

RPC Transportation Advisory Committee  
December 7, 2023  
9:00-11:00 AM

**RPC Offices**

**156 Water Street, Exeter, NH**

Location: <https://goo.gl/maps/X9AvHrcfy2SivYDx7>

There is an elevator available via the Center Street entrance.

***Virtual Participation via Zoom***

<https://us02web.zoom.us/j/81565887561?pwd=UitQOEtXZ3lxY1JjNE5sSnhXTXZmdz09>

***The full zoom invitation is on page 2***

Agenda

1. Introductions
2. Minutes of 4/27/2023, 8/24/2023, and 10/26/2023 Meetings (**Attachment #1a, 1b, and 1c**) — **[Motion Required]** (5 minutes)
3. Annual Highway Safety Performance Targets (**Attachment #2**) **[Motion Required]** — Dave Walker (20 Minutes)
4. Regional Transit Safety Targets (Attachment #3) [Motion Required] – Scott Bogle (20 Minutes)
5. Regional Safety Action Plan Development — Dave Walker (20 Minutes)
6. 2024 TAC Meeting Schedule and ongoing efforts to improve TAC participation – S. Bogle (20 minutes)
7. Agency and Community announcements and updates (20 minutes)
8. Other Project Updates – Staff (10 minutes)
9. Open discussion/Comments

**TAC MEETING SCHEDULE For 2024 (Next meeting highlighted)**

<b>January 25</b>	April 25	July 25	October 24
February 22	May 23	August 22	December 5***
March 28	June 27	September 26	

\*\*\*Off Schedule

Rockingham Planning is inviting you to a scheduled Zoom meeting.

Topic: Transportation Advisory Committee

Time: Dec 7, 2023 09:00 AM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/81565887561?pwd=UitQOEtXZ3lxY1JjNE5sSnhXTXZmdz09>

Meeting ID: 815 6588 7561

Passcode: 483722

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One tap mobile

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Dial by your location

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- +1 646 931 3860 US
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- +1 301 715 8592 US (Washington DC)
- +1 305 224 1968 US
- +1 309 205 3325 US
- +1 669 444 9171 US
- +1 669 900 6833 US (San Jose)
- +1 689 278 1000 US
- +1 719 359 4580 US
- +1 253 205 0468 US
- +1 253 215 8782 US (Tacoma)
- +1 346 248 7799 US (Houston)
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Meeting ID: 815 6588 7561

Passcode: 483722

Find your local number: <https://us02web.zoom.us/j/81565887561>

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**MINUTES**  
**Rockingham Planning Commission**  
**MPO Technical Advisory Committee**  
**RPC Offices, 156 Water Street, Exeter NH**  
**April 27, 2023**

**Members Present:** T. Moore (Plaistow); B. Dion (Greenland); P. Coffin (Kingston); D. Sharples (Exeter); E. Eby (Portsmouth); R. Nichols (COAST); R. DiCillo, (NHDES); L. St. John (NHDOT).

**Staff:** S. Bogle (Senior Transportation Planner); T. Roache (Executive Director)

- 1. Introductions:** Roll call attendance was taken. Bogle indicated that the chair was not attending and that he would run the meeting.
- 2. Minutes of 1/26/23 and 2/23/23 TAC Meetings**

*Motion by Sharples to approve TAC minutes from 1/26/22 and 2/23/23. Second by Coffin. Roll Call Vote was taken. **SO VOTED.***

**3. 2023-2026 TIP Amendment #1 (Attachment #2) – S. Bogle**

Referencing Attachment #2, Bogle summarized the three projects in the RPC MPO region included in Amendment #1 to the 2023-2026 Transportation Improvement Program (TIP). Projects include:

- Portsmouth-Kittery 15731 (SML Bridge Replacement) – Net change of \$2,869,726 to replace functionality of State Pier which was limited by bridge replacement.
- Statewide PAVE-T1-RESURF (Preservation of Tier 1 Highways) - Scope only adjustment to better reflect purpose of the program. Switched out the work “Resurface” for “Preservation” in scope.
- Statewide 44196 (Development of Resilience Improvement Plan) – State Resiliency Improvement Plans are a new planning document allowed by the BIL/IIJA

Bogle noted that fiscal constraint of the TIP/STIP is maintained per NHDOT fiscal constraint documentation included with Attachment #2. Regarding air quality conformity, as of July 20, 2013, all of New Hampshire is unclassifiable/attainment for the 2008 8-Hour Ozone National Ambient Air Quality Standards (the 2008 ozone standard) and as of April 6, 2015, the 1997 8-Hour Ozone National Ambient Air Quality Standard (the 1997 ozone standard) is revoked for all purposes, including transportation conformity purposes in the Boston-Manchester-Portsmouth (SE) NH area. For this reason, no air quality conformity analysis is necessary.

*Motion by Nichols to endorse the changes included in TIP Amendment 1 and recommend approval by the MPO Policy Committee. Second by Sharples. Roll Call Vote was taken. St. John abstained. **SO VOTED.***

#### **4. Ten Year Plan Project Priorities Submitted to NHDOT (Attachment #3) – T. Roache**

Roache provided a brief update on information regarding project priorities received from NHDOT subsequent to the February 23, 2023 TAC meeting, and the discussion and ultimate prioritization vote taken at the MPO Policy Committee meeting on March 8, 2023.

At the TAC meeting on February 23, 2023, the TAC reached a consensus to recommend to the MPO Policy Committee that the Portsmouth Circle redesign project be put forward as the region's top priority for the current Ten Year Plan update cycle. A formal vote was not taken as there was not a quorum at the meeting. While this project exceeded region's target budget there was indication at the meeting from NHDOT that additional funding might be found to round out the project given its regional importance in the department's view.

Between the February TAC and April Policy Committee meeting clarification was received from NHDOT that supplemental funding would not be available, but the MPO could choose to prioritize the project in this Ten Year Plan round and again in the next round to allocate adequate funding. There was subsequent discussion of additional projects which had scored highly in the project ranking process including Ashworth Avenue Complete Streets in Hampton and NH102/Blueberry Hill Road in Raymond.

The Policy Committee ultimately voted to prioritize the Hampton Ashworth Avenue project and an engineering study for the Portsmouth Traffic Circle project as MPO priorities for the Ten Year Plan. The Raymond NH102/Blueberry Hill Road project was put forward for a Road Safety Audit (RSA) under the Highway Safety Improvement Program (HSIP). Depending on the results of the RSA, safety improvements at that location can likely be completed with HSIP funding on a shorter timeline than would be possible under the Ten Year Plan.

#### **5. COAST & NH Transit Coalition Update – (Attachment #4) – Rad Nichols**

Nichols provided an update on COAST operations and post-pandemic ridership recovery, and on the new COAST Maintenance, Operations and Administration facility that is currently in design and for which the agency has secured the needed federal funding and is now pursuing remaining needed non-federal match. Nichols also summarized the efforts of the NH Public Transportation Coalition to support NHDOT's request for additional state operating support for urban and rural transit systems. The Coalition is made up of city mayors and city councils, major private employers, chambers of commerce, nonprofit human service agencies and transit providers around the state. While NHDOT's request was not initially included in the Governor's budget, it was inserted by House Finance Division II and subsequently remained in the budget bill as adopted by the full House. The budget has now crossed over and is in Senate Finance. Coalition members are meeting with key Senators to ensure they understand local and regional transit need in their districts.

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**6. Project Updates: S. Bogle**

- Bogle provided an update on the NH Seacoast Greenway, the first phase of which is now under construction in North Hampton and moving northward. Staff assisted Portsmouth with an earmark application to Congressman Pappas' office to support construction of two trailhead facilities. Staff are also working with Rye and Greenland on a Recreation Trails Program grant application for another trailhead facility at Breakfast Hill Road.
- RPC and SRPC secured an FTA Section 5305e State Planning and Research grant to for a study assessing accessibility of fixed route bus stops on the COAST and Wildcat Transit route networks, and how local development review policies consider transit access for multi-family develops in the vicinity of transit stops.
- The NH Office of Highway Safety is holding a series of three virtual listening sessions as part of updating the NH Highway Safety Plan. Sessions will be held 5/22, 5/24 and 5/26.
- Efforts to bolster attendance at TAC meetings were discussed.

