



METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Area Metro Center
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San Francisco, CA 94105
TEL 415.778.6700
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Memorandum

TO: Commission

DATE: January 17, 2018

FR: Executive Director

W.I. 1512

RE: MTC Resolution No. 4202, Revised – Revisions to the One Bay Area Grant 2 Program

At the Programming and Allocations Committee meeting on January 10, 2018, the Committee considered proposed revisions to the One Bay Area Grant 2 (OBAG 2) Regional Program related to the Innovative Deployment to Enhance Arterials (IDEA) grant program and MTC's Transportation Management Systems (TMS) program. At the meeting, staff requested that the Committee defer the adoption of the IDEA grant program to a future meeting date, and refer only the TMS program revisions to the full Commission for approval.

Staff requested this change to allow sufficient time to evaluate all application materials that had been submitted through the IDEA program solicitation process. Staff will return to the committee at a future date to recommend grant award distributions for the IDEA program.

Staff recommends approval of MTC Resolution No. 4202, Revised, which has been updated to reflect this change.



Steve Heminger

SH:ma

Attachment:

MTC Resolution No. 4202, Revised, Attachment B-1 (as revised, above)

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Date: November 18, 2015
W.I.: 1512
Referred by: PAC
Revised: 07/27/16-C 10/26/16-C 12/21/16-C
03/22/17-C 04/26/17-C 05/24/17-C
06/28/17-C 07/26/17-C 09/27/17-C
10/25/17-C 11/15/17-C 12/20/17-C
01/24/18-C

ABSTRACT

Resolution No. 4202, Revised

Adoption of the project selection policies and project programming for the second round of the One Bay Area Grant program (OBAG 2). The project selection criteria and programming policy contain the project categories that are to be funded with various fund sources including federal surface transportation act funding available to MTC for its programming discretion to be included in the federal Transportation Improvement Program (TIP) for the OBAG 2 funding period.

The resolution includes the following attachments:

- Attachment A – OBAG 2 Project Selection Criteria and Programming Policy
- Attachment B-1 – OBAG 2 Regional Program Project List
- Attachment B-2 – OBAG 2 County Program Project List

On July 27, 2016, Attachment A, and Attachments B-1 and B-2 were revised to add additional funding and projects to the OBAG 2 framework, including \$72 million in additional Fixing America’s Surface Transportation Act (FAST) funding, and to incorporate housing-related policies.

On October 26, 2016, Attachment A, and Attachment B-1 were revised to clarify language related to the North Bay Priority Conservation Area (PCA) Program in Attachment A and to deprogram \$2,500,000 from the Water Emergency Transportation Authority (WETA) Ferry Service Enhancement Pilot within the Regional Active Operational Management Program.

On December 21, 2016, Attachments B-1 and B-2 were revised to redirect \$417,000 in un-programmed balances from the Regional Active Operational Management program to MTC’s Spare the Air Youth within the Climate Initiatives Program; divide MTC’s Rideshare Program into three subcomponents totaling \$10,000,000: \$720,000 for Rideshare Implementation, \$7,280,000 for the Carpool Program, and \$2,000,000 for the Vanpool Program; direct \$1,785,000 from 511 Next Gen to the Commuter Benefits program; direct \$1,000,000 in un-programmed balances to SMART’s Multi-Use Pathway; transfer \$1,000,000 from MTC’s Casual Carpool project to MTC’s Eastbay

ABSTRACT

MTC Resolution No. 4202, Revised

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Commuter Parking project within the Bay Bridge Forward program, as the former will be funded with non-federal funds; transfer \$500,000 from the Freeway Performance Initiative program and \$500,000 in un-programmed balances to US 101/Marin Sonoma Narrow's B2 Phase 2 project in the Regional Active Operational Management Program; shift \$40,000,000 from the BART Car Replacement/Expansion project to the Golden Gate Bridge Suicide Deterrent project and \$13 million from MTC's Clipper project to un-programmed balances within the Transit Priorities program as part of a RM2 funding action to address a cost increase on the Golden Gate Bridge Suicide Deterrent project; and program \$5,990,000 to Alameda County's Safe Routes to School Program in the County Program.

On March 22, 2017, Attachment B-1 was revised to program \$17,000,000 in un-programmed balances within the Regional Transit Priorities Program to MTC's Clipper Program, as part of the FY17 Transit Capital Priorities program.

