Integrated Mobility Division
Transit Systems Call

October 8, 2025

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AGENDA

Transit Safety & Security Focus

- Overview & Importance
- Mitigation Strategies for Deterring Transit System Assaults
- Available Resources – National and State
- Accident/Incident Reporting Processes
- Conclusion

Introduction

- Brennon Fuqua, IMD Director

- David Rhew, NCPTA Executive Director

- Tawanna Williams, NCPTA President

Mitigation Strategies for Deterring Transit System Assaults

Hudson, J. G., O. Wang, N. Johnson, I. N. Sener, J. Guo, C. O'Rear, H. Zhang, M. Mahdavi, and A. Loukaitou-Sideris. 2025. *Mitigation Strategies for Deterring Transit Assaults*. Prepublication draft of TCRP Research Report 258. Transportation Research Board, Washington, DC

https://nap.nationalacademies.org/catalog/29204/mitigation-strategies-for-deterring-transit-assaults

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Background

- Research shows that if people felt more secure when traveling and waiting at railway stations the ridership could increase by ten precent.

- Transit security poses challenges for transit workers, exposing them to risks of physical and psychological harm and contributing to elevated job-related stress.

- Addressing these issues is essential to fostering a secure and sustainable transit environment for both users and employees.

Definitions

- **https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary**

- **Safety Event:** A collision, derailment, fire, hazardous material spill, act of nature (Act of God), evacuation, or Other Safety Occurrence not Otherwise Classified (OSONOC) occurring on transit right-of-way, in a transit revenue facility, in a transit maintenance facility, or involving a transit revenue vehicle and meeting established NTD thresholds.

- **Security Event:** An occurrence of a bomb threat, bombing, arson, hijacking, sabotage, cyber security event, assault, robbery, rape, burglary, suicide, attempted suicide (not involving a transit vehicle), larceny, theft, vandalism, homicide, CBR (chemical/biological/radiological) or nuclear release, or other event.

Definitions

Reportable Event

- A safety or security event occurring on transit right-of-way or infrastructure, at a transit revenue facility, at a transit maintenance facility or rail yard, during a transit related maintenance activity or involving a transit revenue vehicle that results in one or more of the following conditions:

Non-Rail Modes:

- A fatality confirmed within 30 days of the event
- An injury requiring immediate medical attention away from the scene for one or more person
- Property damage equal to or exceeding $25,000
- Collisions involving transit revenue vehicles that require towing away from the scene for a transit roadway vehicle or other non-transit roadway vehicle
- An evacuation for life safety reasons

Definitions

Reportable Event (continued)

Rail Modes:

- A fatality confirmed within 30 days of the event
- Serious injury that may or may not require transport from the scene for medical attention (see Serious Injury)
- An injury requiring immediate medical attention away from the scene for one or more persons
- Substantial damage
- An evacuation for life safety reasons, or to the rail right-of-way
- Rail transit vehicle collisions occurring at a grade crossing
- Rail transit vehicle collisions with an individual on the rail right-of-way
- Rail transit vehicle collisions with another revenue or non-revenue rail transit vehicle
- A mainline or yard derailment of revenue or non-revenue vehicles
- Events involving a runaway train

For details, see: https://www.transit.dot.gov/ntd/manuals

Definitions

- **Non-Major Summary Incident/Event:** Less severe incidents or events that do not meet the requirements of Reportable Events:
  - Other safety occurrences not otherwise classified (injuries); and
  - Fires.
- **Other Safety Occurrences not Otherwise Classified (OSONOC):** Other safety events not specifically listed as a Reportable Event but which meet a reportable threshold. Includes (but not limited to):
  - Slips
  - Trips
  - Falls
  - Electric shock
  - Smoke or the odor of smoke/chemicals noticed in a transit vehicle or facility
  - Events involving a runaway train

Type	Definitions	Examples
Physical assault	Involves physical contact or actions intending to harm another person	Throwing objects Spitting Sexual assault Kidnapping Brawling Robbery Rape Weapon assault
Verbal assault	A statement (oral or written) or act that can reasonably be expected to induce apprehension or danger of bodily injury or harm to another person	Whistling Insults Catcalling Use of obscene language Sexual comments
Nonverbal assault/harassment	An intentional display that would give the victim reason to fear or expect immediate bodily harm	Staring Antisocial behavior Indecent exposure/gestures Public drunkenness Pickpocketing Noncompliance with rules Juvenile disturbance

Crime by Time of Day/Day of Week

- Crimes such as pickpocketing, public disorder, and some types of sexual harassment are more likely to occur during crowded periods, such as peak hours, when greater anonymity exists among passengers.

