APTA Mobility Conference Update to the Bus Safety Committee

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U.S. Department of Transportation
Federal Transit Administration

Agenda

- Bus Safety Data Overview

- Bus-to-POV Collisions

- Assaults on Transit Workers Update

- Cybersecurity Updates
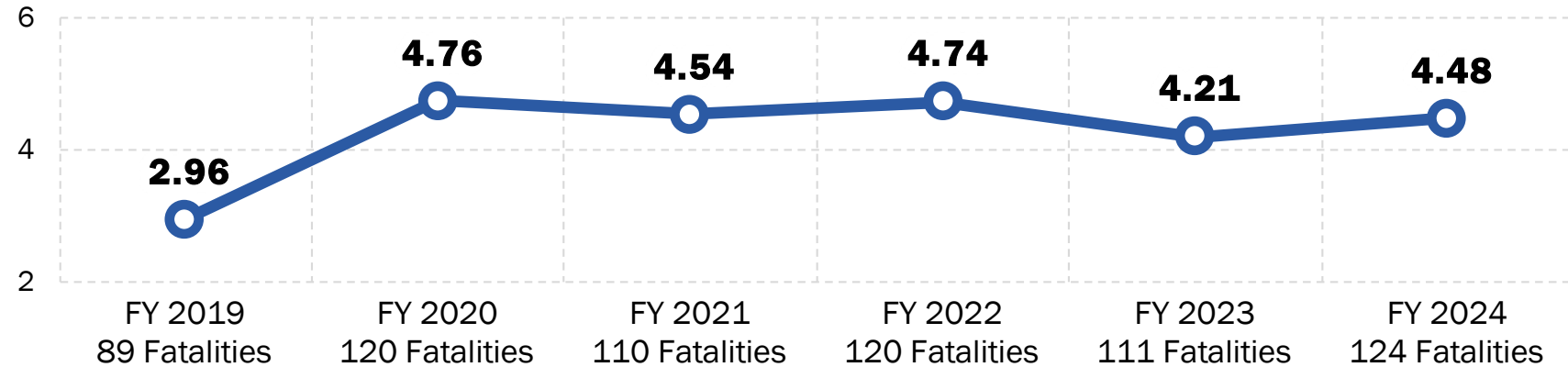
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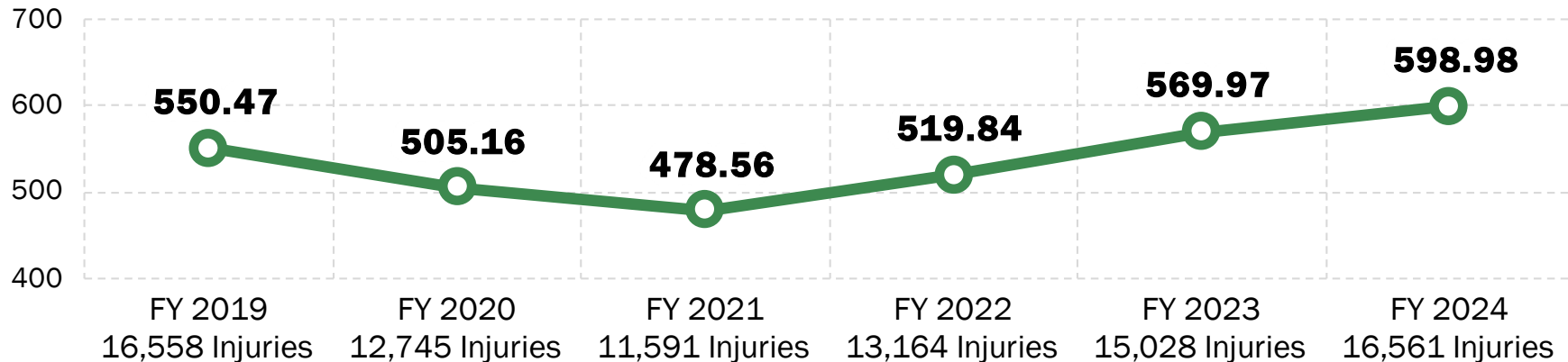
Bus Safety Data Overview

