity and transaction costs, and proactively use sites as an opportunity to expand and/or diversify the developer network. Small sites also create an opportunity for demonstration projects to provide alternative housing types.
- **Typology 2:** Suburban sites. These sites often involve the redevelopment of park-and-ride facilities or aging auto-oriented shopping centers. As such, they sometimes constitute a significant divergence from existing and surrounding development forms, creating an opportunity to reduce automobile dependency if the parking and infrastructure planning process can be carefully managed. This necessitates a particularly robust approach to community engagement and the integration of the site – and its residents – into the

surrounding community. Redevelopment of suburban sites also represents an opportunity to fill gaps in community needs, particularly related to services that may be absent in lower-density communities.

- **Typology 3:** Infill sites. These sites can vary in scale but are mostly located in established communities. Supportive infrastructure exists but may need upgrades, and while the development may be catalytic, it would not necessarily constitute a fundamental transformation of neighborhood form. Efforts should be made to coordinate with pre-existing plans and/or conduct pre-solicitation engagement to identify and focus on gaps in community needs. Given that the surrounding community may be built out, it may be important to maximize site potential and co-locate multiple facilities and uses. Relevant agencies – including but not limited to the property owner – should focus attention on addressing the potential impacts of gentrification on neighborhood residents and businesses.
- **Typology 4:** Large/master-planned sites. Transformation and/or revitalization is often a primary goal for these sites, which may take the form of vacant industrial neighborhoods/facilities. Infrastructure necessary to support new development may be absent, and there may be significant environmental remediation concerns. Development may have a dominant impact on the community relative to surrounding parcels, which necessitates a focus on site integration and the impact of development on existing residents and businesses. The scale of the site may create both challenges and opportunities. It is critical that social equity considerations play a critical role from the outset of the planning process. There will likely need to be a range of mechanisms and tools to ensure that housing affordability is a part of development plans. Public agencies should consider site subdivision to engage with a broader range of developers capable of contributing to the site redevelopment.

In today's current environment of resource scarcity, publicly owned parcels represent a rare opportunity to provide a range of benefits to both the agency and the broader community. However, efficiency is critical to delivering on this promise, as the numerous complexities and competing pressures associated with the process can chip away at the value that such efforts can create. This opportunity is not infinite or indefinite. While some agencies occasionally acquire new parcels, land is a discrete resource for others. To make the most of these sites, it is critical that careful thought and prioritization be given to their use, with a distinct focus on social equity.

For a full outline of recommendations, see Appendix D.

INTRODUCTION: PUBLICLY OWNED PARCEL CHALLENGES AND OPPORTUNITIES

Communities across the country are facing a range of challenges to ensuring access to safe, decent and affordable homes, particularly for low- and moderate-income households. Cost-burden levels among U.S. households are above historical norms, particularly among renter households.ⁱ Many cities are experiencing increased housing demand in urban neighborhoods, which can drive up property values and housing costs. Yet these challenges are not limited to hot markets or high-demand neighborhoods in weaker markets. Insufficient wage growth has contributed to the increase in cost burden in strong and weak markets alike, and concentration of poverty and neighborhood disinvestment remains a significant challenge for many households.¹

Defining “Publicly Owned Parcels”

For the purposes of this report, a publicly owned parcel is any site that is owned by a governmental or government-chartered entity. Such entities can include (but are not limited to): units of state or local government, government departments (including housing and public works), transit agencies, school districts and public institutions of higher learning.

Publicly owned parcels, often referred to as “public sites,” “public land” and “surplus land,” can include but are not limited to: vacant or underutilized parcels, parcels with existing community/public facilities with redevelopment potential, and/or land being purchased by a public agency for the development of community/public facilities.

To confront these challenges, both public and private-sector stakeholders must utilize a range of programs, policies and tools to improve housing affordability and create more vibrant, healthy and opportunity-enriching neighborhoods. A particularly promising approach is the use of publicly owned parcels for affordable housing and other community benefits.

In a constrained financial environment, these properties can be an asset to both the agency and the broader community, regardless of market strength. In strong markets, creative use of public sites can expand opportunities for affordability in an environment in which mission-driven developers struggle to compete for sites against better-funded market-rate developers. In struggling markets or neighborhoods, publicly owned parcels offer an important opportunity to catalyze development and seed revitalization.

Each public site comes with its own set of opportunities and constraints requiring varied and creative approaches to development. Land owners, developers and public finance systems need to both increase their capacity and form new partnerships for the development of larger and more complex sites. Similarly, smaller sites offer opportunities for creative partnerships with neighboring landowners and community groups and can provide an opportunity for innovative design solutions.

While publicly owned parcels can be an asset for creating community benefits, there are significant challenges associated with the planning, solicitation and development

i According to the Harvard Joint Center for Housing Studies, the number of cost-burdened renter households reached an all-time high of 21.3 million in 2015, 11.4 million of whom are severely cost burdened. Harvard Joint Center For Housing Studies, *The State of the Nation's Housing 2016* (Cambridge, MA: Harvard Joint Center for Housing Studies, June 22, 2016), www.jchs.harvard.edu/research/state_nations_housing;

Andrew Jakobovics, Allison Charette, Christopher Herbert, Daniel McCue, and Ellen Tracy Marya, *Projecting Trends in Severely Cost-Burdened Renters* (Columbia, MD: Enterprise Community Partners and Harvard Joint Center for Housing Studies, September 2015), www.enterprisecommunity.com/resources/ResourceDetails?ID=0100886.

Barriers to the Efficient Development of Affordable Housing

In 2014, Enterprise and the Urban Land Institute's Terwilliger Center for Housing released "Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals." This report highlighted the numerous barriers to efficient and effective development and preservation efforts, including but not limited to:

- Regulatory barriers and financial constraints that limit economies of scale
- Requirements to utilize specific design characteristics and/or construction techniques, or restrictions/limitations on innovative practices
- A fragmented financing system that can increase soft costs and delays
- Onerous processes for entitlements, permitting and approvals
- Sometimes contentious community engagement processes that often empower opponents of multifamily and affordable rental housing ³

process. First, developers working on public sites generally have to overcome the same challenges that are inherent in multifamily, mixed-use and/or affordable housing development, which can add time, cost and complexity to the development process (see sidebar).²

These challenges are often exacerbated by the real and perceived differences between the goals and strategies of the public and private sector. In the public/private partnerships required to develop publicly owned parcels, these differences can easily translate into barriers to efficient and effective site development. In addition, a site's status as a public asset often adds additional levels of scrutiny and regulatory complexity to a development, particularly when the public agency working to develop the site is separate from the agency with land use, zoning and building code authority. Overcoming these challenges will be important for ensuring that both public agencies and the community benefit from this opportunity. To that end, this report will identify leading practices and recommendations to:

- Adopt general policies that balance agency goals, community benefits and efficient real estate development practices.
- Streamline the process for developing, responding to and evaluating solicitations for publicly owned parcels.
- Support efficient inter-jurisdictional and cross-sectoral collaboration.
- Facilitate a robust yet efficient community outreach and engagement process.
- Align affordable housing resources with the solicitation process.
- Broaden the pool of developers responding to solicitations with affordability requirements.

BACKGROUND AND METHODOLOGY

This research is part of Enterprise's Expanding the Supply of Affordable Homes program, which provides research and implementation support to improve housing affordability through financial innovations, regulatory optimization and development/preservation cost-effectiveness. This program also includes a workplan that goes beyond research and supports implementation with the inclusion of a set of market-based engagements to supplement local capacity. The scope of this research initiative was developed in partnership with several public agencies in the Seattle region, including the city of Seattle, King County, King County Metro Transit and the Washington State Housing Finance Commission. This effort also builds upon past research by Enterprise and its partners published in, "Promoting Opportunity through Equitable Transit-Oriented Development (eTOD)"⁴ and "Bending the Cost Curve," to improve the efficiency of the affordable housing delivery system.⁵ This report was also informed by previous research on developing publicly owned parcels conducted by the Coalition for Smarter Growth and the Urban Land Institute – Washington, D.C.⁶

In fall 2014, Enterprise Community Partners began researching national examples of publicly owned parcel development, including interviews with practitioners, reviews of past research on the subject and reviews of publicly owned parcel solicitation documents. We compiled and reviewed 60 public solicitation documents from across the country, including Atlanta, Boston, New York, Phoenix, San Francisco, Seattle and Washington, D.C. At least half of the reviewed solicitation documents included affordable housing requirements, and most of the solicited parcels are in developed, urbanized areas with medium to high densities and existing infrastructure. We compared site locations, cost, lot size, timeline, partnerships, revenue requirements, affordable housing requirements, zoning, community process and other factors to determine a list of project typologies.

Additionally, we conducted a case study on publicly owned parcel development efforts in the Seattle region. As part of this process, we discussed project pipelines with the public agencies for whom this report is being prepared to determine the most helpful typologies to research. The case study (released separately) was informed by the experience of staff from Enterprise's Pacific Northwest office who work in the Seattle region as well as outreach to practitioners.

That outreach included two roundtable discussions with local developers in November 2016: one with mission-driven affordable housing developers and another with market-rate developers. The objective of the discussions was to gain perspective on the publicly owned parcel disposition process from those who have experience responding to such solicitations. We followed these discussions with a survey to create an opportunity for participants in Seattle and throughout the country to give more specific and anonymous feedback on how to improve the site development process. While the number of survey responses was not sufficient to provide a statistically meaningful analysis, these responses provide useful context for this research.

THE IMPORTANCE OF PUBLICLY OWNED PARCELS

Public agencies can derive significant benefits from redeveloping the vacant and/or underutilized sites under their control. Vacant sites have direct costs (basic upkeep and security) as well as significant opportunity costs, in the form of foregone property taxes and the potential harms that vacancy can create for a community.⁷ More productive use of these parcels can help meet community needs for public facilities and amenities. Development can also represent a useful source of revenue. These funds can be critical, especially when shifts in political leadership and/or economic conditions threaten agency/municipal finances.

The productive utilization of publicly owned parcels can and should benefit the broader public as well. Public agencies may utilize surplus property to achieve short-term benefits, such as upfront sale revenues. However, by focusing on the short-term benefits of the disposition of a publicly owned parcel, public agencies may neglect a wide range of longer-term community benefits and create a different set of opportunity costs. For example, “highest-bidder” sales in cities experiencing intense development pressures from a growing population and booming economy may sacrifice prime sites for affordable housing, contributing to unmet housing needs and/or higher subsidies to acquire alternative private market sites.

In struggling markets, land redevelopment can catalyze revitalization. However, the resulting neighborhood improvements risk increasing cost burden for and at worst contributing to the displacement of low- and moderate-income households if social equity is not incorporated into the plans from the beginning. A narrow focus on maximizing upfront revenue can also create opportunity costs that impact the agency’s core priorities. For example, transit agencies may seek to maximize ridership and create alternatives to car travel. Ridership data suggests that lower-income households are more likely to utilize transit service.⁸ If a transit agency’s site development terms and conditions are costly enough that only high-end development is feasible, these ridership and congestion management goals may suffer.

To facilitate a more holistic approach, public agencies should use the land development and disposition process as an opportunity to engage with their communities. Exploring uses for surplus publicly owned parcels can be a catalyst for communities thinking about economic development, facility needs and community development. Using publicly owned parcels for affordable housing can increase low- and middle-income households’ access to high-opportunity neighborhoods, where property values, zoning and site availability can make housing serving these populations scarce. It can also increase those households’ access to employment, transit, community centers, health care services and schools. Conversely, neglecting community needs during the publicly owned parcel disposition and development process – or failing to successfully execute that vision – can lead to rising community opposition to development and eroding community trust.

Publicly owned parcel development can take many forms and is affected, like any development, by a range of factors, including:

- Federal, state and/or local regulations governing the use and disposition of public sites
- Site characteristics such as size, shape and topography
- Existing infrastructure (or the lack thereof)
- Current zoning and use restrictions, and the likelihood of potential changes to code
- The use, form and scale of the surrounding parcels and neighborhood

These and other factors influence the development possibilities on a given site, the range of potential community benefits and the approach taken by the public agency.

REGULATORY PROVISIONS AFFECTING PUBLICLY OWNED PARCEL DEVELOPMENT



Public entities often face a range of regulatory restrictions on how they use publicly owned parcels, which can affect development feasibility and the ability to provide community benefits. Restrictions can be imposed at the federal, state and local level, with widely varying degrees of flexibility. Common regulatory stipulations include obtaining fair market value for the use of the property and/or following a specific procurement process (for example, soliciting an open-bid through a request for proposals). Such regulations may originate from a statutory requirement. For example, a local agency's charter (which can be subject to state control) may require open solicitation processes. Alternatively, specific regulations may be imposed by the funding sources used to acquire the property. A state law in Washington requires that land purchased with "enterprise funding," such as a dedicated tax revenue source, must be sold at fair market value (unless otherwise stipulated in state law). When properties are funded by multiple sources – for instance, a transit agency property receiving federal, state and local funds – the most stringent regulations generally apply.

Transit agencies are particularly well positioned to use publicly owned parcel development to bring community benefits. By definition, most of their sites include a core component for advancing opportunity – multi-modal transportation access. In addition, many have significant amounts of land available for development. New construction projects yield surplus land as part of right-of-way acquisition and construction staging. Some legacy systems have the potential for more intensive redevelopment on underutilized park-and-ride lots. When these parcels have been purchased in full or in part with Federal Transit Administration (FTA) funds, it triggers numerous regulatory requirements that protect the federal interest in the property. While the agency's provisions create an additional layer of compliance, in recent years FTA has taken significant action to facilitate development that includes affordable housing and other community benefits. Notably, this includes a 2016 update to its Joint Development guidelines that explicitly allows for flexibility in the Fair Share of Revenue (purchase/lease terms) standard for developments with affordable housing (see Appendix A for more information).

FTA criteria governing the allocation of its Major Capital Investment Grant funds (the main federal discretionary funding source for new transit projects) have also been updated to encourage the coordination of transit and affordable housing, including provisions that allow transit agencies to acquire land with an eye toward future development potential, rather than simply lowest cost.⁹

Many public entities have taken steps to support more equitable publicly owned parcel development, including adopting policies requiring affordable housing and/or taking community benefits into account in determining the fair market value of a property. These policies are discussed in the following sections, and can serve as examples for jurisdictions open to amending existing policy.

LESSONS FROM THE FIELD

Development of publicly owned parcels comes with both common and unique challenges. Despite offering critical opportunities for the development of affordable housing, there is often a significant disconnect between the goals of public agencies and what the market can build and available public subsidies. Furthermore, when public and private markets work together on development, there may be a clash of competing visions. It can be challenging to find a satisfactory common ground that addresses both the priorities of generating revenue (for both the agency and developer) and public benefit without jeopardizing the viability of the development. Finally, the development of public sites is an inherently complex process, given standard development challenges (e.g., zoning, approvals, permitting and community engagement), regulatory layers and public subsidy requirements. This section outlines key elements and considerations that contribute to the success or failure of a publicly owned parcel development effort.

Public Agency Process and Capacity

Development priorities and protocols often depend in part on agency staff capacity and experience. Some agencies may prefer a quick and easy disposition process that maximizes revenue and minimizes staff time expenditure, particularly if real estate development is not a core competency of the public entity. Effective publicly owned parcel development requires a careful calibration of goals with an understanding of a public agency's pipeline of properties and its capacity to manage it. A well-intentioned effort to derive community benefits is unlikely to work if staff lacks the time or experience to navigate a robust community engagement process, review design specifications or manage a multi-phase solicitation process, among other necessary tasks.

In addition, publicly owned parcel processes can be made more difficult by institutional approval processes, even if there is a high-capacity real estate team. Regulatory processes and/or the need for additional resources may require that development efforts gain approval by elected officials who face political pressure from constituents. In other instances, appointed boards of directors may need to sign off on plans even if they do not always share the nuanced understanding of the intricacies of the development process. These stakeholders can delay approvals or add requirements that can reduce efficiency (as well as the ability to maximize community benefits) and even jeopardize development viability.

Matching Agency Approach to Site/Development Context

The characteristics of individual public sites can vary, which makes using a one-size-fits-all approach difficult and in many cases ineffective. Small sites may not justify the time and effort to undergo a robust planning and engagement effort, whereas larger, more transformative projects may

not succeed without such activities. A range of factors can influence the appropriate approach for a given site, including the nature of development surrounding the parcel, existing density, the impact on the surrounding community and the infrastructure needs of the site. This report groups its recommendations into four different typologies (see chart below) based on the findings from the research process and review of literature.¹⁰ These typologies are illustrative in nature; even within these contexts, there can be significant site-by-site differences, diverse needs within communities, and varying agency capacity to manage development. Therefore, these typologies should serve as guidelines by which broad principles for development can be derived.

Characteristics	Typology			
	Small Site	Suburban	Infill	Large/Master-Planned Site
Surrounding uses	<ul style="list-style-type: none"> • Active 	<ul style="list-style-type: none"> • Active, often single use 	<ul style="list-style-type: none"> • Active, often mixed use 	<ul style="list-style-type: none"> • Variable • Previous uses may be obsolete
Existing density	<ul style="list-style-type: none"> • Low-to-mid 	<ul style="list-style-type: none"> • Low 	<ul style="list-style-type: none"> • Mid-to-high 	<ul style="list-style-type: none"> • Variable
Impact of potential publicly owned parcel development on existing neighborhood form/character	<ul style="list-style-type: none"> • Site contributes, but will not be transformative 	<ul style="list-style-type: none"> • May be catalytic and/or transform make-up of surrounding land uses 	<ul style="list-style-type: none"> • May be catalytic but would not constitute fundamental change of form 	<ul style="list-style-type: none"> • Transformative/revitalization is primary goal • Site has dominant impact relative to surrounding parcels
Supportive Infrastructure	<ul style="list-style-type: none"> • Exists, may need redevelopment 	<ul style="list-style-type: none"> • May exist but need significant upgrades and/or redevelopment to accommodate additional density or changes in use 	<ul style="list-style-type: none"> • Exists but may need upgrades 	<ul style="list-style-type: none"> • Nonexistent, obsolete and/or in need of complete upgrade/redevelopment to accommodate new development
Common Concerns/Challenges	<ul style="list-style-type: none"> • Lack of scale • Limited development potential 	<ul style="list-style-type: none"> • Parking • Zoning, land use and code changes • Connection to multi-modal transportation network • Transition between site and surrounding neighborhood forms • Neighborhood engagement 	<ul style="list-style-type: none"> • Parking • Potential historic preservation considerations • Neighborhood engagement 	<ul style="list-style-type: none"> • Infrastructure needs and necessary funding • Zoning, land use and code changes • Potential remediation requirements • Neighborhood engagement

Cross-agency and Cross-sectoral Coordination

Public agencies generally must coordinate with other public entities to accomplish their development goals, except in the rare instances where the same agency owns the land; has full land use, zoning and code authority; and is providing all relevant financing/subsidies for infrastructure and/or community benefits. The need for coordination can complicate the process even in circumstances where the primary agencies share a common vision and goals, as regulations and bureaucratic processes must be aligned or reconciled. Such complications can lead to delays and costs for the developer, which can reduce the scope for community benefit and jeopardize development viability in some circumstances.

Managing Competing Goals and Interests

Public agencies face competing pressures – both internally and from the broader community – when undertaking development projects. The agency may want to accomplish multiple goals (for example, deriving revenue while rebuilding local infrastructure) and community groups and residents may have a range of perspectives on community needs.

Public agencies therefore often include multiple and sometimes competing requirements in publicly owned parcel solicitations, including but not limited to receipt of fair market value of land, specific design characteristics, affordable housing requirements, local hiring, infrastructure development/redevelopment, neighborhood amenities and other community-based benefits. While each of these elements can bring value to a municipality and/or community if structured properly, there are often associated trade-offs related to time, complexity and cost. Calibrated carefully, requirements can balance efficiency and community benefit. However, failure to consider cumulative impact can diminish a developer's ability to maximize the impact of any single goal and, in some cases, inhibit development viability. Public agencies can enhance the efficiency of the publicly owned parcel solicitation process by prioritizing a discrete set of goals and objectives, based on an assessment of the unique characteristics of the site, the most pressing needs within the community, the development potential of the site, and the amount, terms and conditions of both public and private financing available. At a minimum, participants in this research project emphasized the importance of upfront clarity in the solicitation process – and maintaining consistency with those standards throughout the process – which allows developers to plan accordingly in an efficient manner.

Aligning Affordable Housing Resources

When affordable housing is an explicit goal of publicly owned parcel development, it is important to be thoughtful about how the units are financed. Affordability can often be achieved without direct financial subsidy by offsetting the cost of the affordable units with other incentives, such as discounts in site control costs, increased density, and/or reduced fees and infrastructure requirements. There are financial limits to this approach, particularly in areas where

land costs make up a lower proportion of total development costs.¹¹ Therefore, if more affordable units (or deeper levels of affordability) are desired it may become necessary to provide for direct subsidy. Such subsidy can come from traditional affordable housing programsⁱⁱ or through site- or corridor-specific mechanisms, such as tax-increment financing districts.

Given these considerations, it is important for agencies to synchronize the timelines of public land solicitations with the processes for obtaining affordable housing subsidies. Some coordination with these subsidy providers (state housing finance agencies, local housing departments and public housing authorities) is necessary to ensure that there are sufficient resources available to meet affordability goals. Furthermore, it is important to consider whether other on-site requirements (parking, open space, community facilities) create financing gaps and/or conform to the rules and requirements of the subsidy programs (such as total development or per-unit cost caps as specified in Low Income Housing Tax Credit allocation policies).

Efficiency of the Solicitation Process

In responding to solicitations for publicly owned parcels, developers often incur significant due diligence expenses to explore a development site's viability. Thus, they face the risk of losing any funds expended on preliminary plans or environmental reviews if the development does not proceed – a particularly risky proposition for revenue-constrained mission-driven developers. It is important for agencies to carefully review their publicly owned parcel solicitations to ensure that they select an appropriate solicitation structure that is calibrated for their capacity and site development needs, as well as set a timeline that is calibrated for the solicitation's level of detail and requirements.

The structure of the solicitation process itself can be very important. Though the specific structure is sometimes dictated by law, public agencies can often choose among a range of options (or a combination thereof) including:

- **Requests for Information (RFI):** Often the first step in a multi-phase process, an RFI can be used to gather information about a site's potential from interested stakeholders. In some cases, the information submitted is more conceptual in nature, and can help the agency think through what it eventually wants to achieve with the site.
- **Requests for Qualifications (RFQ):** As with an RFI, an RFQ may precede a more detailed solicitation. Interested developers are asked to demonstrate capacity to undertake a project on a given site, and the agency can invite the most qualified respondents to submit a more detailed proposal.

ii Affordable housing developments are generally financed with a combination of debt and equity, as the revenue generated by affordable rentals is insufficient to finance the full cost of development through debt alone. The Low-Income Housing Tax Credit program is the primary source of equity for affordable multifamily developments, and any remaining financing gaps are often filled with a combination of sources that can include grants and soft loans.

- **Requests for Proposals (RFP):** Respondents are asked to submit a more detailed plan for development of the site. This approach requires a significant amount of due diligence work from both the respondents and the reviewing agency.

Selecting an appropriate approach can lead to a more efficient solicitation process. If the public agency has limited capacity but still wants a significant degree of control over the final development outcomes, it may be helpful to undertake a multi-phased structure that leads with an RFQ to narrow the pool of detailed development proposals during a subsequent, invitation-only RFP round.

The efficiency of the solicitation process also depends on the level of due diligence performed by the agency in advance and the requirements placed on prospective developers. Our research indicated that there is not a consensus on which due diligence tasks should be conducted in advance by the agency. As a general principle, an agency should avoid duplication by completing tasks that would not have to be replicated by the developer during the response or development process. High levels of pre-solicitation due diligence can reduce uncertainty and increase the quality of development proposals. Knowing in advance whether costly activities such as environmental remediation will need to be undertaken can also provide greater clarity on the scope for negotiating community benefits without jeopardizing viability. If the agency lacks the capacity to conduct these tasks, it is important to build an accompanying amount of flexibility for the developer into the solicitation requirements. Examples of potential agency-led due diligence activities can include title reporting, Phase 1 environmental review, geotechnical surveys and baseline feasibility analyses.

Managing the Community Engagement Process

Most mid-to-large scale real estate development includes a community engagement component. Publicly owned parcel developments may have heightened scrutiny given the increased role of the public sector and the associated accountability of the public agency to the affected neighborhood. Therefore, community engagement is essential to identifying community needs and shaping the development goals and solicitation process. Such engagement can also reduce the chances that community concerns will derail the development, whether legitimate or due to not-in-my-backyard (NIMBY) opposition. Public agencies have taken a range of approaches to this process, from passing this responsibility entirely to the developer, to conducting extensive outreach in order to develop the solicitation and its associated requirements.

There is no one-size-fits-all approach to managing community engagement. The correct strategy depends on the capacity of the agency, the targeted development timeline, the scale of the site and its potential impact on the surrounding neighborhood and the presence (or absence) of an

overarching neighborhood/community development plan. As such, it is important for public agencies to be aware of the challenges and trade-offs associated with different strategies, given the time, effort and expense of the process. Given this broad range of potential needs, techniques, goals and outcomes, identifying recommendations for specific community engagement approaches was outside the scope of this research. However, a range of resources do exist that can help inform a robust community outreach strategy. For a non-exhaustive list of resources, please see Appendix B.

It may be prudent in some scenarios to pass most or all community engagement activities on to the eventual developer, particularly in the context of smaller-scale sites, where agency staff capacity is severely limited and/or when an overarching neighborhood plan has already been ratified. However, in this scenario, it is critical that the solicitation timeline and requirements should reflect the need for community engagement, particularly in terms of design and use flexibility. More often, it is important for the public agency to begin the community engagement process, using it to inform the solicitation structure and establishing a process for continuity once the developer is selected.

Ensuring Quality while Providing Developer Flexibility

Publicly owned parcel solicitations often include prescriptive design, construction and site preparation standards that may apply in addition to local building codes and/or affordable housing design standards applied by the subsidy source. These standards may be enumerated in the solicitation itself and/or be applied through an agency design review process. Overlapping standards can add unnecessary architectural and engineering costs to publicly owned parcel development and increase compliance costs, as developers may need to seek multiple certifications from professionals to prove that the standards have been met. Public agencies may be justified in requiring meeting some level of solicitation-specific design and construction considerations in larger developments that require coordination of multiple functions and services. For example, transit-oriented joint developments often require specifications that ensure continued, efficient access to on-site transit services. Co-located community facilities may have unique standards for accessibility. However, a more effective approach may be to provide higher-level, guiding design and quality principles when another jurisdiction's or funding program's standards apply.

In addition, friction between agency oversight and expediency can occur once the development process commences. Development plans and specifications can evolve for various reasons – responding to community needs, changes in financing terms and unforeseen soil/geological

conditions, among other factors. While the agency justifiably wants to ensure that agreed-upon goals are being met, damaging costs and delays may result if approvals and waivers are not granted in an expedient manner.

Adopting Appropriate Infrastructure Requirements

The development of any sizable parcel will likely require a certain level of infrastructure investment by the property owner. During the publicly owned parcel development process, public agencies sometimes also seek to obtain off-site and broader community-serving infrastructure as a community benefit. These can include but are not limited to sidewalk and road improvements, undergrounding of utilities, and creation of structured parking (particularly in the context of suburban park-and-ride replacement). In negotiating these requirements, public agencies should recognize the significant direct costs of such requirements and the opportunity costs, such as a diminished ability to provide other community benefits as part of the development. For example, estimates of structured parking costs range from \$12,000 - \$50,000 per space, depending on the market in question.¹² In some cases, development viability may be jeopardized, as demand for residential and/or mixed-use development may be insufficient to command high enough prices at a given density level to cover infrastructure costs. Therefore, it is important to carefully consider where specific infrastructure needs fall in the hierarchy of needs for a given site.

Increasing Developer Interest and Competitiveness

Public agencies generally require a private-sector partnership to develop publicly owned parcels. Successful public-private partnerships require effective developers and a solicitation framework that encourages robust competition. However, from the developer's perspective, a public agency land sale may be more complex, time-consuming and expensive than a private market sale if all else is equal.

Even so, publicly owned parcels can have advantages that may compel developer participation, notably discounted site control costs; patient, low- or no-cost holding periods during the predevelopment phase; and/or access to a prime location otherwise unavailable on the market. If any or all of these factors are absent, then developers (and financially constrained affordable housing developers, in particular) may choose to focus on privately owned sites.

In some circumstances, the terms and conditions of the solicitation itself can inhibit participation by private-sector stakeholders. Financial disclosure standards can be one obstacle to market-rate developer and investor participation. The purpose of these standards is to ensure that the developer has the capacity to execute on the proposed scope-of-work, but these disclosures could be subject to public records laws, which can deter developers concerned about a lack of privacy around sensitive financial information. Public agencies may also impose requirements related to

organizational finances – including standards for net assets and liquidity – to ensure adequate capacity. These provisions may deter both market-rate and nonprofit developer participation, particularly if they are onerous or unrealistic in nature.

The additional layers of complexity – real or perceived – involved with publicly owned parcel development also shape developer willingness to participate. Additional engagement or actions – such as expedited permitting – may be necessary to convince developers that the development can proceed in an expeditious manner and that any past protocol problems have been rectified.

In regions where inclusionary zoning policies are not prevalent, there may be fewer developers with significant experience in producing large-scale, mixed-income development. If a mixed-income community is the preferred approach for a site, joint ventures between market-rate and affordable developers may in some cases be the most efficient mechanism for achieving that goal. However, doing so requires additional layers of coordination, as the separate developers must coordinate design compatibility, on-site construction logistics and the different timelines for market-rate and affordable financing cycles. Managing this complexity requires an efficient process and clear chain-of-command between all parties.

Finally, public agencies should consider the impact of parcel size and capacity on the competitiveness of a solicitation. Small parcels may be able to attract a range of small-scale developers, but only if the transactions costs are low enough for financial viability. Multifamily and mixed-use developers may shy away from smaller sites. Depending on the strength and size of the market, there may be limited or no competition for very large sites or sites with complex challenges. Therefore, depending on the context and the makeup of the region's developer network, it may be beneficial to aggregate or subdivide targeted parcels to increase participation.

EFFECTIVE PRACTICES AND RECOMMENDATIONS

Despite the complexities described above, examples of successful publicly owned parcel development that yield benefits to the agency, developer and broader community exist throughout the country. Public agencies can and do establish policies that effectively balance agency needs with community goals. The following recommendations are based both on real-world experiences and ideas for process improvements from practitioners experienced in the publicly owned parcel development process.

ADOPTING EFFECTIVE AGENCY POLICIES

Public agencies can establish leadership in improving process efficiency and providing affordable housing by adopting overarching goals and policies appropriate to the relevant portfolio, community need and resources available. These “table-setting” plans and activities can streamline the process for developing individual solicitations and provide greater certainty and clarity to the developer community. We group these recommendations into two categories: pipeline/process management and providing community benefit.

Recommendations for Pipeline/Process Management

Administrative activities, policies and procedures that guide public agency land development activities and are ostensibly unrelated to affordable housing/community benefits can still have a profound impact on the ability to provide those benefits. Inefficient processes create both direct and opportunity costs that reduce the financial feasibility of an affordable, mixed-income and/or mixed-use development. Even if such units and other community benefits may still be achieved, the number of units and/or depth of affordability provided may be sacrificed. Therefore, it is important for agencies to improve internal bureaucratic processes, regardless of the specific aspirations for providing community benefit.

Leading Practices: Disseminating Pipeline Information

The **Massachusetts Bay Transportation Authority (MBTA)**, the Boston region’s transit authority, has created an inventory and database of agency-owned parcels for agency use that includes basic site formation, as well as associated maps and plans.¹³

The **Boston Department of Neighborhood Development (DND)**, in partnership with coUrbanize, maintains an online platform that maps and catalogues information about city-owned land and buildings available for development, with the goal of increasing transparency in the development of city-owned land and city-funded housing. The online platform helps residents and developers easily find information about DND development projects and city-owned properties available for development, as well as track local projects, find meeting times and submit feedback through an online forum.¹⁴

In northern California, the **Santa Clara Valley Transportation Authority** lists its current and potential joint development sites, with information that includes acreage, current use and zoning, applicable general plan, net developable area, and council and school districts.¹⁵

Metro, Los Angeles’ transit authority, also publishes information about its pipeline for joint development, including relevant information about phase of development and timing for solicitation release.¹⁶



Identify and catalogue existing properties.

