Metropolitan Transportation Commission Programming and Allocations Committee

January 10, 2017 Agenda Item 2d

MTC Resolution No. 4275, Revised

Subject: 2017 Transportation Improvement Program (TIP) Amendment 2017-25.

Background:

The federally required TIP is a comprehensive listing of Bay Area surface transportation projects that are to receive federal funding, are subject to a federally required action, or are considered regionally significant for air quality conformity purposes during the four-year period from fiscal year 2016-17 through fiscal year 2019-20. MTC, as the federally designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area, is required to prepare and adopt an updated TIP every two years under state statute. The 2017 TIP was adopted by the Commission on September 28, 2016, and approval by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) was received on December 16, 2016. The 2017 TIP is valid for four years under federal regulations. The TIP may be revised to make necessary changes prior to the next update. The TIP is posted on the Internet at: http://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program.

Amendment 2017-25 makes revisions to 134 projects with a net funding increase of approximately \$581 million. Among other changes, this revision:

- Amends six new Active Transportation Program (ATP) funded projects into the TIP and revises the funding plans of six existing ATP funded projects;
- Updates the funding plans and back-up listings of three grouped listings to reflect the latest information from Caltrans;
- Amends 103 new projects into the TIP and updates the funding plans of seven existing projects to reflect the adoption of the One Bay Area Grant 2 (OBAG2) County Program;
- Amends four new projects into the TIP to reflect recent changes to the OBAG2 Regional Active Operations Management and Climate Initiatives Programs;
- Amends three new projects into the TIP to reflect previously approved changes to the One Bay Area Grant 1 (OBAG1) Transit Performance Initiative and Climate Change Initiatives Programs; and
- Updates the funding plan of one project to reflect recent changes to the Transit Capital Priorities program.

The revisions made with this amendment do not conflict with the financial constraint requirements of the TIP, and therefore the 2017 TIP remains financially constrained with this amendment.

The revisions made pursuant to this amendment will not change the air quality conformity finding; therefore, a conformity determination is not required.

The TIP Revision Summary for this amendment is attached and is also available in the MTC offices at 375 Beale Street, San Francisco, CA, and is posted on the Internet at: http://mtc.ca.gov/our-work/fund-invest/tip/tip-revisions-and-amendments.

The TIP public participation process also serves to satisfy the public involvement requirements of the FTA annual Program of Projects, for applicable funds.

This amendment will be transmitted to Caltrans after the Commission approval; after its review, Caltrans will forward the amendment to FTA/FHWA as required for final federal agency review and approval.

Issues: None.

Recommendation: Refer Resolution No. 4275, Revised to the Commission for approval.

Attachments: Attachment 1, Summary Report of Amended Projects for TIP Amendment

2017-25

MTC Resolution No. 4275, Revised

J:\SECTION\ALLSTAFF\Resolution\TEMP-RES\MTC\RES-4275_ongoing_2017_TIP\tmp-4275.docx

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
System: Lo	cal Road				
ALA050035	Alameda County	Cherryland/Ashland/CastroValley/Fairview BikePed	Update the scope to include bike and safety improvements and update the funding plan to add \$8.3M in OBAG2-CMAQ, \$1M in OBAG2-STP, and \$4M in Local funds and reprogram Cycle 3 ATP from FY20 to FY19	\$13,350,000	71.3%
ALA130018	Alameda County	Alameda Co-Various Streets and Roads Preservation	Update the funding plan to add \$3.95M in STP-OBAG2 and \$590K in Other Local funds	\$4,540,000	211.5%
ALA170043	Oakland	Oakland - 14th Street Safe Routes in the City	Update the funding plan to reprogram \$1.2M in PSE ATP funds and \$279K in PSE Local funds from FY20 to FY19, and reprogram \$9.3M in CON ATP funds and \$2.4M in CON Local funds from FY21 to FY20	\$0	0.0%
ALA170051	Oakland	Fruitvale Alive Gap Closure Project	Update the funding plan to reprogram \$800K in PSE ATP funds and \$466K in PSE Local funds from FY20 to FY18, reprogram \$50K in ROW ATP funds from FY20 to FY18, and reprogram \$5M in CON ATP funds and \$2 in CON Local funds from FY21 to FY19	\$0	0.0%
ALA170054	Berkeley	John Muir Safe Routes to School	Update the funding plan to reprogram \$47K in ATP funds from PSE to CON, reprogram PSE from FY20 to FY17 and CON from FY21 to FY18, and add \$27K in PSE Local and \$11K in CON Local	\$38,080	11.3%
ALA170061	Newark	Thornton Avenue Pavement Rehabilitation	Amend a new exempt project into the TIP with \$592K in OBAG 2 and \$910 in Other Local funds	\$1,502,000	~%
ALA170062	Dublin	Dublin Blvd Rehabilitation	Amend a new exempt project to the TIP with \$661K in OBAG2-STP and \$339K in Other Local funds	\$1,000,000	~%
ALA170063	Oakland	Lakeside Family Streets	Amend new exempt project into the TIP with \$2.8M in OBAG2-CMAQ funds, \$1.9M in OBAG-STP and \$622K in Other local funds	\$5,415,000	~%
ALA170064	Oakland	Oakland LSR Paving	Amend new exempt project to the TIP with \$4.9M in OBAG 2 and \$636K in Other Local funds	\$5,531,000	~%
ALA170065	Hayward	Hayward - Main Street Complete Street	Amend a new exempt project to the TIP with \$1.7M in OBAG2-STP and \$550K in Other Local funds	\$2,225,000	~%
ALA170066	Hayward	Winton Ave Complete Street	Amend a new exempt project into the TIP with \$1.75M in OBAG2-STP and \$230K in Other Local funds	\$1,979,860	~%
ALA170067	Berkeley	Southside Complete Streets & Transit Improvement	Amend a new exempt project into the TIP with \$4.4M in OBAG2-CMAQ and \$2.7M in OBAG2-STP and \$2.3M in Other Local funds	\$9,414,997	~%
ALA170068	Livermore	Livermore Pavement Rehabilitation - MTS Routes	Amend new exempt project into the TIP with \$1.4M in OBAG2-STP and \$570K in Other Local funds	\$1,952,000	~%
ALA170069	Fremont	City of Fremont Pavement Rehabilitation	Amend new exempt project into the TIP with \$2.8M in OBAG2-STP and \$1.7M in Other Local funds	\$4,428,000	~%
ALA170070	Pleasanton	Pavement Rehabilitation Hacienda Business Park	Amend a new exempt project into the TIP with \$1.1M in OBAG 2 and \$870K in Other Local funds	\$1,965,000	~%
ALA170071	Union City	Union City-Dyer Street Pavement Rehabilitation	Amend a new exempt project to the TIP with \$872K in OBAG2 and \$168K in Other Local funds	\$1,040,000	~%
ALA170072	Emeryville	Frontage Rd, 65th St and Powell St Pavement Maint	Amend new exempt project into the TIP with \$225K in OBAG2-STP and \$45K in Other Local funds	\$270,000	~%
ALA170073	Alameda (City)	Clement Avenue Complete Streets	Amend a new exempt project into the TIP with \$3M in CMAQ-OBAG2, \$2M in STP-OBAG2 and \$652K in Other Local funds	\$5,670,000	~%

