

FTA Safety Workshop

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CTAA Expo

6/10/2024



U.S. Department of Transportation
Federal Transit Administration

Agenda

- Regulatory Update
- State of Bus Safety
- Assaults on Transit Workers
- Bus Collisions
- Fatigue Risk Management
- National Roadway Safety Strategy



FTA Regulatory Update



U.S. Department of Transportation
Federal Transit Administration

FTA Regulatory Agenda



FTA Regulatory Agenda

General Directive: Assaults on Transit Workers

Proposes to require transit agencies that must have an Agency Safety Plan (ASP) as part of PTASP to conduct a safety risk assessment and provide results to FTA regarding assaults on transit workers.

Estimated Final Publication in 2024



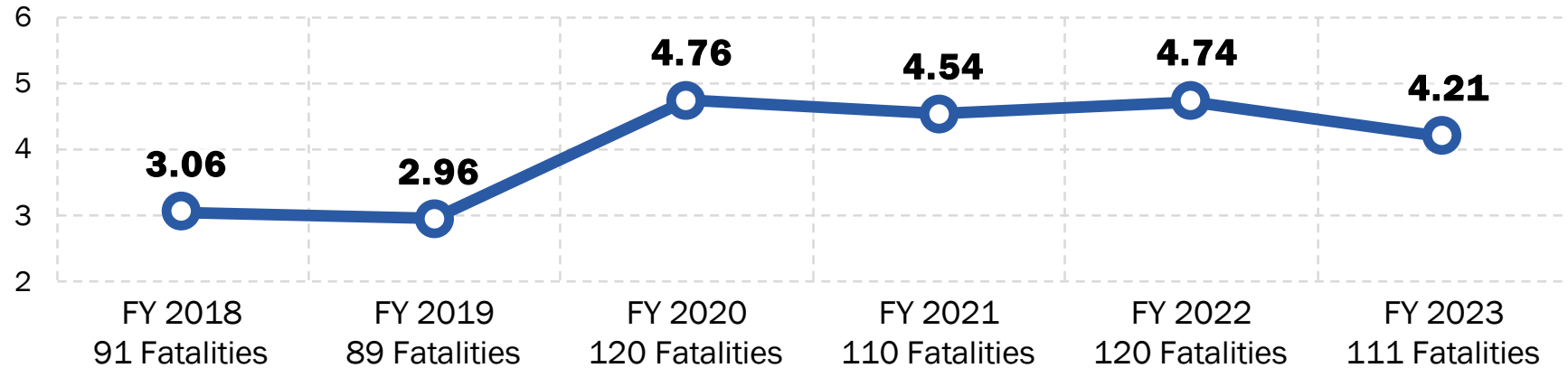
State of Bus Safety



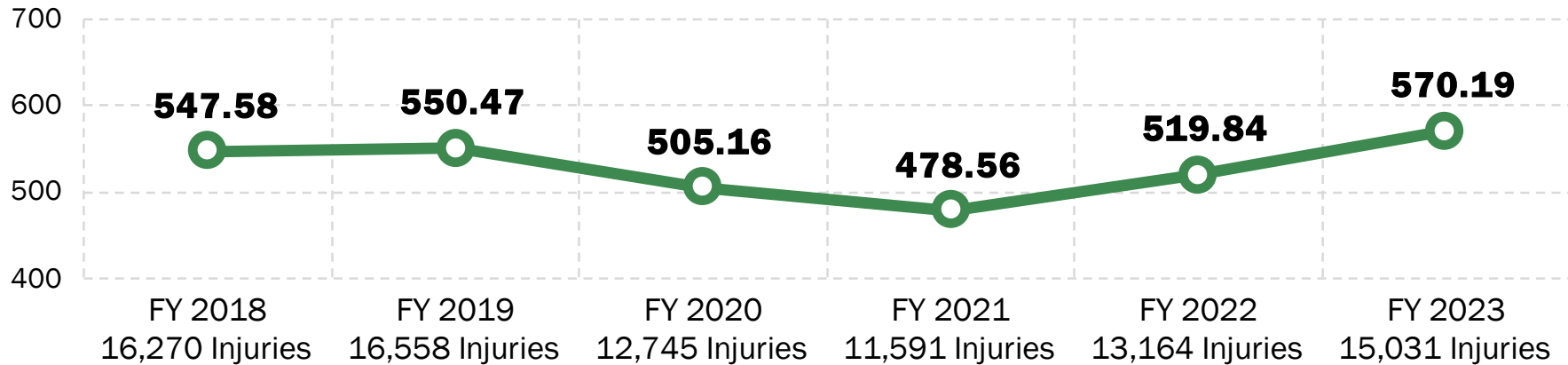
U.S. Department of Transportation
Federal Transit Administration