*Meeting adjourned at approximately 10:25 a.m.*

Respectfully submitted,  
Scott Bogle, Recording Secretary

**MINUTES**  
**Rockingham Planning Commission**  
**MPO Technical Advisory Committee**  
**RPC Offices, 156 Water Street, Exeter NH**  
**August 24, 2023**

Recording available on RPC YouTube page here: <https://youtu.be/cz5vHE4YZGQ>

**Members Present:** B. Dion (Greenland); P. Coffin (Kingston); D. Sharples (Exeter); E. Eby (Portsmouth); D. Seiglie (Rye); R. Nichols (COAST); J. Wilcox (NHDES); V. Partington, (NHDES); L. St. John (NHDOT); L. Levine (FHWA)

**Staff:** D. Walker (Assistant Director); S. Bogle (Senior Transportation Planner); T. Cheever (Transportation/GIS Analyst); M. Jerominek (Regional Planner)

**1. Introductions (0:00-2:30)**

Roll call attendance was taken. Walker indicated that the chair was not attending and that he would run the meeting.

**2. Minutes of 4/27/23 Meetings (2:30-2:45)**

*Tabled until next meeting*

**3. Ten Year Plan Priorities and GACIT Hearings (2:45-29:20) – D. Walker**

Walker reminded TAC members of the work that RPC had accomplished in the spring in setting Ten Year Plan Priorities. He provided a quick overview of the project selection process, the feedback provided by NHDOT on the proposals submitted, and the ultimate priorities selected by the Policy Committee in April. Walker shared the draft Ten Year Plan GACIT hearing dates and locations indicating that the list has not been finalized by NHDOT. Format of those hearings would be similar to previous iterations with a 15 minute presentation from NHDOT, 5 minute presentation from RPC and then testimony from the public. Short discussion followed about RPC's targeted funding, impacts of inflation, and the details and timing of the Portsmouth Circle proposal, and redistribution of federal funds. Also discussed how the prioritization process could be improved next cycle.

**4. Long Range Transportation Plan Update (29:20-50:10) – M. Jerominek**

Jerominek provided an overview of the changes being made to the Long Range Transportation Plan including updating themes, improving document accessibility and public outreach. RPC is looking to develop a transportation system that works for our aging population, is balanced among modes of transportation, and is well funded. She covered how housing location and land

use distribution are impacting the options for improvement and how resilience planning needs to be integrated into the process. The document is being updated to make it more “readable” by reducing the amount of text, improving clarity by using plain language, adding graphics, and ensuring that the document is accessible to people of all abilities. She provided an overview of some potential scenario planning options being discussed internally and how that may be integrated into the document. Public outreach will include a survey or surveys, outreach to specific underserved populations, focus groups, and working to understand barriers to transportation and understanding transportation related decisions.

**5. COAST Transit Stop Accessibility Study (50:10- 1:11:20) – S. Bogle**

Bogle provided an overview of the COAST Transit Stop Accessibility Study that RPC and SRPC are undertaking. Building off some of the work that was completed around Bicycle Level of Traffic Stress (LTS) a few years ago, this project will evaluate how accessible COAST transit stops are and what improvements may be needed to ensure access to transit. This includes a Pedestrian LTS analysis, a connectivity analysis, outreach, and model site plan review regulations. This includes data collection and development of a Pedestrian LTS analysis model and mapping of outcomes. Heat mapping will be used to identify high frequency locations, concentrations of ADA paratransit service needs, and connectivity between transit stops, commercial, and residential areas will be examined and gaps identified. Model site plan review regulations will be developed to improve the connectivity of developments to the transit network and minimize future gaps in accessibility.

**6. Hampstead RSMS Project (1:11:20-1:28:25) – T. Cheever**

Cheever provided an overview of the work that RPC is conducting for the Town of Hampstead updating their Road Surface Management Survey (RSMS). She covered the hierarchy of roads and the practice of planning for pavement maintenance and rehabilitation. RSMS provides a database of road conditions and suggested improvements and timeframes for implementation to be efficient and keep costs low. This process involves data collection and forecasting. Surface condition data is collected and a Pavement Condition Index (PCI) is calculated. From this priorities for improvements are estimated. Roadways conditions are mapped by PCI so that the community can visualize roadways in poor condition. RPC works with the community to identify priorities as they may vary from place to place. Short discussion followed regarding how other communities may be able to implement RSMS.

**7. Agency Updates and Announcements (1:28:25-1:47:25) – Multiple TAC Members**

Dion Shared the discussions that are ongoing to conduct a planning charrette in Greenland discussing the future of NH33 and the needs of the corridor. Portsmouth asked about the status of the US 1 project (Portsmouth ). NHDOT indicated that they will be posting the final GACIT Hearing schedule soon. NHDES shared two grant opportunities that are currently open – Granite State Clean Fleets which provides funds for diesel replacement and EV replacements. NH Clean Diesel Grant is also open and also provides funds for replacing older diesel engines (pre-2009)

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with newer cleaner diesel or electric vehicles. COAST provided an update on the improvements in ridership and some routes and services are seeing pre-pandemic ridership levels return. The new maintenance facility is progressing through permitting and towards final design. Federal funding has been secured but local match is still in the works. COAST is expecting a fiscal deficit for FY25 and is working with the communities and NHDOT to address that issue. Rye is working on addressing speeding issues in the community. FHWA provided information on a FHWA webinar covering federal requirements related to grants. RPC provided an update on the SS4A grant and notified the TAC that the grant agreement has been signed and RPC has started working on the Request For Proposals to hire a consulting firm to assist in the development of Safety Action Plans for the four New Hampshire MPOs.

**8. Project Updates (1:47:25-1:52:43) D. Walker**

- Walker provided a brief overview of efforts to try and revitalize attendance at TAC meetings. This includes potentially changing the time of the meeting, providing food, and other opportunities to improve participation.
- A brief discussion of the traffic count program occurred and covered alerting towns to when counts may be occurring in their communities.

*Meeting adjourned at approximately 10:53 a.m.*

Respectfully submitted,  
David Walker, Recording Secretary

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**MINUTES**  
**Rockingham Planning Commission**  
**MPO Technical Advisory Committee**  
**RPC Offices, 156 Water Street, Exeter NH**  
**October 26, 2023**

Due to technical issues the meeting began at 9:30 and no recording was made.

**Members Present:** B. Dion (Greenland); C. Cross (Newington); T. Moore (Plaistow); E. Eby (Portsmouth); D. Seiglie (Rye); R. Nichols (COAST); M. Connors (Stratham); J. Wilcox (NHDES); V. Partington, (NHDES); L. St. John (NHDOT); L. Levine (FHWA); J. Lavacchia (Hampstead).

**Staff:** D. Walker (Assistant Director); S. Bogle (Senior Transportation Planner); T. Cheever (Transportation/GIS Analyst); M. Jerominek (Regional Planner)

**1. Introductions**

Roll call attendance was taken. Walker indicated that the chair was not attending and that he would run the meeting.

**2. Minutes of 4/27/23 and 8/24/2023 Meetings**

*Tabled*

**3. TIP Amendment #3 – D. Walker**

Walker provided an overview of the TIP Amendment process and the details of the changes proposed in Amendment #3. No comments were received from the public however NHDOT submitted a request to include changes to the TRAIN programmatic in the amendment. After reviewing the proposed changes the TAC endorsed the project revisions and recommended approval to the MPO Policy Committee.

**4. Ten Year Plan Priorities and GACIT Hearings – D. Walker**

Walker reminded TAC members of the project priorities identified by the RPC in the Spring and included by NHDOT in the Draft Ten Year Plan this fall. He provided a quick overview of the GACIT hearing dates and locations as well as attendance around the region. Walker finally provided an overview of the comments heard at the hearings both in support of projects as well as in support of larger initiatives and planning processes.