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State of Bus Transit Safety – Annual Trends

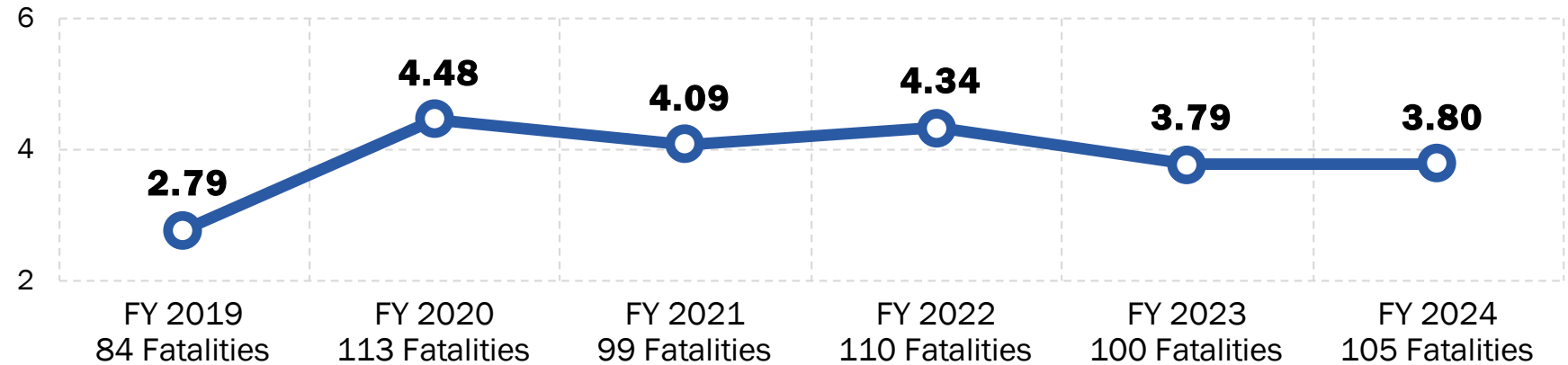**Fatalities per 100 Million Vehicle Revenue Miles (VRM)**

	FY 2019 89 Fatalities	FY 2020 120 Fatalities	FY 2021 110 Fatalities	FY 2022 120 Fatalities	FY 2023 111 Fatalities	FY 2024 124 Fatalities
	2.96	4.76	4.54	4.74	4.21	4.48

Injuries per 100 Million VRM

	FY 2019 16,558 Injuries	FY 2020 12,745 Injuries	FY 2021 11,591 Injuries	FY 2022 13,164 Injuries	FY 2023 15,028 Injuries	FY 2024 16,561 Injuries
	550.47	505.16	478.56	519.84	569.97	598.98

- **Source:** National Transit Database (NTD)
  FY2024 data are preliminary.

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State of Bus Transit Safety (excluding Homicide and Assault) – Annual Trends