- Conversely, crimes requiring privacy, such as robberies, are more common in empty stations or bus stops with little to no surveillance (early/late in day, weekends).

- These temporal patterns highlight the importance of targeted safety measures to address risks during specific times and days.

Reporting Overview

- The Bipartisan Infrastructure Law (BIL) updated some definitions and changed some reporting requirements (historic comparisons may need interpretation)

- Incidents at bus stops are typically not reported (public right-of-way), but bus and rail stations are (transit-owned facilities)

- Rates are often reported in terms of Unlinked Passenger Trips (UPT)

- Assaults fell during COVID, but assault rates per UPT increased dramatically

- Incidents are rare. Agencies with less UPTs usually show outsized and lumpy effects on rates.

Reporting Changes

Table 4. Changes to NTD Security Incident Reporting.

Time Period	Major Events (S&S-40)	Nonmajor Events (S&S-50)
2002–2010	All included	Excludes security events
2011–2014	All included	Nonmajor security events not reported to the NTD
2015–2022	All included	Nonmajor security events not reported to the NTD
2023	All included	Excludes security events (assaults on transit workers)
Starting in April 2023	All included (columns reflect assaults on transit workers)	All included (columns reflect assaults on transit workers)

Note: Summarized from (*28*).

Transit Assaults (4/23-6/24)

Table 5. Number of Transit Assaults by Transit Worker Types and Locations.

Transit Worker Type and Location	Number of Assaults[a]	Percentage
	N=2,959	100%
By transit worker type		
Not a transit worker (rider)	1,962	66%
Other transit worker	349	12%
Transit operator	498	17%
Not applicable[b]	150	5%
By location		
In or on vehicle	1,634	55%
At transit station	1,262	43%
Other	63	2%

[a]Source: Major security event data (S&S-40) from April 2023 to June 2024 (*27*).
[b]Victims are not specified.

Transit Assaults by Mode

Table 6. Number of Transit Assaults by Mode and per 1 Million UPTs.

Mode	Number of Assaults[a]	UPTs (Million)	Number of Assaults per 1 Million UPTs
Bus[b]	1,049	3,375	0.31
Heavy rail	1,300	3,224	0.40
Light rail/BRT	527	457	1.15
Other	83	163	0.51

[a]Source: Major security event data (S&S-40) from April 2023 to June 2024 (*27*).
[b]Assaults at bus stops or shelters are not included.

- Bus stops in public right-of-way are excluded from reporting
- Light rail and BRT assaults have higher rates

Causes of Assaults

- High neighborhood or community crime rates.
- Isolated conditions or crowded conditions.
- Fare evasion attempts.
- Targeting of certain groups (women, Latinx, fare collectors, etc.).
- Enforcement of policy or code of conduct by a transit worker.
- Situations from outside of the transit system may spill over into the transit environment.
- Presence of illegal activities, such as drug exchanges.
- Unhoused populations, who can be both victims and perpetrators of assault.
- Random acts of violence.
- Poor lighting and unkempt transit settings.

Guidance for Reducing Assaults

- Provide resources/services to the unhoused.
- Discourage enforcement of fare collection by a transit worker.
- Do not make vehicle operators enforce fare collection.
- Install fare gates (where applicable) that make fare evasion more difficult.
- Ban repeat offenders (individuals who have committed prior assaults).
- Train transit employees on conflict resolution, de-escalation, and other topics to mitigate the causes of assault.
- Hire more police officers or security personnel to make customers and employees feel safer and act as a deterrent.
- Have more transit personnel present at stations and on transit vehicles.
- Post information to the public on the consequences of committing assault.
- Ensure proper lighting, well-trimmed vegetation to avoid blind spots, and transit settings that are clean and free from debris

Conditions Contributing to Higher Risk of Assault

- Being a member of a vulnerable group or a transit worker in general.
- An open transit facility design that is at street-level with platforms adjacent to the public right-of-way without a fare gate. Such transit facilities are more difficult to control.
- Certain times of day when few people are on the system (nighttime, evening rush hours).
- Certain design features of the station or transit environment that make it easier for perpetrators to hide or catch people off guard.
- Standard operating procedures for transit workers that put them at higher risk.

