Indianapolis Metropolitan Planning Organization Metropolitan Transportation Plan System Performance Report 2023Q3

2023-Q3 | August 16, 2023

Prepared by:

Indianapolis Metropolitan Planning Organization 200 East Washington Street, Suite 2322 Indianapolis, Indiana 46204 317-327-5136 | www.IndyMPO.org



Contents

1. Purpose	3
2. Background	
3. Highway Safety Measures (PM1)	
4. Pavement and Bridge Condition Measures (PM2)	
5. System Performance, Freight, and Congestion Mitigation & Air Quality Improvement Program	0
Measures (PM3)	7
6. Transit Asset Management Measures	
7. Transit Safety Performance	

1. Purpose

Updates or amendments to Metropolitan Transportation Plans (MTPs) for metropolitan planning organizations (MPOs) must incorporate a System Performance Report that addresses federal transportation performance management measures and related information.

Transportation performance management requirements can be found in the Code of Federal Regulations (CFR), Title 23 Parts 450 and 490, and Title 49 Parts 625 and 673.

2. Background

Pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21) Act enacted in 2012 and the Fixing America's Surface Transportation Act (FAST Act) enacted in 2015, state departments of transportation (DOT) and MPOs must apply a transportation performance management approach in carrying out their federally required transportation planning and programming activities. The process requires the establishment and use of a coordinated, performance-based approach to transportation decision-making to support national goals for the federal-aid highway and public transportation programs.

On May 27, 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule (The Planning Rule)1. This rule details how state DOTs and MPOs must implement new MAP-21 and FAST Act transportation planning requirements, including the transportation performance management provisions.

In accordance with the Planning Rule, the IMPO must include a description of the performance measures and targets that apply to the MPO planning area and a System Performance Report as an element of its MTP. The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets, and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports.

The IMPO 2050 MTP was adopted on December 15, 2021. Per the Planning Rule, the System Performance Report for the IMPO is included for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), Transit Asset Management, and Transit Safety targets.

In February 2022 an agreement was executed between the Indiana Department of Transportation (INDOT), the Indianapolis MPO (IMPO), and the Indianapolis Public Transportation Corporation (IndyGo) to establish planning roles and responsibilities for communication and coordination between the agencies.

¹ The Final Rule modified the Code of Federal Regulations at 23 CFR Part 450 and 49 CFR Part 613.

3. Highway Safety Measures (PM1)

Effective April 14, 2016, the FHWA established five highway safety performance measures² to carry out the Highway Safety Improvement Program (HSIP). These performance measures are:

- 1. Number of fatalities;
- 2. Rate of fatalities per 100 million vehicle miles traveled (VMT);
- 3. Number of serious injuries;
- 4. Rate of serious injuries per 100 million VMT; and
- 5. Number of non-motorized fatalities and non-motorized serious injuries.

The IMPO approved safety performance targets on January 4, 2023. The IMPO is expressly supporting the statewide targets developed by INDOT.

INDOT's 2023 safety targets based on five-year rolling averages are:

Measure	Target (2023)
Number of fatalities	894.2
Rate of fatalities (per 100 million VMT)	1.088
Number of serious injuries	3,348.1
Rate of serious injuries (per 100 million VMT)	4.068
Number of non-motorized fatalities and serious injuries	399.6

In support of the statewide safety targets, the IMPO has created tools and programs to support safer transportation facilities. These resources and plans are available for viewing at www.indympo.org.

The IMPO has, for several years, supported a regional Crash Dashboard. Data in this dashboard comes from the Indiana Automated Reporting Information Exchange System (ARIES) database. ARIES contains traffic reports from police enforcement statewide. Since 2017 the IMPO has cleaned up the locations of fatal and incapacitating injury crashes to support more accurate analysis.

- As of this report, incapacitating injury and fatal crash records from 2012-2022 have been cleaned. The ARIES data from 2023 and future years will be cleaned up and added as available.
- The crash dashboard has become a key reference in the region for news agencies and safety advocacy groups. The dashboard currently displays crash data from 2015 – 2022.

