

## Strafford Metropolitan Planning Organization Technical Advisory Committee Meeting

Friday January 6, 2023 from 9:00am - 10:30am

Location: Conference Rm 1A, SRPC Office (Remote access via Zoom)

In accordance with RSA 91:A, the Commission requires a minimum of an in-person quorum. To organize this, the Commission staff will confirm the necessary in-person attendance. It is the preference of the Commission that others participate via Zoom, however, guests may attend the meeting at the SRPC Office. All participants, both in-person and virtual, can communicate contemporaneously. View the remote access information below.

**Meeting Link:**

<https://us02web.zoom.us/j/83483049101?pwd=RW9oK2xQRzJDbkdoYTVzVzZGNDNhZz09>

**Meeting ID:** 834 8304 9101

**Telephone-only Access:** +1 646 558 8656

These instructions have also been provided at [www.trafford.org](http://www.trafford.org). If anybody is unable to access the

| Agenda Item   | Time    | Pre-Meeting Task/Notes  |
|---|---------|---|
| 1) Introductions  | 5 mins  |   |
| 2) Action Items<br>a) Minutes from November 4, 2022<br>b) Performance Target Setting<br>- Highway Safety<br>- Transit Safety and Assets | 30 mins | a) Review draft minutes in packet<br>b) Review target setting memos |
| 3) Discussion Items<br>a) 2023-2026 Transportation Improvement Program<br>b) 2024-2025 Unified Planning Work Program development        | 45 mins | Review meeting prep memo. Presentation to be made at the meeting.   |
| 4) Other Business & Community Updates   | 10 mins |   |
| 5) Citizen's Forum  |         |   |
| 6) Adjourn  |         |   |

Reasonable accommodations for people with disabilities are available upon request. Include a detailed description of the accommodation you will need along with your contact info. Please make your request as early as possible; allowing at least 5 days advance notice. Last minute requests will be accepted but may be impossible to fill. Please call (603) 994-3500 or email [srpc@strafford.org](mailto:srpc@strafford.org).



## **RULES OF PROCEDURE**

*Strafford Regional Planning Commission  
Strafford Metropolitan Planning Organization, and  
Strafford Economic Development District*

### **Meeting Etiquette**

Be present at the scheduled start of the meeting.

Be respectful of the views of others.

Ensure that only one person talks at a time. Raising your hand to be recognized by the chair or facilitator is good practice.

Do not interrupt others or start talking before someone finishes.

Do not engage in cross talk.

Avoid individual discussions in small groups during the meeting. When one person speaks, others should listen.

Active participation is encouraged from all members.

When speaking, participants should adhere to topics of discussion directly related to agenda items.

When speaking, individuals should be brief and concise when speaking.

The Strafford Regional Planning Commission & Metropolitan Planning Organization holds both public meetings and public hearings.

For public meetings, guests are welcome to observe, but should follow proper meeting etiquette allowing the meeting to proceed uninterrupted. Members of the public who wish to be involved and heard should use venues such as Citizen Forum, Public Hearings, Public Comment Periods, outreach events, seminars, workshops, listening sessions, etc.



## MEMO

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TAC meeting prep memo  
January 6, 2023

### Agenda Item Summaries

#### Performance Target Setting

Strafford MPO is required to set quantitative targets for several performance measures. Targets for three performance areas will be updated and included as part of the updated 4-year Transportation Improvement Program: highway safety, public transit safety, and public transit asset conditions. There are detailed memos in the meeting packet on each of the following performance target areas:

There are five highway safety targets for all public highways in the region:

1. *Number of Fatalities*
2. *Rate of Fatalities*
3. *Number of Serious Injuries*
4. *Rate of Serious Injuries*
5. *Number of Non-Motorized Fatalities and Non-motorized Serious Injuries*

There are seven targets related to passenger safety on federally funded public transit vehicles:

1. Number of Fatalities
2. Rate of Fatalities
3. Number of Injuries
4. Rate of Injuries
5. Number of Safety Events
6. Rate of Safety Events
7. System Reliability

There are three target categories related to federally funded public transit assets:

1. Rolling stock (revenue-generating vehicles that transport fare-paying customers)
2. Equipment (non-revenue vehicles that support transit operations)
3. Facilities (buildings and parking lots)

#### 2023-2026 Transportation Improvement Program (TIP)

The TIP contains all federally funded projects in-process in the Strafford region of the next four years. Strafford MPO works with NHDOT and the three other MPOs to update the TIP every two years. This includes adding new projects, removing projects that have been completed, updating funding information (including public transit), and ensuring that federal funds are fiscally constrained over the four-year period. Updates to the TIP also require an update to the Strafford MPO's Metropolitan Transportation Plan (MTP), which considers the



next 20 years of transportation projects and planning. When the TIP is updated, all projects programmed in the TIP through the last year of the MTP shift forward two years and get updated financial information.

A more details will be provided at the meeting.

2024-2025 Unified Planning Work Program development (UPWP)

The UPWP is a comprehensive program of all transportation-related tasks to be completed over the next two years. Strafford MPO is in the process of preparing the next UPWP with NHDOT which will cover state fiscal years 2024 and 2025 (beginning July 1<sup>st</sup> of calendar year 2023). Staff will be meeting with NHDOT in the next few weeks to discuss draft updates. Staff will provide a summary of the updates and major projects anticipated for that two year period,

Strafford Metropolitan Planning Organization  
Joint Meeting of the Technical Advisory & Policy Committee  
Meeting Notes  
Friday, November 4, 2022  
9:00 – 10:30 AM  
Strafford Regional Planning Commission  
Rochester, NH

## 1. Introductions

**At 9:07 am, Policy Chair Dave Landry asked for introductions.**

**TAC members attending in person:** Vanessa Price, Barrington; April Talon, Durham; Lyndsay Butler, Newmarket; Michael Williams, COAST; Jill Semprini, Dover; Glenn Davison, DOT; Bruce Woodruff, Milton; Marshall Goldberg, Brookfield; Michelle Mears, Somersworth.