Guidance to Address Risks

- Design changes to mitigate assault, such as removing bushes or tress that block views or positioning lighting where needed.
- Train transit workers on situational assessment of threats and risks.
- Encourage riders to be aware of their surroundings (headphones).
- Encourage riders to avoid sitting in empty train cars.
- Allow stops-on-demand (courtesy stops closer to their destination).
- Consider transit agency and contractor policy changes intended to reduce risks to transit employees and riders, such as codes of conduct and penalties for violators.
- Train transit workers to follow established protocols by notifying the Control Center rather than directly engaging with perpetrators.
- Make sure training guidance to transit workers is consistent across the industry.
- Use cameras to monitor vehicles and stations.
- Use technology such as access control systems, weapon screening systems, silent alarm systems, facial recognition systems, better lighting.

Addressing Assault Consequences

- Make it easier to report incidents.
- Provide information to victims on how to access various resources available to them.
- Develop policies that let riders know the transit operator/agency take their concerns of assault seriously and care about their perceptions of security.
- Establish procedures and policies for banning individuals that have committed assault.
- Facilitate access to the following resources for transit workers following an assault: advocates to help navigate the process and criminal justice system, employee assistance programs that help victims by providing a therapist to talk to, critical incident stress management programs (support group).
- Develop an agency safety plan (required for agencies receiving select federal funds).

Best Practices

- The report provides examples and best practices for the mitigation strategies (37 pages).

- Takeaways

  – Make it easy to report incidents.

  – Ensure follow-through (prosecute).

  – Document, track, and adapt.

- Mitigation planning Excel model will be available.

Mitigation Strategies for Deterring Transit System Assaults

Hudson, J. G., O. Wang, N. Johnson, I. N. Sener, J. Guo, C. O'Rear, H. Zhang, M. Mahdavi, and A. Loukaitou-Sideris. 2025. *Mitigation Strategies for Deterring Transit Assaults.* Prepublication draft of TCRP Research Report 258. Transportation Research Board, Washington, DC

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Resources for Transit Agencies

NCDOT-IMD Resources

Training Safety Series – 2025 Sessions

- Drug & Alcohol Program Management
- Drug & Alcohol Reasonable Suspicion
- Implementation of the ADA in Public Transportation (10/14)
- PASS (Passenger Assistance, Safety and Sensitivity)
- PATS (Passenger Assistance Techniques)
- Customer Service - Disability Awareness
- Conflict De-escalation
- Dealing With Difficult People
- Diversity and Sensitivity for Operations Personnel
- Accident/Incident Preparedness

Training Hub Web Page

Training Safety Series – 2026 Sessions

- Drug & Alcohol Program Management
- Drug & Alcohol Reasonable Suspicion
- Implementation of the ADA in Public Transportation
- PASS (Passenger Assistance, Safety and Sensitivity)
- PATS (Passenger Assistance Techniques)
- Conflict De-escalation (NCPTA Session)

More Safety and Security focused training coming. The Annual Training Survey will be out in the next few weeks, and we look forward to your feedback and ideas.

Federal Transit Administration (FTA)

- [De-Escalation Training Resource Directory](#)
- [FTA-Sponsored Training Courses](#)

National Rural Transit Assistance Program (National RTAP)

- [Directory of Trainers](#)
  - De-escalation/Driver Assault Prevention
  - Safety & Security
  - Workplace Violence
- [eLearning](#)
  - Active Shooter Preparedness Training for Rural Transit Systems
  - Emergency Procedures for Rural Transit Drivers
  - Problem Passengers: Managing Difficult Passengers & Situations
  - Safety Training and Rural Transit (START) Online

National RTAP is funded by the Federal Transit Administration to assist rural and tribal transit providers and to support the state RTAP programs. There is no charge for any of our training materials, eLearning courses, items in our Resource Library, or use of National RTAP in the Cloud web tools.

