How the 2021 FTIP Addresses California Federal Requirements for Performance Measures

FHWA Performance Targets

The Tahoe Regional Planning Agency is the federally designated Metropolitan Planning Organization (MPO) for the Lake Tahoe Region which plans and funds transportation and transit improvements to support attainment of regional environmental thresholds. The MPO planning process is carried out by the transportation staff at TRPA and actions are taken by MPO Board, which consist of the full TRPA Governing Board plus an additional representative from the U.S. Forest Service. TRPA plays a leading role in identifying and planning solutions for its transportation challenges. Created through a Bi-State Compact between California and Nevada, TRPA leads the cooperative effort to preserve, restore, and enhance the Lake Tahoe Region, while improving local communities and visitors' interactions with its irreplaceable environment.

The current federal transportation bill Fixing America's Surface Transportation Act – FAST Act mandates States and MPOs to take a performance-based approach to planning and programming. The TMPO continues to highlight the connection between project effectiveness and monitoring performance toward meeting regional and local goals. An effort to identify and implement best in practice performance metrics and intuitive public engagement tools to track progress is ongoing. The process is intended to provide useful information for decision-making, while fostering program alignment. TRPA's performance-based transportation planning framework incorporates Federal performance-based planning requirements outlined in the FAST Act, TRPA threshold and Regional Plan performance measures, and various state metrics of performance.

TRPA has developed and will continue to refine performance measures and targets for the regional transportation planning process required Safety, Pavement, Bridge, System Performance, Freight and applicable Congestion Mitigation and Air Quality measures, Transit Asset Management and Safety Plans. This performance-based planning approach informs the Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) to implement regional, state, and federal projects selected in the TIP. It includes a process where performance in achieving regional goals is weighted to ensure projects funded will help us toward achieving existing and future goals that improve safety.

The 2021 FTIP programs transportation projects over the next four federal fiscal years 2021 through 2024. The projects included in the Regional Transportation Plan (RTP) are recommended for various stages of development during the program period and ultimately assist in implementation of the RTP. The project listings in the FTIP include the location and description of proposed work, project cost, expected funding sources, and the scheduled year of work. The FTIP is a dynamic document that reflects project schedules and funding as they may change.

Background

Federal rules require that the Federal Transportation Improvement Program (FTIP) "be designed such that once implemented, it makes progress toward achieving the performance targets established under § 450.306(d)." Also, the FTIP "shall include, to the maximum extent practicable, a description of the anticipated effect of the FTIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets."[i]

The Moving Ahead for Progress in the 21st Century Act (MAP-21, 2012) established new requirements for metropolitan planning organizations (MPOs) to coordinate with transit providers, set performance targets, and integrate those performance targets and performance plans into their planning documents by certain dates. The most recent federal transportation act, Fixing America's Surface Transportation Act of 2016 (FAST Act), carries forward the Performance Based Planning. Beginning in 2018, federal rules required that state departments of transportation and MPOs implement federal performance measures. In response, FHWA and FTA worked with state and regional agencies to identify performance measures that meet the requirements.

In California, Caltrans is directly responsible for submitting state performance targets and periodic progress reports to federal agencies on an annual basis. MPOs are required to establish targets for the same performance measures on all public roads in the MPO planning area within 180 days after the state establishes each target. MPOs may elect to support the statewide targets, establish numerical targets specific to their region, or use a combination of both approaches. Furthermore, each MPO must incorporate these short-range targets into their planning and programming processes, including long-range plan (RTP) and FTIP.

FHWA Performance Measures

The federal performance measures under the Federal Highway Administration (FHWA) are categorized into three performance management (PM) groups

PM 1: Safety

PM 2: Transportation Asset Management

PM 3: System Reliability, Freight, Congestion, and Air Quality

FTA Performance Measures

In addition to the three PM groups, the FTA has established performance measures and reporting requirements for transit asset management (TAM) and transit safety. Performance metrics for TAM focus on the maintenance of our regional transit system in a state of good repair. Transit assets to be monitored under this provision include:

1. Non-revenue support equipment and maintenance vehicles
2. Revenue vehicles (rolling stock)
3. Rail infrastructure including tracks, and signals, and guidance systems; and

4. Transit facilities including stations, parking structures, and administrative offices. Transit safety performance monitoring is focused on assessment of the number of transit incidents resulting in fatalities or serious injuries and transit system reliability.

The Federal Transit Administration (FTA) issued the TAM Final Rule (49 CFR §625 et seq.), effective October 1, 2016, to implement MAP-21's asset management provisions. This final rule mandates a National TAM System, defines 'State of Good Repair' (SGR), and requires transit providers to develop TAM plans. The Metropolitan Transportation Planning Final Rule (23 CFR §450.206) outlines the timelines and processes by which states, MPOs, and transit providers must coordinate in target setting.