**Policy members attending in person:** William Fisher, Farmington; Don Hamann, Rochester; Barbara Holstein, Rochester; Joe Boudreau, Rochester; Mike Williams, COAST; Glen Davison, DOT; Dawn Genes, Lee; Larry Brown, Milton; Karen Golab, Milton; Dave Landry, Dover; Mark Richardson, Somersworth.

**TAC members attending remotely:** Steve Pesci, UNH; Tim White, DES; Katrin Kasper, Lee; Kim Rummo, DOT; Bill Watson, DOT; Richard Reine, Durham; Donna Benton, Dover; Bart McDonough, Newmarket. Shanna Saunders, Rochester

**Policy members attending remotely:** Peter Nelson, Newmarket; Steve Pesci, UNH; Wayne Burton, Durham; Tim White, DES; Katrin Kasper, Lee; Kim Rummo, DOT; Bill Watson, DOT;

**Guests attending remotely:** Greg Bakos, VHB; Jason Plourde, VHB

**Staff attending in person:** Jennifer Czysz, Colin Lentz,

**Staff attending remotely:** Megan Taylor-Fetter, Jackson Rand, Rachel Dewey, Stephen Geis,

## 2. The TAC portion of the meeting convened: Review designs and cost estimates for candidate projects and discuss project ranking.

Greg Bakos and Jason Plourde of VHB presented a review of the candidate projects, and their cost estimates for consideration for inclusion in the Ten Year Plan (TYP). Maps of the project areas were shared.

After each project review, members were given the opportunity for questions and discussion:

The whole group reviewed and discussed candidate projects with explanations from VHB staff.

Municipalities prioritized various design alternatives on their local projects.

- **Durham Point Road**

A. Talon shared that Durham Point Road serves as an emergency detour by-pass. W. Burton spoke about the multiple incidents that occur on Durham Point Road. He read a Resolution from the Durham Town Council asking that SRPC, TAC, Policy and NHDOT recognize the importance of the project and urge inclusion of project in the TYP. The resolution included what was needed and reasons why the project is important. S. Pesci reiterated the importance of the project.

- **NH Route 155A/Main Street Intersection, Durham**

W. Watson: Do the costs reflect inflation or the 10% indirect cost? How would the group propose funding Durham Point Road. It is not a federal road. Estimated on 2022 dollars.

B. McDonough asked if additional signage has been considered and why a roundabout. Safer. Other advantages-good capacity, free flow off hours, less idling. Steve Pesci stated that UNH has always promoted a roundabout. Roundabouts are designed to accommodate emergency vehicles.

- **Lee NH route 155/George Bennett Road/Lee Hook Road intersections**

C. Bakos explained that the need for this project revolves around safety. Concerns discussed included the four way stop and visibility of the stop signs. Alternate options were considered but this option was found to be the best considering all variables.

- **Lee NH 155 Town Center Shared Use Path**

Concerns included where the storm water would be directed, the area proposed for stormwater runoff is a bog that is on the NH National Heritage Bureaus list. Option 3 would be much more cost effective. One suggestion was to create a series of small culverts to go under the path.

- **Newmarket NH Route 108/NH Route 152 Intersection**

This project would need to go through an intensive public project. Concerns for this project included how it would impact businesses, and that Gerry Avenue would not be eligible for federal funds and consideration of maintenance.

- **Somersworth West High Street, Maple Street, and Sunset Drive Intersection**

There is a high level of pedestrian crossing including high school students. Two options have been proposed, the second being a roundabout.

- **Somersworth Complete Streets project**

Michelle Mears presented this project.

J. Czysz distributed an updated list of project costs including inflation numbers. She explained that the inflation is out ten years at 2.8%. G. Davison reported that DOT only funds 80% of what is on the spreadsheet.

The members discussed funding and the lower cost alternatives.

M Williams motioned for TAC to recommend all projects with the 2 lower cost alternatives to the Policy Committee: Somersworth A, Newmarket A, Lee A-1, Lee B, Somersworth B1, Durham A & B. Marshall Goldberg seconded the motion.

Discussion: S. Pesci stated that with further fine tuning, he is hopeful that the Durham roundabout could be a possible project. Roundabout is CMAQ LOI eligible. W. Burton reiterated that the DPR project is critical; could be reevaluated.

A roll call vote was taken: V. Price, A. Talon, L. Butler, M. Mears, M. Williams, J. Semprini, G. Davison, M. Goldberg, B. woodruff, S. Pesci, T. White, K. Kasper, voted in favor. Motion Passed with a unanimous vote in favor.

The Tac portion of the meeting adjourned.

### **3. Convene Policy Committee: Review and discuss the list of projects recommended by TAC**

The group held a brief discussion on the recommended list by TAC and agreed the order will remain the same for now.

With a motion by B. Holstein to proceed with the list of projects as recommended by TAC and seconded by D. Hamann, a roll call vote was taken: B. Fisher, D Hamann, B. Holstein, J. Boudreau, MM Williams, G, Davison, D, Genes, L. Brown, K. Golab, D. Landry, .M. Richardson. The motion passed with a unanimous vote in favor.

Time White announced he is retiring from DES December 1. He said it has been a pleasure to serve as a member of MPO and TAC. The members wished him all the best and thanked him for his valuable contributions to the Committee.

B. Holstein motioned to adjourn seconded by B. Fisher. All in favor meeting adjourned.

## PROPOSED 2023 SAFETY PERFORMANCE TARGETS AND METHODOLOGY

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Strafford Regional Planning Commission

February 17, 2023

### BACKGROUND

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 31st 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 (NHDOS), and Metropolitan Planning Organizations, as well as the specific planning efforts of the State Strategic Highway Safety Plan (SHSP), 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 five factors related to highway safety:

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. Data for the establishment of these measures come 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.
  - State Motor Vehicle Crash Database: Data collected and maintained by the NH Department of Safety is utilized to determine the number of serious injuries in





the state. This is based on the Federal Model Minimum Uniform Crash Criteria (MMUCC, 4th Edition).

- Highway Performance Monitoring System (HPMS): State Vehicle Miles Traveled (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. SRPC contributes roughly 9% of the statewide VMT.