State of Bus Transit Safety – Annual Trends

**Fatalities per
100 Million Vehicle
Revenue Miles
(VRM)**



**Injuries per
100 Million VRM**

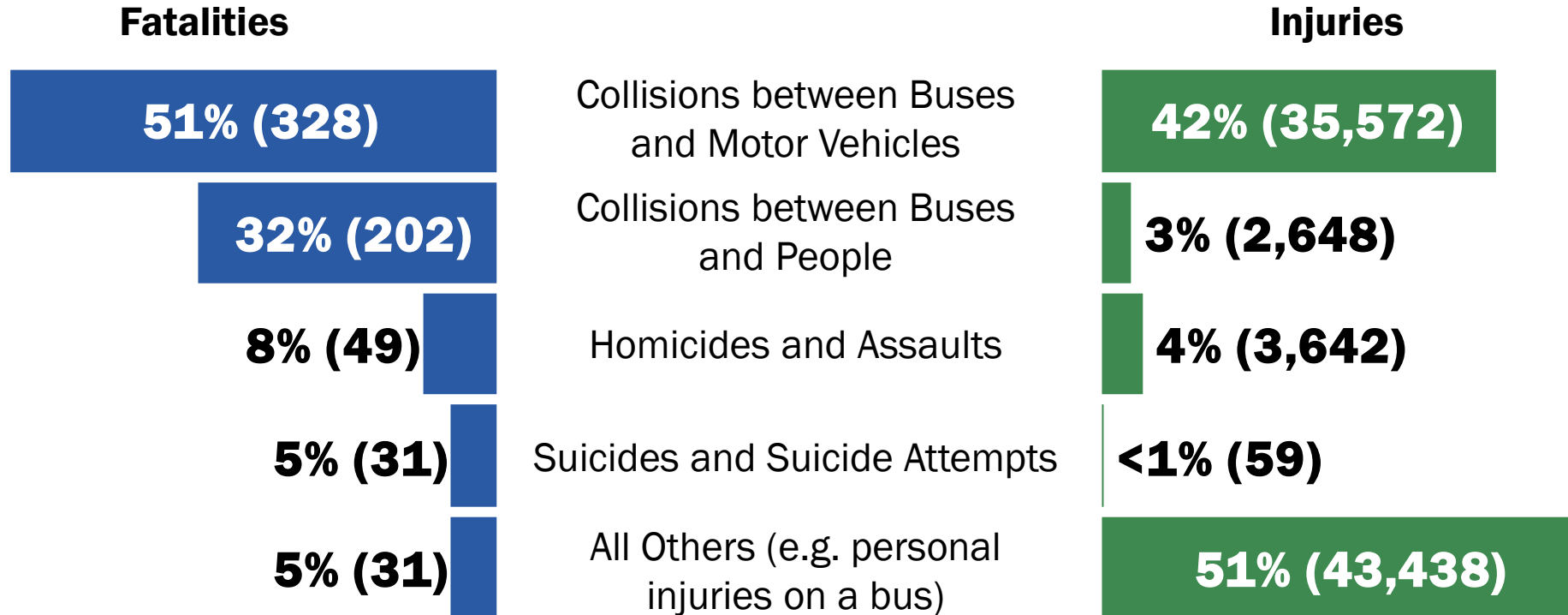


- **Source:** National Transit Database (NTD)
FY 2023 data are preliminary.

Data as of: May 1, 2024

Sources of Bus Transit Fatalities and Injuries

Bus Transit Fatalities and Injuries by Source, Oct 2017–Sep 2023



- **Source:** National Transit Database (NTD)
FY 2023 data are preliminary.

Data as of: May 1, 2024

Delinquency in Major Event (S&S-40) Reporting

Full reporters are required to report major events to the National Transit Database (NTD) via form S&S-40 within 30 days of the event.