Public Transportation Agency Safety Plan

On July 19, 2018, the FTA published the Public Transportation Agency Safety Plan (PTASP) Final Rule (49 CFR §673.15) regulating how Chapter 53 grantees would have to implement federally mandated safety standards. The rule's effective date is July 19, 2019, and the compliance date is July 20, 2020. Considering the extraordinary operational challenges presented by the COVID-19 public health emergency, FTA issued a Notice of Enforcement Discretion effectively extending the PTASP compliance deadline from July 20, 2020, to December 31, 2020. The MPO's initial transit safety targets are set within 180 days of receipt of the safety performance targets from the transit agencies. The MPO then revisits its targets based on the schedule for preparation of its system performance report that is part of the RTP. The first MTP or FTIP update or amendment to be approved on or after July 20, 2021, is required to include the MPO's transit safety targets. See FTA's COVID-19 FAQs page for more information about the Notice.[ii]

The final rule specifically requires transit agencies employing federal funds to develop a safety plan and annually self-certify compliance with that plan. The National Public Transportation Safety Plan identifies four performance measures that must be included in the transit agency safety plans: fatalities, injuries, safety events, and system reliability. Each transit agency must make its safety performance targets available to MPOs to assist in the planning process, and coordinate, to the maximum extent practicable, with the MPO in selecting regional safety targets.

Each of the federal performance management focus areas include an associated set of metrics for which statewide and regional targets must be set. The specific performance measures for each include:

TRANSPORTATION SYSTEM SAFETY (PM 1)

- Number of motor vehicle collision fatalities
- Rate of motor vehicle collision fatalities per 100 million VMT
- Number of motor vehicle collision serious injuries
- Rate of motor vehicle collision serious injuries per 100 million VMT
- Number of non-motorized fatalities and serious injuries

NATIONAL HIGHWAY SYSTEM PAVEMENT AND BRIDGE CONDITION (PM 2)

- Percentage of Interstate System pavement in 'good' condition
- Percentage of non-interstate NHS pavement in 'good' condition
- Percentage of Interstate System pavement in 'poor' condition
- Percentage of non-interstate NHS pavement in 'poor' condition

- Percentage of NHS bridges in 'good' condition
- Percentage of NHS bridges in 'poor' condition

NATIONAL HIGHWAY SYSTEM (NHS) PERFORMANCE (PM 3)

- Percent of interstate system mileage reporting reliable person-mile travel times
- Percent of non-interstate NHS mileage reporting reliable person-mile travel times

FREIGHT MOVEMENT (PM 3)

- Percent of interstate system mileage reporting reliable truck travel times

CMAQ PROGRAM (PM 3) *not applicable to TRPA, only large MPOs*

- Annual hours of peak-hour excessive delay per capita
- Total emissions reduction by criteria pollutant (PM10, PM2.5, Ozone, CO)
- Non-Single Occupancy Vehicle mode share

TRANSIT ASSET MANAGEMENT (TAM)

- Equipment: Share of non-revenue vehicles that meet or exceed useful life benchmark
- Rolling Stock: Share of revenue vehicles that meet or exceed useful life benchmark
- Infrastructure: Share of track segments with performance restrictions
- Facilities: Share of transit assets with condition rating below 3.0 on FTA Transit Economic Requirements Model (TERM) scale[iii]

TRANSIT SAFETY

- Number of transit-related fatalities
- Number of transit-related injuries
- Number of transit system safety events
- Transit system reliability

How TRPA Addresses Each Performance Management Group

TRANSPORTATION SYSTEM SAFETY (PM 1)

TRPA opted to adopt the States targets for PM 1 below.

Table 1 - Safety Performance Management (PM1): Fatalities and Injuries

	Data Source	5- Yr. Rolling Average Targets[1]		Percent Reduction Targets[1]	
		2018	2019	2018	2019
Number of Fatalities	FARS[2]	3590.8	3445.4	7.69%	3%
Rate of Fatalities (per 100 million VMT)	FARS & HPMS[3]	1.029	0.995	7.69%	3%
Number of Serious Injuries	SWITRS[4]	12,823.4	12,688.1	1.5%	1.5%
Rate of Serious Injuries (per 100 million VMT)	SWITRS & HPMS	3.831	3.661	1.5%	1.5%
Number of Non-Motorized Fatalities and Non-Motorized Severe Injuries	FARS & SWITRS	4271.1	3949.8	10%	3% for Fatalities and 1.5% for Serious Injuries

One of the six goals of the RTP is Safety: Increase safety and security for all users of Tahoe's transportation system. Many of the projects programmed in the FTIP aid in this goal to improve safety. For some, safety is the primary aim, and for others, safety may be a component.

TRPA has three funding programs applicable to improving safety.