USDOT

Transportation Safety Institute

Transit Crime Prevention & Emergency Management Courses

- Transit System Security (In-Person) ($80)

- Crime Prevention Through Environmental Design (In-Person) ($100)

- Transit System Security: Design Review (In-Person) ($95)

Certificate Programs

- Transit Safety and Security Program (TSSP) Certificate

- The World Safety Organization, Inc. (WSO) Certification

- Public Transportation Safety Certification Training Program (PTSCTP) Certificate

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Community Transportation Association of America (CTAA)

https://ctaa.org/calendar/

- Customer Service and De-escalating Stressful Situations with Passengers – Oct 16, 2025 (CTAA Members - $300/non-$400)

- Understanding Passengers Who Have Experienced Trauma (Virtual) ($0)

- Passenger Assistance, Safety and Sensitivity (PASS) – We provide this annually (CTAA Members: $28/Non-Members: $55)

- Conflict Management and De-escalation for Transit Drivers and Supervisors (Virtual) ($0)

National Transit Institute (Rutgers) - *NTI is funded by a grant from the Federal Transit Administration*

- *Assault Awareness and Prevention for Transit Operators* ($0)
  - (Train-the-Trainer)
  - Virtual
  - Courses in December 2025 & February 2026

- *Crisis Communications for Transit Managers* ($0)
  - Virtual
  - Courses in November 2025, December 2025, February 2026 & March 2026

- *Violence in the Transit Workplace - Prevention, Response and Recovery* ($0)
  - (Train the Trainer)
  - Virtual
  - Courses in October 2025, January 2026 & March 2026

Course Registration Link

NTI Newsletter – Sign up to receive notices for new courses

Transportation Security Administration (TSA)

- [Surface Transportation Resources](#) - Jason Marino spoke at the NCPTA (pupil transportation) Meeting in Greensboro on Sept 26th. Offered Free Federal Training Services for Bus Drivers, Staff and Admin.
  - Safety Exercises, Bag Drop Testing and Training, Walkthroughs about preparedness and ID'ing vulnerabilities, De-Escalation Techniques for Drivers, etc.

American Public Transportation Association (APTA)

- [Security and Emergency Management](#) - A number of different Security and Emergency Management programs, materials, and staff are available through APTA. These help ensure that transit agencies are successful in maintaining and improving the security of their employees, infrastructure and customers throughout their systems.

- [Security and Emergency Management Standards](#) - Best practices for **enterprise and operational technology, control and communications cyber security, emergency management** measures and the implementation of methods and techniques for **infrastructure system security** are provided to promote the protection and safeguarding of mass transit and passenger rail employees, passengers and systems.
  - [Transit Agency Workplace Violence Prevention, Response and Recovery Programs](#) - Provides a framework for transit agencies to prevent, respond to, and recover from workplace violence incidents. **Published 05/23/23**
  - [Transit De-Escalation Policy and Training](#) - Provides transit agencies policy and training recommendations and resources to support transit workers in the de-escalation of confrontations with the goal of reducing transit worker assaults. **Published 06/24/25**
  - [Security Considerations for Public Transit Passenger Stations and Stops](#) - Proposes standards for enhancing the security of public transit stations and stops of all modes and the passengers who use them.
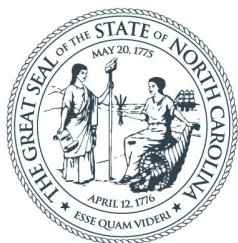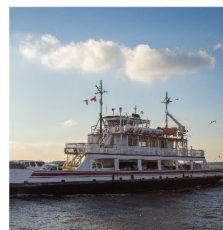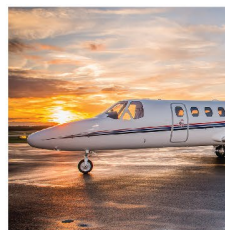
Accident, Incident, & Occurrence Reporting

Kevin B. Edwards, S, E, & C Manager

October 2025

What is an Accident?

The FTA defines an accident as:

- Accident means an Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.

What is an Incident?

The FTA defines an Incident as:

- An Incident means an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

What is an Occurrence?

The FTA defines an Occurrence as:

- Occurrence means an Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.