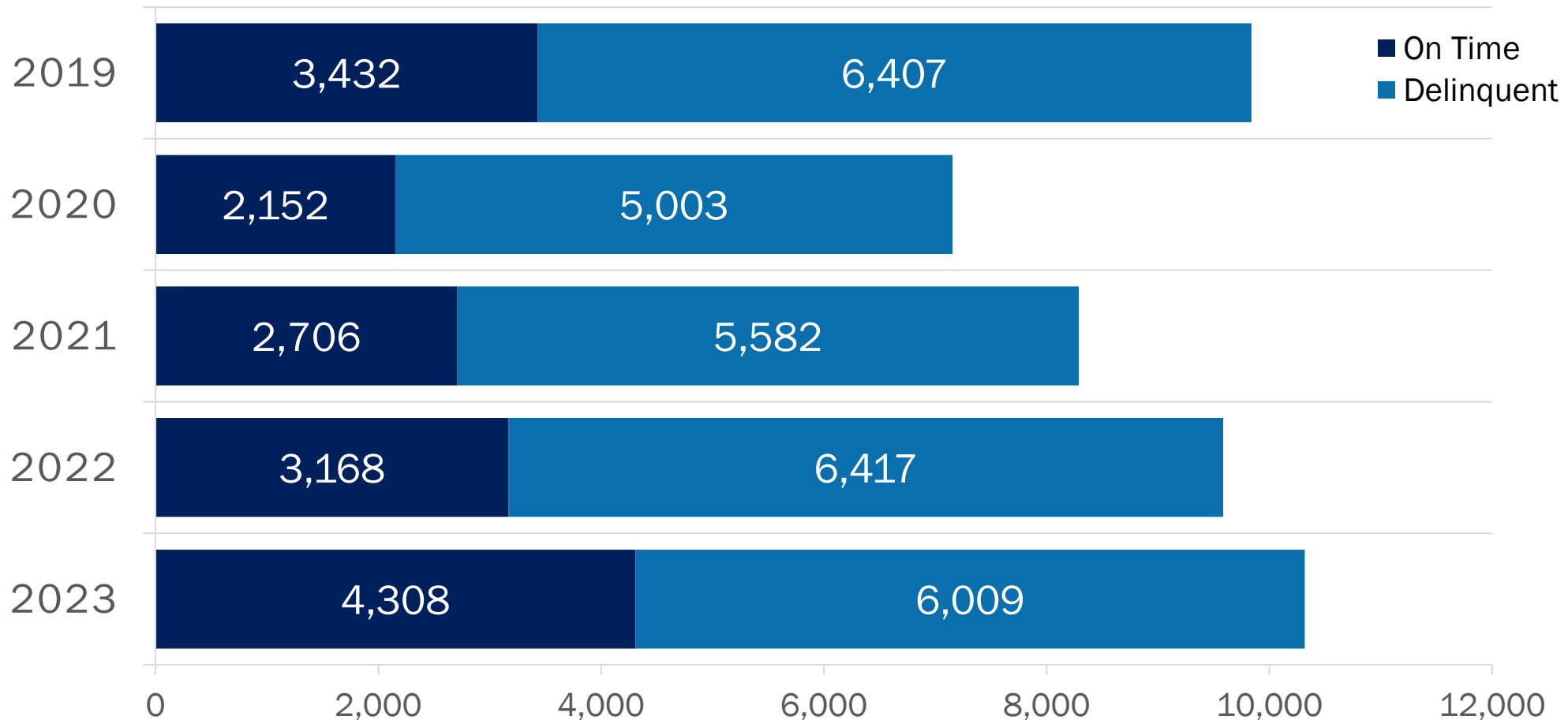
Over last five years - Only 35% of major safety and security events reported to the NTD within 30 days of the event.

Timely and accurate safety and security data needed.

Delinquent reporting inhibits ability to proactively mitigate safety risks.

