

Formal Amendment No. 4 to the Monterey Bay Metropolitan Transportation Improvement Program (MTIP) for FY 2018-19 to FFY 2021-22 received joint FHWA/FTA approval on April 3, 2019 and State approval on March 18, 2019. For more information or copies of the approval letters, please contact Sasha Tepedelenova at stepe@ambag.org or (831) 264-5087.



March 14, 2019

Mr. Bruce de Terra
Division Chief,
Division of Transportation Programming
Management Program, Caltrans MS-82
P.O. Box 924874
Sacramento, CA 94274-0001

Mr. Leslie T. Rogers
Regional Administrator
Office of Federal Transportation
FTA, Region IX
201 Mission Street, Suite 1650
San Francisco, CA 94105-1839

Attn: Abhijit Bagde

Attn: Lucinda Eagle

Re: Formal Amendment No. 4 to the Monterey Bay Metropolitan Transportation Improvement Program (MTIP) FFY 2018-19 to FFY 2021-22

Dear Mr. de Terra and Mr. Rogers:

The AMBAG Board of Directors approved Formal Amendment No. 4 to the *Monterey Bay Metropolitan Transportation Improvement Program (MTIP) FFY 2018-19 to FFY 2021-22* on March 13, 2019 by adopting Resolution No. 2019-2 (**Attachment 1**). Please initiate the state and federal approval process for Formal Amendment No. 4.

Formal Amendment No. 4 updates two (2) projects and makes text updates to Chapter VI, as listed in **Attachment 2**, Summary of Changes. The projects included in Formal Amendment No. 4 meet the general requirements for a project to be approved by the U.S. Department of Transportation as part of the MTIP:

1. Projects must be consistent with AMBAG's adopted Metropolitan Transportation Plan (MTP);
2. Projects must be financially constrained; and
3. Projects must satisfy public review requirements.

In accordance with the FAST Act, Formal Amendment No. 4 to the MTIP is financially constrained to reasonably available resources and adequate public review opportunity was provided.

Projects included in Formal Amendment No. 4 have been developed in accordance with the all applicable transportation planning requirements per 23 CFR Part 450 and are expected to support the establishment and achievement of performance management targets.

The Monterey Bay region is designated as attainment for Federal air quality standards, therefore the changes proposed by this formal amendment are not subject to the requirement that an air quality conformity determination be made.

In addition to being available in CTIPS, programming pages for the projects included in MTIP Formal Amendment No. 4 are also enclosed herewith for your reference (**Attachment 3**).

If you have any questions or comments, please contact Bhupendra Patel at (831) 264-5091 or bpatel@ambag.org.

Sincerely,

(Signature)

Maura F. Twomey
Executive Director

Attachments:

1. Attachment 1: Resolution No. 2019-2
2. Attachment 2: Summary of Changes
3. Attachment 3: Project Programming Pages

cc: (e-mail)

Antonio Johnson, California Division, FHWA
Lucinda Eagle, FTA Region IX
Sherri Martin, SHOPP, LCO, and FTIP Coordinator, District 5
Debra Hale, Executive Director, TAMC
Guy Preston, Executive Director, SCCRTC
Mary Gilbert, Executive Director, SBtCOG
Alex Clifford, General Manager, METRO
Carl Sedoryk, General Manager, MST

**A RESOLUTION
OF THE BOARD OF DIRECTORS OF THE
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS
ADOPTING FORMAL AMENDMENT NO. 4 TO THE MONTEREY BAY METROPOLITAN
TRANSPORTATION IMPROVEMENT PROGRAM (MTIP)
FFY 2018-19 to FFY 2021-22**

WHEREAS, the Association of Monterey Bay Area Governments has been designated by the Governor of the State of California as the Metropolitan Planning Organization (MPO) for the Monterey Bay area; and

WHEREAS, Title 23 Code of Federal Regulations, Part 450, and Title 49 Code of Federal Regulations, Part 613, require that in each urbanized area, as a condition to the receipt of Federal capital or operating assistance, the MPO carries out, in cooperation with State, local agencies and publicly owned operators of mass transportation services, a continuing, cooperative and comprehensive transportation planning process that results in plans and programs consistent with the comprehensively planned development of the urbanized area; and