Reporting Requirements

- The Incident/Accident report form is completed in SmartSheet. The report should be completed within 24 hours of the incident/accident. Once the form has been saved in the software, an automated email notification will be sent to the appropriate IMD staff for review and action. A police report and any communications from the insurance companies must be attached as soon as received. If the vehicle has been totaled, the information should also be forwarded to the IMD Procurement Section. If a fatality occurs, the grantee should notify the IMD Regional Grant Specialist as soon as possible. All incidents and accidents, no matter the circumstances or cost of the damage, must be reported in SmartSheet. Whether the incident or accident is reportable to FTA will be determined by IMD. Only the total of FTA reportable accidents and incidents are reported on the OPSTATS Report.

Reporting Via SmartSheet

- Connect NCDOT webpage

- IMD SmartSheet Links for Transit Systems

- Transit. Activity Reporting – Accident/Incident Reporting
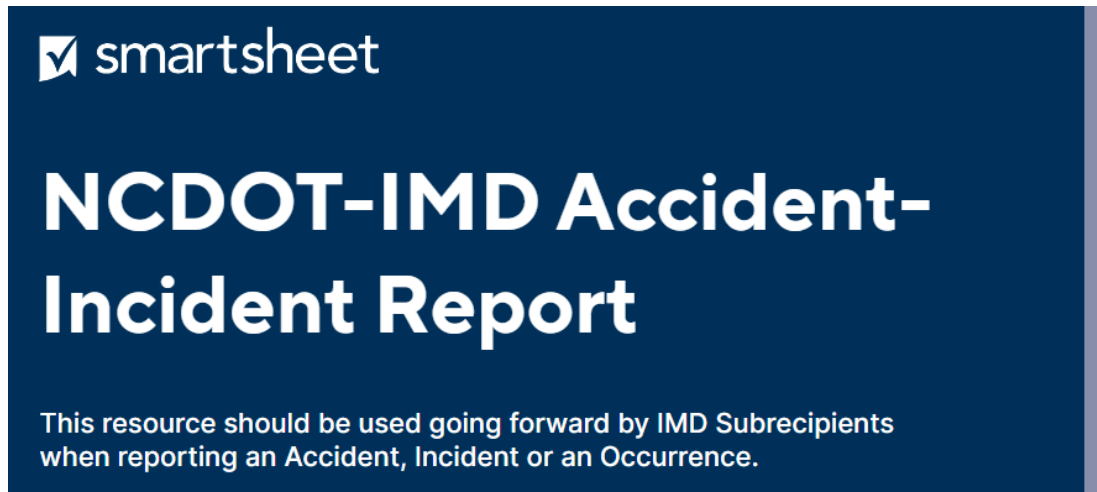
	Report Number	Date of Report	Transit Agency Name	Event Category	Name of Supervisor or Investigator	Name of Submitter	Submitter Email Address	Phone Number of Submitter
1	2023-0715	10/02/25 10:31 AM		Occurrence				
2	2023-0714	10/01/25 3:30 PM		Accident				
3	2023-0713	10/01/25 12:01 PM		Accident		same		

