Federal Transit Administration's Special Topics in Transit Safety – Vulnerable Road Users and Transit Collisions

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Office of System Safety

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Presentation Overview

This purpose of today's presentation is to provide an overview of the Federal Transit Administration's (FTA) recent efforts to reduce the safety risk in the transit industry for Bus-to-Person Collisions.

Agenda

- Overview & Data Analysis of Bus-to-Person Collisions
- Hazards Identified by FTA
- Mitigating Strategies
- Resources



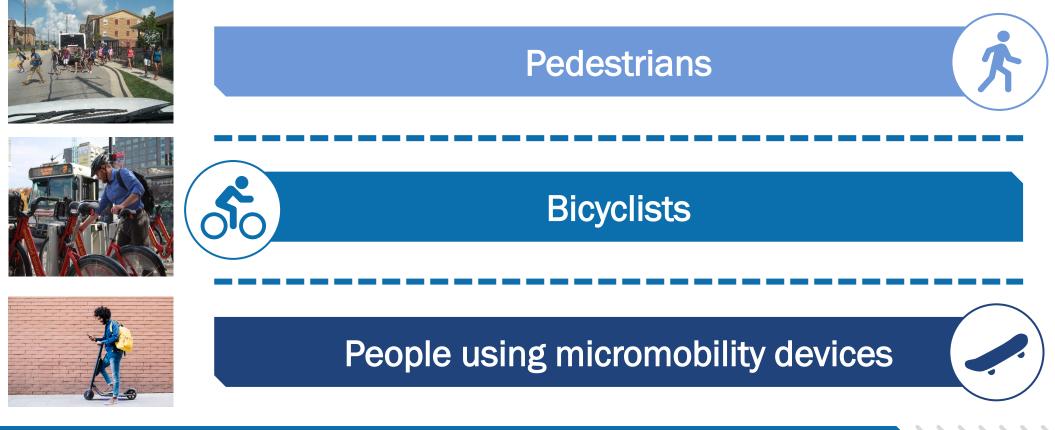
Overview & Data Analysis of Bus-to-Person Collisions





Bus-to-Person Collisions Defined

FTA's Safety Risk Management program defines bus-to-person collisions as collisions between transit buses and:

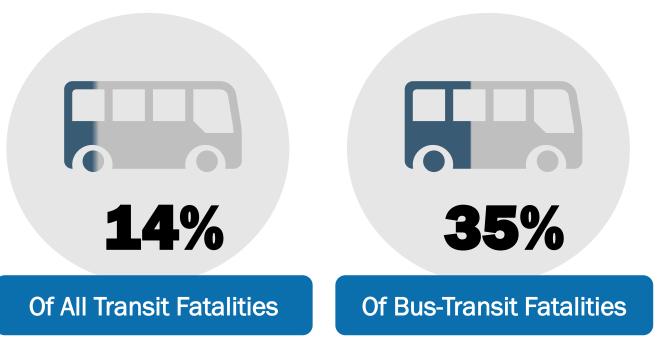




Bus-to-Person Collision Data Overview



From 2008 to 2023, transit agencies reported **8,230 busto-person collisions** to the National Transit Database, which resulted in **596 fatalities** and **8,259 injuries** **Bus-to-Person collisions accounted for:**

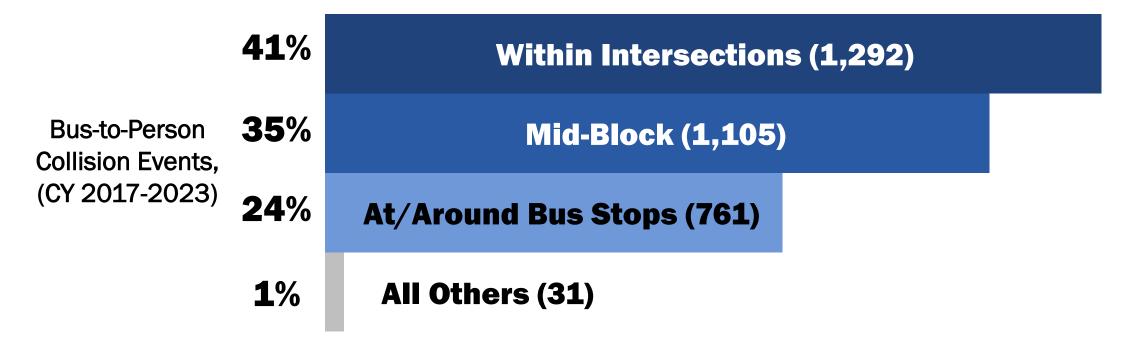




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Bus-to-Person Collisions by Location

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



Source: National Transit Database (NTD), 2017 - 2023.



U.S. Department of Transportation Federal Transit Administration

Collisions Within Intersections

Fatalities and Injuries by the Numbers



50% of fatalities and injuries (689) resulting from bus-toperson collisions within intersections were suffered by pedestrians in the crosswalk.



55% of fatalities and injuries (379) resulting from bus-toperson collisions within intersections occurred when the transit vehicle was turning left.

Source: National Transit Database (NTD), 2017 - 2023.



Collisions in the Mid-Block

Fatalities and Injuries by the Numbers



32% of fatalities and injuries (378) resulting from bus-toperson collisions in the mid-block were suffered by bicyclists.