On April 26, 2017, Attachment B-2 was revised to program \$1,655,000 to the Sonoma Safe Routes to School program; and redirect \$1,000 from Contra Costa Transportation Authority's Planning Activities Base to its discretionary balance and \$1,000 from San Francisco County Transportation Authority's Planning Activities Base to its discretionary balance to address an inconsistency between amounts programmed to planning activities in Appendix A-3 and reflect actual amounts obligated for planning.

On May 24, 2017, Attachment B-1 was revised to redirect \$1,237,000 from 511 Next Gen to AOM Implementation within the Regional Active Operational Management program to reflect re-organization of staff between program elements; direct \$18,000,000 in Arterial/Transit Performance to the Program for Arterial System Synchronization (\$5,000,000) and the Next Gen Arterial Operations Program (\$13,000,000) within the Regional Active Operational Management program; direct \$19,000,000 from the Transportation Management System (TMS) Field Equipment Devices Operations and Maintenance to TMS Implementation (\$2,910,000), Performance-Based Intelligent Transportation Systems Device Maintenance and Rehabilitation (\$5,940,000), Transportation Management Center Asset Upgrade and Replacement (\$4,000,000), I-880 Communication Upgrade and Infrastructure Gap Closures (\$4,000,000) and a Detection Technology Pilot (\$5,000,000) within the Regional Active Operational Management program; and remove \$290,556 in un-programmed balances from the Regional Active Operational Management program to address over-programming in a previous cycles of the STP/CMAQ regional programs.

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MTC Resolution No. 4202, Revised

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On June 28, 2017, Attachments B-1 and B-2 were revised to reprogram \$1,000,000 from the SMART Pathway – 2nd to Andersen to San Rafael’s Grand Ave Bike/Pedestrian Improvements within the Regional Climate Initiatives program as part of a funding exchange within the City of San Rafael, conditioned on San Rafael committing \$1 million in non-federal funds to the construction of the pathway, and a resolution of local support for the use of federal funds on the Grand Ave project, and TAM approval of the redirection of local measure funds between the projects; split out \$8,729,000 from the 511 Next Gen program to 511 Implementation within the Regional Active Operational Management program; program \$1,250,000 to Golden Gate Bridge Highway and Transportation District for the Bettini Transit Center as part of the Marin County Program; and program \$2,617,000 within the San Mateo County Program to the San Mateo County Office of Education for the SRTS program, including \$223,000 in supplemental funds from San Mateo’s discretionary balance.

On July 26, 2017, Attachment B-1 was revised to program \$12,000,000 to the US 101 Marin Sonoma Narrows project as part of a fund exchange agreement with Sonoma County Transportation Authority; \$11,000,000 in exchange funds are added to the program for tracking purposes, with the final \$1 million in exchange funds to be identified through a future Commission action.

On September 27, 2017, Attachment B-1 was revised to change the name of the Next Gen Arterial Operations Program (NGAOP) to Innovative Deployment for Enhanced Arterials (IDEA) to reflect program rebranding and additional focus on advanced technologies; program \$4,160,000 to Incident Management Implementation and \$8,840,000 to I-880 Integrated Corridor Mobility project within the Regional Active Operational Management program; split out the Connected Vehicles/Shared Mobility program into the Connected Vehicles/Automated Vehicles program for \$2,500,000 and the Shared Use Mobility program for \$2,500,000; and program \$16,000,000 for three corridors within the Freeway Performance Program, with \$8,000,000 for I-680, \$3,000,000 for I-880, and \$5,000,000 for SR-84.

On October 25, 2017, Attachment B-1 was revised to program \$10,000,000 to the Bay Area Air Quality Management District for the Spare the Air program, in lieu of the Electric Vehicle Programs within the Regional Climate Initiatives Program, conditioned on the Air District contribution of an additional \$10 million to advance implementation of electric vehicles within the region.

ABSTRACT

MTC Resolution No. 4202, Revised

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On November 15, 2017, Attachment B-2 was revised to program \$200,000 in the Alameda County Program to the I-580 Corridor Study, to support a joint corridor study between Alameda County Transportation Commission (ACTC) and MTC; \$122,000 within the Napa County Program to Napa Valley Transportation Authority (NVTA) for the Napa County Safe Routes to School (SRTS) Program; and \$300,000 within the Contra Costa County Program to San Ramon for the San Ramon Valley Street Smarts Program.