Ad hoc decisions regarding site prioritization can lead to inefficient allocation of resources. In addition, such decision-making may be met with distrust in the community, which may see arbitrariness or preferential treatment, even if that is not the case. Agencies should take comprehensive stock of the parcels under their control and gauge the potential of each site. This analysis should include both vacant or underutilized parcels, as well as sites with current active uses. While parcels currently in use may not be immediate development opportunities, they occasionally need to be redeveloped as facilities age, may have underutilized site capacity, and/or may no longer fit the needs of the community.

For agencies with a critical mass of developable assets, it may be prudent to disseminate parcel information to the public. This can allow for forethought into potential redevelopment opportunities and be used to solicit feedback on site potential. Discussions with residents and neighborhood stakeholders can also be used to identify the range of community needs within a given neighborhood or jurisdiction, which can inform prioritization of sites as well as requirements in individual solicitations.

When disseminating information on potential sites, it is important to include the context on the timeline for development along with basic site information, so that interested developers (particularly nonprofits) do not expend significant time and effort analyzing sites that the agency has no ability to utilize within a reasonable time horizon.

Realistically assess agency capacity to undertake publicly owned parcel development and prioritize sites accordingly.

It is critically important for public agencies to match goals and expectations for publicly owned parcel development with available staff and financial capacity. Overburdened and/or inexperienced agency real estate development teams can have a significantly detrimental impact on a developer's ability to complete a project, when delays in approvals can mean the loss of funding. In the event of a mismatch between goals and capacity, agencies would benefit from investing in additional staff and/or recalibrating their ambitions.

Once agency capacity is accurately assessed, agencies should identify and communicate the pipeline of properties and associated timeline, which allows developers and public funders to plan

Leading Practices: Supplementing Agency Capacity

In Washington, D.C., redevelopment of the **Oyster Elementary School** was initiated by the school community, which subsequently set up the 21st Century School Fund to serve as an intermediary to broker agreement among the public school system and local government and developers, resulting in a new residential high-rise and generating sufficient funding to finance the school modernization, a new library and new playing fields.¹⁷

An unsolicited bid to the **Portland, Oregon, region's Tri-Met** led to the development of the West Gresham Apartments, which includes 27 rental units affordable to residents earning 30 to 60 percent of area median income.¹⁸

accordingly. As previously discussed, the process of site prioritization should be collaborative and iterative across agencies and with the community to ensure that community needs are being met and that relevant agencies have the capacity to approve any necessary permits and rezoning, and provide critical financing.

Public agencies can supplement their internal capacity and ability to execute on publicly owned parcel development by engaging in partnerships with external organizations and/or providing a process for unsolicited bids. Pre-planning and community engagement can be conducted by community/neighborhood groups or planning entities. In addition, agencies can establish a process to receive unsolicited proposals for individual sites, though procurement rules may require a subsequent open bid. Such processes should establish clear standards to ensure that agency interests are met and community benefits are included. This can include limiting such bids to developers whose developments meet affordability thresholds or who have conducted a meaningful community engagement process.

Use properties that are not the focus of immediate development activities to create community benefits.

Public agencies can produce community benefits from sites that are not in line for development in the near term by promoting interim uses. Permitting and/or proactively encouraging interim uses can be particularly useful for vacant sites, to ensure that these assets can be productive and do not become a source of blight in a community.

While such interim uses can provide a clear public benefit, agencies should be cognizant that once these uses are established, their removal may be controversial, requiring provisions for relocation. For example, proponents of a long-standing flea market at a junior high school parking lot in Washington, D.C., allied with project opponents to oppose a reduction in the market's size that was to accompany the redevelopment of the site.¹⁹ Nevertheless, such activities may still be desirable, as leaving properties vacant or underutilized for long periods of time can also strain relationships with a community.

Leading Practices: Interim Uses

Homes for Hope is an effort in Los Angeles to design inexpensive, code-compliant homes to help address the region's homelessness crisis. Created as a final design project at the University of Southern California's Homeless Studio, students worked with city planners and advocates to develop modular, "tiny home-style" units that do not violate building restrictions. These units are moveable and stackable and could hypothetically be used to provide temporary shelters on vacant public sites.²⁰

Atlanta's TransFormation Alliance and Metropolitan Atlanta Rapid Transit Authority (MARTA) have partnered with WonderRoot, a local nonprofit, to support public art as a place-making activity in station areas.²¹ Such activities can promote activity and build a sense of community around station areas that might otherwise be relatively underutilized.

Arlington County, Virginia, purchased the site of a former grocery store for what is now the home of the Arlington Mill Community Center, which is co-located with an affordable housing development of the same name. The county converted the old grocery store to a temporary public community center for part of the 15 year-interim period between purchase and development.²²

Finally, for sites with active uses under consideration for redevelopment, agencies should work to ensure that those existing uses are not prematurely closed. The Benning Library in Washington, D.C., was closed in 2004 in anticipation of a mixed-use redevelopment that never materialized – a permanent replacement for the library was not opened until five-and-a-half years later.²³

Allow process flexibility for addressing different site contexts.

As described in the site typology matrix (chart on page 12), sites have a range of development contexts and associated needs. A public agency's property portfolio may include sites that fit a range of typologies. Therefore, agencies should balance the need for clear processes with the flexibility to adapt to the development and neighborhood context for each site.

Allow for neighborhood and corridor-level coordination.

Public agencies – and transit agencies in particular – may hold multiple parcels in a neighborhood or transportation corridor. Thinking about these sites in a holistic manner can enable multiple development and community needs to be met without overburdening an individual site. For example, if there is a need for both retail space and affordable housing in a neighborhood with two nearby public parcels, one use can be assigned to each site to reduce the complexity of managing the development and operation of retail space in an affordable housing development. Robust neighborhood- and corridor-level community engagement, design and planning/approvals processes can mitigate some of the need for lengthy site-by-site effort. In addition, a coordinated approach for proximate sites can increase efficiency by allowing for shared infrastructure, which can yield significant financial savings that can be redirected to other community benefits. Parking facilities provide a particularly promising opportunity for savings. A recent analysis of 12 major U.S. cities by Donald Shoup of the University of California – Los Angeles found that the average construction cost was \$24,000 per above-ground space and \$34,000 per underground space.²⁶

Leading Practices: Corridor-Level Approach

In conducting the required environmental reviews and site analysis for the T-Third light rail project, the **city of San Francisco** conducted a blanket environmental impact review (EIR) throughout the corridor, reducing the cost of similar EIRs for each development and expediting the entitlement process.²⁴ In addition, the **Metropolitan Transportation Commission** has established a Station Area/Priority Development Area Planning Program, which has funded comprehensive planning efforts that can include program level EIRs.²⁵

Negotiate terms, conditions and operating procedures with partner agencies to apply across solicitations.

Publicly owned parcel development rarely engages only one public partner. A transit agency undertaking joint development relies on the zoning, permitting and approvals of the local municipality and potentially on housing agencies and/or public works departments for financing. Agencies can engage with these entities as part of their overall strategy to identify whether any elements of the development relationship are generalizable and negotiate any terms, conditions and procedures that would be consistent across solicitations.

Leading Practices: Cross-Agency Coordination

In 2012, the **city of Los Angeles** began work to update its Consolidated Plan, which is required by the U.S. Department of Housing and Urban Development (HUD). The plan assesses needs and guides the expenditure of certain federal grants passed through to the city. With technical assistance from Enterprise and Abt Associates, the city leveraged this planning effort to improve city processes for addressing transportation, housing and other community needs. As part of this process, a cross-agency “housing cabinet” was created, and recommended a place-based approach, which included neighborhood-level strategies that prioritized investments that leveraged other public and private resources and aligned with other city initiatives. Robust data analysis and a community participation process guided the approach.

To implement this vision, a cross-agency memorandum of understanding was created that outlined responsibilities for all departments, created a uniform contract for procurement and standardized performance standards across agencies. A new financing mechanism was also created, capitalized by the city’s HUD Community Development Block Grant allocation.²⁷

Set reasonable standards for developer participation.

Public agencies must assess a potential developer’s ability to execute an agreement. However, agencies should do so in a way that does not narrow the pool of potential developers. This includes being sensitive to the level of financial disclosure that for-profit developers and investors are willing to make, as well as the size of the balance sheet or amount of liquid assets for nonprofit developers. In addition, large upfront, pre-acquisition deposits and punitive price escalation clauses (penalties for missing specified performance targets) can deter small-to-medium scale developers from responding. Agencies accustomed to the procurement of construction contractors may harm development potential by applying contractor standards and assurances to developers. Separate processes should be adopted for construction procurement and land disposition.

Examples of due diligence requirements and performance assurances that do not place an unnecessary burden on potential developers may include but are not limited to: audited financial statements (particularly for nonprofit developers), evidence and statements regarding past performance of a similar nature, written evidence of access to capital, partially refundable deposits to be credited to land costs and deadlines for performance and remediating actions. In determining the specifics of these requirements, it is important for public agencies to engage with the market’s development and financial community to ascertain what is reasonable in the local context.

Consider future development potential when acquiring sites.

When acquiring property, planning for future development opportunities can make it easier for public agencies to accomplish their development goals. For example, purchasing additional land during the site assembly process for transit-supportive station area development can potentially pre-empt inflationary market pressures and allow for more cost-effective site control.²⁸ Such purchases in the context of new transit development have been made possible by changes to the Major Capital Investment Grant program (see page 10). Those changes removed disincentives related to project cost evaluations that made purchasing additional land to improve joint development opportunities more difficult.²⁹ Such purchases can make it easier to execute equitable transit-oriented development.

Leading Practices: Site Assembly

In the Twin Cities, the **Minnesota Department of Transportation (MnDOT)** purchased the right of way for the Hiawatha Line (light rail) between Minneapolis, Humphrey International Airport and the Mall of America, including staging areas for construction equipment. When the project was complete, MnDOT sold the property to the Metropolitan Council (the Twin Cities metropolitan planning organization), which leased or sold the property to developers in coordination with the city of Minneapolis.³⁰

Recommendations for Providing Community Benefits

Public agencies that can optimize their pipeline management and development processes and procedures may increase their flexibility to provide affordable housing and other community benefits. The specific benefits a site produces can and should be appropriate for the characteristics and needs at that given site and neighborhood. Agencies can take a range of actions that create a supportive context for those negotiations and ensure that social equity is built into the process from the very beginning.

Identify community needs and potential benefits.

Agency plans and policies should be developed with input from the broader public – including citizens, nonprofit developers, community groups and other related public agencies. This engagement will help the agency understand the full range of needs as well as the specific opportunities to advance social equity. The prospects that a development will be successful are enhanced when the agency creates an atmosphere in which engagement plays a role in shaping future development, rather than being used to sell the agency or developer's vision.

a: Conduct continuous, clear and transparent communication processes.

Engagement can also build the base of community support that is necessary to advance both the overall policy and individual site efforts. In this effort clarity and transparency are critical. For example, in 2014, Arlington County, Virginia., responded to requests

from the affordable housing community and completed a Public Land for Public Good study to identify opportunities to intensify uses for publicly owned parcels, with the priority of meeting affordable housing and public school needs.³¹ Unfortunately, communication errors and a lack of a defined outreach process during the preparation of the report created confusion during the study rollout. In the subsequent politicized environment, opponents succeeded in swaying public opinion by characterizing the effort as a threat to public parks and green space and framing the conversation in a manner that gave the inaccurate impression that no site-by-site community engagement and planning would be pursued. In 2015, the county board withdrew the study, and the process had to be restarted with changes to methodology and focus.³²

Agencies have also faced criticism regarding the monetary valuation of public benefits used to determine purchase/lease discounts.³³ This can sometimes lead to accusations of publicly owned parcel development as a “gift” to developers. Therefore, it is important for agencies to be consistent and transparent about when and how discounts will be applied and to ensure that these discounts are commensurate to community benefit.

Leading Practices: Accounting for Public Land in Planning Efforts

In **New York City, a comprehensive planning effort in East Harlem** was led by a local council member, nonprofit and for-profit developers and other local nonprofit organizations. The community board and a community-organizing group conducted additional community organizing. This one-and-a-half year effort resulted in the East Harlem Neighborhood Plan, which included recommendations for public sites that included affordable housing, services, community facilities and open space.³⁴

b: Coordinate with rezoning, public facility development and community planning efforts.

Municipalities and land use planning agencies regularly engage in neighborhood planning efforts to meet critical community needs and shape future development. These planning efforts often include assessments of the need for community facilities, which present opportunities for co-location with affordable housing or other types of development. Public agencies with land within the planning boundaries should engage in these processes and work to make sure that a vision for use of these sites is included as part of the planning effort.

c: Coordinate with housing agencies and other funders.

While site control discounts can be leveraged to create some level of affordability and/or community-serving infrastructure, more ambitious development proposals often require additional subsidy. The public agency that holds the land should therefore coordinate with other relevant agencies that provide this subsidy to ensure that the financing capacity exists to accomplish these goals, and that the owner's solicitation requirements (for example, income-targeting levels) correspond with that of the funding agency. Furthermore, agencies should be aware of any cost- and procurement-related regulations for affordable housing programs to ensure that solicitation requirements do not push the development over thresholds that preclude the use of these subsidies. Similarly, public affordable housing funders should be aware of the opportunities for publicly owned parcel development within their jurisdiction and prioritize funding accordingly (with consideration to resource constraints and other priorities).

Leading Practices: Facility Co-Location

The new **Fire Station at Potomac Yard in Alexandria, Virginia**, was built as a five-story structure that includes 64 units of affordable housing, retail space and ground-level public space.³⁵

d: Explore options for co-location with other community facilities and other opportunities to maximize site potential.

Public agencies should explicitly consider broader public facility needs when managing and prioritizing sites within their pipeline. This can maximize site potential and facilitate both inter- and intra-agency efficiencies, such as locating supportive housing units on the same site as community health services. In matching facility needs with sites, agencies should be cognizant of the useful life of the relevant buildings. For example, a mixed-use library and residential development in Portland, Oregon, had to grapple with the targeted 100-year life for the library within the same building envelope as residential units with a significantly shorter lifespan.³⁶ Financing timelines may also differ, creating a risk that fines may be incurred or funding may be lost if capital assembly and/or construction for one use proceeds at a different pace than the other.³⁷ As such, it may be beneficial to subdivide parcels or utilize a condominium structure to create greater flexibility.³⁸

Establish goals and mechanisms to support affordable housing.

Once the needs and opportunities for affordable housing and community benefits are established, an agency can set specific goals for meeting those needs and begin to secure the tools that are critical to achieving those goals.

a: Make affordable housing and other community facilities a top priority for use of sites.

Agencies can ensure that publicly owned parcels become a tool for addressing the housing insecurity crisis by prioritizing affordable housing as the primary community benefit. This can take the form of portfolio-based goals, inclusionary requirements (either jurisdiction-wide, across the agency's portfolio, within neighborhoods/corridors and/or on each site) or by targeting specific sites in their entirety for affordable housing. In establishing the specific goals and policies, agencies should consider factors such as market conditions and the diversity of housing needs in terms of unit size and income/tenant targeting.

Leading Practices: Establishing Affordable Housing Policies

In establishing municipality affordability policies, a jurisdiction can ensure that all publicly owned parcels within its boundaries support affordable housing. A 2014 analysis found that nearly **500 local jurisdictions have adopted mandatory, voluntary and/or incentive-based inclusionary housing policies.**³⁹ States can also adopt policies that support affordability on publicly owned parcels. **California's State Surplus Land Act** requires that local agencies prioritize affordable housing, parks and open space when disposing of surplus land; provide a first right of refusal to entities that agree to use the site for these purposes; and provide notice to local public entities involved in affordable housing development, among other provisions.⁴⁰

King County, Washington, has a well-established Surplus Property Program for Affordable Housing, through which all county property deemed surplus is reviewed for suitability for residential development, with a portion of the resulting units reserved for affordable housing.⁴¹

In the **Atlanta region, MARTA,** one of the first transit agencies in the country to establish an affordable housing policy, set a goal to enter into five station-area development contracts that would reserve an average of 20 percent of units as affordable and require solicitations to set a percentage floor for the number of affordable units required.

Los Angeles' Metro sets a 30 percent affordability threshold for direct station area development activities and permits the agency to discount sale and lease prices accordingly.

Washington State enabling legislation, endorsed by Seattle-region voters in a broader referendum, requires **Sound Transit** to offer 80 percent of agency-owned property for affordable housing in which 80 percent of the units are reserved for households earning 80 percent of area median income or less.

The **San Francisco Bay Area Rapid Transit (BART) authority** has incorporated a 20 percent affordability requirement for agency-owned sites into its TOD policy, which is complemented by a station access policy to invest in non-auto access to BART stations.⁴²

The **Dallas Area Rapid Transit Authority (DART)** overcomes restrictive state legislation that prohibits the transit agency from using certain financing mechanisms by transferring property to the City of Dallas, which requires projects that benefit from public funding to reserve 10 to 20 percent of units for affordable housing.⁴³

See Appendix B for full text of the King County, MARTA, METRO, and Sound Transit affordability policies.

b: Ensure a range of tools to facilitate affordability goals.

Agencies should facilitate the use of a variety of tools to efficiently facilitate affordable housing development on publicly owned parcels. Direct provision of financial resources and/or free or discounted site control are the most straightforward mechanisms for supporting affordability and community benefits. Agencies can also enact policies or incentives that cross-subsidize or offset project costs as a form of indirect subsidy. Such

Leading Practices: Tools to Facilitate Affordability

The **New York City Department of Housing Preservation and Development (HPD)** facilitates the development of affordable and mixed-income housing on city-owned parcels by conveying those parcels, in most cases, to developers for a nominal price of \$1 per tax lot. The difference between the acquisition price and appraised value of the land is recorded in an enforcement note and mortgage, which is payable at maturity with interest. The enforcement note and mortgage may be structured as a forgivable loan in return for extended affordability beyond what is minimally required by other sources of funds. This structure helps address the burden of providing significant upfront payments for the acquisition of city-owned parcels, as well as advances the city's affordable housing plan by promoting the development of affordable housing on city-owned land. As an example, in November 2012, HPD issued a solicitation for the development of a mixed-use project on a city-owned parcel located in a high-opportunity Brooklyn neighborhood. A development team led by Jonathan Rose Companies was chosen in October 2013 to develop a 12-story, mixed-use development that will include 50 affordable housing units, 73 market-rate units and the space for arts programs. These benefits were accomplished without additional city subsidy beyond the discounted land value. The target date for construction completion is fall 2017.⁴⁴

In response to a solicitation from **Montgomery County, Maryland**, the Montgomery Housing Partnership (a nonprofit affordable housing developer) and the Donohoe Development Company developed The Bonifant in Silver Spring. Built in conjunction with a new downtown library, this mixed-use building includes 139 units that are affordable to seniors age 62 and older. The subsidy to facilitate affordability came in the form of a steep land discount from an estimated \$8.2 million to \$1.925 million, to be paid over a 77-year lease term.⁴⁵

Finally, affordable homeownership in eight of 24 units in Denver's Tremont Place Townhomes development was made possible through a creative financial structure in which the **Denver Housing Authority** agreed to provide 100 percent seller financing for the initial sale, to be repaid with interest from the proceeds of the ultimate sale of those units. This structure created savings from not having to obtain and pay costs associated with acquisition financing, helping bridge the \$120,000 per unit affordability gap.⁴⁶

policies can include but are not limited to additional density, expedited permitting, fee waivers and retention of title/site control until construction is ready to proceed. Agencies can also be creative in overcoming regulatory barriers. For example, it may be possible to adopt appraisal standards that consider the reduced revenue from affordable units in establishing property value without violating fair market value requirements.⁴⁷

c: If barriers exist to on-site affordable housing development, commit to dedicating revenue from market-rate sale of land to affordable housing development.

There may be circumstances in which public agencies are unable to be flexible in sale and/or lease terms, either due to statutory restrictions or in the absence of sufficient

development staff capacity to undertake robust negotiations related to community benefit. In such cases, it may be possible to dedicate all or a portion of the fair market value proceeds to affordable housing on other sites. Such policies should be undertaken carefully – particularly if the agency-owned site is in a high-opportunity neighborhood – to avoid reinforcing long-standing patterns of segregation and ensure funds are used to affirmatively further fair housing.

Leading Practices: Reinvestment of Revenue

In 2015, the **city of Seattle** approved the sale of a parcel at fair market value in the Chinatown-International District to a private developer promising to provide 150 units of affordable housing. The city committed to utilizing the proceeds from the sale to build additional affordable units elsewhere.⁴⁸

The **Seattle Office of Housing** has also listed for sale two vacant parcels that were assessed as too small to efficiently accommodate affordable housing, with the goal of utilizing the proceeds to finance the production and preservation of affordable housing. The sale of the two parcels is expected to generate over \$1 million, allowing the city to fund the strategic acquisition and preservation of neighboring affordable housing projects, such as the Kuniyuki Apartments project, which was at risk of losing its affordability restrictions.⁴⁹

Provide resources to assist developers in producing affordable housing on publicly owned parcels.

Public agencies and other stakeholders can work to support efforts to equitably develop publicly owned parcels, regardless of whether they hold significant land assets. Housing agencies can dedicate financial resources for this purpose. They can also facilitate technical assistance and capacity building efforts to boost developers' ability to deliver affordable housing on complex sites.

Leading Practices: Providing Resources

Pittsburgh's Urban Redevelopment Authority (URA) assists developers by linking them with available potential development sites and financial resources that are available for small- and large-scale new housing developments, such as the Pittsburgh Housing Construction Fund (which finances new construction and rehabilitation of for-sale housing). The URA also provides equity financing to assist community-based organizations in real estate development projects that provide housing or job creation opportunities. In addition, the Urban Redevelopment Authority works with for-profit and non-profit developers to structure individual long-term financing programs to create sustainable housing developments.⁵⁰

a: Allocate (or create incentives for) traditional affordable housing funding resources to be used in publicly owned parcel development.

Existing funding resources are important for delivering affordable housing at scale. Permanent funding sources such as the Low-Income Housing Tax Credit program can raise substantial equity for these developments, and state housing finance agencies can

either reserve a portion of this funding for public sites and/or offer point-based incentives in competitive allocations of housing credits. Given the sometimes lengthy timeline of affordable housing funding allocation, it may be beneficial to either focus on more flexible sources, such as 4 percent housing credits (though these credits do not provide the same level of subsidy).

Leading Practices: Allocating Traditional Sources of Capital

The **New York City Housing and Preservation Development's 2015 Qualified Allocation Plan (QAP)**, which establishes the policies and competitive structure for awarding the jurisdiction's 9 percent housing credits, establishes a housing needs target for "Projects that convert City owned land or buildings that are difficult to develop or are in the City's Third Party Transfer or Multi-family Preservation Loan programs to private ownership including, among other options, eventual tenant ownership." To advance that goal, the plan awards points to projects that meet these characteristics.

The **Colorado Housing Finance Agency's QAPs for 2011-2015** reserve a portion of credits for the HOPE VI redevelopment of the Denver Housing Authority's South Lincoln Homes.

For more information on QAP incentives, read "Giving Due Credit: Balancing Priorities in State Low Income Housing Tax Credit Allocation."⁵¹

b: Create dedicated sources of capital for affordable housing development on publicly owned parcels.

Traditional affordable housing sources may not meet the needs of every publicly owned parcel development context. In some markets, there may be sufficient permanent financing but a lack of acquisition capital that would allow nonprofit and mission-driven developers to compete for public sites with better-financed market-rate peers. Public agencies, community development finance institutions, philanthropic organizations and private lenders/investors can work together to create dedicated sources of capital to fill these financing gaps.

Leading Practices: Creating Dedicated Sources of Capital

In 2015, **King County, Washington**, committed to use up to \$83 million in funding to build and preserve 700 affordable and workforce housing units around transit centers – including on public land – over eight years. A portion of these funds was raised through the issuance of up to \$45 million in workforce housing bonds backed by local hotel taxes.⁵²

Some of the funding supports the **Regional Equitable Development Initiative (REDI) fund**. Enterprise Community Loan Fund, along with a group of public and private investors, created the REDI fund, a revolving loan fund designed to help affordable housing developers acquire land near transit. The REDI fund provides low-cost capital for the acquisition of land near transit. Each property acquired using the REDI fund will be required to have a share of apartments affordable to households at or below 80 percent area median income (AMI) or 20 percent below market rent. While not a requirement for each individual development, 25 percent of all apartments built or preserved through the REDI Fund must be at or below 50 percent AMI, with an additional goal to include at least 15 apartments at 30 percent AMI.⁵³

SITE-SPECIFIC RECOMMENDATIONS FOR EFFICIENT AND EQUITABLE DEVELOPMENT

Even the most effective public agency policies must be translated into individual site-based efforts to be successful. The combination of efficient agency-wide and solicitation-specific policies can encourage developer participation and competition and increase the likelihood that publicly owned parcel developments could realize substantial community benefits. These efforts must be sensitive to development context, though there are several broad principles that cut across site typology.

Ensure that each given site has a clearly defined and reasonable set of goals and priorities.

Developers interviewed over the course of this research reiterated the importance of public agencies clearly communicating their policy objectives. This includes the agency's priorities for public use, revenue or fair market value expectations as well as affordability levels. **Public agencies must determine which priorities are most important, as each has a cost.** A review of development proposals for a site in Boston illustrates the specific trade-offs among affordability, land payments to the public sector and creative aesthetics, among other factors.⁵⁴ Proposals that focused more on aesthetics could pay less for land and/or provided off-site affordable units; proposals promising the most revenue did not focus on affordability; and the proposal offering the most affordable units offered the city the least revenue and what has been characterized as generic design.⁵⁵ Though the specifics and priorities may be different, such trade-offs are inherent in all publicly owned parcel developments.

As with developing agency policies, **a robust and timely community engagement process is critical**, and giving a formal role to local community organizations can be beneficial. This engagement should be culturally appropriate and not limit outreach to just the immediate neighbors, as the broader community and potential future residents (or individuals and groups left out) are important stakeholders as well. This is particularly true for large-scale developments.

Leading Practices: Empowering Community Organizations

Paseo Verde, a 120-unit mixed-income development in a socioeconomically diverse neighborhood in **North Philadelphia**, is the culmination of the vision of **Asociación Puertorriqueños en Marcha (Association of Puerto Ricans on the March, or APM)**, a community group that has worked in the community for over 40 years. APM was selected to work on the site through a city solicitation process and engaged with Jonathan Rose Companies to develop the site. The development is near Temple University, adjacent to a transit station and also includes a health clinic. Past collaborations by APM include work with the city's redevelopment authority to assemble 111 vacant parcels to produce a shopping center that includes a cross-cultural supermarket.⁵⁶

While developing a discrete set of site priorities can be beneficial, **public agencies can also provide a menu of options for public benefit**, allowing respondents the flexibility to address trade-offs and develop the most efficient proposal given their goals and expertise. However, it is important that the methodology for weighing trade-offs is clear, and that requirements are not overly onerous.

Leading Practices: Offering Site Acquisition Incentives to Facilitate Affordability

The **city of Redmond, Washington**, issued an RFP offering a long-term lease of approximately .81 acres of downtown land for construction of a minimum of 50 units of affordable senior housing. The solicitation included multiple goals, such as providing affordable housing opportunities for seniors, creating a residential design sensitive to its current and future surrounding land uses and providing open space for residents, while integrating the experience of pedestrians and other passersby. To make this possible, the solicitation stated that the city is willing to consider a lease term of 75 years with a \$1 annual lease payment.⁵⁷

While goals and priorities should be clear, **site and design specifics should not be overly prescriptive unless necessary**. One of the most consistent pieces of feedback offered by both market-rate and affordable developers was to keep development programs in solicitations simple. **Specific requirements should focus on clear public purposes** – for example, accessibility, compatibility with existing street grids and infrastructure – rather than aesthetic judgments that are largely a matter of opinion. Developers may be able to see solutions for sites that public agencies have not considered. When programs for new developments are overly prescriptive upfront, it limits developers' ability to use their expertise and creativity to come up with the most viable solution.

The agency should also **base affordability expectations for individual sites on an understanding of the relationship among land values, infrastructure needs and the “affordability gap,”** or the amount of additional subsidy or offsetting cost savings/revenue upgrades that would make the development feasible at a given level of affordability.⁵⁸ It may be beneficial to **involve housing agencies/organizations to evaluate the feasibility of plans that include residential and affordable housing**, especially if the agency lacks significant real estate development or affordable housing experience. Such reviews and evaluations can help ensure that incentives to provide community benefits are proportionate to their costs and that the cost of the overall development program would not exceed funders' per-unit and total development cost limits. Housing experts can also assist in identifying more complicated challenges, such as considering whether density bonuses are calibrated appropriately given the relationship between density, height, construction type and development costs.ⁱⁱⁱ Finally, agencies should **maintain consistency and attempt to avoid imposing additional conditions** not included in the solicitation and/or the subsequent developer agreement, as early planning generally allows goals to be met in a more cost-effective manner.

iii For example, additional density can increase cost effectiveness and profitability, allowing for an increased ability to internally cross-subsidize affordable units. However, once a building's height exceeds a certain level, the developer must switch from wood-frame to more costly steel and concrete construction, which changes the profitability assumptions. Slow- and moderate-growth markets/neighborhoods may have insufficient demand to absorb the further density that would be needed to make high-rise construction feasible. These thresholds vary dramatically by market and sub-market, and are influenced by demand factors, building codes and existing transportation among other factors. Evaluating these factors requires sophisticated real estate development knowledge.

Create a clear chain-of-command for decision-making, designating a single lead agency where possible.⁵⁹

As previously discussed, development of a public site may require involvement from multiple public agencies, for example: the land use/planning authority, transportation and public works departments, state and/or local housing agencies and the land-owning agency (if not any of the preceding entities). Each agency has its own goals, capacities and timelines, which must be reconciled if development is to proceed in an efficient manner.

In developing the solicitation, the agency should **take stock of the applicable codes and design standards, and take steps to avoid overlap**. If standards outside of its direct purview apply (and are not the subject of cross-agency negotiations for flexibility), an agency can refrain from applying its own. Alternatively, agencies can also designate what it considers to be functionally equivalent standards that would be approved automatically without the need to comply with additional provisions or seek waivers. For example, many state allocation policies for housing credits include a list of acceptable green building standards, such as LEED, Enterprise Green Communities and EarthCraft, among others.⁶⁰ Under this structure, if a municipality requires a specific green standard that is different from the agency's listed preference, the developer does not need to incur the design, construction and certification costs associated with reconciling and implementing both standards. If a site has unique needs that necessitate a solicitation-specific requirement – such as preserving pedestrian access to a transit station entrance – the agency can include a limited and discrete set of “add-on” requirements designed to be in sync with other applicable standards.

Leading Practices: Streamlining Design Standards

The **Cleveland Land Bank** offers developers and homebuyers the opportunity to build on a land bank property, generally at an acquisition cost of \$200 per site. However, the traditional permitting, waivers and approvals process can last up to seven months in the city but a matter of weeks in the suburbs. To streamline and dramatically shorten this process, the land bank worked with the city's building and planning departments, Ohio City, Inc. (a neighborhood nonprofit) and Knez Homes (a developer) to take these steps before a lot is sold. Under this program, homebuyers can pick from a menu of home designs that have been pre-approved by all of the relevant agencies. Twenty percent of houses built through the program must be affordable at 80 percent AMI or less.⁶¹

Shifts in political and administrative leadership can also delay and/or derail publicly owned parcel processes.⁶² While agency policies can and should reflect current conditions and needs, the publicly owned parcel outreach and development process is often long enough that some turnover is inevitable. A publicly owned parcel program can become paralyzed if each site is subject to complete reconsideration upon such changes. Therefore, **individual solicitations should be structured to minimize the impact of agency leadership/oversight changes.** This can be accomplished through robust community engagement and cross-agency coordination before the release of the solicitation and an expeditious timeline for proceeding once the solicitation is released. Agencies can also institute a financial incentive structure (including penalties) for timely completion of tasks that applies to all parties, rather than just the developer. Such a structure could compensate a developer for delays caused by bureaucratic problems outside its control (protecting the developer's ability to provide community benefits) and discourage micro-management.