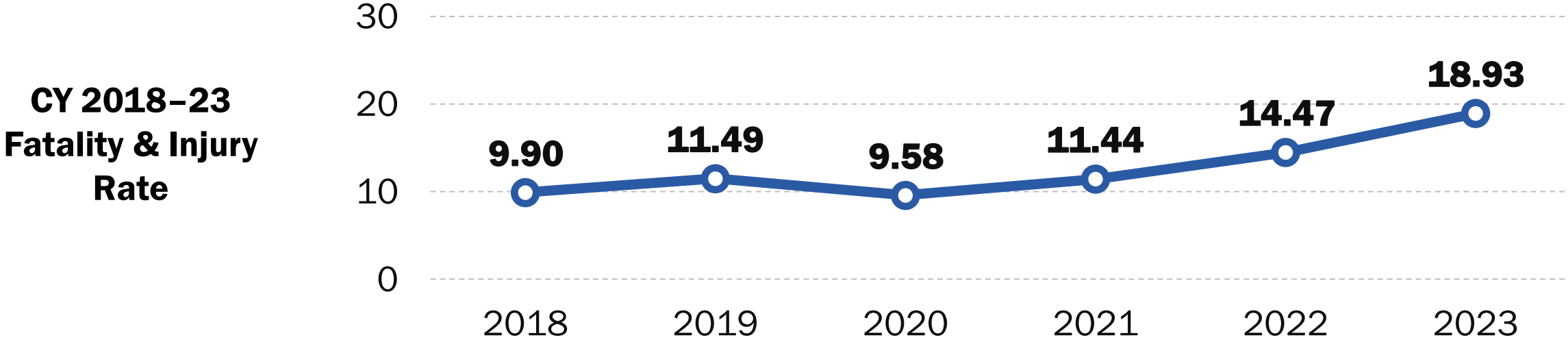
S&S-40 Delinquency by the Numbers

On average, nearly two-thirds (65%) of major safety and security events were delinquently reported to the NTD from 2019 to 2023.



Assaults on Transit Workers

Major Assaults on Transit Workers Fatalities & Injuries: CY 2018–23



	2018	2019	2020	2021	2022	2023
Events	374	435	292	345	463	656
Fatalities	0	1	1	11	2	2
Injuries	375	440	293	354	474	650

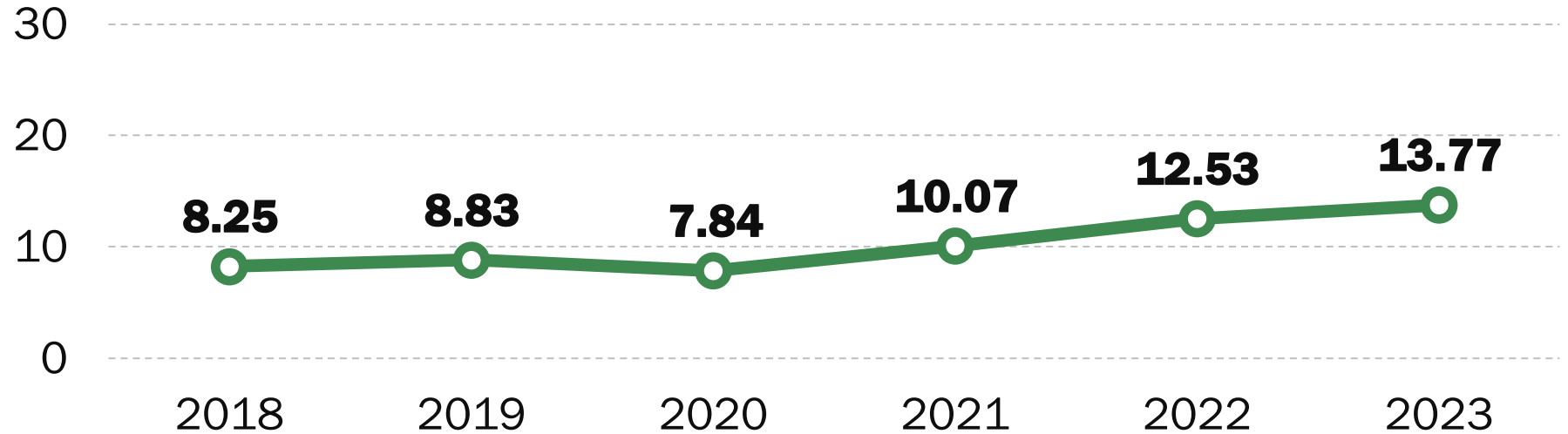
Source: National Transit Database (NTD). CY 2023 data are preliminary.
 Combined fatality and injury rate is calculated per 100 Million Vehicle Revenue Miles (100M VRM).

Data as of: Apr 2, 2024

Major Assaults on Transit Workers

Fatalities & Injuries on Bus: CY 2018–23

**CY 2018–23
Bus Fatality &
Injury Rate**



**Percentage of
Fatalities and
Injuries by
Location**

Location	2018	2019	2020	2021	2022	2023
Vehicle	92%	95%	91%	92%	94%	87%
Station	6%	5%	6%	7%	5%	10%
Other	2%	1%	2%	1%	1%	3%

Source: National Transit Database (NTD). CY 2023 data are preliminary.
Combined fatality and injury rate is calculated per 100 Million Vehicle Revenue Miles (100M VRM).

