

## System Performance Report

Federal law requires states and Metropolitan Planning Organizations (MPOs) to establish and approve performance measures and targets related to transportation safety, highway operations, and transit systems. This report provides information on the performance measures and targets, including how our Metropolitan Transportation Plan (MTP), [Moving Dutchess Forward](#), and capital program, the 2026-2030 Transportation Improvement Program (TIP), contribute to meeting established targets.

### Background

Chapter 23 part 150(b) of the United States Code [23USC §150(b)] includes seven national performance goals for the Federal-Aid Highway Program:

- **Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Capital Assets Condition** – To maintain the highway infrastructure and transit capital asset systems in a state of good repair.
- **Congestion Reduction** – To achieve a significant reduction in congestion on the National Highway System.
- **System Reliability** – To improve the efficiency of the surface transportation system.
- **Freight Movement & 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.
- **Environmental Sustainability** – To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **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.

For public transportation, the law states that performance management shall be used to advance the general policy and purposes of the public transportation program covered in 49 USC §5301(a) and (b).

The [Dutchess County Transportation Council \(DCTC\)](#) will adopt [Moving Dutchess Forward](#), its new Metropolitan Transportation Plan (Plan), on August 6, 2026; the current FFY 2026-2030 TIP was adopted on June 25, 2025. Plans and TIPs must include performance targets for the following measures:

- Highway Safety Improvement Program (HSIP) and Highway Safety (PM1)
- Transit Asset Management
- Pavement and Bridge Condition (PM2)
- System Performance/Freight/Congestion Mitigation & Air Quality Improvement (CMAQ) Program (PM3)

- Transit Safety

MPOs must include a system performance report in their Plan and TIP that describes the condition and performance of the transportation system with respect to required performance measures and targets, and reports on progress achieved in meeting the targets in comparison with baseline data and previous system performance reports.

We developed [Moving Dutchess Forward](#) and TIP in cooperation with our member agencies, including the New York State Department of Transportation (NYSDOT), Metropolitan Transportation Authority (MTA), Dutchess County Public Works, and Dutchess County Public Transit. It reflects the investment priorities established by the MPO to improve transportation safety, reliability, and access to basic needs in Dutchess County, and incorporates feedback from stakeholder agencies and the public. The Plan and TIP seek to maintain existing infrastructure, while maintaining fiscal constraint.

We believe this [System Performance Report for Moving Dutchess Forward](#), done for the new Plan, meets the requirements of 23USC §134(i)(2)(B)(C)(D). Each of the measures and targets is described below, along with a discussion of how the new Plan and current TIP addresses them.

## Highway Safety and HSIP (PM1)

### Performance Targets

On March 15, 2016, the Federal Highway Administration (FHWA) published the final rule for the HSIP and Safety Performance Management (PM1) Measures effective April 14, 2016. The rule finalized five roadway safety measures:

- Number of Fatalities
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)
- Number of Serious Injuries
- Rate of Serious Injuries per 100 million VMT
- Number of Nonmotorized Fatalities and Serious Injuries

Each target is expressed as an annual five-year rolling average, which is the average of five individual, consecutive annual points of data. The five-year rolling average provides a smoothing effect for variations in data that may occur from year to year, and helps to better evaluate progress over time in a more consistent fashion than one based on single year peaks and valleys.

The 2023 [New York Strategic Highway Safety Plan \(SHSP\)](#) seeks to reduce the number of fatalities and serious injuries resulting from motor vehicle crashes on public roads in New York State. The SHSP guides NYSDOT, MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out across New York State. The NYSDOT HSIP annual report also documents statewide performance targets.