The process for collecting and analyzing crash data is lengthy and complex and it has an impact on the target setting timeline. Crashes are responded to and reported on by local police officers; most crash reports in NH are submitted on paper forms that must be entered into the state database. All crash reports are due to NHDOS by the end of each calendar year. As noted elsewhere in this report, if a people person dies as a result of crash-related injuries within 30 days of the crash, an update crash report must be resubmitted. This lag in data access means that NHDOT does not have complete crash data to calculate their performance from the previous year until late spring/early summer. 2021 is the most recent complete year of crash data that has been reviewed and compiled. MPOs are also required to set targets for the same calendar year as NHDOT.

## **TARGET DEVELOPMENT**

States establish HSIP targets and report them for the upcoming calendar year in the HSIP annual report that is submitted to FHWA by August 31st 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. 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 Highway Safety Plan 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. Five performance measures trends were established based on crash and volume data from 2007 to the present. Five year rolling averages were developed from these values and utilized to project trends used to set targets for 2023.

## Data Impacts

The 2020 calendar year saw significant impacts from the COVID-19 pandemic, especially in transportation. Due to shutdowns in response to COVID-19, traffic volumes were lower in 2020 than in recent years. Despite the lower traffic volumes, the number of fatalities stayed consistent with 2019. If not for the reduction of traffic, the number of fatalities might have been higher in 2020. Traffic volumes returned to average levels following widespread pandemic-related shutdowns but the continuing pandemic may have long-term impacts on highway safety trends.

## State Targets

The tables on the following pages show the data supporting the targets for the five required measures as well as a graph showing the state targets for 2023. Detailed graphs of statewide data used to develop five-year rolling averages in each target category are displayed on the following pages.

| Safety Performance Measures and Targets Summary |       |                         |       |       |       |       |       |        |              |
|---|-------|-------------------------|-------|-------|-------|-------|-------|--------|--------------|
|   |       | 5-Year rolling averages |       |       |       |       |       | 2022   | 2023         |
|   |       | 2016                    | 2017  | 2018  | 2019  | 2020  | 2021  | Target | Target       |
| Fatalities                                      | State | 118                     | 117   | 119   | 120   | 118.0 | 120   | 117.8  | <b>111.6</b> |
|   | SRPC  | 14.4                    | 15.8  | 14.8  | 13.6  | 13.2  | 13.2  |        |              |
| Fatality Rate                                   | State | .900                    | .881  | .885  | .884  | 0.884 | .884  | .874   | <b>.857</b>  |
|   | SRPC  | 1.223                   | 1.328 | 1.225 | 1.117 | 1.110 |       |        |              |
| Serious Injuries                                | State | 499.8                   | 457.2 | 449.6 | 456.4 | 465.4 | 456.4 | 465.4  | <b>466.4</b> |
|   | SRPC  | 72.8                    | 63.2  | 61    | 54.4  | 54.2  | 50.2  |        |              |
| Serious Injury Rate                             | State | 3.825                   | 3.4   | 3.3   | 3.4   | 3.5   | 3.4   | 3.5    | <b>3.5</b>   |
|   | SRPC  | 6.2                     | 5.3   | 5.1   | 4.5   | 4.5   |       |        |              |
| Non-motorized fatalities + serious injuries     | State | 54.2                    | 55    | 51.6  | 48.6  | 42    | 45.9  | 38.0   | <b>37.0</b>  |
|   | SRPC  | 9                       | 8.2   | 9     | 8.2   | 7.4   | 6.9   |        |              |

**Note: SRPC supports the state safety targets but this does not mean the statewide number is acceptable for the region. SRPC will continue working with NHDOT to address highway safety issues in the region in support of statewide performance improvements.**

## **MPO Targets**

For 2023, Strafford MPO staff are recommending that the MPO support the State of New Hampshire HSIP Targets in all five mandated areas. This does not mean that the statewide number and rate of fatalities and injuries is acceptable for the region. Crash locations are largely random and driven by driver behavior. The unpredictable nature of crashes means that regional crash rates are variable. Strafford MPO calculates a regional proportion of crashes for each year in each target area by dividing the number of crashes that occur in the region by the statewide total. For example, in 2021 there were a total of 118 fatalities statewide; 18 of those were in the Strafford MPO region, which is 15% of the statewide total.

In supporting the state targets, the MPO will :

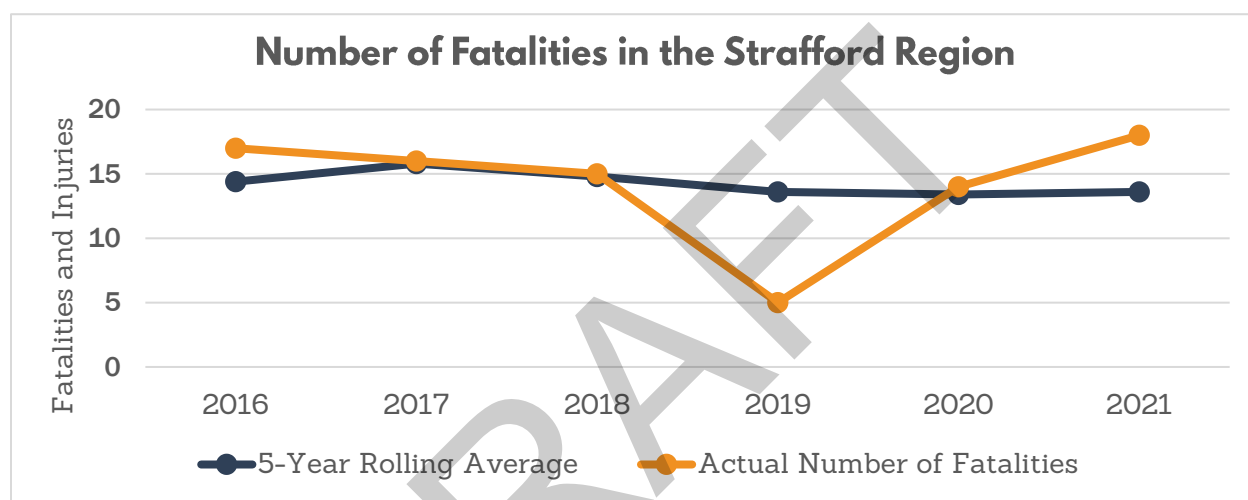
- Conduct regional analysis to identify highway safety hazards and work with the State and safety stakeholders to address areas of concern for fatalities or serious injuries within the region.
- Coordinate with the State and incorporate safety performance measures and targets Metropolitan Transportation Plan and Transportation Improvement Program. This includes more specific description of the anticipated effect of programmed or proposed projects in achieving safety targets and improving safety outcomes.
- Integrate goals, objectives, performance measures, and targets described in other applicable State transportation safety plans and processes into the MPO planning process.