On December 20, 2017, Attachments A, Appendix A-3, B-1, and B-2 were revised to program \$334 million in the County Program to local and county projects recommended by the nine Congestion Management Agencies (CMAs); redirect \$10,248,000 from BART Car Replacement/Expansion to Clipper within the Regional Transit Priorities Program; revise the CMA Planning Activities funding amounts to reflect the supplementary funds requested by several CMAs through their County Programs; and clarify the program details for the Local Housing Production Incentive program (also known as the *80K by 2020 Challenge Grant*).

On January 24, 2018, Attachment B-1 was revised to ~~program \$13 million in Innovative Deployments to Enhance Arterials (IDEA) program grants within the Regional Active Operational Management Program and~~ redirect \$4,100,000 from Performance-Based ITS Device Maintenance and Rehabilitation to I-880 Communication Upgrade and Infrastructure Gap Closures, within the Transportation Management System program.

Further discussion of the project selection criteria and programming policy is contained in the memorandum to the Programming and Allocations Committee dated November 4, 2015, July 13, 2016, October 12, 2016, December 14, 2016, February 8, 2017 (action deferred to March 2017), March 8, 2017, April 12, 2017, May 10, 2017, June 14, 2017, July 12, 2017, September 13, 2017, October 11, 2017, November 8, 2017, December 13, 2017, and January 10, 2018.

Date: November 18, 2015
W.I.: 1512
Referred By: Programming & Allocations

RE: One Bay Area Grant Program Second Round (OBAG 2) Project Selection Criteria and Programming Policy

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4202

WHEREAS, the Metropolitan Transportation Commission (MTC) is the Regional Transportation Planning Agency (RTPA) for the San Francisco Bay Area pursuant to Government Code Section 66500 et seq.; and

WHEREAS, MTC is the designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area region and is required to prepare and endorse a Transportation Improvement Program (TIP) which includes federal funds; and

WHEREAS, MTC is the designated recipient for state and federal funding assigned to the RTPA/MPO of the San Francisco Bay Area for the programming of projects; and

WHEREAS, state and federal funds assigned for RTPA/MPO programming discretion are subject to availability and must be used within prescribed funding deadlines regardless of project readiness; and

WHEREAS, MTC, in cooperation with the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), the Bay Conservation and Development Commission (BCDC), California Department of Transportation (Caltrans), Congestion Management Agencies (CMAs), county Transportation Authorities (TAs), transit operators, counties, cities, and interested stakeholders, has developed criteria, policies and procedures to be used in the selection of projects to be funded with various funding including regional federal funds as set forth in Attachments A, B-1 and B-2 of this Resolution, incorporated herein as though set forth at length; and

WHEREAS, using the policies set forth in Attachment A of this Resolution, MTC, in cooperation with the Bay Area Partnership and interested stakeholders, will develop a program of projects to be funded with these funds for inclusion in the federal TIP, as set forth in Attachments B-1 and B-2 of this Resolution, incorporated herein as though set forth at length; and

WHEREAS the federal TIP and subsequent TIP amendments and updates are subject to public review and comment; now therefore be it

RESOLVED that MTC approves the “Project Selection Criteria and Programming Policy” for projects to be funded in the OBAG 2 Program as set forth in Attachments A, B-1 and B-2 of this Resolution; and be it further

RESOLVED that the regional discretionary funding shall be pooled and distributed on a regional basis for implementation of project selection criteria, policies, procedures and programming, consistent with the Regional Transportation Plan (RTP); and be it further

RESOLVED that the projects will be included in the federal TIP subject to final federal approval and requirements; and be it further

RESOLVED that the Executive Director or designee may make technical adjustments and other non-substantial revisions, including updates to fund sources and distributions to reflect final funding criteria and availability; and be it further

RESOLVED that the Executive Director or designee is authorized to revise Attachments B-1 and B-2 as necessary to reflect the programming of projects as the projects are selected, revised and included in the federal TIP; and be it further

RESOLVED that the Executive Director or designee shall make available a copy of this resolution, and attachments as may be required and appropriate.