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
ALA170074	Alameda (City)	Alameda City-Wide Pavement Rehabilitation	Amend a new exempt project into the TIP with \$827K in STP-OBAG2 and \$232K in Other Local funds	\$1,059,000	~%
ALA170075	San Leandro	San Leandro Washington Avenue Rehabilitation	Amend a new exempt project into the TIP with \$1M in OBAG2-STP and \$137K in Other Local funds	\$1,185,000	~%
ALA170076	Fremont	Complete Streets Upgrade of Relinquished SR84	Amend a new exempt project to the TIP with \$4.2M in OBAG2-CMAQ, \$3.5M in OBAG2-STP and \$998K in Other Local funds	\$8,693,000	~%
ALA170078	Oakland	Oakland - Crossing to Safety	Amend a new exempt project into the TIP with \$1.9M in ATP and \$222K in Local funds	\$2,117,000	~%
CC-170027	Contra Costa County	Contra Costa Local Streets and Roads Preservation	Amend a new exempt project into the TIP with \$4.3M in OBAG2-STP and \$1.4M in Other Local funds	\$5,772,000	~%
CC-170028	Contra Costa County	Kirker Pass Road Open Grade Overlay	Amend a new exempt project into the TIP with \$1.3M in OBAG2-STP and \$1.1M in Other Local funds	\$2,395,000	~%
CC-170029	Contra Costa County	West County Walk and Bike Leaders	Amend a new exempt project into the TIP with \$561K in OBAG2-CMAQ and \$73K in Other Local funds	\$634,000	~%
CC-170030	El Cerrito	Carlson Blvd and Central Ave Pavement Rehab	Amend a new exempt project into the TIP with \$544K in OBAG2-STP and \$478K in Other Local funds	\$1,022,000	~%
CC-170031	San Pablo	San Pablo - Market Street Pavement Rehabilitation	Amend a new exempt project into the TIP with \$618K in OBAG2-STP and \$81K in Other Local funds	\$699,000	~%
CC-170032	Orinda	Orinda Way Pavement Rehabilitation	Amend a new exempt project into the TIP with \$620K in OBAG2-STP and \$130K in Other Local funds	\$750,000	~%
CC-170033	Lafayette	Pleasant Hill Rd Pavement Rehab & Maintenance	Amend a new exempt project into the TIP with \$579K in OBAG2-STP and \$77K in Other Local funds, toll credits will be used in lieu of match for federal funds	\$656,000	~%
CC-170034	Brentwood	Brentwood Various Streets and Roads Preservation	Amend a new exempt project into the TIP with \$1.7M in OBAG2-STP and \$216K in Other Local funds, toll credits will be used in lieu of match for the federal funds	\$1,869,000	~%
CC-170035	Antioch	Antioch - L Street Pathway to Transit	Amend a new exempt project into the TIP with \$1.2M in OBAG2-CMAQ and \$1.8M in Other Local funds	\$3,000,000	~%
CC-170036	Antioch	Antioch Pavement Rehabilitation	Amend a new exempt project into the TIP with \$2.5M in OBAG 2-STP and \$726K in Other Local funds	\$3,200,000	~%
CC-170037	Concord	Concord Willow Pass Road Repaving and 6th St SRTS	Amend to add new exempt project into the TIP with \$1.1M in OBAG2-CMAQ, \$4.2M in OBAG2-STP, \$1.1M in Other Local and \$120K in Sales Tax funds, toll credits will be used in lieu of match for federal funds	\$6,517,000	~%
CC-170038	Walnut Creek	Ygancio Valley & Oak Grove Road Rehabilitation	Amend a new exempt project into the TIP with \$2.6M in OBAG2-STP and \$445K in Other Local funds	\$3,053,000	~%
CC-170040	Pittsburg	Pittsburg BART Pedestrian and Bicycle Connectivity	Amend a new exempt project into the TIP with \$3.9M in OBAG2-CMAQ, \$600K in Sales Tax, and \$50K in Other Local funds	\$4,520,000	~%
CC-170041	Oakley	Oakley Street Repair and Resurfacing	Amend a new exempt project into the TIP with \$969K in OBAG2-STP and \$622K in Local funds	\$1,591,000	~%
CC-170042	Pittsburg	City of Pittsburg Pavement Improvements	Amend a new exempt project into the TIP with \$1.4M in OBAG2-STP and \$180K in Other Local funds, toll credits will be used in lieu of match for federal funds	\$1,565,000	~%

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
CC-170043	Hercules	Hercules -Sycamore/Willow Pavement Rehabilitation	Amend a new exempt project into the TIP with \$492K in OBAG2-STP and \$148K in Other Local funds	\$640,000	~%
CC-170044	Pleasant Hill	Pleasant Hill Road Improvements	Amend new exempt project into the TIP with \$920K in OBAG2-STP, \$98K in Sales Tax, and \$2.7M in Other Local funds	\$3,745,000	~%
CC-170045	San Ramon	Alcosta Boulevard Pavement Rehab	Amend a new exempt project into the TIP with \$1.2M in OBAG2-STP and \$1M in Other Local funds	\$2,200,000	~%
CC-170046	Moraga	Moraga Way and Canyon/Camino Pablo Improvements	Amend a new exempt project into the TIP with \$596K in OBAG2-STP, \$607K in OBAG2-CMAQ, \$822K in Other Local, and \$553K in Sales Tax funds	\$2,628,000	~%
CC-170047	Clayton	Clayton Neighborhood Street Rehab	Amend a new exempt project into the TIP with \$308K in OBAG2-STP and \$85K in Other Local funds	\$393,000	~%
CC-170049	Pittsburg	Pittsburg Active Transp. and Safe Routes Plan	Amend a new exempt project into the TIP with \$312K in ATP funds	\$312,000	~%
CC-170050	Concord	Downtown Corridors Bike/Pedestrian Improvements	Amend a new exempt project into the TIP with \$623K in ATP funds, and \$106K in Local funds	\$729,000	~%
MRN110010	Sausalito	Sausalito - Bridgeway/US 101 Off Ramp Bicycle Imps	Update the funding plan to add \$250K in OBAG2-CMAQ and \$319K in Other Local funds	\$569,000	199.6%
MRN170019	Corte Madera	Corte Madera-Paradise Drive Multiuse Path	Amend a new exempt project into the TIP with \$595K in OBAG2-CMAQ and \$450K in Local funds	\$1,045,000	~%
MRN170020	San Anselmo	San Anselmo Bike Spine	Amend a new exempt project into the TIP with \$269K in OBAG2-CMAQ and \$35K in Other Local funds	\$303,900	~%
MRN170021	San Anselmo	Sir Francis Drake Blvd Pavement Rehabilitation	Amend a new exempt project into the TIP with \$1.1M in OBAG2-STP and \$147K in Other Local funds	\$1,281,100	~%
MRN170022	Novato	Novato-Measure A Group 10 Pavement Rehabilitation	Amend a new exempt project into the TIP with \$1.45M in OBAG2-STP and \$803K in Local funds	\$2,253,950	~%
MRN170023	Corte Madera	Central Marin Regional Pathway Gap Closure	Amend a new exempt project into the TIP with \$415K in ATP funds, and \$54K in Local funds	\$469,100	~%
NAP170004	Napa Valley Transportation Authority	Napa County Safe Routes to Schools	Update the funding plan to add \$437K in CON ATP funds to FY18	\$437,000	162.5%
SCL110108	Santa Clara County	Isabel Bridge Replacement (37C0089)	Update the funding plan to reprogram \$370K in PE HBP from FY17 to FY18 and \$4.8M in CON HBP from FY18 to FY17 and add \$30K in FY18 ROW HBP and \$1.8M in FY18 CON HBP; toll credits will be used in lieu of match for federal funds	\$1,436,662	24.2%
SCL170001	Metropolitan Transportation Commission (MTC)	Regional Planning Activities and PPM - Santa Clara	Update the funding plan to add \$4.8M in OBAG2-STP	\$4,822,000	50.8%
SCL170019	Santa Clara County	Uvas Road Pavement Rehabilitation	Amend a new exempt project into the TIP with \$1.7M in OBAG2-STP-FAS and \$220K in Other Local funds	\$1,921,439	~%
SCL170020	Sunnyvale	Bernardo Avenue Bicycle Underpass	Amend a new exempt project to the TIP with \$500K in OBAG2-CMAQ, \$633K in Other Local funds and \$8.7M in RTP-LRP funds	\$9,833,000	~%
SCL170021	Palo Alto	North Ventura Coordinated Area Plan	Amend a new exempt project into the TIP with \$638K in OBAG2-STP and \$112K in Other Local funds	\$750,000	~%