We agreed to support the NYSDOT statewide 2026 targets for the following Safety (PM1) measures, based on five-year rolling averages per Title 23 Part 490.207 of the *Code of Federal Regulations*, on February 27, 2026 via Resolution DCTC Resolution #26-02:

Performance Measure	2026 Target
Number of Fatalities	1,005.9
Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)	0.877
Number of Serious Injuries	10,978.4
Rate of Serious Injuries per 100 million VMT	9.509
Number of Non-Motorized Fatalities and Serious Injuries	2,602.0

In addition to these statewide targets, we adopted Dutchess-specific targets as part of our [Transportation Safety Action Plan \(SAP\)](#). The 2026 SAP includes three targets: eliminate traffic fatalities by 2050, reduce serious injuries by 50% by 2050, and reduce fatalities and serious injuries among non-motorized road users by 50% by 2050. We approved these targets on March 25, 2026 via DCTC Resolution #26-05.

### Anticipated Effects

Safety is a critical component of our mission, and improving safety is a recurring theme in [Moving Dutchess Forward](#), embodied in our stated goal to “Provide safe and convenient access for all people to housing, jobs, goods, services, and recreational amenities, regardless of age, ability, race, income, location, or mode of transportation.” Additionally, safety is a primary consideration in the selection of projects included in the TIP.

To help achieve our safety goals, the Plan recommends over \$49 million in priority safety improvements. This includes safety improvements at [high crash and high-risk locations](#), such as pavement treatments and markings, sign upgrades, guiderail upgrades, speed feedback devices, and traffic calming treatments. It also includes implementing recommendations from our [Safety Action Plan](#) and past and future [safety assessments and corridor plans](#). The Plan also recommends investments that may not be categorized as ‘safety’ but will still have a safety benefit, such as making \$95 million in walking improvements to repair sidewalks in poor condition.

Additionally, our TIP includes specific road projects with a safety component – such as the Main St/Grand Ave intersection in the Town of Poughkeepsie and Beekman St pedestrian and bicycle improvements in the City of Beacon – both include sidewalk and ADA improvements. These two projects total over \$6 million in federal highway investment. In addition, NYSDOT has programmed systemwide HSIP-funded projects that will benefit our area, and the DCTC will program another \$2.5 million in HSIP funding in late 2026.

On March 1, 2022, we adopted a new [Project Selection Framework](#) to help ensure that available federal transportation funds are used to carry the plan’s goals. The framework directly addresses the trends, barriers, best practices, and investments outlined in [Moving Dutchess Forward](#), with a focus

on improving transportation safety, reliability, access to basic needs, and equity. For transportation safety, the framework asks if a proposed project will reduce Barriers to Safe Access, with a focus on how it achieves the following:

- Improves safety at one or more high-crash intersections, segments, or corridors on state, county, or local roads. This includes high crash locations for vehicles, and for people walking or biking (see [Barriers to Safe Access Map](#)).
- Implements safety-related recommendations from a DCTC Safety Assessment or other DCTC planning study, such as the SAP.
- Promotes a systemwide approach to address a transportation safety issue such as roadway departures or speeding.

Combined, we believe that the anticipated effect of the Plan, TIP, and project selection framework is that they will contribute toward achieving NYSDOT's safety performance targets.

## Transit Asset Management

### Performance Targets

On July 26, 2016, the Federal Transit Administration (FTA) published the final Transit Asset Management rule. This rule applies to all recipients and subrecipients of federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term State of Good Repair (SGR), requires that public transportation providers develop and implement Transit Asset Management (TAM) plans, and establishes performance measures for four transit asset categories: rolling stock, equipment, transit infrastructure, and facilities. The rule went into effect on October 1, 2016.

Public transportation providers must establish TAM targets annually for the following fiscal year and report them to FTA. Each provider shares its targets with the MPO(s) in whose TIP the provider's projects and services are programmed. The MPO is required to establish its first set of TAM targets within 180 days of the date that public transportation provider established its first targets. After this, MPOs are not required to establish TAM targets each year after the transit provider establishes targets. Instead, MPOs must set updated TAM targets when the MPO updates its Plan. When establishing transit asset management targets, the MPO can either agree to program projects that will support the transit provider's targets or establish its own separate transit asset management targets for the MPO planning area.