METROPOLITAN TRANSPORTATION COMMISSION



Dave Cortese, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at the regular meeting of the Commission held in Oakland, California, on November 18, 2015

Attachment B-1
MTC Resolution No. 4202
OBAG 2 Regional Programs
FY 2017-18 through FY 2021-22
January 2018 - REVISED

MTC Res. No. 4202 Attachment B-1
 Adopted: 11/18/15-C
 Revised: 07/27/16-C 10/26/16-C 12/21/16-C 03/22/17-C
 05/24/17-C 06/28/17-C 07/26/17-C 09/27/17-C
 10/25/17-C 12/20/17-C 01/24/18-C

OBAG 2 Regional Programs Project List

PROJECT CATEGORY AND TITLE	COUNTY	SPONSOR	TOTAL STP/CMAQ	Exchange
OBAG 2 REGIONAL PROGRAMS*			\$475,905,000	\$11,000,000*
1. REGIONAL PLANNING ACTIVITIES				
Regional Planning	Regionwide	MTC	\$9,555,000	
1. REGIONAL PLANNING ACTIVITIES			TOTAL:	\$9,555,000
2. PAVEMENT MANAGEMENT PROGRAM				
Pavement Management Program	Regionwide	MTC	\$1,500,000	
Pavement Technical Advisory Program (PTAP)	Regionwide	MTC	\$7,500,000	
Statewide Local Streets and Roads (LSR) Needs Assessment	Regionwide	MTC/Caltrans	\$250,000	
2. PAVEMENT MANAGEMENT PROGRAM			TOTAL:	\$9,250,000
3. PDA PLANNING & IMPLEMENTATION				
PDA Planning and Implementation	Regionwide	MTC	\$18,500,000	
Community-Based Transportation Plan (CBTP) Updates	Regionwide	MTC	\$1,500,000	
3. PDA PLANNING & IMPLEMENTATION			TOTAL:	\$20,000,000
4. CLIMATE INITIATIVES				
Climate Initiatives Program of Projects	TBD	TBD	\$12,000,000	
Spare the Air & EV Program Outreach (for Electric Vehicle Programs)	Regionwide	BAAQMD	\$10,000,000	
Spare the Air Youth Program - 2	Regionwide	MTC	\$1,417,000	
Grand Ave Bike/Ped Imps (for SMART 2nd to Andersen Pathway)	Marin	San Rafael	\$1,000,000	
4. CLIMATE INITIATIVES			TOTAL:	\$24,417,000
5. REGIONAL ACTIVE OPERATIONAL MANAGEMENT				
Active Operational Management				
AOM Projects TBD	Regionwide	MTC		\$2,800,000
AOM Implementation	Regionwide	MTC	\$23,737,000	
Bay Area 511 Traveler Information				
511 Next Gen	Regionwide	MTC	\$27,249,000	
511 Implementation	Regionwide	MTC	\$8,729,000	
Rideshare				
Rideshare Implementation	Regionwide	MTC	\$720,000	
Carpool Program	Regionwide	MTC	\$7,280,000	
Vanpool Program	Regionwide	MTC	\$2,000,000	
Commuter Benefits Implementation	Regionwide	MTC	\$674,000	
Commuter Benefits Program	Regionwide	MTC	\$1,111,000	
Bay Bridge Forward				
Transbay Higher Capacity Bus Fleet/Increased Service Frequencies	Alameda	AC Transit	\$1,200,000	
Pilot Transbay Express Bus Routes	Alameda	AC Transit	\$800,000	
Eastbay Commuter Parking	Alameda	MTC	\$2,500,000	
Transbay Higher Capacity Bus Fleet/Increased Service Frequencies	Contra Costa	WestCat	\$2,000,000	
Columbus Day Initiative (CDI)				
Freeway Performance Program				
FPP: I-880	Regionwide	MTC	\$27,000,000	
FPP: I-680	Various	MTC	\$3,000,000	
FPP: SR 84	Various	MTC	\$8,000,000	
FPP: SR 84	Various	MTC	\$5,000,000	
US 101/Marin Sonoma Narrows (MSN) B2 Phase 2	Sonoma	SCTA	\$1,000,000	
US 101/Marin Sonoma Narrows (MSN) B2 Phase 2 (fund exchange)	Sonoma	SCTA	\$3,800,000	
Program for Arterial System Synchronization (PASS)	Regionwide	MTC	\$5,000,000	
Innovative Deployments for Enhanced Arterials (IDEA)	Regionwide	MTC	\$13,000,000	
Connected Vehicles/Automated Vehicles (CV/AV)	Regionwide	MTC	\$2,500,000	
Shared Use Mobility	Regionwide	MTC	\$2,500,000	
Transportation Management System				
TMS Implementation	Regionwide	MTC	\$2,910,000	
Performance-Based ITS Device Maintenance & Rehab.	Regionwide	MTC	\$1,840,000	
TMC Asset Upgrade and Replacement	Regionwide	MTC	\$1,150,000	
I-880 Communication Upgrade and Infrastructure Gap Closures	Various	MTC	\$8,100,000	
Detection Technology Pilot	Regionwide	MTC	\$5,000,000	
Incident Management				
Incident Management Implementation	Regionwide	MTC	\$4,160,000	
I-880 ICM Central	Alameda	MTC	\$8,840,000	
5. REGIONAL ACTIVE OPERATIONAL MANAGEMENT			TOTAL:	\$177,000,000
6. TRANSIT PRIORITIES				
BART Car Replacement/Expansion	Various	BART	\$99,752,000	
GGB Suicide Deterrent (BART Car Exchange)	SF/Marin	GGBH&TD	\$40,000,000	
Clipper	Regionwide	MTC	\$34,248,000	
<i>Unprogrammed Balance</i>			\$15,283,000	