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
SCL170022	Sunnyvale	Java Dr Road Diet and Bike Lanes	Amend a new exempt project into the TIP with \$214K in OBAG2-CMAQ and \$419K in Other Local funds	\$633,000	~%
SCL170023	Sunnyvale	Peery Park Sense of Place Improvements	Amend a new exempt project into the TIP with \$1.2M in OBAG2-CMAQ and \$2.2M in Other Local funds	\$3,400,000	~%
SCL170024	Sunnyvale	East Sunnyvale Area Sense of Place	Amend a new exempt project to the TIP with \$1.3M in OBAG2-CMAQ and \$2.6M in Other Local funds	\$3,856,900	~%
SCL170025	Sunnyvale	Fair Oaks Avenue Bikeway - Phase 2	Amend a new exempt project into the TIP with \$335K in OBAG2-CMAQ and \$655K in Other Local funds	\$990,000	~%
SCL170026	Sunnyvale	Lawerence Station Area Sidewalks & Bike Facilities	Amend a new exempt project into the TIP with \$214K in OBAG2-CMAQ and \$419K in Other Local funds	\$633,000	~%
SCL170027	Sunnyvale	Sunnyvale Traffic Signal Upgrades/Replacements	Amend a new project into the TIP with \$2.6M in OBAG2-STP and \$333K in Other Local funds, toll credits will be used in lieu of match for CON federal funds	\$2,899,000	~%
SCL170032	Santa Clara County	McKean Rd Pavement Rehabilitation	Amend a new exempt project into the TIP with \$1.2M in OBAG2-STP and \$149K in Other Local funds	\$1,300,125	~%
SCL170033	Santa Clara County	Capitol Expressway Pavement Rehabilitation	Amend a new exempt project into the TIP with \$5M in OBAG2-STP and \$648K in Other Local funds	\$5,647,804	~%
SCL170035	Campbell	Campbell - Winchester Blvd Overlay	Amend a new exempt project into the TIP with \$554K in OBAG2-STP and \$1.2M in Other Local funds	\$1,725,000	~%
SCL170036	Campbell	Eden Avenue Sidewalk Improvements	Amend a new exempt project into the TIP with \$555K in OBAG2-CMAQ and \$147K in Other Local funds	\$702,000	~%
SCL170037	Cupertino	Cupertino Pavement Maintenance Phase 2	Amend a new exempt project into the TIP with \$769K in OBAG2-STP and \$110K in Other Local funds	\$879,000	~%
SCL170039	Milpitas	Milpitas Street Resurfacing	Amend a new exempt project into the TIP with \$1.6M in OBAG2-STP and \$358K in Local funds	\$1,967,463	~%
SCL170040	Mountain View	West Middlefield Road Improvements	Amend a new exempt project into the TIP with \$1.1M in OBAG2-STP and \$414K in Other Local funds	\$1,550,000	~%
SCL170041	Palo Alto	Palo Alto Street Resurfacing	Amend a new exempt project into the TIP with \$1.0M in OBAG2-STP and \$170K in Other Local funds	\$1,179,000	~%
SCL170042	Santa Clara (City)	Santa Clara Streets and Roads Preservation	Amend a new exempt project into the TIP with \$2.4M in OBAG2-STP and \$1.1M in Other Local funds	\$3,413,000	~%
SCL170043	Sunnyvale	Homestead Rd at Homestead High School Improvements	Amend a new exempt project into the TIP with \$1M in OBAG2-CMAQ and \$265K in Other Local funds	\$1,265,000	~%
SCL170044	San Jose	San Jose Pavement Maintenance	Amend a new exempt project into the TIP with \$14.6M in OBAG2-STP and \$3.5M in Other Local funds	\$18,137,017	~%
SF-170017	San Francisco Municipal Transport Agency (SFMTA)	Vision Zero SF: Safer Intersections	Amend a new exempt project into the TIP with \$2M in ATP funds, and \$60K in Local funds	\$2,062,000	~%
SM-170002	Metropolitan Transportation Commission (MTC)	Regional Planning Activities and PPM - San Mateo	Update the funding plan to add \$1.5M in OBAG2-STP	\$1,512,000	27.7%

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
SM-170012	San Mateo County	Canada Road and Edgewood Road Resurfacing	Amend a new exempt project into the TIP with \$892K in OBAG2-STP-FAS and \$135K in Other Local funds	\$1,026,000	~%
SM-170013	Half Moon Bay	Half Moon Bay - Poplar Complete Streets	Amend a new exempt project into the TIP with \$1.2M in OBAG2-CMAQ and \$156K in Other Local funds, toll credits will be used in lieu of match for federal funds	\$1,358,000	~%
SM-170014	San Mateo County	San Mateo Countywide Pavement Maintenance	Amend a new exempt project into the TIP with \$1.1M in OBAG2-STP and \$140K in Other Local funds	\$1,212,000	~%
SM-170015	Burlingame	Hoover School Area Sidewalk Impvts (Summit Dr.)	Amend a new exempt project into the TIP with \$700K in OBAG2-CMAQ and \$198K in Other Local funds	\$898,000	~%
SM-170017	San Bruno	Huntington Transit Corridor Bike/Ped Improvements	Amend a new exempt project to the TIP with \$914K in OBAG2-CMAQ and \$243K in Other Local funds	\$1,157,000	~%
SM-170018	Atherton	Atherton - Middlefield Road Class II Bike Lanes	Amend a new exempt project into the TIP with \$251K in OBAG2-CMAQ and \$709K in Other Local funds	\$960,000	~%
SM-170019	Brisbane	Brisbane - Tunnel Ave Rehabilitation	Amend a new exempt project into the TIP with \$137K in OBAG2-STP and \$29K in Other Local funds	\$166,000	~%
SM-170020	Burlingame	Burlingame: Broadway PDA Lighting Improvements	Amend a new exempt project into the TIP with \$720K in OBAG2-CMAQ and \$180K in Other Local funds, toll credits will be used in lieu of match for federal funds	\$900,000	~%
SM-170021	Burlingame	Burlingame Street Resurfacing	Amend a new exempt project into the TIP with \$571K in OBAG2-STP and \$800K in Other Local funds	\$1,371,000	~%
SM-170022	Colma	Colma - Mission Road Bike/Ped Improvements	Amend a new exempt project into the TIP with \$625K in OBAG2-CMAQ and \$750K in Other Local funds	\$1,375,000	~%
SM-170023	Daly City	Daly City Pavement Preservation	Amend a new exempt project into the TIP with \$1.3M in OBAG2-STP and \$170K in Local funds, toll credits will be used in lieu of match for federal funds	\$1,480,000	~%
SM-170024	East Palo Alto	East Palo Alto Citywide Street Resurfacing	Amend a new exempt project into the TIP with \$416K in OBAG2-STP and \$478K in Other Local funds	\$894,000	~%
SM-170025	Foster City	Foster City - Pavement Rehabilitation	Amend a new exempt project into the TIP with \$441K in OBAG2-STP and \$1.5M in Other Local funds	\$1,901,000	~%
SM-170026	Hillsborough	Hillsborough Street Resurfacing	Amend a new exempt project into the TIP with \$408K in OBAG2-STP and \$53K in Other Local funds, toll credits will be used in lieu of match for federal funds	\$461,000	~%
SM-170027	Menlo Park	Menlo Park - Santa Cruz and Middle Avenues Rehab	Amend a new exempt project into the TIP with \$647K in OBAG2-STP and \$330K in Other Local funds	\$977,000	~%
SM-170028	Millbrae	Millbrae Street Rehabilitation	Amend a new exempt project into the TIP with \$387K in OBAG2-STP and \$215K in Other Local funds	\$602,000	~%
SM-170029	Pacifica	Pacifica - Palmetto Sidewalk Extension	Amend a new exempt project into the TIP with \$330K in OBAG2-STP and \$83K in Other Local funds	\$413,000	~%
SM-170030	Pacifica	Pacifica Citywide Curb Ramps	Amend a new exempt project into the TIP with \$400K of OBAG2-STP and \$92K in Other Local funds	\$492,000	~%
SM-170031	Pacifica	Pacifica Pavement Rehabilitation	Amend a new exempt project into the TIP with \$671K in OBAG2-STP and \$87K in Other Local funds	\$758,000	~%