Leading Practices: Incentive Structures

In response to a solicitation from the **Boston Redevelopment Authority** to redevelop an old parking garage, Millennium Partners submitted a development proposal that utilized a creative structure for the site control payment.^{63, 64} The company offered \$100 million, plus \$100 per square foot of saleable residential space. The development included a partnership with the Asian Community Development Corporation for off-site affordable housing. The structure of this bid created a financial penalty for the agency if zoning or other concerns reduced the scale of the development. In August 2016, Millennium Partners' bid was accepted, and the development is expected to generate a total purchase price of \$150.8 million.

Agencies can also work to **obtain upfront zoning/land use approvals or utilize an expedited approval process** for a given site. These actions can mitigate the impact of the aforementioned shifts and reduce uncertainty for the developer. The permitting and approval process can be arduous and costly for a developer, as it must often finance acquisition through short-term acquisition capital and bear significant financial risk if the development does not proceed. These risks are exacerbated if the development vision requires significant up-zoning, infrastructure investment and/or a change to the existing neighborhood form. In some circumstances, it may be more efficient to mitigate that risk by facilitating as much of the approval process pre-solicitation – the agency is often already working with the broader community, already has the property under control (often tax-free) and may only bear maintenance expenses. Another option is to require the developer to seek approvals, but retain title to the property until all permits are received. In return, the agency may receive a more robust solicitation response, with more favorable terms. Absent these measures, agencies should recognize that the developer is bearing more risk, and structure the solicitation, timeline and financial incentives accordingly.

Meeting these timelines and targets may be more likely if there are cross-agency agreements and/or protocols related to the decision-making and approval process. Designating a single-lead agency or a cross-agency team with binding authority can decrease the likelihood of challenges related to bureaucratic fragmentation. Agencies can ensure that there is clear coordination between plan reviewers and inspectors and an efficient process for responding to change orders. Again, financial incentives can be established for adhering to the established timeline.

Be judicious in application of infrastructure requirements, with a focus on parking requirements.

Constructing infrastructure directly focused on and supportive of a given site is a standard part of development. Adding infrastructure requirements to serve the broader community or neighborhood could be considered a public benefit, but one that is often very costly. Agencies should carefully consider whether the benefits of these requirements exceed the costs. Requiring parking infrastructure in excess of demand can be particularly damaging, as the direct costs can be exacerbated by the opportunity costs associated with diverting portions of the site from more productive uses. Excessively large parking lots and large garages can also inhibit the viability of multi-modal transportation options and diminish the pedestrian environment. Therefore, such requirements should be imposed only after rigorous analysis based on the specific development context as opposed to outdated models based mostly on automobile-oriented development patterns.⁶⁵

Leading Practices: Transportation Demand Management

In the **Atlanta region**, MARTA's impressive suite of eTOD-supportive policies includes TOD guidelines that outline TDM options and strongly encourage shared parking arrangements between different uses to reduce the need for parking spaces in transit-served areas.⁶⁶

Arlington County (Virginia) Commuter Services is a county-run program that assists large-scale real estate development projects with developing TDM programs and provides services to increase the "availability, awareness and use of transit, ridesharing, carsharing, biking, bikesharing, and walking."⁶⁷

In 2012, the **city of Sacramento** removed minimum parking requirements in select districts, allowing a 35 percent reduction of required parking for projects that incorporate TDM measures, authorizing the zoning administrator to reduce required parking by 75 percent, requiring bicycle parking in certain areas and establishing a ratio at which bicycle parking can replace vehicular spaces.⁶⁸

By focusing on means (managing storm water) rather than ends (building pipes), agencies may be able to achieve multiple goals using non-traditional mechanisms in place of infrastructure. Thoughtfully designed open space and water retention techniques can mitigate runoff and potentially reduce water infrastructure costs. Transportation demand management (TDM) utilizes a range of techniques such as subsidized transit passes, car and bike share arrangements and facilitating first- and last-mile connections to reduce the amount of road and parking infrastructure required. In some contexts, such measures may be more cost-effective for both developers and residents than constructing expensive parking facilities.⁶⁹

Consider subdividing larger-scale sites if agency capacity or developer network is limited, and/or to encourage competition.

Public agencies holding large-scale sites face a series of difficult choices. The scale of these sites requires a substantial amount of due diligence. There may be a need for environmental remediation (as many such sites were home to former industrial uses). Communities may pressure the agency to quickly resolve challenges associated with such large-scale vacancy, which can have significant detrimental impacts on a neighborhood. However, such sites are an opportunity to execute a vision for transformational change for a neighborhood, and there have been many successful examples in which an entire site is undertaken by a single developer. If such capacity exists in the market, a master developer may be able to achieve economies of scale sufficient to pay for remediation, infrastructure upgrades and affordable housing. In other circumstances, it may be preferable to subdivide the site and make it available to multiple developers.

The obvious circumstances in which an agency may choose this approach are related to agency and developer network capacity. An agency may not have the staff capacity to manage the highly intensive planning, community engagement and monitoring tasks associated with large-scale development. Simply selling off a large site to a single developer without such due diligence increases the likelihood that considerations of neighborhood connectivity and social equity will be inadequately addressed. Likewise, efforts at development may be inhibited if the large developer network is too small to generate robust competition for the site.

If carefully planned, subdivision can open the process up to a wider range of developers; encourage more fine-grained development; improve integration into surrounding neighborhoods; and encourage diversity of design, building type and use.⁷⁰ This approach can also mitigate risk for the overall site, as the failure of one developer to secure financing or otherwise execute on the development agreement does not halt all activity on the site. Finally,

while the agency must work with a larger number of developers, the level of oversight for each specific parcel can be lessened and negotiations for uses of individual sites more straightforward.

Public agencies can still secure a range of community benefits at scale using this approach. They can reserve certain parcels specifically for affordable housing development or require that each parcel have a certain percentage of affordable units. They can use fair-market-value proceeds from the sale of specific parcels for market-rate development to subsidize community facilities, infrastructure, affordable housing or other community activities.

A middle-ground approach to subdivision could be to partner with a broker or a master developer under the condition that a certain percentage of the sites must be parceled out to non-affiliated development entities. This approach should specify the conditions under which such transactions must occur. It would shift some of the administrative burden away from the agency while still reserving some level of involvement in executing an overall vision. However, it is important to ensure that there is a certain level of independence for developers operating on subdivided parcels. For example, a nonprofit working with a market-rate master developer has a different set of timing pressures and financing deadlines. Development agreements should be careful to mitigate the likelihood that permitting, approval, and/or financing delays (or project failure) for one developer do not carry over to the others.

Finally, subdivided parcels must be sized appropriately to accomplish an agency's goals. If sites are too large, small- and mid-sized developers may still be unable to participate. If sites are too small, it can create an administrative burden and potentially require re-aggregation of parcels to achieve scale for mixed-use or multifamily residential development.

Consider partnerships to secure permanent affordability.

The number of affordable housing units produced as part of any publicly owned parcel development is important, but lasting social equity relies on long-term, rather than initial, affordability. If affordability terms are short or unspecified, lower-income residents may be increasingly cost-burdened or displaced. This can be particularly problematic if publicly owned parcel developments are successful in catalyzing economic growth and improvements in quality of life.

Public agencies can avoid facilitating government-led displacement by taking steps to ensure affordability at the maximum term allowed in law (which varies from state to state). They can achieve this by including specific requirements in the solicitation for affordability terms and utilizing legal mechanisms such as lease terms and deed restrictions/covenants. Agencies can also work with organizations that specialize in this area, such as community land trusts. These

Leading Practices: Partnerships to Secure Permanent Affordability

In 2010, the **Denver TOD Fund** (funded by various public and private partners and managed by Enterprise) was created to support the preservation and creation of affordable housing in the neighborhoods impacted by the city's new transit expansion. Though not targeted specifically to public sites, the fund served as a line of credit to the Urban Land Conservancy (ULC), a land trust. ULC would purchase and hold properties until the sites were ready for development or rehabilitation and permanent financing was secured. Permanent affordability requirements would be required as part of the redevelopment effort. In addition to increasing the amount of available capital, the fund offered lending terms tailored to the unique needs of providing eTOD in this market. In December 2014, the fund was expanded to \$24 million. Rebranded as the Denver Regional TOD Fund, resources can now be utilized across the seven-county region and multiple borrowers can access funds.⁷¹

partnerships work across site typologies, though the specific partners may be different. For example, for small sites and/or affordable homeownership opportunities, an agency can partner with a local Habitat for Humanity affiliate or participant in HUD's Self-Help Homeownership Opportunity Program.

Agencies should also consider how they monitor and enforce commitments made by the developer, particularly if housing is outside of its core competency as an organization. One approach is to negotiate partnerships with housing departments/agencies. In doing so, it may be beneficial to ensure that solicitation affordability standards are in sync with those of the partner in question. Coordinating a publicly owned parcel development with traditional affordable housing financing programs has the benefit of creating a built-in mechanism for verification, as the developer would have to prove compliance to the funder.

Create back-up plans in the event of market disruptions.

Occasionally, developers are unable to execute on a proposed development effort. Sometimes this is the result of difficulties faced by that specific company, but even the best development

Leading Practices: Responding to Market Shifts

The **Arlington Mill development** (see page 21) was initially awarded to a developer in 2009 to execute on a mixed-income residential and community center. Financing for the market-rate portion of the project was rescinded as a result of the economic recession, jeopardizing the overall effort. In response, Arlington County conducted community outreach and decided to separate the project into two components: it moved ahead with construction of the community center on its own and began the process of finding an alternate development partner. The Arlington Partnership for Affordable Housing, a nonprofit developer, was selected, and in 2014 delivered 122 units of affordable housing to complete the mixed-use site.^{72, 73}

During the same timeframe, developers hoping to work with **Los Angeles' Metro** faced similar challenges related to the availability of conventional financing. Again, affordable housing capital played a counter-cyclical role and filled the development gap. Affordable housing developers completed a number of developments and produced a significant amount of affordable housing (32 percent) in station areas even prior to the agency's adoption of affordable housing requirements.⁷⁴

effort is susceptible to broader market conditions. Agencies should be aware of this fact and plan accordingly. This can include conducting due diligence on alternative actions and mitigating activities that could be considered before the solicitation is released, and regularly monitoring market conditions during the solicitation and development process.

Proactively address affordability impact on surrounding neighborhoods.

Municipalities and housing agencies with jurisdiction over neighborhoods surrounding a publicly owned parcel development effort should analyze the potential affordability impact on the neighborhoods. The net benefits of on-site affordability requirements may be minimized (or even negative) if the number of the units is offset with significant price appreciation and higher-end redevelopment in the broader community. Therefore, it is important to engage with the appropriate stakeholders to address and mitigate residential and business displacement. Potential interventions to ensure that catalytic investments benefit the whole community include jurisdiction-wide inclusionary housing policies, proactive preservation programs and financing tools, increased tenant-based assistance and community land trust acquisition of residential and retail/commercial space.

RECOMMENDATIONS BY PUBLIC LAND SITE TYPOLOGY

In applying the above principles, public agencies must consider the characteristics of the individual site. The optimal approach will vary widely depending on scale, existing use, surrounding uses and neighborhood form and infrastructure needs, among other factors. Just as there is no one-size-fits-all approach to agency policies, individual solicitations should be tailored to the unique site characteristics and community needs. This section provides recommendations based on common site typologies.

Typology 1: Small sites

Some common characteristics of the small site typology include:

- Sites may have been acquired through tax delinquency or for agency uses that are no longer relevant, or may represent extraneous square footage adjacent to other uses.
- There are active surrounding uses with lower- or medium levels of density. There is existing infrastructure, but remaining useful life may vary.
- Sites contribute to neighborhood form and character, but are not substantial enough to transform it.

- Vacancy/abandonment may be an issue; ongoing maintenance of scattered-site properties may be difficult.
- Scale and development potential may not justify intensive agency staff effort for any single site.

Recommendations

Select an appropriate method of parcel distribution.

Agencies should consider whether it is appropriate to undertake a site-by-site solicitation, package multiple properties into a single solicitation or attempt to aggregate adjacent sites into larger parcels, based on site/portfolio characteristics and goals/priorities. If the latter approach is taken, the resulting parcel may fall into a different typology.

Leading Practices: Tailoring Solicitation Scope to Agency Goals

The **city of Newark, New Jersey**, provides an example of site-by-solicitations by auctioning off parcels in disinvested areas. Individual households – not just professional developers – can participate in these auctions.⁷⁵

Both Philadelphia and Nashville provide examples of solicitations with packages of properties, focused on engaging professional developers. The **Philadelphia Land Bank's** Workforce Housing Program facilitates the development of affordable workforce housing on vacant publicly owned parcels by conveying some of those parcels to developers for a nominal price of \$1.00 per tax lot, with the goal of mitigating the costs of land acquisition for homes targeted at households earning up to 120 percent AMI.⁷⁶ In 2016, the **city of Nashville, Tennessee**, solicited bids from nonprofits for 13 sites. The transaction utilized a deed restriction that mandated that the resulting homes were affordable at 80 percent AMI for 20 years. The sites were paired with grant money from the **Barnes Fund for Affordable Housing**. Three nonprofits were selected to receive the sites.⁷⁷

Finally, **Baltimore Housing** (the city's combined housing authority and department of housing and community development) operates the Vacants to Value program to strategically purchase abandoned or derelict properties and facilitate private redevelopment of severely distressed blocks and to sustain healthy neighborhoods.⁷⁸

Streamline development standards to improve site viability.

The lack of scale and development potential for small sites makes it even more important to avoid adding additional bureaucratic burden and/or extraneous design and construction requirements to the solicitation. With less ability to recoup costs, such requirements may inhibit financial feasibility. Agencies can also work to proactively dismantle barriers to efficient development.

Leading Practices: Streamlining Design Standards for Small Sites

In addition to the partnership to streamline the approval and permitting process between the Cleveland Land Bank, Ohio City, Inc. and Knez Homes (see page 33), **Boston's Neighborhood Homes Initiative** made available 250 vacant city-owned parcels characterized as “missing teeth” (underutilized parcels on mostly in-use blocks), providing a streamlined process for neighborhood approval. Before releasing a solicitation for a given parcel, the Department of Neighborhood Development meets with abutting property owners to discuss neighborhood context and review prototype designs.⁷⁹

Proactively use sites as an opportunity to expand and/or diversify the developer network.

Agencies holding a large number of developable sites need a robust developer network to match. This network should not only have a critical mass of developers, but also have areas of focus to match the diversity of site typologies within the agency's portfolio. Small sites may have lower barriers to entry in terms of upfront capital requirements or capacity to execute the development type. The Neighborhood Homes Initiatives (see box above) includes smaller packages specifically intended to encourage participation by smaller-scale developers.⁸⁰ Small sites generally exhibit lower risk to the agency, as failure of a single development is less likely to have a substantial detrimental impact on the agency as failure of more complex site typologies. Agencies can use this lower-risk opportunity to broaden the range of developers capable of undertaking publicly owned parcel development, and take this track record into account when analyzing subsequent submissions for more complex developments. As previously mentioned, engaging smaller developers may require some effort to streamline agency procurement processes and protocols that increase transaction costs.

Utilize demonstration projects to provide alternative housing types

The increase in zoning and land use regulations over the course of much of the last century has decreased the diversity of housing types that are produced. In recent years, there has been a focus on reversing this decline and expanding development opportunities for a broader range of housing types. These housing types include but are not limited to smaller-scale attached buildings (such as duplexes or triplexes), small multifamily developments, microunits, “tiny homes” and accessory dwelling units. In some contexts, these building types may be naturally more affordable due to their size and amenities, and can help meet niche housing needs, including “missing middle” and first-time homeownership opportunities, as well as more permanent affordable and/or supportive housing solutions for homeless individuals.⁸¹ Some of these building types can also be used to provide a wider range of housing choices and affordability levels in lower-density, high-opportunity communities. Small public agencies can establish demonstration projects on small sites to test these models where they are currently absent and/or expand the developer network with the capacity to deliver this building type. This can be accomplished through pre-solicitation design consideration and permitting and approval work, as well preferences and incentives within the solicitation.

Typology 2: Suburban sites

Some common characteristics of the suburban site typology include:

- These sites are often the redevelopment of park-and-ride facilities or aging auto-oriented shopping centers.
- There are active but lower density surrounding uses, often – but not always – without mixed-use and/or walkable development patterns and/or integrated street grids.
- Sites may need significant infrastructure reconstruction, especially if the publicly owned parcel development deviates from the pre-existing neighborhood form.
- Significant consideration about parking levels is likely necessary; existing stakeholders may be accustomed to free (or inexpensive), readily available parking.
- Development may be catalytic and could transform the make-up of surrounding land uses. Therefore, transition between site and surrounding neighborhood forms may be a potentially critical consideration.

Recommendations

Undertake a robust planning and community-engagement effort.

The combination of scale and transformational character of many suburban site developments makes the planning and engagement process critical. The publicly owned parcel owner and other relevant agencies (the public works and land use planning departments in particular) must adequately plan for infrastructure redevelopment and connectivity with existing

development patterns. Public education and other services must be prepared to respond to any significant increases in density and population. While these changes can be beneficial over time, they require substantial analysis and consultation.

If the municipality is not the owner of the parcel in question, that owner must make sure that there is a shared vision with the departments responsible for zoning, permitting and approvals. Achieving this consensus requires a robust community engagement process. Many neighbors may be concerned about the impacts of increased density and traffic and/or resistant to changes in neighborhood form. Building trust and sharing timely and accurate process updates can help manage these relationships.



Focus on holistic community development, including services that are often absent in suburban framework.

Lower density suburbs may not have the full range of amenities and social services that are found in cities. Many suburbs are experiencing demographic shifts that challenge this dynamic. As the U.S. population ages, there will be an increasing need for support for seniors. Metropolitan areas across the country are also experiencing increases in suburban poverty.⁸²

The planning process itself can represent an opportunity to identify community needs and service gaps, and the development offers an opportunity to address some of these needs. For example, portions of retail/commercial space in mixed-use developments can be reserved for service providers, potentially in conjunction with housing targeted for special needs. Increased density can create the critical mass necessary to make certain social services viable in the suburban context. Finally, transportation infrastructure can be redeveloped to enhance the viability of non-automotive uses.

Ensure that new resident populations have opportunities to integrate into existing and new civic institutions.

New mixed-use development may increase household diversity in the community, particularly if the surrounding area is dominated by owner-occupied, single-family detached housing. However, there may be a real or perceived divergence in the perspectives between the established and newer groups within the community. There is a risk that these differences can become institutionalized. For example, neighborhood civic associations sometimes gerrymander boundaries or create membership rules that exclude condominium or apartment residents/representatives from membership. If this occurs, it can inhibit neighborhood cohesiveness, stifle collaboration and create opposition to future development proposals.

Therefore, it is important for public agencies and/or the developer to take a broader view of neighborhood engagement. Just as it is helpful for existing neighborhood residents to buy into the vision of the development, it is important that the development's residents become full partners in the community. Public agencies and developers can work to facilitate these connections through a range of mechanisms, including the use of community space, facilitating membership in existing civic institutions and establishing new institutions to meet specific needs. Agencies should work to create outreach efforts that are culturally and contextually sensitive and meant to engage the full diversity of the newly expanded community.

Adopt appropriate and integrated infrastructure/parking requirements.

Suburban sites may have significant infrastructure needs to facilitate new development types and integrate the development into the broader community, ensuring that it does not become an isolated island. While the structure and form of such infrastructure may vary based on neighborhood conditions, it is important to focus on extending multi-modal transportation options to the extent feasible.

The feasibility of various modes will depend on a range of factors, including population density, employment density and dispersion, integration of the road network and the existence (and robustness) of any public transportation options. While it may not be realistic to fully replicate the walkability and accessibility of more traditional urban development patterns in all contexts, incremental improvements can have a positive impact on people's lives – for example, creating sidewalk connections to enable safer walks to school, or a paratransit system that connects seniors to a community or retail center.

Creating a more functional street and pedestrian grid that is integrated to the public site can facilitate these goals. These connections can make it easier for people to walk to transit stops/stations and can be complemented by shared-use mobility efforts (such as car and bike shares) that bridge the “first and last mile” gaps.

Leading Practices: Reducing Parking Infrastructure Needs

Two **Twin Cities suburbs** have adopted policies that allow jurisdictions to hedge their projections for parking utilization. Woodbury's and St. Louis Park's proof-of-parking policies allow developers to refrain from initially providing the full required amount of parking if they can demonstrate that the amount exceeds demand, providing they can prove that the site can accommodate additional parking in the future. While the latter stipulation may prevent the addition of incremental density, landscaped areas would provide a better pedestrian experience than surface lots. Such policies could also provide data points for consideration in efforts to reduce parking minimums.^{83, 84}

Denver's Regional Transportation District (RTD) studied parking utilization and ridership data at its Alameda Station. Though existing lots were being utilized, the agency found that many of those parking in the lots were driving from an area soon to be served by a new rail line, and that many transit riders did not drive to the station. To achieve longer-term ridership gains through more intensive development, RTD reduced parking within the station area, allowing it to sell property for a 275-unit residential development.

Separately, RTD's Transit Village Garage in Boulder adopted a parking-management agreement designed to effectively minimize the number of spaces needed to accommodate a range of commuters and local users. The agreement utilizes shared parking spaces among various users, unbundled parking fees from commercial or residential rents, managed spaces and payments to offset construction costs and influence travel behavior.⁸⁵

Adopting efficient parking structures is important for supporting multi-modal transportation options. Automobile orientation can create a self-reinforcing cycle where each action that accommodates cars – more parking spaces and larger surface lots, wider roads, higher speed limits – degrades the pedestrian experience and usability of transit. In response, more people may choose to drive to meet some or all their needs, creating further demand for autocentric changes. However, some relatively straightforward measures can more efficiently utilize space and potentially level the playing field between modes. Transportation-demand management strategies (see page 35) can be utilized to encourage other transportation modes. For those that do drive, shared-parking strategies can be used to reduce the number of parking spaces in mixed-use neighborhoods, as residential buildings, restaurants and entertainment venues may have many vacant spaces during the day, whereas office buildings are likely to have excess capacity in the evenings and at night.

Leading Practices: Development-Level Transportation Demand Management

MARTA's transit-oriented development guidelines (see page 35) cite a successful example at the Atlantic Station complex in Atlanta, which utilizes a combination of street parking, traditional parking structures shared among various uses, a free shuttle to the nearby rail station, a carpool/vanpool brokerage, "guaranteed rides home," car and bike share programs, and incentive bonuses for mode-shifts away from single-occupancy driving.⁸⁶

Efficient planning and requirements can mitigate some of the costs of producing hard infrastructure. However, in the end, these investments still require significant amounts of capital. While it may be reasonable in some cases to expect a developer to pay all or most of the costs of infrastructure meant to serve the site itself, additional financing mechanisms may be necessary to support community-serving infrastructure, such as tax-increment financing.⁸⁷ Such value-capture mechanisms can be structured in a way to ensure that the initial developer – who often bears risk associated with new product types for the market – is not responsible for bearing the full cost of infrastructure that makes future developments possible.

Typology 3: Infill sites

Some common characteristics of the infill site typology include:

- There are active surrounding uses in an established community.
- Neighborhood may be mixed-use and mid-to-high level density.
- Supportive infrastructure exists but may need upgrades, particularly in the context of significant population growth.
- Development may be catalytic but would not constitute a fundamental transformation of surrounding land uses.
- If catalytic growth occurs, residents and businesses may be susceptible to increased cost burden.

Recommendations

Focus on gaps in community needs, preferably through pre-existing plans and/or pre-solicitation engagement.

Infill sites generally complement, rather than transform, the character of an existing neighborhood. That said, these sites can stimulate economic growth and development and still provide community benefits. To the extent possible, publicly owned parcels should be thought of in the context of broader neighborhood planning. In particularly hot markets or sub-markets, these sites can represent an important opportunity to provide affordable housing and/or community facilities without having to compete with better-financed market-rate developers and/or use eminent domain powers. Identifying neighborhood needs – and avoiding NIMBY opposition from well-established stakeholders – is likely to require an effective community engagement strategy.

Leading Practices: Community Engagement and Identifying Neighborhood Needs

In 2015, **Seattle's Roosevelt Neighborhood Association** established the city's first land use academy as a venue for neighborhoods to learn about and form a collective position on important land use issues and specifically, disposition of public land. For the Roosevelt community, this has been an important tool in shaping the TOD community that the neighborhood wants.⁸⁸

Maximize site potential.

Since the neighborhood surrounding an infill site may be fully built out, agencies should maximize site potential to accomplish multiple goals. Agencies can explore co-location of facilities and shared infrastructure to reduce the need to acquire additional parcels for these purposes. Focusing on complementary uses can also create operating efficiencies for service

programs and/or mitigate the need to construct additional infrastructure. For example, a mixed-use development featuring senior housing and a community health center and neighborhood-serving retail can create marginal savings in the use of paratransit services. Locating schools in mixed-use and/or residential communities can reduce the need for school bus services, particularly less-used transportation for after-school activities. However, both the land-owning and partnering agencies and developers should be cognizant of varying timelines for financing for various uses, and consider the impact on the overall development if one source should be delayed, as in the early stages of the Arlington Mill example described on page 31.

Leading Practices: Maximizing Site Potential

In addition to examples from Northern Virginia (Alexandria's mixed-use affordable housing/firehouse development, and Arlington's joint affordable housing/community center development, pages 26 and 21 respectively), **Boston's MBTA** partnered with Trinity Financial, Inc. to develop the Carruth at Ashmont Station as part of the station's redevelopment. This mixed-use development includes 74 affordable units, 42 market-rate for-sale units and 10,000 square feet of community-retail space, with a reduced amount of structured parking.⁸⁹

Typology 4: Large/master-planned sites

Some common characteristics of the large/master-planned site typology include:

- Transformation and revitalization are primary goals.
- Site has dominant impact relative to surrounding parcels.
- Previous use may be obsolete (e.g., vacant industrial facilities), and the site may have remediation concerns.
- The site may not have active surrounding uses.
- Infrastructure may be non-existent or obsolete.
- There may be significant overlap with the characteristics of suburban sites, and similar principles/recommendations may apply.

Recommendations

Focus on equity considerations from the outset.

Large/master planned sites represent a unique opportunity to advance social equity. In many cases, these efforts create new neighborhoods where none previously existed. This relatively blank slate can be used to ensure that the community is socio-economically integrated from the outset, without the same degree of challenges associated with breaking down legacy patterns of segregation and housing discrimination. In addition, rezoning, remediation and

public investment related to these sites can lead to significant private wealth creation. This opportunity for expanding the scope for shared – rather than concentrated – economic prosperity should not be wasted.

Therefore, large/master planned sites should include a range of housing choices in a fully integrated manner, and significant consideration should be made for how the neighborhood form and development programming contribute to economic mobility.

Leading Practices: Robust Affordability Requirements

Plans for Plaza Saltillo, the first joint development project by **Capital Metro, Austin's (Texas) transit agency**, will reserve 17.6 percent of residential units as affordable housing. The development site is located one stop from downtown Austin on the Red Line commuter-rail corridor, and will redevelop an 11-acre brownfield into retail and office space and 800 residential units.⁹⁰ Unfortunately, current plans reflect changes that lowered the amount of affordable housing from the originally targeted 25 percent.⁹¹

Provide flexible mechanisms for meeting affordability requirements.

The scale of large/master-planned sites requires an exceptionally large amount of capital. The financing needs can overwhelm traditional sources of affordable housing financing, and opportunities for ad hoc public subsidies may be limited if there is also a need for significant infrastructure outlays. Therefore, providing affordability at scale is likely to require a flexible and multifaceted approach, particularly if the development team is to include a full range of affordable housing choices. Potential tools can include (but are not limited to): inclusionary provisions that rely on cross-subsidy and apply across the site, discounted or free site control for a portion of the site dedicated to affordable housing, fully affordable properties financed with traditional and special-purpose affordable housing subsidies and the reservation of tenant or project-based rental subsidies (such as federal Section 8 funding) to provide deeper levels of affordability.

Leading Practices: Comprehensive Affordability Approaches

Austin's (Texas) Mueller neighborhood is in the process of being developed on a 700-acre abandoned airfield northeast of downtown Austin. Approximately one quarter of the nearly 6,000 planned residential units are to be affordable at a range of income levels. The Mueller Affordable Homes Program includes both affordable rental and ownership options, interspersed throughout the new neighborhood on blocks specifically designed to include a variety of price-points. Mueller will also include fully affordable buildings, such as Alder 51, a 240-unit development targeting households earning from 30-60 percent AMI that is financed in part with \$4 million in funding from the Austin Housing Finance Corporation. The project's developer, Catellus Development Corporation, also created the nonprofit Mueller Foundation. This organization is set up to hold second mortgages on all affordable homeownership units to facilitate permanent affordability using a shared-equity homeownership model.^{92, 93, 94}

Ensure integration of site to surrounding community.

As with suburban sites, it is important to consider how large/master planned sites connect with the surrounding neighborhoods to ensure that they do not become self-contained islands. In the worst-case scenario, building orientation (including loading dock placement for retail/commercial uses), parking facilities and transportation infrastructure can create barriers that cut off other communities. In these cases, there is a risk of negative impacts akin to urban freeways, in which legacy neighborhoods are harmed as commuters speed past older shopping establishments to newer retail centers. Infrastructure plans should focus on connecting to or improving existing street grids with a focus on multimodal transportation options. Development plans should also be cognizant of building-form transition between the public site and surrounding neighborhoods.

Consider subdividing the site to meet a range of social equity goals.

Large/master planned sites create significant opportunities for subdivision or hybrid approaches in which a critical mass of the site is awarded to a master developer, but a targeted number of parcels are made separately available. The solicitation process for subdivided sites can occur simultaneously or in phases, depending on agency capacity and market conditions. The success of this approach requires careful consideration of overall infrastructure plans and development timing.

As discussed, this approach can help build developer network capacity and facilitate participation by smaller-scale and nonprofit developers. Subdivision also allows market-rate and affordable development to proceed at the timeline most appropriate to the respective financing and approvals processes.

There are also specific benefits in the context of large/master-planned sites. First, an approach with some degree of site subdivision can mitigate the risk that failure of the master developer derails the entire neighborhood development. In addition, engaging multiple developers can support design diversity, potentially allow for a wider range of development types (as developers with varying expertise may be engaged), and create more natural transitions to the surrounding neighborhoods. While these goals can be met through a thoughtful design process undertaken by a master developer, it may happen more organically with multiple developers.

Finally, subdivision of sites can support social equity by allowing for the potentially significant growth in equity (in the financial use of the term) to be more broadly shared. As stated, the development process for large/master-planned sites can create significant property value increases and the opportunity for wealth generation. The master developer approach concentrates this wealth within the public agency (through site control payments) and a discrete set of well-capitalized partners, relying on the community benefits negotiations to

create broader social impact. While this valid approach has succeeded, it is not the only path that can be taken. Subdivision or hybrid approaches can allow a portion of the value created by the overall development to be captured from the outset by a more diverse range of partners, especially if a portion of the development site is targeted for community-serving organizations.

Avoid the temptation to overload requirements and over-prescribe design requirements.

The blank-slate nature of large/master planned site development can lead a public agency to take a more aggressive approach to dictating community benefits and design requirements. This may be valid to a certain extent, particularly when surrounding neighborhoods are relatively distant and initial land values are low. However, these advantages can be quickly offset by significant costs related to topographical and geo-technical constraints, infrastructure requirements and remediation needs. Furthermore, the scale, complexity and financing needs associated with these sites may represent a high-risk/high-reward tradeoff, particularly if the site is awarded to a single master developer. As with all site typologies, failure to fully account for the direct and opportunity costs of each requirement or solicitation provision can increase that risk and diminish the developer's ability to provide core community benefits. Therefore, public agencies should prioritize the most pressing social equity considerations, limit micromanagement of the process and design, and provide an appropriate amount of developer flexibility to meet development goals.

CONCLUSION

In today's current environment of resource scarcity, publicly owned parcels represent a rare opportunity to provide a range of benefits to both the agency and the broader community. However, efficiency is critical to delivering on this promise, as numerous complexities and competing pressures can chip away at the value that such efforts can create.

The opportunities that publicly owned parcels present are not infinite or indefinite. While some agencies occasionally acquire new parcels, land is a discrete resource for others. To make the most of these sites, it is critical that careful thought and prioritization be given to their use, with a distinct focus on social equity.

This report and the accompanying appendices and supplemental materials provide a range of approaches and success stories for equitable publicly owned parcel development. Each site is different, and the application of any innovative and/or leading practices should be tailored to that local context. However, we hope that agencies can leverage this information, build on the lessons from past experiences and develop the next wave of innovative approaches to publicly owned parcels.

