



# 2040 METRO VISION REGIONAL TRANSPORTATION PLAN

SYSTEM PERFORMANCE REPORT MEMO

Adopted July 15, 2020

## Acronyms

The following acronyms are used in this document:

- CDOT** – Colorado Department of Transportation
- CFR** – Code of Federal Regulations
- CMAQ** – Congestion Mitigation & Air Quality
- DRCOG** – Denver Regional Council of Governments
- FAST Act** – Fixing America’s Surface Transportation Act
- FHWA** – Federal Highway Administration
- FTA** – Federal Transit Administration
- HSIP** – Highway Safety Improvement Program
- MAP-21** – Moving Ahead for Progress in the 21<sup>st</sup> Century Act
- MOU** – Memorandum of Understanding
- MPO** – Metropolitan Planning Organization
- MV/RTP** – Metro Vision/Regional Transportation Plan
- NAAQS** – National Ambient Air Quality Standards
- NHS** – National Highway System
- NHPP** – National Highway Performance Program
- PBPP** – Performance-Based Planning and Programming
- PTASP** – Public Transportation Agency Safety Plan
- RTD** – Regional Transportation District
- SMS** – Safety Management System
- SOV** – Single Occupancy Vehicle
- TAM** – Transit Asset Management
- TERM** – Transit Economic Requirements Model
- TIP** – Transportation Improvement Program
- TPM** – Transportation Performance Management
- TTTR** – Truck Travel Time Reliability Index
- ULB** – Useful Life Benchmark
- USC** – United States Code
- VMT** – Vehicle Miles Traveled



## Introduction

The implementation of performance based-planning and programming (PBPP) is done within the Transportation Performance Management (TPM) framework. TPM provides key system information to determine the progress towards achieving goals and objectives and prioritizes investment and policy decisions. TPM also gives transportation agencies a better ability to identify and mitigate issues within their respective transportation networks and improve communication between partner agencies through data and objective information.

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) established a set of rulemakings for implementation of PBPP. Each rulemaking pertains to a particular area of transportation, and lays out the goals, measures, and data to be used in setting targets. Under the PBPP process, states, transit providers, and MPOs must link investment priorities to the achievement of performance targets.

The Denver Regional Council of Governments (DRCOG) has been coordinating with regional, State, and Federal partners to maintain compliance with Federal laws and regulations related to performance management. The integration of performance management regulations outlined in 2012's Moving Ahead for Progress in the 21st Century (MAP-21) Act and continued with 2015's Fixing America's Surface Transportation (FAST) Act is an evolving effort, as various State, regional, and local transportation agencies set and evaluate targets.

Table 1: Target-Setting Implementation Schedule			
Final Rule	Performance Measure (By Category)	MPO Due Date	Status
<b>PM1</b>	Safety	February 27th, 2018	Complete
<b>PM2</b>	Pavement Condition	November 16th, 2018	Complete
	Bridge Condition	November 16th, 2018	Complete
<b>PM3</b>	Travel Time Reliability	November 16th, 2018	Complete
	Freight Reliability	November 16th, 2018	Complete
	Traffic Congestion	May 20th, 2018	Complete
	Total Emissions Reduction	November 16th, 2018	Complete
<b>TAM</b>	Transit Asset Management	October 1, 2018	Complete
<b>PTASP</b>	Public Transportation Agency Safety Plan	January 20, 2021	Ongoing

In addition to adopting and incorporating performance measures and targets in the RTP and TIP, MPOs must also develop regular reports to document progress in achieving the targets; including a System Performance Report to be included in the RTP at the time of adoption, and a CMAQ Performance Plan to be included in the State's Baseline Performance Report, Mid-Period Performance Report, and Full Period Performance Report.

## System Performance Report

The System Performance Report is to be included in the RTP at the time of its adoption. The report must include an evaluation of system performance with respect to the performance targets. The progress description should include the performance data and associated performance target information that is available at the time of the plan adoption.

This memo serves as the System Performance Report for the 2040 MVRTP that was most recently amended in July 2020 and that was originally adopted in April 2017. As the 2050 MVRTP is currently under development with an anticipated Spring 2021 adoption, the following iteration of the system performance report will describe the progress in meeting the performance targets in comparison with this system performance report. All subsequent adoptions of the MVRTP will continue to include a system performance report.