1. Active Transportation Program (ATP)
2. Highway Safety Improvement Program (HSIP)
3. State Highway Operations and Protection Program (SHOPP) Collision Reduction

ATP

The ATP funds bicycle and/or pedestrian projects. Since people are more vulnerable while walking or biking as compared to traveling in a vehicle, any project that helps them do so is likely to yield safety benefits. The ATP further emphasizes safety by allotting points for projects applications that promise to reduce the rate or number of pedestrian and bicyclist fatalities and injuries.

HSIP

The HSIP directly addresses safety. The program's stated purpose is to "achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal land." Successful project applications promise to reduce fatalities and injuries. The

program is designed to focus local efforts on locations/corridors with the greatest safety needs and countermeasures with lower costs.

SHOPP Collision Reduction

The SHOPP is the State Highway System's "fix-it-first" program that funds repairs and preservation, emergency repairs, safety improvements, and some highway operational improvements on the State Highway System (SHS). All SHOPP projects are limited to capital improvements that do not add capacity (no new highway lanes) to the SHS, though some new auxiliary lanes are eligible for SHOPP funding.

The Collision Reduction category is one of eight categories that make up the SHOPP, with the intention to reduce the number or severity of collisions; within this category are two programs:

1. 201.010 - Safety Improvements: reactive approach based on analysis of collision history
2. 201.015 - Collision Severity Reduction: proactive approach targeted to reduce the potential for traffic collisions based on past performance of roadway characteristics

201.010 – Safety Improvements

This program is designed to reduce the number or severity of collisions on the State Highway System. Projects with a safety index above 200 qualify as safety improvement projects. Projects may be individual locations where the collision history indicates a pattern potentially correctable by a safety improvement, such as unsafe traffic (school zone signals included), wet pavement corrections, curve corrections, shoulder widening, left-turn channelization, etc. All proposed projects will be verified by HQ Office of Traffic Safety Programs in the Division of Traffic Operations before being certified as safety improvement projects.

This task also includes sites identified in monitoring programs to reduce collisions for motorists, such as for wrong-way collisions, multilane, cross-median collisions, two-and three-lane cross center-line collisions and run-off-the-road collisions. It also includes non-motorized modes, such as pedestrian and bicycle facilities.

It does not include relocating existing highways or projects that would add new through lanes or upgrade existing highways to a higher classification, such as conventional to expressway, regardless of the safety benefits. This task does not include projects where the prime purpose is reducing congestion.

Improving a highway, generally on existing alignment, to improve standards of width, grade, alignment or other geometric consideration is new highway construction that is included in STIP programs.

201.015 - Collision Severity Reduction

This program seeks to upgrade existing highway safety features within the roadbed's clear recovery area, resulting in reduced collisions and/or severity. Projects will include new guardrail end treatments and crash cushions, rumble strips, glare screen, rock fall mitigation, overcrossing pedestrian fencing, crosswalk safety enhancements, and improvements that prevent roadway departure.

The program is designed to be proactive in enhancing safety on the State Highway System. As such, this program will not be subject to a safety index analysis but will define projected collision severity reduction numerically. Projects will be prioritized based on the projected collision severity reduction benefits.

2020 SHOPP Collision Reduction Numbers, Statewide

A total of 920 projects are included in the 2020 SHOPP that the CTC adopted in May 2020. The 2020 SHOPP is valued at $17.4 billion, which includes reservation amounts for programs such as the Collision Reduction Program. **The SHOPP Collision Reduction Program has 161 programmed safety projects totaling $1,841,082,000.** The SHOPP reserves $3,120,000,000 for 201.010 safety improvements. The reserved amount will address future safety improvements as they are identified.

TRPA Regional Grant Program

The FTIP implements the region's priority projects in the long-range RTP. Project selection and priorities are based on the availability and eligibility of funding, project readiness, and project consistency with local and regional plans, conformity to federal and state standards, and if it is listed in the current Regional Transportation Plan. A project performance assessment is also incorporated into the project selection process, it emphasizes projects that can reduce the reliance on the automobile, improve safety, and close gaps in the active transportation and transit network and those identified as priorities in the RTP. The performance assessment uses an enhanced performance -based evaluation system.

A Call for Projects is announced when federal funding is available through the Regional Grant Program (RGP). The RGP was created to support the implementation of the Regional Transportation Plan goals, policies, and projects by creating better transportation options and enhancing the transportation system to provide safe, multi-modal, social, and environmental improvements. The program seeks to bundle funding sources when possible and leverage grant funds to increase success and effectiveness of project implementation. The goals and criteria for the Regional Grant Program may include four different funding sources: Surface Transportation Block Grant (STBG), Active Transportation Program (ATP), Congestion Mitigation and Air Quality (CMAQ), and Nevada Transportation Alternative Program (TAP). The RGP goals and criteria and the individual fund source guidelines are included in Appendix A. The next Call for Projects for the RGP is anticipated in Spring 2021, soliciting projects for annual apportionments for Congestion Mitigation and Air Quality Program (CMAQ), Surface Transportation Block Grant (STBG), and Nevada Transportation Alternative Program (TAP) funding. The project selection process, the RGP evaluation criteria, and performance assessment determines how the funding is awarded to projects.