APPENDIX A

Utilization of FTA-Funded Property for Affordable Housing Development: Regulations Regarding Sale and/or Use of Site^{iv}

In determining the most efficient path for utilization of transit agency-owned properties, Federal Transit Administration (FTA) grantees must adhere to a set of regulations that are designed to protect the federal interest in a given property. The federal interest^v applies when the project for which the property was purchased receives FTA funding, in full or in part. State and/or local restrictions governing the use and sale of publicly owned properties may also apply. In general, the most restrictive of the FTA, state and local rules applies as it pertains to regulations regarding sale or lease terms.

FTA grantees have several paths for disposing of and/or developing property with a federal interest. The following paragraphs outline some of the potential options and the relevant regulations related to sale/lease terms (other terms also apply):

- **Property disposition:** If the property is deemed to be surplus (in this context, without having an ongoing transportation purpose), it must be sold through the property disposition process, which requires the receipt of fair market value. The transit agency would liquidate the federal interest by remitting payment to FTA, and the balance of proceeds is retained by the transit agency. At this point, FTA restrictions no longer apply to the property.
- **Retain title with buyout:** This option is similar to property disposition but without requiring the outright sale of property at fair market value. The transit agency could liquidate the federal interest by remitting payment to FTA using its own assets. The federal interest would likely need to be based on a current assessment of fair market value. At this point, FTA restrictions no longer apply to the property, and the transit agency could negotiate agreements for development at discounted sale or lease terms in support of affordable housing.
- **Transfer of assets to local government authority:** A transit agency can transfer property to a local governmental authority for a public purpose at no cost and with no reimbursement to FTA. Certain terms and conditions would apply, including the requirement that the overall benefit accruing to the government through the transfer must be greater than the federal interest. However, FTA regulations note that this transfer is subject to a “competitive process, and there is no guarantee that a particular agency will be awarded” the property.

iv Disclaimer: The information in this appendix is based on the Enterprise Policy team's interpretation of FTA regulations and has not been officially endorsed by FTA.

v The federal interest in a property applies proportionally (i.e., if the land was purchased as part of a build out of a new corridor, and 20 percent of the project was funded by federal dollars, the applicable federal interest for any land purchased as part of that project would be 20 percent).

- **Joint development:** Transit agency-owned land does not need to be deemed surplus to be developed. Under FTA regulations, joint development is a transportation purpose that frees the agency from having to sell the property outright, but also carries additional regulations. Among other rules, sale/lease terms and conditions must conform to FTA's "fair share of revenue" standard, which is distinct from "fair market value."
 - **Fair share of revenue:** This amount is equal to the original federal investment in the property, without adjustment for inflation or increases in property value. This allows for discounting of the sale or lease costs below fair market value.
 - **Exceptions to fair share of revenue rule:** The amount of revenue generated and received by the project sponsor may be lower for community service, publicly operated projects or affordable housing, which allows sale/lease costs to be based on the actual revenue generated by the project. The amount of revenue received must still be based on the amount of revenue generated.

Full regulatory information can be found in [FTA Circular 7050.1a: Federal Transit Administration Guidance on Joint Development](#), [FTA Circular 5010.1E: Award Management Requirements \(Chapter IV\)](#) and [49 U.S.C., 5334\(h\)\(1\)–\(h\)\(3\)](#).

For more information on FTA joint development, visit the program webpage at: www.transit.dot.gov/jointdevelopment. Resources include official program guidance and other documents, as well as a recording, presentation and transcript from the agency's February 9, 2017, Joint Development webinar.

APPENDIX B

Effective Community Engagement Practices

Identifying recommendations for specific community engagement techniques was outside the scope of this research, given the diversity of characteristics of publicly owned parcels and the unique community engagement needs of different site and neighborhood types. However, a range of resources exist for public agencies and developers that can provide insight on effective engagement to create positive, collaborative outcomes, as well as overcome project opposition in more contentious circumstances. At a high level, the Institute for Local Government recommends that three actions be taken to achieve an effective public participation strategy for affordable housing: (1) resolve uncertainty early in the process with a well-designed process and clear, timely communications; (2) address different points of view in the presentation of developments, particularly those that are controversial; and (3) validate participation by ensuring that public views are welcome and respected.⁹⁵

A non-exhaustive list of community engagement resources includes the following materials.

Comprehensive Approach to Engagement

The U.S. Environmental Protection Agency's "Public Participation Guide"⁹⁶ provides information on a range of topics, including:

- Situation assessments
- The right level of public participation
- Public participation process design
- Public participation tools
- Public participation workshops
- Foundational skills, knowledge and behaviors
- Resources

Tools and Techniques

In 2012, Enterprise and Abt Associates provided technical assistance to the city of Los Angeles as part of the process for updating its consolidated plan, which is required by the U.S. Department of Housing and Urban Development. The plan assesses needs and guides the expenditure of certain federal grants passed through to the city. A recent case study details the city's effort to create a new vision for community development and the role of community participation, guided by robust data collection, analysis and visualization/mapping techniques.⁹⁷

More specifically, design charrettes can engage the community and address design, planning and development issues at both the building and neighborhood scale. Enterprise's Green Communities and Design Leadership teams have produced a number of resources for planning and implementing charrettes.⁹⁸

Advocating for Equitable Policies

PolicyLink provides materials to guide advocacy efforts around a range of social equity-related issues, designed to “strengthen the effectiveness of equity advocacy, identify opportunities to drive change, obtain feedback for improvement, and demonstrate results.”⁹⁹ This includes an Equitable Development Toolkit, which provides technical and advocacy resources related to “27 tools to reverse patterns of segregation and disinvestment, prevent displacement, and promote equitable revitalization.”¹⁰⁰

Building Support for Affordable Housing

California's Institute for Local Government provides a suite of planning and public participation tools¹⁰¹ for local agencies focused on affordable housing, covering topics such as:

- Conducting an initial assessment
- Building to code: law, procedure and public hearings
- Addressing legitimate community concerns
- Designing the public participation process
- Applying methods of community engagement
- Implementation, oversight and a framework for planning

Publications from the National Housing Conference and Enterprise/FrameWorks Institute have addressed the language and framing used to support affordable housing, providing information on effective communications to create more equitable communities.¹⁰² In addition, the Minnesota Challenge to Lower the Cost of Affordable Housing developed a Communications Toolbox to assist in advocating for “a full range of housing choices that is right for your community.”¹⁰³

APPENDIX C**Examples of Public Agency Affordability Policies****King County, Washington, Surplus Property Program (abridged for affordability provisions)**

4.56.070 Facilities management division, county departments - responsibilities and powers in declaring county real property surplus.

C. County departments shall be required to report no later than April 1 of every year to justify departmental retention of all real property for which the department is the custodian to the facilities management division.

1. If in the judgment of the facilities management division a county department cannot justify the retention of real property for which it is the custodian or if a department determines that real property is surplus to its needs, the facilities management division shall determine whether any other county department has a need for the property that is related to the provision of essential government services, including, but not limited to, services for the public health, public safety or services related to transportation, water quality, surface water or other utilities. If the property is not needed for the provision of essential government services, the facilities management division shall then determine if the parcel is suitable for affordable housing. If it is deemed suitable for housing the county shall first attempt to make it available or use it for affordable housing in accordance with K.C.C. 4.56.085 or 4.56.100. Suitable for affordable housing for the purpose of this section means the parcel is located within the Urban Growth Area, zoned residential and the housing development is compatible with the neighborhood. If the property is not deemed suitable for the purposes described in this subsection C.1., then it shall be determined whether any other department has a need for the parcel.

D. The facilities management division shall review and make recommendations to the executive for uses other than the sale of surplus real property before a decision by the executive to dispose of such properties through sale. Other possible uses that shall be considered by the division in accordance with this chapter are:

1. Exchanges for other privately or publicly owned lands that meet the county's land needs;
2. Lease with necessary restrictive covenants;
3. Use by other governmental agencies;
4. Retention by the county if the parcel is classified as floodplain or slide hazard property;
5. Use by nonprofit organizations for public purposes; and
6. Long-term lease or sale for on-site development of affordable housing.

E. The facilities management division in consultation with the department of community and human services shall, no later than July 1 of each year, submit a report to the council identifying surplus county real property suitable for the development of affordable housing. Affordable housing for the purpose of this chapter means residential housing that is rented or owned by a person:

1. Who is from a special needs population and whose monthly housing costs, including utilities other than telephone, do not exceed thirty percent of the household's monthly income; or
2. Who qualifies as a very low-income, low-income or moderate-income household as those terms are defined in RCW 43.63A.5102.

King County, Wash. "Title 4 - Revenue and Financial Regulation." King County, Wash, January 17, 2017. [aqua.kingcounty.gov/council/clerk/code/07 Title 4.htm](http://aqua.kingcounty.gov/council/clerk/code/07_Title_4.htm).

Sound Transit 3 Authorizing Legislation (abridged for affordability provisions)

Note: This legislation was approved by Washington state to authorize a local ballot measure to approve a levy to support regional transportation investment. That measure, commonly referred to as ST3, was passed in 2016.

Sec. 329. A new section is added to chapter 81.10438RCW to read as follows:

- (1) A regional transit authority that includes a county with a population of more than one million five hundred thousand must develop and seek voter approval for a system plan, which meets the requirements of any transportation subarea equity element used by the authority, to implement a regional equitable transit-oriented development strategy for diverse, vibrant, mixed-use and mixed-income communities consistent with transit-oriented development plans developed with community input by any regional transportation planning organization within the regional transit authority boundaries. This system plan, which must be part of any authorizing proposition submitted to the voters after the effective date of this section, must include the following:
 - (a) The regional transit authority must contribute at least four million dollars each year for five consecutive years beginning within three years of voter approval of the system plan to a revolving loan fund to support the development of affordable housing opportunities related to equitable transit-oriented development within the boundaries of the regional transit authority.

- (b) (i) A requirement that when a regional transit authority disposes or transfers any surplus property, including, but not limited to, property acquired prior to the effective date of this section, a minimum of eighty percent of the surplus property to be disposed or transferred, including air rights, that is suitable for development as housing, must be offered for either transfer at no cost, sale, or long-term lease first to qualified entities that agree to develop affordable housing on the property, consistent with local land use and zoning laws.
- (ii) (A) If a qualified entity receives surplus property from a regional transit authority after being offered the property as provided in (b)(i) of this subsection, the authority must require a minimum of eighty percent of the housing units constructed on property obtained under (b)(i) of this subsection to be dedicated to affordable housing.

(B) If a qualified entity sells property or development rights obtained through (b)(i) of this subsection, it must use the proceeds from the sale to construct affordable housing within one-half mile of a light rail station or transit station.
- (c) A requirement that the regional transit authority must work in good faith to implement all requirements of this section, but is not required to comply with a requirement imposed by (b)(i) or (ii) of this subsection if the requirement is in conflict, as determined by the relevant federal agency, with provisions of the applicable federal transit administration master grant agreement, federal transit administration full funding grant agreement with the regional transit authority, or the equivalent federal railroad administration agreement necessary to establish or maintain eligibility for a federal grant program.
- (d) A requirement that (b) of this subsection does not apply to property to be transferred to governments or third parties in order to facilitate permitting, construction, or mitigation of high-capacity transportation facilities and services.
- (2) For the purposes of this section:
 - (a) “Affordable housing” means long-term housing for persons, families, or unrelated persons living together whose adjusted income is at or below eighty percent of the median income, adjusted for household size, for the county where the housing is located.
 - (b) “Qualified entity” means a local government, housing authority, and nonprofit developer.

- (3) A regional transit authority implementing subsection (1)(b) of this section must, at the end of each fiscal quarter, send a report to the appropriate committees of the legislature and post a report on its web site detailing the following activities:
- (a) Any transfers of property that have occurred in the previous fiscal quarter pursuant to subsection (1)(b) of this section; and
 - (b) Any progress in implementing any regional equitable transit-oriented development strategy for diverse, vibrant, mixed-use and mixed-income communities approved by the voters pursuant to this section.

Washington State Legislative Evaluation & Accountability Program Committee. "Senate 2015-17 Transportation Budget & Funding Proposals." 2015. leap.leg.wa.gov/leap/budget/detail/2015/st1517p.asp.

MARTA TOD Guidance (abridged for affordability provisions)

Policies for Implementing MARTA's TOD Guidelines; Adopted by the MARTA Board of Directors (November 2010)

4. Affordable Housing

As stated on page 48 of the TOD Guidelines, MARTA believes that residential and mixed-use TOD projects should include a significant component of affordable housing. Achieving this will require a collaborative effort among multiple stakeholders—the municipal and county zoning jurisdictions in the MARTA service area, their housing authorities, the state of Georgia, the Department of Housing and Urban Development, for-profit and non-profit developers, lenders, community groups, and MARTA itself. Together, these stakeholders must be prepared to apply a diverse affordable housing “toolbox”, including land availability, zoning, housing finance subsidy programs, and infrastructure improvements. MARTA intends to be an active participant in this process.

To that end, MARTA will apply a policy goal of 20% affordability, on average, to joint development projects undertaken subsequent to the adoption of the TOD Guidelines. As defined by MARTA, affordable housing includes workforce housing, as well as housing affordable to seniors with low, moderate, or fixed incomes and persons with disabilities. Workforce housing, in turn, is defined as rental housing affordable to households earning 60% to 80% percent of the Atlanta Metropolitan Statistical Area Median Income (“AMI”); or for-sale housing affordable to households earning 80% to 100% percent of AMI.

Joint development projects with 10 or more residential units will be subject to the following requirements. On a project-by-project basis, MARTA will establish a minimum percentage of affordable units. The percentage will reflect market conditions, zoning, and the availability of federal, state, or local housing finance incentives. MARTA may specify that a portion of the required affordable units shall consist specifically of workforce housing. The minimum percentage of affordable units established for a given project will be considered a “floor”, and developers will be encouraged to propose additional affordable units through the Request for Proposals (RFP) scoring criteria. Similarly, the AMI percentile used to define workforce units will be considered a “ceiling”, and developers will be encouraged to provide units affordable to lower AMI percentiles.

Within the density allowed by zoning (including any zoning relief or modification which may be associated with a project), MARTA will use both higher densities and reduced parking requirements as financial incentives for the inclusion of workforce units. MARTA will encourage zoning jurisdictions to adopt reduced parking requirements for TOD housing in general and affordable housing in particular, reflecting lower average car ownership among transit-dependent households.

The affordable housing requirements for each project and any applicable incentives will be clearly stated in the Request for Proposals. The affordable housing terms offered by the designated developer and agreed to by MARTA, will be included in the Joint Development Agreement (“JDA”). The JDA will also include specific procedures to ensure that the designated affordable units are delivered on schedule; are designed and built consistent with the standards required by MARTA; are marketed on a fair and transparent basis to households earning no more than the AMI percentile and household size associated with each unit; are maintained as affordable for an extended period of time; and cannot be used as speculative investments.

MARTA. “Policies for Implementing MARTA’s TOD Guidelines: Adopted by the MARTA Board of Directors.” Atlanta: MARTA, November 2010. www.itsmarta.com/uploadedFiles/More/Transit_Oriented_Development/MARTA-TOD-Implementation-Policies-Adopted-Text-November-2010.pdf.

Los Angeles Metro Joint Development Program (abridged for affordability provisions)

Policies and Process (Updated February 2016)

- B. Community Integration, Engagement, Affordable Housing and Design: Metro's Joint Development Program will seek projects that engage stakeholders and create vibrant, transit-oriented communities that offer a range of housing types, job opportunities, and services centered around public transit facilities.
1. Community Integration. Metro will seek to create projects that are compatible with the surrounding community and reflect the needs and desires of the neighborhood in which they are situated. Like any private development, joint developments are subject to the land use policies and approval processes of the host jurisdiction.
 2. Community Engagement. Metro will ensure that the Joint Development Process actively engages community members at every development stage.
 3. Affordable Housing. Metro's Joint Development Program seeks to facilitate construction of affordable housing units, such that 35% of the total housing units in the Metro joint development portfolio are affordable for residents earning 60% or less of the Area Median Income (AMI). The joint development portfolio includes properties for which Metro maintains long term ownership. It does not include surplus land that is sold in fee. Affordable housing is defined as housing that is covenant-controlled, provided on an income-restricted basis to qualifying residents earning 60% or less than AMI as defined by the CA Tax Credit Allocation Committee, and often subsidized by public or non-profit funding sources.
- E. Affordable Housing Policies: A large portion of Metro riders are low-income and transit dependent. Meanwhile, Metro transportation investments have the potential to raise the value of property near Metro transit investments. Thus, it is in Metro's and the community's interest to maintain and grow ridership by promoting the development of affordable housing on appropriate Metro joint development sites. In addition, State and Federal guidance encourages coordination of investments and policies to accommodate affordable housing near transit. Metro will define affordable housing as housing for residents earning 60% or less than AMI, and will prioritize units with even deeper affordability levels for very low income and extremely low income residents. Metro will use the following policies to promote affordable housing on joint development sites:
1. Range of Types. Joint development projects with a residential component are encouraged to provide a range of housing types to meet the needs of a diversity of household incomes, sizes, and ages.

2. Land Discounting. Where appropriate, and subject to FTA approval (if applicable), Metro may discount joint development ground leases below the fair market value in order to accommodate affordable housing. Such a land discount may not be greater than 30% of the fair market value.
3. Proportional Land Discounting for Affordable Housing. The proportional discount of the ground lease may not be greater than the proportion of affordable units to the total number of housing units in the project, with a maximum discount of 30%. For example, land value for a project that has 20% affordable units could be discounted up to 20%. Land value for a project with 100% affordable housing could be discounted up to 30%. In the case of mixed use projects, the discount will be to the land value attributable to the housing portion of the project.

F. Development Solicitation Policies:

3. Community Based Organizations (CBO)/ Small/Disadvantaged Business Enterprise (SBE/DBE) /Disabled Veterans Business Enterprise (DVBE). Metro strongly encourages partnerships with local Community Based Organizations that provide affordable housing and other community serving programs and uses to its joint development sites, as part of the development team.

Los Angeles County Metropolitan Transportation Authority. "Metro Joint Development Program: Policies and Process." Los Angeles County Metropolitan Transportation Authority, February 2016. https://www.metro.net/projects/joint_dev_pgm/.

APPENDIX D

List of Recommended Actions/Practices

Adopting Agency Policies

- **Pipeline and process management**

- o Identify and catalogue existing properties.
- o Realistically assess agency capacity to undertake public land development and prioritize sites accordingly.
- o Promote community benefits from properties that are not the focus of immediate development activities.
- o Allow process flexibility for addressing different site contexts.
- o Allow for neighborhood- and corridor-level coordination.
- o Negotiate terms, conditions and operating procedures with partner agencies to apply across solicitations.
- o Set reasonable standards for developer participation.
- o Consider future development potential when acquiring sites.

- **Providing community benefits**

- o Identify community needs and potential benefits.
 - Conduct a continuous, clear and transparent communication process.
 - Coordinate with rezoning and community planning efforts.
 - Coordinate with housing agencies and other funders and explore options for co-location with other community facilities.
- o Establish goals and mechanisms to support affordable housing.
 - Make affordable housing and other community facilities a top priority for site uses.
 - Ensure a range of tools to facilitate affordability goals.
 - If barriers exist to on-site affordable housing development, commit to dedicating revenue from market-rate sale of land to affordable housing development.
- o Provide resources to assist developers in producing affordable housing on public land.
 - Allocate (or create incentives for) traditional affordable housing funding resources to be used in public land development.
 - Create dedicated sources of capital for affordable housing development on public land.

Site-specific Recommendations for Efficient and Equitable Development

- **Cross-cutting**

- o Ensure that each given site has a clearly defined and reasonable set of goals and priorities.
 - Determine the most important priorities based on trade-offs.
 - Conduct robust and timely community engagement.
 - Consider whether a menu of flexible options for developers is appropriate.
 - Avoid overly prescriptive site and design specifications.
 - Focus specific requirements on clear public purposes.
 - Base affordability expectations on the relationship between land values, infrastructure needs and the affordability gap.
 - Involve housing agencies/organizations to evaluate the feasibility of residential and affordable housing plans.
 - Maintain consistency throughout the process.
- o Create a clear chain of command for decision-making, designating a single lead agency where possible.
 - Take stock of applicable codes and design standards and take steps to avoid overlap.
 - Structure solicitations to minimize the impact of agency leadership/oversight changes.
 - Obtain upfront zoning/land use approvals or utilize an expedited approval process.
 - Explore cross-agency agreements and/or protocols related to the decision-making and approval process.
- o Be judicious in application of infrastructure requirements, with a particular focus on parking requirements.
 - Impose requirements only after rigorous analysis based on the specific development context.
 - Explore use of non-traditional mechanisms in place of infrastructure.
- o Consider subdividing larger-scale sites if agency capacity or developer network are limited, and/or to encourage competition.
- o Consider partnerships to secure permanent affordability.
- o Create back-up plans in the event of market disruptions.
- o Proactively address affordability impact on surrounding neighborhoods.

- **Typology 1: Small sites**

- o Select an appropriate method of parcel distribution.
- o Streamline development standards to improve site viability.
- o Proactively use sites as an opportunity to expand and/or diversify the developer network.
- o Utilize demonstration projects to provide alternative housing types.

- **Typology 2: Suburban sites**

- o Undertake a robust planning and community-engagement effort.
- o Focus on holistic community development, including services that are often absent in the suburban framework.
- o Ensure that the new resident population has opportunities to integrate into existing and new civic institutions.
- o Adopt appropriate and integrated infrastructure/parking requirements.

- **Typology 3: Infill sites**

- o Focus on gaps in community needs, preferably through pre-existing plans and/or pre-solicitation engagement.
- o Maximize site potential.

- **Typology 4: Large/master-planned sites**

- o Focus on equity considerations from the outset.
- o Provide flexible mechanisms for meeting affordability requirements.
- o Ensure integration of site into surrounding community.
- o Consider subdivision of site to meet a range of social equity-related goals.
- o Avoid temptation to overload requirements and over-prescribe design requirements.

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Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 17-2714 **Version:** 1 **Name:**

Type: Resolution **Status:** Commission Approval

File created: 6/14/2017 **In control:** Joint MTC Planning Committee with the ABAG Administrative Committee

On agenda: 7/14/2017 **Final action:**

Title: Proposed Amendment to the 2017 Transportation Improvement Program (TIP) - Revision Number 2017-14. MTC Resolution No. 4275, Revised

TIP Amendment to reconcile the 2017 TIP with Plan Bay Area 2040 and request referral of the Amendment to the Commission for approval.

Sponsors:

Indexes:

Code sections:

Attachments: [7d_Proposed Amendment to the 2017 TIP – Revision Number 2017-14. MTC_ResNo.4275, Rev.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

Proposed Amendment to the 2017 Transportation Improvement Program (TIP) - Revision Number 2017-14. MTC Resolution No. 4275, Revised

TIP Amendment to reconcile the 2017 TIP with Plan Bay Area 2040 and request referral of the Amendment to the Commission for approval.

Presenter:

Ken Kirkey

Recommended Action:

Commission Approval

Attachments



METROPOLITAN
TRANSPORTATION
COMMISSION

Agenda Item 7d

Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105
TEL 415.778.6700
WEB www.mtc.ca.gov

Memorandum

TO: Planning Committee

DATE: July 7, 2017

FR: Executive Director

W.I. 1512

RE: Proposed Amendment to the 2017 Transportation Improvement Program (TIP) – Revision Number 2017-14. MTC Resolution No. 4275, Revised

Background

The federally required TIP is a comprehensive listing of Bay Area surface transportation projects that are to receive federal funding, are subject to a federally required action, or are considered regionally significant for air quality conformity purposes during the four-year period from fiscal year 2016-17 through fiscal year 2019-20. MTC, as the federally designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area, is required to prepare and adopt an updated TIP every two years under state statute. The 2017 TIP was adopted by the Commission on September 28, 2016, and approval by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) was received on December 16, 2016. The 2017 TIP is valid for four years under federal regulations. The TIP may be revised to make necessary changes prior to the next update. The TIP is posted on the Internet at: <http://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program>.

TIP Amendment 2017-14 serves to conform the 2017 TIP to Plan Bay Area 2040 and revises 61 projects with a net funding increase of approximately \$3.8 billion. Among other changes, this revision:

- Revises 41 existing projects in the 2017 TIP;
- Adds 14 new projects to the 2017 TIP;
- Archives three projects as they have been completed and are not included in Plan Bay Area 2040 as ongoing projects; and
- Deletes three projects as they will not move forward.

This amendment also includes a supplemental listing of the remaining projects currently included in the 2017 TIP and their corresponding Plan Bay Area 2040 projects. The project changes in TIP Amendment 2017-14 and the supplemental listing together demonstrate that the 2017 TIP, as revised, is consistent with Plan Bay Area 2040.

Changes made with this revision do not conflict with the financial constraint requirements. The Transportation-Air Quality Conformity Analysis: Plan Bay Area 2040 and Amended 2017 TIP that is being considered under Item 7a demonstrates that the TIP and Plan are consistent with ("conform to") the federal air quality plan known as the State Implementation Plan (SIP), as required by federal conformity regulations.

In accordance with MTC's public participation plan, TIP Amendment 2017-14 was released for public review and comment on May 3, 2017, and the review period closed on June 1, 2017. No significant comments were received on TIP Amendment 2017-14. The TIP Revision Summary for this amendment is attached and is also available in the MTC offices at 375 Beale Street, San Francisco, CA, and is posted on the Internet at: <http://mtc.ca.gov/our-work/fund-invest/tip/tip-revisions-and-amendments>. The TIP public participation process also serves to satisfy the public involvement requirements of the FTA annual Program of Projects, for applicable funds.

This amendment will be transmitted to Caltrans after the Commission approval; after its review, Caltrans will forward the amendment to FTA/FHWA as required for final federal agency review and approval.

Issues

This revision to the 2017 TIP contains programming changes that are contingent upon:

- The Commission's approval of Item 7a (MTC Resolution No. 4298 - Final Air Quality Conformity Analysis,);
- The Commission's and ABAG Executive Board's approval of Item 7b (MTC Resolution No. 4299 and ABAG Resolution No. 09-17 - Final Environmental Impact Report (EIR)); and
- The Commission's and ABAG Executive Board's approval of Item 7c (MTC Resolution No. 4300 and ABAG Resolution No. 10-14 - Final Plan Bay Area 2040,).

Resolution No. 4275, Revised also reflects changes proposed as part of a separate amendment that will be reviewed by the Programming and Allocations Committee at their July 12, 2017 meeting.

Committee Actions

Staff recommends that the MTC Planning Committee refer Resolution No. 4275, Revised to the Commission for approval.



Steve Heminger

Attachments:

- MTC Resolution No. 4275, Revised
- Attachment 1, Summary Report of Amended Projects for TIP Amendment 2017-14
- Attachment 2, Proposed Plan Bay Area 2040 Project References for Additional Projects in the 2017 TIP

Date: September 28, 2016
 W.I.: 1512
 Referred by: PAC
 Revised: 12/21/16-C 02/22/17-C 03/22/17-C
 04/26/17-C 06/28/17-C 07/26/17-C

ABSTRACT

Resolution No. 4275, Revised

This resolution adopts the 2017 Transportation Improvement Program (TIP) for the San Francisco Bay Area.

Further discussion of the 2017 TIP adoption is contained in the Programming & Allocations Committee summary sheets dated September 14, 2016, December 14, 2016, February 8, 2017, March 8, 2017, April 12, 2017, June 14, 2017, and July 12, 2017, and the Planning Committee summary sheet dated July 14, 2017. This resolution was revised as outlined below. Additional information on each revision is included in attachment B: 'Revisions to the 2017 TIP'.

2017 TIP Revisions

Revision #	Revision Type	# of Projects	Net Funding Change (\$)	MTC Approval Date	Final Approval Date
17-01	Admin. Modification	61	-\$3,823,767	12/21/2016	12/21/2016
17-02	Admin. Modification	6	\$544,852	1/31/2017	1/31/2017
17-03	Amendment	69	\$819,826,956	12/21/2016	2/8/2017
17-04	Admin. Modification	15	-\$111,504	3/6/2017	3/6/2017
17-05	Admin. Modification	12	\$22,741,790	4/5/2017	4/5/2017
17-06	Amendment	11	\$68,189,237	2/22/2017	3/14/2017
17-07	Admin. Modification	15	-\$8,341,530	4/28/2017	4/28/2017
17-08	Amendment	73	\$840,375,166	3/22/2017	4/14/2017
17-09	Admin. Modification	24	\$17,810,414	6/9/17	6/9/17
17-10	Amendment	14	\$101,213,635	4/26/2017	6/8/17
17-11	Admin. Modification	Pending	Pending	Pending	Pending
17-12	Admin. Modification	Pending	Pending	Pending	Pending

ABSTRACT

MTC Resolution No. 4275, Revised

Page 2

Revision #	Revision Type	# of Projects	Net Funding Change (\$)	MTC Approval Date	Final Approval Date
17-13	Amendment	48	\$221,344,142	6/28/2017	Pending
17-14	Amendment	61	\$3,846,016,088	7/26/2017	Pending
17-15	Admin. Modification	Pending	Pending	Pending	Pending
17-16	Amendment	13	\$19,557,138	7/26/2017	Pending
Net Funding Change		422	\$5,945,342,617		
Absolute Funding Change			\$5,969,896,219		

Date: September 28, 2016
W.I.: 1512
Referred by: PAC

Re: Adoption of the 2017 Transportation Improvement Program (TIP)

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4275

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to California Government Code Section 66500 et seq.; and

WHEREAS, MTC is the federally designated Metropolitan Planning Organization (MPO), pursuant to Section 134(d) of Title 23 of the United States Code (USC) for the nine-county San Francisco Bay Area region (the region); and

WHEREAS, Title 23 Code of Federal Regulations Part 450 (23 CFR §450) requires the region to carry out a continuing, cooperative and comprehensive transportation planning process as a condition to the receipt of federal assistance to develop and update at least every four years, a Transportation Improvement Program (TIP) consisting of a comprehensive listing of transportation projects that receive federal funds or that are subject to a federally required action, or that are regionally significant; and

WHEREAS, the TIP must be consistent with the Regional Transportation Plan (RTP) adopted pursuant to Government Code Section 66508, the State Implementation Plan (SIP) as required by the federal Clean Air Act (42 U.S.C. Section 7401 et seq.); and the San Francisco Bay Area Transportation Air Quality Conformity Protocol (MTC Resolution 3757), which establish the Air Quality Conformity Procedures for MTC's TIP and RTP; and

WHEREAS, federal regulations (23 CFR §450.324(i)) require that the TIP be financially constrained, by year, to reasonable estimates of available federal and state transportation funds; and

WHEREAS, federal regulations (23 CFR §450.316) require that the MPO develop and use a documented public participation plan that defines a process for providing citizens, affected public agencies and interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process; and

WHEREAS, federal regulations (23 CFR §450.330(a)) allow MTC to move projects between years in the first four years of the TIP without a TIP amendment, if Expedited Project Selection Procedures (EPSP) are adopted to ensure such shifts are consistent with the required year by year financial constraints; and

WHEREAS, MTC, the State, and public transportation operators within the region have developed and implemented EPSP for the federal TIP as required by Federal Regulations (23 CFR 450.330(a)) and Section 134 of Title 23 United States Code (USC §134), as outlined in Attachment A to this Resolution, and MTC Resolution 3606, Revised; and

WHEREAS, MTC has found in MTC Resolution No. 4274 that the 2017 TIP, as set forth in this resolution, conforms to the applicable provisions of the SIP for the San Francisco Bay Area; and

WHEREAS, the San Francisco Bay Area air basin was designated by U.S. Environmental Protection Agency as nonattainment for the fine particulate matter (PM_{2.5}) standard in December 2009, and MTC must demonstrate conformance to this standard through an interim emissions test until a PM_{2.5} SIP is approved by the federal Environmental Protection Agency (U.S. EPA); now, therefore be it

RESOLVED, that MTC adopts the 2017 TIP, attached hereto as Attachment A and incorporated herein as though set forth at length; and be it further

RESOLVED, that MTC has developed the 2017 TIP in cooperation with the county Congestion Management Agencies, transit operators, the Bay Area Air Quality Management District (BAAQMD), the California Department of Transportation (Caltrans), and other partner agencies and interested stakeholders, and in consultation with the Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and U.S. EPA; and, be it further

RESOLVED, that the 2017 TIP was developed in accordance with the region's Public Participation Plan and consultation process (MTC Resolution No. 4174) as required by Federal Regulations (23 CFR §450.316); and, be it further

RESOLVED, that the projects and programs included in the 2017 TIP, attached hereto as Attachment A to this resolution, and incorporated herein as though set forth at length, are consistent with the RTP; and, be it further

RESOLVED, that the 2017 TIP is financially constrained, by year, to reasonable estimates of available federal, state and local transportation funds; and, be it further

RESOLVED, that MTC approves the EPSP developed by MTC, the State, and public transportation operators within the region for the federal TIP as required by federal regulations (23 CFR 450.330(a)) and Section 134 of Title 23 United States Code (USC §134), as outlined in Attachment A to this Resolution, and MTC Resolution 3606, Revised; and, be it further

RESOLVED, that MTC will support, where appropriate, efforts by project sponsors to obtain letters of no prejudice or full funding agreements from FTA for projects contained in the transit element of the TIP; and, be it further

RESOLVED, that the public hearing and public participation process conducted for the 2017 TIP satisfies the public involvement requirements of the FTA annual Program of Projects; and, be it further

RESOLVED, that the adoption of the TIP shall not constitute MTC's review or approval of those projects included in the TIP pursuant to Government Code Sections 66518 and 66520, or provisions in federal regulations (49 CFR Part 17) regarding Intergovernmental Review of Federal Programs; and, be it further

RESOLVED, that MTC's review of projects contained in the TIP was accomplished in accordance with procedures and guidelines set forth in the San Francisco Bay Area Transportation Air Quality Conformity Protocol (MTC Resolution 3757); and, be it further

RESOLVED, that MTC finds that the 2017 TIP conforms to the applicable provisions of the State Implementation Plan (SIP) and the applicable transportation conformity budgets in the SIP approved for the national 8-hour ozone standard and national carbon monoxide standard, and to the emissions test for the national fine particulate matter standard (MTC Resolution No. 4274); and, be it further

RESOLVED, that the projects and programs included in the 2017 TIP do not interfere with the timely implementation of the traffic control measures (TCMs) contained in the SIP; and, be it further

RESOLVED, that MTC finds all regionally significant capacity-increasing projects included in the 2017 TIP are consistent with Plan Bay Area (the 2040 Regional Transportation

Plan including the Sustainable Communities Strategy for the San Francisco Bay Area); and, be it further

RESOLVED, that revisions to the 2017 TIP as set forth in Attachment B to this resolution and incorporated herein as though set forth at length, shall be made in accordance with rules and procedures established in the public participation plan and in MTC Resolution No. 4275, and that MTC's review of projects revised in the TIP shall be accomplished in accordance with procedures and guidelines set forth in the San Francisco Bay Area Transportation Air Quality Conformity Protocol (MTC Resolution 3757) and as otherwise adopted by MTC; and, be it further

RESOLVED, that staff have the authority to make technical corrections, and the Executive Director and Deputy Executive Directors have signature authority to approve administrative modifications for the TIP and Federal Statewide Transportation Improvement Program (FSTIP) under delegated authority by Caltrans, and to forward all required TIP amendments once approved by MTC to the appropriate state and federal agencies for review and approval; and, be it further

RESOLVED, that a copy of this resolution shall be forwarded to FHWA, the FTA, U.S. EPA, Caltrans, the Association of Bay Area Governments (ABAG), and to such other agencies and local officials as may be appropriate.