## CMAQ Performance Plan

A requirement of the CMAQ Performance Measures (Traffic Congestion & Total Emissions Reductions) is the development of a CMAQ Performance Plan to be updated biennially. It includes a baseline level for traffic congestion and emissions, a description of the progress made in achieving performance measure targets, and a description of projects funded through the CMAQ program & their potential impact on achieving the targets.

As DRCOG is required to set Traffic Congestion and Total Emissions Reductions targets, the CMAQ Performance Plan is to be included in CDOT's Baseline Performance Report, Mid-Period Performance Report, and Full Period Performance Report.

## Federal Requirements

### Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) Act

In relation to performance management, MAP-21 aimed to increase the accountability and transparency of Federal highway programs by improving transportation investment decision-making through performance-based planning and programming.

As a result of MAP-21, seven national goals were established:

1. **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure Condition** - To maintain the highway infrastructure asset system in a state of good repair.
3. **Congestion Reduction** - To achieve a significant reduction in congestion on the National Highway System.
4. **System Reliability** - To improve the efficiency of the surface transportation system.
5. **Freight Movement and Economic Vitality** - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment.

- 7. Reduced Project Delivery Delays** - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

These seven national goals were carried forward into the subsequent surface transportation legislation, the FAST Act.

### Fixing America's Surface Transportation (FAST) Act

The FAST Act continues MAP-21's overall performance approach, and ensures that State DOTs and MPOs invest in projects that collectively make progress toward the National Goals that were established by Congress.

As required under the FAST Act, DRCOG is required to establish performance targets, and track progress towards target achievement, for the following performance areas and measures:

#### Safety

- Total number of traffic related fatalities on all public roads
- Rate of traffic related fatalities on all public roads per 100 million VMT
- Total number of traffic related serious injuries on all public roads
- Rate of traffic related serious injuries on all public roads per 100 million VMT
- Total number of non-motorized fatalities and serious injuries on all public roads

#### Pavement Condition

- Percentage of pavements on the Interstate System in Good condition
- Percentage of pavements on the Interstate System in Poor condition
- Percentage of the non-interstate National Highway System in Good condition
- Percentage of the non-interstate National Highway System in Poor condition

#### Bridge Condition

- Percentage of National Highway System bridges classified as in Good condition
- Percentage of National Highway System bridges classified as in Poor condition

#### Travel Time Reliability

- Percent of the Person-Miles Traveled on the Interstate that are reliable
- Percent of the Person Miles Traveled on the Non-Interstate National Highway System that are reliable

#### Freight Reliability

- Percentage of Interstate System mileage providing reliable truck travel time

#### Traffic Congestion

- Annual hours of peak hour excessive delay per capita
- Percentage of non-single occupancy vehicle travel

#### Total Emissions Reduction

- Total emissions reductions by applicable pollutants under the CMAQ program

## Transit Asset Management

- The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB)
- The percentage of non-revenue service vehicles (by type) that exceed the ULB
- The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale
- The percentage of track segments (by mode) that have performance restrictions

## Public Transportation Agency Safety Plan

- Total number of reportable fatalities and rate per vehicle revenue miles by mode.
- Total number of reportable injuries and rate per vehicle miles by mode.
- Total number of reportable events and rate per vehicle revenue miles by mode.
- Mean distance between major mechanical failures by mode.

## Specific Written Provisions

As part of the final rule for statewide and metropolitan transportation planning published by FHWA and FTA on May 27, 2016, 23 CFR 450.314 (h) was amended to state:

*“The MPO(s), State(s), and the providers of public transportation shall jointly agree upon and develop specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO, and the collection of data for the State asset management plans for the NHS.”*

DRCOG, in coordination with the Colorado Department of Transportation (CDOT) and the Regional Transportation District (RTD), developed and adopted Memorandums of Understanding (MOUs) for cooperatively developing, sharing, and reporting information related to performance measures and performance targets.

An Umbrella MOU was developed and adopted for FHWA’s TPM requirements (PM1, PM2, and PM3) and an MOU was developed for FTA’s TAM requirements. DRCOG is currently working to satisfy the PTASP requirements.