Fatalities per 100 Million VRM

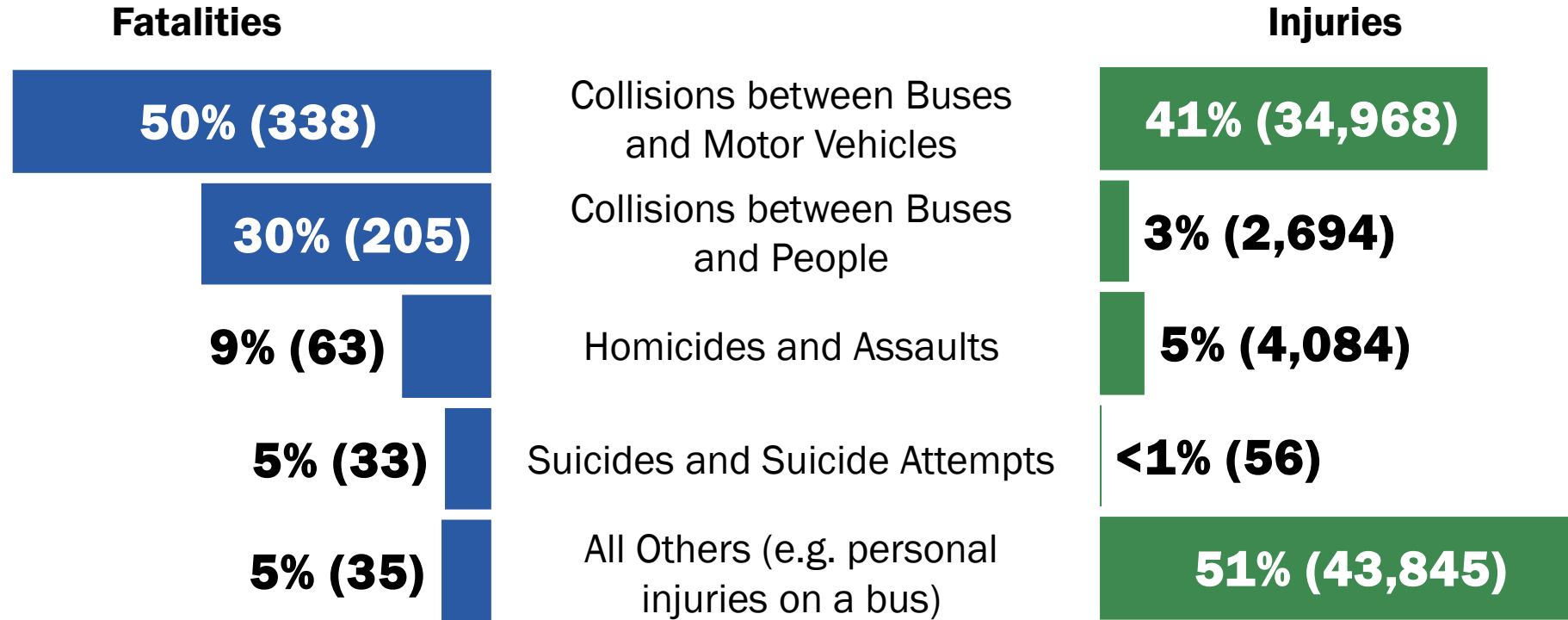|					
2.79	4.48	4.09	4.34	3.79	3.80
FY 2019 84 Fatalities	FY 2020 113 Fatalities	FY 2021 99 Fatalities	FY 2022 110 Fatalities	FY 2023 100 Fatalities	FY 2024 105 Fatalities

Injuries per 100 Million VRM

530.92	483.08	457.13	494.25	539.56	563.90
FY 2019 15,970 Injuries	FY 2020 12,188 Injuries	FY 2021 11,072 Injuries	FY 2022 12,516 Injuries	FY 2023 14,226 Injuries	FY 2024 15,591 Injuries

- **Source:** National Transit Database (NTD)
  FY2024 data are preliminary.

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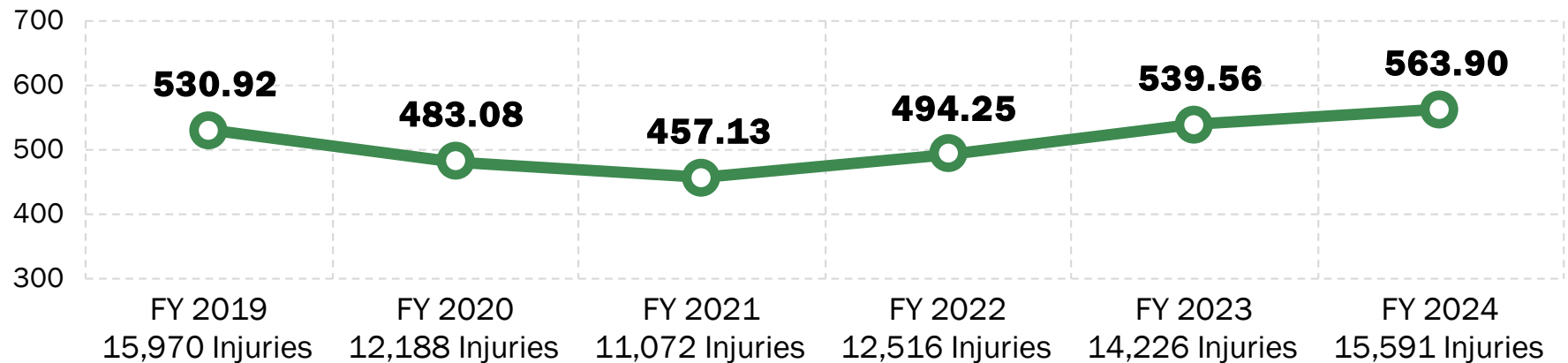
Sources of Bus Transit Fatalities and Injuries