Attachment B-1
MTC Resolution No. 4202
OBAG 2 Regional Programs
FY 2017-18 through FY 2021-22
January 2018 - REVISED

MTC Res. No. 4202 Attachment B-1
 Adopted: 11/18/15-C
 Revised: 07/27/16-C 10/26/16-C 12/21/16-C 03/22/17-C
 05/24/17-C 06/28/17-C 07/26/17-C 09/27/17-C
 10/25/17-C 12/20/17-C 01/24/18-C

OBAG 2 Regional Programs Project List

PROJECT CATEGORY AND TITLE	COUNTY	SPONSOR	TOTAL STP/CMAQ	Exchange
OBAG 2 REGIONAL PROGRAMS*			\$475,905,000	\$11,000,000*
6. TRANSIT PRIORITIES		TOTAL:	\$189,283,000	
7. PRIORITY CONSERVATION AREA (PCA)				
<i>Regional Peninsula, Southern and Eastern Counties PCA Program</i>				
US 101/Marin Sonoma Narrows (MSN) B2 Phase 2 (fund exchange)	Sonoma	SCTA	\$8,200,000	
Peninsula, Southern and Eastern Counties PCA Program	TBD	MTC/CCC		\$8,200,000
<i>Local Northbay PCA Program</i>				
Marin PCA Program	Marin	TAM	\$2,050,000	
Napa PCA Program	Napa	NCTPA	\$2,050,000	
Solano PCA Program	Solano	STA	\$2,050,000	
Sonoma PCA Program	Sonoma	SCTA	\$2,050,000	
7. PRIORITY CONSERVATION AREA (PCA)		TOTAL:	\$16,400,000	\$8,200,000
8. LOCAL HOUSING PRODUCTION INCENTIVE				
Local Housing Production Incentive	TBD	TBD	\$30,000,000	
8. LOCAL HOUSING PRODUCTION INCENTIVE		TOTAL:	\$30,000,000	
OBAG 2 REGIONAL PROGRAMS		TOTAL:	\$475,905,000	\$11,000,000*

*Additional \$1 million in exchange funds will be committed to specific projects or programs through a future Commission action.

**Metropolitan Transportation Commission
Programming and Allocations Committee**

January 10, 2018

Agenda Item 2c

MTC Resolution No. 4202, Revised

Subject: Revisions to the One Bay Area Grant 2 (OBAG 2) program, including programming \$13 million in Innovative Deployments to Enhance Arterials (IDEA) grants and redirection of \$4.1 million within the Transportation Management System (TMS) program.

Background: The OBAG 2 program adopted by the Commission establishes commitments and policies for investing Surface Transportation Block Grant Program (STP) and Congestion Mitigation and Air Quality Improvement (CMAQ) funds for regional and county programs from FY2017-18 through FY2021-22.

This month, staff recommends the following changes to the OBAG 2 regional programs:

1. Innovative Deployments to Enhance Arterials (IDEA)

Program \$13 million to near-term projects that deploy advanced technologies along arterials to enhance mobility, sustainability and safety. The core goals of the IDEA program are to improve travel time and travel time reliability along arterials for autos and transit vehicles, improve safety for all users, decrease emissions and fuel consumption, and improve knowledge of and proficiency in the use of advanced technologies for arterial operations.