## PM1: Safety Performance Targets

The FAST Act continues the Highway Safety Improvement Program (HSIP) 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 lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

FHWA published the HSIP Final Rule and Safety Performance Management Measures Final Rule on March 15, 2016 with an effective date of April 14, 2016. State DOTs were required to report their first round of targets to FHWA by August 31, 2017, and MPOs had until February 27, 2018 to report their first round targets to the State DOT. Moving forward, State DOTs and MPOs are expected to establish and report Safety performance measure targets annually using a 5-year rolling average. MPOs can agree to support the State DOT target, or establish their own target specific to the MPO planning area.

The DRCOG Board elected to establish safety targets specific to the DRCOG MPO Planning Area, which are shown in **Tables 2-4** below:

Table 2: 2018 Safety Performance Measures and Targets				
Performance Measures	5-Year Rolling Average			Achieved
	Baseline (2012-2016)	Targets (2014-2018)	Actuals (2014-2018)	
Number of fatalities	210	246	241	Yes
Rate of fatalities per 100 million VMT	0.81	0.90	0.88	Yes
Number of serious injuries	1,767	1,948	1,769	Yes
Rate of serious injuries per 100 million VMT	6.87	7.20	6.50	Yes
Number of non-motorized fatalities and serious injuries	365	346	366	No

Table 3: 2019 Safety Performance Measures and Targets				
Performance Measures	5-Year Rolling Average			Achieved
	Baseline (2013-2017)	Targets (2015-2019)	Actuals (2015-2019)	
Number of fatalities	228	256	TBD	TBD
Rate of fatalities per 100 million VMT	0.85	0.93	TBD	TBD
Number of serious injuries	1,765	1,953	TBD	TBD
Rate of serious injuries per 100 million VMT	6.68	6.97	TBD	TBD
Number of non-motorized fatalities and serious injuries	372	344	TBD	TBD

Table 4: 2020 Safety Performance Measures and Targets				
Performance Measures	5-Year Rolling Average			Achieved
	Baseline (2014-2018)	Targets (2016-2020)	Actuals (2016-2020)	
Number of fatalities	241	259	TBD	TBD
Rate of fatalities per 100 million VMT	0.88	0.90	TBD	TBD
Number of serious injuries	1,769	1,814	TBD	TBD
Rate of serious injuries per 100 million VMT	6.50	6.36	TBD	TBD
Number of non-motorized fatalities and serious injuries	370	366	TBD	TBD

With safety performance measures being an annual target and one of DRCOG’s top priorities, steps have been taken to achieve past and future safety targets. In the most recently adopted 2020-23 TIP, 115 TIP Projects totaling over \$1.9 billion were identified as helping to achieve the safety targets. Additionally, DRCOG adopted Taking Action on Regional Vision Zero in June 2020. This is a safety action plan that includes a toolkit for local governments within DRCOG to use to prioritize safety throughout the region. It also defines 25 action initiatives with an implementation timeline and additional safety measures to support FAST Act performance measures and additional tracking on regional progress towards safety improvements. Columns for recording the progress in achieving the targets are provided in **Tables 2-4** above, the next update will continue to show progress accordingly.

## PM2: Infrastructure Condition Targets

The National Highway Performance Program (NHPP) provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.

The Pavement and Bridge Condition Performance Measures Final Rule was published on January 18th, 2017 with a rule effective date of May 20th, 2017. State DOTs were required to set targets by May 20, 2018, and MPOs had until November 16, 2018 (180 days after) to report their targets to the State DOT.

State DOTs are required to set 2-year and 4-year targets however, MPOs are only required to set 4-year targets. For the target setting process, to the maximum extent practicable, the MPO and State DOTs must coordinate in the selection of performance targets.