METROPOLITAN TRANSPORTATION COMMISSION



Dave Cortese, Chair

This resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in San Francisco, California on September 28, 2016.

Date: September 28, 2016
W.I.: 1512
Referred by: PAC

Attachment A
Resolution No. 4275
Page 1 of 1

2017 Transportation Improvement Program

The 2017 Transportation Improvement Program for the San Francisco Bay Area, adopted September 28, 2016, is comprised of the following, incorporated herein as though set forth at length:

- A Guide to the 2017 Transportation Improvement Program (TIP) for the San Francisco Bay Area
- TIP Overview
- Expedited Project Selection Process
- TIP Revision Procedures
- Financial Capacity Assessments
- County Summaries
- Project Listings
- Appendices
- The 2017 TIP Investment Analysis: Focus on Low-Income and Minority Communities

Date: September 28, 2016
W.I.: 1512
Referred by: PAC
Revised: 12/21/16-C 02/22/17-C 03/22/17-C
04/26/17-C 06/28/17-C 07/26/17-C

Attachment B
Resolution No. 4275, Revised
Page 1 of 7

Revisions to the 2017 TIP

Revisions to the 2017 Transportation Improvement Program (TIP) are included as they are approved.

Revision 17-01 is an administrative modification that revises 61 projects with a net funding decrease of approximately \$3.8 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on December 21, 2016. Among other changes, this revision:

- Updates the funding plans of 32 Surface Transportation Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect planned obligations and other programming decisions, including the programming of \$110 million in CMAQ funds and \$40 million in Regional Measure 2 funds to BART's Rail Car Procurement Program to reflect the programming in the OBAG 2 funding framework;
- Updates the funding plans of five projects to reflect the repurposing of unused earmark funds;
- Updates the funding plans of eight individually-listed Highway Bridge Program funded projects to reflect the latest information from Caltrans;
- Splits the Incident Management Program project into two projects to separate the current and future phases of the program;
- Updates the funding plan of the Caltrain Electrification project to reflect recent programming decisions and funding agreements;
- Updates the funding plan of SFMTA's Van Ness Bus Rapid Transit project to reflect the latest schedule including reprogramming approximately \$60 million in Federal Transit Administration (FTA) Small Starts funding from prior years to fiscal year 2017; and
- Updates the funding plan and back-up listing of the Mandates Program within the State Highway Operations and Protection Program (SHOPP) to reflect the latest information from Caltrans including the addition of \$7.3 million in SHOPP funds.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of approximately \$60 million in FTA Small Starts funds, \$7.3M in SHOPP funds, \$17,489 in repurposed earmark funds, and \$1.9 million in Transportation Fund for Clean Air funds. MTC's 2017 TIP, as revised with Revision No. 2017-01, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-02 is an administrative modification that revises six projects with a net funding increase of \$544,852. The revision was approved into the Federal-Statewide TIP by the deputy executive director on January 31, 2017. Among other changes, this revision:

- Updates the funding plans of five federally funded projects to reflect actual and planned obligations and Federal Transit Administration grants; and
- Updates the funding plan and back-up listing of the Highway Safety Improvement Program (HSIP) funded grouped listing to reflect the latest programming information from Caltrans related to projects that had unobligated funding from federal fiscal year 2015-16, including the addition of \$399,340 in HSIP funds and \$145,512 in local funds.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$399,340 in HSIP funds. MTC's 2017 TIP, as revised with Revision No. 2017-02, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-03 is an amendment that revises 69 projects with a net funding increase of approximately \$820 million. The revision was referred by the Programming and Allocations Committee on December 14, 2016, and approved by the MTC Commission on December 21, 2016. Caltrans approval was received on January 19, 2017, and final federal approval was received on February 8, 2017. Among other changes, this revision:

- Amends four exempt and four non-exempt, not regionally significant projects into the TIP to reflect the adoption of the Bay Bridge Forward Program;
- Updates the funding plan of the Golden Gate Bridge Suicide Deterrent project to reflect additional funding commitments, including the addition of \$40 million in Highway Bridge Program (HBP) funds, \$40 million in Surface Transportation Block Grant Program funds and \$40 million in Golden Gate Bridge toll funds;
- Updates the funding plans of six additional individually-listed HBP funded projects, updates the funding plan and back-up listing of the HBP funded grouped listing, and combines one individually-listed HBP funded project with the grouped listing to reflect the latest information from Caltrans, including the addition of approximately \$109 million in HBP funds;
- Deletes two projects and updates the funding plans of two other projects to reflect the repurposing of prior year federal earmark funds;
- Adds one new State Highway Operations and Protection Program (SHOPP) funded grouped listing and updates the funding plans and back-up listings of five existing SHOPP funded grouped listings to reflect the latest information from Caltrans, including the addition of approximately \$369 million in SHOPP funds;
- Adds one new Recreational Trails Program funded grouped listing into the TIP;
- Carries forward two exempt and one non-exempt project into the 2017 TIP from the 2015 TIP as these projects were not originally included in the 2017 TIP as adopted;
- Adds one new exempt project to the TIP and updates the scope and funding for an existing project to reflect the award of Federal Transit Administration (FTA) discretionary funds through the FTA Section 5339 Discretionary Program and Transit Oriented Development Planning Pilot Program;

- Adds one new exempt Surface Transportation Block Grant Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded project and updates the funding plans of 18 other STP/CMAQ funded projects to reflect obligations, past funding decisions in the One Bay Area Grant (OBAG) Cycle 1 Transit Performance Initiative program, and the selection of projects in OBAG Cycle 2; and
- Adds one new exempt Transit Capital Priority (TCP) funded project, deletes one existing TCP funded project and updates the funding plans of seven other TCP funded projects.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-04 is an administrative modification that revises 15 projects with a net funding decrease of \$111,504. The revision was approved into the Federal-Statewide TIP by the deputy executive director on March 6, 2017. Among other changes, this revision:

- Updates the funding plans of five Surface Transportation Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect programming decisions and past and planned obligations;
- Updates the funding plans of three other federally funded projects to reflect planned obligations;
- Updates the funding plan of the Sonoma County Transportation Authority's portion of the US 101 Marin/Sonoma Narrows project to reflect the programming of \$15 million in repurposed federal earmark funds;
- Splits out the I-880 Integrated Corridor Management project from the region-wide Incident Management Program; and
- Updates the funding plan and back-up listing of the Caltrans managed Highway Maintenance Program grouped listing to reflect the latest information from Caltrans.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$2 million in High Priority Project Earmark funds, \$15 million in repurposed earmark funds, \$665,042 in Federal Highway Administration Ferry Boat Program funds, and \$3 million in Trade Corridors Improvement Fund funds. MTC's 2017 TIP, as revised with Revision No. 2017-04, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-05 is an administrative modification that revises 12 projects with a net funding increase of \$22.7 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on April 5, 2017. Among other changes, this revision:

- Updates the funding plans of seven projects to reflect the programming of funds for FY2016-17 in the Transit Capital Priorities program;
- Updates the funding plans of two Surface Transportation Block Grant Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect planned obligations;
- Updates the funding plan of the Metropolitan Transportation Commission's Clipper Fare Collection System project to reflect the programming of \$7.4 million in bridge toll funds; and

- Updates the funding plan and back-up listing of the Caltrans managed State Highway Operation and Protection Program (SHOPP) Emergency Response grouped listing to reflect the latest information from Caltrans, including the addition of \$5.3 million to the SHOPP.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$5.3 million in SHOPP funds. MTC's 2017 TIP, as revised with Revision No. 2017-05, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-06 is an amendment that revises 11 projects with a net funding increase of approximately \$68 million. The revision was approved by the MTC Commission on February 22, 2017. Caltrans approval was received on February 24, 2017, and final federal approval was received on March 14, 2017. Among other changes, this revision:

- Updates the scope and funding plan of the Central Contra Costa Transit Authority's Replace 18 30-foot Buses project to reflect the award of approximately \$2.7 million in FTA Low or No Emission Vehicle Deployment Program funds;
- Amends the City of Palo Alto's exempt Bay Area Fair Value Commuting Program into the TIP to reflect the award of approximately \$1 million in FTA Mobility on Demand Sandbox Program funds;
- Amends two additional exempt projects into the TIP; and
- Updates the funding plan of one individually listed Highway Safety Improvement Program (HSIP) funded project and updates the funding plan and back-up listing of the HSIP grouped listing to reflect the latest information from Caltrans, including the addition of approximately \$25.5 million in HSIP funds.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-07 is an administrative modification that revises 15 projects with a net funding decrease of \$8.3 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on April 28, 2017. Among other changes, this revision:

- Updates the funding plans of three projects to reflect the programming of funds for the Federal Highway Administration's 2016 Earmark Repurposing transfer requests;
- Updates the funding plan and back-up listing of the Caltrans managed Local Highway Bridge Program (HBP) grouped listing to reflect the latest information from Caltrans, including the addition of \$476,000 for two HBP projects in Santa Clara County;
- Updates the funding plan and back-up listing of the Caltrans managed State Highway Operation and Protection Program (SHOPP) Pavement Resurfacing/Rehabilitation grouped listing, including the removal of \$7.5 million from the SHOPP;
- Updates the funding plans of five Surface Transportation Block Grant Program/ Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect the latest programming decisions and obligations; and
- Reprograms \$20 million in Federal Transit Administration (FTA) Small Starts program funds for the Sonoma Marin Area Rail Transit Corridor project from prior years to fiscal year 2016/17 to reflect a planned FTA grant.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$20 million in FTA Small Starts funds, \$476,000 in HBP funds, and \$7.5 million in State STP funds. MTC's 2017 TIP, as revised with Revision No. 2017-07, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-08 is an amendment that revises 73 projects with a net funding increase of approximately \$840 million. The revision was referred by the Programming and Allocations Committee on March 8, 2017, and approved by the MTC Commission on March 22, 2017. Caltrans approval was received on March 29, 2017, and final federal approval was received on April 14, 2017. Among other changes, this revision:

- Amends 37 new exempt projects into the TIP and updates the funding plans of 35 existing projects to reflect the programming of funds for FY2016-17 in the Transit Capital Priorities program; and
- Archives one project as it has been completed.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-09 is an administrative modification that revises 24 projects with a net funding increase of \$17.8 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on June 9, 2017. Among other changes, this revision:

- Updates the funding plan of the Caltrain Electrification project to reflect the award of \$100 million in Federal Transit Administration (FTA) Capital Investment funds;
- Updates the funding plans of seven Surface Transportation Block Grant Program/ Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect the latest programming decisions and obligations;
- Updates the funding plan of the Santa Clara Valley Transportation Authority's Standard and Small Bus Replacement Project to reflect the award of \$2.5M in FTA Low or No Emissions Vehicle Deployment Program (LoNo) funds; and
- Updates the funding plan and back-up listing of MTC's Lifeline Transportation Program 5307 Job Access and Reverse Commute Set Aside Program –Cycle 4 grouped listing to reflect the latest programming decisions.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$100 million in FTA Capital Investment funds, \$2.5 million in FTA LoNo funds, \$1.4 million in High Priority Project funds, and \$3.3 million in Low Carbon Transit Operations Program funds. MTC's 2017 TIP, as revised with Revision No. 2017-09, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-10 is an amendment that revises 14 projects with a net funding increase of approximately \$101 million. The revision was referred by the Programming and Allocations Committee on April 12, 2017, and approved by the MTC Commission on April 26, 2017.

Caltrans approval was received on May 11, 2017, and final federal approval was received on June 8, 2017. Among other changes, this revision:

- Amends three new exempt Transit Performance Initiative Program funded projects into the TIP;
- Updates the funding plans of two projects to reflect the programming of funds from fiscal year 2016-17 of the Transit Capital Priorities program;
- Updates the funding plans and back-up listings of two grouped listings and adds one new grouped listing to reflect the latest information from Caltrans including the addition of \$55.8 million in State Highway Operation and Protection Program funds and \$3.8 million in Section 130 Railroad/Highway Crossing funds;
- Amends AC Transit's Five Battery-Electric Bus Purchase project into the TIP to reflect the recent award of \$1.5 million in Federal Transit Administration (FTA) Low or No Emission Vehicle Deployment Program funds;
- Amends Bay Area Rapid Transit's Integrated Carpool to Transit Access Program into the TIP to reflect the award of \$358,000 in FTA Mobility on Demand Sandbox Program funds; and
- Amends one new exempt and one previously archived project into the TIP.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-11 is a pending administrative modification.

Revision 17-12 is a pending administrative modification.

Revision 17-13 is an amendment that revises 48 projects with a net funding increase of approximately \$221 million. The revision was referred by the Programming and Allocations Committee on June 14, 2017, and approved by the MTC Commission on June 28, 2017. Caltrans approval is expected in mid-July, 2017, and final federal approval is expected in mid-August, 2017. Among other changes, this revision:

- Amends 13 new exempt projects and one new non-exempt, not regionally significant project into the TIP and updates the funding plans of two existing projects to reflect the programming of Cycle 3 of the Active Transportation Program;
- Amends four new Surface Transportation Block Grant Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded exempt projects into the TIP, updates the funding plans of three other STP/CMAQ funded projects and deletes one STP/CMAQ funded project to reflect changes in the One Bay Area Grant programs;
- Amends three new grouped listings into the TIP to reflect the programming of Federal Transit Administration Section 5310, 5311 and 5311(f) funds. The FTA Section 5310 listing is contingent upon the California Transportation Commission approval on June 28 & 29, 2017;
- Updates the funding plan and back-up listing of the Highway Bridge Program grouped listing to reflect the latest information from Caltrans;
- Splits two projects out of the Highway Safety Improvement Program grouped listings and updates their project scopes to include road diet elements;

- Updates the scope of the City/County Association of Governments of San Mateo County's US-101 High Occupancy Vehicle/High Occupancy Toll Lane project to change the northern project limit to match the most recent cooperative agreement;
- Splits the Bay Area Rapid Transit District's Go Uptown project out of their Station Modernization Program;
- Amends one new San Francisco Municipal Transportation Agency project into the TIP to reflect the award of \$11 million in Advanced Transportation and Congestion Management Technologies Deployment Program funds;
- Amends one new exempt project into the TIP and updates the funding plan on one existing project to reflect changes in the Transit Capital Priorities program;
- Amends two additional exempt projects in the TIP; and
- Archives six projects as they have been completed.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-14 is an amendment that serves to conform the 2017 TIP to Plan Bay Area 2040 and revises 61 projects with a net funding increase of approximately \$3.8 billion. The revision was referred by the Planning Committee on July 14, 2017, and approved by the MTC Commission on July 26, 2017. Caltrans approval and final federal approval are expected in August, 2017.

Among other changes, this revision:

- Revises 41 existing projects in the 2017 TIP;
- Adds 14 new projects to the 2017 TIP;
- Archives three projects as they have been completed and are not included in Plan Bay Area 2040 as ongoing projects; and
- Deletes three projects as they will not move forward.

Changes made with this revision do not conflict with the financial constraint requirements. The Transportation-Air Quality Conformity Analysis: Plan Bay Area 2040 and Amended 2017 TIP demonstrates that the TIP and Plan are consistent with ("conform to") the federal air quality plan known as the State Implementation Plan (SIP), as required by federal conformity regulations.

Revision 17-15 is a pending administrative modification.

Revision 17-16 is an amendment that revises 13 projects with a net funding increase of approximately \$20 million. The revision was referred by the Programming and Allocations Committee on July 12, 2017, and approved by the MTC Commission on July 26, 2017. Caltrans approval is expected in mid-August, 2017, and final federal approval is expected in mid-September, 2017. Among other changes, this revision:

- Adds one new exempt project, deletes one existing project and updates the funding plans of seven projects to reflect changes in the FY2016-17 Transit Capital Priorities Program;
- Updates the funding plan of the Fairfield-Suisun Intercity/Local Bus Replacement project to reflect the programming of funds available through the Transit Performance Initiative Incentive and Investment Programs; and
- Archives two projects as they have been completed.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

TIP Revision Summary 2017-14

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
System: Local Road					
ALA150003	Dublin	Dublin Blvd. - North Canyons Pkwy Extension	Update the funding plan to add \$1.1M in Local funds and \$75.5M in RTP-LRP and update the RTP reference to reflect Plan Bay Area 2040	\$76,600,000	617.7%
ALA170043	Oakland	Oakland - 14th Street Safe Routes in the City	Amend a new non-exempt project into the TIP with \$10.6M in ATP funds and \$3.5M in Local funds	\$14,032,000	~%
CC-070013	Brentwood	Lone Tree Way Undercrossing	Update the project description to reflect that the project will widen Lone Tree Way to 4 lanes, update the funding plan to remove \$3M in CON RTP-LRP funds, and update the RTP reference to reflect Plan Bay Area 2040	-\$2,990,000	-15.7%
CC-070081	Contra Costa County	Byron Highway - Vasco Road Connection	Update the funding plan to add \$35M in CON RTP-LRP funds and Update the funding plan to add \$5.5M in Sales Tax and \$2.5M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$35,350,000	760.2%
CC-090023	Concord	Concord Clayton Road/Treat Blvd Intersection Imps.	Update the funding plan to add \$525K in FY15 CON Local funds and update the RTP reference to reflect Plan Bay Area 2040	\$525,000	19.6%
CC-090026	Concord	Ygnacio Valley Road Widening	Update the funding plan to add \$600K in Local funds and \$7.4M in RTP-LRP and clarify the project description and update the RTP reference to reflect Plan Bay Area 2040	\$8,000,000	66.7%
CC-170015	Brentwood	Brentwood Blvd. Widening Phase II	Amend a new non-exempt project into the TIP with \$340K in Local funds and \$7.8M in RTP-LRP	\$8,200,000	~%
CC-170016	Contra Costa County	Camino Tassajara Realignment	Amend a new non-exempt project into the TIP with \$3M in Local funds and \$14M in RTP-LRP funds	\$17,000,000	~%
MRN170011	Transportation Authority of Marin (TAM)	North-South Greenway Gap Closure	Split this exempt project out of MRN050001 with \$19M in RM2 funds	\$19,050,000	~%
SCL090004	San Jose	Almaden Ave & Vine St Safety Improvements	Revise the description and name to reflect reduced scope; update the funding plan to remove \$20M in RTP-LRP CON and \$1M in Private ROW funds and reprogram remaining funds between years and phases update the RTP reference to reflect Plan Bay Area 2040	-\$21,000,000	-92.0%
SF-010038	San Francisco Dept of Public Works (SFPDW)	Bayview Transportation Improvements	Update the funding plan to add \$2.85M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$2,850,000	7.9%
SF-090004	San Francisco Dept of Public Works (SFPDW)	Harney Way Roadway Widening	Update the funding plan to change the source and program year for \$8M from FY21 RTP-LRP to FY18 Private funds and add \$3.5M in FY18 Private funds and update the RTP reference to reflect Plan Bay Area 2040	\$3,450,000	14.3%
SF-110002	San Francisco Municipal Transport Agency (SFMTA)	Mission Bay/UCSF Multi-Modal Transportation Imps.	Update the funding plan to add \$22M in Local funds and update the RTP reference to reflect Plan Bay Area 2040	\$22,000,000	44.3%
SF-110006	San Francisco Dept of Public Works (SFPDW)	Hunters Pt Shipyard and Candlestick Pt Local Roads	Update the funding plan to add \$83M in Private funds and reprogram funds between years and phases and update the RTP reference to reflect Plan Bay Area 2040	\$82,950,000	24.5%
SF-110049	San Francisco County Transport Authority (SFCTA)	Treasure Island Congestion Pricing Program	Update the funding plan to change the source for \$2.3M from Local and \$100K from Sales Tax to RTP-LRP, add \$1M in Private funds and \$3M in RTP-LRP and reprogram funds between years and phases and update the RTP reference to reflect Plan Bay Area 2040	\$4,019,835	46.0%

TIP Revision Summary 2017-14

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
SF-130001	San Francisco Dept of Public Works (SFDPW)	SF- Better Market Street Transportation Elements	Update the funding plan to add \$8.5M in Local funds and \$200M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$208,600,000	101.1%
SF-130006	San Francisco Dept of Public Works (SFDPW)	Southeast Waterfront Transportation Improvements	Update the funding plan to add \$15M in RTP-LRP and update the RTP reference to reflect Plan Bay Area 2040	\$15,177,253	6.0%
SF-130007	San Francisco Dept of Public Works (SFDPW)	HOPE SF Street Network - Hunters View	Update the funding plan to add \$1M in FY17 PE Local and \$1M in FY20 CON local and update the RTP reference to reflect Plan Bay Area 2040	\$2,000,000	20.0%
SF-130017	San Francisco County Transport Authority (SFCTA)	SF Downtown Congestion Pricing	Update the funding plan to add \$21.8M in RTP-LRP funds and reprogram \$2M in CON Local from FY17 to FY20 and update the RTP reference to reflect Plan Bay Area 2040	\$21,800,000	20.9%
SF-170013	San Francisco Dept of Public Works (SFDPW)	HOPE SF Street Network - Sunnysdale and Potrero	Amend a new non-exempt project into the TIP with \$6M in Local funds and \$28M in RTP-LRP funds	\$34,000,000	~%
SOL050009	Dixon	Parkway Blvd/UPRR Grade Separation	Amend a previously deleted project back into the TIP; update the funding plan to add \$12M in RTP funds to CON FY 19 and \$750k in local funds to ROW FY 17	\$12,750,000	412.8%
System: State Highway					
ALA110002	Alameda County Transportation Commission (ACTC)	I-880/Industrial Parkway West Interchange	Update the funding plan to add \$3.4M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$3,359,000	6.3%
ALA150001	Alameda County Transportation Commission (ACTC)	Route 84 widening, Pigeon Pass to I-680	Update the project description to correct post miles and references to express lane direction and update RTP reference to reflect Plan Bay Area 2040	\$0	0.0%
ALA170004	Alameda County Transportation Commission (ACTC)	I-880/West Winton Avenue Interchange	Update the funding plan to add \$2.5M in Sales Tax and \$17.5M in RTP-LRP and update RTP reflect the adoption of Plan Bay Area 2040	\$20,000,000	95.2%
ALA170005	Alameda County Transportation Commission (ACTC)	I-880/Whipple Road Interchange Improvements	Update the funding plan to add \$5.5M in Sales Tax and \$2.5M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$8,000,000	13.3%
ALA170009	Alameda County Transportation Commission (ACTC)	Widen I-680 NB and SB for EL from SR-84 to Alcosta	Update the funding plan to reprogram \$1.5M in PE Local from 2018 to 2019, update the project description and update the RTP reference to reflect Plan Bay Area 2040	\$0	0.0%
ALA170045	Dublin	I-580 Interchange Imps at Hacienda/Fallon Rd, Ph 2	Amend a new non-exempt project into the TIP with \$1.4M in Local funds and \$56.6M in RTP-LRP funds	\$58,000,000	~%
ALA170046	Hayward	I-880/A Street Interchange Reconstruction	Amend a new non-exempt project into the TIP with \$1.3M in Local funds and \$52.7M in RTP-LRP funds	\$54,000,000	~%
ALA978027	Caltrans	I-880/SR 262 I/C and HOV lanes	Archive project as all of the funds have been obligated	\$0	0.0%
CC-010023	Contra Costa Transportation Authority (CCTA)	I-680/SR 4 I/C Reconstruction - Phases1 & 2	Update the project scope and funding plan to reflect that Plan Bay Area 2040 only includes Phases 1, 2 and 3. Phase 3 is listed under CC-130046.	-\$186,566,000	-50.5%

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TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
CC-070022	Contra Costa Transportation Authority (CCTA)	I-680 NB HOV Lane Extension between N.Main & SR242	Update the funding plan to add \$6M in RTP-LRP Con funds and update the RTP reference to reflect Plan Bay Area 2040	\$6,000,000	12.5%
CC-070024	Concord	SR 242 / Clayton Road Interchange Improvements	Update the funding plan to change the source for \$5.6M from Sales Tax to RTP-LRP, add \$31M in RTP-LRP and reprogram funds between years and phases update the RTP reference to reflect Plan Bay Area 2040	\$31,280,000	90.1%
CC-070053	Contra Costa Transportation Authority (CCTA)	SR4: Balfour Road Interchange	Update the funding plan to add \$9.8M in ECCRFA and \$12.8M in Sales Tax funds and remove \$20K in Local funds update the RTP reference to reflect Plan Bay Area 2040	\$22,600,000	48.7%
CC-130046	Contra Costa Transportation Authority (CCTA)	I-680 / SR 4 Interchange Reconstruction - Phase 3	Update the funding plan to add \$27M in Sales Tax funds and \$17M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$44,160,000	67.8%
CC-170017	Contra Costa Transportation Authority (CCTA)	I-680 NB Managed Lanes/Op Improvements- Walnut Crk	Amend a new non-exempt project into the TIP with \$4M in Sales Tax and \$95M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$99,000,000	~%
CC-170018	Contra Costa Transportation Authority (CCTA)	SR-4 Operational Improvements - Initial Phases	Amend a new non-exempt project into the TIP with \$4.5M in Sales Tax and \$139.5M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$144,000,000	~%
MRN050001	Transportation Authority of Marin (TAM)	US 101 / Greenbrae Interchange Corridor Impts.	Split out the multi-use path portion of this project to MRN170011 with \$19M in RM2 funds, update the funding plan to remove \$750K in RM2 and \$126M in RTP-LRP funds and delete this project as it will not move forward	-\$145,867,000	-94.2%
NAP010008	Caltrans	SR 12 (Jamieson Canyon Road) Widening	Archive project as it has been completed	\$0	0.0%
SCL110002	Santa Clara Valley Transportation Authority (VTA)	Santa Clara County - US 101 Express Lanes	Update the project description to change the southern limit of the project from Dunne Ave to Cochrane Rd and update the RTP reference to reflect Plan Bay Area 2040	\$0	0.0%
SCL110008	Santa Clara Valley Transportation Authority (VTA)	SR 237 Express Lanes: North 1st St to Mathilda Ave	Update the project scope to reflect that express lanes will be from Mathilda Ave to North 1st St and update the funding plan to remove \$3M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	-\$3,000,000	-10.0%
SCL130002	Santa Clara Valley Transportation Authority (VTA)	SR 237 Express Lanes : Mathilda Avenue to SR 85	Delete project listing as project is not included in Plan Bay Area 2040	-\$83,790,000	-100.0%
SF-130008	San Francisco County Transport Authority (SFCTA)	HOV/HOT Lanes on U.S.101 and I-280 in SF	Update the project to include all phases, update the funding plan to add \$41M in RTP-LRP and update the RTP reference to reflect Plan Bay Area 2040	\$41,000,000	2050.0%
SF-991030	San Francisco County Transport Authority (SFCTA)	US 101 Doyle Drive Replacement	Update the funding plan to add \$120M in FY16 SHOPP funds and update the RTP reference to reflect Plan Bay Area 2040	\$120,100,000	6.0%
SM-090004	Brisbane	US 101/Candlestick Interchange	Update the project scope and funding plan to reflect that the TIP and Plan Bay Area 2040 only include planning and environmental studies for this project and update the RTP reference to reflect Plan Bay Area 2040	\$11,110,000	80.0%

TIP Revision Summary 2017-14

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
SOL070020	Solano Transportation Authority (STA)	I-80/I-680/SR 12 Interchange Project	Update the funding plan to remove \$66.5M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	-\$66,488,000	-9.3%
System: Transit					
ALA170042	Altamont Commuter Express (ACE)	ACE Platform Extensions	Amend a new non-exempt, not regionally significant project into the TIP with \$8M in CARB funds	\$8,000,000	~%
ALA170044	Bay Area Rapid Transit District (BART)	Bay Fair Connection	Amend a new non-exempt project into the TIP with \$100M in Sales Tax and \$50M in Local funds	\$150,000,000	~%
BRT030001	Santa Clara Valley Transportation Authority (VTA)	BART - Berryessa to San Jose Extension	Update the funding plan to change the source for \$613M from RTP-LRP to Sales Tax, add \$346M in TCRP and \$637M in Sales Tax, and reprogram funds between years and phases and update the RTP reference to reflect Plan Bay Area 2040	\$982,376,000	24.8%
CC-030002	Hercules	Hercules Intercity Rail Station	Update project description to reflect the full implementation of the project, update the funding plan to add \$63M in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$62,900,000	187.8%
CC-170019	Oakley	Civic Center Railroad Platform Park & Ride Complex	Amend a new non-exempt project into the TIP with \$600K in Local funds and \$7.4M in RTP-LRP funds	\$8,000,000	~%
MRN130001	Golden Gate Bridge, Highway and Transit District	Larkspur Ferry Terminal Parking Garage	Update the project scope and funding plan to reflect that only preliminary project studies are included in the TIP and Plan Bay Area 2040	-\$3,000,000	-75.0%
NAP050009	Napa Vine	Park & Ride Lots in Napa County	Archive project as the funding has been obligated	\$0	0.0%
NAP170003	Napa Valley Transportation Authority	NVTA- Vine Transit Bus Maintenance Facility	Amend a new non-exempt project into the TIP with \$2M in TDA and \$18M in RTP-LRP funds	\$20,000,000	~%
SCL090019	San Jose	San Jose International Airport People Mover	Update the funding plan and project scope to indicate that TIP and Plan Bay Area 2040 only include planning and environmental work	-\$458,000,000	-90.2%
SF-050002	Transbay Joint Powers Authority (TBJPA)	Transbay Terminal/Caltrain Downtown Ext: Ph. 2	Update the funding plan to add \$1.2M in Sales Tax, \$182M in Other Local and \$2.1B in RTP-LRP funds and update the RTP reference to reflect Plan Bay Area 2040	\$2,324,589,000	120.7%
SF-070004	San Francisco Municipal Transport Agency (SFMTA)	Geary Bus Rapid Transit	Update the funding plan to add \$116.3M in RTP-LRP and update the RTP reference to reflect Plan Bay Area 2040	\$116,300,000	63.3%
SF-090012	San Francisco Municipal Transport Agency (SFMTA)	Additional Light Rail Vehicles to Expand Muni Rail	Update the project description to add 4 vehicles and update the RTP reference to reflect Plan Bay Area 2040	\$0	0.0%
SF-110045	San Francisco Municipal Transport Agency (SFMTA)	SFMTA: 8X Customer First Program	Update the funding plan to add \$2.7M in Local funds and update the RTP reference to reflect Plan Bay Area 2040	\$2,700,000	23.2%
SF-130003	San Francisco Municipal Transport Agency (SFMTA)	19th Ave. & Parkmerced M-Line Realignment Study	Update the project scope and funding plan to reflect that only planning studies are included in the TIP and Plan Bay Area 2040	-\$78,940,000	-97.5%