WHEREAS, the Fixing America's Surface Transportation Act (FAST Act) calls for the development of at least a four-year Transportation Improvement Program (TIP), under direction of the MPO in cooperation with State and local officials, regional and local transit operators, and other affected transportation and regional planning and implementing agencies; and

WHEREAS, AMBAG has developed a four-year program of projects, consistent with AMBAG's *2040 Metropolitan Transportation Plan/Sustainable Communities Strategy*, the *2018 State Transportation Improvement Program*, the *2018 State Highway Operation and Protection Program*, and the area's Regional Transportation Improvement Programs and Short Range Transit Plans; and

WHEREAS, this document is financially constrained and prioritized by funding year, adding only those projects for which funding has been identified and committed in accordance with 23 CFR 450; and

WHEREAS, projects in Formal Amendment No. 4 satisfy the transportation conformity provisions of 40 CFR 93.122(g) and all applicable transportation planning requirements per 23 CFR Part 450 and are expected to support the establishment and achievement of performance management targets; and

WHEREAS, consultation with cognizant agencies was undertaken and the MTIP was considered with adequate opportunity for public review and comment, in accordance with 23 CFR 450:

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Association of Monterey Bay Area Governments does hereby approve and authorize the submission of Formal Amendment No. 4 to the *Monterey Bay Metropolitan Transportation Improvement Program FFY 2018-19 to FY 2021-22* to the appropriate Federal and State agencies.

PASSED AND ADOPTED this 13th day of March 2019.

(Signature)

Scott Funk, President

(Signature)

Maura F. Twomey, Executive Director

MTIP FFY 2018-19 to FFY 2021-22
 Formal Amendment No. 4
 Summary of Changes

Project Number	Project Name	Change	Prior \$ (\$1,000)	New \$ (\$1,000)	% Change
BP01GP	Grouped Projects for Bicycle & Pedestrian Facilities	Add ATP funds, CON: \$9,114K in FFY 2018-19 (was \$13,198K), \$1,052K in FFY 2019-20 (was \$3,734K) and \$6,033K in FFY 2020-21 (was \$400K). Add local funds, CON: \$5,883K in FFY 2018-19, \$266K in FFY 2019-20 (was \$4,586) and \$1,493K in FFY 2020-21 (was \$28,365K). Add \$193K OTS fund in FFY 2018-19, CON. Update backup list.	\$ 51,093	\$ 75,127	47.04%
SHOPP6	Grouped Projects for Emergency Repair - SHOPP Emergency Response Program	Add SHOPP funds, CON: \$1,787K in FFY 2018-19 (was \$6,800), \$1,776K in FFY 2019-20 (was \$5,339), \$1,799K in FFY 2020-21 (was \$7,840) and \$8,638K in FFY 2021-22 (was \$18,419). Update backup list.	\$ 38,398	\$ 52,398	36.46%
Update Chapter VI: Performance-Based Planning and Programming			N/A		

MPO ID: BP01GP
 TITLE: Grouped Projects for Bicycle & Pedestrian Facilities
 DESCRIPTION: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Bicycle and pedestrian facilities (both motorized and Non-motorized)
 CTIPS ID: 201-0000-0473
 COUNTY: Various Counties
 EPA TABLE II OR III EXEMPT CATEGORY: Bicycle and pedestrian facilities.

Dollars in Thousands

Fund Type: Agency

	PRIOR	18/19	19/20	20/21	21/22	FUTURE	TOTAL
PE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CON	\$ 488	\$ 5,883	\$ 4,852	\$ 29,858	\$ -	\$ -	\$ 41,081
Total:	\$ 488	\$ 5,883	\$ 4,852	\$ 29,858	\$ -	\$ -	\$ 41,081

Fund Type: Active Transportation Program (ATP)

	PRIOR	18/19	19/20	20/21	21/22	FUTURE	TOTAL
PE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CON	\$ 2,761	\$ 22,312	\$ 4,786	\$ 6,433	\$ -	\$ -	\$ 36,292
Total:	\$ 2,761	\$ 22,312	\$ 4,786	\$ 6,433	\$ -	\$ -	\$ 36,292