For the TAM rule, FTA defines two tiers of public transportation providers based on size. Tier I providers are those that operate rail service or more than 100 vehicles in all fixed route modes, or more than 100 vehicles in one non-fixed route mode. Tier II providers are those that are a subrecipient of FTA 5311 funds, or an American Indian Tribe, or have 100 or fewer vehicles across all fixed route modes or have 100 vehicles or fewer in one non-fixed route mode. Tier I providers must establish their own transit asset management targets, while Tier II providers have the option to establish their own targets or to participate in a group plan with other Tier II providers whereby

targets are established by a plan sponsor for the entire group. A state DOT is typically the group TAM plan sponsor.

Two transit providers operate in our county: the MTA (Tier I) and County Public Transit (Tier II). The MTA has established the targets listed below, while County Public Transit is participating in the New York State Group TAM Plan.

Asset Category - Performance Measure	Asset Class	Useful Life Benchmark (Years)	Target
<b>Rolling Stock</b>			
	Bus	12	36.25
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Commuter Rail Locomotive	35	67.35%
	Commuter Rail Passenger Coach	35	27.23%
	Commuter Rail Self-Propelled Passenger Car	35	21.9%
	Automobiles	8	100%
	Steel Wheel Vehicles	35	61.87%
	Trucks and other Rubber Tire Vehicles	14-18	29.13%
Infrastructure - % of track segments with performance restrictions	Commuter Rail	n/a	2.96%
Condition - % of facilities with a condition rating below 3.0 on the FTA TERM Scale	Administration/Maintenance Facilities	n/a	38.1%
	Passenger/Parking Facilities	n/a	28.57%

### Anticipated Effects

Our Plan, developed in cooperation with County Public Transit and the MTA, prioritizes investments to operate and maintain bus and rail transit service in the county. Specifically, we recommend over \$129 million to meet the capital needs of the County bus system, with a focus on replacing buses at the end of their useful life (as prescribed by the FTA). Smaller capital investments include updated transit software, hardware, and bus stop shelters. Besides these capital needs, we also recommend over \$500 million to support bus operations. For commuter rail, we recommend over \$373 million to meet the MTA’s operating and capital needs to maintain commuter rail service in the county. Combined, the Plan recommends about \$1 billion in priority investments to operate and maintain existing transit services in the county. This represents nearly half of all the recommended investment

in the Plan: a clear demonstration of our commitment to supporting public transit through 2050.

Our TIP also includes specific projects that support the transit maintenance goals in the Plan. For County Public Transit, TIP investments that support a state of good repair include the following:

- Replacing 16 heavy duty buses (almost \$7 million in federal funding)
- Preventive maintenance work (almost \$6 million in federal funding)
- Purchasing new farebox equipment (over \$500,000 in federal funding)

As with our safety goals, our [Project Selection Framework](#) will help ensure that future projects will support our transit goals in [Moving Dutchess Forward](#). For example, the framework asks if a proposed project will reduce Barriers to Reliable Bus Access or Train Access. It also asks how a project will support priorities such as replacing buses.

We therefore anticipate that the investment priorities in the Plan and TIP, coupled with our Project Selection Framework, will greatly contribute toward achieving established transit asset management targets and maintaining a state of good repair.

## Pavement and Bridge Condition (PM2)

### Performance Targets

On January 18, 2017, FHWA published the Pavement and Bridge Condition Performance Measures Final Rule in the *Federal Register*. This second FHWA performance measure rule, effective May 20, 2017, established six performance measures (PM2) to assess pavement conditions and bridge conditions for the National Highway Performance Program (NHPP).

The pavement condition measures represent the percentage of lane-miles on the Interstate and non-Interstate National Highway System (NHS) that are in good or poor condition. FHWA established five pavement condition metrics:<sup>1</sup> International Roughness Index (IRI); cracking percent; rutting; faulting; and Present Serviceability Rating (PSR). FHWA set a threshold for each metric to establish good, fair, or poor condition. Each section of pavement is classified as being in good condition or poor condition, based upon the ratings of the metrics applicable to that pavement type. Pavement sections not rated as good or poor are classified as fair.