In 2019 Tahoe adopted a Regional Safety Strategy. TRPA received funds from Nevada DOT and Caltrans to conduct systemic safety analyses for the public roadways within the Tahoe Region. TRPA used the funds to conduct the analysis as part of an effort to develop a regionwide safety strategy in collaboration with its fifteen partner agencies. The Safety Strategy supports the goals of and is aligned with direction of the Tahoe Region established in the 2017 Linking Tahoe: Regional Transportation Plan and newly established federal performance measures. The plan can be found online at the following address: Tahoe-Safety-Plan-_Final_02-20-2019_reduced_size.pdf (trpa.org).

Safety Programs and Projects	Total Project Cost	Funding in the 4-Year Element	% of **All** Funding in the 4-Year Element	Number of Projects
Safety Projects	$29,064,415	$22,680,100	18%	3
Other Projects (Not Primarily for Safety)	$35,548,780	$17,267,000	13%	6
Total	$64,613,195	$39,974,100	31%	9

Safety Project Highlights

The following are some of the projects within the FTIP worth highlighting that will help further the region in meeting these targets to promote safety and reduce congestion through the implementation of investments in transportation projects.

- *US 50 Corridor Collision Reduction (CA)* – lighting, improved crossings and high visibility green paint
- *Apache Avenue Pedestrian Safety and Connectivity Project (CA) – mobility improvements including pedestrian and bicycle safety improvements*
- *Kings Beach Western Approach (CA)* - multi-benefit project improving mobility & walkability

NATIONAL HIGHWAY SYSTEM PAVEMENT AND BRIDGE CONDITION (PM 2)

TRPA opted to support the state's targets for pavement and bridge condition. The following are some of the projects within the FTIP worth highlighting that will help further the region in meeting these performance targets to promote maintaining and upgrading of bridges and preservation of existing resources through the implementation of investments in transportation projects. Projects often have multiple benefits like Pioneer Trail Safety Improvements in the Project Highlight section has upgrades to signing and striping as well as a safety component. The Echo Summit Bridge Replacement was most certainly related to safety as well.

PM2: NATIONAL HIGHWAY SYSTEM PAVEMENT AND BRIDGE CONDITION		
	2- Year Good/Poor	4-Year Good/Poor
Pavement on NHS - Interstate - Non-Interstate	 45.1% / 3.5% 28.2% / 7.3%	 44.5% / 3.8% 29.9% / 7.2%
Bridges on the NHS	69.1% / 4.6%	70.5% / 4.4%

The following are funding sources and programs that help fund PM 2 projects.

Local Funds

Cities and counties spend billions each year to maintain local roads and bridges. They derive their funding from a myriad of sources. In a survey of California jurisdictions, for local funds alone, there are more than a hundred different sources of taxes and fees report to be spent on pavement.[iv] Some examples of local funding sources include:

- Local sales taxes
- Development impact fees
- General funds
- Various assessment districts – lighting, maintenance, flood control, special assessments, community facility districts
- Traffic impact fees
- Traffic safety/circulation fees
- Utilities (e.g., stormwater, water, wastewater enterprise funds)
- Transportation mitigation fees
- Parking and various permit fees
- Flood control districts
- Enterprise funds (solid waste and water)
- Investment earnings
- Parcel/property taxes
- Indian reservation roads

- Indian gaming funds
- Vehicle registration fees
- Vehicle code fines
- Underground impact fees
- Transient occupancy taxes
- Capital Improvement Program (CIP) reserves/capital funds

Local Funds tend to pay for non-regionally significant road maintenance, safety, and bridge projects. Even so, some of the PM 2 projects in the FTIP owe their funding to Local Funds.

State Funds

HUTA

The Highway Users Tax Account (HUTA), more commonly known as the state gas tax, is still the single largest funding source for cities and counties.

SB 1

California doubled down on PM 2 when it approved Senate Bill 1 on April 28, 2017. SB 1 increased several taxes and fees to raise more than $5 billion annually in new transportation revenues. Moreover, SB 1 provides for inflationary adjustments, so that purchasing power does not diminish as it has in the past. SB 1 prioritizes funding towards maintenance, rehabilitation, and safety improvements on state highways, local streets and roads, and bridges and to improve the state's trade corridors, transit, and active transportation facilities.

Many SB 1 funds are not captured in the FTIP because that document focuses on federally funded and regionally significant projects, while SB 1 is a non-federal fund that tends to pay for non-regionally significant road maintenance, safety, and bridge projects. Even so, some of the PM 2 projects in the FTIP owe their funding to SB 1.