Fund Type: Transportation Safety & Investment Plan -Measure X

	PRIOR	18/19	19/20	20/21	21/22	FUTURE	TOTAL
PE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CON	\$ -	\$ 810	\$ -	\$ -	\$ -	\$ -	\$ 810
Total:	\$ -	\$ 810	\$ -	\$ -	\$ -	\$ -	\$ 810

Fund Type: Office of Traffic Safety - Repeat Intoxicated Trans

	PRIOR	18/19	19/20	20/21	21/22	FUTURE	TOTAL
PE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CON	\$ -	\$ 193	\$ -	\$ -	\$ -	\$ -	\$ 193
Total:	\$ -	\$ 193	\$ -	\$ -	\$ -	\$ -	\$ 193

Project Total:

	PRIOR	18/19	19/20	20/21	21/22	FUTURE	TOTAL
PE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CON	\$ 3,249	\$ 29,198	\$ 9,638	\$ 36,291	\$ -	\$ -	\$ 78,376
Total:	\$ 3,249	\$ 29,198	\$ 9,638	\$ 36,291	\$ -	\$ -	\$ 78,376

AMBAG MTIP: FFY 2018-19 to FFY 2021-22

Project Title: Grouped Projects for Bicycle & Pedestrian Facilities - Backup list

Formal Amendment No. 4

MPO ID: BP01GP

CTIPS ID: 201-0000-0473

Implementing Agency	Project Title	Project Description	PE	ROW	CON	TOTAL	Notes
City of Salinas	City of Salinas Alvin Drive and Linwood Drive SRTS Improvements	The project improves & adds bicycle and pedestrian facilities along Alvin Drive, Linwood Drive, Chaparral Drive, and Maryal Drive with the implementation of road diets, buffered bike lanes and sparrow, and pedestrian crossing and ramp enhancements.	\$0	\$0	\$2,395	\$2,395	\$2,959 ATP (\$522K in 16/17, \$42 in 17/18 and 2,395K in 18/19); \$339.4 toll credits
City of Watsonville	City of Watsonville Rail Trail from Watsonville Slough Trailhead to Walker street	Construct 2400 foot pedestrian and bicycle path parallel to existing railroad tracks and within existing railroad right of way. Provide public outreach and training to improve bicycle and pedestrian safety	\$0	\$0	\$688	\$688	\$688K ATP fund allocation expected in FY18/19 (extension approved by CTC 5/18).
City of Salinas	City of Salinas Bardin Road SRTS to School Improvements	The project would improve pedestrian, bicycle, and vehicular facilities along Bardin Road and Alisal Street including buffered bicycle lanes, roundabouts, non-contiguous sidewalks, crosswalk enhancements, and ADA ramp enhancements.	\$0	\$0	\$3,614	\$3,614	\$4,430 ATP (\$786K in 16/17, \$30 in 17/18 and 3,614K in 18/19); \$508.12 toll credits
City of Santa Cruz	Santa Cruz Citywide Safe Routes to School Crossing Improvement Program	Combination infrastructure/NI SRTS project to install infrastructure improvements at intersections surrounding Santa Cruz City Schools and support related non-infrastructure education and encouragement programming.	\$0	\$0	\$864	\$864	\$1,404 ATP funds (\$460K in 16/17, \$80K in 17/18 and \$864K in 18/19); \$161.04 toll credits
City of Monterey	North Fremont Bike and Pedestrian Access and Safety Improvements	Class IV bicycle lanes in the median of North Fremont, bicycle guide signing, and bicycle detection at each of the five intersections; changes to the travel lanes and median to accommodate Class IV bicycle lanes and BRT queue jumps; shortened pedestrian crossing distances and median refuge areas; and modifications to traffic signals to add bike signals, audible pedestrian signals and countdown pedestrian heads.	\$0	\$0	\$9,440	\$9,440	18/19, CON: \$5,637 ATP, \$2,993K Local and \$810K Measure X funds. (Note: For information only: This project also includes \$841K ATP funds and \$488K Local funds in Prior years, PE.)