In July 2017, MTC issued a call for projects for the IDEA Grant Program for projects that can provide operational improvements to signal systems, transit, and bicyclists and pedestrians. Example projects include Automated Traffic Signal Performance Measures (ATSPM), adaptive traffic signal control (ATSC), Transit Signal Priority (TSP), bus queue jump lanes/signals, advanced bicycle/pedestrian detection, etc. Projects may either deploy mature, commercially-available technologies (Category 1) or pilot emerging technologies that support regional readiness for a future connected/automated vehicle environment (Category 2).

MTC received 23 applications for Category 1 projects for grant requests totaling approximately \$20 million (see Attachment A) and 14 applications for Category 2 projects for grant requests totaling about \$10.5 million (see Attachment B). MTC staff convened an evaluation panel consisting of staff from MTC and Caltrans. Submissions were scored on: project concepts that can address identified needs, ability to implement within two to three years, project management capacity, stakeholder support, and potential to reduce emissions, travel time, and delays.

Staff recommends awarding \$7.2 million to nine Category 1 projects and \$4 million in grant funds to six Category 2 projects. The list of projects recommended for funding, along with all applications received, are provided in **Attachment A**.

ITS projects, such as those recommended for IDEA grant funding, are more likely than typical roadway projects to experience unanticipated challenges and risks during project development and delivery because they are experimenting with emerging technologies, and will likely require more hands-on project management

and more detailed systems engineering, software development and before/after evaluation studies. For these reasons, staff's recommendation also includes set-asides of \$789,000 in Technical Assistance for Category 1 projects, and \$1.1 million in Technical Assistance for Category 2 projects.

2. Transportation Management Systems

Redirect \$4.1 million from Performance-Based Intelligent Transportation Systems (ITS) Device Maintenance and Rehabilitation to I-880 Communication Upgrade and Infrastructure Gap Closures project, as the ITS device maintenance work will be completed with non-federal funding. The redirected \$4.1 million will be used to design and construct improved communications infrastructure on I-880.

Issues:

IDEA Implementation/Contingency:

Within the IDEA program, \$2 million is proposed for improvements in the Dumbarton Bridge corridor, to expand transit signal priority systems and make other related changes. AC Transit currently operates two RM2-funded routes in the corridor. Both routes have struggled to meet RM2 farebox recovery ratios in recent years. A report on the performance of all RM2 funded routes is typically provided to the Commission each spring, in conjunction with the recommendations for RM2 operating funds for the next fiscal year. Therefore, given the performance issues with the RM2 funded Dumbarton routes, the \$2 million is conditioned on the recommendations of routing, service, and operational improvements per the Dumbarton Forward study, and on the ability of the AC Transit service to meet RM2 performance standards or confirmation that the Dumbarton project has independent utility for other transit or carpool-type services.

Recommendation: Refer MTC Resolution No. 4202, Revised to the Commission for approval.

Attachments: Attachment A – IDEA Category 1 and Category 2 Project Recommendations
MTC Resolution No. 4202, Revised, Attachment B-1

