



Metropolitan Transportation Commission

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

Meeting Agenda

Policy Advisory Council

Wednesday, July 12, 2017

1:30 PM

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>.

1. [17-2684](#) Welcome

Action: Information
Presenter: Randi Kinman, Council Chair

2. Roll Call / Confirm Quorum

Quorum: A quorum of this council shall be a majority of its regular voting members (14).

3. [17-2685](#) Approval of June 14, 2017 Meeting Minutes
(5 minutes)

Action: Approval
Presenter: Randi Kinman, Council Chair

Attachments: [03_Minutes_June_2017.pdf](#)

4. [17-2686](#) Subcommittee Reports
(5 minutes)

The subcommittee may refer an item from its agenda to the full Council for action at its next meeting if needed.

Action: Information
Presenter: Jim Blacksten, Subcommittee Chair

5. [17-2687](#) Disadvantaged Business Enterprise (DBE), Small Business Enterprise (SBE) and Title VI Report
(20 minutes)

Update on MTC's most recent and ongoing DBE/SBE and Title VI activities.

Action: Information
Presenter: Denise Rodrigues, MTC Staff

Attachments: [05_DBE,_SBE_and_Title_VI_Report.pdf](#)

6. [17-2688](#) MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040
(45 minutes)

Presentation of revisions to the Draft Plan.

Action: Information

Presenter: Ken Kirkey

Attachments: [06_MTCResNo4300_ABAGResNo10-17_Final_PBA2040_Cover_Memo.pdf](#)
[6_MTC_ResNo4300_and_ABAG_ResNo10-17_Final_PBA_2040.pdf](#)
[6_FinalPBA40_PPT.pdf](#)

7. [17-2689](#) Staff Liaison Report - July 2017
(5 minutes)

Relevant MTC policy decisions and other activities.

Action: Information

Presenter: Ursula Vogler, Acting MTC Staff Liaison

Attachments: [07_Staff Liaison Report – July 2017.pdf](#)

8. [17-2690](#) Council Member Reports
(5 minutes)

Members of the Council may report on locally relevant issues or events.

Action: Information

Presenter: Randi Kinman, Council Chair

9. [17-2691](#) New Business
(5 minutes)

Members of the Council may bring up new business for discussion or addition to a future agenda.

Action: Discussion

Presenter: Randi Kinman, Council Chair

10. Public Comments / Other Business

11. Adjournment / Next Meeting

The next meeting of the Policy Advisory Council will be held Wednesday, September 13, 2017 at 1:30 p.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 Titulo 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.

MTC's Chair and Vice-Chair are ex-officio voting members of all standing Committees.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 17-2684 **Version:** 1 **Name:**
Type: Report **Status:** Informational
File created: 6/6/2017 **In control:** Policy Advisory Council
On agenda: 7/12/2017 **Final action:**
Title: Welcome
Sponsors:
Indexes:
Code sections:
Attachments:

Date	Ver.	Action By	Action	Result
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Subject:
Welcome

Presenter:
Randi Kinman, Council Chair

Recommended Action:
Information

Attachments



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 17-2685 **Version:** 1 **Name:**
Type: Minutes **Status:** Committee Approval
File created: 6/6/2017 **In control:** Policy Advisory Council
On agenda: 7/12/2017 **Final action:**
Title: Approval of June 14, 2017 Meeting Minutes
(5 minutes)

Sponsors:

Indexes:

Code sections:

Attachments: [03_Minutes_June_2017.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

Approval of June 14, 2017 Meeting Minutes
(5 minutes)

Presenter:

Randi Kinman, Council Chair

Recommended Action:

Approval

Attachments



Metropolitan Transportation Commission

Meeting Minutes - Draft

Policy Advisory Council

Agenda Item 3

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

Wednesday, June 14, 2017

1:30 PM

Board Room - 1st Floor

1. [17-2560](#) Welcome

Action: Information

Presenter: Randi Kinman, Council Chair

2. [17-2568](#) Roll Call / Confirm Quorum

Quorum: A quorum of this council shall be a majority of its regular voting members (14).

Present: 22 - Chair Kinman, Vice Chair Castellanos, Armenta, Baker, Blacksten, Burnett, Din, Fearn, Fang, Florez, Chaudhary, Glover, Hedges, Hernandez, Kaufman, Lane, Lee, Levine, Malekafzali, Murray, Schweng and Talansky

Excused: 2 - Pechner and Wolf

Absent: 2 - Clary and Nicholson

Cathleen Baker and Shireen Malekafzali arrived after the approval of the May 10, 2017 meeting minutes.

3. [17-2561](#) Approval of May 10, 2017 Meeting Minutes
(5 minutes)

Action: Approval

Presenter: Randi Kinman, Council Chair

Upon motion by Hedges and second by Vice Chair Castellanos, the minutes of the May 10, 2017 meeting were adopted. The motion carried by the following vote:

Aye: 19 - Chair Kinman, Vice Chair Castellanos, Armenta, Blacksten, Burnett, Din, Fearn, Fang, Florez, Glover, Hedges, Hernandez, Kaufman, Lane, Lee, Levine, Murray, Schweng and Talansky

Absent: 6 - Baker, Clary, Malekafzali, Nicholson, Pechner and Wolf

Abstain: 1 - Chaudhary

4. [17-2562](#) Subcommittee Reports
(5 minutes)

The subcommittee may refer an item from its agenda to the full Council for action at its next meeting if needed.

Action: Information

Presenter: Jim Blacksten, Subcommittee Chair

5. [17-2633](#) MTC Resolution No. 4290 - Regional Advance Mitigation Planning (RAMP) Program
(45 minutes)

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

Action: Information

Presenter: Kenneth Kao

6. [17-2564](#) Plan Bay Area 2040 Action Plan: Discussion Notes
(45 minutes)

The Council will complete its discussion on the three main elements of the Plan Bay Area 2040 Action Plan.

Action: Discussion

Presenter: Presenter(s)

7. [17-2565](#) Staff Liaison Report - June 2017
(5 minutes)

Relevant MTC policy decisions and other activities.

Action: Information

Presenter: Pam Grove, MTC Staff Liaison

8. [17-2566](#) Council Member Reports
(5 minutes)

Members of the Council may report on locally relevant issues or events.

Action: Information

Presenter: Randi Kinman, Council Chair

9. [17-2567](#) New Business
(5 minutes)

Members of the Council may bring up new business for discussion or addition to a future agenda.

Action: Discussion

Presenter: Randi Kinman, Council Chair

10. Public Comments / Other Business

11. Adjournment / Next Meeting

The next meeting of the Policy Advisory Council will be held Wednesday, July 12, 2017 at 1:30 p.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 #:	17-2686	Version:	1	Name:	
Type:	Report	Status:		Informational	
File created:	6/6/2017	In control:		Policy Advisory Council	
On agenda:	7/12/2017	Final action:			
Title:	Subcommittee Reports (5 minutes)				

The subcommittee may refer an item from its agenda to the full Council for action at its next meeting if needed.

Sponsors:

Indexes:

Code sections:

Attachments:

Date	Ver.	Action By	Action	Result
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Subject:

Subcommittee Reports
(5 minutes)

The subcommittee may refer an item from its agenda to the full Council for action at its next meeting if needed.

Presenter:

Jim Blacksten, Subcommittee Chair

Recommended Action:

Information

Attachments



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 17-2687 **Version:** 1 **Name:**
Type: Report **Status:** Informational
File created: 6/6/2017 **In control:** Policy Advisory Council
On agenda: 7/12/2017 **Final action:**
Title: Disadvantaged Business Enterprise (DBE), Small Business Enterprise (SBE) and Title VI Report (20 minutes)

Update on MTC's most recent and ongoing DBE/SBE and Title VI activities.

Sponsors:

Indexes:

Code sections:

Attachments: [05_DBE, SBE and Title VI Report.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

Disadvantaged Business Enterprise (DBE), Small Business Enterprise (SBE) and Title VI Report (20 minutes)

Update on MTC's most recent and ongoing DBE/SBE and Title VI activities.

Presenter:

Denise Rodrigues, MTC Staff

Recommended Action:

Information

Attachments



METROPOLITAN
TRANSPORTATION
COMMISSION

Agenda Item 5

Bay Area Metro Center
375 Beale Street, Suite 800
San Francisco, CA 94105
415.778.6700
www.mtc.ca.gov

TO: Policy Advisory Council
FR: Denise Rodrigues, MTC Staff
RE: Disadvantaged Business Enterprise (DBE), Small Business Enterprise (SBE) and Title VI Report

DATE: July 6, 2017
W.I. 1153

DBE Triennial Submittal

As required as a recipient of Federal Transit Administration (FTA) funds, the Metropolitan Transportation Commission (MTC) submitted a triennial DBE Report for Fiscal Year (FY) 2016-17, FY 2017-18, and FY 2018-19 to the FTA in July 2016. The report was approved by the FTA on March 17, 2017, and can be viewed online here: http://mtc.ca.gov/sites/default/files/DBE_Triennial_Report_FY_16-17.pdf

DBE and SBE

MTC staff continues to work with other transportation partner agencies as the Business Outreach Committee (BOC) to implement race-neutral measures to increase SBE and DBE participation in contracting. The BOC provides business outreach, networking events with prime contractors and agency procurement officers, a quarterly newsletter that includes upcoming procurement opportunities, and direct referral of SBEs and DBEs to prime contractors.

A detailed list of recent events hosted by the BOC and other agencies that MTC participated in, as well as flyers for those events, is included as Attachment A.

The SBE Construction Project Program (“SBE Program”) provides an SBE preference of 5% in the form of a bid discount, when the lowest responsible bidder meeting specifications is a certified SBE or when a non-SBE prime contractor subcontracts with an SBE firm or firms for a minimum percentage of the project. The Program preference applies only to SBEs certified by the State of California Department of General Services (DGS), includes a requirement that SBE subcontractors not be removed or replaced unless prior written approval of SBE substitution is provided by the SBE Liaison Officer, and has a compliance component that requires continuous monitoring and refinement of these initiatives.

Staff implemented the Professional Services SBE Pilot Program (“SBE Pilot Program”) to assist SBE firms in participating in MTC’s professional service contracts. The Pilot Program applies to formally procured non-federally funded professional service contracts, and will be implemented over a two-year time frame to allow time for staff to test the Pilot Program’s effectiveness and if necessary modify the Pilot Program to make it as successful as possible before formal adoption. The SBE Pilot Program:

- allows the SBE Liaison Officer (SBELO) or designee to determine which contracts it will apply to, based on internal staff workload and appropriateness of contract;
- provides a SBE preference of 5 point or 5 percent evaluation preference when a Proposer meeting specifications is a certified SBE performing a minimum percentage of the work, or

when a non-SBE prime subcontracts with an SBE firm or firms for a minimum percentage of work;

- allows the preference to apply only to SBEs certified by the State of California Department of General Services (DGS); and
- requires SBE subcontractors not be removed or replaced unless prior written approval of SBE substitution is provided by the SBELO.

The SBE Program and SBE Pilot Program can be found on the MTC website at: <http://mtc.ca.gov/about-mtc/doing-business/small-business-enterprise-sbe>. Staff will provide this Council with an update on SBE utilization under the SBE Program and SBE Pilot Program in December 2017.

MTC Title VI Program

The Draft Title VI Program (the "Program"), which MTC is required to submit periodically to the FTA, as well as the Department of Transportation of the State of California (Caltrans), is included as Attachment B. The Program demonstrates how MTC is complying with federal requirements of nondiscrimination in MTC policies, programs and activities, and it is prepared in response to FTA Circular 4702.1B. The Program describes major efforts undertaken by MTC during the last three years that form the basis for assuring that its continuing planning and programming activities are nondiscriminatory on the basis of race, color, or national origin.

Staff will present the draft Program to the Administration Committee on September 13, 2017. Comments and requested changes will be considered in preparing the final Program before it is presented to the Commission on September 27, 2017, for approval.

Job Access and Reverse Commute Program (JARC)/New Freedom

Staff monitors Title VI compliance of subrecipients of JARC/New Freedom funds, reviews the Title VI plans submitted, and works with any subrecipients whose Title VI submissions are deficient to bring them into full compliance.

Clipper®

A report on Title VI activities undertaken for the Clipper® fare payment system from January 2017 to June 2017 is included as Attachment C.

Title VI Working Group

Staff continues to take the lead on the Title VI working group, comprising transportation agency and Metropolitan Planning Organization (MPO) staff from around the country. The Title VI working group meets quarterly via conference call, poses questions and shares information via email, and shares documents via Box. MTC hosted the last Title VI conference call on June 7, 2017. The Title VI working group also holds in-person conferences to allow the FTA and other transit agency members to present on Title VI requirements and best practices. The next in-person conference is scheduled for December 4, 2017 at MTC.

Attachments:

- **Attachment A:** List and flyers for recent outreach events
- **Attachment B:** Draft Title VI Program
- **Attachment C:** Clipper® Activities, January through June 2017

1/26/17	Caltrans Calmentor Event Quarterly meeting	Caltrans District 4 Office 111 Grand Ave, 15 th Floor, Parkview room Oakland, CA
3/10/17	High Speed Rail Small Business Certification Workshop	Mexican Heritage Plaza 1700 Alum Rock Avenue San Jose, CA 95116
3/13/17	MTC Upcoming Contract Opportunities Open House	Bay Area Metro Center, Yerba Buena CR 375 Beale Street, San Francisco, CA 94105
3/15/17	Business Outreach Committee (BOC) “Meet the Primes” Event	Alameda County Transportation Commission (ACTC), 1111 Broadway, 8 th Floor Oakland, California 94607
3/20/17	San Francisco County Transportation Authority Disadvantaged Business Enterprises (DBEs) and Local Business Enterprises (LBEs) Networking Event	1455 Market Street (at 11th Street), 22nd Floor, Hearing Room San Francisco, CA 94103
4/3/17	MTC Goal Setting Methodology Public Participation Meeting	Bay Area Metro Center, Yerba Buena CR 375 Beale Street, San Francisco, CA 94105
5/5/17	Caltrans District 4 Calmentor 10th Anniversary Celebration	10 Washington Street on Jack London Square, Oakland
5/17/17	Business Outreach Committee (BOC) “Meet the Buyers” Event	Bay Area Metro Center, Yerba Buena CR 375 Beale Street, San Francisco, CA 94105

Caltrans District 4 Jt. Professional Liaison - Calmentor Program Quarterly Meeting Registration

When:

Thursday, January 26, 2017, 1:00 p.m. - 3:00 p.m., followed by a hosted business networking mixer after the formal meeting from 3:30 p.m. - 5:00 p.m. at Drake's Restaurant located at 2325 Broadway in Oakland, two blocks from the Caltrans Office Building.

Where:

Caltrans District 4 Offices, 111 Grand Avenue, 15th Floor, Park View Room, in Oakland.

What:

We're celebrating our 10th year under the Caltrans District 4 Calmentor Program. Our agenda for the January 2017 Quarterly Meeting offers a fitting kickoff to what will be a yearlong celebration of small business success!

Imparting business knowledge is a major Calmentor goal. We will host a series of educational workshops for both mentor and protégé firms alike. And as always, we invite our professional liaison partners to join in these exclusive Calmentor member learning experiences. Each of the workshops will offer invaluable tips and best practices in navigating the new Caltrans procurement process, from required forms and FAR compliance to the interview and cost structure review. Hear perspectives from both Caltrans managers and mentor and protégé firms that have experienced the new process firsthand with success.

We also will bring you a presentation from Matthew Ajiake of Sonika Corporation, a Calmentor protégé firm and Caltrans District 4 Calmentor Program Steering Committee Member, who will share his findings on a recent research project titled, "Triple Bottom Line and Social Responsibility Framework in the Public Sector". As many public agencies seek to engage varied stakeholders in their project rollouts, this innovative approach to community engagement could triple your bottom line!

Plus, the Caltrans Look Ahead and public agency partner reports.

Don't miss out! Register today! Space is limited.

The Caltrans District 4 Calmentor Team

* Required

First Name *

Your answer



Last Name *

Your answer

Title *

Your answer

Firm/Organization/Agency *

Your answer

Email Address *

Your answer

Workshop - First Preference *

- ☐ Workshop #1: An Introduction to the Caltrans Procurement Process & Required Forms
- ☐ Workshop #2: FAR Compliance & the Cost Structuring Review
- ☐ Workshop #3: The Interview & Best Practices in Proposal Writing, Interviews and Negotiations

Workshop - Second Preference *

- ☐ Workshop #1: An Introduction to the Caltrans Procurement Process & Required Forms
- ☐ Workshop #2: FAR Compliance & the Cost Structuring Review



- ☐ Workshop #3: The Interview & Best Practices in Proposal Writing, Interviews and Negotiations

Workshop - Third Preference *

- ☐ Workshop #1: An Introduction to the Caltrans Procurement Process & Required Forms
- ☐ Workshop #2: FAR Compliance & the Cost Structuring Review
- ☐ Workshop #3: The Interview & Best Practices in Proposal Writing, Interviews and Negotiations

Will you attend the business networking mixer? *

- ☐ Yes, I will attend the mixer.
- ☐ No, I will not be able to attend the mixer.

SUBMIT

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Google Forms





Free Small Business Certification Workshop

The California High-Speed Rail Authority, in partnership with the Office of California State Senator Jim Beall and the City of San Jose, are hosting a Small Business Enterprise Certification Workshop at no cost to small businesses. The workshop will provide hands-on technical assistance for on-the-spot online certification from the California Department of General Services (DGS). Information on Federal 8(a) and Disadvantaged Business Enterprise (minority and women-owned) certifications will also be provided. Translation services will be provided in Spanish and Vietnamese.

Friday, March 10, 2017

9:00 a.m. – 1:00 p.m.

Mexican Heritage Plaza

1700 Alum Rock Avenue
San Jose, CA 95116

- 9:00 – 10:00 – Networking
 - 10:00 – 10:45 – High-Speed Rail Presentation
 - 10:45 – 11:00 – Break
 - 11:00 – 1:00 – Certification Sessions (Please Note: Choose from one of the two Certification Sessions below as they are being offered simultaneously)
 - Session A – On-the-Spot Small Business Certification presented by DGS
 - Session B – Educational Presentation on Disadvantaged Business Enterprise Certification presented by VTA
- * Habrá disponibles servicios de traducción en español durante la reunión pública.
* Trong cuộc họp công cộng sẽ có dịch vụ dịch thuật tiếng Việt.

For On-The-Spot Small Business Certification You Must Bring the Following Materials to Workshop:

- ☐ Personal laptop with Wi-Fi accessibility
- ☐ Applicant/Affiliate Federal Tax Returns for the past three (3) years
(Please have your tax returns available in electronic PDF format)
- ☐ Federal Employer Identification Number (FEIN) (if applicable)
- ☐ Secretary of State Number (if applicable)
- ☐ Home address of Officers, Member/Manager and Partners
- ☐ Social Security Number (if sole proprietor)
- ☐ Dunn & Bradstreet Number (if applicable)
- ☐ Contractors State License Board Number (if applicable)

*In some cases, additional documentation may be required to complete certification.

In partnership with:



State Senator
Jim Beall
Senate District 15



Space is limited! Please RSVP:

- Send RSVP to Meilani Sabadlab at Meilani.Sabadlab@hsr.ca.gov or (916) 414-2578.
- Include event date, desired certification session, your full name, business name, address, and contact number.

Resource Partners:





**Metropolitan Transportation Commission (MTC), Bay Area Toll Authority (BATA)
and Bay Area Infrastructure Financing Authority (BAIFA)
Upcoming Contract Opportunities
Open House**

March 13, 2017 from 10:00 a.m. to 12:00 p.m.

At the Bay Area Metro Center
375 Beale Street, San Francisco, CA 94105
Yerba Buena Conference Room

For directions, please visit: [Bay Area Metro Center](#)

At the Open House, MTC staff will provide information on:

- How to contract with MTC to provide a variety of professional services;
- Upcoming professional services opportunities; and
- MTC's use and assignment of work under On-Call Bench Contracts.

See Agenda below.

Space is limited, please [RSVP](#) for this event.

Light refreshments will be provided.

Agenda*

9:30 a.m. to 10:00 a.m.: Check-In and refreshments

10:00 a.m. to 10:10 a.m.: Introductions

10:10 a.m. to 10:30 a.m.: Doing Business with MTC and Online Bid and Proposal Submission

10:30 a.m. to 10:45 a.m.: DBE and SBE Programs

10:45 a.m. to 11:15 a.m.: Upcoming Contracting Opportunities

11:15 a.m. to 11:45 a.m.: Questions and Answers

11:45 a.m.: Networking

** Agenda subject to change*



Business Outreach Committee (BOC)

A Consortium of Bay Area Transportation Agencies

*****PUBLIC NOTICE*****

MEET THE PRIMES

The BOC is hosting an outreach event to advise the public of upcoming projects from various transportation agencies and provide opportunities for small and disadvantaged businesses to network with Prime Consultants and Contractors

Wednesday, March 15, 2017

10:00 a.m. to 12:00 p.m.

Registration and Networking: 9:30 a.m. – 10:00 a.m.

Presentations: 10:00 a.m. – 11:00 a.m.

Networking: 11:00 a.m. – 12:00 p.m.

Alameda County Transportation Commission (ACTC)
1111 Broadway, 8th Floor (Commission Rooms A-D)
Oakland, California 94607

[CLICK HERE TO REGISTER](#)

Representatives from BOC member agencies and Prime Contractors listed below will be presenting their upcoming contracting opportunities.

AMOROSO
construction

ALSTOM
Designing fluidity

Balfour Beatty
Infrastructure Inc.

ROBERT A.
BOTHMAN
CONSTRUCTION 3rd



HNTB



Ghirardelli
ASSOCIATES

B&W
BROSAMER & WALL, INC.

HILL

Hill International



MARK THOMAS

PERKINS
+ **WILL**



STV 100 Years



Building Your Future

USS CAL BUILDERS



Join Us...

for a DBE/LBE Upcoming Opportunity Overview and Networking Event

EVENT DESCRIPTION

Join the San Francisco County Transportation Authority for an informative presentation to Disadvantaged Business Enterprises (DBEs) and Local Business Enterprises (LBEs) in its efforts to encourage participation and collaboration of small and large firms for upcoming procurements. Key projects and services to be highlighted at this special *Look-Ahead to 2017* presentation include:

- Construction Management/Inspection Services for Yerba Buena Island (YBI) West Side Bridges and/or YBI Southgate Road Realignment Improvements
- Engineering/Environmental Services for U.S. 101/I-280 High Occupancy Vehicles/High Occupancy Tolls
- Engineering/Design services for the I-280/Balboa (Ocean/Geneva) Ramps
- On-Call Transportation Modeling Services
- Treasure Island Mobility Management Agency (TIMMA) – Toll Systems Integration Services to Support the Development of Yerba Buena and Treasure Islands
- TIMMA – System Manager Services to Support the Design of an On-Island Autonomous Shuttle
- San Francisco Public Works – (1) Construction, (2) Professional Services, and (3) Arborists' Opportunities
- San Mateo County Transit District | Caltrain – Various Contracts

WHEN

Monday, **March 20**, 2017, 10 a.m. – 12 p.m.

WHERE

San Francisco County Transportation Authority
1455 Market Street (at 11th Street), 22nd Floor, Hearing Room
San Francisco, CA 94103

RSVP

Please RSVP at <https://goo.gl/forms/6onSjUoQ58AutBzN2> by Thursday, March 16

PUBLIC TRANSPORTATION

We encourage you to take public transportation to this meeting:

BART: Exit at the San Francisco Civic Center Station

MUNI METRO: Exit at the Van Ness Station (Van Ness/Market Streets)

AND

PARKING

The entrance to the lobby level garage is on 11th Street between Market and Mission Streets. Visit www.sfcta.org/directions for more information.

QUESTIONS

Please visit www.sfcta.org/dbe for up-to-date information, or contact Jen Shader (jen.shader@sfcta.org or 415.522.4865) with any questions.

SPECIAL THANKS TO OUR PARTNER AGENCIES





PUBLIC NOTICE

DBE GOAL METHODOLOGY PUBLIC PARTICIPATION MEETING

**THE METROPOLITAN TRANSPORTATION COMMISSION INVITES YOU
TO A COLLABORATIVE MEETING TO DISCUSS THE REVISED
FEDERAL TRANSIT ADMINISTRATION (FTA) DBE METHODOLOGY
FOR FEDERAL FISCAL YEARS 2017 - 2019**

**TWO MEETINGS WILL BE HELD ON MONDAY, APRIL 3, 2017
A MORNING SESSION FROM 10:00 A.M. TO 12:00 P.M., AND
AN EVENING SESSION FROM 4:00 P.M. TO 6:00 P.M.**

**The Sessions will be held at the Bay Area Metro Center
375 Beale Street, San Francisco, CA 94105
In the Yerba Buena Conference Room**

For directions, please visit: [Bay Area Metro Center](#)

[Click here to RSVP for one of the sessions](#)

Agenda

1. Introduction/Background
2. Revised DBE Goal Setting Methodology
3. DBE Participation
4. Input/Dialogue
5. Open Forum

Light refreshments will be provided

MTC submitted a revised Disadvantaged Business Enterprise (DBE) Triennial Goal and Methodology for Federal Fiscal Year (FFY) 2017 through 2019 as requested by the Federal Transit Administration (FTA). This document will supersede the DBE Triennial Goal submitted to FTA on July 21, 2016. For the full report please visit:

http://mtc.ca.gov/sites/default/files/DBE_Triennial_Report_FY_16-17.pdf



**YOU ARE INVITED
TO THE BUSINESS OUTREACH COMMITTEE (BOC)**

MEET THE BUYERS PROCUREMENT FORUM

Wednesday, May 17, 2017

1:00 p.m. to 3:30 p.m.

**Metropolitan Transportation Commission (MTC), Yerba Buena Conference Room
375 Beale Street, Suite 800, San Francisco, CA 94105**

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**METROPOLITAN TRANSPORTATION COMMISSION
TITLE VI TRIENNIAL PROGRAM
IN RESPONSE TO
FEDERAL TRANSIT ADMINISTRATION CIRCULAR 4702.1B**

2017

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TABLE OF CONTENTS

I. INTRODUCTION	2
II. METROPOLITAN TRANSPORTATION COMMISSION AND ITS REGION	2
A. Description/Profile of the Metropolitan Transportation Commission	2
1. Planning for the Next Generation	4
2. Financing and Monitoring Roles Expand	6
3. Asset Management and State of Good Repair	8
4. Taming Traffic and Smoothing Regional Travel	9
B. Description of the San Francisco Bay Area	12
C. MTC Policy Advisory Council	12
D. Financial Assistance from the Federal Transit Administration	13
1. Designated Recipient: Supplemental Agreements with Grant Recipients and Direct Grants to Transit Operators	14
2. Designated Recipient: Job Access Reverse Commute and New Freedom Large Urbanized Area Programs	15
3. Other Funds (Section 5303, Section 5311, Section 5310, Federal Earmarks)	15
III. GENERAL REPORTING REQUIREMENTS	16
A. Monitoring Subrecipients	16
B. Title VI Complaint Procedures and Complaint Form	16
C. Record of Investigations, Complaints and Lawsuits	17
1. Lawsuits	17
2. Record of Investigations and Complaints	17
D. Meaningful Access to Limited English Proficient (LEP) Persons	17
E. Beneficiary Notifications	18
F. Inclusive Public Participation	19
1. Public Participation Plan	19
2. Public Participation in <i>Plan Bay Area 2040</i> , the San Francisco Bay Area's Regional Transportation Plan and Sustainable Communities Strategy	22
3. Public Participation in the TIP	23
IV. PROGRAM-SPECIFIC REQUIREMENTS FOR DESIGNATED RECIPIENTS OF JOB ACCESS AND REVERSE COMMUTE AND NEW FREEDOM PROGRAMS	24
Program-specific activities are described below	25
A. Lifeline Transportation Program	25
B. Assistance and Monitoring	26
1. Monitoring:	26
2. Assistance:	27
V. PROGRAM-SPECIFIC REQUIREMENTS FOR METROPOLITAN PLANNING ORGANIZATIONS	28
A. Demographic Profile of the Metropolitan Area	28
B. A Description of the Procedures by Which the Mobility Needs of Minority Populations Are Identified and Considered within the Planning Process	32
1. Identifying the Mobility Needs of Minority Populations	33
2. Considering Mobility Needs of Minority Populations in the Planning Process	42
C. Demographic Maps, Funding Analysis, and Impact Assessment	42
D. Analysis of the MPO's Transportation System Investments That Identifies and Addresses Any Disparate Impacts	56
VI. CLIPPER® FARE PAYMENT SYSTEM	60
VII. GLOSSARY	61

APPENDICES:

- Appendix A: Listing of Policy Advisory Council Advisors
- Appendix B: Transit Operators Receiving FTA Grants as Direct Recipients
- Appendix C: Complaint Procedures and Complaint Form
- Appendix D: Listing of Title VI complaints
- Appendix E: Four-Factor Analysis report
- Appendix F: Final Revised Plan for Special Language Services to Limited English Proficient (LEP) Populations.
- Appendix G: Beneficiary Notifications
- Appendix H: Public Participation Plan
- Appendix I: TIP Investment Analysis
- Appendix J: Program Management Plan for FTA 5316 JARC and 5317 New Freedom Recipients
- Appendix K: Lifeline Transportation Program Grant Cycle
- Appendix L: Schedule of Subrecipient Title VI programs
- Appendix M: Clipper® Program Outreach



I. INTRODUCTION

This Title VI Triennial Program provides information and analyses bearing upon the Metropolitan Transportation Commission's (MTC) compliance with Title VI of the Civil Rights Act of 1964 regarding nondiscriminatory delivery of services and benefits under federally-funded programs or activities. This document has been prepared in response to Federal Transit Administration (FTA) Circular 4702.1B, dated October 1, 2012 (the Circular).

MTC last submitted a Title VI Triennial Program to FTA on August 28, 2014. This Title VI Triennial Program includes some information reported in the 2014 Title VI Report.

The Program begins with a profile of MTC as well as a description of the region, then responds to the general and program-specific reporting requirements of the Circular. Several appendices provide additional information.

II. METROPOLITAN TRANSPORTATION COMMISSION AND ITS REGION

A. Description/Profile of the Metropolitan Transportation Commission

Created by the state Legislature in 1970 (California Government Code § 66500 *et seq.*), MTC is the transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area. Over the years, the agency's scope has grown, and its Commissioners now govern three agencies: MTC, the Bay Area Toll Authority (BATA) (California Streets and Highways Code § 30950 *et seq.*), and the Metropolitan Transportation Commission Service Authority for Freeways and Expressways (SAFE) (California Streets and Highways Code § 2551 *et seq.*). In addition, MTC and BATA have combined to form two additional entities, the Bay Area Infrastructure Financing Authority (BAIFA) and the Bay Area Headquarters Authority (BAHA), which are joint powers authorities established pursuant to Chapter 5 of Division 7 of Title 1 of the California Government Code (§§ 6500-6599.3).