City of Santa Cruz	Rail Trail Segment 8 and 9 Design and Environmental Review	Design and environmental review and permitting for 2.18 miles of separated multiuse trail in the City and County of Santa Cruz. Noninfrastructure safety, education, and encouragement programs to encourage active transportation in advance of trail construction.	\$4,500	\$100	\$28,334	\$32,934	In 19/20: PE-\$2,600K ATP funds and \$1,400K local funds; CON-\$169K ATP funds. In 20/21: PE-\$400K ATP and \$100K Local; RW-\$100K Local; CON-\$28,165K-Local.
Monterey County	Via Salinas Valley	An Active Transportation Education Program	\$0	\$0	\$1,158	\$1,158	\$965K ATP funds in 19/20, CON and \$193K Local (Office of Traffic Safety Grant) funds in 19/20, CON
Monterey County	Via Salinas Valley: An AT Education Program	Implement community and school based active transportation education programming. The project will include SRTS programming, Ciclovia (open streets events), and community engagement.	\$0	\$0	\$1,157	\$1,157	\$964K ATP funds and \$193K OTS grant funds, 18/19, CON
Monterey County Resource Management Agency DPW	Moss Landing Segment Bicycle/Pedestrian Path & Bridge	4,466 ft (0.85 mile) of a 10 foot paved bicycle path with 2 foot wide decomposed granite shoulders on either side of the path and a 12 foot wide 386 foot long pedestrian/bicycle bridge.	\$0	\$0	\$13,427	\$13,427	\$7,587K ATP funds and \$5,840K local funds, 18/19, CON
City of Watsonville	Lincoln Street Safety Improvements	Pedestrian Crossing Enhancements that incorporate bulbouts, landscaping, lighting, decorative pedestrian scale fencing, enhanced crosswalks, improved sidewalks and pedestrian amenities.	\$99	\$0	\$562	\$661	In 18/19: PE- \$95K ATP and \$4K local funds; CON- \$100K ATP and \$4K local funds. In 19/20: CON- \$438K ATP and \$20K local funds
City of Santa Cruz	San Lorenzo Riverwalk Lighting	Installation of LED pedestrian scale lighting on the San Lorenzo Riverwalk on east and west banks.	\$95	\$0	\$857	\$952	\$95K ATP funds in PE, 19/20 and \$857K ATP funds in CON, 20/21
City of Santa Cruz	Rail Trail Segment 8 and 9 Design and Enviro	Design and environmental review and permitting for 2.18 miles of separated multiuse trail. NI safety, education, and encouragement programs to encourage active transportation.	\$4,420	\$0	\$249	\$4,669	In 19/20: PE- \$350K ATP and \$166K local Santa Cruz land trust funds; CON- \$169K ATP and \$80K local Santa Cruz land trust funds. In 20/21: PE- \$2,650K ATP and \$1,254K local Santa Cruz land trust funds. \$28,265K Future ATP funds (for information only)
Monterey County Resource Management Agency DPW	Las Lomas Drive Bicycle Lane & Pedestrian Project	1,320 ft. (.25 mile) sidewalks, class II bicycle lanes, widening, curb, gutter, driveways, retaining walls, and water treatment facility.	\$403	\$104	\$2,661	\$3,168	In 18/19: PE- \$368K ATP and \$35K local funds. In 20/21: RW- \$95K ATP funds and \$9K local funds and CON- \$2,431K ATP and \$280K local funds
TOTAL			\$9,517	\$204	\$65,406	\$75,127	

MPO ID: SHOPP6

TITLE: Grouped Projects for Emergency Repair - SHOPP Emergency Response Program

DESCRIPTION: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Repair damage caused by natural disasters, civil unrest, or terrorist acts. This applies to damages that do not qualify for Federal Emergency Relief funds or to damages that qualify for federal Emergency Relief funds but extend beyond the Federally declared disaster period

CTIPS ID: 201-0000-0550

COUNTY: Various Counties

IMPLEMENTING AGENCY: Caltrans

Dollars in Thousands

Fund Type: SHOPP Advance Construction (AC)

	PRIOR	18/19	19/20	20/21	21/22	FUTURE	TOTAL
PE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CON	\$ -	\$ 8,587	\$ 7,115	\$ 9,639	\$ 27,057	\$ -	\$ 52,398
Total:	\$ -	\$ 8,587	\$ 7,115	\$ 9,639	\$ 27,057	\$ -	\$ 52,398