Bus Transit Fatalities and Injuries by Source, Oct 2018–Sep 2024

Fatalities		Injuries
50% (338)	Collisions between Buses and Motor Vehicles	41% (34,968)
30% (205)	Collisions between Buses and People	3% (2,694)
9% (63)	Homicides and Assaults	5% (4,084)
5% (33)	Suicides and Suicide Attempts	<1% (56)
5% (35)	All Others (e.g. personal injuries on a bus)	51% (43,845)

- **Source:** National Transit Database (NTD)
  FY2024 data are preliminary.

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Bus-to-Privately Owned Vehicles (POV) Collisions

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Bus-to-POV Collision Data Overview

Key Findings

- From 2016 to 2023, transit agencies reported **40,691** Bus-to-POV collisions in the National Transit Database.
  - These collisions resulted in:
    - **437** fatalities and
   - **50,739** injuries

Takeaways

- From 2016 to 2023, Bus-to-POV collisions accounted for:
  - 19% of all transit fatalities
  - 51% of bus-related transit fatalities
  - 66% of all transit injuries
  - 79% of bus-related transit injuries

Source: *National Transit Database (NTD), 2016 - 2023. Bus-to-POV collisions are events from the NTD Major Events file where the mode is bus and the event included a collision with a non-transit motor vehicle.*
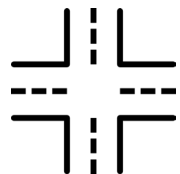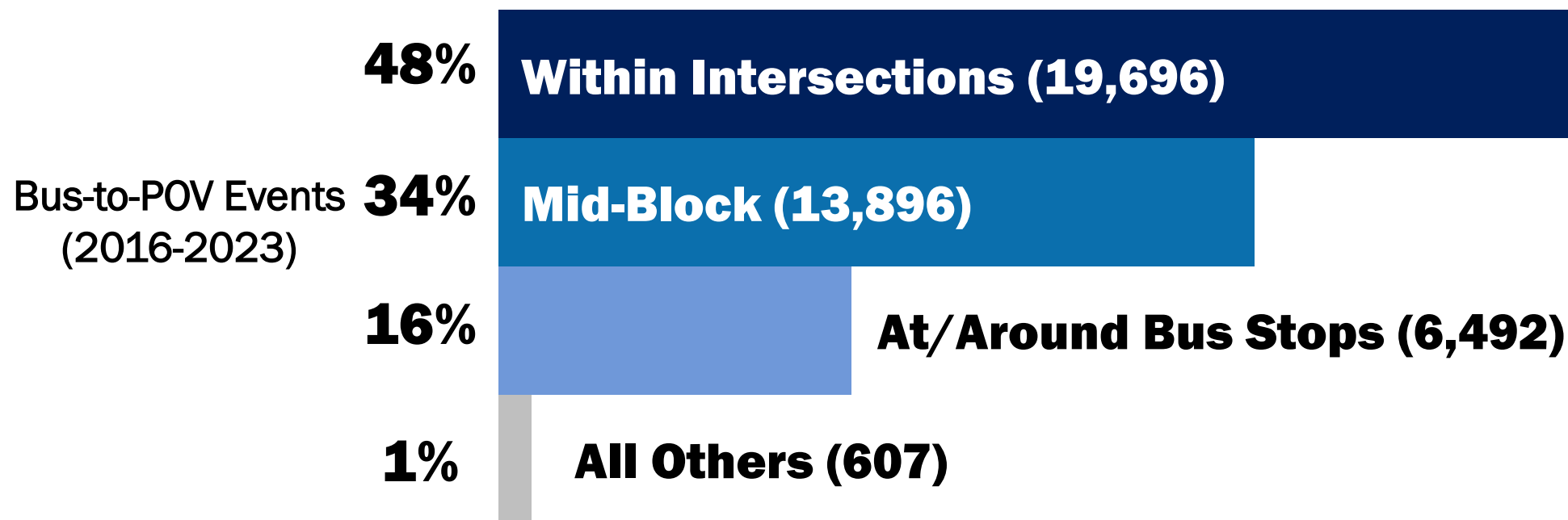.