Federal HBP

The Highway Bridge Program (HBP) provides federal aid to local agencies to replace and rehabilitate deficient, locally owned, public highway bridges. The HBP is intended to remove structural deficiencies from existing local highway bridges to keep the traveling public safe.[v] The HBP provides about $288 million annually for bridge projects. Off-system bridges are usually funded at 100% HBP, while on system bridges are funded at 88.53% HBP. An exception to the federal participating rate is "high-cost" bridges, in which sponsors enter into agreements with Caltrans Local Assistance and agree on a federal participating rate which may not equal 100% or 88.53%.

SHOPP

The SHOPP is already described above under PM 1. Two of the eight categories of the SHOPP that address PM 2 are Bridge Preservation and Roadway Preservation.

Although the SHOPP is a program, it is often thought of as a fund source as well. The FTIP lists the fund source for most SHOPP projects as "SHOPP Advance Construction." Caltrans blends funds from HUTA, SB 1, and federal highway funds into SHOPP, and "SHOPP Advance Construction" is a placeholder for what could be federal or state funds.

SHOPP Bridge Preservation

SHOPP Bridge Preservation category includes following programs:

- 201.110 – Bridge Rehabilitation and Replacement
- 201.111 – Bridge Scour Mitigation
- 201.112 – Bridge Rail Replacement and Upgrade
- 201.113 – Bridge Seismic Restoration
- 201.119 – Capital Bridge Preventative Maintenance Program
- 201.322 – Transportation Permit Requirements for Bridges

The 2020 SHOPP has 156 Bridge Preservation projects totaling $2,371,000,000. The SHOPP does not have a reservation for Bridge Preservation.

SHOPP Roadway Preservation

SHOPP Roadway Preservation category includes following programs:

- 201.120 – Roadway Rehabilitation
- 201.121 – Pavement Preservation
- 201.122 – Pavement Rehabilitation
- 201.150 – Roadway Protective Betterments
- 201.151 – Drainage System Restoration
- 201.170 – Signs and Lighting Rehabilitation

The 2020 SHOPP has 265 Roadway Preservation projects totaling $5,505,000,000. The SHOPP does not have a reservation for Roadway Preservation.

	# of projects	$ in 4 years	$ Total
PM 2 Projects	1	$24,150,000	$24,150,000
Bridges	0		
Roads total (does not include non-NHS)	1	$24,150,000	$24,150,000
Total	1	$24,150,000	$24,150,000

Project Highlights

The following are some of the projects within the FTIP worth highlighting that will help further the region in meeting these performance targets to promote maintaining and upgrading of bridges and preservation of existing resources through the implementation of investments in transportation projects. Projects often have multiple benefits like the safety project below has upgrades to signing and striping as well as a safety component. The Echo Summit Bridge Replacement was most certainly related to safety as well.

- *Pavement Perseveration (CA)* - SR28/SR89 Junction to Nevada State Line
- *Highway 50 Echo Summit Bridge Rehabilitation* – bridge replacement (complete)

PM 3

TRPA opted to support the adopted California Department of Transportation Highway System Performance Measure Targets below. There are three projects in the FTIP identified in the Project Highlight section below that improve air quality by improving travel time reliability for autos and trucks by creating more non-auto options, building 'complete' and safe streets for all modes and realigning roadways to create more pedestrian and bike friendly town centers that include large employers, tourist accommodation and recreation facilities.

Traffic Congestion	2-Year NHS Targets	4-Year NHS Targets
Percent of reliable person-miles traveled on the Interstate	65.1% (.5% above 2017 Baseline)	65.6% (1% above 2017 Baseline)
Percent of reliable person-miles traveled on the Non-Interstate	N/A	74% (+1% above 2017 Baseline)
% of Interstate system mileage providing for reliable truck travel time (Truck Travel Time Reliability Index)	1.68 (baseline -.01)	1.67 (baseline -.02)

1. CMAQ emissions reduction measure, the first performance period begins on October 1, 2017, and ends on September 30, 2021. For all other measures, including the CMAQ traffic congestion measure, the first performance period begins on January 1, 2018, and ends on December 31, 2021. [23 CFR 490.105]

2. Freight movements and CMAQ Program metrics are *only applicable to urban MPOs at this time; these include:* Percent of interstate system mileage reporting reliable truck travel times, Annual hours of peak-hour excessive delay per capita, Total emissions reduction by criteria pollutant (PM10, PM2.5, Ozone, CO),Non-Single Occupancy Vehicle mode share

The following are funding sources and programs that help fund Non-Interstate and Interstate:

SHOPP Mobility

The SHOPP Mobility category include following programs:

201.310 – Operational Improvements
201.315 – Transportation Management Systems
201.321 – Weigh Stations & Weigh-In-Motion Facilities

201.310 – Operational Improvements

The primary purpose of this program element is to improve traffic flow on existing State highways by reducing congestion and operational deficiencies at spot locations. Operational improvement projects do not expand the design capacity of the system.