## **Number of Fatalities**

Fatal crashes are reported to the federal Fatal Analysis Reporting System (FARS) database every year. This database is used to calculate the number of fatalities measure. This measure is the five-year rolling average and targets are based on a minimum five-year trend line. Five-year rolling averages are used to smooth the trend line. They allow for years with exceptionally high or low numbers of severe or fatal crashes without significantly skewing the overall trend line. Rolling averages can still be affected when unusual years are added or lost. 2019 saw a sharp decrease in the number of fatalities in the region. This will draw the rolling average down but could be reversed if fatalities spike in future years. The total number of fatalities in NH for 2022 has the potential to change. Anyone who dies within 30 days of a crash because of injuries sustained in that crash will be included in the final 2022 total.

SRPC will support the 2023 state target for this measure and will work to keep fatalities in the region at or below 12% of the statewide total.

| Year | State      |                | SRPC       |                |
|------|------------|----------------|------------|----------------|
|      | Fatalities | 5-year average | Fatalities | 5-year average |
| 2016 | 136        | 119.8          | 17         | 14.4           |
| 2017 | 102        | 117.8          | 16         | 15.8           |
| 2018 | 147        | 114.2          | 15         | 14.8           |
| 2019 | 101        | 117.3          | 5          | 13.6           |
| 2020 | 104        | 107.3          | 14         | 13.4           |
| 2021 | 118        | 111.0          | 18         | 13.6           |



### Number of Serious Injuries

The New Hampshire Division of Motor Vehicles in the Department of Safety maintains a database of crashes in the state. This is the data source for the serious injury measures. A serious injury is one that incapacitates any person involved. These include severe lacerations, broken or distorted limbs, skull fractures, crushed chest, internal injuries, unconsciousness, and any inability to leave the scene without assistance.

This data is collected on the scene of each crash by the responding police officers. These crash reports may be filled out on paper or electronically, and on varying versions of the form. The data is then sent to the state and manually entered into the database. Early versions of the data might be distributed, and updates did not necessarily make it to everyone with access to the data.

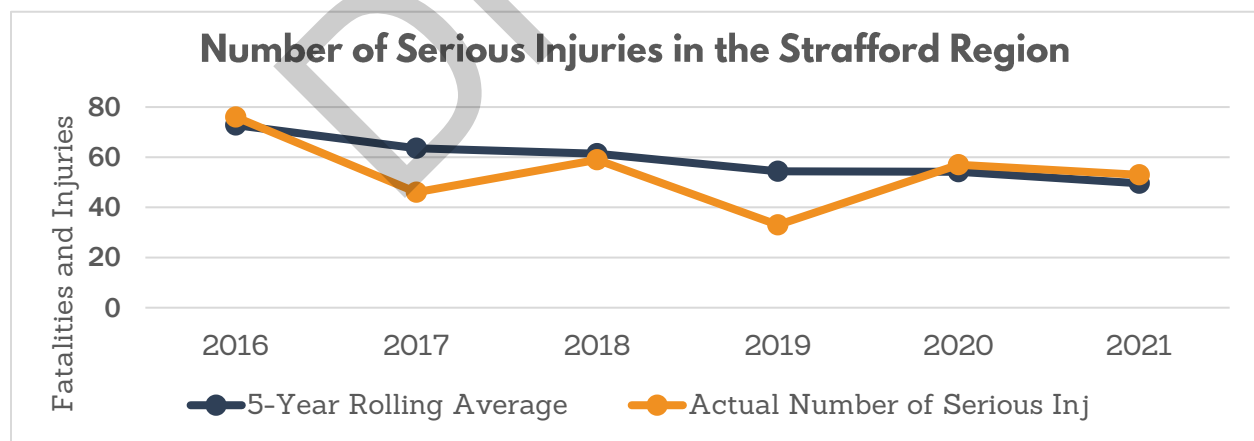
In 2017, the state launched a new database called VISION to house the crash data. VISION is a more consistent and comprehensive database that has improved the data

management for the crash data. It is stricter in what is allowed to be reported as a serious injury, and allows for more seamless data distribution. As a result, there was a notable decrease in the serious injury totals in 2017 and 2018. It is assumed that this trend will continue.

Due to consistency and accuracy concerns with the data pre-2017, it was difficult to set realistic targets on the existing data that the MPOs have access to. The state set targets based on the current data at DOS, but the data provided to the MPOs prior to 2017 showed much higher injury numbers because of inconsistencies in reporting. With state database and reporting improvements, has been decreasing in recent years as the 2016 data is no longer included in the five-year rolling average.

SRPC will support the 2022 state target for serious injuries and will work to keep the number of serious injuries at or below 13% of the statewide total.

| Year | State      |                | SRPC       |                |
|------|------------|----------------|------------|----------------|
|      | Fatalities | 5-year average | Fatalities | 5-year average |
| 2016 | 477        | 456.4          | 76         | 72.8           |
| 2017 | 410        | 465.4          | 46         | 63.6           |
| 2018 | 451        | 466.4          | 59         | 61.4           |
| 2019 | 485        | 480.5          | 33         | 54.4           |
| 2020 | 504        | 490.3          | 57         | 54.2           |
| 2021 | 482        | 493.0          | 53         | 49.6           |