MTC's work is guided by a 21-member policy board, with 18 of the commissioners designated as voting members. Commissioners generally serve concurrent four-year terms, with a new chair elected every two years. The current term expires in February 2019.

Sixteen of the voting MTC commissioners are appointed by local elected officials in each of the nine counties, as follows:

- The two most populous counties, Alameda and Santa Clara, each have three representatives on MTC: the county board of supervisors selects one member; the mayors of the cities within the county collectively appoint another; and the mayors of the biggest cities in these two counties — Oakland in Alameda County and San Jose in Santa Clara County — each appoint a representative;
- The City and County of San Francisco is represented by two members, one appointed by the board of supervisors and the other by the mayor, and San Mateo and Contra Costa counties also have two members, one appointed by the boards of supervisors and one by the mayors within each county; and
- The four least-populous counties of Marin, Napa, Sonoma, and Solano each have one member, appointed by the boards of supervisors.

In addition, two voting members represent regional agencies: the Association of Bay Area Governments (ABAG), which serves as the region's Council of Governments and land use planning agency, and the Bay Conservation and Development Commission (BCDC), which works to protect San Francisco Bay and encourage responsible and productive uses of the Bay. State legislation specifies that the BCDC representative must be a resident of San Francisco, effectively giving San Francisco a third voice on the MTC. Finally, three nonvoting members represent federal and state transportation agencies and the federal housing department.

In May 2016, MTC moved into its new headquarters, co-locating with partner regional agencies, including ABAG and the Bay Area Air Quality Management District (BAAQMD) in order to foster increased regional collaboration.

On May 24, 2017, MTC and ABAG voted to enter into a contract for services governing the terms related to a previously-approved consolidation of their staffs to improve coordination of regional transportation and land use planning and to better serve the residents of the nine-county Bay Area.¹ MTC and ABAG are jointly responsible for adopting the Bay Area's Sustainable

¹ See MTC Resolution 4245, adopted May 25, 2016, and ABAG Resolution 07-16, adopted May 19, 2016.

Communities Strategy – a state-mandated regional transportation and land use plan for accommodating population and job growth while reducing growth in greenhouse gas emissions. The staff consolidation of MTC and ABAG is intended to create a more unified vision for the Bay Area, increase collaboration, and use taxpayer dollars more efficiently. Post consolidation MTC has approximately 290 staff headquartered at the Bay Area Metro Center in San Francisco, California.

1. Planning for the Next Generation

MTC functions as both the regional transportation planning agency — a state designation — and, for federal purposes, as the region’s metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan (RTP), a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. MTC also screens requests from local agencies for state and federal grants for transportation projects to determine their compatibility with the RTP. A focused update of the most recently adopted RTP, known as Plan Bay Area 2040, is currently underway and is slated to be adopted in July 2017. Plan Bay Area 2040 is the first update to Plan Bay Area (adopted by MTC in 2013), the region’s first long-range integrated transportation and land use/housing strategy required under California law (Senate Bill 375) with the goal of accommodating future population growth and reducing greenhouse gas emissions. The vast majority of funds prioritized in Plan Bay Area 2040 are dedicated (by mode) to public transit and (by function) to operation and maintenance of existing facilities (see Figure 1 below).

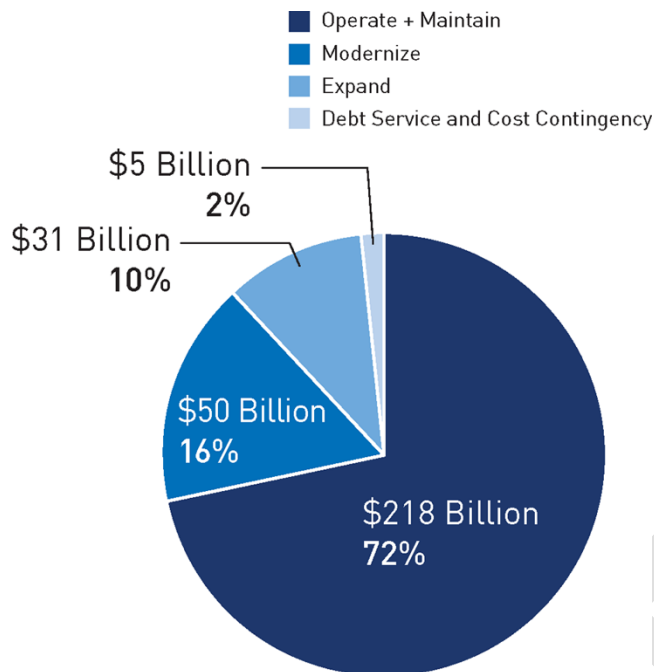


Figure 1. Plan Bay Area 2040 Funding Distribution

In its role as MPO, MTC also prepares and adopts the federally-required Transportation Improvement Program (TIP) at least once every four years. The TIP is a comprehensive listing of all Bay Area surface transportation projects that are to receive federal funding or are subject to a federally required action, or are considered regionally significant for air quality conformity purposes. The TIP covers a four-year period and must be financially constrained by year, meaning that the amount of funding committed to the projects (also referred to as “programmed”) must not exceed the amount of funding estimated to be available. The 2017 TIP was adopted by MTC on September 28, 2016, and received final federal approval from FTA and the Federal Highway Administration (FHWA) on December 16, 2016. The 2017 TIP, as adopted, included approximately 700 transportation projects with approximately \$6.3 billion of federal, state, regional, and local funds “programmed” in four fiscal years: FY 2016-17, FY 2017-18, FY 2018-19, and FY 2019-20.

MTC has played a major role in building regional consensus on where and when to expand the Bay Area transit network. A historic agreement forged by MTC with local officials as well as state and federal legislators in the late 1980s set forth a \$4.1 billion program to extend a total of six rail lines in the Bay Area, adding 40 miles to the region’s rail transit network and connecting the San Francisco Bay Area Rapid Transit District (BART) to San Francisco International Airport. In 2001, MTC laid out the next phase of major regional public transit investments in Resolution 3434. Plan Bay Area 2040 continues the commitment made in the original Plan Bay

Area to prioritize high-performing transit expansion projects, including the second phase of BART to Silicon Valley, electrification of the Caltrain corridor, the downtown extension of Caltrain to the nearly-complete Transbay Transit Center, and construction of new bus rapid transit lines throughout the region.

2. Financing and Monitoring Roles Expand

Over the years, state and federal laws have given MTC an increasingly important role in financing Bay Area transportation improvements. At the federal level, the 1991 Intermodal Surface Transportation Efficiency Act and its successors, the Transportation Equity Act for the 21st Century, the Safe, Accountable, Flexible, Efficient Transportation Equity Act, the Moving Ahead for Progress in the 21st Century Act (MAP-21), and the Fixing America's Surface Transportation (FAST) Act empowered MPOs like MTC to determine the mix of transportation projects best suited to meet their regions' needs.

Using the region's flexible federal highway dollars, which provide approximately \$160 million per year, MTC has established several innovative grant programs. MTC's One Bay Area Grant (OBAG) County Program comprises the largest share of MTC's federal program at \$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 priority development areas (PDAs), areas that are intended to accommodate the bulk of future housing growth. The second largest area of focus for the region's federal highway funds is supplementing MTC's transit programs, the Transit Capital Priorities and Transit Performance Initiative programs, which are slated to receive a combined \$189 million from FY 2018-2022. These priority transit programs help maintain and replace the region's aging transit fleet and improve speed and reliability of key transit routes. Federal highway funds also support a variety of efforts throughout the region to maximize utility and person-throughput on existing facilities using targeted capacity improvements, creative operational strategies, and technological solutions. These efforts include MTC's electronic transit fare card, Clipper[®], and 511[®], MTC's traveler information web site and phone number which harness technology to make traveling around the Bay Area easier. MTC also programs the region's federal funds to support a number of smaller programs including the Climate Initiatives Program, focused on reducing greenhouse gas emissions, the Priority Conservation Area (PCA) program, and PDA and Community-Based Transportation planning programs.

In addition to programming certain federal funds, MTC administers state moneys, including those provided by the Transportation Development Act (TDA). Legislation passed in 1997 gives MTC and other regional transportation planning agencies increased decision-making authority over the selection of state highway projects and allocation of transit expansion funds for the State Transportation Improvement Program. In addition, MTC administers the State Transit Assistance (STA) program. A portion of STA funds is distributed directly to operators, while a portion is under MTC's discretion. Combined with some federal FTA Section 5307 Urbanized Area Formula funds, MTC has historically used STA funds for a Lifeline Transportation Program aimed at addressing the mobility needs of residents in low-income communities throughout the region. From time to time, MTC has augmented the Lifeline Transportation Program with other fund sources, such as state bond funds from Proposition 1B and federal Surface Transportation Program (STP)/ Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds and funds from the discontinued Job Access Reverse Commute (JARC) Programs. Since its inception in 2006, the Lifeline Transportation Program has funded approximately \$230 million worth of improvements that range from bus stop and station enhancements to new buses to community shuttles and voucher programs. MTC is currently planning for the fifth cycle of the Lifeline Program.

In April 2017 Senate Bill 1 (SB 1) – the Road Repair and Accountability Act of 2017 – was passed by a two-thirds majority in the California Legislature and signed into law by Governor Jerry Brown. As the largest transportation investment in California history, SB 1 is expected to raise \$52.4 billion for transportation investments statewide over the next decade.

By 2018-19, MTC estimates SB 1 will generate more than \$365 million per year for transportation in the nine-county Bay Area. Most of that funding will be directed to tackling the enormous backlog of maintenance and repairs for MTC's local streets, roads and public transit systems. Funding will also be available for mobility improvements and expanding bicycle and pedestrian access. The Bay Area is also well-positioned to benefit from the new statewide competitive grant programs to reduce congestion and improve freight movement along trade corridors.

Revenues to pay for SB 1 programs will come from new transportation-related fees and adjustments to state taxes on diesel fuel and gasoline. SB 1 will effectively take the state gas tax back where it used to be 20 years ago. In 1994, the base excise tax on gasoline was 18 cents per gallon, or around \$3 dollars per tank of gas, as a result of the voter-approved gas tax increase in Proposition 111. That rate has been fixed for more than two decades, even though \$3 buys

significantly less maintenance and construction than it did in the 1990's. SB 1 sets the excise tax on gasoline at 30 cents per gallon – equivalent to what 18 cents in 1994 would be worth today.

The second part of the state gas tax is a price-based excise tax, which SB 1 sets at 17.3 cents per gallon beginning in 2019 – precisely where it was set when the gas tax swap was enacted in 2011. SB 1 eliminates the yearly adjustment based on the price of fuel, which has resulted in wild swings from a high of 21.5 cents per gallon in 2013-14 to a low of 9.8 cents per gallon today.

3. Asset Management and State of Good Repair

Through 2040, MTC estimates that the cost to rehabilitate and maintain the region's streets, roads and transit capital assets will approach \$100 billion. Even with the bulk of the region's funding dedicated to maintaining and operating the existing system, a sizeable capital shortfall of roughly \$30 billion remains to achieve an optimal state of repair. MTC has dedicated significant resources and efforts, in concert with its partner agencies, to identify the capital asset needs and to prioritize the investments that will be most cost-effective in maintaining the capital infrastructure.

For streets and roads, MTC has developed and maintains a pavement asset management program that is used by nearly all of the Bay Area jurisdictions. The MTC Pavement Management Program, StreetSaver[®], is a computer-assisted decision-making tool designed to help cities and counties prevent pavement problems through judicious maintenance, and to diagnose and repair existing problems in a timely, cost-effective manner. MTC also dedicates a significant portion of its federal dollars to pavement rehabilitation projects.

For transit, MTC has developed and maintains a regional transit capital inventory that details the transit capital assets for the region's twenty-plus transit operators. The transit capital inventory work has been developed closely with the transit operators and is currently used to calculate current and future replacement and rehabilitation needs and costs. Future enhancements will add asset condition information to allow better prioritization of asset replacement and rehabilitation projects in a constrained funding environment. Additionally, MTC is coordinating and working closely with transit operators to be in compliance with the Transit Asset Management (TAM) Rule published by FTA to establish a TAM system in accordance with MAP-21. MTC has been engaged in asset management activities at the regional level for many years and views the TAM

Rule as an opportunity to refine and expand TAM efforts in the region. MTC has also been active in FTA roundtables on State of Good Repair and state-level work on transit asset management and capital planning. MTC is eager to continue partnering to advance the region's data and analytical framework for asset management. Through longstanding policy, MTC dedicates nearly all of its FTA formula funds to rehabilitation and replacement capital projects.

4. Taming Traffic and Smoothing Regional Travel

SAFE, a partnership of MTC, the California Highway Patrol (CHP), and the California Department of Transportation (Caltrans), oversees the maintenance and operation of call boxes along Bay Area freeways. SAFE also teams up with these two state agencies to administer the Freeway Service Patrol (FSP), a roving tow truck service designed to quickly clear incidents from the region's most congested roadways. Both call box maintenance and FSP have received FHWA funding.

MTC sponsors a number of transportation technology programs to address the region's transportation challenges. The 511 program disseminates regional traveler information via the phone (511), web and mobile devices (511.org), and other channels, including electronic real-time transit displays, Caltrans' changeable message signs, digital voice assistants, and social media. The 511 program provides real-time traffic, parking, and transit information services, as well as a multi-modal trip planner that compares driving, transit, biking, and walking trips. 511 also provides its own online ride matching tool and supports the use of private-sector carpool app partners for ridematching, along with data feeds and Application Programming Interfaces for use by the developer community to create other tools and services.

MTC also oversees the implementation and operations of Clipper® — a regional fare payment system that can currently be used to pay fares electronically on 21 of the Bay Area's transit systems. The Clipper® program processes over 20,000,000 transactions per month, achieving MTC's goal to have Clipper® become the primary transit fare payment system in the Bay Area. A separate discussion of the Title VI implications of Clipper to MTC appears in Section VI of this Program.

In October 2011, the California Transportation Commission deemed 270 miles of Bay Area Express Lanes, shown in Figure 2 below, eligible for development and operation by MTC. MTC's express lanes will be located in Alameda, Contra Costa and Solano counties and will

work in coordination with express lanes operated by partner agencies on SR-237 in Santa Clara County and on I-580 and I-680 in Alameda County. Express lanes are specially-designated highway lanes that are free for carpools, vanpools, buses and other eligible vehicles, just like existing High Occupancy Vehicle lanes. To ensure the greatest use of the space in these lanes while keeping them flowing better than neighboring general purpose lanes, express lanes also are managed to allow solo drivers to pay tolls to use the lanes. MTC delegated its express lanes responsibilities to BAIFA in April 2013. In this role, BAIFA makes policy and operational decisions including setting toll rates. MTC will open the I-680 Contra Costa Express Lanes in summer 2017. MTC is completing design and plans to award a civil construction contract for the I-880 express lanes in Alameda County in 2017, followed closely by an extension of the I-680 Contra Costa Express Lanes in partnership with the Contra Costa Transportation Authority. Lastly, MTC and the Solano Transportation Authority are working on design of the I-80 express lanes in Solano County. All work on the MTC express lanes has been locally-funded.

Figure 2, Bay Area Express Lanes



B. Description of the San Francisco Bay Area

The region MTC serves is unique in that there are eight primary public transit systems as well as numerous other local transit operators, which together carry nearly 500 million passengers per year. The region's varied geography has given rise to a diverse range of public transit modes: antique cable cars and historic streetcars; high-speed ferries; diesel commuter rail and electric-powered rapid transit rail; diesel and natural gas buses; and electric trolley buses. The combined annual operating budget of the transit agencies is \$2.3 billion, placing the Bay Area among the top transit centers in the nation. In addition, there are numerous specialized services for elderly and disabled travelers (referred to as paratransit service), nearly 20,000 miles of local streets and roads, 1,400 miles of highway, six public ports and three major commercial airports.

The Bay Area embraces the nine counties that touch San Francisco Bay (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma) and includes 101 municipalities. Nearly 7.4 million people reside within its approximately 7,000 square miles. The region's population is diverse, with no single ethnic group holding a majority of the population, and the total combined minority ethnic groups representing 59 percent of the Bay Area's population.²

C. MTC Policy Advisory Council

MTC values citizen advisors to support an ongoing dialogue with individuals representing a range of interests and viewpoints, and MTC has a long history of utilizing citizen advisory committees as continual mechanisms to ensure public participation in its planning process.

Created in April 2010 by MTC Resolution No. 3931, MTC's Policy Advisory Council advises MTC on a range of dynamic topics including regional planning efforts linking transportation, housing and land use plans to reduce greenhouse gas emissions; the special mobility issues affecting elderly and disabled individuals; equitable transportation services, programs and benefits in relation to low-income individuals and communities of color; public transit service productivity improvements; cost-effectiveness measures for the region's transportation system; and strategies to secure new revenues for transportation in the Bay Area, among other issues.

² US Census American Community Survey, 2010-2014 5-year average

Based on its governing resolution, a minimum of one-third of the 27-member Council represents the perspective of low-income communities and communities of color, one-third represents the elderly and disabled, and one-third represents the environmental and business communities. The Council serves a four-year term, and vacancies are filled as needed. General recruitment, as well as vacancy recruitment, is broad, allowing enough time for interested citizens in the region to apply. The four-year term of the Council coincides with the four-year planning cycle of the update of the regional transportation plan (Plan Bay Area) in order to maximize education and input from the advisors. See Appendix A, for a list of the advisors serving on the Council for the term of September 2013 through July 2017. The next full recruitment of the Policy Advisory Council is scheduled for spring/summer of 2017, and the new group of advisors will be seated in the fall of 2017. Vacancies will be filled with individuals representing the constituency of the individual being replaced.

Typically during recruitment, the announcement and the online application are posted to MTC's web site, and a press release is sent out with follow-up conversations with several local newspapers and reporters. In addition, display ads are placed in community and minority-focused publications such as: Bay Area Reporter, Crónicas, East County Times (in print and online), El Tecolote, Korea Daily, La Voz, Santa Rosa Press Democrat (in print and online), Sing Tao, and Visión Hispana. An announcement is also included in MTC's e-newsletter that has a distribution list of over 30,000, and a postcard is mailed to those on MTC's mailing list who do not have an email address on file.

D. Financial Assistance from the Federal Transit Administration

As the MPO, MTC has a varying level of administrative oversight and programming responsibilities for FTA funds that flow to the Bay Area. For the majority of funds, MTC serves as the designated recipient of the FTA funds and selects projects in cooperation with the region's transit operators that are consistent with the planning priorities set forth in the RTP. Table 1 summarizes oversight responsibilities. The table does not include FTA earmark/discretionary funds. The funding amounts are shown for FY 2013-14, which represents the first full fiscal year of the reporting period; however, MTC's website includes the FTA program of projects for other years covered by this Program (FY 2013-14 through FY 2016-17): <http://mtc.ca.gov/our-work/fund-invest/investment-strategies-commitments/fix-it-first/transit-capital-priorities/fta>

Table 1. MTC Oversight Responsibilities				
Funding Source	Grant Recipient (i.e. Direct Recipient)	MTC Subrecipients FY2013-14	FY2013-14 Amount (\$ in millions)	Percentage of FTA Funds
MTC is Designated Recipient				
Urbanized Area Formula (5307)	Transit Operators	None	\$209	48%
State of Good Repair Formula (5337)	Transit Operators	None	\$170	39%
Bus & Bus Facilities Formula (5339)	MTC ¹	Transit Operators	\$13	3%
Surface Transportation Program/Congestion Mitigation and Air Quality ²	Transit Operators	None	\$35	8%
State is Designated Recipient				
Elderly and Disabled Specialized Transit Program (5310)	Caltrans	None	\$4.5	1%
Metropolitan Planning (5303)	Caltrans	Transit Operators ³	\$3.0	1%
Non-Urbanized Area Formula (5311)	Caltrans	None	\$1.9	0%
Total			\$437	

Notes:

- (1) With passage of the FAST Act, transit operators are the direct recipients for 5339 Bus and Bus Facilities funds as of FY2015-16.
- (2) The amount for STP/CMAQ represents funds obligated in grants or transferred from FHWA to FTA in that year.
- (3) MTC is a subrecipient to Caltrans for these funds. Of the amount MTC receives, MTC dedicated approximately \$300,000 to fund transit operators' Short Range Transit Plans (SRTPs).

1. Designated Recipient: Supplemental Agreements with Grant Recipients and Direct Grants to Transit Operators

As shown in Table 1, MTC's role is limited to program and project selection for roughly 99% of the funding, including: FTA Urbanized Area Formula (Section 5307); State of Good Repair Formula (Section 5337); Bus & Bus Facilities Formula (Section 5339); and Flex funds (Surface Transportation Program (STP) / Congestion Mitigation and Air Quality Improvement (CMAQ)).

MTC is generally the designated recipient for these funds in large urbanized areas in the Bay Area (Antioch, Concord, San Francisco-Oakland, San Jose and Santa Rosa). Starting in FY 2012-13, Caltrans became the designated recipient for Section 5307 and 5339 funds apportioned to small urbanized areas (Fairfield, Gilroy-Morgan Hill, Livermore, Napa, Petaluma, Vacaville and Vallejo). However, MTC and Caltrans staff, working with FTA Region IX, reached an agreement for MTC to continue to develop the program of projects for Section 5307 and 5339 small urbanized area funds, and to execute supplemental agreements to FTA grants on behalf of Caltrans.

MTC generally relies on MTC Resolution No. 4242 (and its predecessor and successor resolutions), the San Francisco Bay Area Transit Capital Priorities Process and Criteria, to select projects that replace and rehabilitate the region's transit capital assets. MTC programs the funds, and amends the projects and funding into the TIP. Once a grant is approved for these funds, the responsibility for administration and oversight is transferred to FTA either via a direct grant relationship or through the execution of a supplemental agreement. According to the FTA supplemental agreement entered into by MTC, FTA and each grant recipient for Section 5307, and STP/CMAQ funds that are transferred to FTA, MTC as designated recipient is relieved of the responsibility of ensuring compliance with FTA grant requirements, which are fully assumed by the grant recipient. A list of all transit operators that receive FTA grants as direct recipients within MTC's geographical area and the various categories of FTA grants received by each is provided in Appendix B.

2. Designated Recipient: Job Access Reverse Commute and New Freedom Large Urbanized Area Programs

MTC previously served as the direct recipient for non-FTA grantee transit operators, public entities, and non-profits that are competitively selected for the Job Access Reverse Commute (JARC) and New Freedom programs. In MAP-21, the JARC and New Freedom programs were eliminated as stand-alone programs, and JARC functions and funding were combined with the Urbanized Area Formula (Section 5307) and the Non-Urbanized Area Formula (Section 5311) programs starting in FY 2012-13. MTC has historically used JARC funds apportioned to large urbanized areas to support the Lifeline Transportation Program and plans to continue to set aside Section 5307 funds apportioned by the JARC formula (approximately 3% of the Section 5307 appropriations) for the Lifeline Transportation Program. The New Freedom program was merged with the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program, for which Caltrans is the designated recipient and the direct recipient. See Section D.3 below for details about Caltrans-administered FTA programs.

MTC continues to administer and monitor funds allocated under the previous JARC (FTA Section 5316) and New Freedom (FTA Section 5317) programs for Title VI compliance.

3. Other Funds (Section 5303, Section 5311, Section 5310, Federal Earmarks)

For federal earmark and other FTA discretionary funds such as New Starts, Small Starts, and Section 5309 Bus and Bus Facilities, MTC's role is to ensure consistency with the RTP and, after

completing that consistency review, to amend the funds into the TIP. Once that role is satisfied, the transit operators work directly with FTA as direct recipients. For three FTA programs, Caltrans serves as the direct recipient of the funds. For the Enhanced Mobility of Seniors and Individuals with Disabilities program (FTA Section 5310) and the Rural Area program (FTA Section 5311), MTC assists with project selection under a cooperative relationship with Caltrans. MTC is not a grant recipient or subrecipient for 5311 funds, and is a subrecipient to Caltrans of 5310 funds for planning activities only; MTC does not pass through 5310 funds to other recipients. MTC is a subrecipient to Caltrans for Metropolitan Planning funding (Section 5303) and passes through some of these funds to transit operators annually for Short Range Transit Plan development.

III. GENERAL REPORTING REQUIREMENTS

This Section III addresses MTC's compliance with the general requirements for MPOs set forth in Chapters III and IV of the Circular.

A. Monitoring Subrecipients

Chapter III, Section 12 of the Circular requires primary recipients to monitor their subrecipients for compliance with the US DOT Title VI regulations. MTC was the primary recipient for the terminated JARC and New Freedom funding programs, and continues to monitor subrecipients with continuing JARC and New Freedom activities.

B. Title VI Complaint Procedures and Complaint Form

As required by Chapter III, Section 6 of the Circular, MTC has in place a Title VI complaint procedure, which outlines a process for local disposition of Title VI complaints and which is consistent with the guidelines found in the Circular. MTC's complaint procedures include five steps: 1) Submission of Complaint; 2) Referral to Review Officer; 3) Request for Reconsideration; 4) Appeal; and 5) Submission of Complaint to the Federal Transit Administration.

A detailed description of MTC's complaint procedures and MTC's complaint form are attached as Appendix C, and posted on the MTC website at: <http://mtc.ca.gov/about-mtc/access-everyone/civil-rights-act-file-complaint>.

The complaint form is posted in English, Spanish and Chinese. In addition the English version of the complaint form includes translation of the following statement: “If information is needed in another language, contact (415) 778-6757 or (415) 778-6769 for TDD/TTY,” in all language(s) spoken by LEP populations that meet the Safe Harbor Threshold in MTC’s service area/region.

C. Record of Investigations, Complaints and Lawsuits

1. Lawsuits

- a. Superior Court of the State of California, County of Alameda, Case No. RG 14715534
Urban Habitat Program v. Metropolitan Transportation Commission

The subject petition, filed February 27, 2014, as amended, contended that there was a controversy between the petitioner and MTC over the statutory construction of California Government Code section 66531 (relating to MTC’s preparation of guidelines for county-level congestion management agencies (CMAs) to follow in their adoption of county transportation plans) and MTC’s duties under that section. The court dismissed the action with prejudice on September 29, 2014. Although this petition did not allege discrimination on the basis of race, color or national origin, it is included here because it related to MTC’s role in the planning process and the scope and coverage of MTC’s guidance to the CMAs.

2. Record of Investigations and Complaints

A listing of all Title VI investigations, complaints received, and correspondence submitted in response to the complaints for the period of May 31, 2014 through June 1, 2017 is attached to this Program as Appendix D.

D. Meaningful Access to Limited English Proficient (LEP) Persons

Executive Order 13166 requires federal agencies to implement measures to ensure that people who speak limited English have meaningful access to federally-conducted and federally-funded programs and activities, consistent with Title VI. Both the U.S. Department of Transportation (US DOT) and FTA have implemented guidance or directives in furtherance of Executive Order 13166. In compliance with these directives, MTC is committed to taking reasonable steps to

ensure that all persons have meaningful access to its programs, services, and information, at no additional cost to individuals making the requests. In May 2013, the MTC adopted a revised *Plan for Special Language Services to Limited English Proficient (LEP) Populations*. It documents the various services and procedures that MTC has in place to assist persons with limited proficiency in the English language.

MTC staff conducted a Four-Factor Analysis or LEP needs assessment based on the US DOT LEP guidance, to determine what reasonable steps should be taken to ensure meaningful access by LEP persons. The Four-Factor Analysis report is provided as Appendix E.

See Appendix F, for a copy of the *Final Revised Plan for Special Language Services to Limited English Proficient (LEP) Populations*.

MTC performs periodic checks of translated materials to ensure they are interpreted correctly and requires translators and interpreters to meet MTC's competency standards. MTC also monitors requests for language assistance and will update its *Final Revised Plan for Special Language Services to Limited English Proficient (LEP) Populations*, as needed, to ensure meaningful access to its programs and services by LEP persons.

MTC requires staff and all new hires to complete on-line Title VI training, including information on how to provide language assistance to an LEP caller or visitor. MTC staff who routinely field telephone calls from the public developed protocols for assisting non-English speakers (including MTC's Spanish and Chinese language lines as well as how to refer people to MTC's on-call translations vendor for assistance.)

E. Beneficiary Notifications

Consistent with Chapter III, Section 5, of the Circular, MTC informs members of the public of their rights under Title VI in a number of ways, including notification on MTC's website and in the MTC-ABAG Library, which is open to the public. The Beneficiary Notifications are posted at the MTC offices in English, Spanish and Chinese, and on the MTC website in English with instructions in Spanish and Chinese on how to obtain translation of the notification into each of those languages. MTC incorporates notice of the availability of language assistance into its existing outreach materials. This includes routine use of language on printed or electronic announcements for public meetings and public workshops on key planning efforts that alert interested individuals on how to request translation services. A similar notice is posted at the

reception desk, and at MTC meetings and workshops. For special projects, such as the region's long-range transportation plan, MTC works with community-based organizations and other stakeholders to inform LEP individuals of available services, including the availability of language assistance services. MTC also uses notices in local newspapers in languages other than English as well as providing notices on non-English-language radio and television stations about the available language assistance services and how to get them.

See Appendix G, *Beneficiary Notifications*, for a sampling of MTC's written notices and website information.

F. Inclusive Public Participation

Consistent with Chapter III, Section 5 of the Circular, MTC seeks out and considers the viewpoints of minority, low-income and LEP populations in the course of conducting public outreach and involvement activities. This section describes methods used by MTC to inform minority communities of planning efforts, and how minority persons are afforded an opportunity to participate in decision-making processes.

1. Public Participation Plan

MTC's most recent federal Public Participation Plan (PPP) was adopted in February 2015, in advance of updating its long-range transportation plan. The PPP lays out the steps MTC takes to involve residents in decisions affecting Bay Area transportation and land use policies and investments. It is periodically reviewed and updated based on MTC's experiences and the changing circumstances of the Commission and the transportation community it serves.

In advance of the PPP's most recent update, MTC held an evening public meeting in October of 2014 to hear comments and suggestions for improving public engagement. ABAG staff held discussions at their Executive Committee and Regional Planning Committee, as well as at county delegate meetings. Likewise, staff sought ideas from MTC's Policy Advisory Council, the Regional Advisory Working Group, and congestion management agency planning directors. Staff also launched an online survey and comment forum, and surveyed the public at numerous community events around the region.

MTC released a Draft PPP for public comment on November 7, 2014.

In response to prior input, the Draft PPP spotlighted the process and significance of various milestones in development of Plan Bay Area 2040, the roles of various agencies, and opportunities for public comment.