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<sup>1</sup> Per FHWA, "To ensure consistent definitions, a distinction between 'performance measure' and 'performance Metric' was made in 23 CFR 490.101. A 'metric' is defined as a quantifiable indicator of performance or condition whereas a 'measure' is defined as an expression based on a metric that is used to establish targets and to assess progress toward meeting the established targets." (*FHWA Computation Procedure for the Pavement Condition Measures – FHWA-HIF-18-022*, FHWA Office of Infrastructure and Office of Policy & Governmental Affairs, April 2018)

The bridge condition measures represent the percentage of bridges, by deck area, on the NHS that are in good condition or poor condition.<sup>2</sup> The condition of each bridge is evaluated by assessing four bridge components: deck, superstructure, substructure, and culverts. The Final Rule created a metric rating threshold for each component to establish good, fair, or poor condition. If the lowest rating of the four metrics is greater than or equal to seven, the structure is classified as good. If the lowest rating is less than or equal to four, the structure is classified as poor. If the lowest rating is five or six, it is classified as fair.

NYSDOT established statewide pavement and bridge condition performance targets for 2023 and 2025 on December 1, 2022; in September 2024, NYSDOT adjusted its 2025 pavement targets. We subsequently agreed to support NYSDOT’s performance targets on March 6, 2025 via DCTC Resolution #25-03. By adopting NYSDOT’s targets, we agreed to plan and program projects that help NYSDOT achieve these targets. The table below lists the performance targets for the Baseline Year (2021), Year 2 (2023), and Year 4 (2025).

Pavement & Bridge Condition Performance Measures	Baseline (2021)	Year 2 (2023)	Year 4 (2025)
Percent of Interstate pavements in good condition	45.3%	53.2%	48.2%
Percent of Interstate pavements in poor condition	1.1%	1.4%	1.6%
Percent of non-Interstate NHS pavements in good condition	18.9%	22.3%	18.6%
Percent of non-Interstate NHS pavements in poor condition	7.6%	9.3%	8.4%
Percent of NHS bridges (by deck area) in good condition	25.3%	24.1%	21.1%
Percent of NHS bridges (by deck area) in poor condition	11.3%	12.5%	12.8%

### Anticipated Effects

Our focus on maintaining pavement and bridge conditions across the transportation system, including NHS roads, serves as a key component of our mission, and is fundamental to the recommendations set forth in [Moving Dutchess Forward](#). The Plan includes the stated goal to “Invest in our regional transportation system to maintain existing infrastructure and improve safety, reliability, and access to basic needs, while maintaining fiscal constraint.”

Accordingly, our Plan recommends over \$836 million in road maintenance and operations on federal-aid eligible roads, and another \$459 million to maintain federal-aid eligible bridges: these

<sup>2</sup> The sum of total deck area of good or poor NHS bridges is divided by the total deck area of all bridges carrying the NHS to determine the percent of bridges in good or in poor condition. Deck area is calculated by multiplying the structure length by either the deck width or approach roadway width.

investments support the repaving of 315 lanes miles of NHS roads currently rated in poor or fair condition, and replacing 51 bridges rated in poor condition (to include 12 NHS bridges). Our TIP also includes many projects that support the road and bridge maintenance goals in the Plan, and specifically the NHS system:

- Resurfacing Route 9 from Route 113 (Spackenkill Rd) in Poughkeepsie to West Dorsey Ln in Hyde Park (\$12.4 million federal)
- Resurfacing Route 376 from Boardman Rd in Poughkeepsie to Route 82 in East Fishkill (\$9.7 million federal)
- Resurfacing the Taconic State Parkway from Cold Spring Rd to the Dutchess/Columbia Line in Milan (\$12.2 million federal)
- Removing the Route 82 Bridge in Hopewell Junction (East Fishkill) (\$7.4 million federal)
- Replacing the Route 113 (Spackenkill Rd) Bridge in Poughkeepsie (\$15.7 million federal)

Additionally, our [Project Selection Framework](#) specifically asks how a proposed project “Maintains existing infrastructure, including roads, bridges, transit systems, sidewalks, and trails.”

We therefore anticipate that the investment priorities in the Plan and TIP, coupled with our Project Selection Framework, will contribute toward achieving NYSDOT’s pavement and bridge condition targets.