Data as of: Apr 2, 2024

Assaults on Transit Workers

New NTD Data Collection: 2023

Most events reported are non-physical assaults
All Reported Transit Worker Assaults and Homicides by Severity:
April–December 2023



Source: National Transit Database (NTD). CY 2023 data are preliminary.

*Starred categories are events that do not result in a transit worker fatality or injury.

Data as of: Apr 2, 2024

Assaults on Transit Workers: NTD Reporting Requirements

Full reporters

Report major events via form S&S-40 within 30 days of the event.
Report non-major events via form S&S-50 monthly.

Reduced reporters

Report major and non-major events via form S&S-60 annually, four months after the reporter's fiscal year expires.

New NTD Reporting Requires the Who, What, and Where of Assaults on Transit Workers.

New Reporting Resources **Now Available!**

New Technical Resource Guides will support transit agencies with additional data reporting requirements.

Bus Collisions

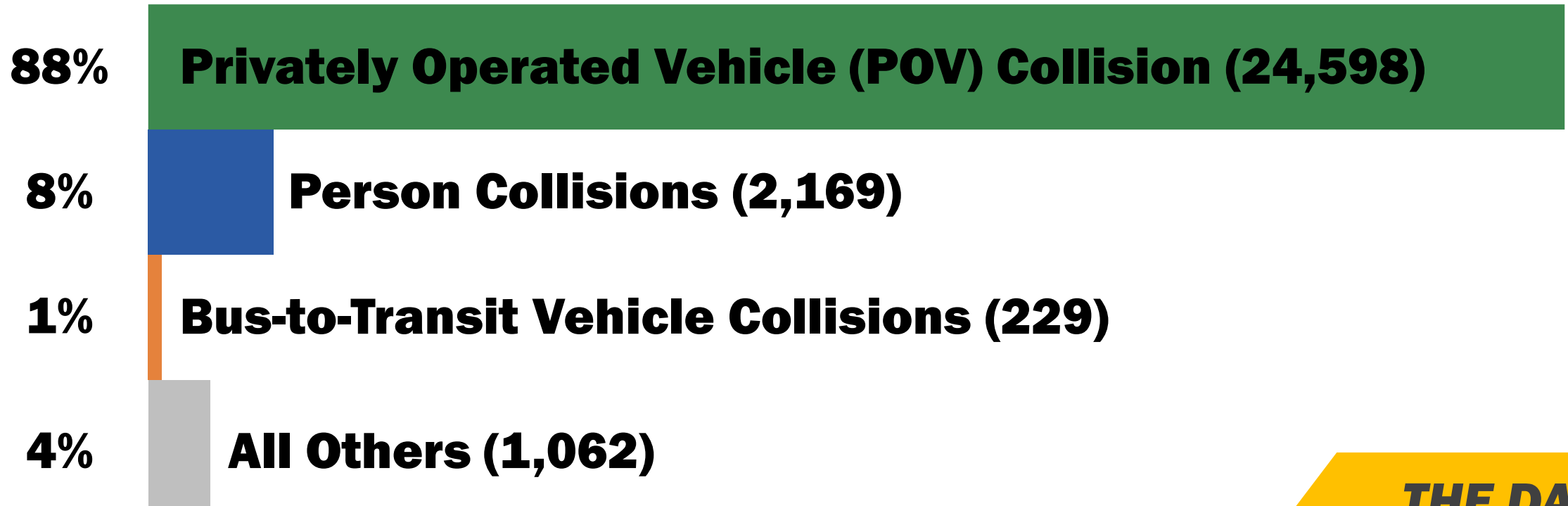
Bus-to-Privately Operated Vehicle (POV) and Bus-to-Person Collisions FY 2019-2023

Source: National Transit Database (NTD). FY 2023 data are preliminary.

Includes all transit vehicle collisions with POVs reported to NTD by bus modes. Excludes Suicides.

Bus Transit Vehicle Collisions by Collision Type

Almost 90% of collisions occurred with privately operated vehicles (POVs).