Examples of Operational Improvements projects include, but are not limited to:

- Interchange modifications (but not to accommodate traffic volumes that are significantly larger than the existing facilities were designed for)
- Ramp modifications (acceleration - deceleration/weaving)

- Auxiliary lanes for merging or weaving between adjacent interchanges
- Curve corrections/improve alignment
- Signals and/or intersection improvements
- Two-way left-turn lanes
- Channelization
- Turnouts
- Shoulder widening

201.315 – Transportation Management Systems

The primary purpose of this program element is to improve traffic flow on existing State highways by addressing system-wide congestion through system management techniques. Transportation Management Systems facilitate the real time management of the State highway system by providing accident and incident detection, verification, response, and clearance. These systems provide State highway system status information to travelers.

Examples of Transportation Management System projects include, but are not limited to:

- Traffic sensors
- Changeable message signs
- Close circuit television cameras
- Ramp meters
- Communications systems
- Highway advisory radio
- Traffic signal interconnect projects
- Traffic management systems housed in Transportation Management Centers (TMCs), including the necessary software and hardware (excluding facilities)
- TMC interconnect projects

201.321 – Weigh Stations & Weigh-in-Motion Facilities

The primary purpose of this program element is to provide for Commercial Vehicle Enforcement Facilities (commonly called Weigh Stations) and Weigh-in-Motion (WIM) systems. The Weigh Stations are needed to support the Commercial Vehicle Enforcement Plan; Truck safety, size and weight regulations are enforced by the California Highway Patrol reducing truck related accidents or incidents and protection our highways from premature damage. The WIM sites provide data for federally required data systems and special studies, design and maintenance strategies, size and weight policies, enforcement and planning strategies, and the traffic and truck volumes publications.

The 2020 SHOPP has 91 Mobility projects programmed totaling $1,440,000,000. The SHOPP does not have a reservation for Mobility.

SB 1 Trade Corridor Enhancement Program (Including National Highway Freight Program)

The purpose of the Senate Bill 1 (SB 1) Trade Corridor Enhancement Program (TCEP) is to provide funding for infrastructure improvements on federally designated Trade Corridors of National and Regional Significance, on California's portion of the National Highway Freight Network, as identified in California Freight Mobility Plan, and along other corridors that have a high volume of freight movement. The Trade Corridor Enhancement Program will also support the goals of the National Highway Freight

Program, the California Freight Mobility Plan, and the guiding principles in the California Sustainable Freight Action Plan.

This statewide, competitive program will provide approximately $300 million per year in state funding and approximately $515 million in National Highway Freight Program funds if the federal program continues under the next federal transportation act.

Eligible applicants apply for program funds through the nomination of projects. All projects nominated must be identified in a currently adopted regional transportation plan. The Commission is required to evaluate and select submitted applications based on the following criteria:

- Freight System Factors – Throughput, Velocity, and Reliability
- Transportation System Factors – Safety, Congestion Reduction/Mitigation, Key Transportation Bottleneck Relief, Multi-Modal Strategy, Interregional Benefits, and Advanced Technology
- Community Impact Factors – Air Quality Impact, Community Impact Mitigation, and Economic/Jobs Growth
- The overall need, benefits, and cost of the project
- Project Readiness – ability to complete the project in a timely manner
- Demonstration of the required 30% matching funds
- The leveraging and coordination of funds from multiple sources
- Jointly nominated and/or jointly funded

Truck Travel Discussion

While Tahoe doesn't have an intense amount of truck travel we still receive goods and services every day. Ensuring our roads minimize congestion benefits autos as well as truck travel. Tahoe US50 is often an alternate to I-80 when snowstorms close the interstate. Keeping Tahoe moving is important for everyone.

CMAQ

The CMAQ program supports improving air quality and relieving congestion. The purpose of the CMAQ program is to fund transportation projects or programs that will contribute to attainment or maintenance of the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide (CO), and particulate matter (both PM10 and PM2.5).

PM3 Projects	# of projects	$ in 4 years	% of FTIP Total $
Non-Interstate	8	$11,519,100	9%
Interstate	0	$ 0	-
Truck Travel Time Projects	N/A	N/A	N/A
CMAQ Projects		$ 3,977,000	3%
PM 3 Total	8	$11,519,100	9%

Project Highlights

The following are some of the projects within the FTIP worth highlighting that will help further the region in meeting these performance targets that improve air quality with ensuring reliable travel times and non-auto travel options.

- *Lake Tahoe Boulevard Class 1 Bicycle Trail (Viking Way to South Wye) CA* - bike trail connecting a major transit hub and town center to affordable housing projects and the local high school
- *Meyers Corridor Operational Improvement Project (CA)* – multimodal complete street providing safe walking and biking access
- *US 50 South Shore Community Revitalization Project* (*CA/NV)* – road realignment creating a complete street with bicycle and pedestrian amenities in the region's largest town center
- *North Tahoe Regional Bike Trail (NV)* - Class 1 bike trail that will link the Dollar Hill Multi-use Trail with the North Tahoe Regional Park in Tahoe Vista.