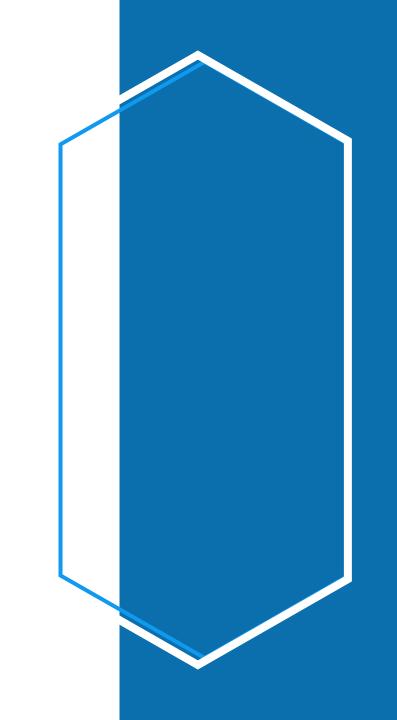
27% of fatalities and injuries (321) resulting from bus-toperson collisions in the mid-block occurred when the pedestrians were crossing outside the crosswalk.

Source: National Transit Database (NTD), 2017 - 2023.

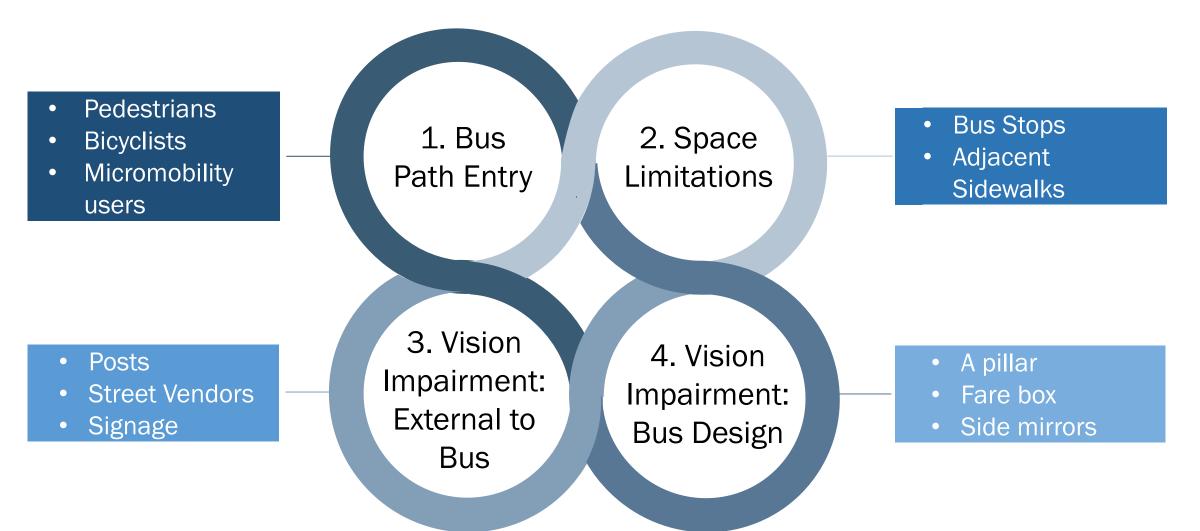


Hazards Identified by FTA





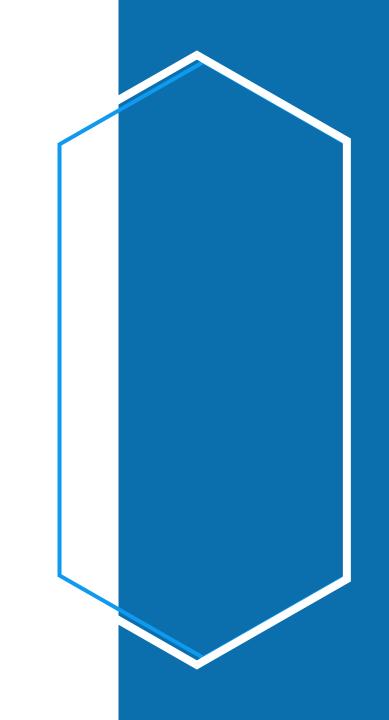
Bus-to-Person Collisions Hazards





Mitigation Strategies





FTA Action: Safety Advisory 23-1

- **Distribution:** Published in the Federal Register •
- Effective Date: September 19, 2023 •
- Audience: Agencies that provide bus service •
- **Overview:** Recommends transit agencies that • provide bus service...
 - Consider mitigation strategies to reduce • bus-to-person collisions
 - **Identify specific hazards** that may cause ٠ or contribute to bus-to-person collisions, assess the associated safety risk, and implement appropriate mitigations to reduce the likelihood and severity of those collisions





USDOT's National Roadway Safety Strategy

FTA has committed to implementation of the NRSS using the Safe System Approach.

FTA's focus:

- Implementing transit/bus-only lanes 1.
- 2. Improving pedestrian/bicycle access to rail/bus stations
- 3. Using collision avoidance technology to reduce collisions
- 4. Other projects to help reach zero roadway fatalities





FTA Bus-to-Person Collisions Resources



Safety Risk Management website Bus-to-Person Collisions

Includes a resources section with reports, research, and best practices from FTA, FHWA, TCRP, and others



Safety Advisory 23-1 Bus-to-Person Collisions

Includes PDF version of safety advisory



Bus-to-Person Collisions Webinars hosted by FTA

Includes past webinars hosted by the Office of Transit Safety and Oversight



Response from the Industry

Industry stakeholders expressed interest and requests to FTA regarding resources and campaigns that highlight the following:



Pedestrian and bicyclist awareness as a roadway user and emphasize safe behaviors such as removing earphones and increased visibility



Transit agency partnerships with micromobility services, such as e-scooters, to share safe paths and parking areas



Transit agency partnerships with jurisdictions for bike path planning to allow for adequate transit bus turning radius



Roadway and streetscape design, including lighting, near-side and far-side stops, and temporary traffic control measures during construction



FTA Safety Resources





Thank you!

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Federal Transit Administration