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
SM-170032	Redwood City	Redwood City Pavement Preservation	Amend a new exempt project into the TIP with \$1.3M in OBAG2-STP and \$296K in Other Local funds	\$1,562,000	~%
SM-170033	San Bruno	San Bruno Street Rehabilitation	Amend a new exempt project into the TIP with \$673K in OBAG2-STP and \$158K in Other Local funds	\$831,000	~%
SM-170034	San Carlos	Ped Enhancements Arroyo/Cedar & Hemlock/Orange	Amend a new exempt project into the TIP with \$500K in OBAG2-CMAQ and \$230K in Other Local funds	\$730,000	~%
SM-170035	San Carlos	Cedar and Brittan Ave Pavement Rehab	Amend a new exempt project into the TIP with \$575K in OBAG2-CMAQ and \$75K in Other Local funds	\$650,000	~%
SM-170036	South San Francisco	SSF Pavement Rehabilitation	Amend a new exempt project into the TIP with \$1.0M in OBAG2-STP and \$134K in Other Local funds	\$1,161,000	~%
SM-170037	Woodside	Woodside Road Rehabilitation	Amend a new exempt project into the TIP with \$242K in OBAG2-STP and \$233K in Other Local funds	\$475,000	~%
SM-170038	San Mateo (City)	North San Mateo Drive Sustainable Streets	Amend a new exempt project into the TIP with \$4M in local funds	\$3,963,600	~%
SOL110019	Solano Transportation Authority (STA)	Solano Safe Routes to School Program	Update the funding plan to add \$1.2M in OBAG2-CMAQ funds, toll credits will be used in lieu of match for federal funds	\$1,209,000	45.8%
SOL170001	Metropolitan Transportation Commission (MTC)	Regional Planning Activities and PPM - Solano	Update the funding plan to add \$3M in OBAG2-STP and \$394K in Local funds	\$3,433,000	68.7%
SOL170010	Fairfield	Grange Middle School Safe Routes to School	Amend a new exempt project into the TIP with \$260K in OBAG2-CMAQ funds	\$260,000	~%
SON170010	Sonoma County	Sonoma County - River Road Pavement Rehab	Amend a new exempt project into the TIP with \$3.3M in OBAG2-STP-FAS and \$423K in Other Local funds	\$3,687,000	~%
SON170011	Petaluma	Petaluma Blvd South Road Diet at E Street	Amend a new project into the TIP with \$2.3M in OBAG2-STP, \$583K in OBAG2-CMAQ, and \$397K in Other Local funds	\$3,295,100	~%
SON170012	Santa Rosa	Highway 101 Bicycle and Pedestrian Bridge	Amend a new exempt project into the TIP with \$1.4M in OBAG2-CMAQ, \$231K in TDA and \$13.9M in RTP-LRP funds	\$15,528,000	~%
SON170013	Sonoma County	Rehabilitaiton of Various Roads in Sonoma County	Amend a new exempt project into the TIP with \$2.6M in OBAG2-STP and \$329K in Other Local funds	\$2,929,000	~%
SON170014	Sonoma County	Crocker Bridge Bike and Pedestrian Passage	Amend a new exempt project into the TIP with \$1.8M in OBAG2-CMAQ, \$402K in Other Local and \$1.28M in RTP-LRP funds	\$3,491,000	~%
SON170015	Cotati	E. Cotati Avenue Street Rehabilitation Project	Amend a new exempt project into the TIP with \$675K in STP and \$88K in Local funds. Toll credits will be used in lieu of match for CON funds.	\$763,000	~%
SON170016	Rohnert Park	Rohnert Park Various Streets Rehabilitation	Amend a new exempt project into the TIP with \$911K in OBAG2-STP, \$124K in OBAG2-CMAQ and \$791K in Other Local funds	\$1,826,000	~%
VAR170012		GL: Bridge Rehab/Recon Local Hwy Bridge Program	Update the funding plan and back-up listing to reflect the latest information from Caltrans	\$183,950,393	34.0%
System: Pu	blic Lands/Trails				
CC-170014	San Ramon	Iron Horse Trail Bike and Pedestrian Overcrossing	Update the scope to remove the Crow Canyon Rd overcrossing; update the funding plan to change the source for \$12.4M in RTP-LRP to \$4.6M in local, \$2.9M in Sales Tax, and \$4.8M in CMAQ, remove \$10.7M in RTP-LRP and reprogram funds between years and phases	-\$10,739,000	-42.7%

TIP Revision Summary
2017-25

Attachment 1

TIP ID	Sponsor	Project Name	Description of Change	Funding Change (\$)	Funding Change (%)
CC-170039	Concord	Monument Boulevard Class I Path	Amend a new exempt project into the TIP with \$4.4M in OBAG2-CMAQ and \$961K in Other Local funds	\$5,329,000	~%
SCL170028	Los Gatos	Los Gatos Creek Trail to Hwy 9 Trailhead Connector	Amend a new exempt project into the TIP with \$343K in OBAG2-CMAQ and \$44K in Other Local funds	\$4,387,440	~%
SCL170045	Santa Clara (City)	Saratoga Creek Trail Phase 1	Amend a new exempt project into the TIP with \$2.7M in OBAG2-CMAQ and \$1.6M in Other Local funds	\$4,326,000	~%
SOL170007	Suisun City	McCoy Creek Trail - Phase 2	Update the funding plan to change the source for \$498K from RTP-LRP to ATP, and for \$582K from Local to ATP; add \$1.3M in ATP and reprogram funds between years and phases	\$1,287,000	42.9%
System: Re	gional				
ALA170077	East Bay Regional Park District (EBRPD)	Doolittle Drive Bay Trail	Amend a new exempt project into the TIP with \$4.3M in Local funds, \$4M in ATP funds, and \$2.8M in Salestax funds	\$11,100,000	~%
CC-170048	Pinole	Pinole - San Pablo Avenue Rehabilitation	Amend a new exempt project into the TIP with \$586K in OBAG2-STP and \$77K in Other Local, toll credits will be used in lieu of match for federal funds	\$663,000	~%
REG170019	Bay Area Air Quality Management District (BAAQMD)	Spare the Air	Amend a new exempt project into the TIP with \$5M in CMAQ funds, toll credits will be used in lieu of match for federal funds	\$5,000,000	~%
REG170020	Bay Area Air Quality Management District (BAAQMD)	Electric Vehicle Programs and Outreach	Amend a new exempt project into the TIP with \$10M in OBAG2-CMAQ funds, toll credits will be used in lieu of match for federal funds	\$5,000,000	~%
REG170021	Bay Area Air Quality Management District (BAAQMD)	Electric Vehicle Infrastructure/Vehicle Buyback	Amend a new exempt project into the TIP with \$7M in TFCA and \$3M in CARB funds	\$10,000,000	~%
SCL170038	Los Altos	Fremont Avenue Preservation	Amend a new exempt project into the TIP with \$336K in OBAG2-STP and \$179K in Other Local funds	\$515,000	~%
VAR170024	Metropolitan Transportation Commission (MTC)	Bike Share Capital Program	Amend a new exempt project into the TIP with \$2.6M in CMAQ and \$355K in Other Local funds	\$2,919,000	~%
System: Sta	ate Highway				
ALA050079	Alameda County Transportation Commission (ACTC)	I-80 Gilman Interchange Reconfiguration	Update the funding plan to change the source for \$3.4M from Sales Tax to RTP-LRP and for \$12K from Other State to RTP-LRP, and add \$960K in Other Local, \$4.2M in ATP and \$11.9M in RTP-LRP, and reprogram funds between years and phases; update sponsor	\$17,022,139	65.1%
NAP170005	Saint Helena	Main Street St. Helena Pedestrian Improvements	Amend a new exempt project into the TIP with \$1.2M in OBAG2-STP and \$187K in Other Local	\$1,393,000	~%
REG170018	Metropolitan Transportation Commission (MTC)	Connected & Automated Vehicles	Amend in new project funded with \$2.5M in OBAG2-STP funds; toll credits applied in lieu of match	\$2,500,000	~%
SM-170016	South San Francisco	SSF Grand Boulevard (Phase III)	Amend a new project into the TIP with \$1M in OBAG2-CMAQ and \$275K in Other Local funds	\$1,275,000	~%

			TIP Revision Summary 2017-25	,	Atta	achment 1	
TIP ID	Sponsor	Project Name	Description of Change			Funding Change (\$)	Funding Change (%)
VAR170006	Caltrans	GL: Pavement Resurf./Rehab - SHOPP Roadway Presv.		Update the funding plan and back-up listing to reflect the latest information from Caltrans including the addition of \$19.9M in SHOPP funds		\$19,911,000	2.8%
VAR170008	Caltrans	GL: Emergency Repair - SHOPP Emergency Response	Update the funding plan and back-up listing to reflect the latest information from Caltrans including the addition of \$30.8M in SHOPP funds		t information from	\$30,765,000	7.4%
System: Tra	ansit						
NAP050009	Napa Valley Transportation Authority	Park & Ride Lots in Napa County	Amend a project back into the TIP, update the scope to include improvements to existing parking and ride lots and update the funding plan to add \$507K in STP and \$200K in Other Local funds		•	\$707,131	14.1%
REG090054	Water Emergency Transportation Authority (WETA)	WETA: Ferry Channel & Berth Dredging	Update the funding plan to add \$2.48M in FY18 5337 and \$620K in FY18 Bridge Tol funds		OK in FY18 Bridge Toll	\$3,100,000	94.1%
SF-170016	Bay Area Rapid Transit District (BART)	Embarcadero Stn: New North-Side Platform Elevator	Amend a new exempt project into the TIP with \$2M in OBAG2-STP and \$13M in local funds		STP and \$13M in	\$15,000,000	~%
SOL170009	Solano Transportation Authority (STA)	Solano Mobility Call Center	Amend a new exempt project into the TIP with \$1.5M in OBAG2-CMAQ and \$199K in Other Local funds		2-CMAQ and \$199K	\$1,736,000	~%
				-	Total Funding Change:	\$581,480,200	
			TIP Revision Summary				
	Fed	eral State	Regional	Local	Total		2017 TIP Only
Current:	\$533,6	06,559 \$1,148,842,551	\$2,350,000	\$114,164,081	\$1,798,963,19	91	\$1,316,887,293
Proposed:	\$798,2	04,952 \$1,219,769,770	\$9,970,000	\$352,498,669	\$2,380,443,3	91	\$1,712,247,541

\$7,620,000

\$238,334,588

\$581,480,200

Delta:

\$264,598,393

\$70,927,219

\$395,360,248

Date: September 28, 2016

W.I.: 1512 Referred by: PAC

Revised: 12/21/16-C 02/22/17-C 03/22/17-C

04/26/17-C 06/28/17-C 07/26/17-C 09/27/17-C 11/15/17-C 01/24/18-C

ABSTRACT Resolution No. 4275, Revised

This resolution adopts the 2017 Transportation Improvement Program (TIP) for the San Francisco Bay Area.