AMBAG MTIP: FY 2018-19 to 2021-22

Grouped Projects for Emergency Repair - SHOPP Emergency Response Program - Back-Up List

I Amendment No. 4

MPO ID: SHOPP6

CTIPS ID: 201-0000-0550

\$ x 1000

Prg Yr	Prg Code	CO	EA	PPNO	ROUTE	DESCRIPTION	PE	RW	CON	TOTAL
18/19	201.131	SCR	1K130	2876	9	Near Boulder Creek, 1.1 miles south of Route 236. Construct tieback wall, restore roadway and drainage facilities, and install permanent erosion control measures.	\$2,536	\$223	\$0	\$2,759
20/21							\$0	\$0	\$3,888	\$3,888
18/19	201.131	SCR	1K120	2874	9	In and near the city of Santa Cruz, at north of Vernon Street; also at south of Glengarry Road (PM 4.0). Construct sidehill viaducts, restore roadway and facilities, provide erosion control.	\$ 1,214	\$0	\$0	\$1,214
20/21							\$ 3,851	\$ 101	\$0	\$3,952
21/22							\$0	\$0	\$13,065	\$13,065
18/19	201.131	SCR	1K140	2875	9	Near Boulder Creek, at Spring Creek Road. Construct soldier pile retaining wall, restore roadway and drainage facilities, and install permanent erosion control measures.	\$ 2,052	\$54	\$0	\$2,106
19/20							\$0	\$0	\$3,976	\$3,976
18/19	201.131	SCR	1K070	2852	17	in Santa Cruz County near Scotts Valley, south of Sugarleaf Road. Stabilize eroded side cut slope by grading and dewatering.	\$721	\$0	\$0	\$721
19/20							\$1,288	\$75	\$0	\$1,363
21/22							\$0	\$50	\$5,304	\$5,354
18/19	201.131	MON	1K050	2849	1	In Monterey County near Big Sur, south of Little Sur River Bridge. Construct earth retaining wall.	\$1,031	\$0	\$0	\$1,031
20/21							\$1,655	\$144	\$0	\$1,799
21/22							\$0	\$0	\$4,260	\$4,260
18/19	201.131	SCR	1K060	2847	9	In Santa Cruz County near Brookdale, south of Western Avenue. Construct side hill viaduct extension with cutoff retaining wall, restore roadway and facilities, and install permanent erosion control.	\$756	\$0	\$0	\$756
19/20							\$1,621	\$155	\$0	\$1,776
21/22							\$0	\$0	\$4,378	\$4,378
							\$16,725	\$802	\$34,871	\$52,398

Chapter VI: Performance-Based Planning and Programming

Performance-Based Planning and Programming

MAP-21 and the FAST Act established several performance management requirements for state departments of transportation (DOTs), metropolitan planning organizations (MPOs), and transit agencies. A performance-based approach to transportation planning and programming aims to ensure the most efficient investment of transportation funds, support improved decision-making and increase accountability and transparency. MAP-21 and subsequent federal legislation requires DOTs, MPOs and transit agencies to establish performance targets for each of the following national goal areas:

- Safety
- Infrastructure Condition
- Transportation Asset Management
- System Reliability
- Freight Movement and Economic Vitality
- Congestion Reduction
- Environmental Sustainability

The national goal areas fall into three categories of performance management (PM) rules:

PM 1: Safety

PM 2: Infrastructure Condition; Transportation Asset Management

PM 3: System Reliability;

Freight Movement and Economic

Vitality;

Congestion Reduction; and

Environmental Sustainability

According to regulations and the current 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), AMBAG's must collect data on project contributions to safety performance targets for the MTIP. MTIP projects should indicate expected contributions to safety. Moving forward, AMBAG will be required to collect additional data for other performance target areas for the MTIP such as system performance and transportation asset management in order to meet new federal and state reporting requirements.