## System Performance, Freight, and Congestion Mitigation and Air Quality (PM3)

### Performance Targets

On January 18, 2017, FHWA published the system performance, freight, and CMAQ Performance Measures Final Rule in the *Federal Register*. This third and final FHWA performance measure rule, effective May 20, 2017, established six performance measures (PM3) to assess the performance of the NHS, freight movement on the Interstate System, and traffic congestion and on-road mobile source emissions for the CMAQ Program.

There are two NHS performance measures that represent the reliability of travel times for all vehicles on the Interstate and non-Interstate NHS. FHWA established the Percent of Person Miles Traveled (PMT) metric as one way to calculate reliability on both the Interstate and non-Interstate NHS. PMT is a standard measure of mobility that combines both the number and length of trips. It is defined as the ratio of longer travel times (80<sup>th</sup> percentile) to a normal travel time (50<sup>th</sup> percentile) during four time periods between the hours of 6 am to 8 pm each day (AM peak, midday, and PM peak on Mondays through Fridays and weekends). The PMT ratio is calculated for each segment of applicable roadway. A segment is reliable if its PMT is less than 1.5 during all time periods. If one or more time periods have a PMT of 1.5 or above, that segment is unreliable. The measures are expressed as the percentage of person-miles traveled on the Interstate and non-Interstate NHS that are reliable.

The single freight movement performance measure represents the reliability of travel times for trucks on the Interstate system. FHWA established the Truck Travel Time Reliability (TTTR) Index, which is

defined as the ratio of longer truck travel times (95<sup>th</sup> percentile) to a normal truck travel time (50<sup>th</sup> percentile). The TTTR Index is calculated for each segment of the Interstate system over five time periods from all hours of each day (AM peak, midday, and PM peak on Mondays through Fridays, overnights for all days, and weekends). The highest TTTR Index value among the five time periods is multiplied by the length of the segment, and the sum of all length-weighted segments is then divided by the total length of Interstate to generate the TTTR Index.

There are three traffic congestion and on-road mobile source emissions performance measures that represent peak hour excessive delay per capita (PHED), non-single occupancy vehicle (SOV) travel, and total on-road mobile source emissions reductions. We meet all current air quality standards and are not subject to establishing targets for these performance measures.

NYS DOT established the statewide system performance and freight performance targets in the table below on October 1, 2024. We subsequently agreed to support the NYS DOT statewide targets on March 6, 2025 via DCTC Resolution #25-03. The table below lists the performance targets for the Baseline Year (2021), Year 2 (2023), and Year 4 (2025).

System Performance Measures	Baseline (2021)	Year 2 (2023)	Year 4 (2025)
Percent of person-miles traveled on the interstate that are reliable (Interstate PMT)	81.6%	75.0%	75.0%
Percent of person-miles traveled on the non-Interstate NHS that are reliable (Non-Interstate NHS PMT)	85.7%	70.0%	70.0%
Truck travel time reliability index (TTTR)	1.39	2.00	2.00

### Anticipated Effects

Our focus on improving the reliable movement of people and goods serves as a key component of our mission and is fundamental to the recommendations set forth in [Moving Dutchess Forward](#). The Plan includes the stated goal to “Provide safe and convenient access for all people to housing, jobs, goods, services, and recreational amenities, regardless of age, ability, race, income, or mode of transportation.” Accordingly, our Plan recommends \$109 million in congestion management and operational projects. This includes projects that address congested areas and improve traffic operations, such as turn pockets, signal timing changes, roundabouts, and access management. It also includes technology solutions to move vehicles more efficiently.

Our TIP also includes two federally funded projects that improve travel time reliability on the NHS: 1) Redesigning the Route 52/82 intersection in Fishkill (\$6 million federal), and 2) Redesigning the Route 82/Beekman Rd intersection in East Fishkill (\$5 million federal).