Key Messages Heard

We received nearly 100 comments, including several from MTC's Policy Advisory Council and the Regional Advisory Working Group. A memo, including a summary of comments and responses as well as the adopted Public Participation Plan, can be found at this link:

<https://mtc.legistar.com/View.ashx?M=F&ID=4093706&GUID=873CCF04-86CE-4919-B046-1B1107A52214>

Comments fell into the following themes:

Be Specific — A number of comments asked for more detail in the PPP, including showing more explicitly how public comments are factored into the decision-making process. The final PPP includes strategies directing staff to summarize comments to highlight areas of consensus and areas of disagreement so that Commissioners and the public have a clear understanding of the depth and breadth of opinion on a given issue. The final PPP also calls for meeting minutes that reflect public comments and for staff documentation of how comments are considered in MTC's decisions, as well as information about how public meetings and participation are helping to shape or have contributed to MTC's key decisions and actions. The final PPP also calls for explaining the rationale when outcomes don't correspond to the views expressed.

Localize the Plan Bay Area Message — One theme expressed the need to communicate the plan and related issues via a local framework to explain why Plan Bay Area matters in a given community and/or county.

Involve Under-Served Communities — Many commenters noted the importance of taking the time to work with low income communities and communities of color over the long term to build capacity and allow for more effective participation. The final PPP calls for continued partnerships with community-based organizations to involve residents in communities that might not otherwise participate. Likewise, based on several comments, the final PPP includes revised language to form a Regional Equity Working Group similar to a panel used during the previous Plan Bay Area process.

More Access to Meetings — A number of commenters asked for better access to meetings, whether in person or via live and interactive web streaming. Several suggested holding meetings at locations that are convenient and accessible, including by public transit. While the final PPP does not go into great detail on meeting formats or locations, it does call for holding meetings at varied times and locations that are convenient to more residents. It also calls for use of interactive web features.

Evaluate and Improve — Another theme called for evaluation of the previous Plan Bay Area process and reviews of each phase of the upcoming Plan Bay Area public engagement process to identify what is likely to work and what needs to be improved. MTC and ABAG reviewed each phase of the last Plan Bay Area public process and completed a comprehensive evaluation after the Plan was approved. Those reviews helped shape the final PPP, and we anticipate continuing this practice moving forward.

Specific Plan Bay Area Topics — Many of the comments touched on specific issues to be addressed during the Plan Bay Area update that did not directly relate to public participation. When possible, we explained opportunities in the Plan Bay Area update to address these concerns.

The final PPP was adopted by the Commission as MTC Resolution No. 4174, on February 13, 2015. Revisions to the Draft provided requested clarification or expanded upon public participation opportunities, as described above.

The 2015 PPP includes five guiding principles:

- Public participation is a dynamic activity that requires teamwork and commitment at all levels of the MTC organization.
- One size does not fit all — input from diverse perspectives enhances the process.
- Effective public outreach and involvement requires relationship building — with Bay Area residents, local governments, advisory groups and special interest organizations.
- Engaging interested persons in regional transportation issues is challenging, yet possible, by making it relevant, removing barriers to participation, and saying it simply.
- An open and transparent public participation process empowers low-income communities and communities of color to participate in decision making that affects them.

The PPP is available in English, Spanish and Chinese on MTC's website at

<http://mtc.ca.gov/about-mtc/public-participation> and attached as Appendix H.

2. Public Participation in *Plan Bay Area 2040*, the San Francisco Bay Area’s Regional Transportation Plan and Sustainable Communities Strategy

An essential component of developing Plan Bay Area 2040 was reaching out to and engaging the public, stakeholders and partners in the alternative scenarios and associated policy choices. The multi-phased public participation process for Plan Bay Area 2040 spanned over three years and built on the values, needs and priorities that MTC heard from the public during development of the *2015 Public Participation Plan for the San Francisco Bay Area*.

For Plan Bay Area 2040, the proposed approach was to conduct a limited and focused update, building off the core framework established by the Plan adopted in 2013. One key difference between the 2013 Plan Bay Area and Plan Bay Area 2040 is that the latter does not require adoption of a Regional Housing Needs Allocation (RHNA), which was required in 2013, and which will be included again in the 2021 update.

Notable aspects of Plan Bay Area 2040 public engagement activities include:

A robust advisory committee structure, with active consultation of MTC’s Policy Advisory Council — which includes representatives from low-income communities and communities of color throughout the region — the Regional Advisory Working Group and the Regional Equity Working Group.

Partnerships with Community-Based Organizations working in low-income communities and communities of color to engage local residents via surveys and focus groups. MTC contracted with nonprofit groups selected through a competitive procurement to consult with underserved communities on range of transportation and housing issues.

Open Houses, Focus Groups and Online Comment Opportunities, including an interactive, multilingual game called “Build A Better Bay Area” that highlighted trade-offs associated with the Plan Bay Area 2040 planning scenarios. Open Houses in all nine Bay Area counties were held at major plan development milestones.

For a complete list of Plan Bay Area 2040 public engagement activities, please refer to the *Plan Bay Area 2040 Public Engagement Report*, available at this link:

http://2040.planbayarea.org/sites/default/files/2017-03/Public_Engagement_DPBA2040_Supplemental%20Report_3-2017_0.pdf

3. Public Participation in the TIP

MTC's PPP also guides public outreach for and participation in review of the TIP. Generally, once the draft TIP has been developed, it is then released for a 30-day public review and comment period. As part of the public review process, the draft document is made available at the MTC offices and is sent to major libraries throughout the Bay Area upon request. Notices are also sent to an extensive list of interested parties including transportation agencies, other state, federal and tribal agencies and other transportation interests with the objective to continue the consultation process for transportation planning and investments in the Bay Area. The draft TIP is submitted for intergovernmental review, via ABAG's Regional Clearinghouse, which notifies all local agencies in the Bay Area and receives their comments. The document is also made available on the MTC website. At least one public hearing is also conducted to solicit public comment, and notice of that hearing is published in regional newspapers, including newspapers directed at Spanish- and Chinese-language readerships. After the close of the public comment period, MTC's response to significant comments is compiled into an appendix of the TIP.

In 2010, MTC developed a short guide to the TIP, to facilitate public participation in the TIP adoption process. This booklet, "A Guide to the San Francisco Bay Area's Transportation Improvement Program," has been updated for the release of each TIP, was last updated in September 2016, and is available at the MTC offices, or online at http://mtc.ca.gov/sites/default/files/Guide-to-the-2017-TIP_3-17_web2.pdf.

The Draft 2015 TIP and accompanying Transportation-Air Quality Conformity Analysis were released for public review and comment on June 26, 2014, with a public hearing held on July 9, 2014. The 2015 TIP and accompanying Transportation-Air Quality Conformity Analysis were adopted by the MTC on September 24, 2014, and approved by the FTA and the FHWA on December 15, 2014. More details about the public notices and hearing specific to the TIP are found in Appendix A-57 of the 2015 TIP, available online at http://mtc.ca.gov/sites/default/files/A-57_Public_notices.pdf.

The Draft 2017 TIP and accompanying Transportation-Air Quality Conformity Analysis were released for public review and comment on June 24, 2016, with a public hearing held on July 13,

2016. The 2017 TIP and accompanying Transportation-Air Quality Conformity Analysis were adopted by the MTC on September 28, 2016, and approved by the FTA and the FHWA on December 16, 2016. More details about the public notices and hearing specific to the TIP are found in Appendix A-76 of the 2017 TIP, available online at

http://mtc.ca.gov/sites/default/files/A-76_public_notifications_for%20final_all.pdf.

To further assist in the public assessment of the TIP, and specifically to address the equity implications of the proposed TIP investments, MTC conducts an investment analysis with a focus on low-income and minority populations, seniors and persons with disabilities. The purpose of the analysis is to help the public understand whether low-income and minority populations, seniors and persons with disabilities are sharing equitably in the TIP's financial investments. The 2017 TIP Investment Analysis is included in full in Appendix I. A discussion of the equity analysis of the TIP with respect to minority residents is in Section V.B.1.b.

IV. PROGRAM-SPECIFIC REQUIREMENTS FOR DESIGNATED RECIPIENTS OF JOB ACCESS AND REVERSE COMMUTE AND NEW FREEDOM PROGRAMS

As noted in Sections II.D.2 and III.A above, MTC directly administers JARC and New Freedom grants, which were discontinued by MAP 21 in FY 2012-13. MTC continues to administer allocated JARC and New Freedom funds in accordance with FTA program guidance (FTA Circulars 9050.1 and 9045.1, respectively), which require MTC to administer JARC and New Freedom grants according to a Program Management Plan (PMP).

MTC's PMP specifically states, "MTC complies with all provisions prohibiting discrimination on the basis of race, color, or national origin on Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. § 2000d et seq.); U.S. D.O.T. regulations, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation— Effectuation of Title VI of the Civil Rights Act' (49 C.F.R. Part 21), and the Circular. MTC specifically requires in all third party contracts and funding agreements that the subrecipient/contractor at any tier complies with all requirements of Title VI. Failure to do so is considered to be a breach of contract."

Please see Appendix J, for the entire PMP for FTA 5316 JARC and 5317 New Freedom Programs. The PMP can also be viewed at

<http://mtc.ca.gov/sites/default/files/Res%203986%20JARC%20and%20New%20Freedom%20Program%20Management%20Plan.pdf>

Program-specific activities are described below.

A. Lifeline Transportation Program

Prior to MAP-21, MTC's policy was to direct JARC funds to support implementation of MTC's Lifeline Transportation Program, which includes projects that address mobility and accessibility needs in low income communities throughout the region. The Lifeline Transportation Program continues to exist with other fund sources, including Section 5307. Each Lifeline Transportation Program grant cycle in place during the reporting period, program guidelines and programs of projects are provided in Appendix K.

MTC has delegated many aspects of the administration of the Lifeline Transportation Program to CMAs or other designated county-wide agencies as follows:

County	Lifeline Transportation Program Administrator
Alameda	Alameda County Transportation Commission
Contra Costa	Contra Costa Transportation Authority
Marin	Transportation Authority of Marin
Napa	Napa County Transportation and Planning Agency
San Francisco	San Francisco County Transportation Authority
San Mateo	City/County Association of Governments of San Mateo County
Santa Clara	Santa Clara Valley Transportation Authority and Santa Clara County
Solano	Solano Transportation Authority
Sonoma	Sonoma County Transportation Authority

Lifeline Program administrators are responsible for soliciting projects for the Lifeline Program. This requires a full commitment to a broad, inclusive public involvement process and using multiple methods of public outreach, as described in MTC's PPP. Methods of public outreach include, but are not limited to, highlighting the program and application solicitation on the CMA website; sending targeted postcards and e-mails to local community-based organizations, city departments, and non-profit organizations (particularly those that have previously participated in local planning processes); and contacting local elected officials and their staffs. Further guidance for public involvement is contained in MTC's PPP.

The Lifeline Program administrators are also responsible for oversight of projects funded under the county programs and ensuring that projects meet MTC obligation deadlines and project delivery requirements. In addition, Lifeline Program administrators are to ensure, at a minimum, that projects substantially carry out the scope described in the grant applications.

For the selection of projects involving federal funds, Lifeline Program administrators must also consider fair and equitable solicitation and selection of project candidates in accordance with federal Title VI requirements, i.e. funds must be distributed without regard to race, color and national origin.

Since the last Title VI Program submission in 2014, MTC, through the Lifeline Program administrators, has conducted one call for projects for the Lifeline Program in 2014, and used Proposition 1B, State Transit Assistance, and FTA Section 5307 Urbanized Area Formula funds to support eligible projects.

B. Assistance and Monitoring

MTC included the following language in all contracts with subrecipients of JARC and New Freedom programs: “Recipient agrees to comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (47 U.S.C. § 2000(d)) and the regulations of the Department of Transportation issued thereunder (49 CFR Part 21).”

In addition to the above, MTC ensures the following, with respect to its monitoring and assistance process as enumerated below:

1. Monitoring:

In the PMP, MTC documents its process for ensuring that all subrecipients are complying with the general Title VI reporting requirements, as well as other requirements that apply to the subrecipient. Consistent with the PMP, MTC collected Title VI programs from JARC and New Freedom subrecipients with the submission of the standard agreement and annually thereafter with submission of the annual FTA certifications and assurances. MTC reviewed each Title VI program for compliance with the federal guidelines. The schedule of subrecipient Title VI programs is included in Appendix L.

2. Assistance:

MTC provided assistance to potential subrecipients applying for JARC and/or New Freedom funding, including applicants that would serve predominantly minority populations. The assistance included:

- MTC maintained an extensive database of contacts, including all agencies and organizations that MTC comes into contact with that serve senior, disabled, and low-income populations and/or are interested in transportation issues related to those populations. MTC used these contact lists to distribute the MTC-administered calls for projects, and, upon request, made contact lists available to external agency program administrators for their countywide calls for projects.
- MTC presented the program guidelines to the PAC's Equity and Access Subcommittee, and asked the subcommittee members to notify any organizations that may be interested, including organizations that serve predominantly minority populations.
- MTC provided instructions to prospective applicants on how to collect pertinent demographic information from the U.S. Census Bureau website in order to answer the civil rights question in the grant application, and applicants were also given the option of contacting MTC for assistance with collecting the demographic data.

The following is a description of the assistance that MTC provided to JARC and New Freedom subrecipients after they were awarded funding:

- MTC hosted a workshop or provided one-on-one technical assistance with subrecipients to explain the invoicing and reporting procedures, and to explain the various federal requirements, including those related to Title VI, DBE, procurements, etc. At the workshops, subrecipients were given an overview of the PMP, Title VI and the Circular (FTA Circular 4702.1A in April 2011 and FTA Circular 4702.1B in January 2013).
- Subrecipients were provided with one-on-one consultation, as requested, of their responsibilities to assure effective Title VI implementation and enforcement, as well as requirements for public participation and providing meaningful access to LEP persons. Subrecipients were provided sample forms, notices and procedures. If requested, MTC provided demographic information on race and English proficiency of residents served by subrecipients.

V. PROGRAM-SPECIFIC REQUIREMENTS FOR METROPOLITAN PLANNING ORGANIZATIONS

This Section V addresses MTC's compliance with program-specific requirements for MPOs set forth in Chapter VI of the Circular.

A. Demographic Profile of the Metropolitan Area

The Bay Area officially became a "majority minority" region in 2000,³ and like the rest of California and the United States, its population is expected to become even more diverse over time. At a neighborhood level, between 2000 and 2014, the minority population increased in almost every community in the region, with the notable exceptions of West and North Oakland, Emeryville, and West Berkeley, where the minority population declined significantly (see Map 4b below).

Minority populations include persons who identify as any of the following groups defined by the Census Bureau⁴ in accordance with guidelines provided by the U.S. Office of Management and Budget (OMB):

- American Indian or Pacific Islander Alone (non-Hispanic/non-Latino);
- Asian Alone (non-Hispanic/non-Latino);
- Black or African-American Alone (non-Hispanic/non-Latino);
- Hispanic or Latino of Any Race;
- Native Hawaiian or Pacific Islander Alone (non-Hispanic/non-Latino); and
- Other (Some Other Race, Two or More Races).

All residents who identify as Hispanic or Latino, even if they also identify with another race, are considered Hispanic or Latino. The "Non-minority" population therefore consists of persons who identify as non-Hispanic Whites or "White alone."

In 2014, there were approximately 3.1 million Whites in the Bay Area, or 41.4 percent of the total population. Between 1990 and 2014, the White population declined by 608,016 (-17

³ U.S. Decennial Census, 2000.

⁴ For Census Bureau's definitions for race and ethnicity, see:
<http://www.census.gov/topics/population/race/about.html>.

percent). During the same time, the Black or African American population declined by 60,555 (-12 percent); the Asian population increased by 874,244 (+99 percent); and the Latino or Hispanic population increased by 820,348 (+89 percent). During the same time period, the total Bay Area population increased by 22 percent, from approximately 6.0 million to 7.4 million.

Table 2: Bay Area Population by Race, 1990-2014

	1990	2000	2005-2009 Average	2010-2014 Average	Change 1990- 2014 (%)
White Alone	3,658,309	3,392,204	3,165,395	3,050,293	-17
Black Alone	516,420	497,205	463,359	455,865	-12
Asian Alone ⁵	884,547	1,278,515	1,519,768	1,758,791	+99
Latino / Hispanic	923,606	1,315,175	1,521,456	1,743,954	+89
All	6,023,577	6,783,760	6,950,764	7,360,487	+22

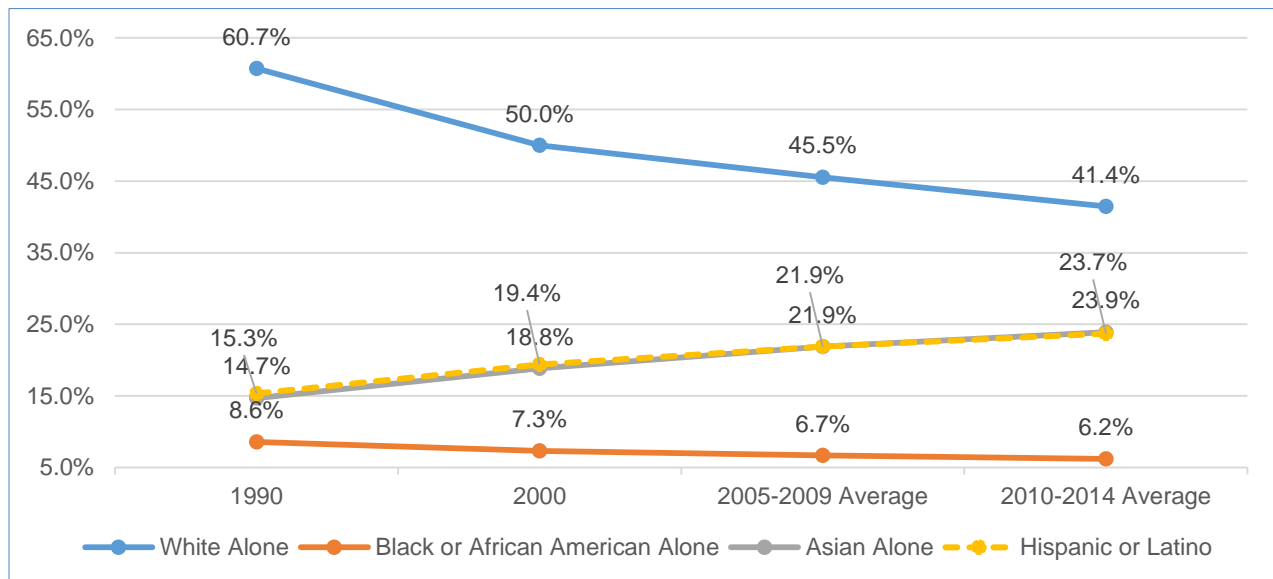
Source: 1990 Census data from NHGIS.ORG Code ET2, Census 2000 Table P8, American Community Survey 2005-2009 and 2010-2014 Table B03002

While all nine counties experienced a decline in their White population between 1990 and 2014, the steepest declines occurred in Alameda (-24 percent), San Mateo (-22 percent) and Santa Clara (-28 percent) counties. In 2014, the largest share of the White population in the region lived in Santa Clara County (21 percent). While the White population declined at the regional level, it increased in the Mission District and Presidio in San Francisco; West Berkeley, West Oakland, Oakland Chinatown, and the city of Emeryville in the East Bay; and parts of the cities of St. Helena and Napa in the North Bay.⁶ Areas where the White population increased between 2000 and 2014 also experienced a decline in their share of low-income population, indicating that at least some of this shift occurred due to rising housing costs in transit-accessible areas in inner bay communities.

⁵ In 1990, the "Asian Alone" category includes Pacific Islanders, and Pacific Islanders are not included in the "Other" category.

⁶ US Decennial Census 2000 and American Community Survey 2010-2014 5-year average.

Chart 1: Share of Bay Area Population by Race, 1990-2014

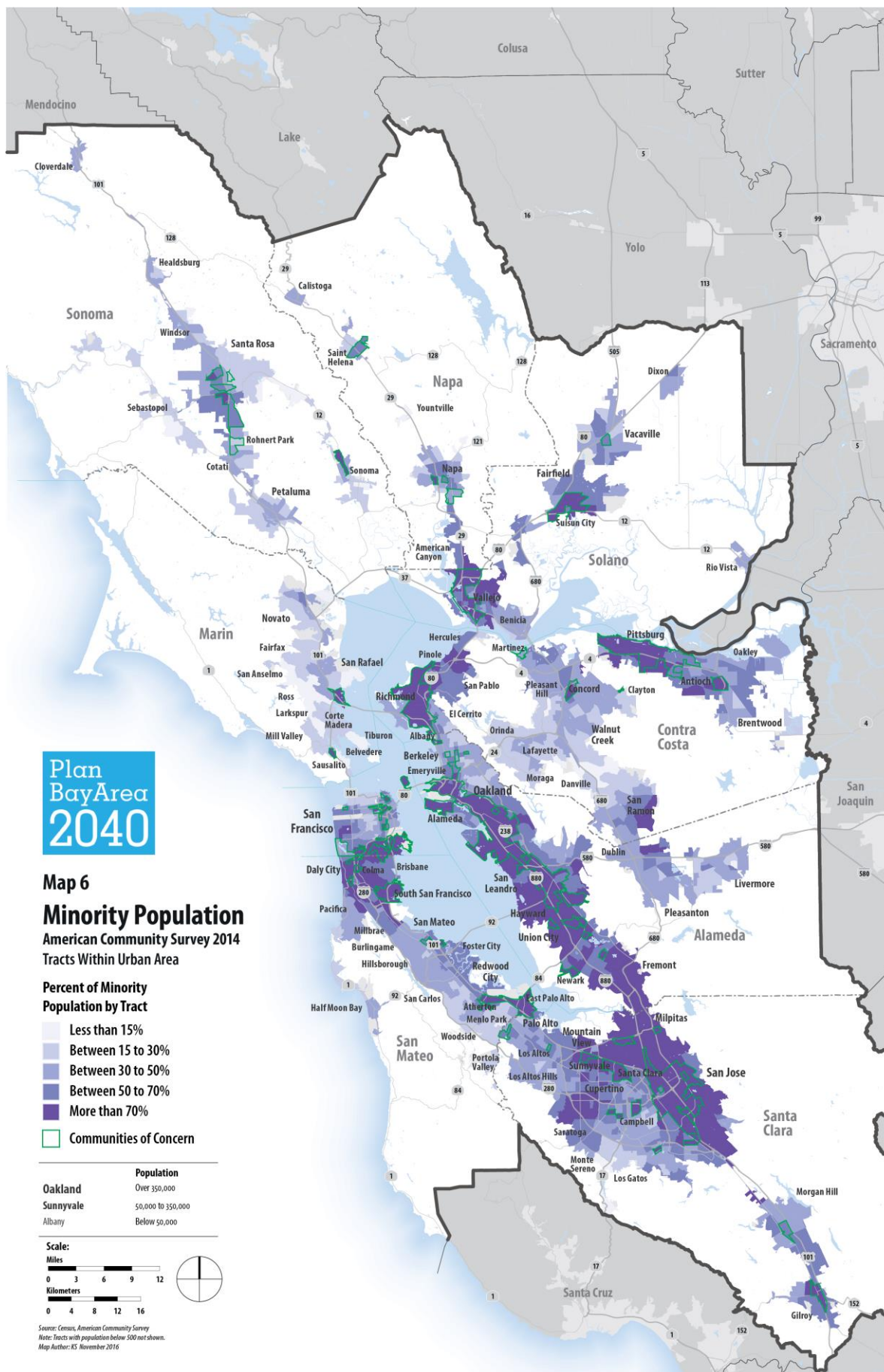


Source: 1990 Census data from NHGIS.ORG Code ET2, Census 2000 Table P8, American Community Survey 2005-2009 and 2010-2014 Table B03002

Between 1990 and 2014, the steep declines for Black or African American populations occurred in Alameda (-19 percent), San Francisco (-40 percent), San Mateo (-46 percent) and Santa Clara (-15 percent) counties. Marin County also experienced a decline, but from a small base. The Black or African American population increased in Contra Costa (+28 percent) and Solano (+32 percent) counties. Napa and Sonoma counties also experienced a gain, but from a small base. In 2014, the largest share of the Black or African American population lived in Alameda County (40 percent).

At a neighborhood level, between 2000 and 2014, the Black or African American population declined substantially in West Oakland, North Oakland, East Oakland, West Berkeley, the unincorporated community of North Richmond and the Iron Triangle neighborhood in the city of Richmond. The Black or African American population also declined in the cities of East Palo Alto and Dublin, in the Hunters Point and Mission District neighborhoods in San Francisco, and in parts of the city of Vallejo (see Map 6).⁷ At the same time, the Black or African American population increased substantially in the communities of Pittsburg, Antioch and Oakley in East Contra Costa County – areas where the share of low-income residents also increased between 2000 and 2014.

⁷ Ibid.



Between 1990 and 2014, all nine counties experienced an increase in their Asian and Latino or Hispanic populations. Steep increases for the Asian populations occurred in Alameda (+128 percent), Contra Costa (+116 percent), San Francisco (+34 percent), San Mateo (+80 percent) and Santa Clara (+141 percent) counties. Similar to the Asian population, the Latino or Hispanic population also increased in Alameda (+94 percent), Contra Costa (+193 percent), San Francisco (+27 percent), San Mateo (64 percent) and Santa Clara (+57 percent) counties. For both the Asian and the Latino or Hispanic populations, Marin, Napa, Solano and Sonoma counties also experienced a gain, but from a small base.

At a neighborhood level, between 2000 and 2014, the Hispanic population grew in almost all the communities in the region, and especially in the cities of Redwood City and Palo Alto in the Peninsula; San Jose, Mountain View and Gilroy in the South Bay; Richmond, Pinole, Oakland and Hayward in the East Bay; Pittsburg, Antioch and Concord in East Contra Costa County; and San Rafael, Santa Rosa, Napa, Vallejo and Fairfield in the North Bay.⁸

Significantly, the Hispanic population declined substantially in the Mission District in San Francisco, West and South San Jose, the Great Mall area in the city of Milpitas, and the cities of Brentwood, Napa and St Helena. During the same time, the Asian and Pacific Islander population increased significantly in the South Bay (Palo Alto to Cupertino and Milpitas), inner East Bay (Alameda, Hayward and Fremont), and the Tri Valley area (San Ramon, Dublin and Pleasanton).⁹

B. A Description of the Procedures by Which the Mobility Needs of Minority Populations Are Identified and Considered within the Planning Process

MTC undertakes both analytical and public-outreach efforts to identify and consider the needs of minority populations within the planning process. General agency efforts related to public participation in the planning process are described in detail in Section III.F of this Program, while this section describes more specific planning research and analysis efforts MTC undertakes to fulfill its Title VI obligations throughout the metropolitan planning process.

Discussion in this section focuses specifically on consideration of populations protected by Title VI, which is related but not equivalent to numerous other efforts MTC undertakes more broadly

⁸ Ibid.

⁹ Ibid.

to fulfill its two Environmental Justice Principles, which were adopted by the MTC in 2006, as recommended by MTC's Minority Citizens Advisory Committee, and members of the Bay Area Partnership:

- **Principle #1** — *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.*
- **Principle #2** — *Collect accurate and current data essential to understanding the presence and extent of inequities in transportation funding based on race and income.*

In furtherance of these principles, MTC continues to pursue major efforts to assure that MTC's planning and programming activities are nondiscriminatory and involve a wide range of stakeholders. This commitment is reflected in the varied work products described herein and further detailed on MTC's website using the links provided.

1. Identifying the Mobility Needs of Minority Populations

As part of the planning process, MTC identifies the needs of minority populations in several key ways, including both research efforts and ongoing public involvement of minority communities.

a) Plan Bay Area 2040

Key aspects of identifying the mobility needs of minority populations in the Plan Bay Area process involved both input from the Regional Equity Working Group (as described in Section V.B.2 below) and conducting regional research to identify commute trends for specific minority populations.

Minority populations have somewhat similar travel behavior compared to the broader population. But there are still some notable differences. This section describes the travel patterns of minority populations, with an emphasis on commute to work.

Minority populations in the region account for 59 percent of the total population, 61 percent of transit trips, 52 percent of roadway trips and 52 percent of all trips (transit and roadway). It is unclear why the total number of trips taken by minority populations is lower than their share of the total population, but some of the difference is a result of using multiple data sources. While the demographic data is derived from the U.S. Census Bureau, roadway trips are summarized

from the California Household Travel Survey and transit trips from both MTC's transit passenger survey and previous data collected by each transit operator.