AMBAG's Role

Under the federal performance management rules, AMBAG is responsible for setting regional transportation performance targets. AMBAG has adopted Caltrans' Statewide safety, infrastructure condition, system performance and air quality targets as our regional targets, consistent with the MPO-State coordination requirements of federal performance management regulations. AMBAG is responsible for setting regional transit asset management targets in association with the transit agencies operating within our MPO area. AMBAG must incorporate these statewide and local transit

targets into our planning processes, including in the MTIP and MTP. Caltrans’ performance targets are set and achieved at the state level. As of the writing of this document the State has not set binding region specific targets.

MTIP Requirements

There are two primary requirements for incorporating performance management into the MTIP. For all federally-required targets, AMBAG must show that the MTIP “makes progress towards achieving the performance targets” and that the MTIP includes, “to the maximum extent practicable, a description of the anticipated effect of the MTIP towards achieving the performance targets” (Title 23 CFR§ 450.326). AMBAG must show that it is moving in the right direction based on the package of investments included in the MTIP and must also describe how much of an effect the MTIP investments are expected to have on the target achievement.

MTP Requirements

Currently AMBAG is required to report on the safety, condition and performance of the transportation system in relation to its adopted performance targets (Title 23 CFR§ 450.324). AMBAG will also have to comply with other new federal requirements related to long-range planning including any potential scenario planning.

Reporting

In addition to quantifying progress made towards performance targets in the context of its MTIP and MTP, AMBAG is required to report regional targets to Caltrans. To meet this requirement, AMBAG coordinates with Caltrans and RTPAs to collect transportation performance data.

Overall Goals

The overall goal of a performance-based approach to transportation planning and programming intends to ensure the most efficient investment of transportation funds, support improved decision-making, and increase accountability and transparency.

Road Safety

Goal: Reduce traffic fatalities and serious injuries on all public roads.

Performance Measures-Road Safety

Five performance measures were established to identify trends and assess progress towards reducing traffic-related fatalities and serious injuries on public roads.

Table 1 – Performance Measures - Road Safety

Performance Measure
Number of fatalities

Rate of fatalities per 100 million vehicle miles traveled
Number of serious injuries
Rate of serious injuries per 100 million vehicle miles traveled
Number of non-motorized fatalities and non-motorized serious injuries
<i>For all measures: 5-year rolling average; all public roads</i>

Performance Targets-Road Safety

State DOTs are required to set numerical targets each year for each safety measure to comply with the regulation. MPOs have the option of supporting State targets or setting their own region-specific numerical targets on a target-by-target basis.

Caltrans established ambitious statewide targets to align with the State’s Towards Zero Deaths goal for zero traffic fatalities by 2030 and the State Highway Safety Plan. AMBAG chose to support the State’s targets through ongoing planning and programming efforts. The targets for each measure are detailed in the table below.

Table 2 –Statewide Road Safety Targets (2019)

Performance Measure	Percent Reduction Target (2019)
Fatalities – total	3% reduction
Fatalities – per 100 million VMT	3% reduction
Serious Injuries – total	1.5% reduction
Serious Injuries – per 100 million VMT	1.5% reduction
Non-motorized fatalities + serious injuries – total	3% reduction in fatalities 1.5% reduction in serious injuries

Transit Safety

Goal: Improve the safety of all public transportation systems, specifically in the areas of fatalities, injuries, safety events and system reliability.

Performance Measures- Transit Safety

Seven performance measures were established to improve safety on transit systems.

Table 3 – Performance Measures - Transit Safety

Performance Measure
Number of fatalities, by mode
Rate of fatalities per vehicle revenue miles, by mode
Number of injuries, by mode
Rate of injuries per vehicle revenue miles, by mode
Number of transit safety events, by mode
Rate of transit safety events per vehicle revenue miles, by mode
Mean distance between major mechanical failures, by mode

Performance Targets-Transit Safety

The seven transit safety performance measures are already collected through the National Transit Database (NTD) and have been selected through rulemaking on national reporting. AMBAG coordinates on transit safety performance measures with the region’s three transit operators, Monterey-Salinas Transit (MST), Santa Cruz Metropolitan Transit District (METRO), San Benito County Local Transportation Authority (LTA). Transit agencies are required to set numerical targets each year for each transit safety measure to comply with performance management regulations. Once transit operators in the region set their targets through their Public Transportation Agency Safety Plan (PTASP), AMBAG will adopt the targets by reference and coordinate to assure the MTIP helps to implement their transit safety plans and achieve the targets found therein.