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Bus-to-POV Collision Yearly Data Overview
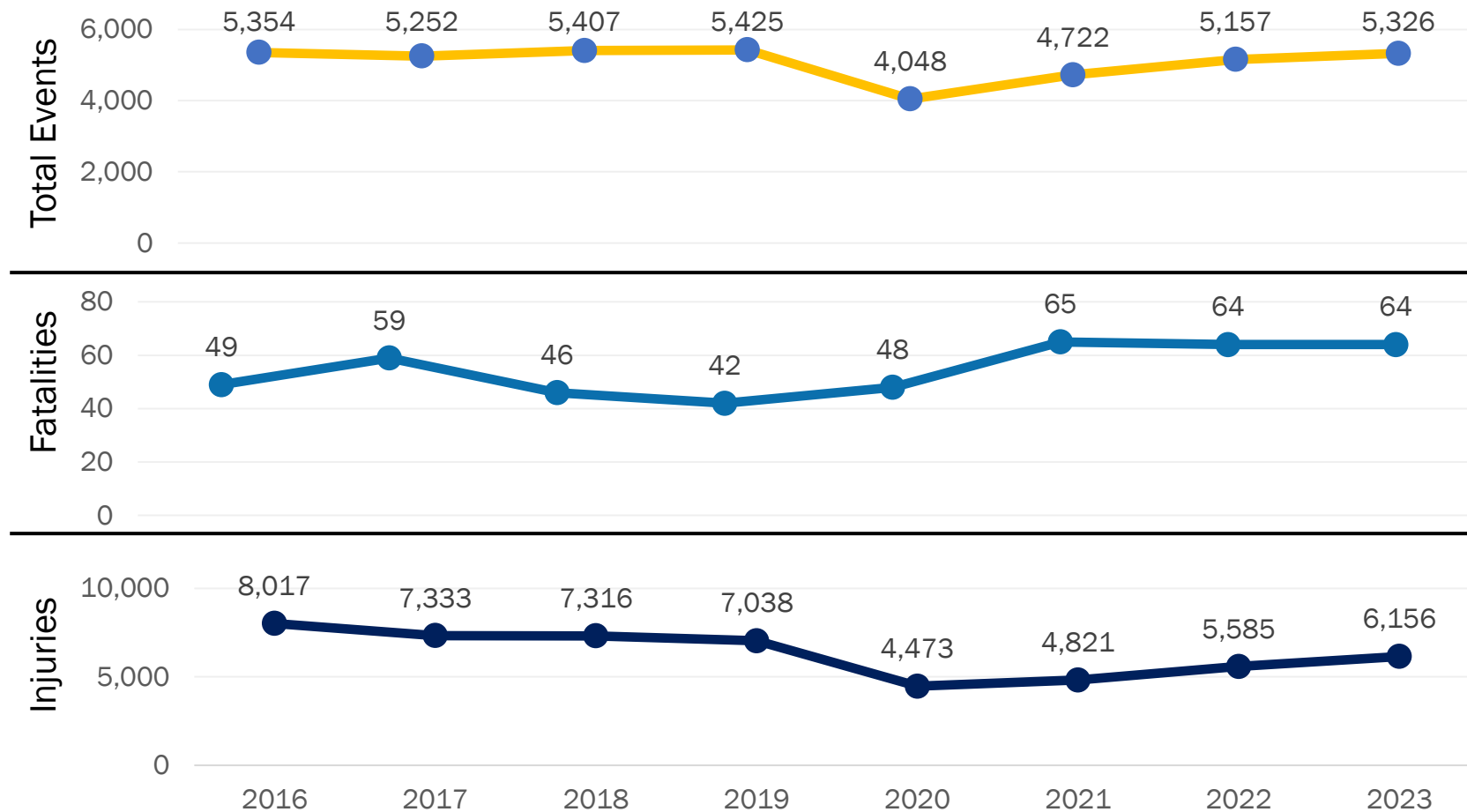
Source: National Transit Database (NTD), 2016 - 2023. Bus-to-POV collisions are events from the NTD Major Events file where the mode is bus and the event included a collision with a non-transit motor vehicle.