**5. Improving TAC Participation – S. Bogle**

Bogle reviewed recent staff work to improve participation in the TAC. We have regular, active participation from eleven of the 25 towns currently eligible for voting seats. Three towns currently have no appointee, while eleven towns have either an appointee or a contact for TAC

mailings but have not participated in 2022-2023. Three of the eight agency members with voting seats have also not attended a meeting during 2022-2023. While the 11 active communities and the active agencies constitute a quorum for doing business, at times we've had difficulty getting enough members physically present as opposed to tuning in via Zoom. Staff are currently contacting TAC members who have not been active recently, and communities with no current appointee to ensure that inactive seats are filled. The group discussed providing food as an incentive to attend in person, including moving the meeting to lunchtime and serving pizza as NRPC does with their TAC. There was also brief discussion of adding more outside speakers, so meetings provide more opportunities to learn about transportation topics, beyond just managing the mechanics of the MPO process. Topic suggestions included EVs, the new Public Right of Way Accessibility Guidelines (PROWAG) that set new sidewalk and crossing accessibility requirements for municipalities, and traffic management/adaptive signal control. There was also a suggestion to rotate meeting locations.

#### **6. Agency Updates and Announcements – Multiple TAC Members**

Cross shared that the primary discussion in Newington is on how to best reuse the Fox Run Mall as well as industrial development in the community. Dion described ongoing discussions of the future of NH33 and the needs of the corridor. Nichols announced that COAST was restarting some runs that had been previously suspended due to a lack of drivers and is back to hourly service on all routes. Eby discussed a recent Federal Rail Administration grant to address railroad crossings in the City as well as work to study options for the Bartlett Street bridge. Connors indicated that Stratham is working with the Conservation Commission to improve trail networks and access to adjacent private lands. Moore relayed ongoing discussions in Plaistow regarding the Main Street Traffic Calming project, the Main Street/North Avenue intersection, and work on NH 125. NHDOT indicated that the GACIT Hearings are wrapping up and there will be two more meetings in November in Concord to finalize the plan to be sent to the Governor. NHDES shared that they will be hosting two listening sessions related to EV charging in November.

#### **7. Project Updates**

- Progress is being made on securing a consultant for the development of Regional Safety Action Plans for the four New Hampshire MPOs.

*Meeting adjourned at approximately 11:00 a.m.*

Respectfully submitted,  
David Walker, Recording Secretary

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Rockingham Planning Commission

# 2024 Transportation Safety (HSIP) Performance Targets

**Draft – 12/1/2023**

Rockingham Planning Commission  
Adopted: [Date]

## Background

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The Federal Highway Administration (FHWA) implemented the final rule on the Highway Safety Improvement Program (HSIP) effective April 14, 2016. This regulation ([23 CFR 490](#)) requires that five safety related performance targets must be set and published annually by State DOTs by August 31<sup>st</sup> and MPOs within 180 days after the state targets are established. This target setting is intended to coordinate the efforts of the State Department of Transportation (NHDOT), State Office of Highway Safety (OHS), and Metropolitan Planning Organizations (MPO), as well as the specific planning efforts of the NHDOT State Strategic Highway Safety Plan (SHSP), OHS Highway Safety Plan (HSP), and the Highway Safety Improvement Program (HSIP), into measures that help to assess the safety performance of the transportation system. The federally required targets assess and report safety improvements in five ways:

1. **Number of Fatalities:** The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year.
2. **Rate of Fatalities:** The ratio of total number of fatalities to the number of vehicle miles traveled (VMT, in 100 Million VMT) in a calendar year.
3. **Number of Serious Injuries:** The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year.
4. **Rate of Serious Injuries:** The ratio of total number of serious injuries to the number of VMT (in 100 Million VMT) in a calendar year.
5. **Number of Non-Motorized Fatalities and Non-motorized Serious Injuries:** The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year.

In addition, the MPOs in New Hampshire are tracking additional safety metrics that are not required by the Federal rule. To date, this includes a single measure:

1. **Motorcycle Fatalities:** The number of fatal crashes involving motorcycles.

## Target Development

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States establish Highway Safety Improvement Program (HSIP) targets and report them for the upcoming calendar year in the HSIP annual report that is submitted to FHWA by August 31<sup>st</sup> each year. Targets are applicable to all public roads, regardless of functional classification or ownership. The targets established for number and rate of fatalities, and number of serious injuries must be identical to those established for the National Highway Transportation Safety Agency (NHTSA) Highway Safety Grant program in the annual Highway Safety Plan (HSP). The state has the option to also establish any number of urbanized area targets and a non-urbanized area target for the purposes of evaluating and reporting measures. However, those sub-state targets are not included in the significant progress determination that will be made by FHWA.

In New Hampshire, the process used to develop the required safety measures included in the annual HSP formed the basis for the establishment of the five FHWA mandated targets by NHDOT and the MPOs. This involved coordination and consultation between the New Hampshire Departments of Transportation and Safety, as well the four MPOs in the state. Currently available fatality, serious injury, and volume data were analyzed to establish 2014-2022 conditions in terms of total fatalities, fatality rates, total serious injuries, serious injury rates, as well as total non-motorized fatalities and serious injuries. Five year rolling averages were developed from these values and utilized to compute projected values for 2024.

## State Targets

**Figure 1** below shows the New Hampshire HSIP targets for 2024. The figures in the “Supporting Data and Analysis” section of this document show state and regional data supporting the targets for the five required measures as well as charts showing historic values, 5-year averages, and projected 2024 values for each measure.

**Figure 1: State of NH 2024 HSIP Targets**

Measure	2022 Values		Trend Based Target	2024 Targets		
	Yearly	Five-Year Average		Current Trend	Desired Trend	2024 Target
Number of Fatalities	146	123.0	119.8			<b>120.0</b>
Fatality Rate per 100 Million VMT	1.100	0.932	0.917			<b>0.919</b>
Number of Serious Injuries	594	503.2	515.1			<b>509.6</b>
Serious Injury Rate per 100 Million VMT	4.480	3.827	3.960			<b>3.877</b>
Non-Motorized Fatalities and Serious Injuries	51	42.4	31.7			<b>39.4</b>

## MPO Targets

For 2024, the MPO is agreeing to support the State of New Hampshire HSIP Targets in all five mandated areas. In doing so, the MPO is agreeing to:

- Work with the State and safety stakeholders to address areas of concern for fatalities or serious injuries within the metropolitan planning area.
- Coordinate with the State and include the safety performance measures and HSIP targets for all public roads in the metropolitan area in the MTP (Metropolitan Transportation Plan).
- Integrate into the metropolitan transportation planning process the safety goals, objectives, and performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the SHSP.
- Include a description in the TIP (Transportation Improvement Program) of the anticipated effect of the TIP toward achieving HSIP targets in the MTP, linking investment priorities in the TIP to those safety targets.

## Motorcycle Fatalities

The four New Hampshire MPOs have mutually agreed to track motorcycle fatalities as a performance measure and Fatality Analysis Reporting System (FARS) data is utilized for this purpose. As the State and MPO are not required to establish targets by FHWA, the state is not establishing targets in this area and so the MPO must establish its own. Since 2010, the MPO region has averaged 3 motorcycle fatalities per year and this has kept the 5-year average nearly flat at around 2.8 since 2015. In 2022 however there were six motorcycle related fatalities which caused the 5-year average for the region to go above 3.0 for the first time since 2015. Statewide, motorcycle fatalities were 23% higher in 2021 than in 2020 and 50% higher in 2022 than in 2021, including 6 in the RPC region (up from 2 in 2021). Assuming no motorcycle fatalities in both 2023 and 2024 would reduce the 5-year average to **2.2 and this is the recommended 2024 target for the 5-year average Motorcycle fatalities**. Additional supporting data is included in the “Supporting Data and Analysis” section of this document.