Infrastructure Condition

The maintenance and preservation of the existing transportation infrastructure is critical for supporting a safe and efficient transportation system. The primary goal of the infrastructure condition performance area is to improve the condition of existing pavement and bridge assets.

Pavement Condition

Goal: Maintain the condition of highway infrastructure assets in a state of good repair.

Performance Measures -Pavement Condition

Four performance measures were established to identify trends and assess progress towards maintaining a state of good repair on the Interstate and Non-Interstate National Highway System (NHS).

Table 4 – Performance Measures - Pavement Condition

Performance Measure
Percentage of pavements on the Interstate in good condition (lane miles)
Percentage of pavements on the Interstate in poor condition (lane miles)
Percentage of pavements on the non-Interstate NHS in good condition (lane miles)
Percentage of pavements on the non-Interstate NHS in poor condition (lane miles)

Performance Targets – Pavement Conditions

State DOTs are required to develop a Transportation Asset Management Plan to develop long-range investment strategies for assets on the National Highway System, including pavement and bridge condition. The plan establishes 10-year performance goals and interim two- and four-year performance targets to monitor progress. MPOs are required to set four-year targets and may choose to adopt the statewide target or adopt quantifiable performance targets for the region.

Caltrans finalized the statewide targets for pavement condition in May 2018 and AMBAG adopted these regional targets.

Table 5 –Statewide Pavement Condition Targets (2018)

Performance Measure	Statewide 2-Year Targets	Statewide 4-Year Targets
Interstate in good condition – %	45.10%	44.50%
Interstate in poor condition – %	3.50%	3.80%
Non-Interstate NHS in good condition – %	28.20%	29.90%
Non-Interstate NHS in poor condition – %	7.30%	7.20%

Bridge Condition

Goal: Maintain the condition of bridge assets in a state of good repair

Performance Measures – Bridge Condition

Two performance measures were established to identify trends and assess progress towards maintaining a state of good repair of bridges on the National Highway System (NHS).

Table 6 – Performance Measure- Bridge Condition

Performance Measure
Percentage of NHS bridges classified in good condition (deck area square miles)
Percentage of NHS bridges classified in poor condition (deck area square miles)

Performance Targets – Bridge Condition

State DOTs are required to develop a Transportation Asset Management Plan to develop long-range investment strategies for assets on the National Highway System, including bridge condition. The plan establishes 10-year performance targets as well as targets for years 2 and 4 to monitor progress. MPOs are required to set four-year targets, and may choose to adopt the statewide target or adopt quantifiable performance targets for the region.

Caltrans finalized the statewide bridge condition targets in May 2018 and AMBAG has adopted these regional targets.

Table 7 –Statewide Bridge Condition Targets (2018)

Performance Measure	Statewide 2-Year Targets	Statewide 4-Year Targets
NHS bridges in good condition – %	69.1%	70.5%
NHS bridges in poor condition – %	4.6%	4.4%

Transit Asset Management (TAM)

Goal: Maintain the condition of public transit assets in a state of good repair.

Performance Measures – Transit Asset Management

Four asset performance measure categories were established to improve transit asset management for rolling stock, equipment, infrastructure and facilities.

Table 8 – Performance Measures – Transit Asset Management

Performance Measure
Percentage of revenue vehicles that have met or exceeded their useful life benchmark (by asset class)
Percentage of facilities with a condition rating below fair (by asset class)
Percentage of rail fixed-guideway with performance restrictions (not applicable in AMBAG region)
Percentage of non-revenue vehicles that have met or exceeded their useful life benchmark

Performance Targets – Transit Asset Management

Metropolitan transportation planning is performed in coordination with the region’s three transit operators, MST in Monterey County, METRO in Santa Cruz County and LTA in San Benito County. AMBAG coordinates with these transit operators to assure the MTIP facilitates implementation of their transit asset management plans. The MTIP prioritizes funding based on the condition of transit assets in order to maintain local and regional transit system in a state of good repair. AMBAG’s planning process aims to address the goals, objectives, performance measures and targets described in each transit operator’s Transit Asset Management Plan (TAMP). AMBAG’s MTIP is consistent with the FHWA-FTA Final Rule on planning and the Transit Asset Management Final Rule.