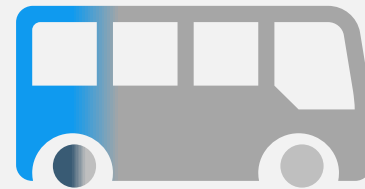
THE DATA

Bus-to-Person Collisions



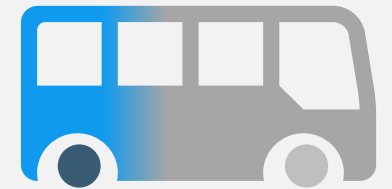
From 2008 to 2021, transit agencies reported **7,298 bus-to-person collisions** to the National Transit Database, which resulted in **537 fatalities** and **7,329 injuries**

From 2008 to 2024, Bus-to-Person collisions accounted for:



15%

Of All Transit Fatalities

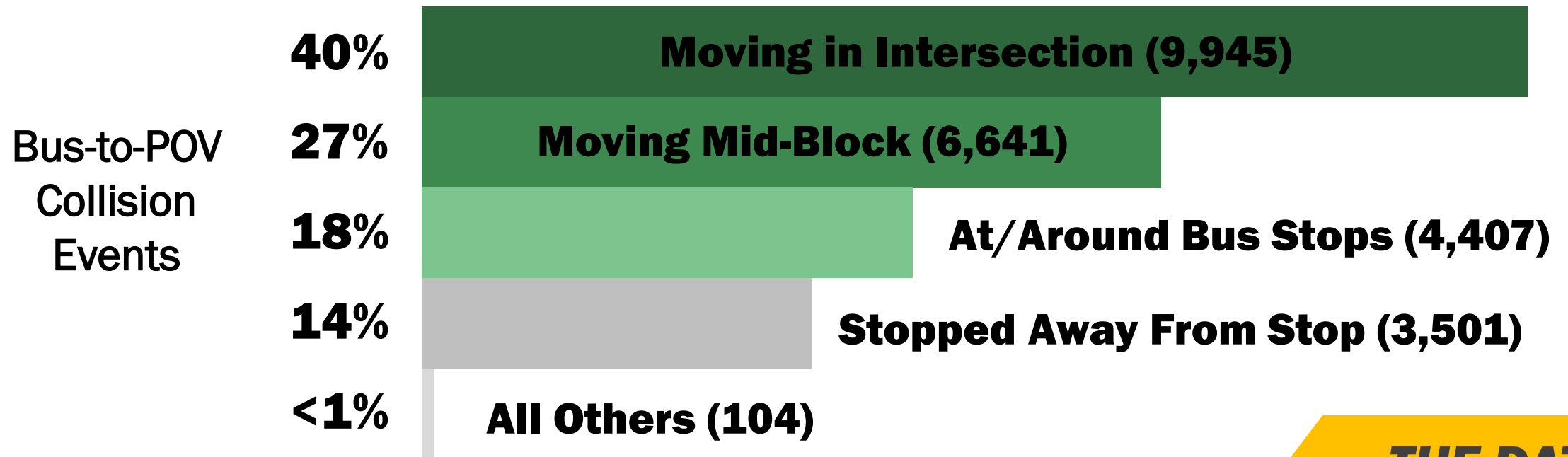


37%

Of Bus-Transit Fatalities

Bus-to-POV Collisions by Location

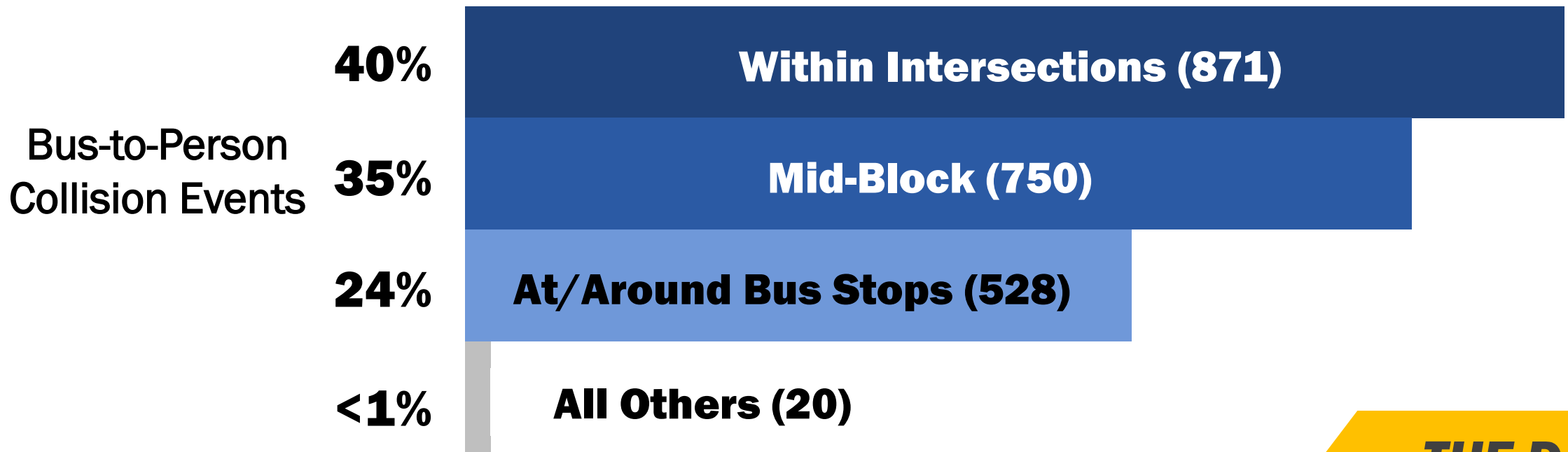
The largest percentage of all Bus-to-POV collision events occurred as buses moved through intersections.