**Figure 2: Rockingham Planning Commission Additional 2022 Safety Performance Targets**

Measure	2022 Values		Trend Based Target	2024 Targets		
	Yearly	5-Year Average		Current Trend	Desired Trend	2024 Target
Number of Motorcycle Fatalities	6	3.2	3.2			<b>2.2</b>

## Supporting Data and Analysis

Data for the establishment of these measures is provided from three sources:

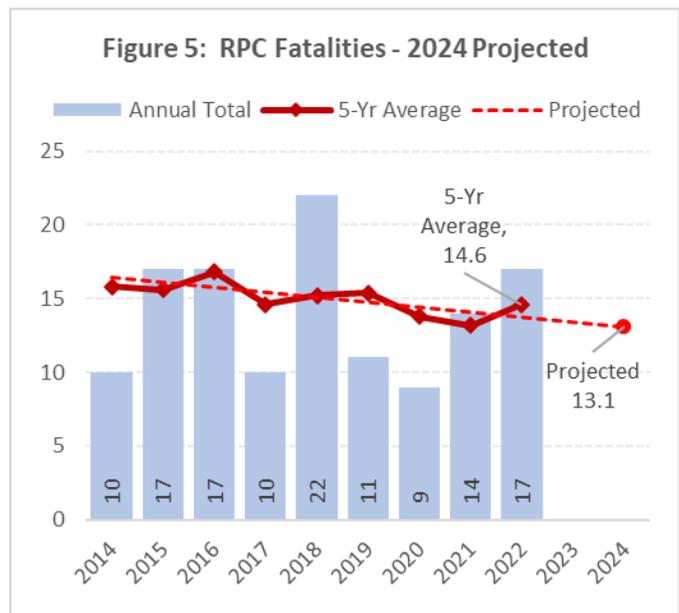
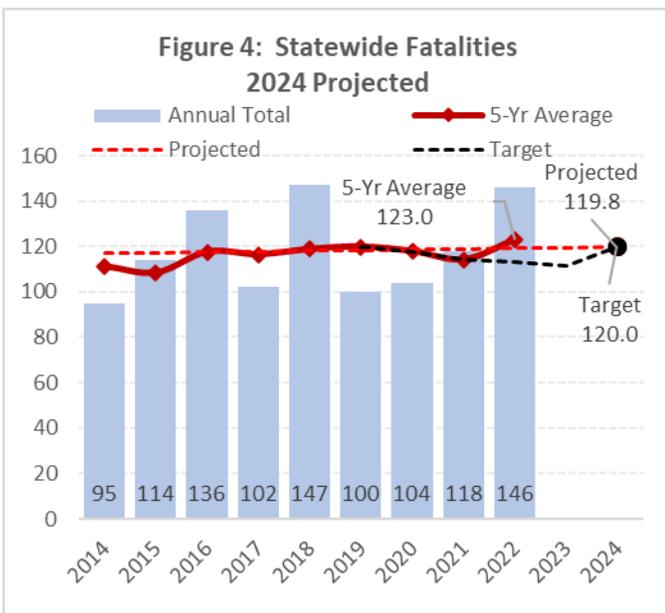
- Fatality Analysis Reporting System (FARS):** FARS Annual Report File or Final data is utilized to provide information on fatal crashes in the state and to identify those that have occurred within the MPO region. Five-year rolling averages are computed to provide a better understanding of the overall data over time without discarding years with significant increases or decreases, as well as to provide a mechanism for regressing fatalities to the mean and accounting for their essential random nature in location and time.
- State Motor Vehicle Crash Database:** Data collected and maintained by the NH Department of Safety is utilized to determine the number of serious injury crashes in the state (currently those classified as “Suspected Serious Injury” on the DSMV159, 2018). This includes injuries that involve severe lacerations, broken or distorted limbs, skull fracture, crushed chest, internal injuries, unconscious when taken from the accident scene, or unable to leave the accident scene without assistance. This data is necessary to identify the total number of serious injuries from traffic crashes in New Hampshire and the MPO region specifically.
- Highway Performance Monitoring System (HPMS):** State VMT data is collected by the Department of Transportation and aggregated into a dataset for the state. VMT data can be calculated for MPO regions and individual communities. The VMT data is combined with FARS data to calculate rate of fatalities (deaths per 100 million VMT) and with the State Motor Vehicle Crash data to calculate the rate of serious injuries (serious injuries per 100 million VMT).

### Number of Fatalities

Statewide, there was a 3% increase in Vehicle Miles of Travel (VMT) which has edged volumes closer to those seen pre-pandemic (2% decrease from 2019) and along with the higher volumes there was a 23% increase in the number of motor vehicle crash related fatalities in 2022. The number of fatalities in the state has varied substantially since 2014 averaging a  $\pm 23\%$  change from year to year ( $\pm 34$  deaths) (**Figures 3 & 4**). Since the low in 2015, the five-year rolling average increased through 2019, dropped in 2020 and 2021, and has increased substantially with the 5-year period ending in 2022. This illustrates a return to a generally higher numbers of fatalities as 2018 and 2022 had the highest number of fatalities since the process of setting performance targets began. Calculating a trend line on the five-year averages indicates a slight decrease in the rolling average from the current 123.0 to 119.8 in 2024 and NHDOT rounded this to 120 to establish the state target for 2024. Fatalities in the RPC region continued to be lower than the 2018 peak of 22 with 17 during 2022 (**Figures 3 & 5**). After two years of declining numbers, the five-year average fatalities started to increase again and rose to 14.6 for the period ending in 2022. The overall trend is still indicating declining numbers of fatalities with a five-year average for the 2020-2024 period expected to be at 13.1 deaths.

**Figure 3: Fatalities**

Year	Annual Crash Fatalities		5-Year Period	5-Year Rolling Average Crash Fatalities	
	New Hampshire	MPO Region		New Hampshire	MPO Region
2014	95	10	2010-2014	111.2	15.8
2015	114	17	2011-2015	108.4	15.6
2016	136	17	2012-2016	117.6	16.8
2017	102	10	2013-2017	116.4	14.6
2018	147	22	2014-2018	118.8	15.2
2019	101	11	2015-2019	120.0	15.4
2020	104	9	2016-2020	117.8	13.8
2021	118	14	2017-2021	114.2	13.2
<b>2022</b>	<b>146</b>	<b>17</b>	<b>2018-2022</b>	<b>123.0</b>	<b>14.6</b>

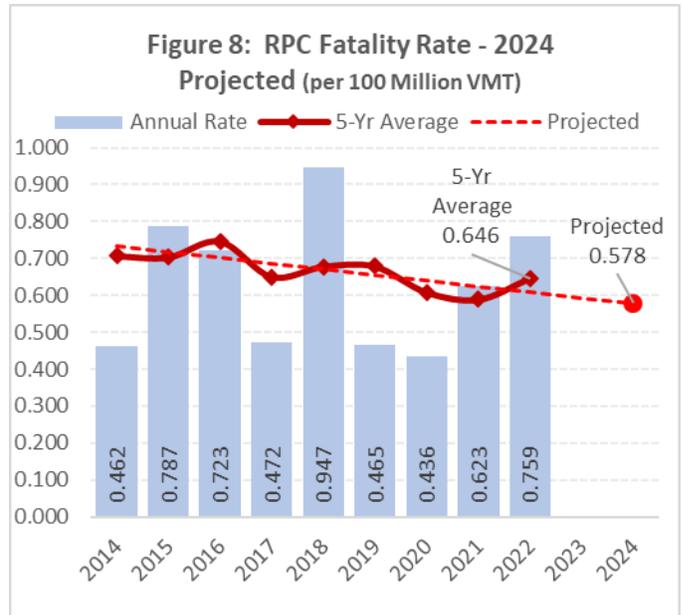
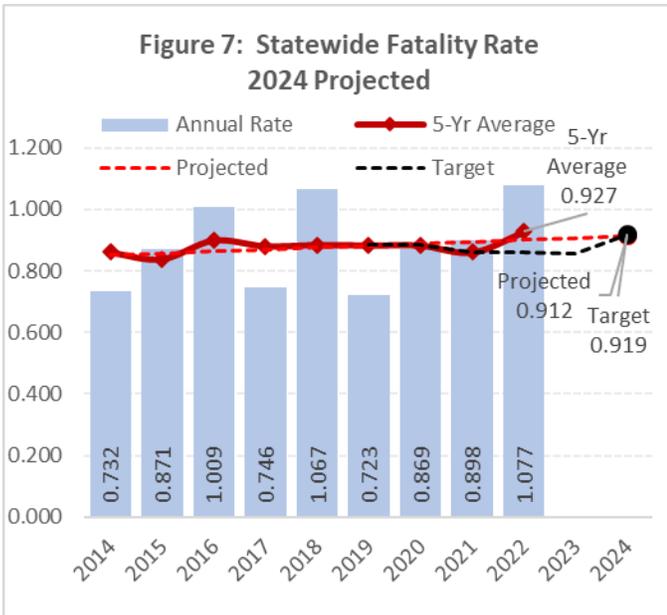