The 2023 Safe Streets and Roads for All Safety Action Plan approved in May 2023 consists of several components: goal setting, safety analysis, public engagement, equity analysis, policy and process proposals, and progress reporting. This Safety Action Plan represents the beginning of a more concentrated effort to improve safety in the Central Indiana MPA, and provides a foundation for the IMPO to pursue supplemental planning work on this topic. The plan will be updated annually throughout the life of the 5-year federal program to better understand the issues facing our region.

² 23 CFR Part 490, Subpart B

The IMPO developed a **High Injury Network** (HIN) to identify the local corridors with the highest frequencies of crashes resulting in incapacitating injuries and fatalities within the MPA. The HIN represents the top 10% (234 centerline miles) of regional collector and arterial streets scored by the number of incapacitating injury and fatal crashes per centerline mile. The HIN enables IMPO and LPAs to prioritize safety investments and other strategies on the streets with the highest number of severe crashes to make rapid progress towards regional safety goals.

The IMPO completed 24 Road Safety Audits (RSAs) at high crash intersection locations in 2019. In 2023 the IMPO will conduct RSAs at approximately 20 high crash intersection locations that were identified from our High Injury Network.

Crash data is a factor for prioritizing need for the Regional Pedestrian Plan and a focus for analysis and recommendations in the **Regional Bikeways Plan**.

The IMPO's Transportation Policy Committee adopted an updated Vision Zero statement on August 17, 2022 which set a goal of reducing fatal and serious crashes by 35% by 2040.

The IMPO ran a targeted outreach campaign against distracted driving during the summer of 2022. The call to action, EYES UP, JUST DRIVE, was directed at drivers on billboards, IndyGo bus tails, the radio, print in Indianapolis Recorder and La Voz, and on social media. From June 1 - August 31, Spotify ads reached 404k users and radio spots played on Radio Latina and Urban One.

The **2050 MTP** supports improved transportation safety:

- through goals and objectives, including:
 - Goal 6: To improve safety for travelers system-wide through project investment.
 - Objective 6A: Support projects and policies that reduce the number and rate of serious injuries and fatalities for all modes.
- by awarding points during project selection to capacity expansion projects that intend to include proven safety countermeasures in their project design, and
- by incorporating by reference the Indiana statewide safety trends and targets.

The IMPO's Transportation Improvement Program (TIP) supports improved transportation safety by providing funding for projects that improve safety across the region. The TIP funds a certain number of projects within the Highway Safety Improvement Program (HSIP) which can be used only for projects and plans that improve the safety of the network, including roundabouts, signage projects, and safety studies. The TIP Also funds projects through the Transportation Alternatives Program (TAP) program which funds projects like trails or streetscape improvements, which provide safe facilities for pedestrians and cyclists. Projects funded through the Surface Transportation Block Grant (STBG) program are required to follow a Complete Streets Policy help to support the needs of all road users.

Averaged over the 2024-2026 TIP Calls for Projects, approximately 15% of the IMPO's federal funding was HSIP funding, and the IMPO estimates that over the last five calls for projects 49% of all funding went to projects with specific or partial safety elements.

4. Pavement and Bridge Condition Measures (PM2)

In January 2017, USDOT published the Pavement and Bridge Condition Performance Measures Final Rule, which is also referred to as the PM2 rule. This rule establishes the following six performance measures:

- 1. Percent of Interstate pavements in good condition;
- 2. Percent of Interstate pavements in poor condition;
- 3. Percent of non-Interstate National Highway System (NHS) pavements in good condition;
- 4. Percent of non-Interstate NHS pavements in poor condition;
- 5. Percent of NHS bridges (by deck area) classified as in good condition; and
- 6. Percent of NHS bridges (by deck area) classified as in poor condition.

The IMPO approved pavement and bridge condition targets on January 4, 2023. The IMPO is expressly supporting the statewide target developed by INDOT.