Rate of fatalities and Rate of serious injuries

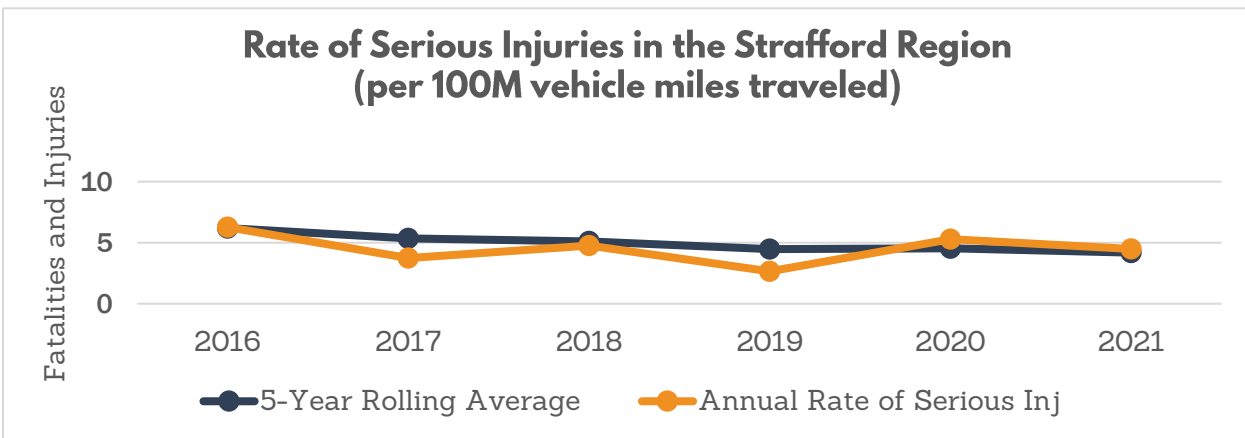
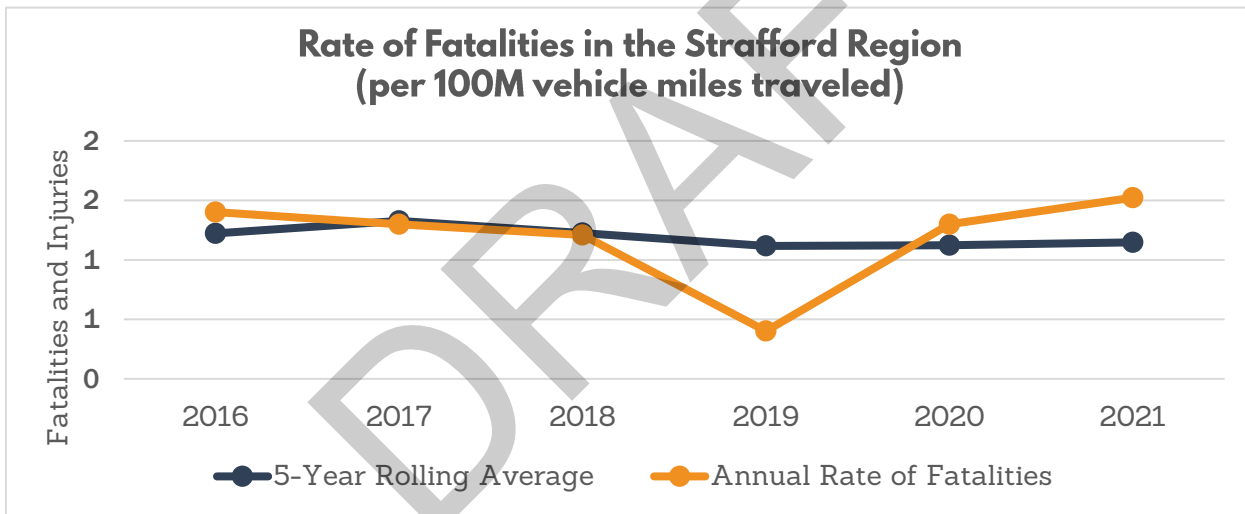
The rate of fatalities and the rate of serious injury measures combine their respective crash data with the vehicle miles traveled (VMT) data from the Highway Performance Monitoring System (HPMS). The NHDOT has calculated regional shares of VMT for the MPOs to use in these calculations.

The rate of fatalities is calculated by dividing the number of fatalities by the VMT. Similarly, the rate of serious injuries is calculated by dividing the serious injuries by the VMT. SRPC's rate of fatalities and rate of serious injuries are both generally a bit higher than the state rates. This is because on average, the regional share of VMT is less than the regional share of fatalities and serious injuries.

| SRPC Average Annual Shares |                  |     |
|----------------------------|------------------|-----|
| Fatalities                 | Serious Injuries | VMT |
| 12%                        | 13%              | 9%  |

*12% of state total fatalities*  
*9% of state VMT*

SRPC will support the state targets for 2023 for both measures.

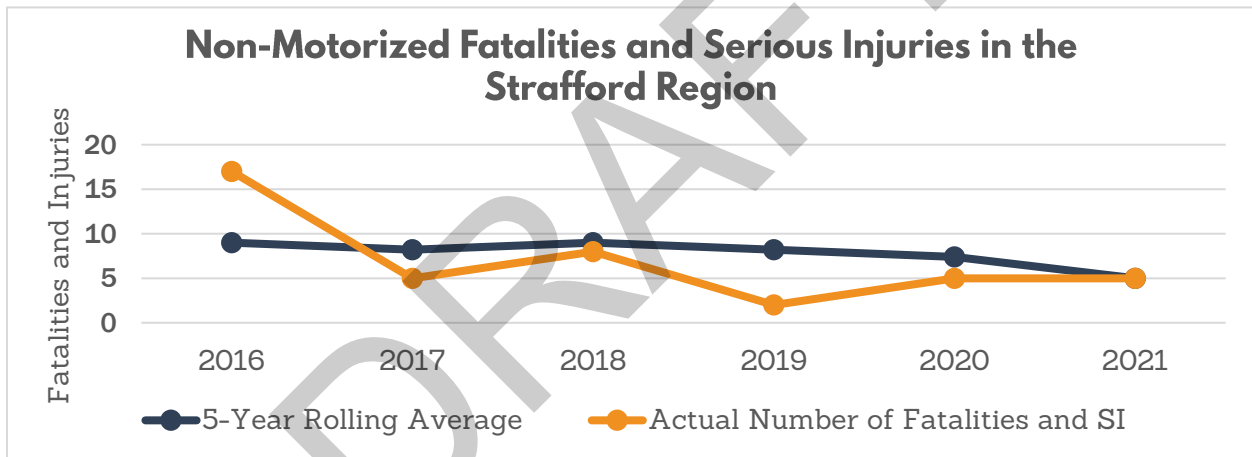


Number of Non-Motorized Fatalities and Serious Injuries

The non-motorized fatalities and serious injuries measure is the sum of the individuals who were killed or seriously injured while outside of a motor vehicle. This measure includes pedestrians and bicyclists.