TRANSIT ASSET MANAGEMENT

The TAM targets below were produced collaboratively with regional transit agencies based on their agency TAM plans and local targets. In developing the targets, TRPA reviewed and considered the transit operators' TAM plans (including identified goals, objectives, measures, and targets), thereby incorporating them into the metropolitan planning process.

We will continue to work with the region's transit operators and county transportation commissions to seek ways to improve the methodology, data collection and analysis for future RTP updates, and to continue engaging in a regional discussion about transit state of good repair and the need for additional funding.

Transit Asset Management Performance

TRPA have adopted Transit Asset Management plans, which are available from transit operators, Tahoe Transportation District (TTD) and Tahoe Truckee Area Regional Transit (TART). The two agencies and TRPA worked collaboratively to set targets. Transit Asset Management category projects could also be supported by state, local, and other federal funding sources (e.g., flexible CMAQ and RSTP). The funding and the program of projects in the TIP will enable the operators to achieve their respective transit asset management performance targets as show below.

Transit Asset Management Performance Measures for TTD and TART

Asset Category	Performance Measure	Estimated Current % (TART)	Estimated Current % (TTD)	Regional Target for 2020 RTP Cycle
ROLLING STOCK				
Bus (BU)	Percentage of buses that exceed ULB of 12 years	36%	38%	42%
Cutaway bus (CU)	Percentage of cutaway buses that exceed ULB of 7 years	100%	0%	100%
Small Cutaway/Van (VN)	Percentage of small cutaway buses and vans that exceed ULB of 5 years	N/A	58%	80%
EQUIPMENT				
Automobile (AO)	Percentage of automobiles that exceed ULB of 8 years	0%	0%	50%
Other rubber tire vehicles	Percentage of other rubber tire vehicles that exceed ULB of 10 years	0%	33%	50%
FACILITIES				
Administrative and maintenance facilities	Percentage of administrative and maintenance facilities rated less than 3.0 on the TERM scale	0%	N/A	0%
Passenger facilities	Percentage of passenger facilities rated less than 3.0 on the TERM scale	16%	22%	30%

1. For more information on the Lake Tahoe TAM targets see the Regional Transit Asset Management Targets and Tahoe Fleet Replacement Fund.

The 2 reporting entities for public transportation provided their targets to TRPA, as shown above. The targets for the metropolitan planning region are presented in tabular form to account for the differences in targets and standards among the providers of public transportation. Targets are the threshold for the maximum percentage of assets at or exceeding acceptable standards. In most cases for the 2017 target-setting process, providers set targets that are above their current performance. In future years, staff will work with the providers of public transportation to collate performance as agencies build their way back up to normal services.

Project Highlights

The TIP includes funding from multiple FTA sources for projects that support Transit Asset Management. Examples of these projects include rural and urban capital assistance programs; rolling stock acquisition, maintenance, and overhauls; bus fleet rehabilitation and replacement; and maintenance of passenger facilities. For the TRPA region key projects that address Transit Asset Management are:

- *Transit Capital TTD and TART (CA/NV)* – Bus and Bus Facilities and Preventive Maintenance
- *New Fleet Facility for TTD* - preventive maintenance; fleet and facilities improvements; safety and security enhancements to both the fleet and facilities

Transit Capital projects in the 2021 FTIP include $9.47 million in FTA funds: $3,056,000 in 5307, $3,693,000 in 5310, $208,000 in 5310, LCTOP $500,000 and $2,020,000 in local funds (TART only) funds that support the maintenance or replacement of transit assets. TTD proposed new fleet facility is currently programed with $678,000 in STBG and local match of $36,000 for a new fleet facility.

Public Transportation Agency Safety Plan Performance Measures

On July 19, 2018, the FTA published the Public Transportation Agency Safety Plan (PTASP) Final Rule (49 CFR §673.15) regulating how Chapter 53 grantees would have to implement federally mandated safety standards. The rule's effective date is July 19, 2019 and the compliance date is July 20, 2020. In light of the extraordinary operational challenges presented by the COVID-19 public health emergency, FTA issued a Notice of Enforcement Discretion effectively extending the PTASP compliance deadline from July 20, 2020 to December 31, 2020. The MPO's initial transit safety targets are set within 180 days of receipt of the safety performance targets from the transit agencies. The first MTP update or amendment to be approved on or after July 20, 2021, is required to include the MPO's transit safety targets. Please visit FTA's COVID-19 FAQs page for more information about the Notice.[vi]

Safety targets must be set every four years in the RTP and must integrate into the plan, either directly or by reference, the goals, objectives, performance measures, and targets from the transit providers' safety plans.