### Pavement Condition

The DRCOG Board elected to support CDOT's pavement condition targets, which are shown in **Table 5** below:

Performance Measures	Baseline (2017)	2-Year Targets (2019)	Mid-Period Performance Progress	4-Year Targets (2021)	Full Period Performance Progress
Percent of Pavement in Good Condition (Interstate)	44.88%	NA	NA	47%	TBD
Percent of Pavement in Poor Condition (Interstate)	0.25%	NA	NA	1%	TBD
Percent of Pavement in Good Condition (Non-Interstate NHS)	49.34%	NA	NA	51%	TBD
Percent of Pavement in Poor Condition (Non-Interstate NHS)	0.96%	NA	NA	2%	TBD

### Bridge Condition

The DRCOG Board elected to support CDOT's bridge condition targets, which are shown in **Table 6** below:

Performance Measures	Baseline (2017)	2-Year Targets (2019)	Mid-Period Performance Progress	4-Year Targets (2021)	Full Period Performance Progress
Percent of Bridges in Good Condition	48.8%	NA	NA	44%	TBD
Percent of Bridges in Poor Condition	4.19%	NA	NA	4%	TBD

Each of CDOT's programs fall into one of seven major investment categories, including a Maintenance and Operations category, from which the program of projects is developed, in



consultation with the Department’s local partners, the public, and through the development of the Department’s 10-year strategic pipeline of projects. These investments contribute toward achievement of objectives for asset management, translating into improving performance for pavement and bridge objectives within the FAST Act.

Additionally, in DRCOG’s most recently adopted 2020-23 TIP, 31 projects totaling \$805 Million were identified as helping to achieve the state’s pavement condition targets and 14 projects totaling \$428 million were identified as helping to achieve the state’s bridge condition targets.

Columns for recording the progress in achieving the targets are provided in **Tables 5-6** on the previous page, the next update will fill these in to show progress accordingly.

### PM3: System Performance Targets

FHWA published the System Performance/Freight/CMAQ Performance Measures Final Rule on January 18, 2017, with an effective date of May 20, 2017. It assesses the performance of the Interstate and non-Interstate National Highway System (NHS) for the purpose of carrying out the National Highway Performance Program (NHPP); assesses freight movement on the Interstate System; and assesses traffic congestion and on-road mobile source emissions for the purpose of carrying out the Congestion Mitigation & Air Quality (CMAQ) Improvement Program.

State DOTs were required to set targets by May 20, 2018, and MPOs had until November 16, 2018 (except for Traffic Congestion) to report their targets. For the target setting process, to the maximum extent practicable, the MPO and State DOT must coordinate in the selection of performance targets.

#### Travel Time Reliability

State DOTs and MPOs are charged with reporting the measurement of travel time reliability on the Interstate and/or non-Interstate NHS. State DOTs are required to set 2-year and 4-year targets, while MPOs only have to set 4-year targets.

The DRCOG Board elected to support CDOT’s performance targets related to travel time reliability, which are shown in **Table 7** below:

Performance Measures	Baseline (2017)	2-Year Targets (2019)	Mid-Period Performance Progress	4-Year Targets (2021)	Full Period Performance Progress
Percent of the Person Miles Traveled on the Interstate that are Reliable	81.7%	NA	NA	81%	TBD
Percent of the Person Miles Traveled on the Non-Interstate NHS that are Reliable	63.5%	NA	NA	64%	TBD

Each of CDOT’s programs fall into one of seven major investment categories from which the program of projects is developed, in consultation with the Department’s local partners, the public, and through the development of the Department’s 10-year strategic pipeline of projects. These investments contribute toward achievement of objectives for safety, asset management and mobility goal areas, with mobility goal objectives translating into improving performance for travel time reliability objectives within the FAST Act.

Additionally, in DRCOG’s most recently adopted 2020-23 TIP, 73 TIP projects totaling \$1.43 billion were identified as helping to achieve the travel time reliability targets.

### Freight Reliability

The FAST Act requires a separate measure for travel time reliability for freight on the interstate system, the Truck Travel Time Reliability (TTTR) Index. It is broken down into five periods: morning peak, midday, and afternoon peak Monday – Friday, weekends, and overnight for each day. The TTTR ratio is generated by dividing the 95th percentile time by the normal time (50th percentile) for each segment. The TTTR Index will be generated by multiplying each segment’s largest ratio of the five periods by its length, then dividing the sum of all length-weighted segments by the total length of Interstate.

State DOTs are required to set 2-year and 4-year targets for Freight Reliability, while MPOs only need to set 4-year targets. For the below performance measure, MPOs can agree to support the State DOT target, or establish their own target specific to the MPO planning area.