Table 3: Share of Bay Area Population and Mode of Transportation, 2014

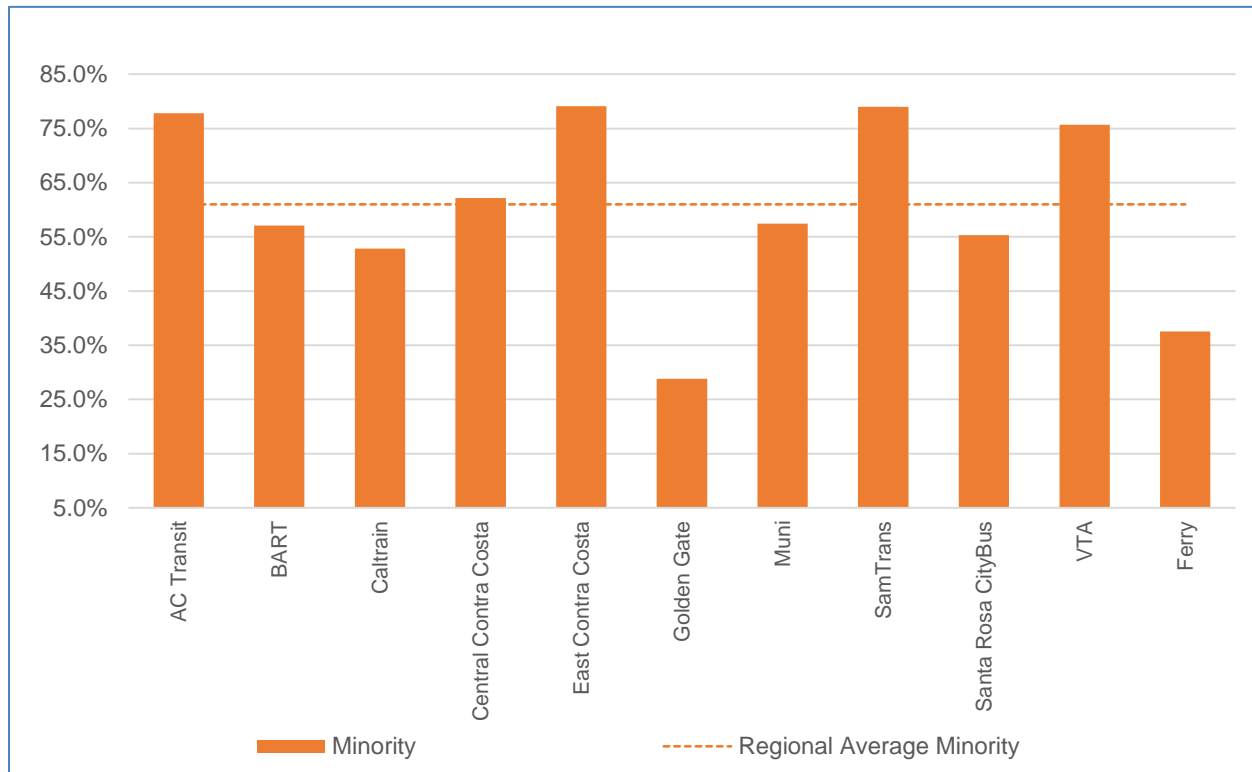
Population Subgroup	Share of Population	Share of Transit Trips	Share of Roadway Trips	Share of All Trips
Minority Population	59%	61%	52%	52%

Source: U.S. Census American Community Survey 2010-2014, 2012/2013 California Household Travel Survey, 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys

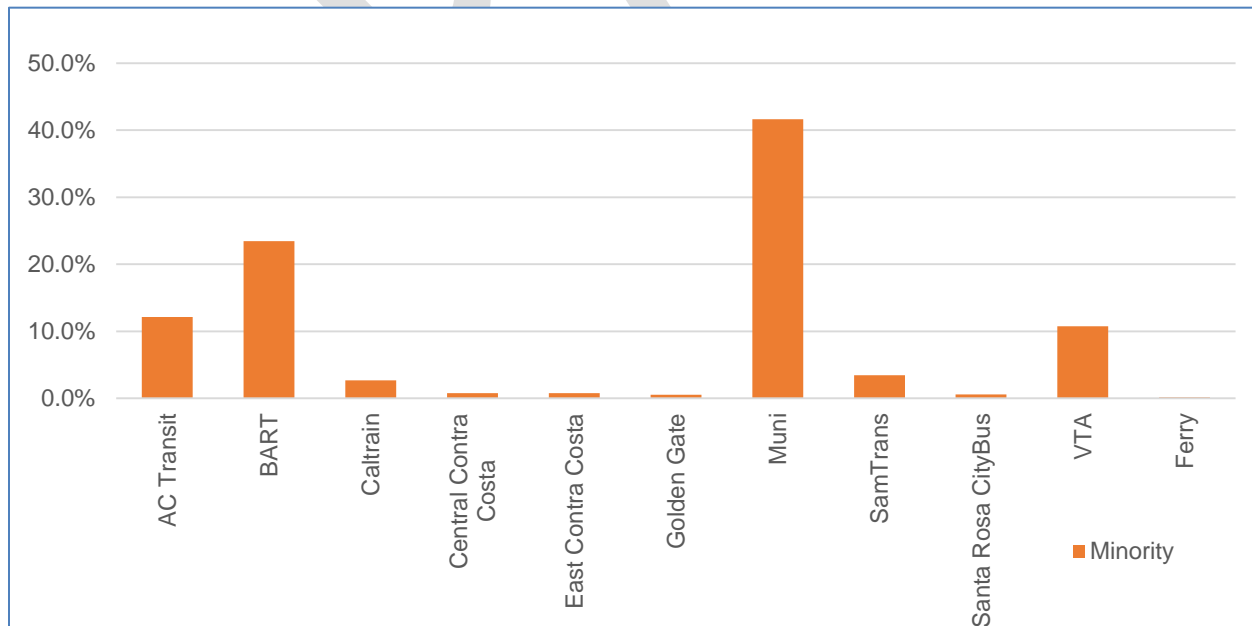
While minority populations have a higher reliance on transit (compared to their share of the population), this dependence varies widely among different operators and counties. Of the 27 transit operators in the Bay Area, AC Transit, BART, San Francisco Muni and Santa Clara Valley Transportation Authority (VTA) account for around 90 percent of all transit trips by minorities. Notably, Muni accounts for about 42 percent of all transit trips for minority populations, confirming the role of land use (higher-density, mixed-use, walkable communities) in supporting not just higher transit ridership but also access and mobility for transit-dependent populations.

AC Transit and VTA also carry some of the highest shares of minority populations in the region. 78 percent of AC Transit's riders are minorities. Similarly, 76 percent of VTA's riders are minorities. Of the larger transit operators, Golden Gate Transit and the ferry service have the smallest shares of minority riders, at 29 and 38 percent, respectively.

Chart 2: Minority Ridership as a Share of Total Transit Ridership by Operator in the Bay Area



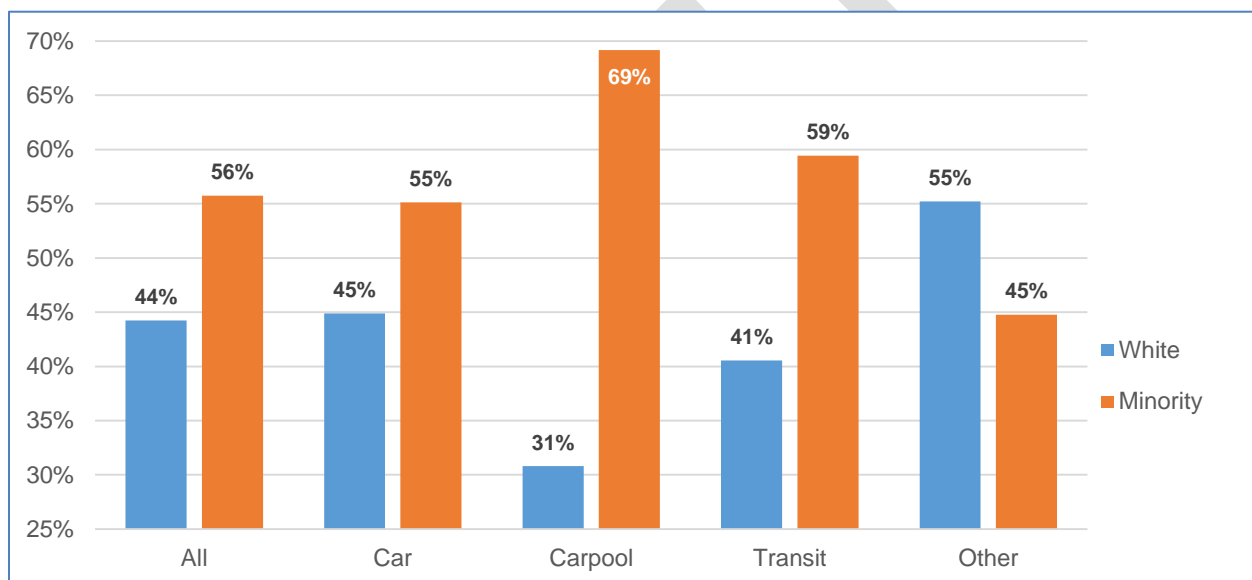
Source: 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys **Chart 3: Share of Minority Riders on all Transit Systems in Bay Area**



Source: 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys

Travel behavior for minorities varies by mode and county of residence. While minorities are 56 percent of the workforce, they comprise 69 percent of workers who carpool to work and 59 percent who take transit. These shares vary somewhat among various racial/ethnic groups. Ten percent of Hispanic/Latino and White workers take transit to work, compared to 13 percent for Asians and 17 percent for African Americans/Blacks. About 80 percent of Asian and Hispanic/Latino workers drive alone or carpool to work, compared to about 74 percent for African Americans/Blacks and Whites. With 12 and 14 percent of workers who carpool to work, Asian and Hispanic/Latino workers have the highest rates of carpooling.

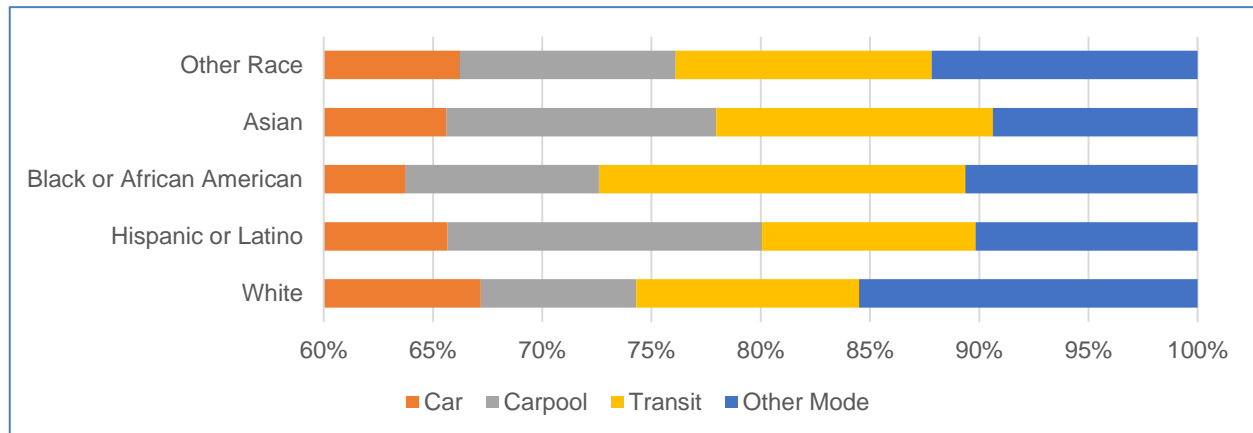
Chart 4: Means of Transportation to Work (16 Years and Over), White and Minority, Bay Area 2015



Source: U.S. Census American Community Survey, 2011-2015, 5-Year Average

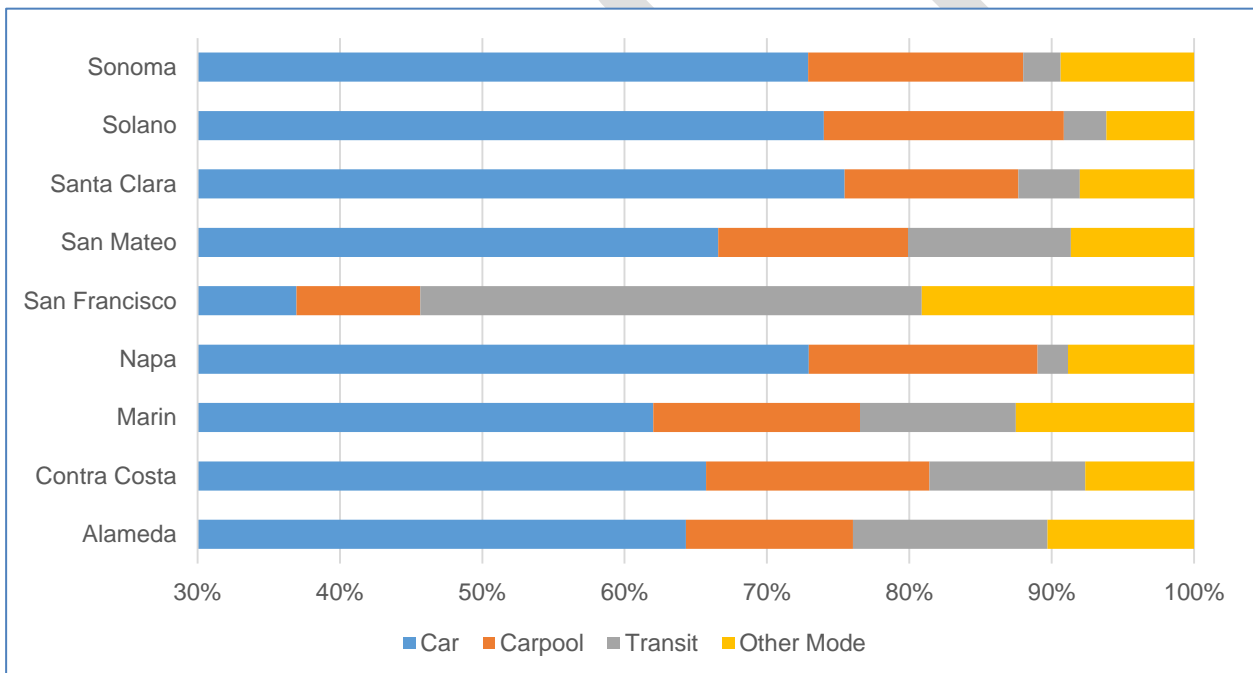
As with low-income workers, only 46 percent of minority workers in San Francisco drive alone or carpool, a much lower rate than in any other county. In comparison, 88 percent of the minority workers in Sonoma, 91 percent in Solano, 87 percent in Santa Clara and 89 percent in Napa drive alone or carpool to work. The share of minority residents who ride transit was highest in San Francisco, at 35 percent, followed by 14 percent in Alameda and 11 percent each in San Mateo, Marin and Contra Costa counties.

Chart 5: Means of Transportation to Work (16 Years and Over), by Race/Ethnicity, Bay Area, 2015



Source: U.S. Census American Community Survey, 2011-2015, 5-Year Average

Chart 6: Means of Transportation to Work, Minority Workers (16 Years and Over), Bay Area, 2015



Source: U.S. Census American Community Survey, 2011-2015, 5-Year Average

b) 2017 TIP Investment Analysis

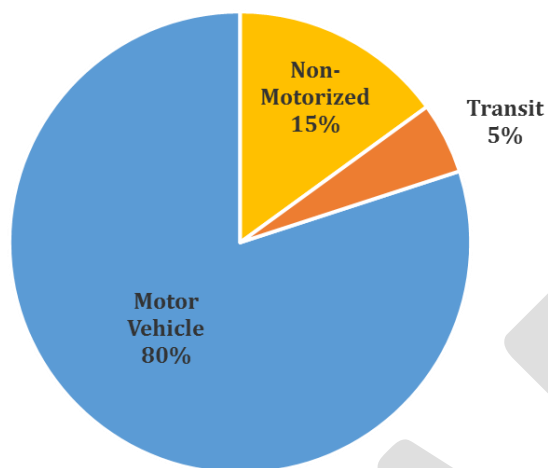
One purpose of the TIP Investment Analysis is to understand whether minority populations are sharing equitably in the TIP's financial investments. The analysis calculates the shares of 2017 TIP investments flowing to the identified communities, and compares those shares with the proportional size of this group's population and trip-making, relative to that of the general population. Understanding travel patterns of minority populations is therefore a key

underpinning of this analysis and a key part of informing the metropolitan planning process as to the mobility needs of minority populations.

Figure 3 shows the distribution by mode of total regional trip making for all Bay Area travelers, compared to the share of trips by mode for minority travelers shown in Figure 4. For complete information and discussion of these trends in the context of the 2017 TIP Investment Analysis, see the full report in Appendix I.

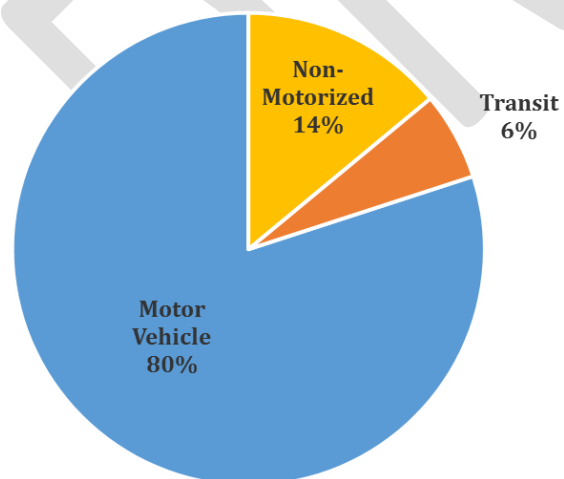
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**Figure 3. Share of Trips by Mode:
Total Population**



Source: Tabulation based on 2012 California Household Travel Survey.

**Figure 4. Share of Trips by Mode:
Minority Population**



Source: Tabulation based on 2012 California Household Travel Survey.

c) *Community-Based Transportation Planning (CBTP) Program*

MTC's CBTP Program evolved out of work done for the 2001 RTP that identified transit needs in low-income communities of concern throughout the San Francisco Bay Area and recommended community-based transportation planning as a first step in addressing these gaps. Because most of these communities of concern are also communities with high concentrations of minority residents, the CBTP Program also helps inform MTC of the mobility needs of minority populations throughout the region. MTC allocated funds for local planning efforts as a way to involve minority and low-income residents in the transportation decision-making process.

Each community-based planning process is a collaborative effort that involves the participation of residents, community-based organizations providing services within low-income and minority neighborhoods, local transit operators, CMAs, and MTC. The outcome of each planning process is a transportation plan that contains community-prioritized transportation needs, as well as solutions to address them. Solutions could include fixed-route transit service or other transportation services such as community shuttles, auto-oriented solutions or bicycle options. Recommendations outlined in the plans are forwarded to transit policy boards and other local agencies for consideration and subsequent incorporation into their planning, funding and implementation decisions.

MTC initially identified 41 low-income communities of concern throughout the Bay Area designated for Community-Based Transportation Planning. Following a pilot phase in 2002 that funded 23 CBTPs (\$60,000 was granted for completing each CBTP), in 2008, MTC approved another \$1,080,000 to complete the remaining 18 plans. In 2016, MTC approved an additional \$1.5 million to update CBTPs that are in some cases more than five years old.

For more information see <http://mtc.ca.gov/our-work/plans-projects/other-plans/community-based-transportation-plans>.

d) *Regional Survey Products*

As part of MTC's regional planning responsibilities, MTC oversees two major regional surveys to inform the planning process with respect to demographic characteristics and travel behavior for various populations within the region.

1. Bay Area Transit Passenger Demographic Survey

In 2012, MTC began a program of collecting consistent demographic and trip data from Bay Area transit passengers. Since then, passengers from 15 transit agencies have been surveyed, and the rest of the region's system is anticipated to be surveyed by 2017. MTC works with transit operators to collect consistent demographic and travel-activity data across all transit systems surveyed.¹⁰ In order to make best use of available funding and resources to support these extensive survey efforts, surveys are being conducted for different systems on a serial basis over time.

Data collected include geographic detail of the transit trip taken and passenger race/ethnicity, age, fare payment information, household income and household vehicle availability. Results of this survey are used in the Transportation Investment Analysis¹¹ to determine transit-investment benefits to low-income and minority populations based on these groups' share of transit use on individual systems and across the region as a whole. The Transit Passenger Demographic Survey also informs the Title VI analysis of PBA 2040 by establishing a consistent demographic profile of the region's overall transit ridership across all systems by minority and non-minority status.

2. Bay Area Household Travel Survey 2012/2013

The Bay Area Travel Survey (BATS) is MTC's periodic regional household travel survey, most recently completed in 2012-2013, and conducted in concert with the California Department of Transportation's statewide California Household Travel Survey (CHTS). The CHTS is an activity-based travel survey that collects information on all in-home and out-of-home activities, including all trips, over a one-day period for approximately 10,000 Bay Area households. The survey provides detailed information on many trip characteristics such as trip purpose, mode, origins and destinations, as well as household demographic and socioeconomic characteristics, and informs development of the regional travel model. In this Program, data on usage of the regional transportation system, the share of trip-making on the region's road and highway system, and different demographic groups comes from CHTS.

¹⁰ Surveys are being conducted on all transit systems claiming funds under the Transportation Development Act (TDA), consistent with those included in MTC's annual Statistical Summary of Bay Area Transit Operators.

¹¹ Operator-collected data was used when recent MTC-collected data was not available, including surveys collected by San Francisco Municipal Transportation Agency and Santa Clara Valley Transportation Authority. Data from MTC's 2007 Transit Passenger Demographic Survey provided information for the remaining six operators. Where appropriate, the 2015 MTC Statistical Summary of Bay Area Transit Operators was used to provide current ridership totals for regional comparisons.

2. Considering Mobility Needs of Minority Populations in the Planning Process

This section describes involvement and consideration of minority populations specifically in the equity analysis of Plan Bay Area and the Investment Analysis of the 2017 TIP. More general discussion of the involvement of minority populations in the planning process and MTC's Public Participation Program can be found in Section III.F of this Program.

a) The Regional Equity Working Group

In spring 2015, MTC and ABAG staff solicited participation by members of MTC's Policy Advisory Council and the MTC/ABAG Regional Advisory Working Group in the formation of a Regional Equity Working Group (REWG). The group first convened in May 2015 and has met frequently throughout the planning process. The primary purpose of the REWG is to advise MTC and ABAG staff on the development of the equity analysis, including identifying equity measures, defining communities of concern and developing the methodology for assessment. The REWG brought together stakeholders from around the region representing low-income and minority communities; seniors and persons with disabilities; staff representing local jurisdictions, transit agencies and county CMAs; public health departments; and community-based organizations and advocacy groups. All REWG meetings are open to the public.

b) MTC Policy Advisory Council

The Policy Advisory Council's Equity and Access Subcommittee (which includes representatives of minority communities within the region) reviewed and commented on staff's proposed methodology for the 2017 TIP Investment Analysis in April 2016,¹² prior to the analysis being carried out and the draft released for public review as part of the overall TIP adoption process.

C. Demographic Maps, Funding Analysis, and Impact Assessment

1. Background

As part of the metropolitan planning process, MTC analyzed both Plan Bay Area and the 2017 TIP investment programs to identify the distribution of Federal and State funds in the aggregate

¹² See the video recording of the April 2016 Policy Advisory Council: <http://mtc.ca.gov/whats-happening/meetings/meetings-archive/policy-advisory-council-14>

between minority and non-minority populations, and analyzed the distribution for any potential disparate impact prior to final adoption. This section describes the methodology and results of these analyses as required by the Circular. Further discussion of these topics and analyses can be found in the Plan Bay Area Equity Analysis Report¹³ and the 2017 Transportation Improvement Program Investment Analysis Report.¹⁴

2. Methodology

In addition to modeling travel and socioeconomic outcomes, based on various land use and transportation investments using equity measures, MTC carried out an off-model analysis of Plan Bay Area 2040's overall transportation investment strategy. This analysis illustrates the distribution of the proposed Regional Transportation Plan investments relative to different population subgroups and communities in the region. In an ongoing effort to ensure equity in the metropolitan transportation planning process, MTC has previously carried out similar analyses of the 2009 RTP (*Transportation 2035*), the 2011 Transportation Improvement Program (TIP), the 2013 Plan Bay Area and TIP, the 2015 TIP, and, most recently, the 2017 TIP.

The Transportation Investment Analysis serves three key functions, including:

- Complying with Title VI regulations (per FTA Circular 4702.1B, issued in October 2012) by conducting an assessment with “charts that analyze the impacts of the distribution of State and Federal funds in the aggregate for public transportation purposes...” and “an analysis of impacts ... that identifies any disparate impacts on the basis of race, color, or national origin...”;
- Complying with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, which directs each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...”; and
- Complying with MTC's own adopted Environmental Justice Principles.

To carry out these functions, the Transportation Investment Analysis relies on three different methodologies described in this section to determine whether Plan Bay Area 2040's investments

¹³ See <http://2040.planbayarea.org/reports>

¹⁴ See <http://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program-tip/2017-tip>

are shared equitably among low-income and minority populations, and to determine whether there is any disparate impact at the regional level on the basis of race, color or national origin. No specific federal standard exists for conducting an environmental justice assessment. Similarly, FTA's Title VI requirements for MPOs do not provide any specific guidelines or benchmarks for MPO Title VI analyses. Finally, there are no established best practices or approved comparative analyses available against which MTC can measure its findings. Therefore, for this analysis, MTC is building on its prior work undertaken in the 2013 PBA investment analysis, and the 2013 and 2015 TIP.

Population/Use-Based Analysis

The population/use-based investment analysis compares the estimated share of investments that benefit low-income and minority populations to the share of their respective use of the transportation system (roadways and transit) and to their respective share of the regional population.

As an example, if a higher share of low-income populations rely disproportionately on the transit system for their access and mobility needs, and if the Draft Plan invests a higher share of revenues in the transit system, then the low-income population will accrue a bigger share of the benefits. This scenario would therefore be considered equitable to low-income populations. In the aggregate, the analysis measures transit and motor vehicle trips using the 2012 CHTS and various transit passenger demographic surveys (TPDSs). The steps involved in conducting the population/use-based analysis include:

1. Using Census data, determine the share of low-income (L0) and minority (M0) population in the region.
2. Using the CHTS and TPDS data, calculate the share of all roadway trips by county and all transit trips by transit operator for low-income (L1 and L2) and minority (M1 and M2) populations.
3. Using the Draft Plan transportation project list, tally the total investments in roadways by county (RR) and transit by operator (TT).
4. For roadway investments, for each county, assign a share of the investment (refer to RR above) to the low-income population (L3) based on their share of roadway trips (refer to L1 above) for that county. Repeat for minority population (M3).

5. For transit investments, for each transit operator, assign a share of the investment (refer to TT above) to the low-income population (L4) based on their share of transit trips (refer to L2). Repeat for minority population (M4).
6. Total the investments (roadway and transit) that were assigned to low-income (L5) and minority (M5) populations.
7. Compare the share of population (L0 and M0) and trips by mode (L1/L2 and M1/M2) to the share of assigned investments (L5 and M5) to assess the level of benefit accrued to low-income and minority populations.

Table 4: Population/Use-Based Analysis

Population	Share of Regional	Share of Roadway	Share of Transit	Share of Roadway	Share of Transit	Share of Total
Low-Income	L0	L1	L2	L3	L4	L5
Minority	M0	M1	M2	M3	M4	M5

At a regional level, while this approach takes advantage of the available data on trips for low-income and minority populations by county and transit operator, it is still a coarse analysis that has the following limitations:

- The analysis does not account for benefits and burdens at the project level. While a roadway project may benefit all users of that facility, the benefits may not necessarily accrue at the same proportion to each population group as their share of all trips in a county where the facility is located.
- The analysis also assumes that the share of trips by mode by a particular population group remains the same in future years, regardless of investments that improve efficiency, safety, capacity or access.
- The analysis does not adjust for the relative size of populations in future years. For example, the share of low-income population in 2040 may or may not be the same compared to 2014.
- Lastly, pedestrian and bicycle projects are assigned to local streets and roads due to a lack of sufficient data on use by income and race/ethnicity, and some regional programs such as the climate initiative were not included in the assessment since they do not fit the roadway or transit categories.¹⁵

¹⁵ For example, the Sonoma-Marín Area Rail Transit service will start in mid-2017, so there is no usage data currently available, even though the plan allocates future funding for the project.

The Title VI analysis is a subset of the population/use-based analysis, which only considers public transit projects that are funded through federal and state sources (described in more detail below).

Project Mapping Analysis

To supplement the population/use-based analysis described above, MTC mapped all roadway and transit projects to show the spatial distribution of projects relative to communities of concern (CoCs) and census tracts with a concentration of minority populations. This analysis only presents data visually. It does not use a metric to estimate the potential benefit or burden of each project on disadvantaged communities. It also does not include projects that cannot be mapped. For example, a substantial share of total funding in the Draft Plan is dedicated to transit operations, but this investment cannot be mapped as a project because each transit operator serves a fairly large geographic area rather than a point on a map.

This qualitative assessment involves examining the distribution of projects for any indication of systematic exclusion of CoCs or minority communities in the distribution of benefits. It also involves examining the distribution of projects for any systematic imbalances within the distribution of projects between CoCs and the remainder of the region, or between minority and non-minority communities. The analysis for minority populations satisfies one component of the Title VI analysis of the Draft Plan, as described below.

Title VI Compliance

Federal Transit Administration (FTA) released updated guidance in October 2012 specifying how MPOs such as MTC must demonstrate compliance with Title VI of the Civil Rights Act of 1964 and DoT's Title VI regulations in the metropolitan planning process. This section describes the methodology for conducting the analysis that demonstrates compliance with these requirements, including the methodology for conducting a disparate impact analysis.

Table 5: FTA Requirements for Title VI Analysis

FTA Requirement	Related Plan Bay Area 2040 Analysis
“Demographic maps that overlay the percent minority and non-minority populations as identified by Census or ACS data ...”	Project mapping analysis that overlays projects that can be mapped over above-regional-average concentrations of minority residents.
“[C]harts that analyze the impacts of the distribution of State and Federal funds in the aggregate for public transportation purposes...”	Population/use-based analysis of public transit investments using state and federal funding sources.
“An analysis of impacts identified in paragraph [above] that identifies any disparate impacts on the basis of race, color, or national origin” ¹⁶	Disparate impact analysis comparing Plan Bay Area 2040 investments per capita and per rider for minority and non-minority populations.

Because the plan covers a long time horizon and includes many types of fund sources the disparate impact analysis shows all transit investments overlaid against minority tracts, regardless of fund source. MTC will continue to investigate the feasibility of updating future RTP project databases and/or travel model parameters to include more specific fund source information in light of these FTA requirements. MTC does have the data to distinguish between public transportation investments that receive state and federal funds for the population/use-based analysis.

The state and federal fund sources included in the Title VI analysis are:

- *Transit Operating* – State Transit Assistance (revenue- and population-based), FTA Sections 5307 and 5311, Low Carbon Transit Operations Program (Cap and Trade);
- *Transit Capital (Replacements)* – FTA Sections 5307, 5340, 5311, 5337, and 5339, FHWA Ferry Boat Program, FTA Passenger Ferry Grant Program, FTA Bus and Bus Facilities Discretionary Program, STP/CMAQ, Anticipated; and

¹⁶ FTA Circular 4702.1B, page VI-2. See: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Title_VI_FINAL.pdf.

- *Transit Capital (Expansions)* – FTA Section 5309, STP/CMAQ, Transit and Intercity Rail Program (Cap and Trade), Affordable Housing and Sustainable Communities Program (Cap and Trade), High Speed Rail, Anticipated.

To conduct the disparate impact analysis, the results of the population/use-based analysis of public transit investments using state and federal funds are assigned to minority and non-minority populations on a per capita and per-rider basis. A comparison of the per capita and per-rider investments for the two groups determines whether there is any disparate impact.

Although FTA does not provide specific guidance or standard benchmarks for MPOs to use in the metropolitan planning process to determine whether any given result represents a disparate impact, a general practice in disparate impact analysis is to use the percentage result to determine whether any differences between benefits for minority or non-minority populations may be considered statistically significant. If a disparate impact is found to be statistically significant, consideration must then be given to “whether there is a substantial legitimate justification for the policy that resulted in the disparate impacts, and if there are alternatives that could be employed that would have a less discriminatory impact.”¹⁷

3. Results: Demographic Mapping Analysis

The second part of the investment analysis is to map the location of transit and roadway projects included in the Draft Plan, overlaid with census tracts that are designated as CoCs and have a higher-than-regional-average (>59 percent) concentration of minority populations. The purpose of this analysis is to qualitatively assess the spatial distribution of projects for any apparent systematic exclusion of CoCs or minority populations at a regional level, or for any apparent systematic imbalances between the distribution of projects between CoCs and the remainder of the region, or between minority and non-minority populations. This assessment is intended to provide a regional-level analysis of the Draft Plan’s investments. Individual projects will be subject to their own Title VI and environmental justice analyses during implementation, as required under federal and state laws.