Further discussion of the 2017 TIP adoption is contained in the Programming & Allocations Committee summary sheets dated September 14, 2016, December 14, 2016, February 8, 2017, March 8, 2017, April 12, 2017, June 14, 2017, and July 12, 2017, the Planning Committee summary sheet dated July 14, 2017 and the Programming & Allocations Committee summary sheet dated September 13, 2017, November 8, 2017 and January 10, 2017. This resolution was revised as outlined below. Additional information on each revision is included in attachment B: 'Revisions to the 2017 TIP'.

2017 TIP Revisions

				MTC	
Revision		# of	Net Funding Change	Approval	Final Approval
#	Revision Type	Projects	(\$)	Date	Date
17-01	Admin. Mod.	61	-\$3,823,767	12/21/2016	12/21/2016
17-02	Admin. Mod.	6	\$544,852	1/31/2017	1/31/2017
17-03	Amendment	69	\$819,826,956	12/21/2016	2/8/2017
17-04	Admin. Mod.	15	-\$111,504	3/6/2017	3/6/2017
17-05	Admin. Mod.	12	\$22,741,790	4/5/2017	4/5/2017
17-06	Amendment	11	\$68,189,237	2/22/2017	3/14/2017
17-07	Admin. Mod.	15	-\$8,341,530	4/28/2017	4/28/2017
17-08	Amendment	73	\$840,375,166	3/22/2017	4/14/2017
17-09	Admin. Mod.	24	\$17,810,414	6/9/2017	6/9/2017
17-10	Amendment	14	\$101,213,635	4/26/2017	6/8/2017
17-11	Admin. Mod.	4	-\$1,360,312	7/6/2017	7/6/2017
17-12	Admin. Mod.	20	-\$6,802,149	8/2/2017	8/2/2017
17-13	Amendment	48	\$221,344,142	6/28/2017	8/3/2017
17-14	Amendment	61	\$3,846,016,088	7/26/2017	8/23/2017

ABSTRACT MTC Resolution No. 4275, Revised Page 2

				MTC	
Revision		# of	Net Funding	Approval	Final Approval
#	Revision Type	Projects	Change (\$)	Date	Date
17-15	Admin. Mod.	16	\$12,222,653	9/20/2017	9/20/2017
17-16	Amendment	13	\$19,557,138	7/26/2017	9/5/2017
17-17	Admin. Mod.	20	-\$336,931	10/12/2017	10/12/2017
17-18	Admin. Mod.	5	-\$466,894	11/6/2017	11/6/2017
17-19	Amendment	31	\$4,412,223,691	9/27/2017	10/25/2017
17-20	Admin. Mod.	18	\$4,097,482	11/21/2017	11/21/2017
17-21	Admin. Mod.	Pending	Pending	Pending	Pending
17-22	Amendment	19	\$66,639,566	11/15/2017	Pending
17-23	Admin. Mod.	Pending	Pending	Pending	Pending
17-24	Admin. Mod.	Pending	Pending	Pending	Pending
17-25	Amendment	134	\$581,480,200	1/24/2018	Pending
Net Fundi	Net Funding Change		\$11,013,039,923		
Absolute I	Funding Change	\$11,055,526,097			

Date: September 28, 2016

W.I.: 1512 Referred by: PAC

Re: Adoption of the 2017 Transportation Improvement Program (TIP)

METROPOLITAN TRANSPORTATION COMMISSION RESOLUTION NO. 4275

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

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

WHEREAS, Title 23 Code of Federal Regulations Part 450 (23 CFR §450) requires the region to carry out a continuing, cooperative and comprehensive transportation planning process as a condition to the receipt of federal assistance to develop and update at least every four years, a Transportation Improvement Program (TIP) consisting of a comprehensive listing of transportation projects that receive federal funds or that are subject to a federally required action, or that are regionally significant; and

WHEREAS, the TIP must be consistent with the Regional Transportation Plan (RTP) adopted pursuant to Government Code Section 66508, the State Implementation Plan (SIP) as required by the federal Clean Air Act (42 U.S.C. Section 7401 et seq.); and the San Francisco Bay Area Transportation Air Quality Conformity Protocol (MTC Resolution 3757), which establish the Air Quality Conformity Procedures for MTC's TIP and RTP; and

WHEREAS, federal regulations (23 CFR §450.324(i)) require that the TIP be financially constrained, by year, to reasonable estimates of available federal and state transportation funds; and

WHEREAS, federal regulations (23 CFR §450.316) require that the MPO develop and use a documented public participation plan that defines a process for providing citizens, affected public agencies and interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process; and

WHEREAS, federal regulations (23 CFR §450.330(a)) allow MTC to move projects between years in the first four years of the TIP without a TIP amendment, if Expedited Project Selection Procedures (EPSP) are adopted to ensure such shifts are consistent with the required year by year financial constraints; and

WHEREAS, MTC, the State, and public transportation operators within the region have developed and implemented EPSP for the federal TIP as required by Federal Regulations (23 CFR 450.330(a)) and Section 134 of Title 23 United States Code (USC §134), as outlined in Attachment A to this Resolution, and MTC Resolution 3606, Revised; and

WHEREAS, MTC has found in MTC Resolution No. 4274 that the 2017 TIP, as set forth in this resolution, conforms to the applicable provisions of the SIP for the San Francisco Bay Area; and

WHEREAS, the San Francisco Bay Area air basin was designated by U.S. Environmental Protection Agency as nonattainment for the fine particulate matter (PM2.5) standard in December 2009, and MTC must demonstrate conformance to this standard through an interim emissions test until a PM2.5 SIP is approved by the federal Environmental Protection Agency (U.S. EPA); now, therefore be it

<u>RESOLVED</u>, that MTC adopts the 2017 TIP, attached hereto as Attachment A and incorporated herein as though set forth at length; and be it further

RESOLVED, that MTC has developed the 2017 TIP in cooperation with the county Congestion Management Agencies, transit operators, the Bay Area Air Quality Management District (BAAQMD), the California Department of Transportation (Caltrans), and other partner agencies and interested stakeholders, and in consultation with the Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and U.S. EPA; and, be it further

<u>RESOLVED</u>, that the 2017 TIP was developed in accordance with the region's Public Participation Plan and consultation process (MTC Resolution No. 4174) as required by Federal Regulations (23 CFR §450.316); and, be it further

<u>RESOLVED</u>, that the projects and programs included in the 2017 TIP, attached hereto as Attachment A to this resolution, and incorporated herein as though set forth at length, are consistent with the RTP; and, be it further

<u>RESOLVED</u>, that the 2017 TIP is financially constrained, by year, to reasonable estimates of available federal, state and local transportation funds; and, be it further

RESOLVED, that MTC approves the EPSP developed by MTC, the State, and public transportation operators within the region for the federal TIP as required by federal regulations (23 CFR 450.330(a)) and Section 134 of Title 23 United States Code (USC §134), as outlined in Attachment A to this Resolution, and MTC Resolution 3606, Revised; and, be it further

<u>RESOLVED</u>, that MTC will support, where appropriate, efforts by project sponsors to obtain letters of no prejudice or full funding agreements from FTA for projects contained in the transit element of the TIP; and, be it further

<u>RESOLVED</u>, that the public hearing and public participation process conducted for the 2017 TIP satisfies the public involvement requirements of the FTA annual Program of Projects; and, be it further

<u>RESOLVED</u>, that the adoption of the TIP shall not constitute MTC's review or approval of those projects included in the TIP pursuant to Government Code Sections 66518 and 66520, or provisions in federal regulations (49 CFR Part 17) regarding Intergovernmental Review of Federal Programs; and, be it further

<u>RESOLVED</u>, that MTC's review of projects contained in the TIP was accomplished in accordance with procedures and guidelines set forth in the San Francisco Bay Area Transportation Air Quality Conformity Protocol (MTC Resolution 3757); and, be it further

RESOLVED, that MTC finds that the 2017 TIP conforms to the applicable provisions of the State Implementation Plan (SIP) and the applicable transportation conformity budgets in the SIP approved for the national 8-hour ozone standard and national carbon monoxide standard, and to the emissions test for the national fine particulate matter standard (MTC Resolution No. 4274); and, be it further

<u>RESOLVED</u>, that the projects and programs included in the 2017 TIP do not interfere with the timely implementation of the traffic control measures (TCMs) contained in the SIP; and, be it further