Post Accident Testing Decision Making : A guide to help navigate the post accident decision process.

```
                              ┌─────────────┐
                              │  ACCIDENT   │
                              └──────┬──────┘
                                     │
                                     ▼
   ┌───────────────────────────────────────────┐           ┌──────────────────┐
   │ Did the occurrence involve a public transit│    No →   │ No DOT/FTA test  │
   │ vehicle, whether in or out of revenue       │─────────▶│ required;        │
   │ service?                                    │          │ document         │
   └───────────────────────┬─────────────────────┘          └────────▲─────────┘
                       Yes │                                          │
                           ▼                                          │
   ┌───────────────────────────────────────────┐                     │
   │ Was the occurrence associated with the     │       No           │
   │ operation of the transit vehicle?          │────────────────────┘
   └───────────────────────┬─────────────────────┘
                       Yes │
                           ▼
            ┌──────────────────────┐          ┌──────────────┐   ┌────────────────────────────────────────┐
            │ Was there a fatality?│   Yes →  │ DOT/FTA Test │──▶│ Any other SS employee who could have    │
            └──────────┬───────────┘          │ ASAP         │   │ contributed                             │
                   No  │                       └──────┬───────┘   └────────────────────────────────────────┘
                       ▼                              │           ┌──────────┐
                                                      └──────────▶│ Driver   │
   ┌────────────────────────┐                                     └──────────┘
   │ Was anyone immediately │
   │ transported to a       │   Yes    ┌────────────────────────────────────┐   Yes   ┌──────────────────┐
   │ medical treatment      │─────────▶│ Can SS employee's performance be   │────────▶│ No DOT/FTA test  │
   │ facility?              │          │ completely discounted as a          │         │ required;        │
   └───────────┬────────────┘          │ contributing factor?**              │         │ document         │
           No  │                        └────────────────────────────────────┘   No    └──────────────────┘
               ▼                                                                         ┌──────────────┐
   ┌────────────────────────┐          ┌────────────────────────────────────┐          │ DOT/FTA      │
   │ Was there disabling    │   Yes    │ Could any other SS employee have   │   Yes    │ Test ASAP    │
   │ damage* to any vehicle?│─────────▶│ contributed to the accident?       │─────────▶└──────────────┘
   └───────────┬────────────┘          └──────────────────┬─────────────────┘
           No  ▼                                       No  │
   ┌────────────────────────┐                              │
   │ No DOT/FTA test        │◀─────────────────────────────┘
   │ required; document      │
   └────────────────────────┘
```

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Post Accident Testing Decision Report

- **POST ACCIDENT TESTING DECISION REPORT**

- ***A separate sheet must be filled out for each covered employee that contributed to the accident****

- **System Name: Date of Accident:**

- **Time of Accident: Time Employer was notified:**

- **Location of Accident:**

- **Safety-Sensitive Employee: Position:**

- **i.e. Driver, Dispatcher, etc.**

- **1. Did the accident involve a public transit vehicle? Yes No**

Post Accident Testing Decision Report

- 2. Did the accident involve the operation of the vehicle? Yes No

- 3. Was there loss of life as a result of the accident?* Yes No

- 4. Did an individual suffer a bodily injury and immediately Yes No

- receive medical treatment away from the scene?*

- 5. Was there disabling damage to any of the involved vehicles? * Yes No

- 6. a) Did you perform a drug and/or alcohol test? Yes Yes (NON-DOT) No

- (Use Decision Tree on back of this form) DOT-FTA Authority Company Authority

- b) If no, why not?
  _____
  _____

- c) For a non-fatal accident, can the covered employee(s) performance be completely discounted as a contributing factor to the accident? Yes or No

Post Accident Testing Decision Report

- **7. a) Was an alcohol test performed within 2 hours? N/A Yes No**

- **b) If no, why:**

- **8. If no alcohol test occurred, and more than 8 hours elapsed from the time of the accident, please explain:**

- **9. a) Was a drug test performed within 32 hours? N/A Yes No**

- **b) If no, why:**

- **10. a) Did the employee leave the scene of the accident without a reasonable explanation? Yes No**

- **b) If Yes, please explain:**

- **Test Determination:**

- **Name of supervisor making determination:**

- **Time employee was informed of determination:**

Post Accident Testing Decision Report

- * Disabling Damage: Damage that precludes departure of a motor vehicle from the scene of the accident in its usual manner in daylight after simple repairs.

- (1) Inclusion: Damage to a motor vehicle, where the vehicle could have been driven, but would have been further damaged if so driven.

- (2) Exclusions:

- A. Damage that can be remedied temporarily at the scene of the accident without special tools or parts.

- B. Tire replacement without other damage even if no spare tire is available.

Post Accident Testing Decision Report

- **C. Headlamp or taillight damage.**

- **D. Damage to turn signals, horn, or windshield wiper, which makes the vehicle inoperable.**

- **** Contributing Factor: The determination of whether or not a safety-sensitive employee's performance was a contributing factor should be the decision of the company official investigating the accident; not based on the police officer's accident fault determination. This decision should not be made hastily. The company official's determination must be based on the best available information at the time of the accident.**

Post Accident Decision Tree

- A guide to help navigate the post accident decision process.

- Copies of this slide presentation are available by contacting Compliance Analyst Eartle McNeill Jr. at elmcneill1@ncdot.gov

  or myself at

- kbedwards2@ncdot.gov