### Rate of Fatalities

2022 saw a substantial increase in fatalities and a moderate increase in auto travel resulting in an increased annual Fatality Rate for the state from 0.898 to 1.077 fatalities per 100 Million VMT. Similarly, the statewide five-year average rate of fatalities jumped from 0.861 fatalities per 100 million VMT (2017-2021) to 0.927 for the current five-year average (2018-2022)(**Figures 6 & 7**). The projected rate for 2020-2024 drops slightly to 0.912 fatalities per 100 Million VMT however NHDOT set a slightly higher target of 0.919 which better reflects current performance of the system. Although the annual rate for the MPO region increased significantly for the second year in a row, it remains lower than the statewide rate. The higher numbers of fatalities in the last two years has reversed what was a downward trend in the five-year average rate and it has increased (**Figures 6 & 8**) for the first time since 2016 to 0.646 for the 2018-2022 cycle. Projections continue to show a downward trend however and the 2020-2024 timeframe is estimated to be 0.578 deaths per 100 million VMT.

**Figure 6: Fatality Rates**

Year	100 Million Vehicle Miles of Travel (VMT)		Fatality Rate per 100 Million VMT		5-Year Period	5-Year Average Fatality Rates per 100 Million VMT	
	New Hampshire	MPO Region	New Hampshire	MPO Region		New Hampshire	MPO Region
2014	129.70	21.65	0.732	0.462	2010-2014	0.861	0.707
2015	130.94	21.61	0.871	0.787	2011-2015	0.839	0.703
2016	134.76	23.53	1.009	0.723	2012-2016	0.899	0.747
2017	136.81	21.18	0.753	0.472	2013-2017	0.881	0.650
2018	137.76	23.24	1.074	0.947	2014-2018	0.885	0.678
2019	138.57	23.69	0.729	0.464	2015-2019	0.884	0.679
2020	119.70	20.66	0.869	0.436	2016-2020	0.882	0.608
2021	131.33	22.46	0.898	0.623	2017-2021	0.861	0.589
<b>2022</b>	<b>135.58</b>	<b>22.40</b>	<b>1.077</b>	<b>0.759</b>	<b>2018-2022</b>	<b>0.927</b>	<b>0.646</b>

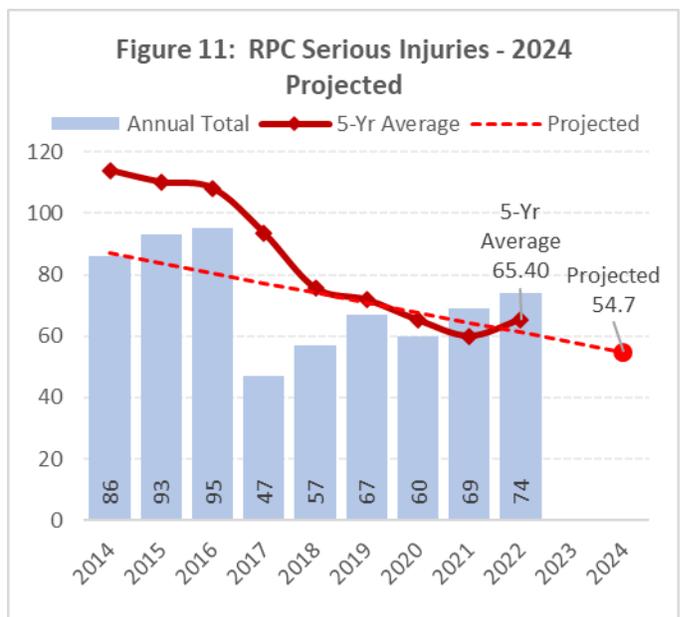
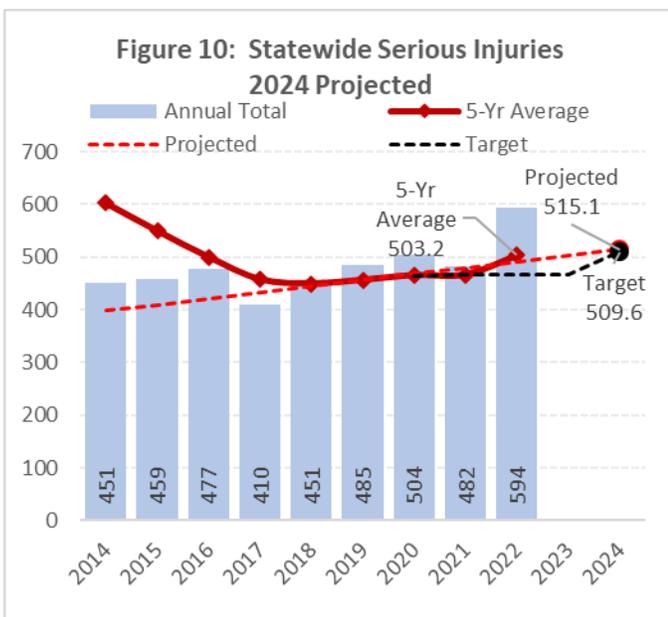


### Serious Injuries

The state crash data shows some variation from year to year but has generally indicated a flat trend in the number of serious injuries at both the State (**Figures 9 & 10**) and MPO level (**Figures 9 & 11**). 2022 had the highest number at the state level since 2012 and a 23% over 2021. At the regional level, 2022 had a substantial increase over 2021 (7%) and the region experienced the highest number of serious injuries since 2016. The five-year average at the state level showed a sharp upward increase after several cycles of staying relatively level while the at the regional level the five-year average returned to values seen in the period ending in 2020. The statewide five-year average of serious injuries is projected to rise to 515.1 for 2024 and an increasing rate is not acceptable for a state target. For that reason, NHDOT has set the 2024 target at 509.6 for the five-year average of serious injuries. Despite the uptick in serious injuries in 2022, the trend for the regional five-year average continues to decline and the current average is still more than 40% lower than the period ending in 2014.

**Figure 9: Serious Injuries**

Year	New Hampshire Serious Injuries	MPO Region Serious Injuries	5-Year Period	5-Year Rolling Average Serious Injuries	
				New Hampshire	MPO Region
2014	451	86	2010-2014	510.6	114.0
2015	459	93	2011-2015	496.8	110.2
2016	477	95	2012-2016	499.8	108.2
2017	410	47	2013-2017	457.2	93.6
2018	451	57	2014-2018	449.6	75.6
2019	485	67	2015-2019	456.4	71.8
2020	504	60	2016-2020	465.4	65.2
2021	482	69	2017-2021	466.4	60.0
<b>2022</b>	<b>594</b>	<b>74</b>	<b>2018-2022</b>	<b>503.2</b>	<b>65.4</b>