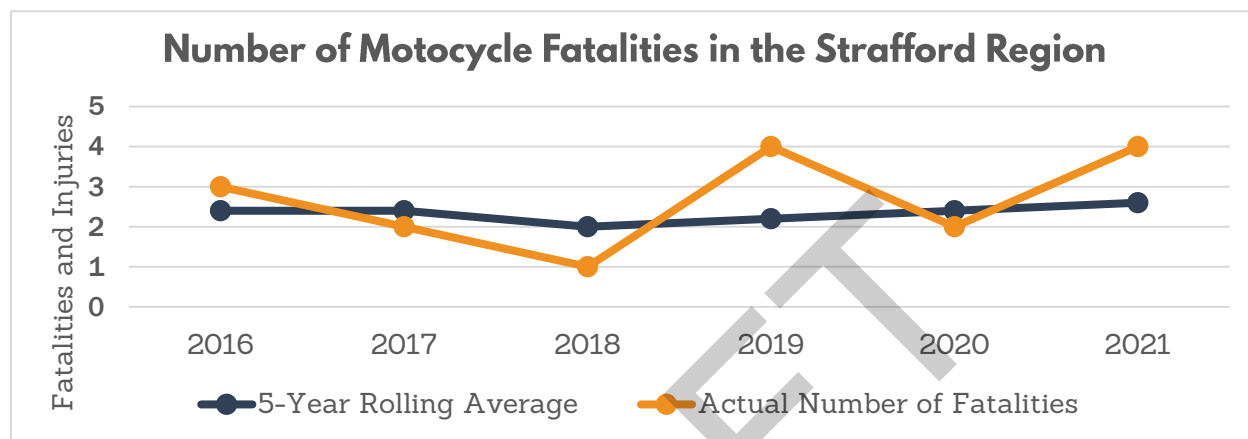
As with most crashes, the locations for non-motorized crashes are random. SRPC has seen anywhere from 0-33% of the statewide non-motorized fatalities and anywhere from 6-37% of the serious injuries since 2007. In 2016, SRPC had 3 non-motorized fatalities (21% of the state total that year), and 6 serious injuries (12% of the state total). In 2019, SRPC had 0 non-motorized fatalities and 2 (of the 30 statewide) serious injuries.

Due to the wild fluctuation in these numbers, SRPC will support the state on this measure.



### Supplemental Measure: Motorcycle Fatalities

Motorcycles are popular in NH, so Strafford MPO tracks the number of motorcyclists killed on public roads. This is not required by federal law so motorcycle fatalities are supplemental data.



### Emerging Trends

There are several notable issues and trends that may affect future safety performance and warrant monitoring:

- New Hampshire remains the only state without an adult seatbelt law. Past legislative efforts to introduce a primary seatbelt law have all failed but could be expected to improve safety performance.
- Marijuana legalization: Recreational marijuana is not yet legal in New Hampshire but is legal in New Hampshire's three abutting states and the Province of Quebec. Legalization of marijuana in New Hampshire could be expected to worsen safety performance, as has been seen in other states.
- Opioid addiction: Impaired driving continues to be a principal contributor to fatal and serious injury crashes. The ongoing opioid crisis within New Hampshire and the Northeast will continue to pose a hazard to highway safety and can be expected to worsen safety performance.
- COVID-19 Pandemic: The full scale of impacts from the 2020 pandemic cannot be fully determined yet. The massive economic downturn resulted in much lower VMT, but the number of crashes did not decrease significantly.



## Summary

SRPC will support the state for all five safety performance measures for 2023. In supporting the state targets, SRPC will work to achieve the following benchmarks for the Strafford MPO area:

- keep fatalities at or below 12% of the state total (approximately 13 fatalities);
- keep serious injuries at or below 13% of the state's total (approximately 59 serious injuries);
- and non-motorized fatalities and serious injuries should stay at or below 15% of the state's total (approximately 6 fatalities or serious injuries).

As the MPOs and NHDOT adapt to a performance-based approach, measures and targets will be more fully integrated into processes and programs. Safety is a primary goal for the Strafford MPO and staff strive to achieve targets and goals through multiple strategies:

- Conduct regional analysis to identify highway safety hazards and work with the State and safety stakeholders to address areas of concern for fatalities or serious injuries within the region
- Coordinate with the State and incorporate safety performance measures and targets Metropolitan Transportation Plan and Transportation Improvement Program. This includes more specific description of the anticipated effect of programmed or proposed projects in achieving safety targets and improving safety outcomes
- Collaborate with local and state law enforcement to improve safety data management and access for analysis
- Integrate goals, objectives, performance measures, and targets described in other applicable State transportation safety plans and processes into the MPO planning process
- Work with municipalities, NHDOT, and FHWA to develop comprehensive Local Road Safety Plans that lay out a strategic and proactive approach to improving safety
- Conduct more detailed analysis of road geometry to identify hazards before they result in a fatality or serious injury (e.g. intersections that have a "Y" shape rather than a "T" shape)

# Public Transportation Agency Safety Plan

## FTA Performance Measures & MPO Targets

On July 19, 2018, the Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule.

The PTASP rule became effective on July 19, 2019. The PTASP rule requires transit operators in urbanized areas and metropolitan planning organizations to adopt performance targets for the following federally required public transportation safety measures:

1. Number of Fatalities
2. Rate of Fatalities\*
3. Number of Injuries<sup>1</sup>
4. Rate of Injuries\*
5. Number of Safety Events
6. Rate of Safety Events
7. System Reliability\*\*

\*Rate Targets are based on incidents per 500,000 Vehicle Revenue Miles.

\*\*System Reliability targets are based on the mean distance (number of miles driven) between major mechanical failures.