THE DATA

Bus-to-Person Collisions by Location

The largest percentage of bus-to-person collisions events occurred while buses were within intersections.



THE DATA

Recommended Actions

Transit agencies that focus on bus operator vision impairment as a safety hazard may consider the below categories of safety risk mitigations, among others:



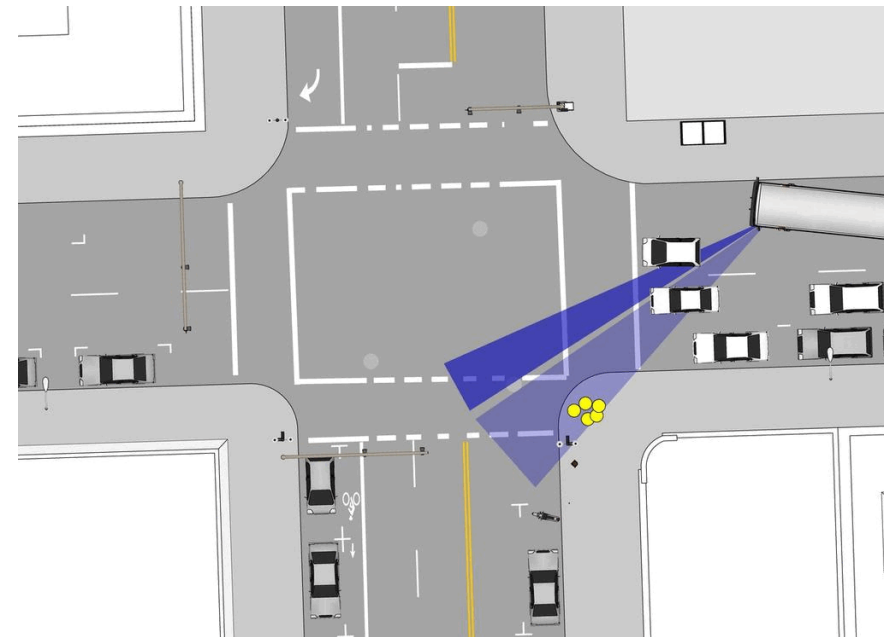
Vehicle Design

1. Vehicles
2. Vehicle Systems



Operator Driving Policies and Procedures

1. Scanning
2. Square Left Turns



Bus Collisions in Intersections



39% of fatalities from bus collisions with vehicles in intersections **occurred when the bus turned left.**



27% of fatalities and injuries from bus collisions with people in intersections were **crosswalk pedestrians** hit as the bus made a **left turn.**

THE DATA

Future Bus Safety Collision Prevention Initiatives



Bus
Manufacturers
Roundtable

Online-based
safety
manager
training
covering best
practices

Research
dedicated to
bus design
standards and
best practices

Research on
causal factors
of bus-to-POV
collisions

Fatigue Risk Management

Why Transit Worker Fatigue?

Studies and medical research indicate that fatigue can negatively affect transportation worker performance, as well as worker health and safety.

97%

of employers in the transportation industry feel the impact of fatigue.

66%

of employers in the transportation industry reported decreases in productivity due to fatigue.

45%

of employers in the transportation industry stated they experienced safety incidents due to fatigue-related issues.



Source: *National Safety Council Report "Fatigue in Safety-Critical Industries: Impact, Risks & Recommendations" (2017)*

Why Transit Worker Fatigue?

2022

The pedestrian lost his balance and leaned backwards into the streetcar's path and was injured ... upon review of video, the Operator appeared to be sleeping while the streetcar was in motion.