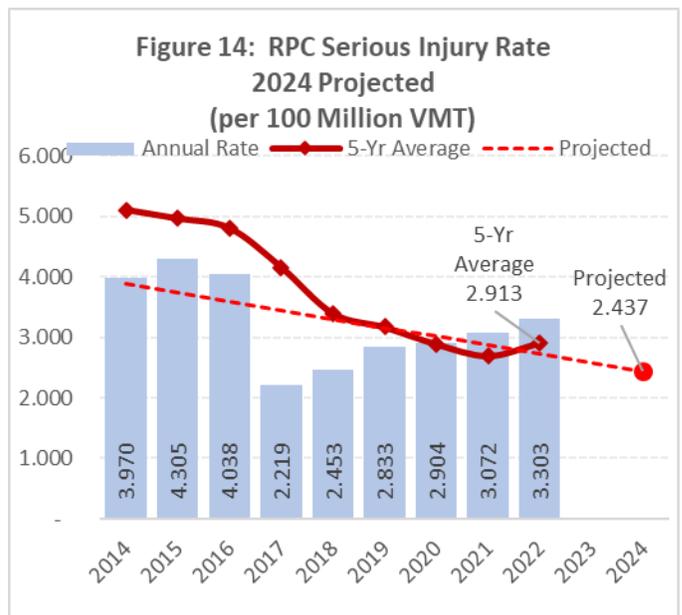
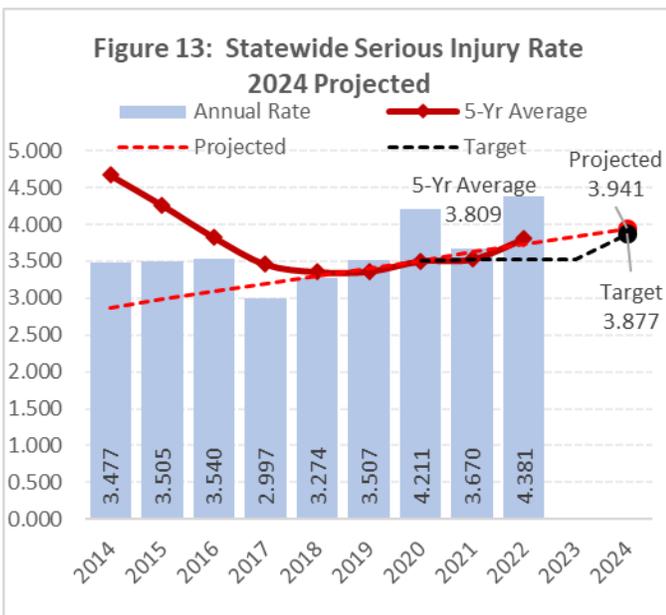


### Rate of Serious Injuries

A substantial increase in the number of serious injuries and continued growth in VMT at the state level resulted in a significant jump in the serious injury rate to 4.381 serious injuries per 100 million VMT in 2022. The five-year average continued to increase as well (**Figures 12 & 13**) as numbers of serious injuries remain higher than the low observed in 2017 and this results in a projected statewide 2020-2024 five-year average of 3.941 serious injuries per 100 million VMT. NHDOT has established the 2024 target at 3.877 serious injuries per 100 Million VMT which is higher than the 2022 observed rate and lower than the projected trend but reflects the higher rates seen in the last three years. Regionally (**Figures 12 & 14**), the annual serious injury rate continued to increase as the number of injuries grew and the amount of VMT stayed flat. The five-year average increased for the first time in many years reflecting the increases in the annual rate seen since 2017. Projecting the five-year average for the 2020-2024 period results in a serious injury rate of 2.437 per 100 million VMT for the region however the annual rate would need to drop by about 50% to meet that trend.

**Figure 12: Serious Injury Rate**

Year	100 Million Vehicle Miles of Travel (VMT)		Serious Injury Rate per 100 Million VMT		5-Year Average Serious Injury Rates per 100 Million VMT		
	New Hampshire	MPO Region	New Hampshire	MPO Region	5-Year Period	New Hampshire	MPO Region
2014	129.70	21.65	4.919	3.970	2010-2014	3.954	5.103
2015	130.94	21.61	4.636	4.305	2011-2015	3.847	4.961
2016	134.76	23.53	4.964	4.038	2012-2016	3.829	4.803
2017	136.81	21.18	3.033	2.219	2013-2017	3.462	4.158
2018	137.76	23.24	3.492	2.453	2014-2018	3.359	3.397
2019	138.57	23.69	3.536	2.828	2015-2019	3.365	3.168
2020	119.70	20.66	4.280	2.904	2016-2020	3.506	2.888
2021	131.33	22.46	3.670	3.072	2017-2021	3.532	2.696
<b>2022</b>	<b>135.58</b>	<b>22.40</b>	<b>4.381</b>	<b>3.303</b>	<b>2018-2022</b>	<b>3.809</b>	<b>2.913</b>

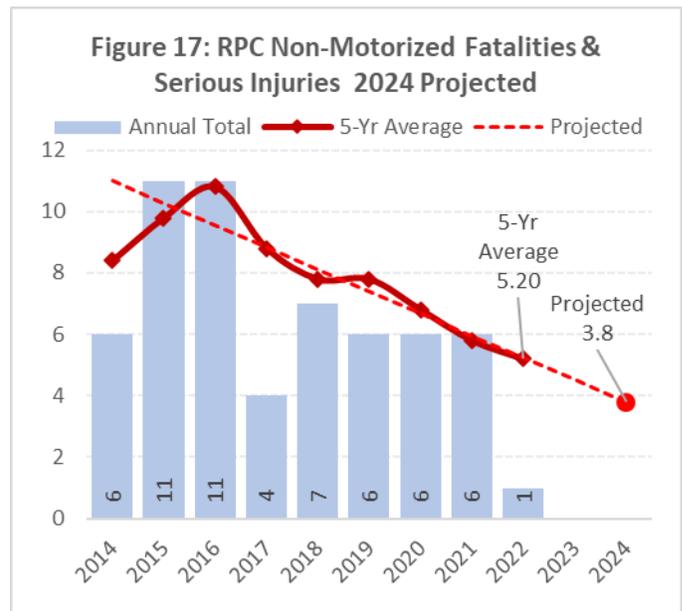
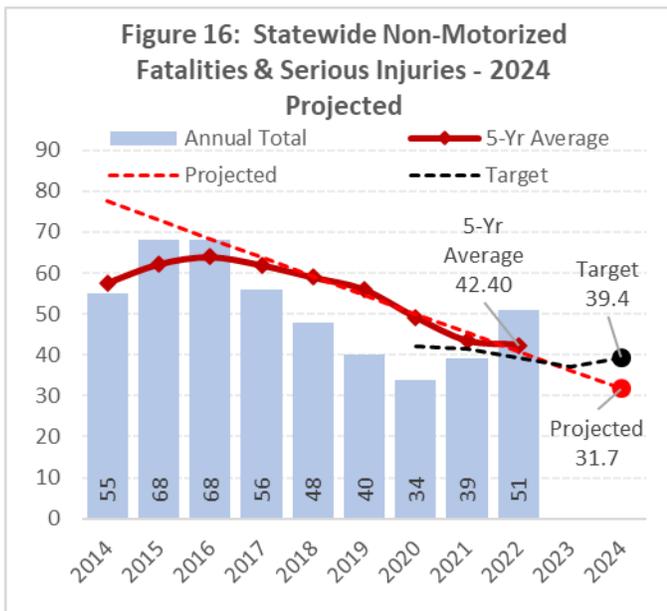


### Non-motorized Fatalities and Serious Injuries

Non-motorized crash data is pulled from FARS and from state crash records. Rates are not established for non-motorized crashes as the overall volume of bicycle and pedestrian travel is unknown. Statewide, non-motorized fatalities and serious injuries continued to be lower than the peaks seen in 2015 and 2017 (**Figures 15 & 16**) however there was an increase from 2020 to 2021. The five-year average continues to decline although the projected 2019-2023 average of 33.2 fatalities and serious injuries is not a viable target. For that reason, NHDOT has established a target of 37.0 non-motorized fatalities and serious injuries. Regionally, there were 6 non-motorized fatalities and serious injuries for the third year in a row however there were more fatalities in 2021 than in either of the first two years (**Figures 15 & 17**). The five-year average declined as well. Using a linear projection, the five-year average for the 2019-2023 period is expected to continue the downward trend to 4.6 non-motorized fatalities and serious injuries per year for the region. This would require an average of 2.5 or less non-motorized fatalities and serious injuries in the region for each of the next two years which is significantly lower than current observed values.