The National Public Transportation Safety Plan identifies four performance measures that must be included: fatalities, injuries, safety events, and system reliability. Definitions for safety performance measures are as described in the NTD Safety and Security Manual.

Transit providers may choose to establish additional targets for safety performance monitoring and measurement. The following table documents existing performance targets set by transit operators in the Tahoe region.

TTD

Mode of Transit Service	Fatalities (Total)	Fatalities (Rate)	Injuries (Total)	Injuries (Rate)	Safety Events (Total)	Safety Events (Rate)	System Reliability (miles)
Motor Bus (MB)	0	0	4	1/381,539	1	1/381,539	10,000
Commuter Bus (CB)	0	0	1	1/48,802	1	1/48,802	10,000
Demand Response (DR)	0	0	1	1/13,309	1	1/13,309	10,000

TART

Mode of Transit Service	Fatalities 2020 Target	Injuries 2020 Target	Safety Events 2020 Target	System Reliability (VRM/Failures) 2020 Target
Fixed Route Integer	0	7	53.33	-
Fixed Route Vehicle Rev Miles	0	.48	3.65	31,182
Demand Response Integer	0	.33	2.33	-
Demand Response Vehicle Rev Miles	0	.15	1.09	11,023

Project Highlights

While these projects have been mentioned in previous measures, they are multi benefit projects that also help implement transit safety targets. In addition to transit operations, there are a few complete street projects that are on very busy bus routes. Adding adequate sidewalk and bike paths will make the street safer for autos, people and transit buses.

- *Transit Operations, TTD and TART (CA/NV)* – transit service with critical regional connections for residents and visitors including employment and medical trips
- *Lake Tahoe Boulevard Class 1 Bicycle Trail (Viking Way to South Wye) CA* - bike trail connecting a transit hub and town center to affordable housing projects and the local high school
- *US 50 South Shore Community Revitalization Project* (*CA/NV)* – road realignment creating a complete street with bicycle and pedestrian amenities in the region's largest town center serving 3 routes and several private operator shuttles.
- *US 50 Corridor Collision Reduction (CA)* – lighting, improved crossings and high visibility green paint on the south shore that carries 3 routes and several private operator shuttles.

These projects in the FY 20/21 – 23/24 TIP with a mix of funds including $3,820,000 in §5307 that specify the maintenance or replacement of transit assets and additional funds like ATP and STBG help build complete streets. Lake Tahoe Boulevard Class 1 Bike Trail, a major route for south shore transit, will have a new complete street as mentioned above. This project includes 20/21 funding from multiple

sources: local funds, CMAQ, ATP and HIP along with STBG to fully fund the project with $3,489,000 from the 2021 FTIP.

GENERAL RESOURCES:

1. Caltrans' PM1 Targets and Target-Setting Whitepaper (Year Two 2019) (PDF)
2. Federal Liaison: https://dot.ca.gov/programs/federal-liaison
3. Federal Highway Transportation Performance Management https://www.fhwa.dot.gov/tpm/
4. State Highway Safety Report (2018) - California https://www.fhwa.dot.gov/tpm/reporting/state/safety.cfm?state=California
5. Tahoe Safety Strategy: Tahoe-Safety-Plan-_Final_02-20-2019_reduced_size.pdf (trpa.org)
6. 2020 Tahoe Regional Transportation Plan - https://gis.trpa.org/rtp/
7. FTA TAM Final Rule Fact Sheet
8. General FTA FAQs on TAM – specifically here please see the last Q&A on the page that frequency with which MPOs must update their TAM targets
9. MPO Specific FAQs on TAM – th[i]s resource outlines what exactly the MPOs are responsible for per the TAM Rule which was finalized in 2016
10. FTA Performance-Based Planning Timeframe Overview
11. FTA Safety Final Rule Fact Sheet

END NOTES:

[i] 23 CFR § 450.326 (c, d)

[ii] MPO Frequently Asked Questions, Public Transportation Agency Safety Plan Final Rule, FTA https://www.transit.dot.gov/regulations-and-programs/safety/public-transportation-agency-safety-program/mpo-frequently-asked#SPTQ4

[iii] The TERM scale is a measure of condition used in the National Transit Database (NTD). This is the five-point scale that agencies use to report the condition of their facility assets. An asset is deemed to be in good repair if it has a rating of 3, 4, or 5 on this scale.

[iv] California Statewide Local Streets and Roads Needs Assessment, October 2018, pg. 39. https://www.savecaliforniastreets.org/wp-content/uploads/2018/10/2018-Statewide-Final-Report-1.pdf

[v] Chapter 6 Highway Bridge Program, January 2019. https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/lapg/g06.pdf

[vi] MPO Frequently Asked Questions, Public Transportation Agency Safety Plan Final Rule, FTA https://www.transit.dot.gov/regulations-and-programs/safety/public-transportation-agency-safety-program/mpo-frequently-asked#SPTQ4