For the analysis of minority populations, the project layers from Maps 43 and 44 are overlaid with census tracts in the region that have a higher-than-regional-average (>59 percent) concentration of minority populations. As with the CoC analysis, there is a strong relationship

¹⁷ Ibid.

between the spatial distribution of investments in the Draft Plan and minority tracts. Based on this assessment, there does not appear to be any systematic exclusion of communities from Plan investments on the basis of minority status, or imbalances in the distribution of projects between minority and non-minority communities.

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4. Results: Charts That Analyze the Impacts of the Distribution of State and Federal Funds in the Aggregate for Public Transportation Purposes

To create charts illustrating the impacts of the distribution of State and Federal funds in the aggregate for public transportation purposes, a population/use-based analysis was carried out on both Plan Bay Area and the 2017 TIP. This section provides the results of those analyses.

a) Results: Plan Bay Area

The first step in the analysis is to identify the combined share of federal and state transit investments in Plan Bay Area 2040 (see table below). The investments included in the plan total \$303.5 billion over a 24-year period, for a wide range of projects that include express lanes, freight improvements, active transportation programs and transit operations. Of the total plan investments, \$203.5 billion are allocated to transit operations, maintenance, modernization and expansion. Transit is by far the largest investment made in Plan Bay Area 2040. Of the total transit investments, 18 percent (or \$53.4 billion) comes from various federal and state sources. The Title VI analysis in this Program is conducted on this amount (i.e., \$53.4 billion).

Table 6: Sources of Funding by Mode of Transportation, Plan Bay Area 2040

	Total	Federal and State		Local / Other	
	\$ million	\$ million	%	\$ million	%
Roadway / Bridge	\$88,701	\$29,220	33%	\$59,482	67%
Bicycle and Pedestrian	\$5,150	\$1,325	26%	\$3,825	74%
Freight	\$2,743	\$1,938	71%	\$805	29%
Other Programs	\$3,401	\$1,072	32%	\$2,329	68%
Public Transit	\$203,449	\$53,362	26%	\$150,087	74%
Plan Bay Area 2040 Investments	\$303,445	\$86,917	29%	\$216,528	71%

Source: MTC Analysis of Plan Bay Area 2040 Investments

Since this analysis relies on ridership data by race/ethnicity for each transit operator,¹⁸ the assessment is further limited to only those operators for whom this information is available

¹⁸ Ridership data by race/ethnicity is available for 24 of the 27 transit operators in the Bay Area. Data is not available for Amtrak (\$92 million), City of Dixon (\$17 million) and the Sonoma-Marín Area Rail Transit (SMART)

through a transit passenger survey (either conducted by the transit operator or MTC). This subset of the total federal and state transit funding for which data is available is \$43.6 billion, or 82 percent of the total.

Next, federal and state investments in transit are allocated to minority and non-minority populations using the same methodology used in the transportation investment analysis (the population/use-based analysis) outlined in Chapter 5 of the Plan Bay Area 2040 Equity Analysis Report. Essentially, federal and state investments are broken out by transit operator and allocated to minority or non-minority populations, based on their respective shares of ridership on that particular transit system. The allocations by transit operator are then added to provide the total federal and state funding that is allocated to minority and non-minority populations. This allocation of funding to minority and non-minority populations based on their use of various transit systems constitutes “benefit.” The results for each subgroup are compared to estimate the relative benefit accrued to minority and non-minority populations.

Table 7: Summary of Population/Use-Based Analysis for Federal and State Transit Funding

Population	Share of Population	Share of Transit Ridership	Investments (\$ million)		Share of Investments (%)	
			PBA 2040	Federal/State Transit	PBA 2040	Federal/State Transit
Minority	59%	62%	\$117,386	\$25,797	61%	59%
Non-Minority	41%	38%	\$76,557	\$17,850	39%	41%

Source: 2010-2014 American Community Survey, 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, MTC’s Analysis of Plan Bay Area Investments

Finally, investments are distributed on a per capita and a per-rider basis, so that investment benefits allocated to the region’s minority populations and riders can be compared to investment benefits allocated to the region’s non-minority populations and riders. The results from this analysis are summarized in the tables below.

Following FTA guidance, MTC’s disparate impact analysis of plan investments reveals that, on a per-capita basis, minority populations in the region would receive 59 percent of Plan Bay Area 2040’s investment benefits for public transit using federal and state sources, compared to 41 percent for non-minority populations. The share of investment benefits based on a per capita

(\$623 million). Data is also not available for the California High Speed Rail project (\$8.5 billion). These amounts are therefore not included in the population/use-based analysis.

basis is proportional to the share of minority (59 percent) and non-minority (41 percent) populations in the region. On a transit-ridership basis, minority transit riders would again receive 59 percent of the benefit, compared to 41 percent for non-minority transit riders. The share of investment benefits based on a per-rider basis is proportional to the share of minority (62 percent) and non-minority (38 percent) transit ridership.

Table 8: Disparate Impact Analysis Results, Population-Based

	Population (2014)		Federal and State Transit		Per capita
	#	%	\$ millions	%	\$
Minority	4,305,728	59%	\$25,797	59%	\$5,991
Non-Minority	3,033,324	41%	\$17,850	41%	\$5,885

Source: 2010-2014 American Community Survey, 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, MTC investment analysis

Table 9: Disparate Impact Analysis Results, Ridership-Based

	Ridership		Federal and State Transit		Per-Rider Benefit
	#	%	\$ millions	%	\$
Minority	998,992	62%	\$25,797	59%	\$25.82
Non-Minority	616,075	38%	\$17,850	41%	\$28.97

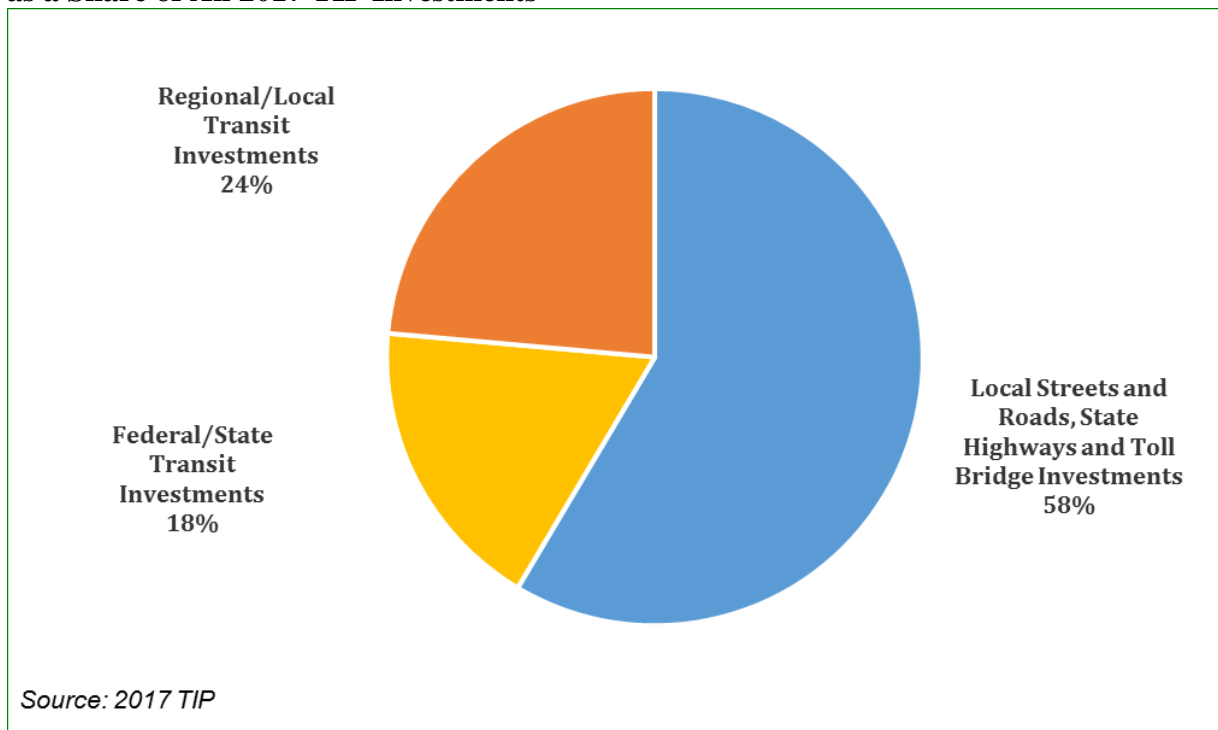
Source: 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, MTC investment analysis

Based on the results presented in the tables above, MTC concludes that the Draft Plan is in compliance with Title VI of the Civil Rights Act of 1964 for the distribution of federal and state transit funds.

b) Results: 2017 Transportation Improvement Program

The following summarizes the results from the Investment Analysis in 2017 TIP. First, Federal and State funding sources for public transportation are separated out from the \$6.3 billion in total 2017 TIP investments, representing 18% of the total (\$1.1 billion) as illustrated in Figure 5.

Figure 5. Public Transportation Investments from Federal and State Sources as a Share of All 2017 TIP Investments



Next, using the population/use based investment analysis methodology described above, the \$1.1 billion in the 2017 TIP's public transportation investments using Federal and State sources is attributed to minority and non-minority transit riders based on their respective shares of ridership among the various Bay Area transit agencies, and total investment shares are compared to the region's overall transit ridership and populations as a whole, as shown in Table 10.

Table 10. 2017 TIP Federal and State Transit Investments by Minority Status

Subgroup	Total Federal/ State Transit Funding (\$Millions)	% of Total Federal/ State Transit Funding	% of Regional Transit Ridership	% of Total Regional Population
Minority	\$660	58%	61%	59%
Non-minority	\$469	42%	39%	41%
Total	\$1,129	100%	100%	100%

Source: MTC analysis of 2017 TIP investments, *Transit Passenger Demographic Survey (MTC)*, *SFMTA Transit Passenger Demographic Survey*, *VTA Transit Passenger Demographic Survey*, *BART 2014 Customer Satisfaction Survey*, *2006-2007 Regional Transit Passenger Demographic Survey (Godbe Research)*, 2014 American Community Survey Table C03002.

At 58%, benefits accrued to minority populations from Federal and State transit funding may be lower than their share of the region's population (at 59%) and transit ridership (at 61%), but that does not demonstrate a systematic dis-benefit to minority populations since the difference in percentage points for share of population and ridership is 1% and 3%, respectively (see Table 10 above).

D. Analysis of the MPO's Transportation System Investments That Identifies and Addresses Any Disparate Impacts

To conduct the disparate impact analysis, the results of the population/use-based analysis of public transportation investments using State and Federal funds in the preceding section are first expressed in terms of investments per capita for both minority and non-minority transit riders (or total population) in the region as follows:

$$\text{Minority benefit per capita} = \frac{\text{Total transit investments allocated to minority riders}}{\text{Total regional minority transit ridership (or population)}}$$

$$\text{Non-minority benefit per capita} = \frac{\text{Total transit investments allocated to non-minority riders}}{\text{Total regional non-minority transit ridership (or population)}}$$

Next, the minority and non-minority per-capita benefit results are compared, expressing the minority benefit per capita as a percentage of the non-minority benefit per capita:

$$\text{Result (\%)} = \frac{\text{Minority benefit per capita}}{\text{Non-minority benefit per capita}}$$

Although the Circular does not provide specific guidance or standard benchmarks for MPOs to use in the metropolitan planning process to determine whether any given result represents a disparate impact, a general practice in disparate impact analysis is to use the percentage result to determine whether any differences between benefits for minority or non-minority populations may be considered statistically significant. If a disparate impact is found to be statistically significant, consideration must then be given to “whether there is a substantial legitimate justification for the policy that resulted in the disparate impacts, and if there are alternatives that could be employed that would have a less discriminatory impact.”¹⁹

¹⁹ FTA Circular 4702.1B, page VI-2.

1. Disparate Impact Analysis Results: Plan Bay Area

The distribution of investment benefits accruing to the region's minority and non-minority populations and riders are shown in Table 11 and Table 12, respectively, along with the relevant comparisons to evaluate for any disparate impact.

Table 11. Disparate Impact Analysis of Plan Bay Area Federal and State Transit Investments: Population Analysis

Subgroup	Total Federal/ State Transit Funding (Millions of YOE \$)	Regional Population (2010)	Per- Capita Benefit	Minority Per- Capita Benefit as % of Non- minority Per- Capita Benefit
Minority	\$24,147	4,117,836	\$5.86	120%
Non-minority	\$14,877	3,032,903	\$4.91	--
Total	\$39,025	7,150,739		--

Source: MTC analysis of Plan Bay Area investments, 2006 Transit Passenger Demographic Survey, 2010 Census SF1.
Note: Totals may not sum due to rounding.

Table 12. Disparate Impact Analysis of Plan Bay Area Federal and State Transit Investments: Ridership Analysis

Subgroup	Total Federal/ State Transit Funding (Millions of YOE \$)	Avg. Daily Transit Ridership (2006)	Per- Rider Benefit	Minority Per- Rider Benefit as % of Non- minority Per- Rider Benefit
Minority	\$24,147	816,059	\$29.59	99%
Non-minority	\$14,877	498,303	\$29.86	--
Total	\$39,025	1,314,362		--

Source: MTC analysis of Plan Bay Area investments, 2006 Transit Passenger Demographic Survey, MTC Statistical Summary for Bay Area Transit Operators.
Note: Totals may not sum due to rounding.

On a per-capita population basis, Table 11 shows minority persons in the region are receiving 120% of the benefit of Plan Bay Area's investments in public transportation from Federal and State sources compared to non-minority persons. On a ridership basis, Table 12 shows that minority riders are receiving 99% of the benefit of Federal- and State-funded transit investments in Plan Bay Area compared to non-minority riders. This 1% difference between minority and non-minority per-rider benefits is not considered statistically significant, and therefore this

analysis finds no disparate impact in the distribution of Federal and State funding for public transportation purposes between minority and non-minority populations or riders in the draft Plan Bay Area investment strategy.

2. Disparate Impact Analysis Results: 2017 Transportation Improvement Program

The distribution of investment benefits accruing to the region's minority and non-minority populations and riders are shown in Table 13 and Table 14, respectively, along with the relevant comparisons to evaluate for any disparate impact.

Table 13. Disparate Impact Analysis of 2017 TIP Federal and State Transit Investments: Population Analysis

Subgroup	Total Federal/ State Transit Funding (\$Millions)	Regional Population	Per- Capita Benefit	Minority Per- Capita Benefit as % of Non- minority Per- Capita Benefit
Minority	\$660	4,497,334	\$147	96%
Non-minority	\$469	3,064,421	\$153	--
Total	\$1,129	7,561,755		--

Source: MTC analysis of 2017 TIP investments, *Transit Passenger Demographic Survey (MTC)*, *SFMTA Transit Passenger Demographic Survey*, *VTA Transit Passenger Demographic Survey*, *BART 2014 Customer Satisfaction Survey*, *2006-2007 Regional Transit Passenger Demographic Survey (Godbe Research)*, 2014 American Community Survey Table C03002.

Table 14. Disparate Impact Analysis of 2017 TIP Federal and State Transit Investments: Ridership Analysis

Subgroup	Total Federal/ State Transit Funding (\$Millions)	Avg. Daily Transit Ridership (2006)	Per- Rider Benefit	Minority Per- Rider Benefit as % of Non- minority Per- Rider Benefit
Minority	\$660	990,834	\$666	89%
Non-minority	\$469	624,234	\$752	--
Total	\$1,129	1,615,067		--

Source: MTC analysis of 2017 TIP investments, *Transit Passenger Demographic Survey (MTC)*, *SFMTA Transit Passenger Demographic Survey*, *VTA Transit Passenger Demographic Survey*, *BART 2014 Customer Satisfaction Survey*, *2006-2007 Regional Transit Passenger Demographic Survey (Godbe Research)*, MTC Statistical Summary for Bay Area Transit Operators.

The disparate impact analysis indicates that the share of Federal and State transit investments distributed to minority populations varies as compared to their respective shares of regional transit ridership and regional population. On a per-capita population basis, Table 13 shows

minority persons in the region are receiving 96% of the benefit of the TIP's investments in public transportation from Federal and State sources compared to non-minority persons. On a per-rider basis, Table 14 shows that minority riders are receiving 89% of the benefit of Federal- and State-funded transit investments in the TIP compared to non-minority riders. It is important to note, however, that the TIP does not reflect the full picture of transportation investments in the Bay Area over the long-term. As noted above, the TIP only includes four years of near-term fund programming. Also, since the TIP primarily documents projects that require federal actions or use federal funds, it tends to include more large capital projects than operating and maintenance programs, particularly for transit. Additionally, funding shown in the TIP is included in the year that project phases begin or are obligated and does not reflect the actual flow of funding and expenditures within these phases. While rehabilitation programs will have their funding spread across many years, large capital projects tend to have their funding lumped into a shorter period even if the funds will actually be expended over a number of years, some of which may be outside the scope of the TIP. When compared to the investments described in the Plan, the 2017 TIP only reflects about 15% of the average annual transportation spending in the Bay Area.

An example of the issues described above is the fact that the 2017 TIP Investment Analysis is heavily influenced by two projects, BART's Railcar Procurement Program and Caltrain's Electrification project, as these projects have large capital phases that are beginning in the near future. Together, these projects account for over one third of all transit funding in the 2017 TIP as adopted. As BART and Caltrain are used by a lower proportion of minority riders than the regional average for transit riders, the results of the analysis show lower investments benefiting minority riders. That said, BART ridership approximately mirrors the regional demographics for minority populations on a percentage basis, and it carries large numbers of such groups in numerical terms. Prior iterations of the TIP Investment Analysis that showed a less variable distribution have been influenced by other large capital projects, such as SFMTA's Central Subway project and VTA's BART Warm Springs to Berryessa Extension project that are still ongoing, but in the current TIP period require less funding action. Additionally, approximately \$2 billion in federal transit formula funding for FY2016-17 through FY2019-20 had yet to be programmed at the time that this analysis was performed on the 2017 TIP. While BART and Caltrain will still receive a large portion of these funds, the program will also distribute funds to a wider variety of transit operators.

VI. CLIPPER® FARE PAYMENT SYSTEM

The Clipper® Program is a fare payment system based on smart card technology that is used to pay fares on transit systems throughout the Bay Area. The Clipper card is currently accepted on 21 Bay Area transit operators, including the Alameda-Contra Costa Transit District (AC Transit); Golden Gate Bridge Highway and Transportation District (GGBHTD); the San Francisco Bay Area Rapid Transit District (BART); the City and County of San Francisco Municipal Transportation Agency (SFMTA); the San Mateo County Transit District (SamTrans); the Santa Clara Valley Transportation Authority (VTA); the Peninsula Corridor Joint Powers Board (Caltrain); Central Contra Costa Transit Authority; City of Fairfield, as the operator of Fairfield and Suisun Transit; City of Petaluma; Eastern Contra Costa Transit Authority; Livermore/Amador Valley Transit Authority; Marin County Transit District; Napa County Transportation and Planning Agency; Solano County Transit; Sonoma County Transit; Vacaville City Coach; Western Contra Costa Transit Authority; San Francisco Bay Area Water Emergency Transportation Authority; City of Santa Rosa; and City of Union City. In summer 2017, the new Sonoma Marin Area Rail Transit system will become the 22nd operator to accept Clipper®.

MTC is authorized by state statute²⁰ to adopt rules and regulations to promote the coordination of fares and schedules for all public transit systems within its jurisdiction and to require every system to enter into a joint fare revenue sharing agreement with connecting systems. Pursuant to this statute, MTC adopted a Transit Coordination Implementation Plan (MTC Resolution 3866) which required certain Bay Area transit operators to implement, operate and promote the Clipper® fare payment program as their primary fare payment systems.

Transit operators participating in the Clipper® program are responsible for establishing their own fare policies, and would ordinarily be responsible for conducting the fare and service change Title VI analyses required by the Circular. However, since MTC mandated the transition to Clipper®, MTC undertook a Title VI analysis of the Clipper® transition in compliance with Chapter IV, Section 7 of the Circular. MTC reported on the result – the *Final Title VI Summary Report, Clipper® Fare Media Transitions (Final Summary Report)* – in its 2014 Title VI Program.

MTC did not impose any additional card fees or require any transit operators to transition fare media to Clipper® for the period covered by this Program.

²⁰ California Government Code § 66516.

MTC regularly conducts community and operator outreach efforts related to the Clipper[®] program. A summary of outreach efforts related to the Clipper[®] program is attached as Appendix M.

VII. GLOSSARY

ABAG	Association of Bay Area Governments
AC Transit	Alameda-Contra Costa Transit District
ACS	American Community Survey
BAAQMD	Bay Area Air Quality Management District
BAHA	Bay Area Headquarters Authority
BAIFA	Bay Area Infrastructure Financing Authority
BART	San Francisco Bay Area Rapid Transit District
BATA	Bay Area Toll Authority
Bay Area	The nine-county San Francisco Bay Area, including Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma Counties
Bay Area Partnership	A confederation of the top staff of various transportation agencies in the region (MTC, public transit operators, CMAs, city and county public works departments, ports, Caltrans, US DOT) as well as environmental protection agencies.
BCDC	Bay Conservation and Development Commission
Caltrain	Peninsula Corridor Joint Powers Board
Caltrans	California Department of Transportation
CBTP	Community Based Transportation Plan
CCTA	Contra Costa Transportation Authority
Circular	Federal Transit Administration Circular 4702.1B

Clipper®	A card that can be used to pay fares electronically on the Bay Area's transit systems
CMA	Congestion Management Agency
CMAQ	Congestion Mitigation and Air Quality Improvement
Coordinated Plan	MTC's Coordinated Public Transit/Human Services Transportation Plan
FasTrak®	Electronic toll collection system
FHWA	Federal Highway Administration
FSP	Freeway Service Patrol
FTA	Federal Transit Administration
GGBHTD	Golden Gate Bridge, Highway and Transportation District
FY	Fiscal Year
JARC	Job Access Reverse Commute
LAVTA	Livermore Amador Valley Transit Authority
LEP	Limited English Proficient
Lifeline	Lifeline Transportation
MAP-21	Moving Ahead for Progress in the 21 st Century Act
MPO	Metropolitan Planning Organization
MTC	Metropolitan Transportation Commission
PAC	Policy Advisory Council
Plan Bay Area	The region's first long-range integrated transportation and land-use/housing strategy that guides growth and policy decisions through 2040, consistent with Senate Bill 375; also the 2013 RTP.
PMP	Program Management Plan

PPP	Public Participation Plan
RTP	Regional Transportation Plan
SAFE	Metropolitan Transportation Commission Service Authority for Freeways and Expressways
SamTrans	San Mateo County Transit District
SFCTA	San Francisco County Transportation Authority
STA	State Transit Assistance
STP	Surface Transportation Program
Subrecipient	Any entity that receives FTA financial assistance as a pass-through from another entity.
TDA	Transportation Development Act
TIP	Transportation Improvement Program
Title VI	Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. § 2000d et seq.)
US DOT	United States Department of Transportation
VTa	Santa Clara Valley Transportation Authority

Clipper Activities, October 2016 to June 2017

SFMTA Fare Differential Campaign

MTC worked closely with SFMTA on a campaign to promote the new fare differential on Muni, effective January 1, 2017 – adult customers can now receive a 10 percent discount on single rides if they pay their fares with Clipper instead of cash (youth, senior and disabled riders will receive a 20 percent discount). We conducted a pre-campaign round of outreach events in October-November and launched a broader campaign on January 3. The campaign included:

Advertising: A four-week advertising campaign ran throughout January featuring pre-roll video –a short, 30-second animated spot that ran before people watched selected online video content – plus a banner ad that ran on targeted websites. We supplemented these with additional ads on Facebook. The 30-second spot is on Clipper’s YouTube channel: <https://youtu.be/omQ9Aj4st8M>. Subtitled versions were produced in Spanish, Chinese and Vietnamese.

Outreach: We completed 62 outreach events in October-November 2016 and January 2017, deploying two-person teams on “ride-alongs” (teams will actually ride the bus) and at intersections where multiple bus lines in targeted neighborhoods connect to distribute free cards and educate customers about using Clipper. We distributed a total of 1,469 cards and answered questions for and otherwise assisted 8,609 riders (see Table 1 for distribution by event). Usage was relatively low in the three months following the outreach events (see Table 2). We produced a take-one, a card sleeve and a handout showing retailer locations to support the outreach.



Card Sleeve

SAVE MONEY ON MUNI!

Muni cash fares are going up in January. Avoid the fare increase—get a reloadable Clipper card.

Clipper customers save 25¢ on all Muni single rides starting January 1.

You can add any amount of cash value you choose to your Clipper card at local retailers, ticket machines, online or by phone.

Clipper is accepted on all major Bay Area transit. Find out all our money-saving tips with Clipper at clippercard.com.

Take-one

¡AHORRE DINERO EN MUNI!

Las tarifas en efectivo de Muni aumentarán en enero. Evite el aumento de tarifa, obtenga una tarjeta Clipper recargable.

Los clientes de Clipper ahorran 25¢ en todas las rutas de Muni a partir del 1 de enero.

Puede agregar cualquier monto en efectivo que elija a su tarjeta Clipper en tiendas locales, máquinas de boletos, en línea o por teléfono.

Se acepta Clipper en los sistemas de transporte público principales del Área de la Bahía. Vea más maneras de ahorrar con Clipper en clippercard.com.

clippercard.com | 877.878.8883
TDD/TTY: 711 or 800.735.2929

Educational Materials: We developed a car card in four languages and provided SFMTA with 3,050 to post at no charge. We produced 5” X 5” decals to replace the fading and torn ones currently on Muni Metro ticket machines; copy promotes the fare differential and is in multiple languages. We created new signage for 97 Clipper retailers in San Francisco: indoor/outdoor 4’ X 2’ banners and indoor 2’ X 3’ signs that retailers can display as well as new decals.

使用 Clipper (路路通) 可省錢!

► 為單程優惠增加現金價值
► 為頻繁乘車優惠增加通行證

Car Card

獲得一張 Clipper (路路通) 卡，並可在以下地點充值：

- Walgreens
- Whole Foods Market
- 其他零售商
- Muni 售票機
- clippercard.com

CLIPPER 您的綜合交通卡

clippercard.com | 877.878.8883

Save with Clipper!

- Get discounts on Muni
- Reload cash value or passes
- Use it on all Bay Area public transit

Ticket Machine Decal

Obtenga una tarjeta Clipper para adultos o agregue valor a su tarjeta Clipper para niños o estudiantes.

Mua thẻ Clipper người lớn hoặc thẻ tiền vào thẻ tại đây.

여객에서 성인용 Clipper 카드를 구매하거나 금액을 충전하십시오.

Kumuhua ng adult Clipper card o magdagdag ng halaga dito.

Здесь можно купить или пополнить взрослую карту Clipper.

clippercard.com | 877.878.8883 | TDD/TTY: 711 or 800.735.2929

Table 1: Results of SFMTA Fare Differential Outreach Activities

Event	Route#	Route Name	Cards Distributed	Customer Contacts
1	14/14L	Mission	78	198
2	9/9L	San Bruno	20	68
3	47	Van Ness	13	162
4	31	Balboa	3	48
5	38	Geary	38	88
6	28/28L	19th Ave.	13	209
7	29	Sunset	29	82
8	24	Divisadero	16	217
9	27	Bryant	8	64
10	49	Van Ness/Mission	22	205
11	14/14L	Mission	45	208
12	23	Monterey	20	75
13	8/8A/8X	Bayshore Express	6	120
14	28/28L	19th Ave.	17	194
15	5	Fulton	14	191
16	54	Felton	9	110
17	12	Folsom-Pacific	7	58
18	9/9L	San Bruno	1	22
19	17	Parkmerced	26	64
20	19	Polk	3	56
21	108	Treasure Island	23	206
22	44	O'Shaughnessy	20	72
23	28/28L	19th Ave.	11	209
24		Daly City BART	26	83
25	29	Sunset	14	196
26	14/14L	Mission	60	131
27	19	Polk	24	67
28	108	Treasure Island	28	188
29	14/14R	Mission	24	205
30		Silver/San Bruno or Bayshore	16	260
31		Van Ness/Sacramento	2	22
32		Geary	14	72
33	38	McAllister/Divisadero	32	140
34		Geneva/Mission	35	186
35		Geary/Park Presidio	19	64
36		Balboa Park	37	135
37		Visitacion/3rd	23	266
38		Geary/25th	19	73
39	29	Sunset	28	122
40		Mission/30th	20	340
41	28/28R	19th Ave.	4	14
42		Mission/30th	5	51
43	14/14R	Mission	46	310
44		Daly City	39	205
45		Potrero/16th	10	107
46		Silver/Mission	20	63
47		Mission/Cesar Chavez	5	29
48		3rd/Palou	27	255

49		Mission/24th	42	230
50	28/28R	19th Ave.	33	135
51		Mission/16th	13	79
52	29	Sunset	17	172
53		Geary/25th	31	198
54		3rd/Evans	23	141
55		Potrero/24th	30	105
56		Fillmore/Hayes-Haight	75	225
57		Geneva/Mission	23	171
58		Mission/16th	79	250
59		Mission/24th	31	115
60	38	Geary	22	134
61	14/14R	Mission	11	54
62		Balboa Park	20	90
		TOTAL	1,469	8,609

Table 2: 3-Month Usage of Cards Distributed in SFMTA Fare Differential Outreach

	Cumulative Results
# Events	28
# Cards distributed	594
Fare Payment Transactions (Usage)	
# Unique cards used for fare payment	47
% Cards used for fare payment	8%
# Fare payment transactions	2,948
# Fare payments per card distributed	4.96
Add Value Transactions (Loads)	
# Add value transactions (all)	837
# Autoload transactions	2

Future of Clipper, Phase 2

MTC developed a plan for Phase 2 of public engagement on C2, the next-generation Clipper system, taking place through 2017. Phase 1 was completed in fiscal year 2014-15 and included an online opt-in survey, selected stakeholder interviews, presentations at regional and transit agency advisory group meetings, and opportunities to submit comments via email and phone. It also included creation of the FutureofClipper.com website, in multiple languages, as the central resource for public engagement opportunities for Clipper and to let people know that they can provide input into the design of the next-generation Clipper system on an ongoing basis.

For Phase 2, MTC is providing multiple opportunities for members of the public to provide feedback. They include:

- **Public Comment on Draft Request for Proposals (RFP):** MTC released a draft RFP for the vendor that will serve as system integrator, responsible for coordinating all vendors delivering the new system. MTC invited the payments industry to comment on the draft RFP before releasing the final version later this year. MTC opened the comment opportunity to members of the public as well, from February 27 to April 3, 2017. MTC prepared a summary of main characteristics from the draft RFP in English, Spanish, Chinese and Vietnamese.