INDOT's 2 and 4-year statewide pavement targets based on a certified Transportation Asset Management Plan are:

Measure	2 Yr Target (2024)	4 Yr Target (2026)
Percent of NHS bridges (by deck area) classified as in Good Condition	49.0%	47.5%
Percent of NHS bridges (by deck area) classified as in Poor Condition	3.0%	3.0%
Percent of Interstate pavements in Good Condition	60.0%	62.0%
Percent of Interstate pavements in Poor Condition	1.0%	1.0%
Percent of non-Interstate NHS pavements in Good Condition	50.0%	48.0%
Percent of non-Interstate NHS pavements in Poor Condition	1.5%	1.5%

These performance measures apply only to Interstates and the NHS. The IMPO supports regional pavement and bridge conditions in the following ways:

- The IMPO collects pavement and bridge ratings annually from each of our LPAs and tracks and analyzes trends over time. The IMPO completed an Asset Management Report in 2021 which provided an analysis of the pavement and bridge conditions in the region.
- The 2050 MTP supports pavement and bridge conditions:
 - through goals and objectives, including:
 - Goal 7: To preserve or enhance the existing transportation system.
 - Objective 7A: Preserve or enhance the condition of on- and off- system bridges.
 - Objective 7B: Preserve or enhance the quality and condition of transit resources.
 - Objective 7C: Preserve or enhance the pavement conditions of the roadway network
 - by incorporating by reference the Indiana statewide pavement and bridge condition trends and targets.

The TIP supports pavement and bridge conditions through an allocation goal of approximately 32% toward pavement preservation and 23% toward bridge preservation during each call for projects. Through its selection criteria, the TIP call for projects prioritizes, among other factors, road pavements and bridges that have the highest need. Funds for road and bridge condition are primarily through the Surface Transportation Block Grant (STBG) program.

5. System Performance, Freight, and Congestion Mitigation & Air Quality Improvement Program Measures (PM3)

In January 2017, USDOT published the System Performance/Freight/CMAQ Performance Measures Final Rule to establish measures to assess passenger and freight performance on the Interstate and non-Interstate National Highway System (NHS), and traffic congestion and on-road mobile source emissions in areas that do not meet federal National Ambient Air Quality Standards (NAAQS). The rule, which is referred to as the PM3 rule, requires MPOs to set targets for the following six performance measures:

National Highway Performance Program (NHPP)

- 1. Percent of person-miles on the Interstate system that are reliable, also referred to as Level of Travel Time Reliability (LOTTR);
- 2. Percent of person-miles on the non-Interstate NHS that are reliable (LOTTR);

National Highway Freight Program (NHFP)

3. Truck Travel Time Reliability index (TTTR);

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

- 4. Annual hours of peak hour excessive delay per capita (PHED);
- 5. Percent of non-single occupant vehicle travel (Non-SOV); and
- 6. Cumulative 2-year and 4-year reduction of on-road mobile source emissions (NOx, VOC, CO, PM10, and PM2.5) for CMAQ funded projects.

The IMPO is currently in CMAQ attainment and no longer needs to set Indianapolis specific targets for the three CMAQ performance measures. The IMPO is supporting the INDOT targets for all the PM3 targets.

The IMPO approved system performance, freight, and congestion mitigation & air quality improvement program targets on January 4, 2023. The IMPO is expressly supporting the statewide target developed by INDOT.

The 2024 and 2026 statewide PM3 targets are:

Performance Measure	2-Year Target (2024)	4 Year Target (2026)
Interstate Percentage of Person-Miles Reliable (LOTTR)	93.0%	93.5%
Non-Interstate Percentage of Person-Miles Reliable (LOTTR)	93.0%	93.5%
Truck Travel Time Reliability Index (TTTR)	1.32	1.30
Annual Hours of Peak Hour Excessive Delay (PHED)	N/A*	N/A*
Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel	N/A*	N/A*
Total Emission Reductions: PM 2.5	3.0	4.0
Total Emission Reductions: NOx	690.0	725.0
Total Emission Reductions: VOC	590.0	600.0
Total Emission Reductions: PM 10	0.02	0.03
Total Emission Reductions: CO	330.0	520.0

^{*}Not applicable to the Central Indiana 9-County Airshed

The NHPP and NHFP performance measures apply only to Interstate and Non-Interstate NHS transportation facilities. The CMAQ performance measures apply only to CMAQ non-attainment areas. The IMPO supports regional system performance, freight, and congestion mitigation & air quality improvement in the following ways:

- The **2050 MTP** supports these performance measures:
 - through goals and objectives, including:
 - Goal 1: To Enhance Transportation Options and Choices for All Users.
 - Objective 1A: Improve regional connectivity of the roadway system.
 - Goal 2: To Implement Strategies That Address Congested Segments.
 - Objective 2A: Develop mobility strategies that address system performance and congested transportation segments.
 - Goal 5: To Ensure the Efficient Movement of Goods and Freight.
 - Objective 5A: Improve reliability, capacity, and competitiveness for regional freight.
 - Goal 8: To Minimize Negative Impacts of The Transportation System on The Natural Environment.
 - Objective 8B: Support projects that improve air quality.
 - by including a Congestion Management Process,
 - o by awarding points during project selection to capacity expansion projects that demonstrate a mitigation of choke points, reduce congested lane miles, reduce vehicle hours of delay, or improve a roadway on the identified regional freight network, and
 - by incorporating by reference the Indiana statewide trends and targets.
- The Regional Pedestrian Plan and Regional Bikeway Plan support these measures by prioritizing areas and projects of highest need to provide more options and use of non-motorized transportation options.
- The IMPO's Complete Streets Policy requires projects receiving STBG or TAP funding through the IMPO to incorporate facilities for pedestrians and/or bicyclists to ensure the continued development of a non-motorized transportation system.

 The TIP makes significant investments in reducing congestion and improving air quality during each call for projects. The Congestion Mitigation and Air Quality (CMAQ) program is the second largest program during a call for projects. Funds can only be used on projects that improve air quality often by reducing congestion. Projects might include roundabouts that ease congestion, air quality outreach campaigns such as Knozone, or encouraging mode shift by funding bus purchases.

6. Transit Asset Management Measures

On July 26, 2016, FTA published the final Transit Asset Management (TAM) 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," requires that public transportation providers develop and implement TAM plans, and establishes state of good repair standards and performance measures for four asset categories: equipment, rolling stock, infrastructure, and facilities. The rule became effective on October 1, 2018.

The FTA TAM Performance Measures include:

- 1. Equipment Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark
- 2. Rolling Stock Percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark
- 3. Infrastructure Percentage of track segments with performance restrictions
- 4. Facilities Percentage of facilities within an asset class rated below condition 3 on the TERM scale

The Indianapolis Public Transportation Corporation (aka IndyGo) coordinates the TAM for Central Indiana as a Tier I agency. There are additional Tier II agency subrecipients that qualify and IndyGo is the Group TAM sponsor for those agencies. The IMPO participated in the development of the TAM and supports the targets developed by IndyGo.

INDOT creates the TAM for subrecipients outside of the IMPO's Urbanized Area, which include Boone County, Shelby County, and Hendricks County.

This performance measures applies to transportation facilities operated and maintained by IndyGo and other transit providers. The IMPO supports transit asset management by:

The TIP supports transit asset management through an allocation goal of approximately 12% toward transit during each call for projects. The IMPO has funded several significant bus purchases through the TIP including hybrid buses used on the IndyGo BRT network.

7. Transit Safety Performance

The Federal Transit Administration (FTA) published a final Public Transportation Agency Safety Plan (PTASP) rule and related performance measures as authorized by Section 20021 of the Moving Ahead for Progress in the 21st Century Act (MAP-21). The PTASP rule requires operators of public transportation systems that receive federal financial assistance under 49 U.S.C. Chapter 53 to develop and implement a PTASP based on a safety management systems approach. Development and implementation of PTASP s is anticipated to help ensure that public transportation systems are safe nationwide.

The rule applies to all operators of public transportation 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. The rule does not apply to certain modes of transit service that are subject to the safety jurisdiction of another Federal agency, including passenger ferry operations that are regulated by the United States Coast Guard, and commuter rail operations that are regulated by the Federal Railroad Administration.

The transit agency sets targets in the PTASP based on the safety performance measures established in the National Public Transportation Safety Plan (NPTSP). The required transit safety performance measures are:

- 1. Total number of reportable fatalities.
- 2. Rate of reportable fatalities per total vehicle revenue miles by mode.
- 3. Total number of reportable injuries.
- 4. Rate of reportable injuries per total vehicle revenue miles by mode.
- 5. Total number of reportable safety events.
- 6. Rate of reportable events per total vehicle revenue miles by mode.
- 7. System reliability Mean distance between major mechanical failures by mode.

The Indianapolis Public Transportation Corporation (aka IndyGo) develops the PTASP. The IMPO participated in the development of the PTASP and supports the targets developed by IndyGo.

This performance measures applies only to assets operated and maintained by IndyGo and other transit providers.