In the Strafford region, these measures apply to the Cooperative Alliance for Seacoast Transportation (COAST) and the Strafford MPO<sup>2</sup>. The table below displays the performance for these measures for the COAST system. COAST has published their Safety Plan including targets for 2022. It includes performance and targets for both fixed route and demand response services.

Staff are recommending that Strafford MPO support the transit safety targets set by COAST in their 2022 Transit Asset Management Plan. COAST has an excellent safety record and Strafford MPO itself has little direct impact on transit safety performance, but staff will continue serving on the COAST board to assist with ongoing safety improvements. Upon adoption, these targets will be incorporated into the Metropolitan Transportation Plan and 2023-2026 Transportation Improvement Program.

**Proposed action:** for the TAC to recommend that the Strafford MPO Policy Committee adopt the public transit safety performance targets as presented.

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<sup>1</sup> Any damage or harm to persons that requires immediate medical attention away from the scene [e.g. not on-site first aid]. *From the National Transit Database Safety & Security Policy Manual*

<sup>2</sup> As a University transit system, UNH Wildcat Transit is not required to establish federal PTASP targets.

| <b>FY2022 Transit Safety Targets</b>  |                            |                            |                           |                            |                       |
|---|----------------------------|----------------------------|---------------------------|----------------------------|-----------------------|
|   | <b>Performance Measure</b> | <b>FY 2020 Performance</b> | <b>FY2021 Performance</b> | <b>FY 2021 Performance</b> | <b>FY 2022 Target</b> |
| <b>Fixed Route</b>  | Fatalities - Total         | 0                          | 0                         | 0                          | 0                     |
|   | Fatalities - Rate          | 0.00                       | 0.00                      | 0.00                       | 0.00                  |
|   | Injuries - Total           | 0                          | 0                         | 0                          | 0                     |
|   | Injuries - Rate            | 0.00                       | 0.00                      | 0.00                       | 0.00                  |
|   | Safety Events – Total      | 1                          | 0                         | 0                          | 0                     |
|   | Safety Events – Rate       | 0.17                       | 0.00                      | 0.00                       | 0.00                  |
|   | System Reliability         | 15,634                     | 19,000                    | 14,358                     | 16,000                |
| <b>Demand Response</b>  | Fatalities - Total         | 0                          | 0                         | 0                          | 0                     |
|   | Fatalities - Rate          | 0.00                       | 0.00                      | 0.00                       | 0.00                  |
|   | Injuries - Total           | 0                          | 0                         | 0                          | 0                     |
|   | Injuries - Rate            | 0.00                       | 0.00                      | 0.00                       | 0.00                  |
|   | Safety Events – Total      | 0                          | 0                         | 1                          | 0                     |
|   | Safety Events – Rate       | 0.00                       | 0.00                      | 0.66                       | 0.00                  |
|   | System Reliability         | 54,351                     | 216,000                   | 37,637                     | 100,000               |
| <b>All rates are expressed as a number per 100,000 Vehicle Revenue Miles (VRM), rounded</b> |                            |                            |                           |                            |                       |



## Strafford Metropolitan Planning Organization 2023 Transit Asset Management Performance Targets

**February 17, 2023**

### Background

On July 26<sup>th</sup> 2016 the Federal Transit Administration (FTA) published the [final rule](#) on Transit Asset Management (49 CFR Part 625). Strafford Regional Planning Commission operates as a Metropolitan Planning Organization (MPO) and is required to set regional targets in coordination with regional federally funded transit providers. This must be done at least each time the Strafford MPO Metropolitan Transportation Plan (metro Plan) is updated. There are two transit providers in the region which are required to set targets: University of New Hampshire Wildcat Transit (UNH Wildcat) and the Cooperative Alliance for Seacoast Transportation (COAST). The targets comprise four asset categories: equipment, rolling stock, infrastructure, and facilities. The Strafford region contains no relevant “Infrastructure” as defined under 49 CFR part 625 (e.g. fixed guideway for light rail mass transit), therefore Strafford MPO is only required to set targets for equipment, rolling stock, and facilities.

### Rolling Stock and Equipment Methodology

Rolling Stock refers to “revenue vehicles” that transport users of public transportation services. Equipment refers to non-revenue vehicles that are used for administration, maintenance, and operations of facilities. The National Transit Database (NTD) stores information about public transportation vehicle fleets. The FTA sets default Useful Life Benchmarks (ULBs) for transit vehicles ([Find a cheat sheet of vehicle types and ULBs here](#)). Those ULBs are based on the average number of years at which a vehicle would reach a 2.5 rating (out of 5) on the Transit Economic Requirements Model (TERM) scale. The performance measure is the percentage of vehicles that meet or exceed their ULB.

Rolling Stock vehicles in the fleets of UNH Wildcat and COAST generally fall into the following categories:

| Rolling Stock Vehicle Types and Useful Life Benchmarks |   |                     |
|--|---|---------------------|
| Vehicle Code   | Description                                       | Useful Life (years) |
| VN   | Van [e.g. specialized van with a wheelchair ramp] | 8                   |
| CU   | Cutaway bus                                       | 10                  |
| TB   | Trolleybus  | 13                  |
| BU   | Bus   | 14                  |

“Equipment” vehicles are vehicles owned by the transit agency and used for maintenance and operations other than transporting passengers. Equipment vehicles in the COAST and UNH Wildcat fleets generally fits into the following categories from the [FTA sheet on ULBs](#):

| Equipment Vehicle Types and Useful Life Benchmarks |                                       |                     |
|--|---------------------------------------|---------------------|
| Vehicle Code                                       | Description                           | Useful Life (years) |
| AO   | Automobile                            | 8                   |
| MV/VN  | Minivan, van                          | 8                   |
| SV   | Sport Utility Vehicle                 | 8                   |
| --   | Trucks and other rubber tire vehicles | 14                  |

### Facilities Methodology

Targets for facilities are developed by applying the Transit Economic Requirements Model ([TERM](#)) scale to facilities used in the provision of public transportation services. The TERM scale is a 5-point scale ranging from poor condition (1.0) to excellent condition (5.0). The performance measure is the number of facilities with a condition rating below 3.0. Any facility below a 3.0 condition is considered not in a state of good repair. The inventory includes four facility types that are owned, operated, or managed by transit agencies:

- Passenger
- Administrative
- Maintenance
- Parking

The only facility below a 3.0 rating is COAST’s parking lot (see tables below).