IDEA Category 1 Applications and Recommendations

Category 1: Deploy Mature, Commercially-available Advanced Technologies

County	Agency	Project Corridor(s)	Project Description	Full Project Budget	Requested Grant Amount	Recommended Grant Amount
1 Multi-county	AC Transit	Dumbarton Express Route (SR84)	Expand existing TSP; implement bus queue jump lanes [a]	\$ 3,685,651	\$ 2,733,803	\$ 2,300,000
2 Alameda	City of Alameda	SR260 (Webster & Posey tubes), Park St.	Deploy ATSPM, bluetooth units, automated pedestrian detection	\$ 369,000	\$ 276,000	\$ 276,000
3 Contra Costa	City of Concord	Clayton Rd and Treat Blvd	Deploy ATSPM, fish-eye cameras	\$ 716,040	\$ 537,030	
4 Alameda	City of Dublin	Dublin Blvd, Dougherty Rd, Tassajara Rd	Deploy ATSPM and bike detection; expand adaptive traffic signal system	\$ 929,461	\$ 650,119	
5 Solano	City of Fairfield	Air Base Parkway, North Texas St, Peabody Rd	Deploy ASCT, CCTV cameras	\$ 1,712,500	\$ 1,284,375	
6 Alameda	City of Fremont	Citywide	Install new EVP system	\$ 625,000	\$ 468,750	
7 San Mateo	City of Menlo Park	Willow Rd, Marsh Rd, Bayfront Expressway	Implement signal timing plans for existing ASCT	\$ 275,000	\$ 250,000	
8 Alameda	City of Oakland	Bancroft Ave	Implement bicycle greenwave	\$ 403,300	\$ 306,000	\$ 310,000
9 Alameda	City of Pleasanton	Hacienda Dr, Hopyard Rd, Stoneridge Dr, Owens Dr, Foothill Blvd, Santa Rita Rd, W. Los Positas, Sunol Blvd, Vineyard Av	Deploy ATSPM; data integration	\$ 387,000	\$ 290,250	\$ 290,000
10 Sonoma	City of Rohnert Park	Rohnert Park Expwy, Golf Course Dr, Commerce Blvd	Deploy ASCT; expand existing EVP	\$ 797,900	\$ 542,200	
11 San Mateo	City of San Carlos	Citywide	Deploy ATSPM and video detection	\$ 661,000	\$ 434,600	
12 Santa Clara	City of San Jose	Citywide	Deploy ATSPM	\$ 2,158,750	\$ 1,619,062	\$ 1,400,000
13 Alameda	City of San Leandro	Marina Blvd, Hesperian Blvd	Expand existing ASCT; deploy ATSPM; install pedestrian detection	\$ 778,980	\$ 544,204	
14 Marin	City of San Rafael	Downtown San Rafael	Deploy ATSPM [b]	\$ 2,352,410	\$ 1,735,115	\$ 830,000
15 Contra Costa	City of San Ramon	Bollinger Canyon Rd, Crow Canyon Rd	Deploy ATSPM and fish-eye cameras; upgrade signal infrastructure	\$ 762,372	\$ 563,308	\$ 563,000
16 Santa Clara	City of Santa Clara	Great America Parkway	Deploy ASCT	\$ 404,000	\$ 299,000	
17 Santa Clara	County of Santa Clara	Lawrence Expwy, San Tomas Expwy, Foothill Expwy	Install bike/pedestrian detection	\$ 1,100,000	\$ 825,000	
18 Santa Clara	Santa Clara Valley Transit Authority	N. First St, Tasman Dr	Install advanced pedestrian crossing technology; implement archived video and video analytics	\$ 2,265,000	\$ 1,698,750	
19 San Mateo	City of South San Francisco	Airport Blvd, South Airport Blvd, Gateway Blvd, Oyster Pt Blvd, Forbes Blvd, East Grand Av	Deploy ATSPM; implement variable lane assignment	\$ 709,825	\$ 532,000	\$ 532,000
20 Santa Clara	City of Sunnyvale	Sunnyvale-Saratoga, Mathilda Av, Wolfe Rd, Fair Oaks Av, Homestead Rd, Maude Av, Caribbean Dr	Install video sensors, CCTV cameras, thermal imaging pedestrian detection	\$ 2,844,000	\$ 2,133,000	
21 Marin	Transportation Authority of Marin	Sir Francis Drake Blvd	Deploy ASCT, ATSPM, bicycle/pedestrian detection, TSP	\$ 1,255,000	\$ 930,000	
22 Alameda	City of Union City	Union City Blvd, Decoto Rd	Expand existing ASCT; deploy ATSPM, bicycle/pedestrian detection; upgrade signal infrastructure	\$ 1,098,265	\$ 709,765	\$ 710,000
23 Solano	City of Vallejo	Tennessee St, Georgia St, Broadway St	Install fish-eye cameras; deploy ATSPM	\$ 682,871	\$ 461,062	
24 Multi-county	MTC	Various	Technical Assistance			\$ 789,000
Total IDEA Category 1				\$ 26,973,325	\$ 19,823,393	\$ 8,000,000

Notes: [a] Final project scope will be determined in consultation with applicable stakeholders of MTC's Dumbarton Forward project.

[b] Omits the ASCT element of the application due to justification of need.

Acronyms: ASCT = Adaptive Signal Control Technology; ATSPM = Automated Traffic Signal Performance Measures; CCTV = Closed Circuit Television;