TIP Revision Summary 2017-14

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
SM-110002	Water Emergency Transportation Authority (WETA)	WETA: Redwood City Ferry Service	Update the project scope and funding plan to reflect that only environmental clearance and design are included in the TIP and Plan Bay Area 2040	-\$7,000,000	-46.7%
SON070013	North Bay Ferry Service	Ferry Service to Port Sonoma	Delete project as it will not move forward	-\$23,171,000	-100.0%
Total Funding Change:				\$3,846,016,088	

TIP Revision Summary

	Federal	State	Regional	Local	Total	2017 TIP Only
Current:	\$431,765,349	\$1,808,710,539	\$66,744,384	\$10,595,992,197	\$12,903,212,469	\$617,848,617
Proposed:	\$412,456,349	\$2,293,056,539	\$65,994,384	\$13,977,721,285	\$16,749,228,557	\$977,060,979
Delta:	-\$19,309,000	\$484,346,000	-\$750,000	\$3,381,729,088	\$3,846,016,088	\$359,212,362

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Alameda	AC Transit	ALA010034	AC Transit: Facilities Upgrade	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA110008	AC Transit State of Good Repair Program	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA130002	AC Transit: Procure (27) 60' Artic Hybrid Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA150004	AC Transit: East Bay Bus Rapid Transit	17-01-0060	East Bay BRT
Alameda	AC Transit	ALA150020	AC Transit: South County Corridors	17-01-0007	Roadway Operations
Alameda	AC Transit	ALA150038	AC Transit: Purchase (10) Double-Deck Diesel Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA150039	AC Transit: Purchase (10) 40' Buses-Fuel Cell ZEB	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA150040	AC Transit: Replace (10) 40ft Urban Buses-Diesels	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA150041	AC Transit: Replace (29) 60' Artic Buses - Diesels	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA150045	AC Transit: PM - Exchange for 40ft Fuel Cell ZEB	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA150052	AC Transit: SFOBB Forward	17-10-0033	Bay Area Forward
Alameda	AC Transit	ALA170027	AC Transit: Purchase 10 Double-Decker Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA170028	AC Transit: Purchase 18 40ft Hybrid-Electric Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA170029	AC Transit: Preventive Maintenance (Swap)	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA170030	AC Transit: Preventive Maintenance (Deferred Comp)	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA170032	AC Transit: Purchase 19 60-ft Artic Urban Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA170041	AC Transit: 5 Battery Electric Bus purchase	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA990052	AC Transit: Paratransit Van Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	AC Transit	ALA990076	AC Transit: ADA Paratransit Assistance	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Alameda	ACE	ALA010056	ACE Track Improvements.	17-01-0008	Minor Transit Improvements
Alameda	ACE	ALA110099	ACE Preventative Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	ACE	ALA170048	ACE Fixed Guideway (Capital Lease)	17-01-0008	Minor Transit Improvements
Alameda	ACE	ALA170056	Locomotive Procurement	17-01-0008	Minor Transit Improvements
Alameda	ACTC	ALA050014	SR 84 Expressway Widening	17-01-0032	SR-84 Widening (Ruby Hill Drive to Concannon Boulevard)

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Alameda	ACTC	ALA050019	I-880 North Safety Improvements	17-01-0031	I-880 at 23rd/29th Avenue Interchange Improvements
Alameda	ACTC	ALA070042	I-880 SB HOV Lanes - Marina Blvd to Hegenberger	17-10-0025	Regional State Highways - Existing Conditions
Alameda	ACTC	ALA090018	Truck Parking Facilities in North County (Phase I)	17-01-0026	Minor Freight Improvements Programmatic
Alameda	ACTC	ALA090019	Corridor Mobility Program & Adaptive Ramp Metering	17-01-0007	Roadway Operations
Alameda	ACTC	ALA110033	Alameda County Safe Routes to School	17-01-0003	County Safety, Security and Other
Alameda	ACTC	ALA130034	I-680 NB HOV/HOT Lane	17-10-0058	I-680 Express Lanes: Northbound from SR-84 to SR-237
Alameda	ACTC	ALA150008	East Bay Greenway	17-01-0001	Bicycle and Pedestrian Program
Alameda	ACTC	ALA170001	State Route 262 (Mission Blvd) Improvements	17-01-0020	SR-262 Mission Boulevard Cross Connector Improvements
Alameda	ACTC	ALA170002	I-80/Ashby Avenue Interchange Improvements	17-01-0037	Ashby I-80 Interchange with Bicycle and Pedestrian Ramps
Alameda	ACTC	ALA170008	I-580/680 Interchange HOV/HOT Widening	17-01-0028	I-580/I-680 Interchange: Project Development and Phase 1 Short-term Operational Improvements
Alameda	ACTC	ALA170010	I-880 NB HOV/HOT: North of Hacienda to Hegenberger	17-10-0057	I-880 Express Lanes: Northbound from Hegenberger to Lewelling and bridge improvements
Alameda	ACTC	ALA978004	East-West Connector in Fremont & Union City	17-01-0047	I-880 to Mission Boulevard East-West Connector
Alameda	ACTC/Oak/Alameda	ALA070009	Oakland/Alameda Freeway Access Project	17-01-0030	I-880 Broadway/Jackson Interchange Improvements
Alameda	Alameda	ALA130022	Alameda City Complete Streets	17-01-0004	Multimodal Streetscape
Alameda	Alameda	ALA150007	Cross Alameda Trail (includes SRTS component)	17-01-0001	Bicycle and Pedestrian Program
Alameda	Alameda	ALA170049	Central Avenue Safety Improvements	17-01-0003	County Safety, Security and Other
Alameda	Alameda County	ALA010003	Crow Canyon Safety Improvements	17-01-0003	County Safety, Security and Other
Alameda	Alameda County	ALA030002	Alameda: Vasco Road Safety Improvements	17-01-0003	County Safety, Security and Other
Alameda	Alameda County	ALA050035	Cherryland/Ashland/CastroValley/Fairview Sidwklmp	17-01-0001	Bicycle and Pedestrian Program
Alameda	Alameda County	ALA090022	Estuary Bridges Seismic Retrofit and Repairs	17-10-0024	Regional and Local Bridges - Existing Conditions
Alameda	Alameda County	ALA090023	Fruitvale Ave Roadway Bridge Retrofit	17-10-0024	Regional and Local Bridges - Existing Conditions
Alameda	Alameda County	ALA130018	Alameda Co-Variou Streets and Roads Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Alameda	Alameda County	ALA150002	Niles Canyon Rd (SR 84)/Pleas-Sunol Rd Inter. Imps	17-01-0003	County Safety, Security and Other

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Alameda	Alameda County	ALA150006	Be Oakland, Be Active	17-01-0003	County Safety, Security and Other
Alameda	Alameda County	ALA150026	Safe Routes to School, Unincorporated Alameda Co.	17-01-0003	County Safety, Security and Other
Alameda	Alameda County	ALA150028	Ashland Avenue Bicycle/Ped Improvements	17-01-0001	Bicycle and Pedestrian Program
Alameda	Alameda County	ALA170047	Active Oakland: A Comprehensive SR2S Program	17-01-0001	Bicycle and Pedestrian Program
Alameda	Albany	ALA150011	Complete Streets for San Pablo Ave/Buchanan St.	17-01-0004	Multimodal Streetscape
Alameda	BAIFA	ALA170006	ALA-880 Express Lanes	17-10-0052	I-880 Express Lanes in both directions: Hegenberger/Lewelling to SR-237
Alameda	BART	ALA090065	BART: Fare Collection Equipment	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	BART	ALA090068	MacArthur BART Plaza Remodel	17-01-0004	Multimodal Streetscape
Alameda	BART	ALA110003	Hayward Shop and Yard Expansion	17-10-0064	Hayward Maintenance Complex Phase 1
Alameda	BART	ALA110032	Downtown Berkeley BART Plaza/Transit Area Imps.	17-01-0004	Multimodal Streetscape
Alameda	BART	ALA110115	Bicycle Lockers at Capitol Corridor Stations	17-01-0001	Bicycle and Pedestrian Program
Alameda	BART	ALA130007	BART to Livermore Extension - Develop EIR/EIS	17-01-0062	BART to Livermore/ACE Project Development and Construction Reserve
Alameda	BART	ALA130032	BART Metro Priority Track Elements	17-10-0005	BART Metro Program + Bay Fair Connector
Alameda	BART	ALA150030	Ladders of Opportunity - Careers in Transit	17-01-0008	Minor Transit Improvements
Alameda	BART	ALA170055	BART - GO Uptown	17-10-0063	BART Seismic Safety Augmentation
Alameda	Berkeley	ALA050079	I-80 Gilman Interchange Reconfiguration	17-01-0040	I-80 Gilman Street Interchange Improvements
Alameda	Berkeley	ALA130026	Shattuck Complete Streets and De-couplet	17-01-0004	Multimodal Streetscape
Alameda	Berkeley	ALA130028	Hearst Avenue Complete Streets	17-01-0004	Multimodal Streetscape
Alameda	Berkeley	ALA130035	Bay Trail Shoreline Access Staging Area Project	17-01-0001	Bicycle and Pedestrian Program
Alameda	Berkeley	ALA150005	LeConte Elementary Safe Routes to School Imps	17-01-0003	County Safety, Security and Other
Alameda	Berkeley	ALA150048	9th St Bicycle Blvd Extension Pathway Ph II	17-01-0001	Bicycle and Pedestrian Program
Alameda	Berkeley	ALA150049	goBerkeley Residential Shared Parking Pilot	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Alameda	Berkeley	ALA170054	John Muir Safe Routes to School	17-01-0001	Bicycle and Pedestrian Program

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Alameda	Caltrans	ALA150021	SFOBB Maintenance Complex Ph 3 Training Facility	17-10-0024	Regional and Local Bridges - Existing Conditions
Alameda	Dublin	ALA130005	Dougherty Road widening	17-01-0053	Dougherty Road Widening
Alameda	Dublin	ALA130006	Dublin Boulevard widening	17-01-0057	Dublin Boulevard Widening - Sierra Court to Dublin Court
Alameda	Dublin	ALA130012	Dublin Boulevard Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Alameda	Emeryville	ALA130021	Emeryville - Hollis Street Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Alameda	Emeryville	ALA170050	Emeryville Greenway Crossing Improvements	17-01-0001	Bicycle and Pedestrian Program
Alameda	Fremont	ALA130001	Widen Kato Rd from Warren Avenue to Milmont Drive	17-01-0006	Minor Roadway Expansions
Alameda	Fremont	ALA130025	Fremont City Center Multi-Modal Improvements	17-01-0004	Multimodal Streetscape
Alameda	Hayward	ALA090016	Rt 92/Clawiter/Whitesell Interchange Improvements	17-01-0036	SR-92/Clawiter Road/Whitesell Street Interchange Improvements
Alameda	Hayward	ALA090020	I-880 Auxiliary lanes at Industrial Parkway	17-01-0007	Roadway Operations
Alameda	Hayward	ALA090021	I-880 NB and SB Auxiliary lanes	17-01-0007	Roadway Operations
Alameda	Hayward	ALA130013	Hayward - Industrial Boulevard Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Alameda	Hayward	ALA150022	City of Hayward Car Sharing Services	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Alameda	LAVTA	ALA030030	LAVTA: Preventive Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150014	LAVTA: Bus Purchase-Low Floor	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150015	LAVTA: Bus Purchase-Over the Road	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150016	LAVTA: Bus Purchase-7 Hybrids	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150017	LAVTA: 5 40' Hybrids	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150019	Dublin Blvd Transit Performance Initiative	17-01-0007	Roadway Operations
Alameda	LAVTA	ALA150031	LAVTA: Replacement (11) 40' Hybrid Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150032	LAVTA: Replacement (9) 30' Hybrid Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150033	LAVTA: Service Vehicles (2) Trucks	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150035	LAVTA: Farebox Replacement	17-10-0028	Clipper

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Alameda	LAVTA	ALA150036	LAVTA: Service Vehicles (3) Road Supervisor	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150037	LAVTA: Service Vehicles (4) shift trade	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	LAVTA	ALA150051	Wheels Individualized Marketing Program	17-01-0008	Minor Transit Improvements
Alameda	LAVTA	ALA990077	LAVTA: ADA Paratransit Operating Subsidy	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Alameda	Livermore	ALA110120	Livermore TOD Study at I-580/SR84	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Alameda	Livermore	ALA130011	Livermore Relocation and Restoration of R/R Depot	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	Livermore	ALA150009	Livermore Marilyn Avenue Safe Routes to School	17-01-0003	County Safety, Security and Other
Alameda	MTC	ALA110104	Bay Bridge Park	17-01-0001	Bicycle and Pedestrian Program
Alameda	MTC	ALA130030	Improved Bike/Ped Access to East Span of SFOBB	17-01-0001	Bicycle and Pedestrian Program
Alameda	MTC	ALA170007	Regional Planning Activities and PPM - Alameda	17-10-0023	Local Streets and Roads - Operations
Alameda	MTC	ALA170011	Bay Bridge Forward - West Grand HOV/Bus Only Lane	17-10-0033	Bay Area Forward
Alameda	MTC	ALA170012	Bay Bridge Forward-Commuter Parking Access Imps.	17-01-0003	County Safety, Security and Other
Alameda	MTC	ALA170040	I-880 Integrated Corridor Management	17-10-0013	Transportation Management Systems
Alameda	Newark	ALA010052	Central Avenue Railroad Overpass at UPRR	17-01-0003	County Safety, Security and Other
Alameda	Newark	ALA130027	Enterprise Drive Complete Streets and Road Diet	17-01-0004	Multimodal Streetscape
Alameda	Oakland	ALA070039	Oakland Waterfront Bay Trail	17-01-0001	Bicycle and Pedestrian Program
Alameda	Oakland	ALA110046	Oakland Army Base Infrastructure Improvements	17-01-0016	Oakland Army Base transportation infrastructure improvements
Alameda	Oakland	ALA110072	Lake Merritt Improvement Project	17-01-0004	Multimodal Streetscape
Alameda	Oakland	ALA130003	Lake Merritt to Bay Trail Bike/Ped Bridge	17-01-0001	Bicycle and Pedestrian Program
Alameda	Oakland	ALA130014	7th Street West Oakland Transit Village, Phase II	17-01-0001	Bicycle and Pedestrian Program
Alameda	Oakland	ALA130015	Lake Merritt BART Bikeways	17-01-0001	Bicycle and Pedestrian Program
Alameda	Oakland	ALA130016	Oakland Complete Streets	17-01-0004	Multimodal Streetscape
Alameda	Oakland	ALA130017	Oakland - Peralta and MLK Blvd Streetscape Phase I	17-01-0001	Bicycle and Pedestrian Program

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Alameda	Oakland	ALA130024	Lakeside Complete Streets and Road Diet	17-01-0001	Bicycle and Pedestrian Program
Alameda	Oakland	ALA150010	International Boulevard Improvement Project	17-01-0001	Bicycle and Pedestrian Program
Alameda	Oakland	ALA150012	Laurel Access to Mills, Maxwell Park and Seminary	17-01-0007	Roadway Operations
Alameda	Oakland	ALA150023	Oakland Car Share and Outreach Program	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Alameda	Oakland	ALA150024	Oakland: High/Ygnacio/Courtland Bike/Ped Imprvmnts	17-01-0003	County Safety, Security and Other
Alameda	Oakland	ALA150025	Oakland Safe Routes to Schools Various Locations	17-01-0003	County Safety, Security and Other
Alameda	Oakland	ALA150042	Oakland: Telegraph Ave Bike/Ped Imps and Road Diet	17-01-0001	Bicycle and Pedestrian Program
Alameda	Oakland	ALA150043	Oakland: Shattuck and Claremont Bike/Ped Imps	17-01-0004	Multimodal Streetscape
Alameda	Oakland	ALA150044	19th St BART to Lake Merritt Urban Greenway	17-01-0004	Multimodal Streetscape
Alameda	Oakland	ALA150047	Oakland: Telegraph Avenue Complete Streets	17-01-0004	Multimodal Streetscape
Alameda	Oakland	ALA150050	Oakland Parking and Mobility Management Project	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Alameda	Oakland	ALA170051	Fruitvale Alive Gap Closure Project	17-01-0001	Bicycle and Pedestrian Program
Alameda	Oakland	ALA170052	Oakland Fruitvale Ave Bike/Ped Imprvmnts H8-04-014	17-01-0003	County Safety, Security and Other
Alameda	Oakland	ALA170053	Oakland 35th Ave Bike/Ped Improvements H8-04-015	17-01-0003	County Safety, Security and Other
Alameda	Oakland	ALA991081	42nd Ave. & High St. I-880 Access Improv.	17-01-0043	42nd Ave & High St Access Improvement at I-880 On/Off Ramp
Alameda	Piedmont	ALA130019	Piedmont Complete Streets (CS)	17-01-0004	Multimodal Streetscape
Alameda	Pleasanton	ALA130009	Pleasanton Complete Streets	17-01-0004	Multimodal Streetscape
Alameda	Port of Oakland	ALA070054	California Inter-regional Rail Intermodal Study	17-01-0018	7th Street Grade Separation West
Alameda	Port of Oakland	ALA090026	Outer Harbor Intermodal Terminals (OHIT)	17-01-0017	Outer Harbor Intermodal Terminal (OHIT) Phases 2 and 3
Alameda	Port of Oakland	ALA090027	7th St Grade Separation and Port Arterial Improvem	17-01-0018	7th Street Grade Separation West
Alameda	San Leandro	ALA050002	SR 185- E. 14th St/ Hesperian Blvd/150th Ave	17-01-0007	Roadway Operations
Alameda	San Leandro	ALA070014	I-880/SR 112 Overcrossing Replacement	17-10-0057	I-880 Express Lanes: Northbound from Hegenberger to Lewelling and bridge improvements
Alameda	San Leandro	ALA090012	I-880/Marina Blvd Interchange and Overcrossing Rep	17-10-0057	I-880 Express Lanes: Northbound from Hegenberger to Lewelling and bridge improvements

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Alameda	San Leandro	ALA130008	San Leandro Boulevard Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Alameda	UCBerkeley	ALA150029	UC Berkeley Parking Price Auction Study	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Alameda	Union C Transit	ALA150046	Union City Transit Rehab Two (2) Transit Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	Union C Transit	ALA170003	Union City Transit: Single Point Login Terminals	17-10-0028	Clipper
Alameda	Union C Transit	ALA170013	Union City Transit Travel Time Improvements	17-01-0007	Roadway Operations
Alameda	Union C Transit	ALA170014	Union City Paratransit Van Procurement	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	Union C Transit	ALA170015	Union City Transit: Replace Paratransit Sedan	17-10-0026	Regional Transit Capital - Existing Conditions
Alameda	Union C Transit	ALA170039	Union City: ADA Paratransit Operating Subsidy	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Alameda	WETA	ALA110001	Central Bay Operations and Maintenance Facility	17-10-0041	Central Bay Ferry Service Enhancement
Contra Costa	AC Transit	CC-030001	AC Transit: Richmond Prkwy Transit Center	17-02-0005	Multimodal Streetscape
Contra Costa	Antioch	CC-070008	Laurel Road Extension	17-02-0007	Minor Roadway Expansions
Contra Costa	Antioch	CC-070009	Slatten Ranch Road Extension	17-02-0007	Minor Roadway Expansions
Contra Costa	BAIFA	CC-130043	CC I-680 Southern Segment Express Lanes	17-10-0049	I-680 Express Lanes in both directions: Livorna/Rudgear to Alcosta
Contra Costa	BAIFA	CC-170002	CC-680 Northern Segment Express Lane - Southbound	17-10-0049	I-680 Express Lanes in both directions: Livorna/Rudgear to Alcosta
Contra Costa	BAIFA	CC-170003	CC-680 Northern Segment Express Lane - Northbound	17-10-0060	I-680 Express Lanes: Northbound from Rudgear to SR 242 and operational improvements
Contra Costa	BART	CC-050025	E-BART - East Contra Costa Rail Extension	17-02-0047	East County Rail Extension (eBART), Phase 1
Contra Costa	BART	CC-110082	Walnut Creek BART TOD Access Improvements	17-02-0043	BART Capacity, Access and Parking Improvements
Contra Costa	BART	CC-130002	eBART Railroad Avenue Station	17-02-0047	East County Rail Extension (eBART), Phase 1
Contra Costa	BART	CC-150019	Concord Yard Wheel Truing Facility	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	Brentwood	CC-070011	SR4/Brentwood Boulevard Widening - North (Phase I)	17-02-0030	Widen Brentwood Boulevard - Havenwood Way to north city limit; and Chestnut to Fir
Contra Costa	Brentwood	CC-070078	John Muir Parkway Extension: Ph. II	17-02-0007	Minor Roadway Expansions
Contra Costa	CC County	CC-050030	Vasco Road Safety Improvements	17-02-0004	County Safety, Security and Other
Contra Costa	CC County	CC-070075	Kirker Pass Road NB Truck Climbing Lanes	17-02-0014	Kirker Pass Road Northbound Truck Climbing Lane, Clearbrook Drive to Crest of Kirker Pass Road

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Contra Costa	CC County	CC-110084	Canal Road Bicycle and Pedestrian Facilities	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	CC County	CC-130001	Bailey Road-State Route 4 Interchange	17-02-0020	SR-4 Operational Improvements - Initial Phases
Contra Costa	CC County	CC-130003	Bailey Road Bike and Pedestrian Improvements	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	CC County	CC-130004	Contra Costa County Various Streets & Road Preserv	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	CC County	CC-130027	Port Chicago Hwy/Willow Pass Rd Bike Ped Upgrades	17-02-0005	Multimodal Streetscape
Contra Costa	CC County	CC-150010	CC County - Rio Vista Elementary Ped Connection	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	CC County	CC-170020	Fred Jackson Way First Mile/Last Mile Connection	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	CC County	CC-170021	Pacheco Blvd Sidewalk Gap Closure Phase 3	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	CCCTA	CC-110083	Replace Diesel Trolleys with Electric TrolleyBuses	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	CCCTA	CC-110099	CCCTA - Replace 15 40' Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	CCCTA	CC-110100	CCCTA - Replace 18 40' Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	CCCTA	CC-130045	CCCTA: Access Improvements Implementation	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	CCCTA	CC-150006	CCCTA: Replace 18 30' Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	CCCTA	CC-150007	CCCTA: Replace 13 35' Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	CCCTA	CC-150008	CCCTA: Replace 3 Paratransit Vans	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	CCCTA	CC-150012	REMIX Software Implementation Project	17-02-0009	Minor Transit Improvements
Contra Costa	CCCTA	CC-99T001	CCCTA: ADA Paratransit Assistance	17-10-0027	Regional Transit Operations
Contra Costa	CCTA	CC-050028	I-680 SB HOV Lane Completion	17-02-0022	I-680 Southbound HOV Lane between N. Main and Livorna
Contra Costa	CCTA	CC-070035	Reconstruct I-80/San Pablo Dam Rd Interchange	17-02-0021	Reconstruct I-80/San Pablo Dam Road Interchange
Contra Costa	CCTA	CC-070067	Mokelumne Trail Bike/Ped Overcrossing	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	CCTA	CC-110066	SR 239 - New State Highway Study	17-02-0017	SR-239 Feasibility Studies and Project Development
Contra Costa	CCTA	CC-150009	CCTA - Carshare 4 All	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Contra Costa	CCTA	CC-150013	SR 4 Integrated Corridor Management	17-02-0010	SR4 Integrated Corridor Mobility

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Contra Costa	Clayton	CC-130030	Clayton Various Streets Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Concord	CC-130006	Concord BART Station Bike/Ped Access Improvements	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Concord	CC-130011	Detroit Avenue Bicycle and Pedestrian Improvements	17-02-0005	Multimodal Streetscape
Contra Costa	Concord	CC-130012	Concord Various Street Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Concord	CC-130013	Concord New and Upgraded Signals at Various Loc	17-02-0008	Roadway Operations
Contra Costa	Concord	CC-170022	Commerce Ave Complete Streets	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Danville	CC-050075	Crow Canyon/Camino Tassajara Intersection Imps	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Danville	CC-090001	Diablo Road Imps. - Green Valley to Avenida Neuva	17-02-0008	Roadway Operations
Contra Costa	Danville	CC-130023	Danville Various Streets and Roads Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Danville	CC-130038	Vista Grande Street Pedestrian Improvements/SR2S	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Danville	CC-170001	San Ramon Valley Blvd Lane Addition and Overlay	17-02-0052	Widen San Ramon Valley Boulevard from 2 to 4 lanes - Jewel Terrace to Podva Road
Contra Costa	EB Reg Park Dis	CC-070033	Contra Costa Parks Bike/Ped Trail Improvements	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	EB Reg Park Dis	CC-070063	Atlas Road - New Bridge and Roadway Extension	17-02-0007	Minor Roadway Expansions
Contra Costa	EB Reg Park Dis	CC-130049	Breuner Marsh Restoration and Public Access	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	EB Reg Park Dis	CC-130050	SF Bay Trail, Pinole Shores to Bay Front Park	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	ECCTA	CC-030035	Tri-Delta: ADA Operating Assistance	17-02-0001	Access and Mobility Program
Contra Costa	ECCTA	CC-070092	ECCTA: Transit Bus Replacements	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	ECCTA	CC-150020	ECCTA: Non-ADA Paratransit to FR Incentive Program	17-02-0001	Access and Mobility Program
Contra Costa	El Cerrito	CC-070046	Del Norte Area TOD Complete Street Imps	17-02-0005	Multimodal Streetscape
Contra Costa	El Cerrito	CC-130024	Ohlone Greenway Station Area Bike/Ped Improvements	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Hercules	CC-130040	Hercules-Refugio Valley Road Pavement Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Martinez	CC-030004	Martinez Intermodal Station Parking Expansion	17-02-0009	Minor Transit Improvements
Contra Costa	Martinez	CC-130025	Martinez Various Streets and Roads Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Contra Costa	Moraga	CC-130020	Moraga Various Streets and Roads Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Moraga	CC-130037	Moraga Rd SRTS Bicycle and Ped Improvements	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	MTC	CC-170004	Regional Planning Activities and PPM - CC County	17-10-0023	Local Streets and Roads - Operations
Contra Costa	Oakley	CC-070065	Main Street (Previously SR4) Realignment in Oakley	17-02-0005	Multimodal Streetscape
Contra Costa	Oakley	CC-130031	Oakley Various Streets and Roads Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Pinole	CC-130015	Pinole - San Pablo Avenue Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Pittsburg	CC-130039	Pittsburg Multimodal Transit Station Access Imps.	17-02-0005	Multimodal Streetscape
Contra Costa	Pleasant Hill	CC-130005	Golf Club Rd Roundabout and Bike/Ped Improvements	17-02-0008	Roadway Operations
Contra Costa	Pleasant Hill	CC-130029	Boyd Road/Elinora Drive SRTS Sidewalk Installation	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Pleasant Hill	CC-150011	Contra Costa Blvd. Improvement (Beth to Harriet)	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Richmond	CC-050076	I-80/Central Avenue Interchange Modification	17-02-0026	I-80/Central Avenue Interchange Modification - Phases 1 & 2
Contra Costa	Richmond	CC-110007	Richmond Transit Village: Nevin Imps BART-19th	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Richmond	CC-130026	Richmond Local Streets and Roads Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Richmond	CC-130047	37th Street Bicycle & Pedestrian Improvements	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Richmond	CC-150016	The Yellow Brick Road in Richmond's Iron Triangle	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	San Pablo	CC-130032	San Pablo Avenue Bicycle and Ped Improvements	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	San Pablo	CC-150017	Rumrill Blvd Complete Streets Improvements	17-02-0005	Multimodal Streetscape
Contra Costa	San Ramon	CC-090019	Bollinger Canyon Road Widening (Alcosta to SRVB)	17-02-0007	Minor Roadway Expansions
Contra Costa	San Ramon	CC-170014	Iron Horse Trail Bike and Pedestrian Overcrossings	17-02-0003	Bicycle and Pedestrian Program
Contra Costa	Walnut Creek	CC-130033	Walnut Creek - North Main Street Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Contra Costa	Walnut Creek	CC-150018	Walnut Creek-Parking Guidance System Pilot	17-02-0008	Roadway Operations
Contra Costa	WCCTA	CC-030025	WCCTA: Preventive Maintenance Program	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	WCCTA	CC-150001	WestCAT: Replacement of (10) Paratransit Cut-Aways	17-10-0026	Regional Transit Capital - Existing Conditions

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Contra Costa	WCCTA	CC-150002	WestCAT: Purchase of (10) Radio systems	17-02-0009	Minor Transit Improvements
Contra Costa	WCCTA	CC-150003	WestCAT: Purchase of (2) Electronic Fareboxes	17-02-0009	Minor Transit Improvements
Contra Costa	WCCTA	CC-150004	WestCAT: Replace (1) 2003 40ft Revenue Vehicle	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	WCCTA	CC-150005	WestCAT: Replace (1) 40ft Rev. Vehicle with 43ft	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	WCCTA	CC-150014	WestCAT: Replace (1) 1998 40 ft Vehicle	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	WCCTA	CC-150015	WestCAT: Purchase (1) Fast Fare Electronic Farebox	17-02-0009	Minor Transit Improvements
Contra Costa	WCCTA	CC-150021	WestCAT - AVL System with APC Element.	17-02-0009	Minor Transit Improvements
Contra Costa	WCCTA	CC-150022	WCCTA: Purchase of (2) Double Decker buses	17-10-0033	Bay Area Forward
Contra Costa	WCCTA	CC-170006	WestCAT: Replace (2) 2002 40ft Revenue Vehicles	17-10-0026	Regional Transit Capital - Existing Conditions
Contra Costa	WCCTA	CC-170007	WestCAT: Purchase 2 Fast Fare Electronic Fareboxes	17-02-0009	Minor Transit Improvements
Contra Costa	WCCTA	CC-990045	WestCat: ADA Paratransit Operating Subsidy	17-02-0001	Access and Mobility Program
Marin	Fairfax	MRN130009	Parkade Circulation and Safety Improvements	17-03-0005	Minor Transit Improvements
Marin	GGBHTD	MRN010035	ACIS Radio Communications System	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	GGBHTD	MRN030010	GGBHTD: Fixed Guideway Connectors	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	GGBHTD	MRN050018	Golden Gate Bridge Seismic Retrofit, Phase 3B	17-10-0009	Golden Gate Bridge Capital and Operations
Marin	GGBHTD	MRN050019	Golden Gate Bridge-Suicide Deterrent SafetyBarrier	17-10-0009	Golden Gate Bridge Capital and Operations
Marin	GGBHTD	MRN050025	GGBHTD: Facilities Rehabilitation	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	GGBHTD	MRN110045	GGBHTD: Replace 7 - 40' Diesel Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	GGBHTD	MRN130015	GGBHTD - Transit Systems Enhancements	17-03-0005	Minor Transit Improvements
Marin	GGBHTD	MRN150005	MS Sonoma Ferry Boat Refurbishment	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	GGBHTD	MRN150006	GGBHTD: Bldg Ridership to Meet Capacity Campaign	17-03-0005	Minor Transit Improvements
Marin	GGBHTD	MRN150007	GGBHTD: On-Board Bus and Ferry Surveys	17-10-0027	Regional Transit Operations
Marin	GGBHTD	MRN150014	GGBHTD Ferry Major Components Rehab	17-10-0026	Regional Transit Capital - Existing Conditions