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Bus-to-POV Collisions by Location

The largest percentage of bus-to-POV collision events occurred while buses were within intersections.

Bus-to-POV Events (2016-2023)

48%	**Within Intersections (19,696)**
34%	**Mid-Block (13,896)**
16%	**At/Around Bus Stops (6,492)**
1%	**All Others (607)**

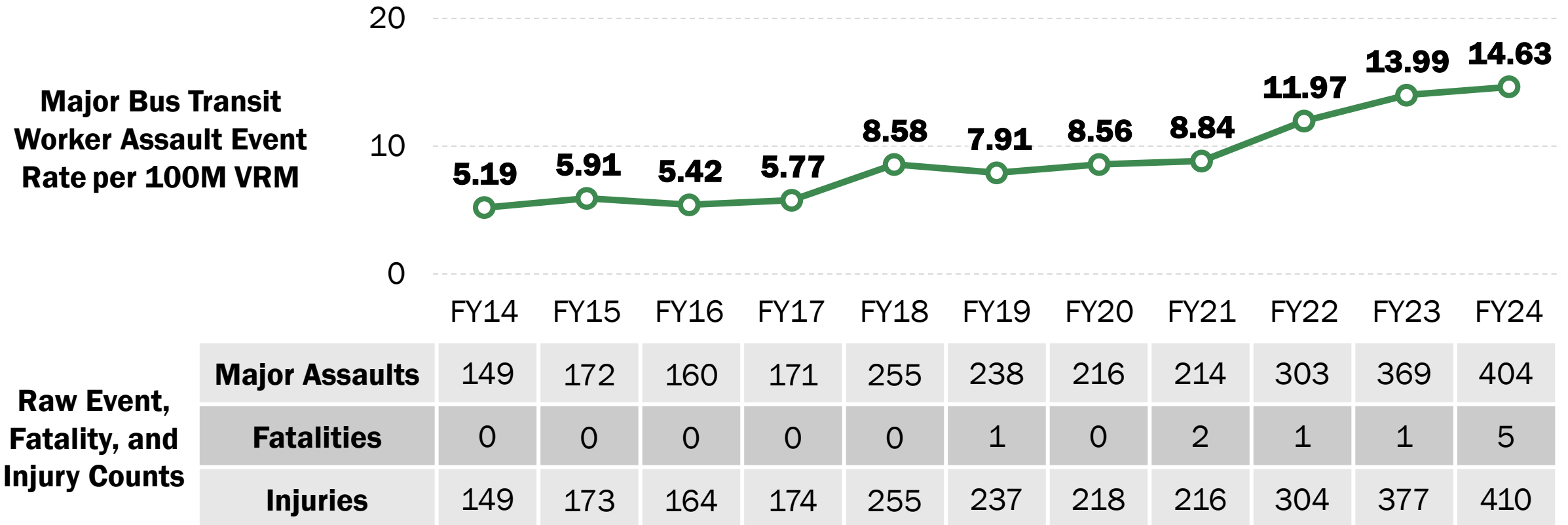*Source: National Transit Database (NTD), 2016 - 2023.*