<u>RESOLVED</u>, that MTC finds all regionally significant capacity-increasing projects included in the 2017 TIP are consistent with Plan Bay Area (the 2040 Regional Transportation

Plan including the Sustainable Communities Strategy for the San Francisco Bay Area); and, be it further

RESOLVED, that revisions to the 2017 TIP as set forth in Attachment B to this resolution and incorporated herein as though set forth at length, shall be made in accordance with rules and procedures established in the public participation plan and in MTC Resolution No. 4275, and that MTC's review of projects revised in the TIP shall be accomplished in accordance with procedures and guidelines set forth in the San Francisco Bay Area Transportation Air Quality Conformity Protocol (MTC Resolution 3757) and as otherwise adopted by MTC; and, be it further

RESOLVED, that staff have the authority to make technical corrections, and the Executive Director and Deputy Executive Directors have signature authority to approve administrative modifications for the TIP and Federal Statewide Transportation Improvement Program (FSTIP) under delegated authority by Caltrans, and to forward all required TIP amendments once approved by MTC to the appropriate state and federal agencies for review and approval; and, be it further

<u>RESOLVED</u>, that a copy of this resolution shall be forwarded to FHWA, the FTA, U.S.
EPA, Caltrans, the Association of Bay Area Governments (ABAG), and to such other agencies and local officials as may be appropriate.

METROPOLITAN TRANSPORTATION COMMISSION

Dave Cortese, Chair

This resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in San Francisco, California on September 28, 2016.

Date: September 28, 2016

W.I.: 1512 Referred by: PAC

Revised: 12/21/16-C 02/22/17-C 03/22/17-C

04/26/17-C 06/28/17-C 07/26/17-C 09/27/17-C 11/15/17-C 01/24/18-C

Attachment B

Resolution No. 4275, Revised

Page 1 of 11

Revisions to the 2017 TIP

Revisions to the 2017 Transportation Improvement Program (TIP) are included as they are approved.

Revision 17-01 is an administrative modification that revises 61 projects with a net funding decrease of approximately \$3.8 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on December 21, 2016. Among other changes, this revision:

- Updates the funding plans of 32 Surface Transportation Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect planned obligations and other programming decisions, including the programming of \$110 million in CMAQ funds and \$40 million in Regional Measure 2 funds to BART's Rail Car Procurement Program to reflect the programming in the OBAG 2 funding framework;
- Updates the funding plans of five projects to reflect the repurposing of unused earmark funds:
- Updates the funding plans of eight individually-listed Highway Bridge Program funded projects to reflect the latest information from Caltrans;
- Splits the Incident Management Program project into two projects to separate the current and future phases of the program;
- Updates the funding plan of the Caltrain Electrification project to reflect recent programming decisions and funding agreements;
- Updates the funding plan of SFMTA's Van Ness Bus Rapid Transit project to reflect the latest schedule including reprogramming approximately \$60 million in Federal Transit Administration (FTA) Small Starts funding from prior years to fiscal year 2017; and
- Updates the funding plan and back-up listing of the Mandates Program within the State Highway Operations and Protection Program (SHOPP) to reflect the latest information from Caltrans including the addition of \$7.3 million in SHOPP funds.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of approximately \$60 million in FTA Small Starts funds, \$7.3M in SHOPP funds, \$17,489 in repurposed earmark funds, and \$1.9 million in Transportation Fund for Clean Air funds. MTC's 2017 TIP, as revised with Revision No. 2017-01, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Attachment B Resolution No. 4275, Revised Page 2 of 11

Revision 17-02 is an administrative modification that revises six projects with a net funding increase of \$544,852. The revision was approved into the Federal-Statewide TIP by the deputy executive director on January 31, 2017. Among other changes, this revision:

- Updates the funding plans of five federally funded projects to reflect actual and planned obligations and Federal Transit Administration grants; and
- Updates the funding plan and back-up listing of the Highway Safety Improvement Program (HSIP) funded grouped listing to reflect the latest programming information from Caltrans related to projects that had unobligated funding from federal fiscal year 2015-16, including the addition of \$399,340 in HSIP funds and \$145,512 in local funds.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$399,340 in HSIP funds. MTC's 2017 TIP, as revised with Revision No. 2017-02, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-03 is an amendment that revises 69 projects with a net funding increase of approximately \$820 million. The revision was referred by the Programming and Allocations Committee on December 14, 2016, and approved by the MTC Commission on December 21, 2016. Caltrans approval was received on January 19, 2017, and final federal approval was received on February 8, 2017. Among other changes, this revision:

- Amends four exempt and four non-exempt, not regionally significant projects into the TIP to reflect the adoption of the Bay Bridge Forward Program;
- Updates the funding plan of the Golden Gate Bridge Suicide Deterrent project to reflect additional funding commitments, including the addition of \$40 million in Highway Bridge Program (HBP) funds, \$40 million in Surface Transportation Block Grant Program funds and \$40 million in Golden Gate Bridge toll funds;
- Updates the funding plans of six additional individually-listed HBP funded projects, updates the funding plan and back-up listing of the HBP funded grouped listing, and combines one individually-listed HBP funded project with the grouped listing to reflect the latest information from Caltrans, including the addition of approximately \$109 million in HBP funds;
- Deletes two projects and updates the funding plans of two other projects to reflect the repurposing of prior year federal earmark funds;
- Adds one new State Highway Operations and Protection Program (SHOPP) funded grouped listing and updates the funding plans and back-up listings of five existing SHOPP funded grouped listings to reflect the latest information from Caltrans, including the addition of approximately \$369 million in SHOPP funds;
- Adds one new Recreational Trails Program funded grouped listing into the TIP;
- Carries forward two exempt and one non-exempt project into the 2017 TIP from the 2015 TIP as these projects were not originally included in the 2017 TIP as adopted;
- Adds one new exempt project to the TIP and updates the scope and funding for an existing project to reflect the award of Federal Transit Administration (FTA) discretionary funds through the FTA Section 5339 Discretionary Program and Transit Oriented Development Planning Pilot Program;

Attachment B Resolution No. 4275, Revised Page 3 of 11

- Adds one new exempt Surface Transportation Block Grant Program/Congestion
 Mitigation and Air Quality Improvement Program (STP/CMAQ) funded project and
 updates the funding plans of 18 other STP/CMAQ funded projects to reflect obligations,
 past funding decisions in the One Bay Area Grant (OBAG) Cycle 1 Transit Performance
 Initiative program, and the selection of projects in OBAG Cycle 2; and
- Adds one new exempt Transit Capital Priority (TCP) funded project, deletes one existing TCP funded project and updates the funding plans of seven other TCP funded projects.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-04 is an administrative modification that revises 15 projects with a net funding decrease of \$111,504. The revision was approved into the Federal-Statewide TIP by the deputy executive director on March 6, 2017. Among other changes, this revision:

- Updates the funding plans of five Surface Transportation Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect programming decisions and past and planned obligations;
- Updates the funding plans of three other federally funded projects to reflect planned obligations;
- Updates the funding plan of the Sonoma County Transportation Authority's portion of the US 101 Marin/Sonoma Narrows project to reflect the programming of \$15 million in repurposed federal earmark funds;
- Splits out the I-880 Integrated Corridor Management project from the region-wide Incident Management Program; and
- Updates the funding plan and back-up listing of the Caltrans managed Highway Maintenance Program grouped listing to reflect the latest information from Caltrans.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$2 million in High Priority Project Earmark funds, \$15 million in repurposed earmark funds, \$665,042 in Federal Highway Administration Ferry Boat Program funds, and \$3 million in Trade Corridors Improvement Fund funds. MTC's 2017 TIP, as revised with Revision No. 2017-04, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-05 is an administrative modification that revises 12 projects with a net funding increase of \$22.7 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on April 5, 2017. Among other changes, this revision:

- Updates the funding plans of seven projects to reflect the programming of funds for FY2016-17 in the Transit Capital Priorities program;
- Updates the funding plans of two Surface Transportation Block Grant Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect planned obligations;
- Updates the funding plan of the Metropolitan Transportation Commission's Clipper Fare Collection System project to reflect the programming of \$7.4 million in bridge toll funds; and

Attachment B Resolution No. 4275, Revised Page 4 of 11

• Updates the funding plan and back-up listing of the Caltrans managed State Highway Operation and Protection Program (SHOPP) Emergency Response grouped listing to reflect the latest information from Caltrans, including the addition of \$5.3 million to the SHOPP.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$5.3 million in SHOPP funds. MTC's 2017 TIP, as revised with Revision No. 2017-05, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-06 is an amendment that revises 11 projects with a net funding increase of approximately \$68 million. The revision was approved by the MTC Commission on February 22, 2017. Caltrans approval was received on February 24, 2017, and final federal approval was received on March 14, 2017. Among other changes, this revision:

- Updates the scope and funding plan of the Central Contra Costa Transit Authority's Replace 18 30-foot Buses project to reflect the award of approximately \$2.7 million in FTA Low or No Emission Vehicle Deployment Program funds;
- Amends the City of Palo Alto's exempt Bay Area Fair Value Commuting Program into the TIP to reflect the award of approximately \$1 million in FTA Mobility on Demand Sandbox Program funds;
- Amends two additional exempt projects into the TIP; and
- Updates the funding plan of one individually listed Highway Safety Improvement Program (HSIP) funded project and updates the funding plan and back-up listing of the HSIP grouped listing to reflect the latest information from Caltrans, including the addition of approximately \$25.5 million in HSIP funds.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-07 is an administrative modification that revises 15 projects with a net funding decrease of \$8.3 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on April 28, 2017. Among other changes, this revision:

- Updates the funding plans of three projects to reflect the programming of funds for the Federal Highway Administration's 2016 Earmark Repurposing transfer requests;
- Updates the funding plan and back-up listing of the Caltrans managed Local Highway Bridge Program (HBP) grouped listing to reflect the latest information from Caltrans, including the addition of \$476,000 for two HBP projects in Santa Clara County;
- Updates the funding plan and back-up listing of the Caltrans managed State Highway Operation and Protection Program (SHOPP) Pavement Resurfacing/Rehabilitation grouped listing, including the removal of \$7.5 million from the SHOPP;
- Updates the funding plans of five Surface Transportation Block Grant Program/ Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect the latest programming decisions and obligations; and
- Reprograms \$20 million in Federal Transit Administration (FTA) Small Starts program funds for the Sonoma Marin Area Rail Transit Corridor project from prior years to fiscal year 2016/17 to reflect a planned FTA grant.

Attachment B Resolution No. 4275, Revised Page 5 of 11

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$20 million in FTA Small Starts funds, \$476,000 in HBP funds, and \$7.5 million in State STP funds. MTC's 2017 TIP, as revised with Revision No. 2017-07, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-08 is an amendment that revises 73 projects with a net funding increase of approximately \$840 million. The revision was referred by the Programming and Allocations Committee on March 8, 2017, and approved by the MTC Commission on March 22, 2017. Caltrans approval was received on March 29, 2017, and final federal approval was received on April 14, 2017. Among other changes, this revision:

- Amends 37 new exempt projects into the TIP and updates the funding plans of 35 existing projects to reflect the programming of funds for FY2016-17 in the Transit Capital Priorities program; and
- Archives one project as it has been completed.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-09 is an administrative modification that revises 24 projects with a net funding increase of \$17.8 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on June 9, 2017. Among other changes, this revision:

- Updates the funding plan of the Caltrain Electrification project to reflect the award of \$100 million in Federal Transit Administration (FTA) Capital Investment funds;
- Updates the funding plans of seven Surface Transportation Block Grant Program/ Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect the latest programming decisions and obligations;
- Updates the funding plan of the Santa Clara Valley Transportation Authority's Standard and Small Bus Replacement Project to reflect the award of \$2.5M in FTA Low or No Emissions Vehicle Deployment Program (LoNo) funds; and
- Updates the funding plan and back-up listing of MTC's Lifeline Transportation Program 5307 Job Access and Reverse Commute Set Aside Program –Cycle 4 grouped listing to reflect the latest programming decisions.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$100 million in FTA Capital Investment funds, \$2.5 million in FTA LoNo funds, \$1.4 million in High Priority Project funds, and \$3.3 million in Low Carbon Transit Operations Program funds. MTC's 2017 TIP, as revised with Revision No. 2017-09, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-10 is an amendment that revises 14 projects with a net funding increase of approximately \$101 million. The revision was referred by the Programming and Allocations Committee on April 12, 2017, and approved by the MTC Commission on April 26, 2017.

Attachment B Resolution No. 4275, Revised Page 6 of 11

Caltrans approval was received on May 11, 2017, and final federal approval was received on June 8, 2017. Among other changes, this revision:

- Amends three new exempt Transit Performance Initiative Program funded projects into the TIP;
- Updates the funding plans of two projects to reflect the programming of funds from fiscal year 2016-17 of the Transit Capital Priorities program;
- Updates the funding plans and back-up listings of two grouped listings and adds one new grouped listing to reflect the latest information from Caltrans including the addition of \$55.8 million in State Highway Operation and Protection Program funds and \$3.8 million in Section 130 Railroad/Highway Crossing funds;
- Amends AC Transit's Five Battery-Electric Bus Purchase project into the TIP to reflect the recent award of \$1.5 million in Federal Transit Administration (FTA) Low or No Emission Vehicle Deployment Program funds;
- Amends Bay Area Rapid Transit's Integrated Carpool to Transit Access Program into the TIP to reflect the award of \$358,000 in FTA Mobility on Demand Sandbox Program funds; and
- Amends one new exempt and one previously archived project into the TIP. Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-11 is an administrative modification that revises 4 projects with a net funding decrease of \$1.4 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on July 6, 2017. Among other changes, this revision:

- Updates the funding plans of two Surface Transportation Block Grant Program/ Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect the latest programming decisions; and
- Updates the funding plan and back-up listing of the Caltran's Section 130 –
 Railroad/Highway Crossing Projects grouped listing to reflect the latest programming decisions.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$1.4 million in Section 130 – Railroad/Highway Crossing funds. MTC's 2017 TIP, as revised with Revision No. 2017-11, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-12 is an administrative modification that revises 20 projects with a net funding decrease of \$6.8 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on August 2, 2017. Among other changes, this revision:

- Updates the funding plans of two Surface Transportation Program (STP) funded projects to reflect the latest programming decisions;
- Updates the funding plan and back-up listing of the Section 130 Railroad/Highway Crossing Projects grouped listing to reflect the latest information from Caltrans;
- Updates the funding plan of 14 Federal Transit Administration formula funded projects to reflect changes in the fiscal year 2016/17 Transit Capital Priorities Program; and

• Updates the funding plan of one Highway Bridge Program funded project to reflect planned reimbursements for advanced construction.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$1.4 million in Section 130 funds. MTC's 2017 TIP, as revised with Revision No. 2017-12, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-13 is an amendment that revises 48 projects with a net funding increase of approximately \$221 million. The revision was referred by the Programming and Allocations Committee on June 14, 2017, and approved by the MTC Commission on June 28, 2017. Caltrans approval was received on July 17, 2017, and final federal approval was received on August 3, 2017. Among other changes, this revision:

- Amends 13 new exempt projects and one new non-exempt, not regionally significant project into the TIP and updates the funding plans of two existing projects to reflect the programming of Cycle 3 of the Active Transportation Program;
- Amends four new Surface Transportation Block Grant Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded exempt projects into the TIP, updates the funding plans of three other STP/CMAQ funded projects and deletes one STP/CMAQ funded project to reflect changes in the One Bay Area Grant programs;
- Amends three new grouped listings into the TIP to reflect the programming of Federal Transit Administration Section 5310, 5311 and 5311(f) funds. The FTA Section 5310 listing is contingent upon the California Transportation Commission approval on June 28 & 29, 2017;
- Updates the funding plan and back-up listing of the Highway Bridge Program grouped listing to reflect the latest information from Caltrans;
- Splits two projects out of the Highway Safety Improvement Program grouped listings and updates their project scopes to include road diet elements;
- Updates the scope of the City/County Association of Governments of San Mateo County's US-101 High Occupancy Vehicle/High Occupancy Toll Lane project to change the northern project limit to match the most recent cooperative agreement;
- Splits the Bay Area Rapid Transit District's Go Uptown project out of their Station Modernization Program;
- Amends one new San Francisco Municipal Transportation Agency project into the TIP to reflect the award of \$11 million in Advanced Transportation and Congestion Management Technologies Deployment Program funds;
- Amends one new exempt project into the TIP and updates the funding plan on one existing project to reflect changes in the Transit Capital Priorities program;
- Amends two additional exempt projects in the TIP; and
- Archives six projects as they have been completed.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-14 is an amendment that serves to conform the 2017 TIP to Plan Bay Area 2040 and revises 61 projects with a net funding increase of approximately \$3.8 billion. The revision was

Attachment B Resolution No. 4275, Revised Page 8 of 11

referred by the Planning Committee on July 14, 2017, and approved by the MTC Commission on July 26, 2017. Caltrans approval was received on August 2, 2017, and final federal approval was received on August 23, 2017. Among other changes, this revision:

- Revises 41 existing projects in the 2017 TIP;
- Adds 14 new projects to the 2017 TIP;
- Archives three projects as they have been completed and are not included in Plan Bay Area 2040 as ongoing projects; and
- Deletes three projects as they will not move forward.