While MTC is still conducting a detailed analysis, high-level results are that more than 100 people submitted comments (most through email), and the most commented-on topics addressed fare policy, real-time add-value transactions (currently, there is a delay to add value online), integration with other programs (such as tolls or bike share), and other fare media (like mobile phones).

- **Online Opt-In Survey:** MTC's online survey for customers to provide input on the next generation of Clipper opened on April 17 and closed on June 1. The survey received more than 11,000 responses compared to 7,600 responses in 2014. While staff prepares to analyze and package these results to share with transit operators and the public, they are also tackling the next set of activities in the C2 public engagement process. This includes meeting with stakeholder groups and preparing to conduct interviews with individual stakeholders. Interviews and meetings cover topics ranging from accessibility to low-income access to transit benefit integration. Staff welcomes suggestions about individuals or groups who should be contacted for stakeholder interviews. Please send suggestions to Lysa Hale at lhale@mtc.ca.gov or call 415-778-5284.
- **Next Phase:** The next phase also includes a survey of cash customers, to be conducted in September. The goal of this survey is to better understand who is still paying with cash, what they know about Clipper and why they choose to use cash instead of Clipper. We plan to incorporate relevant results into our near-term communications efforts as well as development of C2 over the long term.
- **Website:** The FutureofClipper.com website has been continually updated (in four languages) with information about past, current and future public input opportunities.

Community-Based Organization Free Card Distribution

As a policy, MTC provides cards with no fee to community-based organizations serving low-income and limited English-proficient individuals. Normally the per-card fee is \$3. Since October 2016, MTC has approved the distribution of free cards to the following organizations:

Organization	Quantity
County of San Mateo Human Services	100
Newcomers Health Program	50
John Muir Health low-income program	20
Rubicon Programs	25
Oakland Housing Authority	2
Year Up	30
LCS Inc.*	TBD
Our Road Prison Project	30
New Door Ventures	260
Teach for America	14

*These organizations have requested and received approval to order on an ongoing basis.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 17-2688 **Version:** 1 **Name:**
Type: Report **Status:** Informational
File created: 6/6/2017 **In control:** Policy Advisory Council
On agenda: 7/12/2017 **Final action:**
Title: MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040
(45 minutes)

Presentation of revisions to the Draft Plan.

Sponsors:

Indexes:

Code sections:

Attachments: [06_MTCResNo4300_ABAGResNo10-17_Final_PBA2040_Cover_Memo.pdf](#)
[6_MTC_ResNo4300_and_ABAG_ResNo10-17_Final_PBA_2040.pdf](#)
[6_FinalPBA40_PPT.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
(45 minutes)

Presentation of revisions to the Draft Plan.

Presenter:

Ken Kirkey

Recommended Action:

Information

Attachments



METROPOLITAN
TRANSPORTATION
COMMISSION

Agenda Item 6

Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105
TEL 415.778.6700
WEB www.mtc.ca.gov

Memorandum

TO: Policy Advisory Council

DATE: July 5, 2017

FR: Dave Vautin and Matt Maloney, MTC

RE: MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040

Policy Advisory Council Agenda Item 6 on MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040 will be provided on July 10th and will be presented to this month's Joint MTC Planning Committee with the ABAG Administrative Committee, which will meet on July 14, 2017.

MTC staff will be at your July 12 meeting to discuss MTC Resolution No. 4300 and ABAG Resolution No. 10-17 - Final Plan Bay Area 2040. The item will go before the MTC Commission and the ABAG Executive Board for final approval on July 26, 2017 at 7:00 p.m.

Attachment

DV & MM

J:\COMMITTEE\Policy Advisory Council\Meeting Packets\2017\07_Poli Adv Coun_July
2017\06a_MTCResNo4300_ABAGResNo10-17_Final_PBA2040_Cover_Memo.docx



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

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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

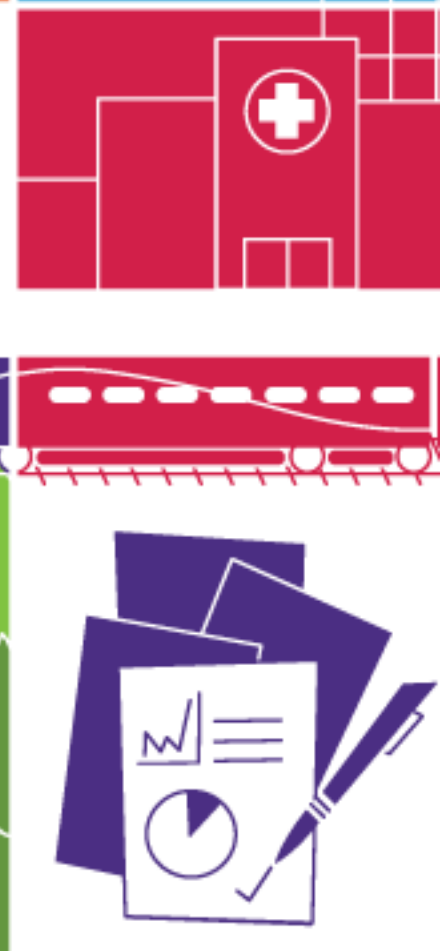


Plan Bay Area 2040

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.

TABLE 4.9 Results of Plan Bay Area 2040 target assessment.
<i>Staff note: Table available on Plan Bay Area 2040 website and in plan document.</i>
<u>Source:</u> Metropolitan Transportation Commission, 2016

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 <u>transportation</u> funding sources (including planning grants), with particular emphasis on housing affordable to very low-, low- and moderate-income households as well as <u>anti-displacement and community stabilization</u> . 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</u> affordable to low- and moderate-income households, guidance on housing preservation and <u>locally appropriate</u> community stabilization <u>and anti-displacement</u> policies, <u>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, - local jurisdictions, <u>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.</u> <u>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. <u>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.</u></p>	<p><u>MTC/ABAG, industry partners, economic organizations, EDA, megaregional partners</u> 1-4 years</p>
<p><u>Strengthen middle-wage job career paths</u> 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.</u> 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 <u>industry partners</u>, 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 <u>and on construction efforts for the California High Speed Rail system</u>; continue to evaluate a means-based fare or other methods for reducing <u>or eliminating</u> transportation costs for lower-wage workers <u>and students</u>; <u>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.</u></p>	<p>MTC/ABAG, transit agencies, the Partnership, megaregional partners, <u>local jurisdictions, transit operators</u> 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><u>MTC/ABAG, state legislature</u> 1 year</p>
<p><u>Preserve and enhance existing industrial lands</u> <u>Support 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 <u>housing or mixed use development</u>; <u>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</u></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

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<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>

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<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.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		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.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<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.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<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.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
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.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		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.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		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>

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
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.

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		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>

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		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>

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		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

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
			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>

Comment ID (Plan)	Commenter Author	Staff Response	Revisions Made
		<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
COMMISSION San Francisco, CA 94105
TEL 415.778.6700
WEB www.mtc.ca.gov

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.

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





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:

- 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



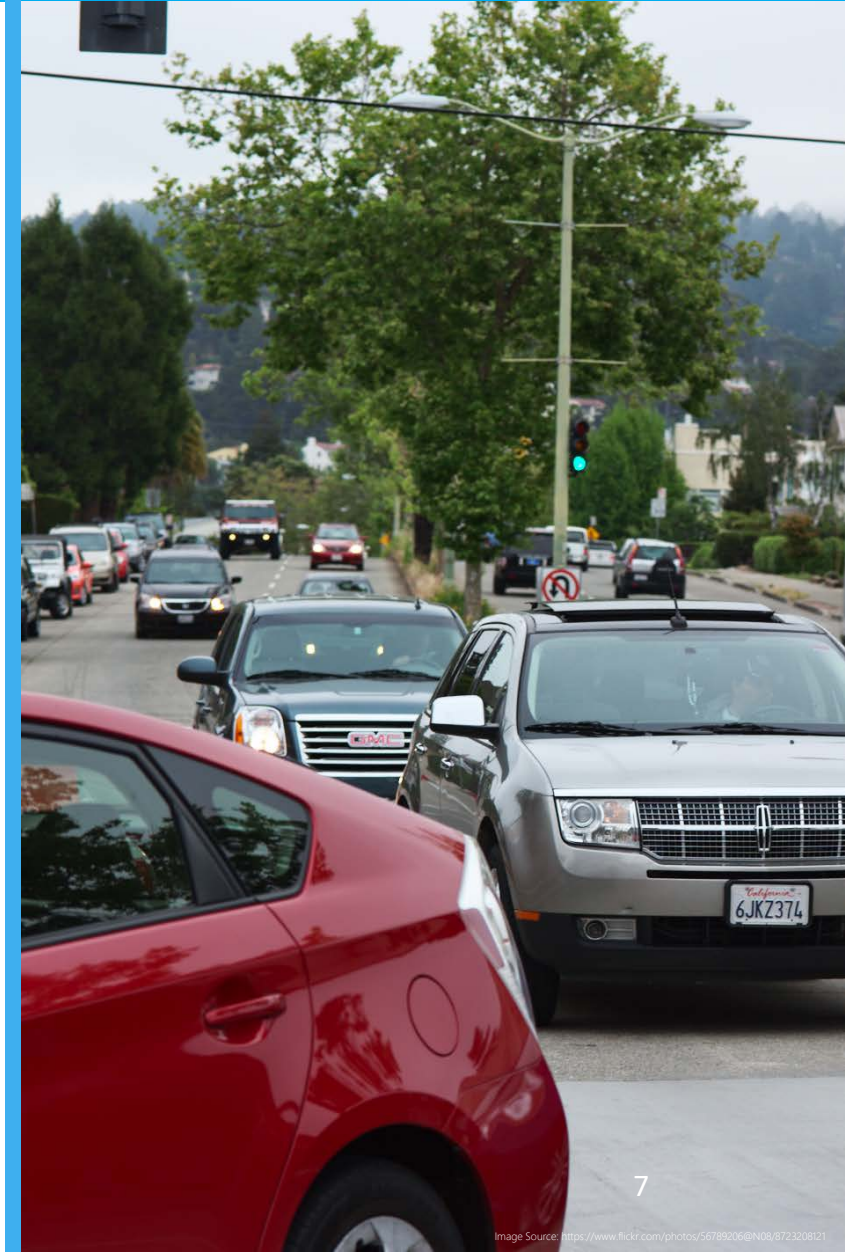
Comments & Associated Revisions – Growth Constraints

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



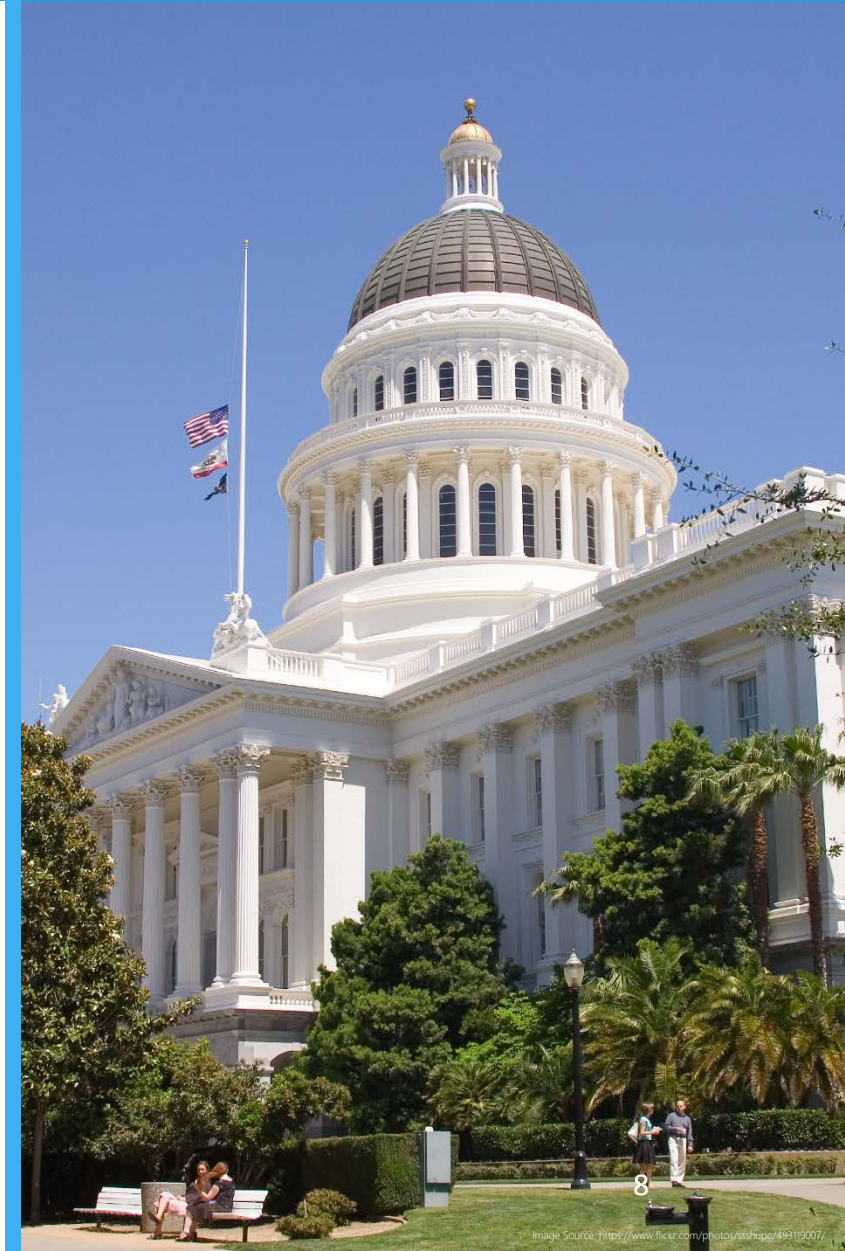
Comments & Associated Revisions – Planning Coordination

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:

- 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 #: 17-2689 **Version:** 1 **Name:**
Type: Report **Status:** Informational
File created: 6/6/2017 **In control:** Policy Advisory Council
On agenda: 7/12/2017 **Final action:**
Title: Staff Liaison Report - July 2017
(5 minutes)

Relevant MTC policy decisions and other activities.

Sponsors:

Indexes:

Code sections:

Attachments: [07_Staff Liaison Report – July 2017.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

Staff Liaison Report - July 2017
(5 minutes)

Relevant MTC policy decisions and other activities.

Presenter:

Ursula Vogler, Acting MTC Staff Liaison

Recommended Action:

Information

Attachments



METROPOLITAN
TRANSPORTATION
COMMISSION

Agenda Item 7

Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105
TEL 415.778.6700
WEB www.mtc.ca.gov

Memorandum

TO: Policy Advisory Council
FR: Ursula Vogler, Acting Staff Liaison
RE: Staff Liaison Report – July 2017

DATE: July 6, 2017

W.I. 1114

Policy Advisory Council Term Extension Requested

As was mentioned to you briefly last month, the advisor recruitment process has been extended, and staff anticipates the Commission will be appointing the 2017-2021 Policy Advisory Council at its September Legislation Committee and Commission meetings. As a result, staff is requesting the Legislation Committee this month to extend your terms through September, and as late as October if necessary, until the new Council is put in place. There is a slight possibility the Council's September meeting could be canceled; however, at this point we anticipate holding the meeting.

If you find you cannot attend a meeting on the second Wednesday in September for some reason, please let staff know. We appreciate your continued service to the Commission, and look forward to seeing you all at least one last time in the fall.

Caltrain Electrification Project Charges Forward

Working is getting underway on the long-awaited Caltrain electrification project, thanks to the Federal Transit Administration's action in May 2017 to finally approve a Full-Funding Grant Agreement (that guarantees \$647 million in federal funding for modernizing Caltrain's rail system. The decision was a dramatic turnaround after months of limbo for the project.

The federal grant agreement was the last piece of the funding package and will cover roughly one third of the project cost over the next five years. The conversion from diesel locomotives to high-performance electric trains will allow for longer and faster trains and double the rail system's capacity. The project also will substantially reduce pollution and ease traffic along the train's route, which traverses Silicon Valley – one of the most economically productive areas in the United States.

To read the full story, go to:

<http://mtc.ca.gov/whats-happening/news/caltrain-electrification-project-charges-forward>

Ford GoBike Now Available

On June 28, 2017, the Metropolitan Transportation Commission (MTC), joined by global bike share leader Motivate, Ford Motor Company, regional officials and scores of community members, launched the region's new bike share system, Ford GoBike.

– more –

By Labor Day, Ford GoBike will offer 3,500 bicycles at 332 stations. And when fully installed next year, the program will boast 7,000 bikes at 546 stations – spanning San Francisco, Oakland, San Jose, Berkeley and Emeryville. This tenfold expansion comes at no cost to taxpayers, and will bring bike sharing to the East Bay for the first time.

Under the "Bike Share for All" access program, Ford GoBike is offering an introductory rate of just \$5 for the entire first year of membership to qualifying low-income residents, as compared to a general annual membership fee of \$149 (which is discounted to \$124 a year during the introductory period. Residents lacking a credit or debit card can pay this modest fee in cash at a number of locations, including The Hub, a commuter service center located at MTC's offices at the 375 Beale Street in San Francisco. Users can also buy a day pass or a single-ride pass rather than buying a year-long membership.

To read the full story, go to:

<http://mtc.ca.gov/whats-happening/news/ford-gobike-bay-areas-latest-sustainable-transportation-option-now-available>

Executive Director's Report

The following items are excerpts from the June 2017 Executive Director's Report to the Commission. Read the report in its entirety at:

<http://www.mtc.ca.gov/whats-happening/news/executive-directors-report>.

- **Transportation Task Force – June 5, San Francisco**

I attended the first meeting of a city task force convened by San Francisco Mayor Ed Lee and Supervisor Aaron Peskin to explore potential local transportation funding measures for the 2018 ballot.

- **Gas Tax Poll Released – June 9, Berkeley**

As you know, there is an effort underway to qualify a referendum measure for the 2018 ballot that would repeal the various fuel and vehicle taxes imposed by the Legislature in Senate Bill (SB) 1. Earlier this month, the Institute of Governmental Studies at UC Berkeley released the results of a statewide public opinion poll which found that opponents of the new gas tax law outnumber supporters by 58% to 35%. Interestingly, the only region in the state where a majority of voters did not oppose the measure was the San Francisco Bay Area.

- **TNCs Today – June 13, San Francisco**

Our colleagues at the San Francisco County Transportation Authority have released a fascinating report about the rise of transportation network companies (TNCs) like Uber and Lyft in San Francisco. Among the results are that TNCs account for a whopping 15% of vehicle trips within San Francisco on a typical workday, and that the number of TNCs on the street vastly outnumber the city's taxi fleet on every day of the week and at all hours of the day. A copy of the full report is attached.

- **ABAG Staff Consolidation – Update**

I'm very pleased to report that 56 of 57 ABAG employees who were offered a new job at MTC accepted the position. One employee opted to retire from public service. Even before all the acceptances were in, I held our first all-hands meeting of the consolidated staff. We barely fit in the large Yerba Buena conference room on the ground floor. We start work together officially on July 5. On that date, the two agencies will have a new web portal address: www.bayareametro.gov. In the fall, we will convert staff email addresses to the same domain name, as in: sheminger@bayareametro.gov. Stay tuned for more changes in the months ahead.

Attachment:

- Attachment A: TNCs Today

J:\COMMITTEE\Policy Advisory Council\Meeting Packets\2017\07_Poli Advi Coun_July 2017\07_Staff_Liaison_Report.docx

DRAFT



TNCs Today

A Profile of San Francisco Transportation Network Company Activity



JUNE, 2017



ACKNOWLEDGEMENTS

We wish to thank the following individuals who contributed to the development of this report:

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Contents

Executive Summary	1
Introduction	3
Purpose	4
Methodology	5
Research Questions	7
How many TNCs operate in San Francisco today?	7
How many TNC trips are occurring in San Francisco?	8
When are TNC trips occurring in San Francisco?	9
Where are TNC trips occurring in San Francisco?	11
How much VMT do TNCs generate within San Francisco?	15
Do TNCs provide good geographic coverage throughout the entire city?	17
Future Research	18
For More Information	18
Bibliography	19
Glossary	19



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Executive Summary

Transportation network companies (TNCs) such as Uber and Lyft are an increasingly visible presence on San Francisco streets, but there has been no comprehensive data source to help the public and decision-makers understand how many TNC trips occur in San Francisco, how much vehicle travel they generate, and their potential effects on congestion, transit ridership, and other measures of system performance. The California Public Utilities Commission (CPUC) regulates TNCs and requires data reporting by TNCs, but will not share these data with local jurisdictions and the public.

The purpose of this report is to provide information on TNC activity in San Francisco, in order to help the San Francisco County Transportation Authority (Transportation Authority) fulfill its role as the Congestion Management Agency for San Francisco County. The report is also intended to inform the Transportation Authority board which is comprised of the members of the San Francisco Board of Supervisors, as well as state and local policy-makers in other arenas, and the general public, on the size, location and time-of-day characteristics of the TNC market in San Francisco.

The information presented is a profile of estimated local TNC usage (trips made entirely within San Francisco) from mid-November to mid-December of 2016. The TNC data was originally gathered by researchers at Northeastern University from the Application Programming Interfaces (APIs) of Uber and Lyft and then shared with the Transportation Authority. The Transportation Authority's data team cleaned and analyzed the data for presentation here.



While this document provides a broad range of descriptive information about TNC trips, it does not evaluate the effects of these TNC trips on the performance of the San Francisco transportation system, nor does it explain TNC customer trip purposes, demographic characteristics, or longer term effects on vehicle ownership and residential and employment location. This report does not identify the extent to which TNCs affect congestion. Many factors contribute to increased congestion—population and employment growth, construction activity, increased delivery and other transportation services, and TNCs.

Subsequent reports and studies by the Transportation Authority and others will address these important analytic and policy topics in depth, including the effects of TNCs on roadway congestion, public transit operations and ridership, disabled access, and equity.

The report is structured around six primary questions:

HOW MANY TNCs OPERATE IN SAN FRANCISCO TODAY?

- The San Francisco Treasurer's Office estimates that 45,000 Uber and Lyft drivers may operate in San Francisco, and in 2016 sent notices requiring them to register their business with the city.
- Almost 21,000 drivers are estimated to have complied with the requirements to register their business with the city. Of that number, only 29% are San Francisco residents.
- On a typical weekday, over 5,700 TNC vehicles operate on San Francisco streets at peak times, with the peak period occurring between 6:30pm and 7:00pm. On Fridays, over 6,500 TNC vehicles are on the street during the peak of 7:30pm to 8:00pm. This is over 15 times the number of taxis on the street at these times of day.

HOW MANY TNC TRIPS ARE OCCURRING IN SAN FRANCISCO?

- On a typical weekday, TNCs make over 170,000 vehicle trips within San Francisco, which is approximately 12 times the number of taxi trips, and 15% of all intra-San Francisco vehicle trips. This represents a conservative estimate of total TNC trips in San Francisco because the study's dataset does not include trips with a regional origin or destination.
- Assuming TNC occupancy rates are similar to taxi occupancy rates, it is estimated that at least 9% of all San Francisco person trips use TNCs.

WHEN ARE TNC TRIPS OCCURRING IN SAN FRANCISCO?

- Significant numbers of TNC vehicle trips occur on both weekdays and weekends, with the highest number on Fridays with over 222,500 trips, and the lowest number on Sundays with approximately 129,000 trips.
- On weekdays, TNC usage is concentrated during the AM and PM peak periods when congestion is greatest, and extends into the evenings on Friday. Saturday and Sunday TNC trips occur primarily in the afternoon and evening.

WHERE ARE TNC TRIPS OCCURRING IN SAN FRANCISCO?

- TNC trips are concentrated in the densest and most congested parts of San Francisco including the downtown and northeastern core of the city. At peak periods, TNCs are estimated to comprise 25% of vehicle trips in South of Market.
- TNC trips are concentrated on the busiest arterials, yet also operate extensively on neighborhood streets, including along major public transit lines.

HOW MANY VEHICLE MILES TRAVELED (VMT) DO TNCs GENERATE WITHIN SAN FRANCISCO?

- Intra-SF TNC trips generate approximately 570,000 vehicle miles of travel (VMT) on a typical weekday, comprising as much as 20% of intra-SF-only VMT, at

least 6.5% of average total weekday VMT citywide, and may account for more than 10% of weekend VMT, primarily during the AM peak, PM peak, and early evening time periods. These estimates include both in-service and out-of-service vehicle miles.

- Approximately 20% of total TNC VMT are out-of-service miles. This is significantly lower than the more than 40% of taxi VMT that are out-of-service miles. The greater efficiency of TNCs is likely due to the higher number of TNC vehicles and more efficient technology.

DO TNCs PROVIDE A HIGH DEGREE OF GEOGRAPHIC COVERAGE THROUGHOUT THE ENTIRE CITY?

- TNCs provide broader service across the city than taxis, particularly in the western neighborhoods.
- TNCs provide fewer trips per population and employment in southern and southeastern areas of the city, which may reflect the presence of fewer TNC vehicles, or neighborhood preferences or demographics.

For more information, or to obtain a downloadable file of Transportation Authority processed data, visit the TNCs Today website at www.sfcta.org/tncstoday.



Introduction

Transportation network companies (TNCs) such as Uber and Lyft are visible presences on San Francisco's streets, in both the downtown core as well as in the city's neighborhoods. These companies allow people to use a smartphone app to request and pay for rides sourced from a pool of available drivers. These services are taxi-like in that they provide point-to-point transportation primarily in private vehicles. The success of TNCs in attracting rides in San Francisco and other cities reflects the high unmet demand for premium services and the extensive benefits they provide to users who can afford their services. Initially TNCs offered some distinct advantages over taxis including the ability to easily reserve a ride, the ability for both driver and passenger to contact each other and to know the location of the other using GPS, ease of payment, cheaper fares, shorter wait times, and more availability at all times of day due to a larger supply of vehicles. Taxis now offer some of these features, although the supply of taxis is still significantly smaller than TNCs, and taxi fares are higher.

The advantages of TNCs over taxis and other transportation modes are in part a result of the technological innovation of directly connecting travelers and drivers, but are also in part an outcome and reflection of the relatively light regulatory requirements under which TNCs operate, relative to taxis and other for-hire vehicles. The biggest difference between TNCs and other modes is the significantly lower barrier for drivers to enter the market. California state law grants municipalities the ability to regulate taxis, and in San Francisco, the taxi medallion system limits the number of taxi vehicles that can serve the city. In addition, taxis are subject to price controls, must provide access to all areas of the city, must provide service to people with

disabilities, have greater insurance requirements, and are subject to driver background checks and vehicle inspections. In contrast, there is no limit on the number of TNCs that may operate on San Francisco streets, no price controls, no geographic service area requirements, minimal disabled access requirements, limited driver background checks and few vehicle inspection or driver training requirements (TRB 2015).

There is a perception that TNC vehicles now comprise a significant number of the vehicles on San Francisco streets, having increased rapidly since TNCs started operating in the city seven years ago. However, there has been little data to either confirm or refute this perception. The California Public Utilities Commission (CPUC), which regulates TNCs due to the inter-city, non-hail nature of the service they provide, requires TNCs to report to the CPUC an extensive set of information on service provision including where and when trips are starting and ending, the availability of disabled-accessible vehicles, traffic incidents, and hours and miles logged by drivers. However, the CPUC has refused to share these TNC data with San Francisco, stating that it is authorized to withhold official information if disclosure of the information is against the public interest (CPUC Letter to the Transportation Authority, 2017). However, recent SFMTA Travel Decisions Survey results indicate that TNCs are growing in significance as a share of overall San Francisco travel, doubling in mode share served between 2014 and 2015 (SFMTA 2014, SFMTA 2015). In addition, it has been noted that Uber reported an annual tripling of trips in San Francisco (TRB 2015). However, these data sources provide no reliable estimates of the true number of TNC trips occurring in San Francisco, where TNC trips are occurring, or when TNC trips are occurring.





Purpose

The purpose of this report is to provide information on TNC activity in San Francisco, in order to help the San Francisco County Transportation Authority (Transportation Authority) fulfill its role as the Congestion Management Agency for San Francisco County. The report is also intended to inform the Transportation Authority board which is comprised of the members of the San Francisco Board of Supervisors, as well as state and local policy-makers in other arenas, and the general public, on the size, location and time-of-day characteristics of the TNC market in San Francisco.

This document provides estimates of how many TNCs are operating in San Francisco during all times of day and days of week, imputes the number, location, and timing of intra-San Francisco TNC trips based on TNC driver trip acceptance information (referred to in this report as pickups) and TNC driver drop off information (referred to as drop-offs). The report estimates the amount of daily vehicle miles travelled (VMT) generated by TNCs, and contextualizes these relative to the other travel modes operating in San Francisco, including private vehicles, public transit, walking and biking. TNC trips between San Francisco and other counties (regional TNC trips) are not included in these estimates, and as a result these numbers represent a lower-bound estimate of the number of actual TNC vehicles and trips operating in San Francisco. Note that the data on which this report is based does not include any information on TNC trip purposes, travel party size, fares paid, traveler attributes such as gender, income, disability, mode choice shifts, or induced travel.

The information presented is a profile of local TNC usage in San Francisco from mid-November to mid-December of 2016, excluding dates around the Thanksgiving 2016 holiday. The TNC data was originally gathered by researchers at Northeastern University from the Application Programming Interfaces (APIs) of Uber and Lyft which show the locations of available vehicles to mobile apps, and then was shared with the Transportation Authority through a research collaboration over the past year. The other data referenced in the report come from a variety of sources including Caltrans, the San Francisco Municipal Transportation Agency (SFMTA), and the Transportation Authority's SF-CHAMP travel demand model.

This document does not evaluate the near-term impacts of TNCs on the performance of the San Francisco transportation system, nor does it explain potential longer-term effects of TNC provision on vehicle ownership or residential and employment location.

This report does not identify the extent to which TNCs affect congestion. Many factors contribute to increased congestion—population and employment growth, construction activity, increased delivery and other transportation services, and TNCs. Subsequent reports by the Transportation Authority through this project and the larger Emerging Mobility Services and Technology (EMST) policy framework and the Connect SF long-range planning process, both being undertaken in coordination with other City agencies, will address these important analytic and policy questions in depth.

Methodology

This research team developed and applied multiple procedures to estimate TNC trips within San Francisco. First, the team acquired data on TNC vehicle locations that was gathered from the Uber and Lyft APIs. The research team then cleaned this location data, removing unnecessary, anomalous, or redundant information. Finally, the team identified trips and imputed missing attributes.