Assaults on Transit Workers Update

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Major Transit Worker Assaults: FY 2014–24

Major Transit Worker Assault Event Rate per 100 Million Vehicle Revenue Miles (100M VRM)

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Rate per 100M VRM	5.51	6.07	6.33	6.61	9.51	10.32	11.17	9.01	14.05	18.02	18.86

Raw Event, Fatality, and Injury Counts

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Major Assaults	200	224	237	249	359	395	364	284	459	615	669
Fatalities	0	1	0	0	0	1	0	12	1	3	5
Injuries	203	225	243	254	360	399	368	290	469	656	717

- **Source:** National Transit Database (NTD)
  FY 2024 data are preliminary.

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Major Bus Transit Worker Assaults: FY 2014–24

Major Bus Transit Worker Assault Event Rate per 100M VRM

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Rate	5.19	5.91	5.42	5.77	8.58	7.91	8.56	8.84	11.97	13.99	14.63

Raw Event, Fatality, and Injury Counts

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Major Assaults	149	172	160	171	255	238	216	214	303	369	404
Fatalities	0	0	0	0	0	1	0	2	1	1	5
Injuries	149	173	164	174	255	237	218	216	304	377	410

- **Source:** National Transit Database (NTD)
  FY 2024 data are preliminary.

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GD Analysis - Mitigation Status

What mitigations are transit agencies deploying?

#1 De-Escalation Training

#2 Video/Audio Surveillance

#3 Operating Policies and Procedures

#4 Signage Informing Riders of Surveillance/Penalties

GD Analysis - Mitigation Status (cont.)

What are some additional mitigations specific to different types of transit agencies?

#5 Communication Protocols
(All Agencies)

#5 Patrol Strategies
(Large Bus)

#5 Automatic Vehicle Location
(Small Bus)

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GD Analysis - Mitigation Effectiveness Evaluation – All Agencies

83% of all agencies found **Video/Audio Surveillance** to be effective

75% of all agencies found **Operator Area Protective Barriers** to be effective

72% of all agencies found **Operating Policies and Procedures** to be effective

67% of all agencies found **De-Escalation Training** to be effective

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General Directive Resources

On January 16, 2025, FTA published *Responses to General Directive 24-1: Required Actions Regarding Assaults on Transit Workers*.

View FTA's GD Analysis
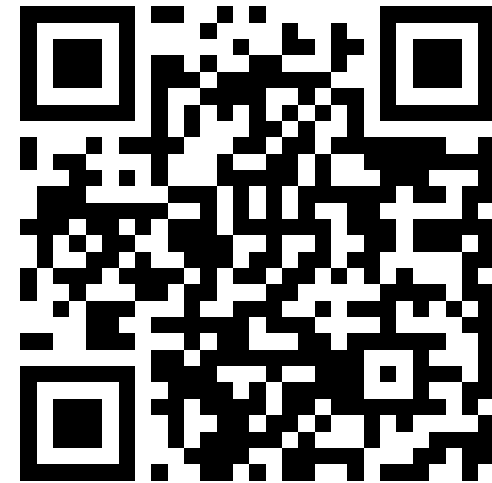
View FTA's GD Website

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Cybersecurity Updates

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Cybersecurity Tips

Risk Management is a time-proven and effective practice for prioritizing limited resources to align an organization's technology risk with its enterprise risk tolerance.

Manage and prioritize your technical service inventory, and create partnerships with legal, emergency management, and public relations.

Phishing resistant methods can support multifactor authentication.

Ransomware detection and response should be consistent.

Source: Colorado's Regional Transportation District FTA Cybersecurity Awareness For Transit Agencies Webinar 10-29-24

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FTA's Cybersecurity Resources

Webinars in October for Cybersecurity Awareness Month

Cybersecurity Resources for Transit Agencies

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Thank you!

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