The DRCOG Board elected to support CDOT’s performance targets related to freight reliability, which are shown in **Table 8** below:

Performance Measures	Baseline (2017)	2-Year Targets (2019)	Mid-Period Performance Progress	4-Year Targets (2021)	Full Period Performance Progress
Truck Travel Time Reliability Index (TTTR)	1.45	NA	NA	1.5	TBD

In the most recently adopted 2020-23 TIP, 21 TIP projects totaling \$614 million were identified as helping to achieve the freight reliability targets. Additionally, DRCOG adopted the Multimodal Regional Freight Plan in June 2020. A key aspect of the plan is the identification of regional projects to position the DRCOG region for federal and state investment in freight infrastructure and maintain efficient freight mobility in the region.

### Traffic Congestion Reduction

This subpart is applicable to all urbanized areas that include NHS mileage and have a population over 1 million that are, in all or part, designated as nonattainment or maintenance areas for Ozone (O3), Carbon Monoxide (CO), or Particulate Matter (PM10 or PM2.5) per National Ambient Air Quality Standards (NAAQS).

As the Denver-Aurora, CO Urbanized Area, including the Planning Area of the Denver Regional Council of Governments (DRCOG), meets the threshold set, this subpart applied to the Denver-Aurora Urbanized Area.

Completed jointly with CDOT, the DRCOG Board and CDOT Transportation Commission established the following performance targets related to traffic congestion, which are shown in **Table 9** on the following page:

Performance Measures	Baseline (2017)	2-Year Targets (2019)	Mid-Period Performance Progress	4-Year Targets (2021)	Full Period Performance Progress
Percentage of Non-Single Occupancy Vehicle Travel	23.8%	24%	TBD	25%	TBD
Annual Hours of Peak-Hour Excessive Delay per Capita	47.65	52	TBD	54	TBD

In the most recently adopted 2020-23 TIP, 108 TIP projects totaling \$1.76 billion were identified as helping to achieve the traffic congestion targets. Additionally, within the 2020-23 TIP, a TDM Services set-aside supports marketing, outreach and research projects that reduce single-occupant vehicle (SOV) travel and ultimately reduce traffic congestion and improve regional air quality. The 2020-2023 TIP Policy established \$1.8 million in federal funds for TDM non-infrastructure projects over the four-year period.

In addition to the investments through the TIP, DRCOG has adopted or developed multiple multimodal plans to promote non-SOV travel in the region including the Active Transportation Plan in January 2019 and the Mobility Choice Blueprint in February 2019 to guide future investment and outline the region’s needs and vision.

### Total Emissions Reduction

This performance measure is only applicable to areas that include any part of a nonattainment or maintenance area for Ozone (O3), Carbon Monoxide (CO), or Particulate Matter (PM10 and PM2.5) per NAAQS. This measure is limited to these areas to further the CMAQ’s program purpose of funding programs and projects that seek to satisfy the NAAQS. If an MPO has a population of greater than 1 million, and is designated as a nonattainment and maintenance area, then both 2 and 4-year targets are required. If the population is less than 1 million, then only a 4-year target is required.

As the DRCOG MPO Planning Area has a population greater than 1 million and is designated as nonattainment/ maintenance for Ozone (O3), Carbon Monoxide (CO), and Particulate Matter (PM<sub>10</sub>), performance targets for each of those criteria pollutants had to be established. MPOs had the option of either supporting the State DOT target, or choosing their own.

The DRCOG Board elected to support CDOT’s total emissions reduction performance targets, which are shown in **Table 10** below:

Performance Measures	Baseline (FY 14-17)	2-Year Targets (FY 18-19)	Mid-Period Performance Progress	4-Year Targets (FY 18-21)	Full Period Performance Progress
Total Emissions Reductions (VOC) kg/day	88.616	86	TBD	105	TBD
Total Emissions Reductions (PM <sub>10</sub> ) kg/day	40.714	31	TBD	152	TBD
Total Emissions Reductions (CO) kg/day	1,682.796	1,152	TBD	1,426	TBD
Total Emissions Reductions (NOx) kg/day	391.338	86	TBD	105	TBD

In the most recently adopted 2020-23 TIP, 27 TIP projects totaling \$141.4 million were identified as helping to achieve the total emissions reduction targets. Additionally, within the TIP an Air Quality Improvements Set-Aside dedicates funds exclusively for the Regional Air Quality Council in programs such as vehicle fleet technology, ozone outreach and education, and ozone SIP modeling.