DATA COLLECTION

In order to provide real-time information to drivers and passengers, Lyft and Uber expose certain data through public-facing APIs. This information includes nearby vehicle locations, estimated times-to-pickup, and sometimes, estimated costs. The data exposed through the APIs also includes, among other things, a vehicle identifier associated with a sequence of time-stamped coordinates, and the service types associated with that vehicle, such as UberX or UberPOOL. Sending a request to the API returns a text file response containing this information for the nearest available vehicles. When a vehicle becomes unavailable, either because the driver has turned off their app or they have accepted a ride request, the vehicle disappears from the datastream. Similarly, when the vehicle becomes available, either because the driver has turned on their app or they have completed a ride request, it reappears in the datastream. Researchers at Northeastern University implemented a systematic method for collecting this datastream such that it geographically covers all of San Francisco. The Northeastern University researchers collected information on vehicle locations every five seconds for approximately six weeks. The data collection methodology has no impacts on either drivers or riders.

DATA CLEANING

The research team collected data by sampling available TNC vehicles using a geographic grid that covers all of San Francisco. This sampling procedure means that any available Uber or Lyft vehicle may be detected by multiple sampling locations. Furthermore, because data is being collected almost continuously in time for each sampling location, the same vehicle will often appear repeatedly in the datastream for each individual sampling location. The first step in the data preparation process involved cleaning the information in the datastream. In addition, the raw data may at times contain anomalous data, which was also screened out to ensure the reasonableness of the GPS traces. The result was a set of unique GPS traces for each TNC vehicle.

TRIP IDENTIFICATION, TRIP MATCHING AND ATTRIBUTE IMPUTATION

Cleaning resulted in a set of unique “pre-trip” vehicle trajectories that reflect when a vehicle became available (due to the driver dropping off a passenger or starting a shift) and when the vehicle became unavailable (due to the driver accepting a passenger or ending a shift). Once pre-trips and pickup and drop-off locations were defined, “trips” were imputed by linking the pickup and trip drop-off locations. Lyft trips were created first because the Lyft API reveals a persistent vehicle identifier, with which it is possible to build an aggregate matrix of Lyft flows from pickup locations to dropoff locations by detailed time-of-day. This matrix of flows is used to estimate the vehicle miles traveled generated by TNCs. Uber’s API does not have persistent identifiers that are necessary to connect pickup and dropoff locations, so the research team used the Lyft matrix of pickup and dropoff flows by travel analysis zone (TAZ) and time-of-day as a starting point, and then proportionally fitted the matrix to match Uber trip pickup locations and drop-off locations by time-of-day.

A unique aspect of the Uber and Lyft driver labor market is that drivers may drive for both services simultaneously. As a result, these driver vehicles may appear in both the Uber and Lyft datastreams. It is necessary to identify these “matched pre-trips” in order to avoid double-counting of TNC pre-trips and trips. Matched pre-trips were identified by comparing the start and end times of the pre-trips and selecting only those pre-trips whose start and end times both occurred within a limited time window, as well as selecting only pre-trips that traversed the same set of network links in the same sequence. The pre-trip (and associated trip) were then assigned to either Lyft or Uber, based on which pre-trip ended first, representing the first platform on which a driver accepted the trip.

For pre-trips, out of service travel times and distances could be calculated directly from the cleaned and processed datastream. For Lyft trips, trip travel times could be derived from the datastream. Because the datastream does not contain the information on the actual paths used by TNCs on trips, it was necessary to impute distances between observed pickup and dropoff locations using information from the Transportation Authority’s SF-CHAMP model. For Uber trips, both travel times and distances were imputed from the model system.

DATA LIMITATIONS

It must be emphasized that the TNC information documented in this report does not represent direct observa-

tion of TNC trips. Trips and pre-trips are imputed based on the changes in the supply of Uber and Lyft vehicles as revealed by each company's API. Requests to the CPUC and to Uber and Lyft for data that could be used to validate these findings were declined.

However, as documented in subsequent sections of this report, the summaries of how the time and location of imputed TNC trips vary across time and space are generally consistent with overall travel patterns within the city.

There are a number of other limitations to the data as revealed by the APIs. Pickup locations and drop-off locations are not true trip origins and trip destinations. Instead, they represent where drivers accept rides (which

are assumed to be a few minutes from true trip origins) and where drivers are available again (which are assumed to be near true trip destinations). In addition, no information on the specific TNC products used (such as UberX or LyftLine) can be derived from the datastream. Pooled services like UberPOOL and LyftLine which are designed to encourage users to share rides may not show up in the datastream. No information on TNC vehicle occupancy or traveler demographics is available, nor is consistent information on costs. Finally, these estimates are a lower bound on TNC trips in San Francisco, as all trips with one or more end outside the city (regional and through trips) are excluded from the analysis.

Research Questions

HOW MANY TNCs OPERATE IN SAN FRANCISCO TODAY?

Two measures of TNC supply are the number of TNC drivers who regularly drive in the city and the number of TNC vehicles that operate in the city at peak times.

There are no definitive observed data of the number of TNC drivers who regularly drive in San Francisco. It has been estimated that as many as 45,000 TNC drivers may operate in San Francisco, based on the number of letters sent by the San Francisco Treasurer's office to potential TNC drivers, notifying them of the requirement to register their businesses with the City. (SF Examiner, 2016). The City's business location database (<https://data.sfgov.org/Economy-and-Community/Registered-Business-Locations-San-Francisco/g8m3-pdis>) provides industrial sector detail and business addresses of individuals who have registered businesses in San Francisco. Based on information from this database, the research team estimates that approximately 21,000 drivers complied with the City's business registration requirements. In contrast, there are only approximately 1,800 San Francisco taxi vehicle medallions (SFMTA 2016). Table 1 shows the distribution of registered drivers' locations, by county. It appears that only 29% of TNC drivers who work in San Francisco are

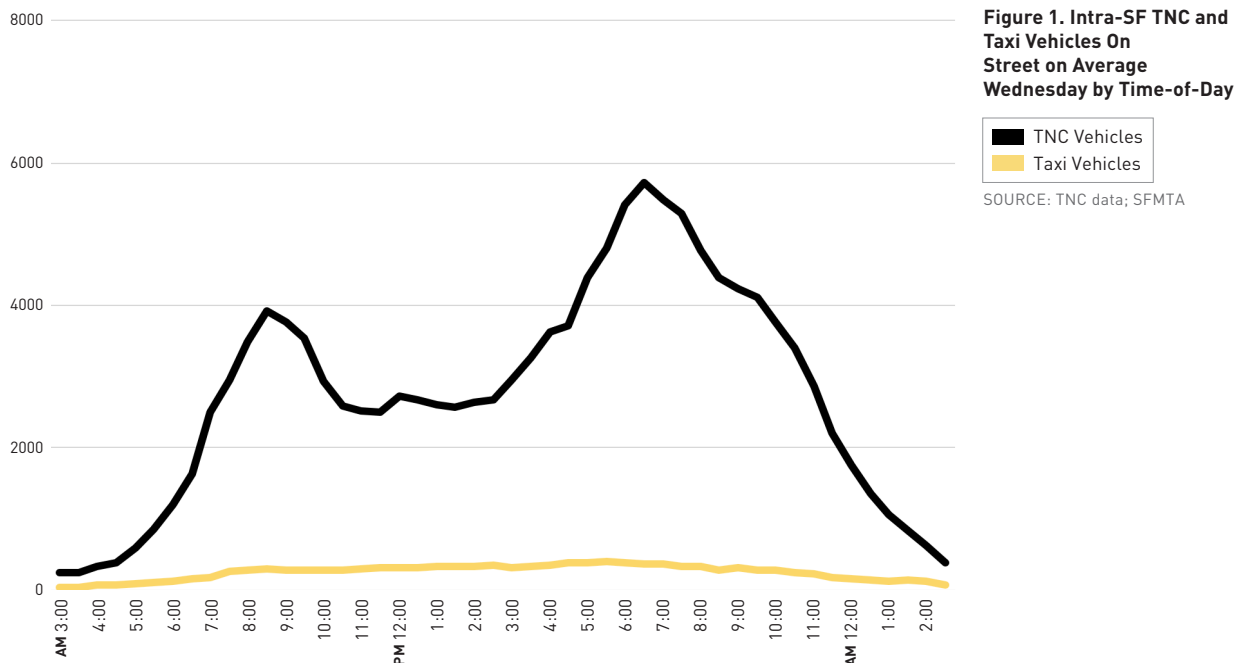
Table 1. Estimated SF-Registered TNC Businesses by County

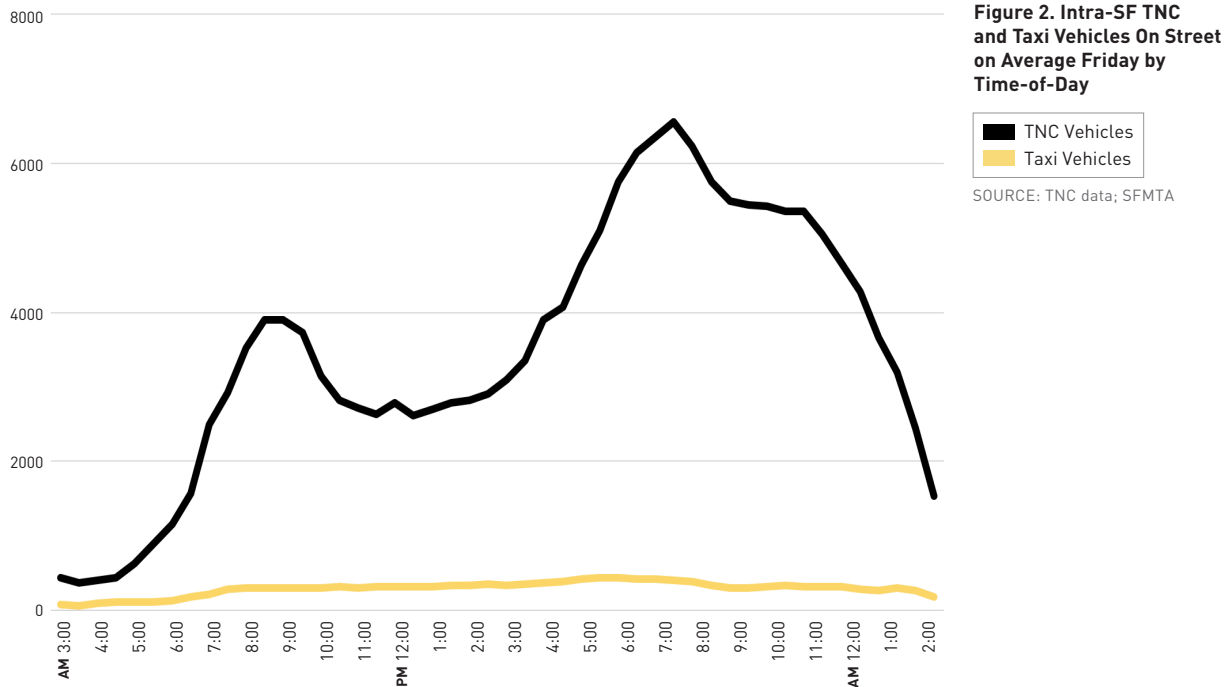
COUNTY	PERCENTAGE
Alameda	21%
Contra Costa	12%
Marin	2%
Napa	0%
San Francisco	29%
San Mateo	16%
Santa Clara	6%
Solano	2%
Sonoma	1%
Outside Bay Area	10%
TOTAL	100%

Source: San Francisco Registered Business Location Database, accessed 2017 May 12

based in the city, indicating that vast majority of TNC drivers are coming in the city from other Bay Area counties and beyond.

Figure 1 shows the estimated number of TNC vehicles that are on San Francisco streets on a typical weekday, by time-of-day, while Figure 2 (next page) shows the number of TNC vehicles on a typical Friday. These data show that on weekdays, the peak number of TNC vehicles occurs between 6:30pm and 7:00pm, when approximately 5,700 TNC vehicles are on San Francisco streets. On Fridays, the peak occurs between 7:30pm and 8:00pm, when an estimated 6,500 TNC vehicles are on the street.





HOW MANY TNC TRIPS ARE OCCURRING IN SAN FRANCISCO?

Two types of TNC trips were estimated: vehicle trips and person trips. The number of TNC vehicle trips is important because more vehicle trips generally leads to increased congestion and conflicts with other street users, while more person trips may indicate enhanced mobility. Again, only those trips with both pickup and drop-off location within San Francisco are considered in the following summaries.

“Vehicle trips” in Table 2 refers to movements by motor vehicles with origins and destinations entirely within San Francisco. Vehicles may carry different numbers of people, or may be public transit vehicles or taxis. Trucks are excluded. Approximately 170,000 TNC vehicle trips are estimated to occur within San Francisco during a typical weekday. This represents approximately 15% of all weekday vehicle trips that both start and end within the city, as shown in Table 2. There are approximately 12 times as many TNC trips as taxi trips during a typical weekday.

Figure 3. Average Wednesday Intra-SF Vehicle Trips by Mode

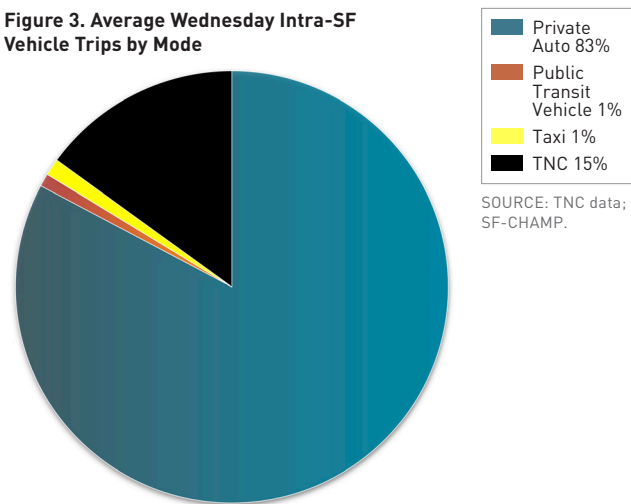


Table 2. Weekday Intra-SF Vehicle Trips by Mode

MODE	VEHICLE TRIPS	%
Private Auto	940,000	83%
Public Transit Vehicle	11,000	1%
Taxi	14,000	1%
TNC	170,000	15%
TOTAL	1,135,000	100%

Source: TNC data; SF-CHAMP travel model, SFMTA

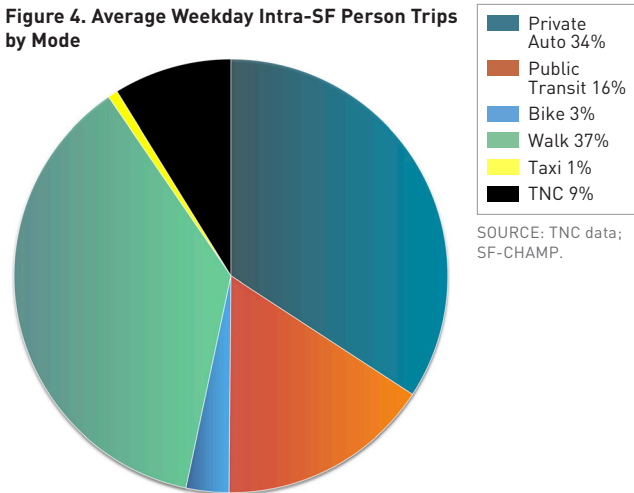
Person trips refers to movements by people with origins and destinations in San Francisco. Person trips are different than vehicle trips because person trips include walking and biking trips (which don't require motor vehicles), and also because private vehicles, public transit vehicles and taxis may carry more than one person. For TNCs and taxis, vehicle trips were converted to person trips using an assumed occupancy rate of 1.66, based on observed taxi data (Schaller, 2017). This assumed occupancy rate affects the TNC share of overall travel. Use of a lower occupancy rate would result in lower TNC person trip mode shares. Approximately 290,000 TNC person trips are estimated to occur within San Francisco during a typical weekday. This represents approximately 9% of all weekday person trips within the city, as shown in Table 3.

Table 3. Weekday Intra-SF Person Trips by Mode

MODE	PERSON TRIPS	%
Drive	1,099,000	34%
Public Transit	512,000	16%
Bike	103,000	3%
Walk	1,193,000	37%
Taxi	24,000	1%
TNC	283,000	9%
TOTAL	3,214,000	100%

Source: TNC data; SF-CHAMP travel model, SFMTA

Figure 4. Average Weekday Intra-SF Person Trips by Mode



SOURCE: TNC data; SF-CHAMP.

WHEN ARE TNC TRIPS OCCURRING IN SAN FRANCISCO?

The timing of TNC trips is important because trips that occur during peak periods and weekdays are more likely to exacerbate congestion and delay on roads, affecting both general traffic, surface public transit as well as conflicts with bicycles and pedestrians.

Figure 5 shows the total number of estimated TNC vehicle trips and taxi trips by day-of-week. It shows that TNC trips increase as the week progresses, reaching their peak volume on Friday and hitting their lowest volume on Sunday. This indicates that TNCs are serving both the weekday and

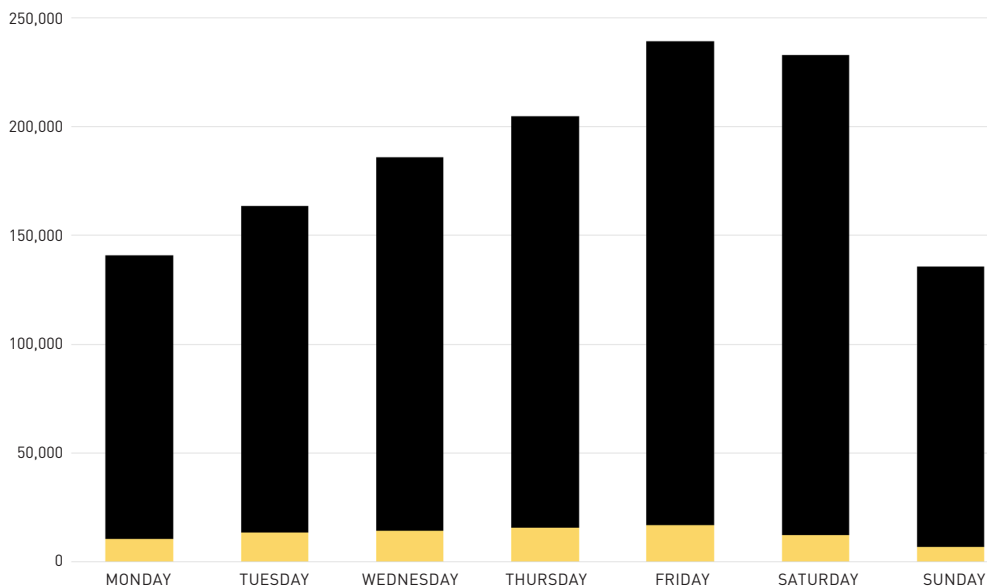


Figure 5. TNC and Taxi Intra-SF Trips by Day-of-Week

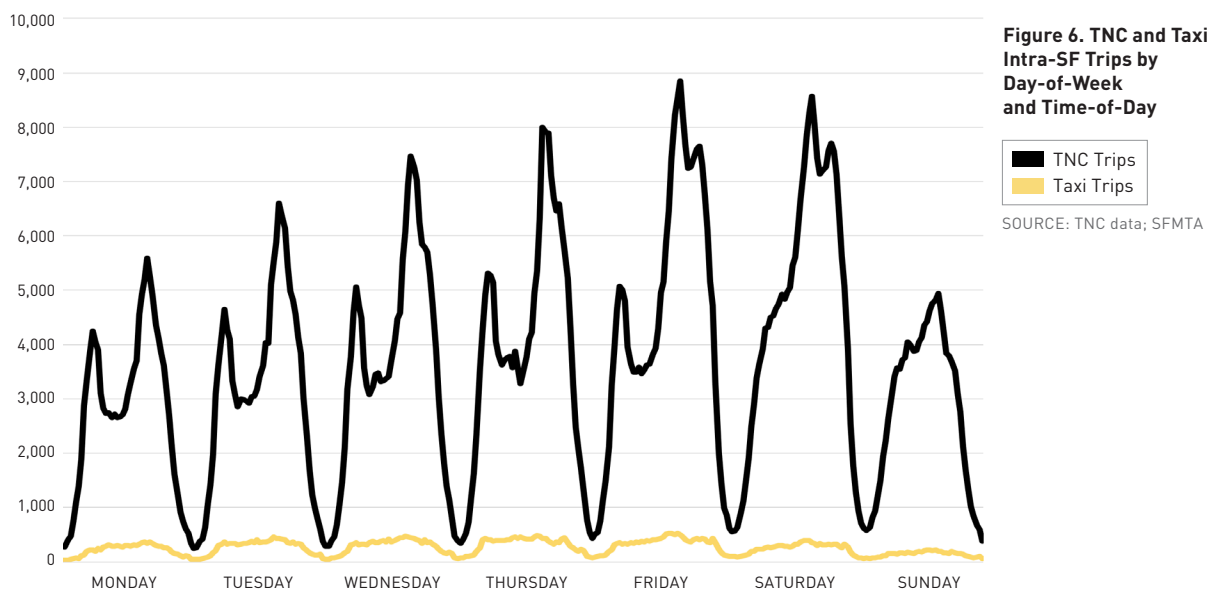
Legend:
 ■ TNC Trips
 ■ Taxi Trips

SOURCE: TNC data; SFMTA

weekend travel markets, and that TNCs have strong discretionary trip market demand.

Figure 6 provides additional detail on the timing of TNC trips by showing the estimated number of trips by half-hour and by day of week. This figure indicates that during the weekdays, TNCs have a clear pattern of peak usage that coincides with the existing AM and PM peak periods. Peak periods typically have the highest availability of other

forms of transportation, and are also the times when added traffic has the highest negative effect on other transportation system users. Figure 6 also shows that on Fridays and Saturdays usage of TNCs extends later into the evening, suggesting that TNCs may also provide additional options for travelers at times when other modes such as public transit, biking or walking may be less attractive due to reduced service or safety concerns.



WHERE ARE TNC TRIPS OCCURRING IN SAN FRANCISCO?

The location of TNC trips is important because trips that occur where there is already significant traffic are more likely to exacerbate congestion and conflicts with other road users, while trips that occur in less congested areas may reflect lower transportation impacts.

Figures 7 through 9 provide geographic detail on the locations of TNC pickups on weekdays, Saturdays and Sundays. In these figures, TNC trip pickups have been aggregated to travel analysis zones (TAZs), which are a basic spatial unit used by the Transportation Authority for transportation analyses (dark colors indicate more daily TNC trips, and light colors indicate fewer daily TNC trips). TAZs are approximately the size of US Census block groups in most of the city, and the size of Census blocks in the core downtown area. Figure 7 illustrates clearly that the vast majority of TNC trips are occurring in San Francisco's northeast quadrant, which is the most congested area of the city, as well as the area that is most well served by public transit, bicycling and walking facilities. South of Market, the Mission Street corridor, the Van Ness Avenue corridor, Pacific Heights and the Marina all show relatively higher intensities of TNC usage.

To a lesser extent, TNC usage is also high along the Geary Street corridor, Panhandle, and Inner Sunset, and Stonestown/San Francisco State University area.

Figure 8 illustrates that the even greater levels of TNC trip-making that occurs on Saturday is also highly concentrated in these same areas, along with more trips from Golden Gate Park and along the Geary Avenue corridor. Figure 9 shows the significantly lower level of TNC trip-making on Sundays, particularly in the northern neighborhoods.

Figures 10–12 (next page) provide an alternative detailed visualization of the locations of TNC drop-off locations. Rather than aggregate the drop-off locations to TAZs, the drop-off point locations are used to directly map the intensity of drop-offs on the roadway network. This provides insights into which specific streets and transit corridors are likely being affected most by TNC activity. The patterns are broadly similar across weekdays, Saturdays and Sunday. The Market Street spine, and areas north and south of Market show high levels of TNC drop-off activities at all times of day. Many other streets clearly stand out as well, including nearly all downtown and SoMa streets, Columbus Ave, Geary Blvd, Mission and Valencia Streets, 19th Avenue, 3rd Street, and San Bruno Avenue.

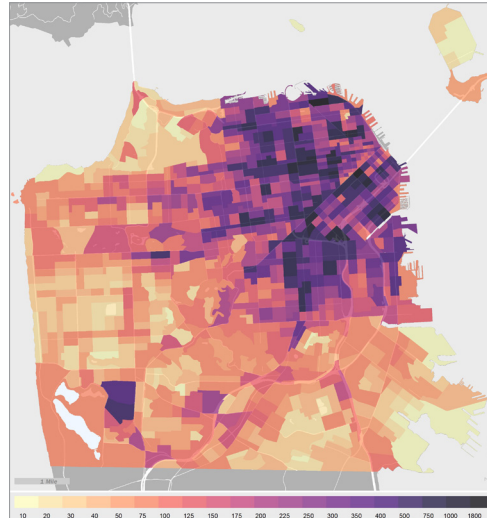


Figure 7. Average Weekday Intra-SF TNC Pickups by Travel Analysis Zone

SOURCE: TNC data

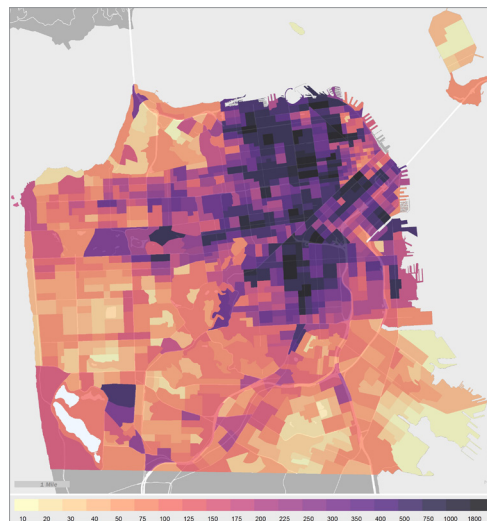


Figure 8. Average Saturday Pickups by Travel Analysis Zone

SOURCE: TNC data

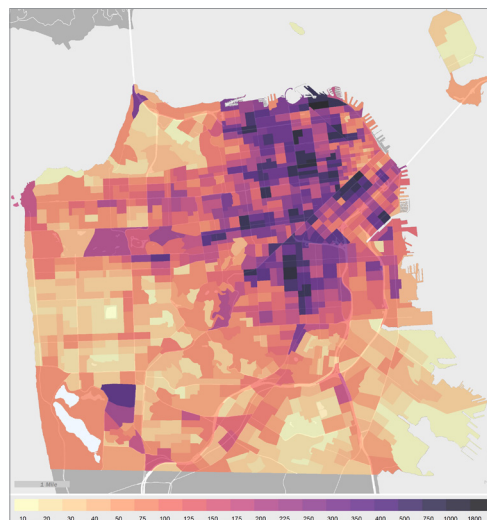


Figure 9. Average Sunday Pickups by Travel Analysis Zone

SOURCE: TNC data

The locations with the highest levels of TNC pickups and drop-offs include:

- Union Square
- Market/Van Ness
- Caltrain (4th and King)
- Transbay Terminal
(2nd and Market to Harrison/Beale)
- Chinatown
- Marina
- 9th/Brannan
- Fell/Oak/Divisadero
- Embarcadero Center (Clay/Front)
- Clay/Van Ness

Figure 13 summarizes the percentage of all vehicle trips starting in each of the supervisorial district that are TNC vehicle trips. This provides information on how the overall share of 15% of daily vehicle trips as TNC trips varies by time of day and location. In District 6, the research team estimates that more than 25% of AM peak and PM peak period vehicle trips are by TNC.

Figures 14–16 (next page) show the average number of TNC pickups and drop-offs by San Francisco supervisorial district by day-of-week. Figure 14 shows that, as noted above, District 6 absorbs the greatest number of weekday TNC trips, followed closely by District 3 and more distantly by Districts 2 and 5. This likely reflects the significant employment and public transit hubs found in Districts 3 and 6, combined with higher parking supply restrictions and parking costs. Interestingly, Figure 15 indicates that the greatest number of Saturday TNC trips occur in District 3 instead, followed by District 6, possibly reflecting a greater concentration of entertainment and dining opportunities in District 3. Finally, Figure 16 shows the overall lower number of TNC trips occurring across all districts on Sunday, while the relative distribution by district is very similar to that observed on weekdays and Saturdays.