**Figure 15: Non-Motorized Fatalities & Serious Injuries**

Year	New Hampshire			MPO Region			5-Year Rolling Average Non-Motorized Fatalities & Serious Injuries		
	Non-Motorized Crashes			Non-Motorized Crashes			5-Year Period	New Hampshire	MPO Region
	Fatalities	Serious Injuries	Total	Fatalities	Serious Injuries	Total			
2014	16	36	52	0	6	6	2010-2014	51.8	8.4
2015	14	50	64	2	9	11	2011-2015	56.4	9.8
2016	21	20	41	1	10	11	2012-2016	54.2	10.8
2017	15	47	62	0	4	4	2013-2017	55.0	8.8
2018	14	25	39	5	2	7	2014-2018	51.6	7.8
2019	10	27	37	0	6	6	2015-2019	48.6	7.8
2020	11	20	31	1	5	6	2016-2020	42.0	6.8
2021	10	29	39	2	4	6	2017-2021	41.6	5.8
<b>2022</b>	<b>20</b>	<b>31</b>	<b>51</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2018-2022</b>	<b>42.4</b>	<b>2.9</b>

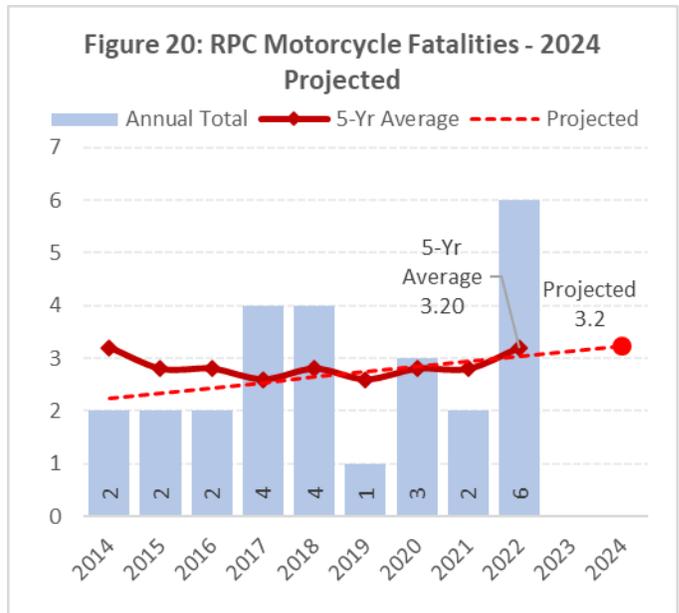
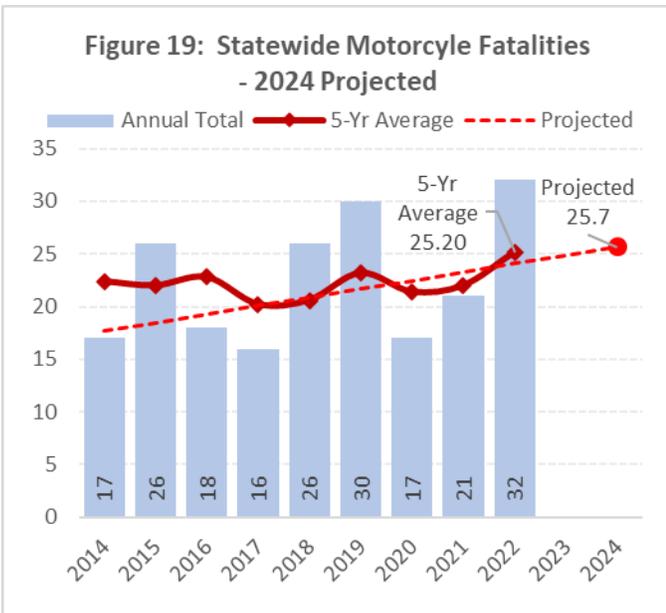


### Motorcycle Fatalities

The FARS dataset provides the data necessary for identifying the total number of motorcycle crash fatalities in New Hampshire (**Figures 18 & 19**) and for the MPO region (**Figures 18 & 20**). No fatalities rates are set as information on motorcycle-specific VMT is not available. The State does not set performance targets for motorcycle fatalities and that data is included for context only. Overall, motorcycle fatalities increased substantially statewide (52%) in 2022 over 2021 numbers to the highest numbers seen since this metric began to be tracked. There were six motorcycle fatalities in the MPO region which is three times the number seen in 2021. The five-year average number of fatalities increased statewide to 22.0 and for the region to 3.2 both of which are the highest averages seen since the metric began being tracked. The projected value for the 2020-2024 five-year period anticipates a increase in fatalities statewide with an expected 25.7 average. At the regional level, the five-year average fatalities are projected to increase to 3.2 however keeping annual totals below three would ensure that the projected increase does not become an actual increase. To meet the proposed target rate for the MPO in 2024 there would need to be zero motorcycle fatalities in 2023 and 2024.

**Figure 18: Motorcycle Fatalities**

	Annual Motorcycle Crash Fatalities		5-Yr Period	5-Year Rolling Average Crash Fatalities	
	New Hampshire	MPO Region		New Hampshire	MPO Region
2014	17	2	2010-2014	22.40	3.20
2015	26	2	2011-2015	22.00	2.80
2016	18	2	2012-2016	22.80	2.80
2017	16	4	2013-2017	20.20	2.60
2018	26	4	2014-2018	20.60	2.80
2019	30	1	2015-2019	23.20	2.60
2020	17	3	2016-2020	21.40	2.80
2021	21	2	2017-2021	22.00	2.80
<b>2022</b>	<b>32</b>	<b>6</b>	<b>2018-2022</b>	<b>25.20</b>	<b>3.20</b>



## MEMORANDUM

To: MPO Technical Advisory Committee  
From: Scott Bogle, Senior Transportation Planner  
Date: December 1, 2023  
**RE: FY2024 Public Transit Agency Safety Targets**

On July 19, 2018 the Federal Transit Administration published the [Public Transportation Agency Safety Plan \(PTASP\) final rule](#) which requires certain transit operators to develop safety plans and implement Safety Management Systems (49 CFR Part 673). The targets deal with four areas of transit safety: Fatalities, Injuries, Safety Events, and System Reliability. The targets are further divided to differentiate between Fixed Route, Demand Responsive and Intercity transit services.

Fatalities	Total number of reportable fatalities and rate per total vehicle revenue miles, by mode
Injuries	Total number of reportable injuries and rate per total vehicle revenue miles, by mode
Safety Events	Total number or reportable events and rate per total vehicle revenue miles, by mode
System Reliability	Mean distance between major mechanical failures, by mode

The RPC MPO is unusual in New Hampshire in that we have two public transportation agencies serving the MPO region: COAST in the Seacoast and the Manchester Transit Authority (MTA) which now operates CART transit service in five communities in western Rockingham County including Salem and Hampstead in the MPO region. MTA adopted its PTASP on February 23, 2021. COAST adopted its most recent update to its PTASP effective November 1, 2023. UNH Wildcat Transit's Route 4 connecting Durham, Newington and Portsmouth also serves the MPO region and is accessible to the public, though as a university transportation system Wildcat Transit is not required to develop a PTASP.

Intercity bus companies that receive operating assistance from the Federal Transit Administration are also required to maintain Public Transit Agency Safety Plan. Boston Express operates commuter and intercity bus service in the I-93 corridor including service to Salem, and receives limited FTA operating support to sustain this operation given its origin as mitigation for Salem-Manchester I-93 highway expansion project. The most recent update to the Boston Express PTASP was adopted on December 28, 2022. While C&J operates similar service in the I-95 corridor and periodically receives capital assistance for fleet replacement the C&J service does not receive FTA operating support so is not required to develop a PTASP. With the recent adoption of updated safety targets by COAST, the RPC MPO is updating our regional transit safety targets in conjunction with our Highway Safety Improvement Program (HSIP) targets.

**Requested Action:**

*Staff ask MPO Technical Advisory Committee members to review the attached MPO FY2024 Public Transit Safety Targets and, following discussion at the December 7<sup>th</sup> TAC meeting, vote to recommend adoption of the targets by the MPO Policy Committee at their meeting on December 13<sup>th</sup>.*

With questions in advance of the meeting contact Scott Bogle at [sbogle@therpc.org](mailto:sbogle@therpc.org) or 603-512-4456.

# Rockingham Planning Commission

## Regional Public Transportation Safety Performance Targets

*December 1, 2023*

### Background

On July 19, 2018 the Federal Transit Administration published the [Public Transportation Agency Safety Plan \(PTASP\) final rule](#) which requires certain transit operators to develop safety plans and implement Safety Management Systems (49 CFR Part 673). The initial rule required compliance for transit agencies July 20, 2020; however this deadline was extended to December 31, 2020 with MPOs provided another 180 days to implement regional transit safety targets based on the PTASPs. The targets address four aspects of transit safety: Fatalities, Injuries, Safety Events, and System Reliability. Separate targets for each of these four areas are required for fixed route transit services and for demand responsive transit services.