Columns for recording the progress in achieving the targets are provided in **Tables 7-10** on the previous pages, the next update will fill these in to show progress accordingly

## Transit Performance Targets

Similar to the Federal Highway Administration, the Federal Transit Administration has established a set of rule-makings implementing performance management to improve project and program delivery, inform investment decisions, focus staff on leadership priorities, and provide greater transparency and accountability.

The rulemakings establish new requirements for MPOs to coordinate with transit providers, set performance targets, compare current performance against targets, and integrate those performance targets and performance plans into their planning documents by certain dates. FTA administers a national transit safety program and compliance oversight process as well as a Transit Asset Management (TAM) program to achieve or maintain transit networks in a state of good repair.

## Transit Asset Management (TAM)

FTA published the Transit Asset Management (TAM) Final Rule on July 26, 2016 with an effective date of October 1, 2016. As similarly required through FHWA's TPM target setting process, to the maximum extent practicable transit providers must coordinate with the MPO in the selection of TAM performance targets.

As the Regional Transportation District (RTD) is the major public transportation provider in the DRCOG MPO region, has fixed-route rail guideways, and is a Tier One agency that has developed a Transit Asset Management Plan (TAMP), RTD has developed information and targets for the four required state of good repair measures:

- **Rolling Stock:** The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB).
- **Equipment:** The percentage of non-revenue service vehicles (by type) that exceed the ULB.
- **Infrastructure:** The percentage of track segments (by mode) that have performance restrictions, considered to have a rating less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.
- **Facilities:** The percentage of facilities (by group) that are rated less than 3.0 on the TERM Scale.

The current TAMP Version 1.B is dated October 2019. The Tier II agencies in the DRCOG MPO region participated in the CDOT-sponsored Statewide Group TAM Plan. In consultation with FTA and CDOT, the DRCOG Board elected to support RTD's transit asset management performance targets. These targets, which are incorporated by reference into the 2040 MVRTP, are shown in **Tables 11-14** on the following page, followed by recent performance data, as assembled by RTD:



Vehicle Class	Baseline # (2019)	Baseline % (2019)	Target # (2020)	Target % (2020)	Achieved
Articulated Bus - AB	116	0.0%	116	0.0%	TBD
Over-the-Road Bus - BR	160	0.0%	160	0.0%	TBD
Bus - BU	768	10.4%	768	16.2%	TBD
Cutaway - CU	409	1.2%	397	0.0%	TBD
Light Rail Vehicle - LR	187	0.0%	201	0.0%	TBD
Commuter Rail Self-Propelled - RS	66	0.0%	66	0.0%	TBD

Vehicle Class	Baseline # (2019)	Baseline % (2019)	Target # (2020)	Target % (2020)	Achieved
Automobile	50	34%	50	44%	TBD
Truck & Other Rubber Tire	340	13.8	340	14.7%	TBD
Steel Wheel Vehicles	4	0.0%	4	0.0%	TBD

Mode of Guide Way	Baseline Total Track (2019)	Baseline % (2019)	Target Total Track Mile (2020)	Target % (2020)	Achieved
Light Rail	111.3	3.2%	111.3	3.2%	TBD
Commuter Rail	71.9	1.5%	71.9	1.5%	TBD

Types of Facility	Baseline # (2019)	Baseline % (2019)	Target # (2020)	Target % (2020)	Achieved
Stations & Parking	121	9.9%	121	9.9%	TBD
Maintenance & Administration	15	6.7%	15	0.0%	TBD

As a relatively young agency, RTD has not experienced the decaying infrastructure or immediate funding shortages that many older and larger transit systems have. RTD's asset management maturity improvement initiative is not driven by a growing set of decaying assets, but by the expansion of the asset base in recent years. The funding for the most recent expansion projects did not make provision for the long-term maintenance and capital renewal of the new assets. Without a solid, long-term renewal plan in place, with funding earmarked, the risk of a growing backlog of renewal projects without adequate funding is too great. A growing backlog increases risk to safety, service, and future sustainability.