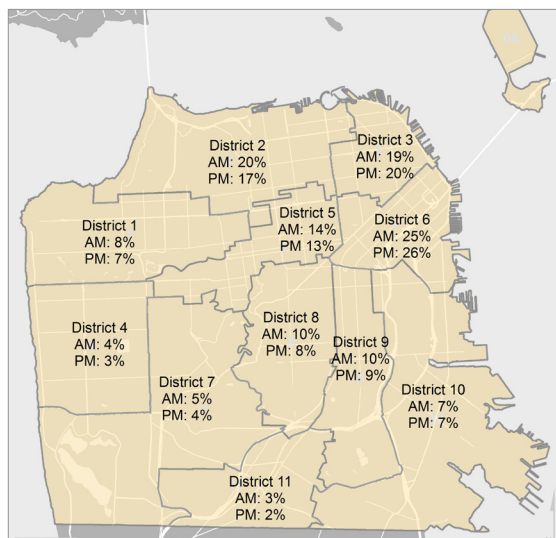


Figure 13. TNC AM and PM Vehicle Shares by Supervisorial District

SOURCE: TNC data



Figure 10. Weekday Pickup Hotspots

SOURCE: TNC data



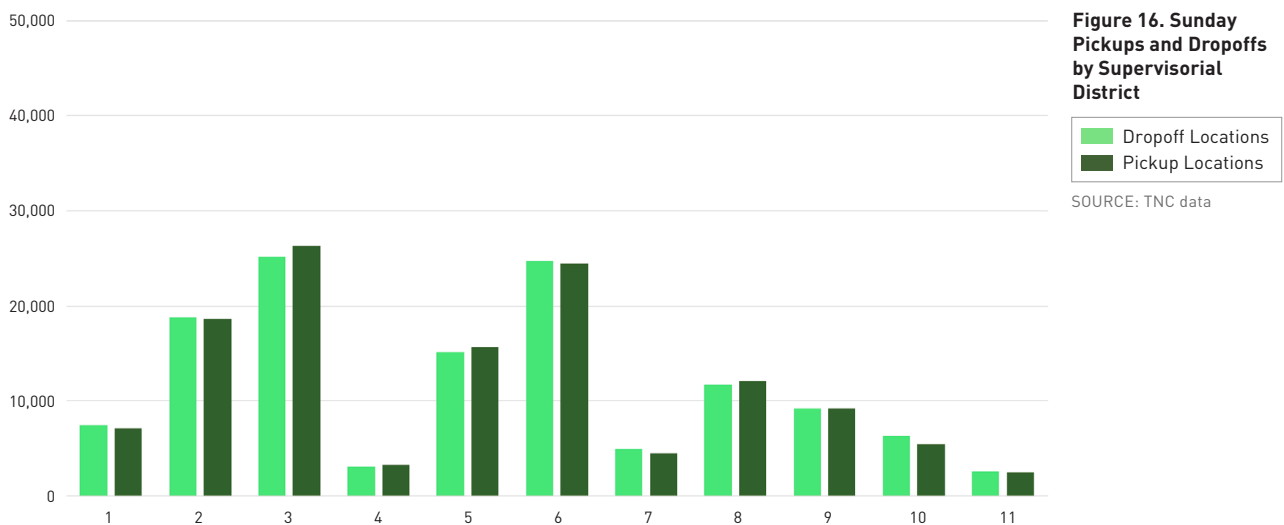
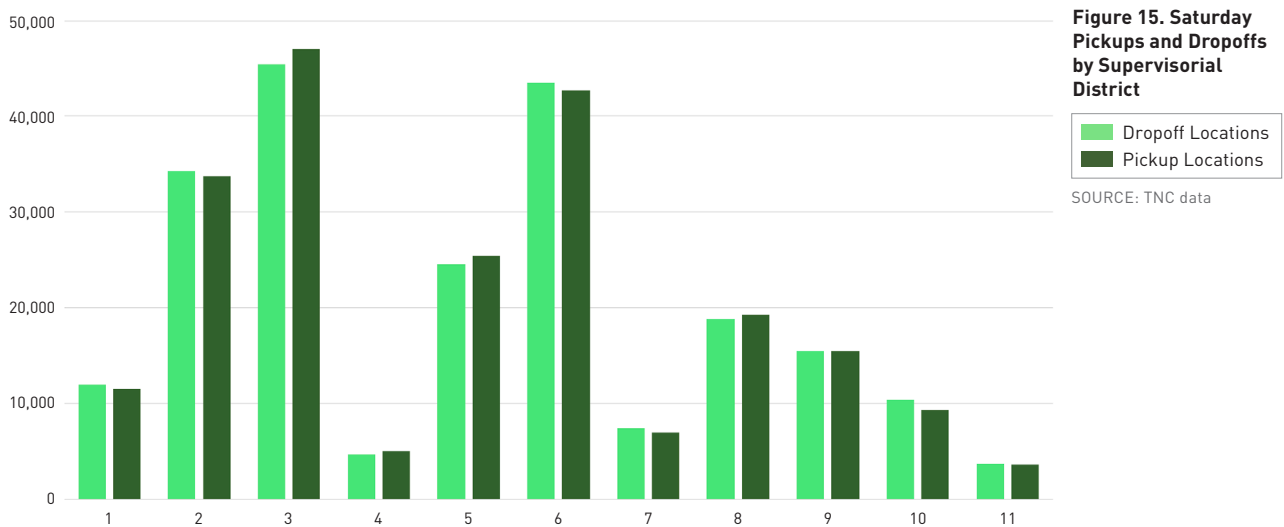
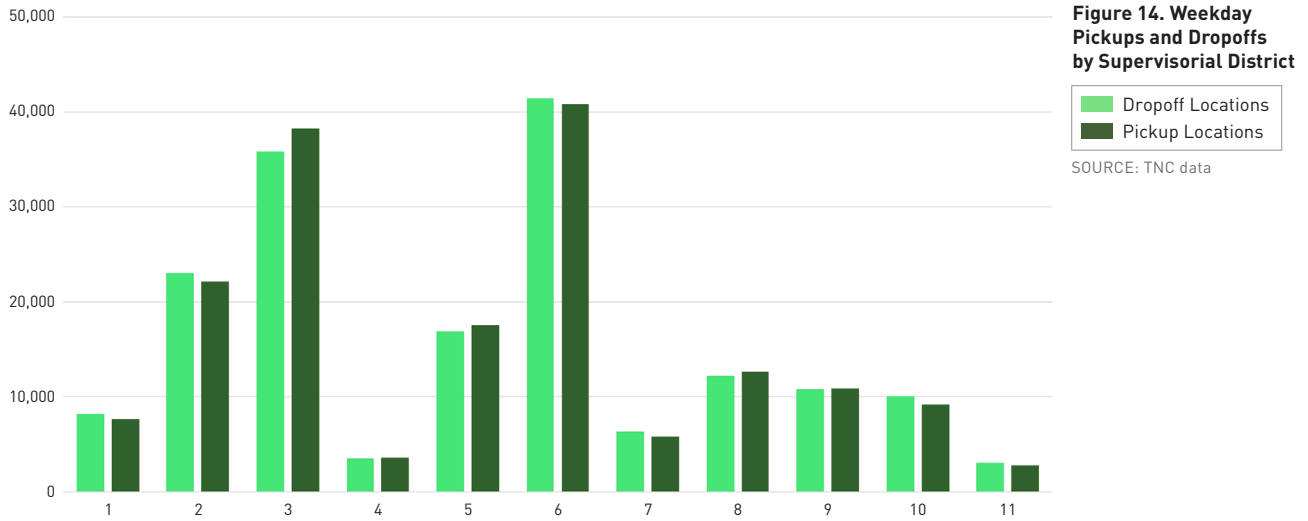
Figure 11. Saturday Pickup Hotspots

SOURCE: TNC data



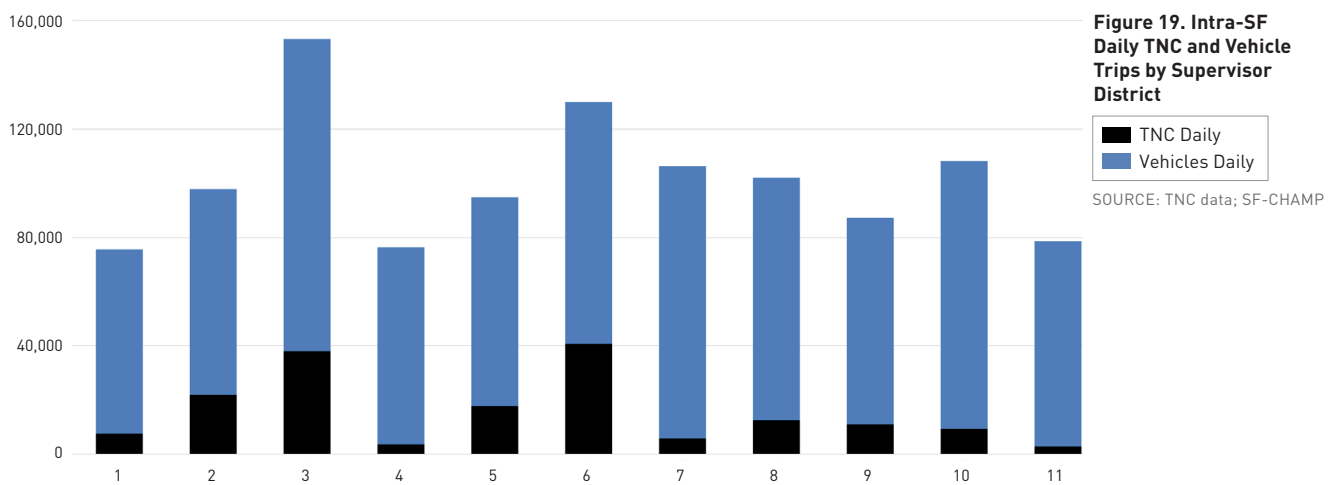
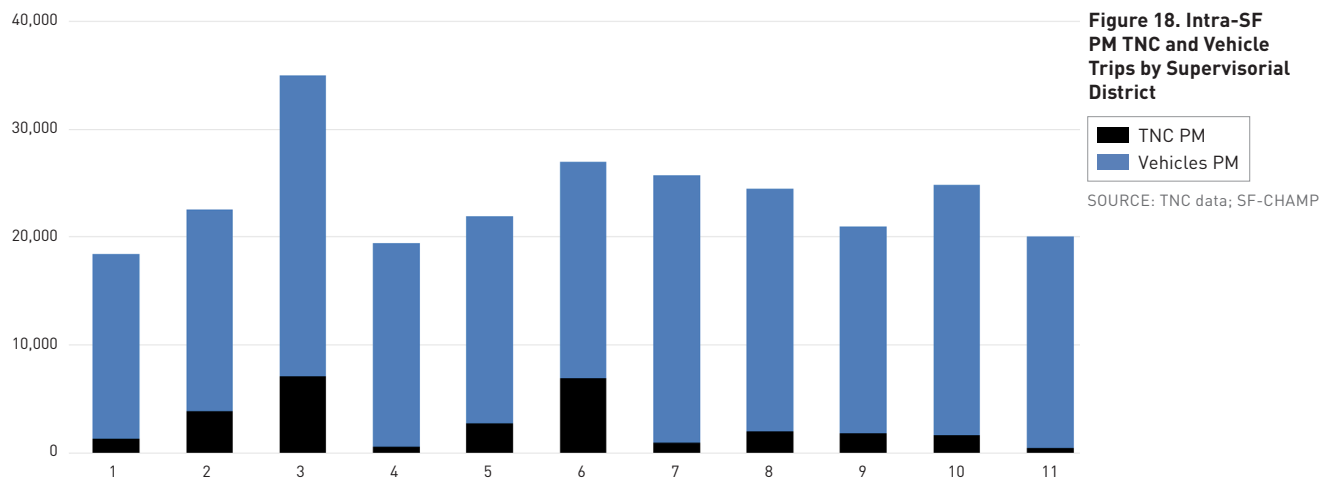
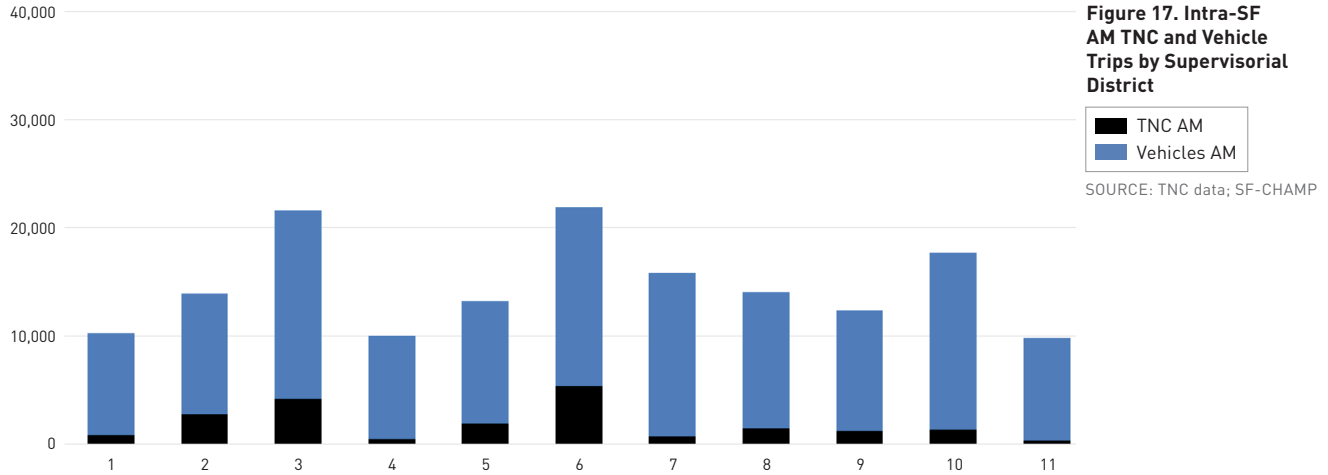
Figure 12. Sunday Pickup Hotspots

SOURCE: TNC data



Figures 17–19 further illustrate the total number of TNC and non-TNC vehicle trips by supervisorial district and time of day. These show overall higher levels of TNC vehicle

trips in the PM peak than in the AM peak, and that District 3 and District 6 have the greatest levels and the greatest shares of TNC vehicle trip-making.



HOW MUCH VMT DO TNCs GENERATE WITHIN SAN FRANCISCO?

The amount of VMT, or vehicle miles travelled, that is generated by TNCs is important because VMT is a fundamental measure of transportation system performance. Higher levels of VMT are associated with greater levels of emissions of greenhouse gases such as CO₂ as well as other pollutants. In addition, higher levels of VMT are also associated with greater roadway congestion and conflicts. For TNCs and taxis, two types of VMT are important, in-service VMT and out-of-service VMT. In-service VMT refers to the vehicle miles traveled when transporting a passenger. Out-of-service VMT refers to the vehicle miles traveled while circulating to pickup a passenger.

Tables 4–6 show the total trips, total VMT, average total trip length, in-service trip length, out-of-service trip length, and percent out-of-service trip length by day-of-week for local TNCs and taxis. These tables indicate that TNCs and taxis are generally similar in terms of average in-service trip length. However, a notably smaller share of TNCs' total trip lengths are out-of-service miles, while a significant share of total taxi trip length (over 40%) are out-of-service miles. The greater efficiencies of TNCs, as reflected in a lower share of out-of-service miles, are likely primarily a reflection of the larger fleets of TNC drivers operating on the road at any given time, enabling shorter distances to pickup locations. In addition, TNCs' routing software may be more efficient than the taxi dispatch systems. Most critically, Table 4 indicates that the estimated TNC total VMT on a typical weekday is approximately 570,000 VMT, and this estimate is clearly conservative given that it:

- Includes only intra-SF TNC trips (such as trips to and from San Francisco International Airport).
- Underestimates out-of-service VMT because it excludes the additional distance from acceptance location to where the passenger is actually picked up.
- Excludes VMT associated with TNC drivers commuting to SF from non-SF home origins.

This TNC VMT estimate indicates that intra-SF TNCs generate as much as 20% on weekday VMT for intra-SF vehicle trips and at least 6.5% of total weekday VMT in San Francisco, given Caltrans' most recent estimate of weekday VMT traveled on San Francisco streets and highways (Caltrans 2014). Saturday roadway volumes are lower than weekday volumes, yet Saturday TNC VMT is even greater than average weekday TNC VMT. It is possible that TNCs may account for approximately 10% of VMT on Saturdays.

Table 4. Average Weekday Intra-SF Trip Lengths

	TNCS	TAXIS
Trips	170,400	14,400
VMT	569,700	65,900
Average Total Trip Length	3.3	4.6
Average In-service Trip Length	2.6	2.6
Average Out-of-service Trip Length	0.7	2.0
% Out-of-service Trip Length	21.0%	43.6%

Table 5. Average Saturday Intra-SF Trip Lengths

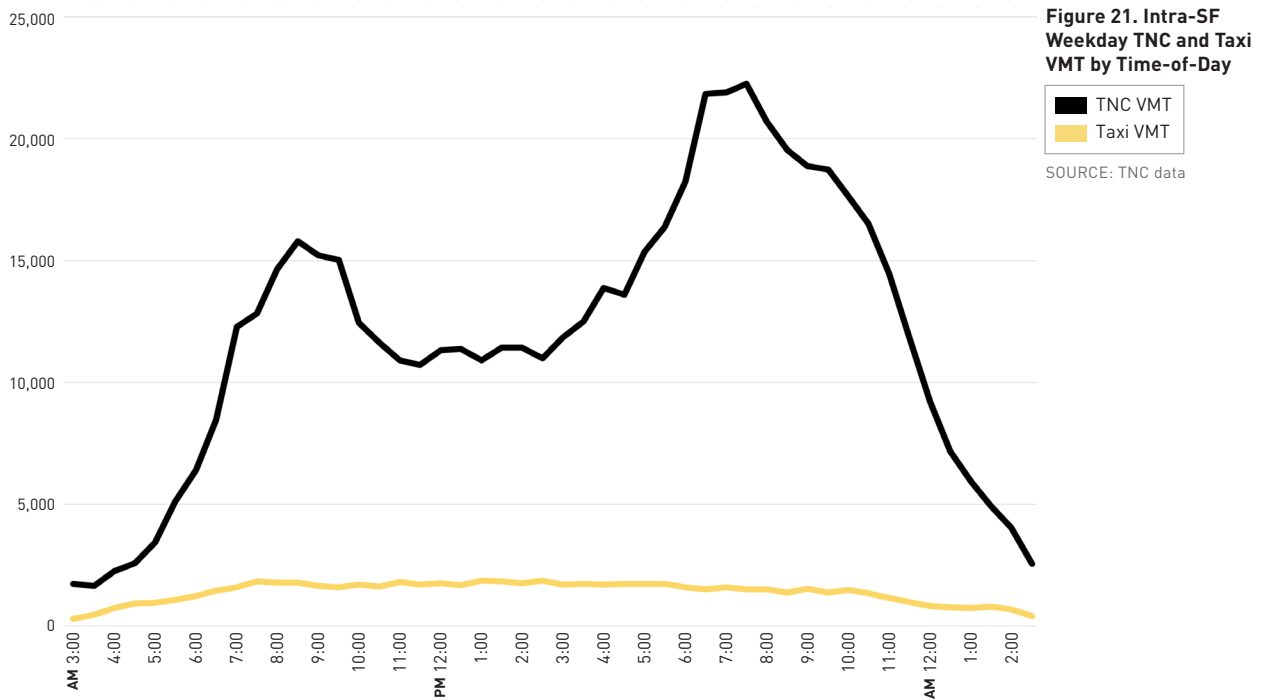
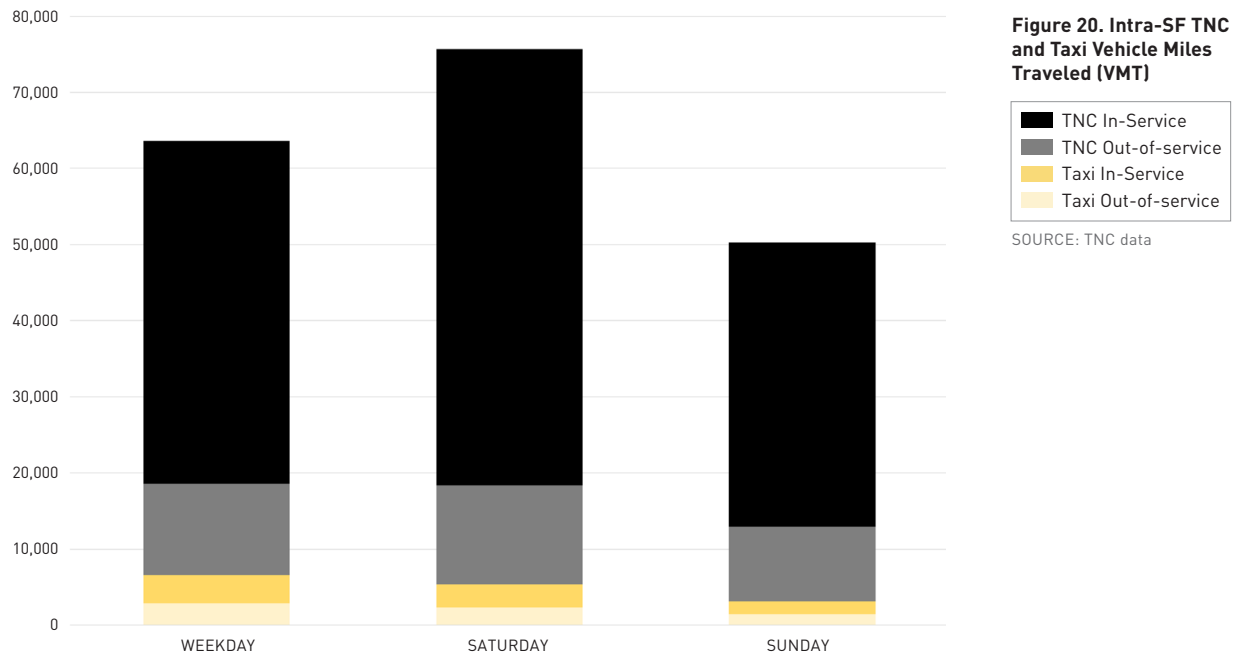
	TNCS	TAXIS
Trips	220,700	12,300
VMT	703,600	53,600
Average Total Trip Length	3.2	4.4
Average In-service Trip Length	2.6	2.4
Average Out-of-service Trip Length	0.6	1.9
% Out-of-service Trip Length	18.6%	44.1%

Table 6. Average Sunday Intra-SF Trip Lengths

	TNCS	TAXIS
Trips	129,100	6,700
VMT	471,200	31,900
Average Total Trip Length	3.7	4.8
Average In-service Trip Length	2.9	2.6
Average Out-of-service Trip Length	0.8	2.2
% Out-of-service Trip Length	20.7%	45.5%

Figure 20 (next page) illustrates the amount of estimated in-service and out-of-service VMT generated by local TNCs and taxis for typical weekdays, Saturdays and Sundays. TNCs generate more than 10 times as many VMT as taxis on a typical weekday, while generating 12 times as many trips.

Figure 21 (next page) shows the distribution of weekday VMT by time-of-day for TNCs and taxis. It indicates that most of the VMT generated by TNCs occurs during the AM peak and PM peak hours, with significant VMT also occurring during the evening hours, following the PM peak. VMT generated during periods of peak demand likely exacerbates existing peak period congestion.



DO TNCs PROVIDE GOOD GEOGRAPHIC COVERAGE THROUGHOUT THE ENTIRE CITY?

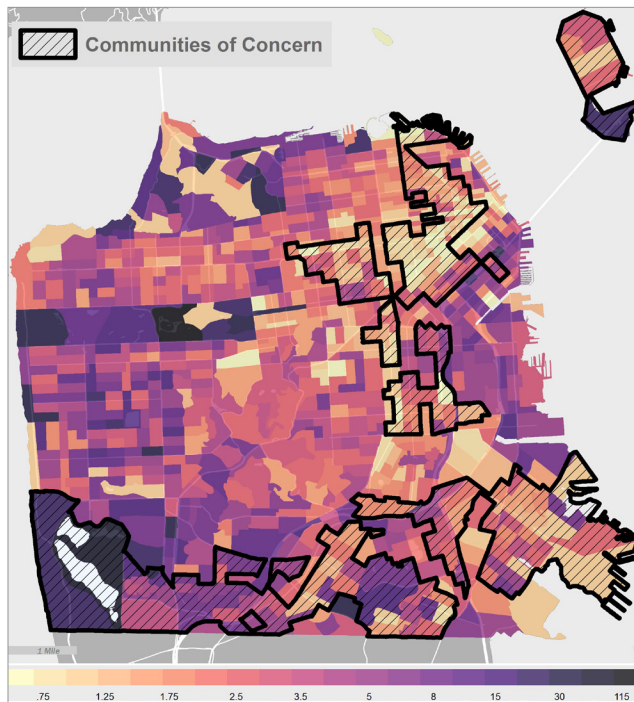
It is important to ensure that all areas of the city have access to transportation alternatives, while also acknowledging that different communities may have different needs and abilities to pay for mobility services. Due to their flexibility, TNCs should be able to provide reasonable geographic coverage to all areas of the city. In order to assess whether TNCs are serving all neighborhoods, two metrics are used: the number of TNC pickups per taxi pickup in each TAZ and the number of TNC pickups per combined population and employment in each TAZ.

Figure 22 shows the number of TNC pickups per taxi pickup. Areas defined as “communities of concern” are also identified. Darker areas indicate where TNCs are providing

broader service than taxis. However, the figure also suggests that southeastern neighborhoods may not be well served by TNCs.

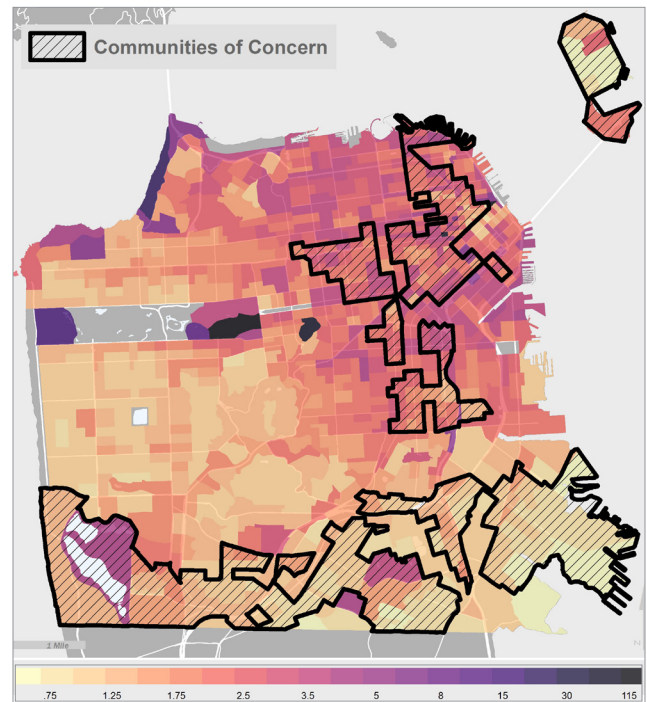
Figure 23 shows the number of TNC pickups per combined population and employment by TAZ. This shows that the northeastern core and northern parts of the city are generally well served by TNCs. Southeastern and southern neighborhoods do not appear to be as well served. This may reflect either a lack of vehicles available in this area, or may reflect inability of residents of these areas to use TNCs, or some combination of these or other factors. Additional data is required to better understand this pattern.

Figure 22. Weekday TNC Pickups per Taxi Pickup



SOURCE: TNC data

Figure 23. TNC Pickups per Population and Employment



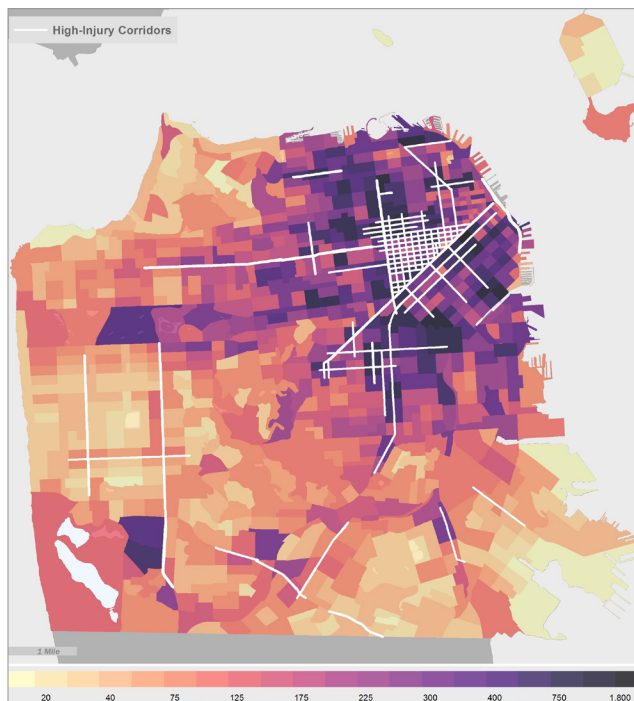
SOURCE: TNC data

Future Research

The report provides a profile of estimated TNC usage from mid-November to mid-December of 2016. This document does not evaluate the impacts of TNCs on the performance of the San Francisco transportation system, nor does it recommend any policy responses. Subsequent reports by the Transportation Authority and others will address important analytic and policy questions in depth, including:

- **TNC POLICIES.** What is the role of government in regulating TNCs? What TNC regulatory frameworks exist in other US cities or internationally?
- **TNC BEST PRACTICES.** What potential impacts of TNCs have other agencies identified, and what policies have they enacted in response? How have agencies partnered with TNCs?
- **TNCS AND STREET SAFETY.** How do TNCs affect the safety of people who use the roads, including public transit riders, bicyclists and pedestrians? How can TNCs help San Francisco achieve its VisionZero goals?
- **TNCS AND TRANSIT DEMAND.** How do TNCs complement, compete with, or otherwise affect public transit ridership and mode share?
- **TNCS AND PUBLIC TRANSIT OPERATIONS** How do TNCs affect public transit service operations?

Figure 24. High Injury Corridors with Average Weekday Intra-SF TNC Pickups by Travel Analysis Zone



SOURCE: TNC data

- **TNCS AND CONGESTION.** How do TNCs affect roadway congestion, delay and travel time unreliability? How do TNCs affect air quality?
- **TNCS AND DISABLED ACCESS.** To what extent do TNCs serve people with disabilities?
- **TNCS AND EQUITY.** Can TNCs be accessed by all San Francisco residents including communities of concern and those without smartphones or credit cards? Are all neighborhoods served equitably?
- **TNCS, LAND USE AND CURB MANAGEMENT.** What are the best practices for loading/curbside/roadway space allocation? How do TNCs affect parking demand? Is TNC demand associated with certain land uses? What are the effects of TNCs on location choices and auto ownership?

Additional data collection will be necessary in order to help answer these questions. We are seeking/open to research collaborations to obtain further information, including data to validate or enhance these findings, TNC vehicle occupancy information, traveler demographics and travel purposes, travel costs, TNC fleet composition data, and a range of other data items.

For More Information

The Transportation Authority makes available aggregate travel analysis zone (TAZ) level summaries of TNC pickups and drop-offs by hour of day, which can be downloaded at the Transportation Authority website (www.sfcta.org/tncstoday). In addition, an interactive visualization of the TAZ-level TNC data can be found at <http://tncstoday.sfcta.org>. The Transportation Authority will not provide detailed telemetry data or processed pre-trip and trip information due to the potential to contain personally identifiable information. Parties interested in the detailed telemetry data may contact the Northeastern University researchers to request access. Further information on on-going emerging mobility services and technology work being performed by the Transportation Authority can be found on the Transportation Authority website at: www.sfcta.org/emst.

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Glossary

APPLICATION PROGRAMMING INTERFACE (API): Programming code that allows interaction with software, or between software components. It is a tool that a developer of an app uses to communicate with data from a central server.

IMPUTE: Refers to any method to estimate an unknown or missing value in a dataset based on known values or information.

PERSON TRIPS: A trip by one or more people in any mode of transportation.

TELEMETRY: A remotely collected continuous series of GPS points with associated time and other information that forms a path.

TRANSPORTATION NETWORK COMPANY: Uses an online-enabled platform to connect passengers with drivers using their personal, non-commercial, vehicles.

TRAVEL ANALYSIS ZONE (TAZ): A geographic unit used for transportation analysis. The Transportation Authority uses a roughly 1000-zone system with average sizes of 1 block in the downtown area and several blocks for outer areas.



Metropolitan Transportation Commission

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Legislation Details (With Text)

File #:	17-2690	Version:	1	Name:	
Type:	Report	Status:		Informational	
File created:	6/6/2017	In control:		Policy Advisory Council	
On agenda:	7/12/2017	Final action:			
Title:	Council Member Reports (5 minutes)				

Members of the Council may report on locally relevant issues or events.

Sponsors:

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Attachments:

Date	Ver.	Action By	Action	Result
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Subject:

Council Member Reports
(5 minutes)

Members of the Council may report on locally relevant issues or events.

Presenter:

Randi Kinman, Council Chair

Recommended Action:

Information

Attachments



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #:	17-2691	Version:	1	Name:	
Type:	Report	Status:		Informational	
File created:	6/6/2017	In control:		Policy Advisory Council	
On agenda:	7/12/2017	Final action:			
Title:	New Business (5 minutes)				

Members of the Council may bring up new business for discussion or addition to a future agenda.

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Attachments:

Date	Ver.	Action By	Action	Result
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Subject:

New Business
(5 minutes)

Members of the Council may bring up new business for discussion or addition to a future agenda.

Presenter:

Randi Kinman, Council Chair

Recommended Action:

Discussion

Attachments