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Marin	GGBHTD	MRN170009	GGBHTD: Replace Paratransit Vehicles	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	GGBHTD	MRN170013	San Rafael Transit Center Relocation	17-03-0013	San Rafael Transit Center (SRTC) Relocation Project
Marin	GGBHTD	MRN970016	Golden Gate Bridge Seismic Retrofit, Ph: 1-3A	17-10-0009	Golden Gate Bridge Capital and Operations
Marin	Marin County	MRN050033	Non-motorized Transp. Pilot Program - Marin County	17-03-0001	Bicycle and Pedestrian Program
Marin	Marin County	MRN070019	Marin Parklands Visitor Access, Phase 2	17-03-0001	Bicycle and Pedestrian Program
Marin	Marin County	MRN090049	Non-motorized Transp. Projects - Marin County	17-03-0001	Bicycle and Pedestrian Program
Marin	Marin County	MRN110033	Miller Creek Road Bike Lanes and Ped Improvements	17-03-0001	Bicycle and Pedestrian Program
Marin	Marin County	MRN110035	Mountain View Rd Bridge Replacement - 27C0154	17-10-0024	Regional and Local Bridges - Existing Conditions
Marin	Marin County	MRN130007	North Civic Center Drive Improvements	17-03-0004	Roadway Operations
Marin	Marin County	MRN130010	Donahue Street Road Rehabilitation Project	17-10-0022	Local and Streets and Roads - Existing Conditions
Marin	Marin County	MRN130014	Mill Valley-Sausalito Pathway Preservation	17-03-0001	Bicycle and Pedestrian Program
Marin	MCTD	MRN110040	MCTD Preventive Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	MCTD	MRN110041	Marin Transit Low Income Youth Pass Program	17-10-0027	Regional Transit Operations
Marin	MCTD	MRN110047	MCTD: ADA Paratransit Assistance	17-10-0027	Regional Transit Operations
Marin	MCTD	MRN150003	MCTD: On Board Vehicle Equipment	17-03-0005	Minor Transit Improvements
Marin	MCTD	MRN150010	MCTD - Relocate Transit Maintenance Facility	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	MCTD	MRN150012	MCTD - Replace 13 -40ft Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	MCTD	MRN150013	MCTD - Emergency Radio System	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	MCTD	MRN170003	MCTD: Replace Paratransit Vehicles	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	MCTD	MRN170004	MCTD: Replace Paratransit Vehicles with Vans	17-10-0026	Regional Transit Capital - Existing Conditions
Marin	Mill Valley	MRN070002	Mill Valley - Miller Avenue Rehabilitation	17-10-0022	Local and Streets and Roads - Existing Conditions
Marin	Mill Valley	MRN130012	Bayfront Park Recreational Bay Access Pier Rehab	17-03-0001	Bicycle and Pedestrian Program
Marin	MTC	MRN150009	Richmond-San Rafael Bridge Access Improvements	17-10-0036	I-580 Access Improvements Project

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Marin	MTC	MRN170001	Regional Planning Activities and PPM - Marin	17-10-0023	Local Streets and Roads - Operations
Marin	Novato	MRN070006	Novato Boulevard Widening, Diablo to Grant	17-03-0011	Widen Novato Boulevard between Diablo Avenue and Grant Avenue
Marin	Novato	MRN130011	DeLong Avenue and Ignacio Boulevard Resurfacing	17-10-0022	Local and Streets and Roads - Existing Conditions
Marin	Novato	MRN150016	Vineyard Road Improvements	17-10-0022	Local and Streets and Roads - Existing Conditions
Marin	Ross	MRN130006	Bolinas Avenue and Sir Francis Drake Intersection	17-10-0022	Local and Streets and Roads - Existing Conditions
Marin	San Anselmo	MRN110032	San Anselmo - Center Blvd Bridge Replace (27C0079)	17-10-0024	Regional and Local Bridges - Existing Conditions
Marin	San Anselmo	MRN130013	Sunny Hill Ridge and Red Hill Trails	17-03-0001	Bicycle and Pedestrian Program
Marin	San Rafael	MRN070009	San Rafael - Non-motorized Transport Pilot Program	17-03-0001	Bicycle and Pedestrian Program
Marin	San Rafael	MRN130004	San Rafael Various Streets and Roads Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Marin	San Rafael	MRN130005	San Rafael Transit Center Pedestrian Access Imps.	17-03-0016	Multimodal Streetscape
Marin	San Rafael	MRN150008	Grand Avenue Bicycle Pedestrian Improvements	17-03-0001	Bicycle and Pedestrian Program
Marin	San Rafael	MRN170012	Francisco Boulevard East Sidewalk Widening	17-03-0001	Bicycle and Pedestrian Program
Marin	Sausalito	MRN110010	Sausalito - Bridgeway/US 101 Off Ramp Bicycle Imps	17-03-0001	Bicycle and Pedestrian Program
Marin	TAM	MRN050014	Central Marin Ferry Access Improvements	17-03-0001	Bicycle and Pedestrian Program
Marin	TAM	MRN050034	US 101 HOV Lanes - Marin-Sonoma Narrows (Marin)	17-03-0006	Implement Marin Sonoma Narrows HOV Lane and corridor improvements Phase 2 (Marin County)
Marin	TAM	MRN070017	TAM - Non-motorized Transportation Pilot Program	17-03-0001	Bicycle and Pedestrian Program
Marin	TAM	MRN110034	Highway 101 Landscaping for Gap Closure Project	17-10-0025	Regional State Highways - Existing Conditions
Marin	TAM	MRN150004	TAM - Car Share Canal	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Napa	American Canyon	NAP110029	Eucalyptus Drive Realignment Complete Streets	17-04-0004	Minor Roadway Expansions
Napa	American Canyon	NAP130006	Devlin Road and Vine Trail Extension	17-04-0004	Minor Roadway Expansions
Napa	Calistoga	NAP150001	SR 128 and Petrified Forest Intersection Imp	17-04-0002	County Safety, Security and Other
Napa	Caltrans	NAP130007	Hwy 29 Grayson Ave. Signal Construction	17-04-0002	County Safety, Security and Other
Napa	MTC	NAP170001	Regional Planning Activities and PPM - Napa	17-10-0023	Local Streets and Roads - Operations

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Napa	Napa	NAP110028	California Boulevard Roundabouts	17-04-0005	Roadway Operations
Napa	Napa	NAP130004	Highway 29/Napa Creek Bicycle Path Upgrade	17-04-0001	Bicycle and Pedestrian Program
Napa	Napa County	NAP110023	Silverado Trail Phase H Rehab	17-10-0022	Local and Streets and Roads - Existing Conditions
Napa	Napa County	NAP110026	Hardin Rd Bridge Replacement - 21C0058	17-10-0024	Regional and Local Bridges - Existing Conditions
Napa	Napa County	NAP110027	Loma Vista Dr Bridge Replacement - 21C0080	17-10-0024	Regional and Local Bridges - Existing Conditions
Napa	Napa County	NAP130003	Airport Boulevard Rehabilitation	17-10-0022	Local and Streets and Roads - Existing Conditions
Napa	Napa County	NAP130009	Silverado Trail Phase G Rehab	17-10-0022	Local and Streets and Roads - Existing Conditions
Napa	Napa County	NAP130010	Silverado Trail Yountville-Napa Safety Improvement	17-04-0002	County Safety, Security and Other
Napa	Napa County	NAP170002	Napa County: 2014 Earthquake Pavement Repair	17-10-0022	Local and Streets and Roads - Existing Conditions
Napa	NVTA	NAP030004	NVTA: ADA Operating Assistance	17-10-0027	Regional Transit Operations
Napa	NVTA	NAP030005	Napa: Bus Stop Improvements	17-04-0006	Minor Transit Improvements
Napa	NVTA	NAP090003	SR 12/29/221 Soscol Junction Interchange Study	17-04-0009	Soscol Junction
Napa	NVTA	NAP090005	NVTA: Replace Rolling Stock	17-10-0026	Regional Transit Capital - Existing Conditions
Napa	NVTA	NAP090008	NVTA Equipment Replacement and Upgrades	17-10-0026	Regional Transit Capital - Existing Conditions
Napa	NVTA	NAP110014	Napa Valley Vine Trail Design and Construction	17-04-0001	Bicycle and Pedestrian Program
Napa	NVTA	NAP150003	Napa Valley Vine Trail Calistoga-St. Helena Seg.	17-04-0001	Bicycle and Pedestrian Program
Napa	NVTA	NAP970010	Napa Vine Operating Assistance	17-10-0027	Regional Transit Operations
Napa	Yountville	NAP130008	Hopper Creek Pedestrian Bridge and Path Project	17-04-0001	Bicycle and Pedestrian Program
Regional	MTC	REG170010	Reg. Prog. for Arterial System Synchronization	17-10-0013	Transportation Management Systems
Regional/Multi-County	ACE	REG110044	ACE Positive Train Control	17-10-0026	Regional Transit Capital - Existing Conditions
Regional/Multi-County	BAIFA	REG130004	Regional Express Lane Network	17-10-0054	MTC Express Lane Program Cost
Regional/Multi-County	BAIFA	VAR170003	ALA/CC-80 and Bay Bridge Approach Express Lanes	17-10-0053	I-80 Express Lanes in both directions: Carquinez Bridge to Bay Bridge
Regional/Multi-County	BART	BRT030004	BART Train Control Renovation	17-10-0005	BART Metro Program + Bay Fair Connector

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Regional/Multi-County	BART	BRT030005	BART: Traction Power System Renovation	17-10-0005	BART Metro Program + Bay Fair Connector
Regional/Multi-County	BART	BRT97100B	BART: Rail, Way and Structures Program	17-10-0026	Regional Transit Capital - Existing Conditions
Regional/Multi-County	BART	BRT99T01B	BART:ADA Paratransit Capital Accessibility Improve	17-10-0005	BART Metro Program + Bay Fair Connector
Regional/Multi-County	BART	CC-130048	BART Station Modernization Program	17-10-0005	BART Metro Program + Bay Fair Connector
Regional/Multi-County	BART	REG050020	BART Car Exchange (Preventive Maintenance)	17-10-0026	Regional Transit Capital - Existing Conditions
Regional/Multi-County	BART	REG090037	BART: Railcar Procurement Program	17-10-0006	BART Transbay Core Capacity Project
Regional/Multi-County	BART	REG150005	Transit-Oriented Development Pilot Planning Progra	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Regional/Multi-County	BART	REG170008	BART Integrated Carpool to Transit Access Program	17-01-0002	Climate Program: TDM and Emission Reduction Technology
Regional/Multi-County	BART	REG170009	BART Train Seat Modification	17-10-0005	BART Metro Program + Bay Fair Connector
Regional/Multi-County	Caltrain	REG090051	Caltrain: Revenue Vehicle Rehab Program	17-10-0026	Regional Transit Capital - Existing Conditions
Regional/Multi-County	Caltrain	REG110030	Caltrain Positive Train Control System	17-10-0008	Caltrain Electrification Phase 1 + CBOSS
Regional/Multi-County	Caltrain	REG150006	Caltrain Station Management Toolbox	17-10-0032	Regional Rail Station Modernization and Access Improvements
Regional/Multi-County	Caltrain	SM-050041	Caltrain: Signal/Communication Rehab. & Upgrades	17-10-0026	Regional Transit Capital - Existing Conditions
Regional/Multi-County	Caltrans	REG110041	GL: FTA Non-Urbanized Formula Program	17-10-0027	Regional Transit Operations
Regional/Multi-County	Caltrans	REG110042	GL: Elderly & Persons with Disability Program	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Regional/Multi-County	Caltrans	REG150001	Oakland to San Jose Double Track (Segment 2A)	17-01-0026	Minor Freight Improvements Programmatic
Regional/Multi-County	Caltrans	REG150002	GL: FTA 5311 Rural Area FY15	17-10-0027	Regional Transit Operations
Regional/Multi-County	Caltrans	REG150003	GL: Elderly&Persons with Disability Prog FY13-FY14	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Regional/Multi-County	Caltrans	VAR150002	GL: Pavement Resurf and/or Rehab-Fed Discretionary	17-10-0023	Local Streets and Roads - Operations
Regional/Multi-County	Caltrans	VAR150003	GL: Bike and Ped Facilities - Fed Discretionary	17-05-0001	Bicycle and Pedestrian Program
Regional/Multi-County	Caltrans	VAR170001	GL: Safety Improvements - SRTS	17-06-0001	Bicycle and Pedestrian Program
Regional/Multi-County	Caltrans	VAR170002	GL: Highway Safety Improvement Program	17-10-0025	Regional State Highways - Existing Conditions
Regional/Multi-County	Caltrans	VAR170004	GL: Pavement Resurfacing/Rehab SHS - Highway Maint	17-10-0025	Regional State Highways - Existing Conditions

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Regional/Multi-County	Caltrans	VAR170005	GL: Safety Improvements - SHOPP Mobility Program	17-10-0013	Transportation Management Systems
Regional/Multi-County	Caltrans	VAR170006	GL: Pavement Resurf./Rehab - SHOPP Roadway Presv.	17-10-0025	Regional State Highways - Existing Conditions
Regional/Multi-County	Caltrans	VAR170007	GL: Safety Imprv. - SHOPP Collision Reduction	17-10-0025	Regional State Highways - Existing Conditions
Regional/Multi-County	Caltrans	VAR170008	GL: Emergency Repair - SHOPP Emergency Response	17-10-0025	Regional State Highways - Existing Conditions
Regional/Multi-County	Caltrans	VAR170009	GL: Safety Improvements - SHOPP Mandates	17-10-0025	Regional State Highways - Existing Conditions
Regional/Multi-County	Caltrans	VAR170010	GL: Bridge Rehab and Reconstruction - SHOPP	17-10-0024	Regional and Local Bridges - Existing Conditions
Regional/Multi-County	Caltrans	VAR170011	GL: Shoulder Imprv - SHOPP Roadside Preservation	17-10-0025	Regional State Highways - Existing Conditions
Regional/Multi-County	Caltrans	VAR170012	GL: Bridge Rehab/Recon. - Local Hwy Bridge Program	17-10-0024	Regional and Local Bridges - Existing Conditions
Regional/Multi-County	Caltrans	VAR170015	GL: Pvmnt Resurf/Rehab State Hwy Sys - SHOPP Minor	17-10-0025	Regional State Highways - Existing Conditions
Regional/Multi-County	Caltrans	VAR170016	GL: Recreational Trails Program	17-09-0001	Bicycle and Pedestrian Program
Regional/Multi-County	Caltrans	VAR170017	GL: Railroad-Highway Crossing	17-10-0025	Regional State Highways - Existing Conditions
Regional/Multi-County	MTC	MTC050001	Bay Area Commuter Benefits Program	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Regional/Multi-County	MTC	MTC050020	Real-time Transit Information Program	17-10-0029	511 Traveler Information Program
Regional/Multi-County	MTC	MTC050021	Safe Routes to Transit	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Regional/Multi-County	MTC	REG090002	GL: JARC FY 09 - FY 10 - Large UA	17-10-0027	Regional Transit Operations
Regional/Multi-County	MTC	REG090003	Freeway Performance Initiative (FPI)	17-10-0013	Transportation Management Systems
Regional/Multi-County	MTC	REG090039	Regional Streets and Roads Program	17-10-0022	Local and Streets and Roads - Existing Conditions
Regional/Multi-County	MTC	REG090042	511 Traveler Information	17-10-0029	511 Traveler Information Program
Regional/Multi-County	MTC	REG090045	Clipper Fare Collection System	17-10-0028	Clipper
Regional/Multi-County	MTC	REG090046	Regional Arterial Operations & Signal Timing Prog	17-10-0013	Transportation Management Systems
Regional/Multi-County	MTC	REG090065	Climate Initiatives Program Public Education	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Regional/Multi-County	MTC	REG110010	Regional Bicycle Sharing Program	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Regional/Multi-County	MTC	REG110011	Electric Vehicle Funding Strategies	17-10-0015	Climate Program: TDM and Emission Reduction Technology

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Regional/Multi-County	MTC	REG110028	GL: FY10 JARC Mobility Management	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Regional/Multi-County	MTC	REG110032	GL: JARC FY11-FY12 Large UA	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Regional/Multi-County	MTC	REG110039	GL: 5307 JARC Set-aside FY13-FY14 Large UA	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Regional/Multi-County	MTC	REG130001	Toll Bridge Maintenance	17-10-0024	Regional and Local Bridges - Existing Conditions
Regional/Multi-County	MTC	REG130002	Toll Bridge Rehabilitation Program	17-10-0024	Regional and Local Bridges - Existing Conditions
Regional/Multi-County	MTC	REG130005	Transit Oriented Affordable Housing	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Regional/Multi-County	MTC	REG150004	GL: Lifeline Cycle 4 5307 JARC	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management
Regional/Multi-County	MTC	REG170001	Regional Planning Activities and PPM - MTC	17-10-0023	Local Streets and Roads - Operations
Regional/Multi-County	MTC	REG170002	Transportation Management Systems	17-10-0013	Transportation Management Systems
Regional/Multi-County	MTC	REG170003	511 Carpool and Vanpool Programs	17-10-0029	511 Traveler Information Program
Regional/Multi-County	MTC	REG170004	Bay Bridge Forward - Commuter Parking Initiative	17-10-0033	Bay Area Forward
Regional/Multi-County	MTC	REG170005	Bay Bridge Forward - Flexible On-Demand Transit	17-10-0033	Bay Area Forward
Regional/Multi-County	MTC	REG170006	Spare the Air Youth	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Regional/Multi-County	MTC	REG170007	MTC - Incident Management Program	17-10-0013	Transportation Management Systems
Regional/Multi-County	MTC	VAR130002	GL: JARC FY12 Small UA & Rural	17-10-0027	Regional Transit Operations
Regional/Multi-County	MTC	VAR130003	GL: New Freedom FY12 Small UA & Rural	17-10-0027	Regional Transit Operations
Regional/Multi-County	MTC	VAR130005	GL: New Freedom FY12 Large UA	17-10-0027	Regional Transit Operations
Regional/Multi-County	MTC	VAR150001	GL: FTA 5311 Rural Area FY16	17-10-0027	Regional Transit Operations
Regional/Multi-County	MTC	VAR170013	Bay Bridge Forward - Casual Carpool	17-10-0033	Bay Area Forward
Regional/Multi-County	MTC	VAR170014	Bay Bridge Forward - Integrated Bridge Corridor	17-10-0033	Bay Area Forward
Regional/Multi-County	MTC-SAFE	REG090044	Incident Management Program	17-10-0013	Transportation Management Systems
Regional/Multi-County	MTC-SAFE	REG130003	FSP and Call Box Program	17-10-0030	SAFE Freeway Patrol
Regional/Multi-County	SMART	SON090002	Sonoma Marin Area Rail Corridor	17-03-0015	SMART Downtown San Rafael to Larkspur Rail Extension

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Regional/Multi-County	WETA	MTC050027	Ferry Service - Berkeley/Albany	17-10-0042	Albany/Berkeley Ferry Terminal
Regional/Multi-County	WETA	MTC050029	SF Ferry Terminal/Berthing Facilities	17-05-0018	Downtown San Francisco Ferry Terminal Expansion - Phase II
Regional/Multi-County	WETA	REG070003	Treasure Island Ferry Service	17-05-0030	Treasure Island Mobility Management Program: Intermodal Terminal, Congestion Toll, Transit Service, Transit Capital
Regional/Multi-County	WETA	REG090055	WETA: Ferry Propulsion System Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
Regional/Multi-County	WETA	REG090067	WETA: Fixed Guideway Connectors	17-10-0026	Regional Transit Capital - Existing Conditions
Regional/Multi-County	WETA	REG110020	WETA: Facilities Rehabilitation	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	BART	SF-050014	BART/MUNI Direct Connection Platform	17-05-0010	Minor Transit Improvements
San Francisco	BART	SF-110044	Regional Real-Time Transit Information at BART	17-05-0010	Minor Transit Improvements
San Francisco	MTC	SF-170002	Regional Planning Activities and PPM - SF County	17-10-0023	Local Streets and Roads - Operations
San Francisco	MTC	SF-170003	Bay Bridge Forward-Sterling/Bryant St Managed Lane	17-10-0033	Bay Area Forward
San Francisco	Port of SF	SF-070009	Embarcadero Corridor Transportation Improvements	17-05-0002	Climate Program: TDM and Emission Reduction Technology
San Francisco	Port of SF	SF-130021	Pier 70 19th Street & Illinois Street Sidewalk	17-05-0008	Minor Roadway Expansions
San Francisco	Port of SF	SF-170001	Mission Bay Ferry Terminal	17-05-0019	Establish new ferry terminal at Mission Bay 16th Street
San Francisco	Port of SF	SF-170012	Cargo Way and Amador Street Improvements	17-05-0014	Muni Forward (Transit Effectiveness Project)
San Francisco	SF County TA	SF-070027	Yerba Buena Island (YBI) Ramp Improvements	17-05-0023	Yerba Buena Island (YBI) I-80 Interchange Improvement
San Francisco	SF County TA	SF-090011	Oakdale Caltrain Station	17-05-0028	Southeast San Francisco Caltrain Station - Environmental
San Francisco	SF County TA	SF-110011	Integrated Public-Private Partnership TDM Program	17-05-0002	Climate Program: TDM and Emission Reduction Technology
San Francisco	SF County TA	SF-130004	Treasure Is/Yerba Buena Is Street Improvements	17-05-0030	Treasure Island Mobility Management Program: Intermodal Terminal, Congestion Toll, Transit Service, Transit Capital
San Francisco	SF County TA	SF-130005	Treasure Island Pricing Mobility Improvements	17-05-0030	Treasure Island Mobility Management Program: Intermodal Terminal, Congestion Toll, Transit Service, Transit Capital
San Francisco	SF County TA	SF-130010	Construct Treasure Island Bus Terminal Facility	17-05-0030	Treasure Island Mobility Management Program: Intermodal Terminal, Congestion Toll, Transit Service, Transit Capital
San Francisco	SF County TA	SF-150008	Quint-Jerrold Connector Road	17-05-0008	Minor Roadway Expansions
San Francisco	SF County TA	SF-150012	San Francisco Travel Smart Rewards Pilot Program	17-05-0002	Climate Program: TDM and Emission Reduction Technology
San Francisco	SF County TA	SF-150013	SB I-280 Off-Ramp at Ocean Ave Realignment	17-05-0009	Roadway Operations

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
San Francisco	SF DPW	SF-110005	Great Highway Restoration	17-10-0022	Local and Streets and Roads - Existing Conditions
San Francisco	SF DPW	SF-130011	SF- Second Street Complete Streets and Road Diet	17-05-0004	Multimodal Streetscape
San Francisco	SF DPW	SF-130014	SF- Broadway Chinatown Complete Streets	17-05-0004	Multimodal Streetscape
San Francisco	SF DPW	SF-150001	John Yehall Chin Safe Routes to School	17-05-0003	County Safety, Security and Other
San Francisco	SF DPW	SF-150016	Lombard Street Vision Zero Project	17-05-0003	County Safety, Security and Other
San Francisco	SFDPH	SF-130018	SF SRTS Non-Infrastructure Program	17-05-0003	County Safety, Security and Other
San Francisco	SFDPH	SF-150003	San Francisco Safe Routes to School (ATP)	17-05-0003	County Safety, Security and Other
San Francisco	SFDPH	SF-150017	SF Safe Routes to School 2017-2019	17-05-0003	County Safety, Security and Other
San Francisco	SFMTA	SF-010037	SF Muni Third St LRT Phase 2 - New Central Subway	17-10-0038	Caltrain/HSR Downtown San Francisco Extension
San Francisco	SFMTA	SF-030013	SFMTA: Wayside Fare Collection Equipment	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-050024	SFMTA:Train Control & Trolley Signal Rehab/Replace	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-050034	Light Rail Vehicle Overhaul Program	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-070003	Historic Streetcar Extension to Fort Mason	17-05-0042	Historic Streetcar Extension - Fort Mason to 4th & King
San Francisco	SFMTA	SF-070005	Van Ness Avenue Bus Rapid Transit	17-05-0033	Van Ness Avenue Bus Rapid Transit
San Francisco	SFMTA	SF-070030	SFGO-Corridor Management	17-05-0012	SFgo Integrated Transportation Management System
San Francisco	SFMTA	SF-070045	SFMTA: Trolley Coach Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-090016	Transit Center in Hunters Point	17-05-0031	Southeast Waterfront Transportation Improvements - Phase 1
San Francisco	SFMTA	SF-090018	Oakdale-Palou Interim High-Capacity Bus Corridor	17-05-0010	Minor Transit Improvements
San Francisco	SFMTA	SF-090019	Extended Trolleybus Service into Hunters Point	17-05-0031	Southeast Waterfront Transportation Improvements - Phase 1
San Francisco	SFMTA	SF-090020	Geneva Harney BRT Infrastructure: Central Segment	17-05-0032	Geneva-Harney Bus Rapid Transit
San Francisco	SFMTA	SF-090023	Geneva Harney BRT Infrastructure: Eastern Segment	17-05-0032	Geneva-Harney Bus Rapid Transit
San Francisco	SFMTA	SF-090031	SF Muni - Preventive Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-090032	SFMTA: Muni Forward Capital Implementation Program	17-05-0014	Muni Forward (Transit Effectiveness Project)

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
San Francisco	SFMTA	SF-090035	SFMTA: Paratransit Vehicle Replacements	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-110010	SFMTA Transportation Asset Management System	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-110037	Linked Priced Electric Bikesharing	17-05-0002	Climate Program: TDM and Emission Reduction Technology
San Francisco	SFMTA	SF-110050	SFMTA: Replace 58 40' Neoplan Buses	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-130002	Implement Parkmerced Street Network	17-05-0037	Parkmerced Transportation Improvements
San Francisco	SFMTA	SF-130015	Mansell Corridor Complete Streets	17-05-0004	Multimodal Streetscape
San Francisco	SFMTA	SF-130019	Eddy and Ellis Traffic Calming Improvement Project	17-05-0004	Multimodal Streetscape
San Francisco	SFMTA	SF-130020	SFMTA: Purchase 60 foot expansion motor coaches	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-130022	Twin Peaks Connectivity Planning	17-05-0001	Bicycle and Pedestrian Program
San Francisco	SFMTA	SF-150002	San Francisco Safer Streets Campaign	17-05-0003	County Safety, Security and Other
San Francisco	SFMTA	SF-150004	SFMTA Station-Area Ped and Bicycle Access Imp.	17-05-0001	Bicycle and Pedestrian Program
San Francisco	SFMTA	SF-150005	SFMTA - Replacement of 40' Motor Coaches	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-150006	SFMTA Replacement of 60' Motor Coaches	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-150007	SFMTA Farebox Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-150009	San Francisco Citywide Bicycle Wayfinding	17-05-0001	Bicycle and Pedestrian Program
San Francisco	SFMTA	SF-150011	San Francisco Vision Zero Safety Investment	17-05-0003	County Safety, Security and Other
San Francisco	SFMTA	SF-150014	SFMTA 30' Motor Coach Mid-Life Overhaul	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-150015	SFMTA: Replacement of 40' Trolley Coaches	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-170004	SFMTA: Replacement of 40' Trolley Coaches	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-170005	SFMTA: Replacement of 60' Trolley Coaches	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-170006	SFMTA: Station-area Ped and Bike Access Improvemnt	17-05-0001	Bicycle and Pedestrian Program
San Francisco	SFMTA	SF-170014	SF - Powell Street Safety Project	17-05-0003	County Safety, Security and Other
San Francisco	SFMTA	SF-170015	SF - Adv Transportation and Congestion Management	17-05-0002	Climate Program: TDM and Emission Reduction Technology

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
San Francisco	SFMTA	SF-95037B	SF Muni Rail Replacement Program	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-970073	SFMTA: Cable Car Vehicle Renovation Program	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-970170	SFMTA: Trolley Overhead Recon. Program	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-990003	Global Positioning System	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	SFMTA	SF-990004	Islais Creek Motor Coach Facility	17-05-0013	Expand SFMTA Transit Fleet
San Francisco	SFMTA	SF-990022	SFMTA: ADA Paratransit operating support	17-05-0002	Climate Program: TDM and Emission Reduction Technology
San Francisco	SFMTA	SF-99T002	Cable Car Traction Power & Guideway Rehab	17-10-0026	Regional Transit Capital - Existing Conditions
San Francisco	TBJPA	SF-010015	Transbay Term/Caltrain Downtown Ext - Ph.1	17-10-0039	Implement Transbay Transit Center/Caltrain Downtown Extension (Phase 1 - Transbay Transit Center)
San Francisco	TBJPA	SF-070029	Transbay Transit Center - TIFIA Loan Debt Service	17-10-0017	Capital Projects Debt Service
San Francisco	WETA	SF-110053	WETA: Replace Ferry Vessels	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	BART	SM-050005	BART: Preventive Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	BART	SM-130029	Daly City BART Station Intermodal Improvements	17-06-0002	County Safety, Security and Other
San Mateo	Belmont	SM-130017	Ralston Avenue Pedestrian Route Improvements	17-06-0001	Bicycle and Pedestrian Program
San Mateo	Belmont	SM-130018	Old County Road Bicycle/Pedestrian Improvements	17-06-0001	Bicycle and Pedestrian Program
San Mateo	Belmont	SM-150004	Belmont Village Specific/Implementation Plan	17-10-0021	Priority Development Area (PDA) Planning Grants
San Mateo	Burlingame	SM-130021	Carolan Ave Complete Streets and Road Diet	17-06-0003	Multimodal Streetscape
San Mateo	Caltrain	SF-010028	Caltrain Electrification	17-10-0008	Caltrain Electrification Phase 1 + CBOSS
San Mateo	Caltrain	SM-010054	San Mateo Bridges Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	Caltrain	SM-03006B	Caltrain: Systemwide Track Rehab & Related Struct.	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	Caltrain	SM-050040	Caltrain: ADA Operating Set-aside	17-10-0027	Regional Transit Operations
San Mateo	Caltrain	SM-070008	Caltrain South Terminal Phase II and III	17-07-0065	Caltrain Station and Service Enhancements
San Mateo	Caltrain	SM-130026	Caltrain Control Point Installation	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	Caltrain	SM-130027	Caltrain Off-peak Marketing Campaign	17-10-0026	Regional Transit Capital - Existing Conditions

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
San Mateo	Caltrain	SM-150007	Map Based Real-Time Train Display for Caltrain.com	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	Caltrain	SM-170005	South San Francisco Caltrain Station Improvements	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	Caltrans	SM-110047	SR92/El Camino Real (SR82) Ramp Modifications	17-06-0019	State Route 92-82 (El Camino) Interchange Improvement
San Mateo	CCAG	SM-070002	San Mateo Countywide ITS Improvements	17-06-0006	County-wide Intelligent Transportation System (ITS) and Traffic Operation System Improvements
San Mateo	CCAG	SM-070029	Dumbarton Bridge to US101 Connection Study	17-06-0016	Improve access to and from the west side of Dumbarton Bridge on Route 84 connecting to U.S. 101 per Gateway 2020 Study - Phased
San Mateo	CCAG	SM-090014	Improve US 101 operations near Rte 92	17-06-0009	Improve operations at U.S. 101 near Route 92 - Phased
San Mateo	CCAG	SM-110022	San Mateo County SR2S Program	17-06-0002	County Safety, Security and Other
San Mateo	CCAG	SM-110067	Local PDA Planning - San Mateo	17-10-0021	Priority Development Area (PDA) Planning Grants
San Mateo	CCAG	SM-150017	US 101 HOV/ HOT from Santa Clara to I-380	17-07-0075	US 101 Express Lanes: Whipple Ave. in San Mateo County to Cochrane Road in Morgan Hill
San Mateo	Daly City	SM-130011	John Daly Boulevard Bicycle /Ped Improvements	17-06-0001	Bicycle and Pedestrian Program
San Mateo	Daly City	SM-150012	Daly City Central Corridor Bike/Ped Safety Imprmnt	17-06-0001	Bicycle and Pedestrian Program
San Mateo	East Palo Alto	SM-070004	Bay Rd Bicycle/Ped Improvements Phase II & III	17-06-0003	Multimodal Streetscape
San Mateo	East Palo Alto	SM-070006	US 101 University Ave Interchange Improvements	17-06-0005	Roadway Operations
San Mateo	East Palo Alto	SM-130028	US-101 Pedestrian/Bicycle Overcrossing	17-06-0001	Bicycle and Pedestrian Program
San Mateo	Half Moon Bay	SM-010002	SR 92 Shoulder Widening & Curve Correction	17-06-0033	Widen Route 92 between SR 1 and Pilarcitos Creek alignment, includes widening of travel lanes and shoulders
San Mateo	Half Moon Bay	SM-090015	Route 1 improvements in Half Moon Bay	17-06-0023	Route 1 Improvements in Half Moon Bay
San Mateo	Menlo Park	SM-010047	US 101 / Willow Road Interchange Reconstruction	17-06-0014	Reconstruct U.S. 101/Willow Road interchange
San Mateo	Menlo Park	SM-130008	Menlo Park-Various Streets Bike /Ped Improvements	17-06-0001	Bicycle and Pedestrian Program
San Mateo	Menlo Park	SM-130023	Menlo Park - Willow Rd Traffic Signal Modification	17-06-0006	County-wide Intelligent Transportation System (ITS) and Traffic Operation System Improvements
San Mateo	Millbrae	SM-050053	US 101 Millbrae Ave Bike/Ped Bridge	17-06-0001	Bicycle and Pedestrian Program
San Mateo	Millbrae	SM-130009	Millbrae Various Streets and Roads Preservation	17-06-0003	Multimodal Streetscape
San Mateo	Millbrae	SM-150001	Millbrae Priority Development Area Specific Plan	17-10-0021	Priority Development Area (PDA) Planning Grants
San Mateo	MTC	SM-170002	Regional Planning Activities and PPM - San Mateo	17-10-0023	Local Streets and Roads - Operations