Changes made with this revision do not conflict with the financial constraint requirements. The Transportation-Air Quality Conformity Analysis: Plan Bay Area 2040 and Amended 2017 TIP demonstrates that the TIP and Plan are consistent with ("conform to") the federal air quality plan known as the State Implementation Plan (SIP), as required by federal conformity regulations.

Revision 17-15 is an administrative modification that revises 15 projects with a net funding increase of \$12.2 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on September 20, 2017. Among other changes, this revision:

- Updates the funding plans of six Surface Transportation Block Grant Program/ Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect the latest programming decisions;
- Updates the funding plan and back-up listing of one grouped listing to reflect the latest information from Caltrans regarding the State Highway Operations and Protection Program (SHOPP), including the addition of \$4.8 million in SHOPP funds;
- Updates the funding plan of one Federal Transit Administration (FTA) formula funded project to reflect changes in the fiscal year 2016-17 Transit Capital Priorities Program; and
- Splits the El Cerrito del Norte BART Station Modernization project out of BART's system-wide Station Modernization program along with \$21.5 million in Proposition 1B funds.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$4.8 million in SHOPP funds and \$21.5M in Proposition 1B funds. MTC's 2017 TIP, as revised with Revision No. 2017-15, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-16 is an amendment that revises 13 projects with a net funding increase of approximately \$20 million. The revision was referred by the Programming and Allocations Committee on July 12, 2017, and approved by the MTC Commission on July 26, 2017. Caltrans approval was received on August 7, 2017, and final federal approval was received on September 5, 2017. Among other changes, this revision:

- Adds one new exempt project, deletes one existing project and updates the funding plans of seven projects to reflect changes in the FY2016-17 Transit Capital Priorities Program;
- Updates the funding plan of the Fairfield-Suisun Intercity/Local Bus Replacement project to reflect the programming of funds available through the Transit Performance Initiative Incentive and Investment Programs; and
- Archives two projects as they have been completed.

Attachment B Resolution No. 4275, Revised Page 9 of 11

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-17 is an administrative modification that revises 20 projects with a net funding decrease of \$336,931. The revision was approved into the Federal-Statewide TIP by the deputy executive director on October 12, 2017. Among other changes, this revision:

- Updates the funding plans of 16 Surface Transportation Block Grant Program/ Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect the latest programming decisions;
- Updates the funding plan and back-up listing of one grouped listing to reflect the latest programming decisions regarding the FTA Section 5310 Elderly and Persons with Disabilities Transit Program, including the addition of \$4.2 million in FTA Section 5310 funds;
- Updates the funding plan of one Federal Transit Administration (FTA) formula funded project to reflect changes in the fiscal year 2016-17 Transit Capital Priorities Program; and
- Updates the funding plan of one State Transportation Improvement Program (STIP) funded project to reflect the latest programming decisions.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$4.2 million in Section 5310 funds. MTC's 2017 TIP, as revised with Revision No. 2017-17, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-18 is an administrative modification that revises five projects with a net funding decrease of \$466,894. The revision was approved into the Federal-Statewide TIP by the deputy executive director on November 6, 2017. Among other changes, this revision:

- Updates the funding plans of four federal earmark funded projects to reflect the repurposing of earmarked funds; and
- Updates the funding plan and back-up listing of the Highway Safety Improvement Program (HSIP) grouped listing to reflect the latest information from Caltrans, including the addition of \$208,500 in HSIP funds.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$208,500 in HSIP funds and \$69,840 in repurposed federal earmarked funds. MTC's 2017 TIP, as revised with Revision No. 2017-18, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-19 is an amendment that revises 31 projects with a net funding increase of approximately \$4.4 billion. The revision was referred by the Programming and Allocations Committee on September 13, 2017, and approved by the MTC Commission on September 27, 2017. Caltrans approval was received on October 9, 2017, and final federal approval was received on October 25, 2017. Among other changes, this revision:

- Amends four new exempt, three new non-exempt, and three new non-exempt-not regionally significant Surface Transportation Block Grant Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects into the TIP and updates the funding plans of five existing STP/CMAQ funded projects to reflect changes in the One Bay Area Grant 1 (OBAG1) County Program, the OBAG2 Program, and the Transit Performance Initiative Program;
- Amends Bay Area Rapid Transit's (BART) Transbay Core Capacity Improvements project into the TIP with \$931 million in local funds and \$2.6 billion in uncommitted funds;
- Updates the funding plan of Caltrain's Positive Train Control (PTC) System project to reflect the award of approximately \$22 million in Federal Railroad Administration PTC Implementation grant funds;
- Updates the funding plans of five State Highway Operations and Protection Program (SHOPP) funded grouped listings, the Section 130 Railroad/Highway Crossing Projects funded grouped listing, and the Highway Maintenance Program funded grouped listing to reflect the latest information from Caltrans, including the addition of \$412 million in SHOPP, \$3.8 million in Section 130 funds and \$15 million in Highway Maintenance funds; and
- Amends one new locally-funded exempt project and one new locally-funded non-exempt project into the TIP.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-20 is an administrative modification that revises 18 projects with a net funding increase of \$4 million. The revision was approved into the Federal-Statewide TIP by the deputy executive director on November 21, 2017. Among other changes, this revision:

- Updates the funding plans of 11 Surface Transportation Block Grant Program/ Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to reflect the latest programming decisions;
- Updates the funding plan of one federal earmark funded project to reflect the latest programming decisions;
- Updates the funding plans of four individually-listed Federal Highway Bridge Program (HBP) funded projects to reflect the latest information from Caltrans; and
- Updates the funding plan and back-up listing of the HBP funded grouped listing to reflect changes to Contra Costa County's Marsh Creek Rd bridge replacement project, including the addition of \$2.2 million in HBP funds.

The administrative modification is financially constrained by year and MTC relies on the State's programming capacity in the amount of \$2.1 million in HBP funds to reflect the net change in HBP funding over the four years of the TIP. MTC's 2017 TIP, as revised with Revision No. 2017-20, remains in conformity with the applicable State Implementation Plan (SIP) for air quality and the revision does not interfere with the timely implementation of the Transportation Control Measures contained in the SIP.

Revision 17-21 is a pending administrative modification.

Attachment B Resolution No. 4275, Revised Page 11 of 11

Revision 17-22 is an amendment that revises 19 projects with a net funding increase of approximately \$66.6 million. The revision was referred by the Programming and Allocations Committee on November 8, 2017, and approved by the MTC Commission on November 15, 2017. Caltrans approval is expected in early January, 2018, and final federal approval is expected in late-January, 2018. Among other changes, this revision:

- Adds five exempt and one non-exempt, not regionally significant Surface Transportation Block Grant Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ) funded projects to the TIP and updates one existing STP/CMAQ funded project to reflect the latest programming decisions;
- Splits out two State Highway Operations and Protection Program (SHOPP) funded projects from the SHOPP Mobility grouped listing to the new Alameda County-Traffic Operations Systems/Mobility Program grouped listing, transfers two project segments and \$20 million in CMAQ funds from the Freeway Performance Initiative (FPI) program to the new grouped listing, and adds one new project to the new grouped listing along with \$40.4 million in SHOPP funds;
- Adds one new SHOPP funded grouped listing for the Marin County-Traffic Operations Systems/Mobility Program with \$13 million in SHOPP funds; and
- Archives eight projects as they have been completed.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.

Revision 17-23 is a pending administrative modification.

Revision 17-24 is a pending administrative modification.

Revision 17-25 is an amendment that revises 134 projects with a net funding increase of approximately \$581 million. The revision was referred by the Programming and Allocations Committee on January 10, 2018, and approved by the MTC Commission on January 24, 2018. Caltrans approval is expected in mid-February, 2018, and final federal approval is expected in mid-March, 2018. Among other changes, this revision:

- Amends six new Active Transportation Program (ATP) funded projects into the TIP and revises the funding plans of six existing ATP funded projects;
- Updates the funding plans and back-up listings of three grouped listings to reflect the latest information from Caltrans;
- Amends 103 new projects into the TIP and updates the funding plans of seven existing projects to reflect the adoption of the One Bay Area Grant 2 (OBAG2) County Program;
- Amends four new projects into the TIP to reflect recent changes to the OBAG2 Regional Arterial Operations Management and Climate Initiatives Programs;
- Amends three new projects into the TIP to reflect previously approved changes to the One Bay Area Grant 1 (OBAG1) Transit Performance Initiative and Climate Change Initiative Programs; and
- Updates the funding plan of one project to reflect recent changes to the Transit Capital Priorities program.

Changes made with this revision do not affect the air quality conformity finding or conflict with the financial constraint requirements.