Additionally, our [Project Selection Framework](#) asks how a proposed project will reduce traffic congestion, with a focus on how it improves travel time reliability or reduces delay at [high-congestion locations](#), including those identified in our [Congestion Management Process \(CMP\)](#). Our framework also asks if a proposal provides a reliable alternative to driving (such as transit, walking or bicycling), on or parallel to the congested roadway.

We therefore anticipate that the investment priorities in the Plan and TIP, coupled with our Project Selection Framework, will contribute toward achieving NYSDOT's system performance and freight performance targets.

## Transit Safety

### Performance Targets

The FTA published a final Public Transportation Agency Safety Plan (PTASP) rule on July 19, 2018. Under this rulemaking, providers of public transportation systems that are a recipient or sub-recipient of FTA Urbanized Area Formula Grant Program funds under 49 U.S.C. Section 5307, or that operate a rail transit system that is subject to FTA's State Safety Oversight Program, must develop and implement a PTASP or Safety Plan based on a Safety Management Systems approach. Each Safety Plan must include performance targets based on the safety performance measures established in FTA's National Public Transportation Safety Plan. Providers subject to the rule must annually certify a Safety Plan, including targets for transit safety measures that cover fatalities, injuries, safety events, and system reliability.

Upon establishing transit safety targets, a public transportation provider must make the targets available to the responsible MPO. The MPO is required to establish its first set of transit safety targets within 180 days of the date that the provider established its first targets. After this, MPOs are not required to establish transit safety targets each year after the transit provider establishes targets. Instead, MPOs must set updated targets when they update a new Plan.

An MPO must reflect the transit safety targets in any Plan or TIP updated after July 20, 2021. When establishing transit safety targets, the MPO can either agree to program projects that will support the transit provider's targets or establish its own separate targets for the MPO planning area.

The MTA and County Public Transit are the only transit providers in Dutchess County that are subject to the Safety Plan rule. They are responsible for developing a Safety Plan and establishing transit safety targets annually. However, a Safety Plan is not required for Commuter Railroads such as Metro-North Railroad since they fall under the Federal Railroad Administration's (FRA) jurisdiction for safety. Accordingly, we do not typically endorse Metro-North's Safety Plan, but do endorse County Public Transit's Plan and its targets, as shown below.

Transit Mode	Fatalities (total)	Fatalities (rate)	Injuries (total)	Injuries (rate)	Safety Events (total)	Safety Events (rate)
Fixed Route Bus	1	0.001	4	0.00004	0	0.00
Demand Response	0	0	0	0.00	0	0.00

We endorsed County Public Transit’s original transit safety measures and targets on July 27, 2021 via DCTC Resolution #21-08, agreeing to plan and program projects that are anticipated to make progress toward achieving the targets. We subsequently endorsed revised targets on June 25, 2025 via DCTC Resolution #25-10.

### Anticipated Effects

Our Plan was developed in cooperation with County Public Transit and the MTA, and recommends investments to support transit safety, both through operational assistance and capital purchases (e.g., new buses and bus shelters). Overall, the Plan recommends over \$1 billion in transit investments to support bus and rail service in the county. And beyond supporting bus operations and maintenance, our TIP includes funding to support transit amenities such as bike racks, benches, and shelters, which will improve passenger comfort.

Additionally, our [Project Selection Framework](#) ensures that available federal transportation funds are used to carry out the goals of [Moving Dutchess Forward](#). For transit safety, the framework asks if a proposed project will reduce Barriers to Reliable Bus Access or Train Access. It also asks how a project will support recommended investment priorities to maintain and operate bus services in the county, such as bus repairs and replacements.

We anticipate that the investment priorities in the Plan and TIP, coupled with our Project Selection Framework, will contribute toward achieving established transit safety targets. We will continue to coordinate with our transit providers to improve the safety of staff and passengers in our planning area and maintain transit assets in a state of good repair.

### Final Thoughts

[Moving Dutchess Forward](#) outlines the investments needed to maintain transportation infrastructure and services through 2050, with a focus on safety, reliability, and access to basic needs. Due to fiscal constraint, our Plan emphasizes state of good repair work that will directly support achieving statewide, countywide, and agency specific targets for safety, facility conditions, and operations.