System Performance and Air Quality

Goals: Reduce congestion on the National Highway System; improve the efficiency of the surface transportation system; improve the national freight network, strengthen the ability of rural

communities to access national and international trade markets, support regional economic development; enhance the performance of the transportation system while protecting and enhancing the natural environment.

Performance Measures – Congestion Reduction; System Reliability; Freight Movement and Economic Viability; Congestion Reduction; And Environmental Sustainability

These performance measures were established to identify trends and assess progress towards improving reliability, freight movement and economic vitality, and environmental sustainability of the Interstate system and non-Interstate National Highway System (NHS).

Table 9 – Performance Measures - Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, Congestion Reduction, and Environmental Sustainability

Performance Measure
Annual hours of peak-hour excessive delay per capita by urbanized area
Percent of non-single occupancy vehicle (non-SOV) travel by urbanized area
Percentage of person-miles traveled on the Interstate highway system that are reliable
Percentage of person-miles traveled on the non-Interstate NHS that are reliable
Percentage of Interstate highway system mileage providing reliable truck travel times (Truck Travel Time Reliability Index)
Total emissions reduction from CMAQ-funded projects, by pollutant (PM 2.5, PM 10, CO2, VOCs, NOx)

Performance Targets – Congestion Reduction, System Reliability, Freight Movement And Economic Viability, Congestion Reduction And Environmental Sustainability

State DOTs and MPOs are required to set two- and four-year targets every four years for each reliability measure. MPOs have the option of supporting State targets or setting their own region-specific numerical targets on a target-by-target basis. For environmental and congestion reduction performance targets, the AMBAG region is not subject to these targets as a small urban MPO that is in air quality attainment status.

Caltrans set their targets for these measures in May 2018 and AMBAG adopted these targets. AMBAG’s will support state targets for system performance and air quality on the interstate system.

8) Measures and targets not applicable to the AMBAG region include annual hours of peak-hour excessive delay and percent of non-single occupancy vehicle travel.

Table 10 – Statewide Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, Congestion Reduction and Environmental Sustainability Targets Continued (2018)

Performance Measure	2017 Baseline	Statewide 2-year Targets	Statewide 4-year Targets
Annual Hours of Peak-Hour Excessive Delay Per Capita	N/A	N/A	N/A
Percent of Non-Single Occupancy Vehicle (SOV)	N/A	N/A	N/A
Reliable person-miles traveled on Interstate system – %	64.6%	65.1% (+0.5%)	65.6% (+1.0%)
Reliable person-miles traveled on non-Interstate NHS – %	73.0%	N/A	74.0% (+1.0%)
Reliable Interstate miles of truck travel – Truck Travel Reliability Index	1.69	1.68 (-0.01)	1.67 (-0.02)
Fine particulate matter – PM2.5 (kg/day)	904.25	913.29 (+1%)	922.34 (+2%)
Particulate matter – PM10 (kg/day)	2,431.21	2,455.52 (+1 %)	2,479.83 (+2%)
Carbon monoxide – CO2 (kg/day)	6,683.26	6,931.90 (+1%)	7,000.54 (+2%)
Volatile organic compounds – VOCs (kg/day)	951.83	961.35 (+1%)	970.87 (+2%)
Nitrogen oxide – NOx (kg/day)	1,753.36	1,770.89 (+1%)	1,788.43 (+2%)

Summary of Projects Moving Transportation Performance Metrics

The Draft 2018-19 MTIP includes a number of projects which contribute to improvement of one or more transportation performance measures. These are summarized below. Each project may contribute to multiple performance measure goals.

Table 11- Projects Contributing to Performance Measure Improvement in Draft 2018-19 MTIP

AMBAG Draft 2018-2019 MTIP	# of Projects Contributing to PM*
Safety	49
Roadway & Bridge Condition	73
System Performance	18
Transit Operation & State of Good Repair	13

*Note: Each project may have multiple PM benefits