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
San Mateo	Pacifica	SM-050001	SR 1 - Fassler to Westport Drive Widening	17-06-0034	Construct Route 1 (Calera Parkway) northbound and southbound lanes from Fassler Avenue to Westport Drive in Pacifica
San Mateo	Pacifica	SM-130016	Palmetto Avenue Streetscape	17-06-0003	Multimodal Streetscape
San Mateo	Pacifica	SM-170004	Manor Drive Overcrossing and Milagra On Ramp	17-06-0004	Minor Roadway Expansions
San Mateo	Redwood City	SM-050027	US 101 / Woodside Interchange Improvement	17-06-0010	Improve U.S. 101/Woodside Road interchange
San Mateo	Redwood City	SM-090007	Blomquist Street Extension	17-06-0040	Extend Blomquist Street over Redwood Creek to East Bayshore and Bair Island Road
San Mateo	Redwood City	SM-110065	Middlefield Rd and Woodside Rd Intersection Improv	17-06-0005	Roadway Operations
San Mateo	Redwood City	SM-130002	Redwood City Various Streets Overlay	17-10-0024	Regional and Local Bridges - Existing Conditions
San Mateo	Redwood City	SM-130022	Middlefield Road Bicycle / Ped Improvements	17-06-0003	Multimodal Streetscape
San Mateo	Redwood City	SM-150003	Redwood City Dwntrn Transit Area Impvmts-Streetcar	17-10-0021	Priority Development Area (PDA) Planning Grants
San Mateo	SamTrans	SM-030023	SAMTRANS: Preventive Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	SamTrans	SM-050051	SR 82 - El Camino Real Grand Boulevard Initiative	17-06-0003	Multimodal Streetscape
San Mateo	SamTrans	SM-070049	Facility/Equipment Rehabilitation/Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	SamTrans	SM-110054	Reconfiguration of San Carlos Transit Center	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	SamTrans	SM-110062	Samtrans - Replace 62 1998 Gillig Buses	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	SamTrans	SM-110068	SAMTRANS: Replacement of Articulated Bus Fleet	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	SamTrans	SM-130025	SamTrans Service Plan (SSP)	17-10-0027	Regional Transit Operations
San Mateo	SamTrans	SM-150005	SAMTRANS: Replacement of 2003 Gillig Buses	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	SamTrans	SM-150008	SamTrans - Replacement of Non-Rev Vehicles	17-10-0026	Regional Transit Capital - Existing Conditions
San Mateo	SamTrans	SM-170008	El Camino Real Traffic Signal Priority Project	17-06-0029	Add new rolling stock and infrastructure to support SamTrans bus rapid transit along El Camino Real- Phase
San Mateo	SamTrans	SM-990026	SAMTRANS: ADA Paratransit Operating Subsidy	17-10-0027	Regional Transit Operations
San Mateo	San Bruno	SM-110012	San Bruno Transit Corridor Pedestrian Imps	17-06-0003	Multimodal Streetscape
San Mateo	San Bruno	SM-130019	San Bruno Ave Street Medians Improvements	17-06-0001	Bicycle and Pedestrian Program
San Mateo	San Bruno	SM-170003	SR-35 (Skyline Blvd) Widening from I-280 to Sneath	17-06-0036	Widen Skyline Boulevard (Route 35) to 4-lane roadway from I-280 to Sneath Lane - Phased

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
San Mateo	San Carlos	SM-090008	US101/Holly Interchange modification	17-06-0017	Route 101/Holly St Interchange Access Improvements
San Mateo	San Carlos	SM-130012	San Carlos Streetscape and Ped Improvments	17-06-0003	Multimodal Streetscape
San Mateo	San Carlos	SM-150009	US 101 Holly Pedestrian/Bicycle Overcrossing	17-06-0001	Bicycle and Pedestrian Program
San Mateo	San Mateo	SM-110064	North Central Pedestrian Improvement Program	17-06-0001	Bicycle and Pedestrian Program
San Mateo	San Mateo	SM-130004	Mount Diablo Ave. Rehabilitation	17-10-0024	Regional and Local Bridges - Existing Conditions
San Mateo	San Mateo	SM-130020	San Mateo Citywide Crosswalk Improvements	17-06-0001	Bicycle and Pedestrian Program
San Mateo	San Mateo	SM-150002	City of San Mateo SR2S Program	17-06-0002	County Safety, Security and Other
San Mateo	San Mateo	SM-150006	City of San Mateo Car Sharing Program	17-10-0015	Climate Program: TDM and Emission Reduction Technology
San Mateo	San Mateo	SM-150016	San Mateo Downtown Parking Tech Implementation	17-10-0015	Climate Program: TDM and Emission Reduction Technology
San Mateo	San Mateo	SM-170006	East Hillsdale Boulevard Ped/Bike Overcrossing	17-06-0001	Bicycle and Pedestrian Program
San Mateo	San Mateo Co	SM-130015	Semicircular Rd Bicycle / Ped Access Improvements	17-06-0001	Bicycle and Pedestrian Program
San Mateo	San Mateo Co	SM-130032	Midcoast Multi-Modal Trail	17-06-0001	Bicycle and Pedestrian Program
San Mateo	San Mateo Co	SM-150013	RWC 2020 Sustainable Transportation Encouragement	17-06-0002	County Safety, Security and Other
San Mateo	San Mateo Co	SM-170001	Hwy 1 Congestion throughput and safety improvement	17-06-0005	Roadway Operations
San Mateo	San Mateo County	SM-150014	Safe Routes to School for Health and Wellness	17-06-0002	County Safety, Security and Other
San Mateo	SF City/County	SM-130031	Southern Skyline Blvd. Ridge Trail Extension	17-06-0001	Bicycle and Pedestrian Program
San Mateo	SMCTA	SM-090009	US 101 Aux lanes from Sierra Point to SF Cnty Line	17-06-0008	Add northbound and southbound modified auxiliary lanes and/ or implementation of managed lanes on U.S. 101 from I-380 to San Francisco County line
San Mateo	SSF	SM-110003	US 101/Produce Avenue Interchange	17-06-0011	US 101 Produce Avenue Interchange
San Mateo	SSF	SM-130003	SSF Citywide Sidewalk Gap Closure Project	17-06-0001	Bicycle and Pedestrian Program
San Mateo	SSF	SM-130013	SSF Grand Blvd Project: Chestnut to Arroyo	17-06-0003	Multimodal Streetscape
San Mateo	SSF	SM-130030	SSF Grand Blvd Project: Kaiser Way to McLellan	17-06-0003	Multimodal Streetscape
San Mateo	SSF	SM-150015	SSF Linden/Spruce Ave Traffic Calming Improvements	17-06-0001	Bicycle and Pedestrian Program
San Mateo	Woodside	SM-170009	Woodside School Safety Pathway Phase 3	17-06-0001	Bicycle and Pedestrian Program

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Santa Clara	Gilroy	SCL110032	Gilroy New Ronan Channel and Lions Creek Trails	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Morgan Hill	SCL130043	Monterey Road Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Santa Clara	Mountain View	SCL150017	Mountain View El Camino Real Streetscape Study	17-07-0003	Multimodal Streetscape
Santa Clara	MTC	SCL170001	Regional Planning Activities and PPM - Santa Clara	17-10-0023	Local Streets and Roads - Operations
Santa Clara	Palo Alto	SCL130034	Arastradero Road Schoolscape/Multiuse Trail	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Palo Alto	SCL130041	Adobe Creek/ Highway 101 Bicycle Pedestrian Bridge	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Palo Alto	SCL170003	Palo Alto: Bay Area Fair Value CommutingMoDSandbox	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Santa Clara	San Jose	SCL030006	US 101 / Blossom Hill I/C Reconst & Road Widening	17-07-0038	US 101/Blossom Hill Rd. Interchange Improvements
Santa Clara	San Jose	SCL050082	Bay Trail Reach 9 & 9B	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	San Jose	SCL050083	Coyote Creek Trail (Hwy 237-Story Rd)	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	San Jose	SCL070004	US 101 / Mabury New Interchange	17-07-0027	US 101/Mabury Rd./Taylor St. Interchange Improvements
Santa Clara	San Jose	SCL090003	San Jose Charcot Avenue Extension Over I-880	17-07-0005	Minor Roadway Expansions
Santa Clara	San Jose	SCL090005	Coleman Avenue Widening from I-880 to Taylor St.	17-07-0005	Minor Roadway Expansions
Santa Clara	San Jose	SCL110006	San Jose - Autumn Street Extension	17-07-0005	Minor Roadway Expansions
Santa Clara	San Jose	SCL110029	San Jose: Los Gatos Creek Reach 5 Underpass	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	San Jose	SCL110107	San Jose: Road Rehab and Ped. Facilities	17-10-0022	Local and Streets and Roads - Existing Conditions
Santa Clara	San Jose	SCL130004	San Jose - Meridian Bike/Ped Improvements	17-07-0003	Multimodal Streetscape
Santa Clara	San Jose	SCL130006	San Jose Citywide SRTS Program	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	San Jose	SCL130007	Jackson Ave Bicycle and Pedestrian Improvements	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	San Jose	SCL130010	San Jose Pedestrian Oriented Traffic Signals	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	San Jose	SCL130011	St. Johns Bikeway and Pedestrian Improvements	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	San Jose	SCL130016	East San Jose Bikeways	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	San Jose	SCL150020	North 1st Street Urban Village Plan	17-10-0021	Priority Development Area (PDA) Planning Grants

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Santa Clara	San Jose	SCL150021	Berryessa BART Urban Village Plan	17-10-0021	Priority Development Area (PDA) Planning Grants
Santa Clara	Santa Clara Co	SCL090002	San Tomas Expressway Box Culvert Rehabilitation	17-10-0025	Regional State Highways - Existing Conditions
Santa Clara	Santa Clara Co	SCL090017	Montague Expwy Widening - Trade Zone-I-680	17-07-0005	Minor Roadway Expansions
Santa Clara	Santa Clara Co	SCL110007	San Tomas Expressway Widening	17-07-0078	Envision Expressway (Tier 1 Expressway Plan) Major and Minor Projects
Santa Clara	Santa Clara Co	SCL110108	Isabel Bridge Replacement (37C0089)	17-10-0024	Regional and Local Bridges - Existing Conditions
Santa Clara	Santa Clara Co	SCL110121	East San Jose Pedestrian Improvements	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Santa Clara Co	SCL130022	San Tomas Aquino Spur Multi-Use Trail Phase 2	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Santa Clara Co	SCL130037	Capitol Expressway ITS and Bike/Ped Improvements	17-07-0078	Envision Expressway (Tier 1 Expressway Plan) Major and Minor Projects
Santa Clara	Santa Clara Co	SCL150015	Gilroy Moves!	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Saratoga	SCL130026	Prospect Rd Complete Streets	17-07-0003	Multimodal Streetscape
Santa Clara	Saratoga	SCL130027	Saratoga Village Sidewalk Rehabilitation	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Sunnyvale	SCL130028	Sunnyvale/Saratoga Traffic Signal, Bike/Ped Safety	17-07-0003	Multimodal Streetscape
Santa Clara	Sunnyvale	SCL130029	Fair Oaks Avenue Bikeway and Street Enhancements	17-07-0003	Multimodal Streetscape
Santa Clara	Sunnyvale	SCL130030	Maude Avenue Bikeway and Streetscape	17-07-0003	Multimodal Streetscape
Santa Clara	Sunnyvale	SCL130031	Sunnyvale East and West Channel Multi-Use Trails	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Sunnyvale	SCL130032	Sunnyvale SRTS Ped Infrastructure Improvements	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	Sunnyvale	SCL170017	Sunnyvale SNAIL Neighborhood Improvements	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	VTa	SCL010019	I-880 Coleman Avenue I/C Reconfiguration	17-10-0025	Regional State Highways - Existing Conditions
Santa Clara	VTa	SCL050001	VTa: Standard & Small Bus Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTa	SCL050002	VTa: Rail Replacement Program	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTa	SCL050009	Capitol Expressway LRT Extension- Phase II	17-07-0061	Extend Capitol Expressway light rail to Eastridge Transit Center - Phase II
Santa Clara	VTa	SCL050046	VTa: ADA Operating Set Aside	17-10-0027	Regional Transit Operations
Santa Clara	VTa	SCL050049	VTa: Rail Substation Rehab/Replacement	17-10-0026	Regional Transit Capital - Existing Conditions

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Santa Clara	VTA	SCL090016	New SR152 Alignment Study	17-07-0022	Environmental Studies for SR-152 New Alignment
Santa Clara	VTA	SCL090030	SR 85 Express Lanes	17-07-0074	SR 85 Express Lanes: US 101 (South San Jose) to Mountain View
Santa Clara	VTA	SCL090031	Santa Clara Caltrain Station Bike/Ped Tunnel	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	VTA	SCL090040	LRT Extension to Vasona Junction	17-07-0062	Extend light-rail transit from Winchester Station to Route 85 (Vasona Junction)
Santa Clara	VTA	SCL090041	VTA: Photovoltaic Solar Panel Alternative Energy	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL090044	VTA: TP OCS Rehab & Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL110005	BART - Warm Springs to Berryessa Extension	17-07-0077	BART ' Warm Springs to Berryessa Extension (SVBX)
Santa Clara	VTA	SCL110009	El Camino Real Bus Rapid Transit	17-07-0013	Implement El Camino Rapid Transit Project
Santa Clara	VTA	SCL110010	VTA: Stevens Creek Bus Rapid Transit	17-07-0059	Implement Stevens Creek Rapid Transit Project
Santa Clara	VTA	SCL110099	VTA: Light Rail Bridge and Structure - SG Repair	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL110100	VTA: Kinkisharyo LRV Overhaul Program	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL110104	VTA: Light Rail Track Crossovers and Switches	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL110125	Local PDA Planning - Santa Clara	17-10-0021	Priority Development Area (PDA) Planning Grants
Santa Clara	VTA	SCL130001	SR 237/US 101/Mathilda Interchange Modifications	17-07-0033	SR 237/Mathilda Ave. and US 101/Mathilda Ave. Interchange Improvement
Santa Clara	VTA	SCL130040	Montague Expy Ped Bridge at Milpitas BART	17-07-0001	Bicycle and Pedestrian Program
Santa Clara	VTA	SCL130044	I-880 Stevens Creek Landscaping	17-10-0025	Regional State Highways - Existing Conditions
Santa Clara	VTA	SCL150001	I-680 Soundwalls - Capitol Expwy to Mueller Ave	17-07-0064	County Safety, Security, Noise and Other
Santa Clara	VTA	SCL150005	VTA Train to Wayside Communication System Upgrade	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL150006	VTA: Back-up Power for Elevated Stations	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL150008	VTA Track Intrusion Abatement	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL150011	VTA: N 1st Street LR Speed Improvements	17-07-0008	Implement System Operations and Management Program for Santa Clara County
Santa Clara	VTA	SCL150014	I-280/Winchester Study	17-07-0025	I-280/Winchester Blvd Interchange Improvements
Santa Clara	VTA	SCL150018	Peery Park Rides	17-10-0015	Climate Program: TDM and Emission Reduction Technology

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Santa Clara	VTA	SCL170002	VTA BART Phase II TOD and Station Access Planning	17-10-0032	Regional Rail Station Modernization and Access Improvements
Santa Clara	VTA	SCL170004	VTA: LR Vehicle CCTV Door Monitoring System	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL170005	VTA: Paratransit Vehicle Procurement	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL170006	VTA: Replace Fault Monitoring System on LRVs	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL170007	VTA: Pedestrian Swing Gates Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL170008	VTA: Vasona Pedestrian Back Gates	17-07-0064	County Safety, Security, Noise and Other
Santa Clara	VTA	SCL170009	VTA: Chaboya Yard Well Removal	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL170010	VTA: Guadalupe Train Wash Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL170011	VTA: Upgrade Rail Grade Crossing Control Equipment	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL170012	Santa Clara Pocket Track Light Rail Interlocking	17-10-0026	Regional Transit Capital - Existing Conditions
Santa Clara	VTA	SCL990046	VTA: Preventive Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
Solano	Dixon	SOL130012	Dixon SR2S Infrastructure Improvements	17-08-0004	County Safety, Security and Other
Solano	Fairfield	SOL010006	City of Fairfield Operating Assistance	17-10-0027	Regional Transit Operations
Solano	Fairfield	SOL030002	Fairfield/Vacaville Intermodal Rail Station	17-08-0015	Solano MLIP Support Projects
Solano	Fairfield	SOL110007	Fairfield Transportation Center - Phase 3	17-08-0015	Solano MLIP Support Projects
Solano	Fairfield	SOL110041	Fairfield-Suisun Intercity/Local Bus Replacement	17-10-0026	Regional Transit Capital - Existing Conditions
Solano	Fairfield	SOL170006	East Tabor Tolenas SR2S Sidewalk Gap Closure	17-08-0002	Bicycle and Pedestrian Program
Solano	MTC	SOL110001	I-80 Express Lanes - Fairfield & Vacaville Ph I&II	17-10-0044	I-80 Express Lanes in both directions: Airbase Parkway to Red Top Road
Solano	MTC	SOL170001	Regional Planning Activities and PPM - Solano	17-10-0023	Local Streets and Roads - Operations
Solano	Rio Vista	SOL130014	SR 12 crossing with updated lighting	17-08-0004	County Safety, Security and Other
Solano	Solano County	SOL070012	Cordelia Hills Sky Valley	17-08-0005	Multimodal Streetscape
Solano	Solano County	SOL090015	Redwood-Fairgrounds Dr Interchange Imps	17-08-0010	Improve interchanges and widen roadways serving Solano County Fairgrounds, including Redwood Parkway
Solano	Solano County	SOL130007	Suisun Valley Bicycle and Pedestrian Imps	17-08-0001	Access and Mobility Program

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Solano	SolTrans	SOL070032	SolTrans: Preventive Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
Solano	SolTrans	SOL090033	SolTrans: Bus Maintenance Facility Renovation	17-10-0026	Regional Transit Capital - Existing Conditions
Solano	SolTrans	SOL090034	SolTrans: Bus Replacement (Alternative Fuel)	17-10-0026	Regional Transit Capital - Existing Conditions
Solano	SolTrans	SOL110025	SolTrans: ADA Paratransit Operating Subsidy	17-10-0027	Regional Transit Operations
Solano	SolTrans	SOL130019	Bus Replacement (Commuter)	17-10-0026	Regional Transit Capital - Existing Conditions
Solano	SolTrans	SOL170002	SolTrans: Data Management Technology Enhancements	17-10-0026	Regional Transit Capital - Existing Conditions
Solano	SolTrans	SOL170003	Soltrans: Facilities and Amenities Improvements	17-10-0026	Regional Transit Capital - Existing Conditions
Solano	STA	SOL110003	Jepson: Vanden Road from Peabody to Leisure Town	17-08-0012	Construct 4-lane Jepson Parkway from Route 12 to Leisure Town Road at I-80
Solano	STA	SOL110004	Jepson: Walters Rd Ext - Peabody Rd Widening	17-08-0012	Construct 4-lane Jepson Parkway from Route 12 to Leisure Town Road at I-80
Solano	STA	SOL110005	Jepson: Leisure Town Road from Vanden to Commerce	17-08-0012	Construct 4-lane Jepson Parkway from Route 12 to Leisure Town Road at I-80
Solano	STA	SOL110006	Jepson: Leisure Town Road (Commerce to New Ulatis)	17-08-0012	Construct 4-lane Jepson Parkway from Route 12 to Leisure Town Road at I-80
Solano	STA	SOL110019	Solano Safe Routes to School Program	17-08-0004	County Safety, Security and Other
Solano	STA	SOL150001	Ingraining Walking & Rolling into School Culture	17-08-0003	Climate Program: TDM and Emission Reduction Technology
Solano	STA	SOL150003	SR12/Church Rd Intersection Improvements	17-08-0005	Multimodal Streetscape
Solano	STA	SOL150004	STA SR2S Infrastructure & Non-infrastructure	17-08-0004	County Safety, Security and Other
Solano	Suisun City	SOL130020	Driftwood Drive Path	17-08-0001	Access and Mobility Program
Solano	Suisun City	SOL170007	McCoy Creek Trail - Phase 2	17-08-0002	Bicycle and Pedestrian Program
Solano	Vacaville	SOL010007	Vacaville Transit: Operating Assistance	17-10-0027	Regional Transit Operations
Solano	Vacaville	SOL090001	I-505/Vaca Valley Off-Ramp and Intersection Imprv.	17-10-0023	Local Streets and Roads - Operations
Solano	Vacaville	SOL110009	Vacaville Intermodal Station - Phase 2	17-08-0015	Solano MLIP Support Projects
Solano	Vacaville	SOL130005	Allison Bicycle / Ped Improvements	17-08-0005	Multimodal Streetscape
Solano	Vacaville	SOL130017	Transit Marketing and Public Outreach	17-10-0027	Regional Transit Operations
Solano	Vallejo	SOL110035	Vallejo Downtown Streetscape	17-08-0002	Bicycle and Pedestrian Program

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Solano	Vallejo	SOL110037	Sonoma Boulevard Improvements HSIP5-04-031	17-08-0004	County Safety, Security and Other
Solano	Vallejo	SOL130015	Vallejo SRTS Infrastructure Improvements	17-08-0004	County Safety, Security and Other
Solano	Vallejo	SOL150002	SR2T - Curtola Bike Path	17-08-0004	County Safety, Security and Other
Solano	Vallejo	SOL170008	Vallejo Bay Trail / Vine Trail Gap Closure	17-08-0002	Bicycle and Pedestrian Program
Solano	Vallejo	SOL990018	I-80 / American Canyon Rd overpass Improvements	17-08-0008	Roadway Operations
Sonoma	Caltrans	SON010001	Son 101 HOV - SR 12 to Steele & Steele Lane I/C	17-09-0005	Roadway Operations
Sonoma	Cloverdale	SON130016	Cloverdale - Safe Routes to School Phase 2	17-09-0001	Bicycle and Pedestrian Program
Sonoma	Cotati	SON130008	Cotati - Old Redwood Highway S. Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Sonoma	Healdsburg	SON110054	Healdsburg Pedestrian Safety and Access Improvmnts	17-09-0001	Bicycle and Pedestrian Program
Sonoma	MTC	SON170002	Regional Planning Activities and PPM - Sonoma	17-10-0023	Local Streets and Roads - Operations
Sonoma	Petaluma	SON090030	Petaluma Transit: AVL System	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Petaluma	SON110051	Petaluma: Purchase 2 Paratransit Cutaways FY13	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Petaluma	SON110052	Petaluma: Replace 2 Paratransit Cutaways FY14	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Petaluma	SON130002	Petaluma Complete Streets	17-10-0022	Local and Streets and Roads - Existing Conditions
Sonoma	Petaluma	SON130020	Petaluma Transit: Transit Signal Priority System	17-09-0005	Roadway Operations
Sonoma	Petaluma	SON150004	Petaluma Transit: Purchase (1) Fixed Route Bus	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Petaluma	SON150005	Petaluma Transit: (3) Digital Two-Way Radios	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Petaluma	SON150007	Petaluma Transit: ADA Set-Aside	17-10-0027	Regional Transit Operations
Sonoma	Petaluma	SON150014	Petaluma Transit: Purchase (2) Fixed Route Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Petaluma	SON150015	PetalumaTransit:Clipper Equip for FixedRoute Buses	17-10-0028	Clipper
Sonoma	Petaluma	SON150016	PetalumaTransit:Comm Equip for 3 Fixed Route Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Petaluma	SON170004	Petaluma: Replace 1 Paratransit Cutaway FY17	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Petaluma	SON170005	Petaluma: Transit Yard & Facilities Improvements	17-10-0026	Regional Transit Capital - Existing Conditions

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Sonoma	Rohnert Park	SON130007	Rohnert Park Streetscape and Pedestrian Imps	17-09-0001	Bicycle and Pedestrian Program
Sonoma	Rohnert Park	SON130009	Rohnert Park Various Streets Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Sonoma	Santa Rosa	SON130006	Downtown Santa Rosa Streetscape	17-09-0001	Bicycle and Pedestrian Program
Sonoma	Santa Rosa	SON130017	Santa Rosa Cmplt Sts Road Diet on Transit Corridor	17-09-0003	Multimodal Streetscape
Sonoma	Santa Rosa	SON150003	Jennings Ave Bike & Ped RR Crossing Corridor	17-09-0001	Bicycle and Pedestrian Program
Sonoma	Santa Rosa	SON150006	US 101 Hearn Ave Interchange	17-09-0010	Hearn Avenue Interchange
Sonoma	SantaRosa Bus	SON030012	Santa Rosa City Bus: Transit Enhancements	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	SantaRosa Bus	SON070020	Santa Rosa City Bus Replacement Bus Purchase	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	SantaRosa Bus	SON090023	Santa Rosa CityBus: Operating Assistance	17-10-0027	Regional Transit Operations
Sonoma	SantaRosa Bus	SON090024	Santa Rosa CityBus: Preventative Maintenance	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	SantaRosa Bus	SON150017	SRCityBus Non-Revenue Vehicle and Capital Equipmnt	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	SantaRosa Bus	SON150018	SR City Bus: Garage Hoist for Bus Repairs	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	SantaRosa Bus	SON150019	Implementation of Reimagining CityBus	17-10-0027	Regional Transit Operations
Sonoma	SantaRosa Bus	SON170003	Santa Rosa CityBus-paratransit operations	17-10-0027	Regional Transit Operations
Sonoma	Son Co Reg Park	SON070008	Bodega Bay Trail Segments 1B and 1C	17-09-0001	Bicycle and Pedestrian Program
Sonoma	Son Co Reg Park	SON110050	Central Sonoma Valley Trail	17-09-0001	Bicycle and Pedestrian Program
Sonoma	Son Co TA	SON010019	Son 101 HOV - Steele Lane to Windsor (North)	17-09-0005	Roadway Operations
Sonoma	Son Co TA	SON010024	Son 101 HOV - Redwood Hwy to Rohnert Park Expwy	17-09-0005	Roadway Operations
Sonoma	Son Co TA	SON070004	US 101 Marin/Sonoma Narrows (Sonoma)	17-09-0006	Implement Marin Sonoma Narrows Phase 2 (Sonoma County)
Sonoma	Son Co TA	SON090005	US 101 Airport I/C (North B)	17-09-0004	Minor Roadway Expansions
Sonoma	Son Co TA	SON150009	Highway 116/121 Intersection Improvement Project	17-09-0005	Roadway Operations
Sonoma	Son Co TA	SON150010	Santa Rosa Car Share	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Sonoma	Son Co TA	SON170009	Sonoma County - County-Wide SRTS Program	17-09-0001	Bicycle and Pedestrian Program

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Sonoma	Son Co Transit	SON030005	Sonoma Co Transit: Preventive Maintenance Program	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Son Co Transit	SON050021	Sonoma County Transit: Bus Stop Improvement	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Son Co Transit	SON110049	Sonoma County Transit: Replacement Bus Purchase	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Son Co Transit	SON150012	Sonoma County Transit: Replacement CNG Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Son Co Transit	SON150013	Sonoma County Transit: Replace 2006 CNG Buses	17-10-0026	Regional Transit Capital - Existing Conditions
Sonoma	Sonoma County	SON050001	Laughlin Bridge over Mark West Crk 20C0246	17-09-0004	Minor Roadway Expansions
Sonoma	Sonoma County	SON070026	Rehab King Ridge Bridge over Austin Crk 20C0433	17-10-0024	Regional and Local Bridges - Existing Conditions
Sonoma	Sonoma County	SON090001	Replace Geysers Bridge over Sulpher Crk 20C0005	17-10-0024	Regional and Local Bridges - Existing Conditions
Sonoma	Sonoma County	SON090025	Replace Chalk Hill Bridge over Maacama Crk 20C0242	17-10-0024	Regional and Local Bridges - Existing Conditions
Sonoma	Sonoma County	SON090026	Replace Lambert Bridge over Dry Creek 20C0248	17-10-0024	Regional and Local Bridges - Existing Conditions
Sonoma	Sonoma County	SON090027	Replace West Dry Creek Bridge over Pena Ck 20C0407	17-10-0024	Regional and Local Bridges - Existing Conditions
Sonoma	Sonoma County	SON110024	Replace Bohan Dillon Bridge over Gualala 20C0435	17-10-0024	Regional and Local Bridges - Existing Conditions
Sonoma	Sonoma County	SON110025	Replace Hauser Bridge over Gualala River 20C0240	17-10-0024	Regional and Local Bridges - Existing Conditions
Sonoma	Sonoma County	SON110026	Replace Freestone Flat Bridge over Salmon 20C0440	17-10-0024	Regional and Local Bridges - Existing Conditions
Sonoma	Sonoma County	SON130010	Sonoma County Various Streets & Roads Preservation	17-10-0022	Local and Streets and Roads - Existing Conditions
Sonoma	Sonoma County	SON130014	Sonoma County - Safe Routes to School Program	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Sonoma	Sonoma County	SON130015	Bodega Highway Pavement Rehabilitation	17-10-0022	Local and Streets and Roads - Existing Conditions
Sonoma	Sonoma County	SON150001	PDA Planning - Springs Area Plan	17-10-0021	Priority Development Area (PDA) Planning Grants
Sonoma	Sonoma County	SON150002	PDA Planning - Airport Station/Specific Plan Amend	17-10-0021	Priority Development Area (PDA) Planning Grants
Sonoma	Sonoma County	SON150011	Sonoma SRTS High School Pilot	17-10-0015	Climate Program: TDM and Emission Reduction Technology
Sonoma	Windsor	SON130003	Jaguar Way/Windsor Road Bicycle /Ped Improvements	17-09-0001	Bicycle and Pedestrian Program
Sonoma	Windsor	SON130012	Conde Ln/Johnson St Pedestrian Improvements	17-09-0005	Roadway Operations
Sonoma	Windsor	SON130013	Bell Rd/Market St/Windsor River Rd Ped Improvement	17-09-0001	Bicycle and Pedestrian Program

Additional Proposed RTP Reference Update for Projects in the 2017 TIP					
County	Sponsor	TIP ID	TIP Project Name	RTP ID	RTP Title
Sonoma	Windsor	SON170001	Windsor River Road/Windsor Road/NWPRR Intersection	17-09-0003	Multimodal Streetscape
Various	MTC	VAR170018	GL: FTA 5311 Rural Area FY17	17-10-0026	Regional Transit Capital - Existing Conditions
Various	MTC	VAR170019	GL: FTA 5311 Rural Area FY18	17-10-0026	Regional Transit Capital - Existing Conditions
Various	MTC	VAR170020	GL: FTA Section 5310 Program FY15, FY16 and FY17	17-10-0026	Regional Transit Capital - Existing Conditions