RTD aims to comply fully with MAP-21 and FAST Act requirements for transit asset management and beyond. It has developed an overall Strategic Asset Management Plan to summarize its strategy to improve asset management over the next period.

Additionally, in support of RTD's TAM targets, DRCOG's most recently adopted 2020-23 TIP includes 21 projects totaling \$730 million that have been identified as helping to achieve the targets.

## Public Transportation Agency Safety Plan (PTASP)

FTA published the Public Transportation Agency Safety Plan (PTASP) Final Rule on July 19, 2018. PTASP requires certain operators of public transportation systems that receive federal 5307 funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS).

As RTD is a recipient of federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307) that operates public transportation, RTD is required to set the following safety performance targets:

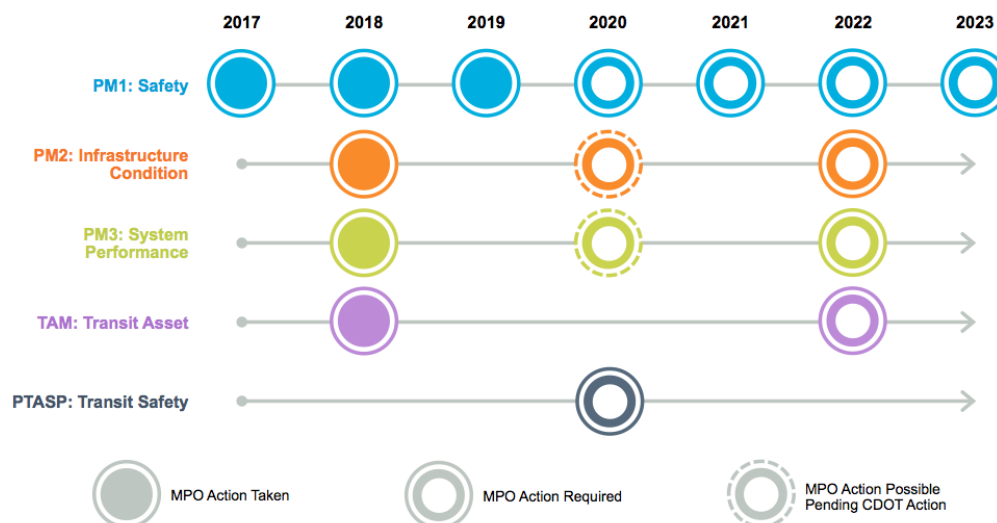
- Total number of reportable fatalities and rate per vehicle revenue miles by mode.
- Total number of reportable injuries and rate per vehicle miles by mode.
- Total number of reportable events and rate per vehicle revenue miles by mode.
- Mean distance between major mechanical failures by mode.

The RTD Board approved the PTASP for the agency on December 17, 2019. Following consultation with FHWA and FTA, DRCOG is currently coordinating with RTD to incorporate PTASP targets into the planning process.

## Next Steps

### Target-Setting Timeline

Further action is required by DRCOG as performance targets must continue to be evaluated, updated, and incorporated into the RTP and TIP. The timeline below provides an overview of anticipated MPO actions to meet federal deadline requirements on target-setting. In instances where DRCOG has elected to support CDOT's targets, a revision by CDOT at the two-year midpoint will necessitate a DRCOG action to either reaffirm its support of the state's targets or adopt its own targets.



## Reporting Timeline

Further action is also required by DRCOG as the biennial CMAQ Performance Plan documenting the progress in achieving the performance targets is due to CDOT for inclusion in their Mid-Period and Full Period Performance Reports.

Report	Period Covered	CMAQ Performance Plan Due Date	Status
<b>Baseline</b>	Varies	October 1, 2018	Complete
<b>Mid-Period</b>	2018-2019	October 1, 2020	Complete
<b>Full Period</b>	2018-2021	October 1, 2022	Upcoming

The system performance report will also continue to be required; all subsequent adoptions of the MVRTP will continue to include a system performance report.

## Conclusion

DRCOG will continue to coordinate with CDOT, RTD, and other relevant stakeholders to integrate their performance measure goals, objectives, and plans into its planning process by linking investment priorities to the applicable performance measure targets to the maximum extent practicable. Furthermore, DRCOG will continue to direct investments in the MVRTP and TIP toward projects that have the potential to support the targets and measures described above.