EVP = Emergency Vehicle Preemption; TSP = Transit Signal Priority

IDEA Category 2 Applications and Recommendations

Category 2: Deploy and Pilot Connected and Automated Vehicle Technologies

	County	Agency	Project Corridor(s)	Project Description	Full Project Budget	Requested Grant Amount	Recommended Grant Amount
1	San Mateo	City of Belmont	Ralston Ave.	Deploy ASCT and CV EVP.	\$ 960,000	\$ 710,000	
2	San Mateo	City/County Association of Governments	State Route 82 (El Camino Real)	Deploy eco-driving application that recommends to auto drivers the optimal speed to drive to increase arrivals on green phases, to minimize intersection delay and stops.	\$ 1,312,240	\$ 984,180	
3	Contra Costa	Contra Costa Transportation Authority	Concord Blvd., Clayton Rd. and Willow Pass Rd.	Deploy next generation TSP, an eco-driving application that recommends a speed for transit vehicles to increase their arrivals on green phases; deploy a transit passenger application to improve the reliability of connections for riders transferring from BART.	\$ 747,271	\$ 560,453	\$ 560,000
4	Alameda	City of Dublin	Citywide	Deploy an SAV on city streets; implement pedestrian/bicycle and CV transit applications.[a]	\$ 650,133	\$ 443,433	\$ 385,000
5	Alameda	City of Emeryville	Powell, Shellmound, Christie and 40th St.	Deploy ATSPM and TSP; implement virtual bicycle detection technology that utilizes a mobile device application to increase bicycle arrivals on green phases.	\$ 1,099,251	\$ 784,313	\$ 785,000
6	Alameda	City of Fremont	Fremont Blvd., Auto Mall Parkway and Warren Ave.	Implement a mobile application for Tesla truck drivers to provide arrival time to manufacturing operators at Tesla's Fremont facility and deploy Freight Signal Priority using DSRC-enabled truck platoons.	\$ 625,000	\$ 468,750	
7	Contra Costa	City of Lafayette	Mt. Diablo Boulevard, Moraga Rd. and Pleasant Hill Rd.	Install video detection and CV roadside units to transmit SPaT data to facilitate improved signal timing.	\$ 385,020	\$ 269,901	
8	Santa Clara	Town of Los Gatos	Los Gatos Boulevard	Deploy ASCT, ATSPM, and a virtual bicycle detection application that utilizes a mobile device application to increase bicycle arrival on green phases.	\$ 1,075,600	\$ 698,500	\$ 700,000
9	Santa Clara	City of Mountain View	N.Rengstroff, W MiddleField and Charleston Rd.	Deploy ATSPM, ASCT, bicycle/pedestrian detection, bluetooth devices, CV TSP, dynamic transit routing, and DSRC-enabled bicycle safety system.	\$ 3,161,000	\$ 1,846,000	
10	Santa Clara	City of Palo Alto	Bryant, N. California and Embarcardero	Implement a system that provides real-time speed guidance to bicycles to increase their arrivals on green phases via dynamic signage and real-time route guidance.	\$ 939,000	\$ 704,200	
11	Alameda	City of Pleasanton	Citywide	Implement an application that provides safety and eco-driving notifications to automobiles and a predictive analytical tool using video data to gauge possible traffic conflicts.	\$ 1,491,390	\$ 1,118,543	
12	Santa Clara	Valley Transportation Authority	N. First Street Corridor and Tasman	Deploy and test a new vulnerable road user protection system where roadside detection directly alerts a CV of the presence of a bicyclist or pedestrian at the intersection.	\$ 361,012	\$ 274,762	
13	Santa Clara	Valley Transportation Authority	Veterans Administration Palo Alto Medical Center	Deploy an eAV that is accessible to persons with disabilities for deployment at Veterans Administration Palo Alto Medical Center.	\$ 1,112,020	\$ 829,316	\$ 830,000
14	Contra Costa	City of Walnut Creek	Olympic Blvd. S. California Blvd, and Newell Avenue	Deploy CV TSP and EVP, bicycle/pedestrian detection, bluetooth devices. [b]	\$ 1,121,000	\$ 836,000	\$ 600,000
15	Multi-county	MTC	Various	Technical Assistance			\$ 1,140,000
Total IDEA Category 2					\$ 15,039,937	\$ 10,528,351	\$ 5,000,000

Notes: [a] Omits the bikeshare station in the application, as it is an ineligible project under the IDEA Grant Program

[b] Omits the ASCT element of the application due to the proposed alignment of the corridor.

Acronyms: ASCT = Adaptive Signal Control Technology; ATSPM = Automated Traffic Signal Performance Measures; CV = Connected Vehicle; DSRC = Dedicated Short Range Communications;

eAV = Electric Automated Vehicle; EVP = Emergency Vehicle Preemption; SAV = Shared Autonomous Vehicle; TSP = Transit Signal Priority

MTC Resolution No. 4202, Revised and its Attachments have been updated and are attached to the Commission memo in this packet.