Safety Category	Performance Measure
<b>Fatalities</b>	Total Number of reportable fatalities
	Rate of fatalities per 500,000 Vehicle Revenue Miles
<b>Injuries</b>	Total number of reportable injuries
	Rate of injuries per 500,000 Vehicle Revenue Miles
<b>Safety Events</b>	Total number of reportable events
	Rate of safety events per 500,000 Vehicle Revenue Miles
<b>System Reliability</b>	Distance between major mechanical failures

For Fatalities, Injuries and Safety Events targets are set for the actual number of projected incidents as well as for incidence rate. The denominator for the rate measure is Vehicle Revenue Miles (VRM) and is up to individual transit agencies to set. COAST’s safety plan uses 100,000 miles in its rate calculations while MTA’s plan uses 500,000 miles. For MPO regional targets, rates are calculated per 500,000 miles.

A “safety event” is an event that occurs on a transit right-of-way or infrastructure, at a transit revenue facility, at a maintenance facility or rail yard, during a transit related maintenance activity, or involving a transit revenue vehicle that includes, but is not limited to: 1) A fatality confirmed within 30 days; 2) an injury requiring transport away from the scene for medical attention; 3) a serious injury; or 4) substantial property damage to facilities equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

### Target Development

The RPC MPO developed targets by reviewing the data for the two public transit providers in the region: Manchester Transit Authority and the Cooperative Alliance for Seacoast Transportation (COAST). The Manchester Transit Authority (MTA) most recently updated its Public Transit Agency Safety Plan on February 23, 2021, including its safety performance targets for FY2021. COAST updated its PTASP in November 2023 with its safety targets for FY2024. The University of New Hampshire Wildcat Transit system, as a university transportation system, is not required by the Federal Transit Administration (FTA) to develop a PTASP or safety targets and is not incorporated into the MPO targets. Separate targets are also included for Intercity Bus based on the PTASP developed by Boston Express which operates commuter and intercity bus service in the I-93

corridor and receives limited FTA operating support to sustain this operation given its origin as mitigation for Salem-Manchester I-93 highway expansion project. While C&J operates similar service in the I-95 corridor the C&J service does not receive FTA operating support so is not required to develop a PTASP.

**COAST Safety Performance and Targets**

	Performance Measure	FY2022 Performance	FY2023 Target	FY2023 Performance	FY2024 Target
<b>Fixed Route</b>	Fatalities - Total	0	0	0	0
	Fatalities - Rate	0	0	0	0
	Injuries - Total	0	0	1	0
	Injuries - Rate	0	0	0.85	0
	Safety Events - Total	1	0	0	0
	Safety Events - Rate	0.85	0	0	0
	System Reliability	16,130	17,000	13,053	17,000
<b>Demand Response</b>	Fatalities - Total	0	0	0	0
	Fatalities - Rate	0	0	0	0
	Injuries - Total	0	0	2	0
	Injuries - Rate	0	0	4.8	0
	Safety Events - Total	0	0	0	0
	Safety Events - Rate	0	0	0	0
	System Reliability	40,815	50,000	104,270	100,000

**MTA Safety Performance and Targets**

	Performance Measure	Current Target
<b>Fixed Route</b>	Fatalities - Total	0
	Fatalities - Rate	0
	Injuries - Total	2
	Injuries - Rate	1.6
	Safety Events - Total	17
	Safety Events - Rate	13.85
	System Reliability	30,460
<b>Demand Response</b>	Fatalities - Total	0
	Fatalities - Rate	0
	Injuries - Total	1
	Injuries - Rate	2.75
	Safety Events - Total	7
	Safety Events - Rate	19.55
	System Reliability	13,764

Notes: Rates for both agencies are expressed per 500,000 Vehicle Revenue Miles (VRM)

**Boston Express Safety Performance and Targets**

	Performance Measure	FY2022 Target	FY2022 Performance	Current Target
<b>Intercity Bus</b>	Fatalities - Total	0	0	0
	Fatalities - Rate	0	0	0
	Injuries - Total	5	2	1.8
	Injuries - Rate	2.4	1.41	1.27
	Safety Events - Total	9	11	9.9
	Safety Events - Rate	4.3	7.76	6.98
	System Reliability	32,658	354,259	425,110

Notes: Rates for both agencies are expressed per 500,000 Vehicle Revenue Miles (VRM)

Calculation of regional targets for each measure was based on the assessment of baseline data and established targets for the two public transit agencies. Regional baseline and target calculations will be updated as part of the RPC Long Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP) update processes going forward.

Prior to 2023 the MTA provided only Demand Response transportation in the MPO region in the form of the former Greater Derry-Salem CART transit system that merged into MTA in late 2019. Beginning in 2023 MTA/CART operates a regional fixed route service connecting the new Tuscan Village development in Salem, the new Woodmont Commons development in Londonderry and downtown Manchester; so Fixed Route targets for the MPO region now incorporate both COAST and MTA/CART targets. Based on performance in FY2022 and FY2023, these project zero fatalities, up to two injuries and up to 17 safety events for FY2024, and an average distance between mechanical failures of 23,730 miles for System Reliability.

Regarding Demand Response service targets, COAST has established targets of zero fatalities, zero injuries and zero safety events for demand response service based on performance in FY2022 and FY2023. MTA projects targets of one Injury and seven Safety Events for their Demand Response service.

Intercity fixed-route service is very different from fixed route regional public transit, with many fewer stops and most revenue miles traveled on interstate highway with fewer opportunities for collision. Because of this, the Boston Express safety targets are not averaged in with COAST Fixed Route targets but rather separated into a third category of Intercity Bus safety targets. These include goals to maintain zero fatalities, up to two injuries, reducing the injury rate per 500,000 VRM by 10% to 1.27, and no more than ten reportable safety events for a rate of 6.98 per 500,000 VRM (a 10% reduction from FY2021). Boston Express’ target for average distance between mechanical failures for FY2023 is 425,110 vehicle revenue miles, representing a 20% improvement over FY2021.

MPO targets for Fatality, Injury and Safety Event rates for both Fixed Route and Demand Response transit service are derived by adding together anticipated vehicle revenue miles for the two public transportation agencies (COAST and MTA) as the denominator; with combined Injuries, and combined Safety Events as the numerators for the respective rate measures. This yields an MPO Regional Target for Injury Rate on Fixed Route

transit of 0.86 per 500,000 miles, and a Safety Event rate of 2.4 per 500,000 miles. For a System Reliability the averaged target is 23,730 miles between mechanical failures. For Demand Response service the MPO Regional Target for Injury Rate is 1.28 per 500,000 miles, and a Safety Event rate of 8.97 per 500,000 miles. For a System Reliability the averaged target is 56,882 miles between mechanical failures.

Because Boston Express is the sole provider of Intercity Bus service that is required to develop a PTASP in the MPO region, their safety targets are proposed as MPO targets.

**Proposed Rockingham Planning Commission MPO Transit Safety Targets for FY2024**

	Performance Measure	COAST FY2024 Target	MTA Current Target	RPC MPO FY2024 Target
<b>Fixed Route</b>	Fatalities - Total	0	0	0
	Fatalities - Rate	0	0	0
	Injuries - Total	0	2	2
	Injuries - Rate	0	1.6	0.84
	Safety Events - Total	0	17	17
	Safety Events - Rate	0	13.85	2.40
	System Reliability	17,000	30,460	23,730
<b>Demand Response</b>	Fatalities - Total	0	0	0
	Fatalities - Rate	0	0	0
	Injuries - Total	0	1	1
	Injuries - Rate	0	2.75	1.28
	Safety Events - Total	0	7	7
	Safety Events - Rate	0	19.55	8.97
	System Reliability	100,000	13,764	56,882
<b>Intercity Bus</b>	Fatalities - Total			0
	Fatalities - Rate			0
	Injuries - Total			1.8
	Injuries - Rate			1.27
	Safety Events - Total			9.9
	Safety Events - Rate			6.98
	System Reliability			425,110