### Target Development

Calculation of regional targets for rolling stock and equipment was based on comparing existing regional assets to anticipated additions and replacements. Strafford MPO developed targets by reviewing asset portfolios for UNH Wildcat and COAST. For each vehicle type, the total number of vehicles was compared to the number of vehicles at or beyond their ULB.

The data used to set targets came from asset lists provided by COAST and Wildcat, which are also recorded in the National Transit Database ([NTD](#)) and follow the remaining Useful Life Benchmark methodology. Targets for transit facilities were determined by using the Transit Economic Resource Model ([TERM](#)) qualitative scale of condition. Per federal ruling, targets were based on realistic expectations and the best available data. Targets were set based on the number of vehicles expected to meet or exceed their useful life benchmark by the end of 2023. This is noted in the tables below: the “target assumption” is the number of vehicles that are expected to meet or exceed their useful life benchmarks by the end of 2023.

## Regional Target Setting Tables

### 2022 Rolling Stock Existing Vehicle Conditions

| Vehicle Type | Total UNH Vehicles | UNH Wildcat: vehicles at or beyond ULB | Total COAST Vehicles | COAST: Vehicles at or beyond ULB | total regional Vehicles | Total Vehicles at/ beyond ULB | Regional Baseline |
|--------------|--------------------|--|----------------------|----------------------------------|-------------------------|-------------------------------|-------------------|
| Van          | 2                  | 0                                      | 8                    | 1                                | 10                      | 1                             | 10%               |
| Cutaway Bus  | 4                  | 0                                      | 9                    | 0                                | 13                      | 0                             | 0%                |
| Large Bus    | 23                 | 5                                      | 16                   | 0                                | 39                      | 5                             | 13%               |

### 2023 Rolling Stock Regional ULB Assumptions & Targets

| Vehicle Type | UNH Wildcat: target assumption | COAST: target assumption | Assumed proportion of Vehicles at/ beyond ULB by 2023 | Regional Target |
|--------------|--------------------------------|--------------------------|---|-----------------|
| Van          | 0                              | 2                        | 2   | 20%             |
| Cutaway Bus  | 0                              | 0                        | 0   | 0%              |
| Large Bus    | 5                              | 0                        | 5   | 13%             |

### 2022 Equipment Vehicle Conditions

| Total UNH Wildcat Equipment Vehicles | UNH Wildcat: Vehicles at- beyond ULB | Total COAST Equipment Vehicles | COAST: Vehicles at- beyond ULB | total regional Vehicles | Total Vehicles at/ beyond ULB | Regional Baseline |
|--------------------------------------|--------------------------------------|--------------------------------|--------------------------------|-------------------------|-------------------------------|-------------------|
| 3                                    | 1                                    | 4                              | 4                              | 7                       | 5                             | 71%               |

### 2023 Equipment Regional ULB Assumptions & Targets

| UNH Wildcat: target assumption of vehicles at/ beyond ULB by 2023 | COAST: target assumption of vehicles at/ beyond ULB by 2023 | Assumed proportion of Vehicles at/ beyond ULB by 2023 | Regional Target |
|---|---|---|-----------------|
| 3   | 4   | 7   | 100%            |

| 2022 Facilities Conditions                                |   |                           |   |                   |
|---|---|---------------------------|---|-------------------|
| UNH Wildcat facilities <u>not</u> in state of good repair | COAST facilities <u>not</u> in state of good repair | total regional facilities | Total facilities <u>not</u> in state of good repair | Regional Baseline |
| 0 of 2  | 1 of 3  | 5                         | 1 of 5  | 20%               |

| 2023 Facilities Regional Assumptions & Targets   |  |  |                 |
|--|--|--|-----------------|
| UNH Wildcat: target assumption for facilities <u>not</u> in state of good repair by 2023 | COAST: target assumption for facilities <u>not</u> in state of good repair by 2023 | Assumed proportion of assets not in state of good repair by 2023 | Regional Target |
| 2 of 2   | 2 of 3   | 4 of 5   | 80%             |

### Notes on Target Setting & Assumptions

UNH Wildcat and COAST set targets for their fleets and facilities. The targets above are based on a regional combination of all vehicles and facilities so they will differ from the agency-specific targets. UNH Wildcat and COAST are constantly maintaining, upgrading, retiring, and purchasing vehicles. At the time of publication of this memo, each has pending grants for new vehicles. Target setting did not assume those grants would be successful and actual delivery of new vehicles takes several months to a year depending on manufacture capacity. Vehicles are not immediately withdrawn from service once they reach their useful life benchmark. Buses are built to last and a well-maintained vehicle can safely operate several years beyond its ULB. COAST is allocating funds to replace its current administrative office and bus maintenance bay, and construct a covered storage facility. Its parking lot is the only facility type below a 3.0 condition rating. Those are not expected to be complete for several years. UNH owns a liquid natural gas fueling station that is in excellent condition and has been regularly upgraded.

### Compiled Regional Transit Asset Management Performance Targets for 2023

| Asset Category*      | Performance Measure   | Asset Class    | 2022 Baseline | 2023 Target |
|----------------------|---|----------------|---------------|-------------|
| <b>Rolling Stock</b> | % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB) | Van            | 10%           | 20%         |
|                      |   | Cutaway        | 0%            | 0%          |
|                      |   | Large Bus      | 13%           | 13%         |
| <b>Equipment</b>     | % of non-revenue vehicles that have met or exceeded their Useful Life Benchmark (ULB)                             | All vehicles   | 71%           | 100%        |
| <b>Facilities</b>    | <a href="#">% of facilities with a condition rating below 3.0 on the FTA TERM Scale</a>                           | Passenger      | NA            | NA          |
|                      |   | Administrative | 0%            | 0%          |
|                      |   | Maintenance    | 0%            | 0%          |
|                      |   | Parking        | 100%          | 100%        |