2022

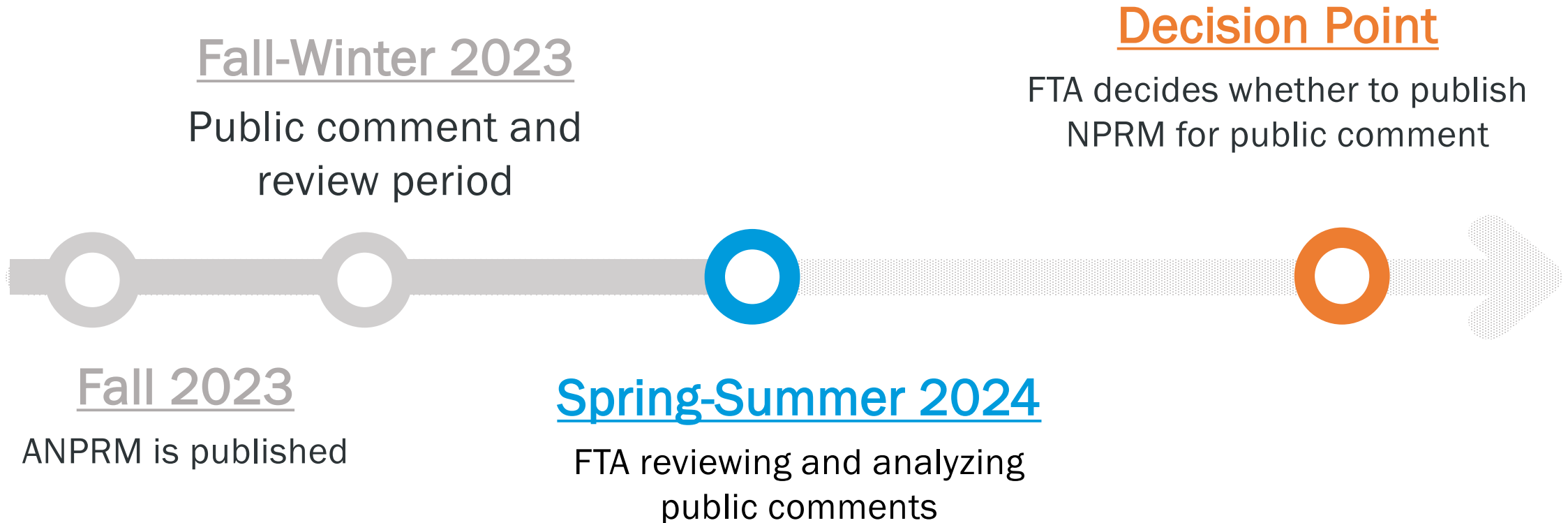
“The operator stated that as he was traveling on Washington Ave., he fell asleep at the wheel and went onto the sidewalk, and contacted two electrical poles.”

2022

“[I]t appears the operator started to nod off (potentially falling asleep). The bus drifted off of the road, over the curb contacting a light pole, bus stop location sign, cement box and then came to rest.”

Source: National Transit Database and State Safety Oversight Reporting Tool

Regulatory Process To Date – ANPRM



FTA Fatigue Resources Website

For additional information and links to resources on transit worker fatigue, please visit: www.transit.dot.gov/fatigue

Fatigue Resources for Transit Operations
Click below to see a list of resources



Understanding Sleep

Causes

Symptoms and Warning Signs

Effects

Transit Workers

Transit Agencies

Fatigue Risk Management Systems

FTA is making these resources available in adherence with the [DOT Website Linking Policy](#).

DISCLAIMER: FTA has not assessed whether any of these resources meet applicable statutory or regulatory requirements. This list is provided for technical assistance only. Inclusion on this list does not imply endorsement or approval by FTA. Please email us at FTASafetyPromotion@dot.gov if you find any broken or outdated links.

National Roadway Safety Strategy (NRSS) Call to Action Campaign



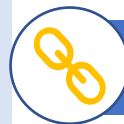
JOIN US **WE NEED YOU!**

- U.S. Department of Transportation's NRSS aims to significantly reduce serious injuries and deaths on our nation's roads and highways
- More than 160 Allies in Action support the Call to Action
- Agencies that are taking action:
 - Delaware Transit Corporation
 - Denver Regional Transportation District
 - San Francisco Municipal Transportation Agency

COMMIT TO **ZERO** FATALITIES

To make our roadways safer for everyone, we can't do it alone.

WE NEED YOU.



Visit the [NRSS webpage](#) for more information



Thank you!

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