The pocket reference guide provides bus transit systems with an overview of procedures, best practices and guidelines to conduct transit incident investigations.

In the event of an incident, each employee has a responsibility to the transit property. Those responsibilities are as follows:

The Bus Operator's Responsibilities

Seven Emergency Management Steps:

- Stay Calm
- Assess the Situation
- Obtain Help
- Protect People then Property
- Assist the customers
- Secure the scene
- Gather Information

Immediately following the incident:

- Shut the bus down
- Notify management
  - Provide route number
  - Exact location
  - Vehicle number
  - Operator's name/number
- Activate four-way flasher
- Set out reflective triangle

The operator should not:

- Discuss the incident with anyone except representatives from the transit agency and the police.
- Make any statements or get drawn into any discussions or arguments;
- Move the vehicle until someone arrives that can verify or witness the positions of the vehicle, length and position of skid mark.

The operator should:

- Provide their name, and the company's name
- Pass out courtesy cards
- Complete an Incident Report

Incident Investigator Responsibilities

Investigators should bring their incident investigation tool kits including the following items:

- flash light
- camera
- rain gear
- latex gloves
- safety vest
- calculator
- clip board
- paper
- pencil
- spray paint
- tape measure
- measuring wheel
- tape recorder
- hammer
- masking tape
- chalk
- courtesy cards
- radio
- cones
- accident damage & incidence report forms
- drug & alcohol testing
- notification form
- witness statement forms
- employee incident report form

When Collecting Evidence the Investigator should:

- Collect and note evidence
- Note the date/time/location of collection
- Identify the collector
- Store evidence in a secured location to prevent damaged or alteration
- Limit access to evidence and document in writing anyone who reviews the evidence

The Investigators should Photograph the Scene:

- Area of impact
- Fixed object damage
- Sight lines or distances
- Sight obstructions
- Evidence
- Points of final rest
- Tire marks
- Debris
- Fluids
- Conditions/items that may be of importance
- Location signs/road signs, traffic signals/stop signs, vehicle model/ license plates
- Areas of damage, matching damaged parts of two vehicles showing how they came in contact or other items on the vehicle that can help explain the collision.
- Photograph negatives and/or a CD of photos should be kept with the investigation report.

Investigators Field Sketching:

It is important for the investigator to use a plain piece of paper when illustrating the field sketch. Investigators should include on their field sketch directional north, any and all measurements and a statement that reads:"not to scale."

Investigators should draw a field sketch of the collision scene showing certain features of the crash, such as the intersections, vehicles, street names, directions, traffic signals and signs, position of witnesses and any other objects that might be useful.

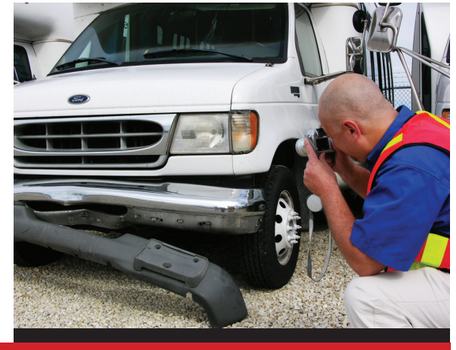
The Investigator Should Look for External/ Contact Damage/Induced Damage:

Contact damage is damage to any part of the vehicle caused by direct contact with some other object.

Safety/laminated glass in front windshields leave fracture lines radiating away from the contact point know as a "spider web" pattern.

External damage is rubbed-off, crumpled vehicle skin, tire rubber, road material, tree bark, and human tissue/clothing, imprints of headlight, wheel rims, bumpers, door handles, poles, and other fixed objects.

Induced damage is damage that is caused by the vehicle being hit in one area and the vehicle reacting in another.



Florida Department of Transportation

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For more information contact:

Mike Johnson, Administrator
Transit Operations
Florida Department of Transportation
850.414.4525
jamemike.johnson@dot.state.fl.us

Deborah Sapper
Center for Urban Transportation Research
University of South Florida
813.974.1446
sapper@cutr.usf.edu

Amber Reep
Center for Urban Transportation Research
University of South Florida
813.974.9823
reep@cutr.usf.edu

The Investigator Should Identify Skid Marks:

Curved skid marks—indication that the vehicle is rotating while simultaneously skidding. All four tire marks can be observed.

Skip skid—intermittent skids and may have been made by a vehicle bouncing on the roadway. The length of the skid mark and the length of the space between them is uniform and consistent, and less than 3 to 4 feet apart.

Gap skid—skids with a gap between the termination of the skid marks on the roadway and a re-initiation of the skid mark some distance down the roadway.

Yaw Marks—tire marks left on the roadway by wheels that are sliding and rolling simultaneously. Yaw marks are always curved and have very distinctive striations.

Investigator should note that ABS equipped buses leave visible tire marks on the road that are significantly lighter than those left by non-ABS vehicles.

Investigators Should Note Vehicle Fluids Evidence

Splash down occurs when a fluid container is ruptured and fluid splashes onto the surface.

Dribble is a fluid "trail" from the area of impact to the vehicle's final rest.

Puddling fluid forms in a puddle after leaking from the vehicle.

Run-off fluid leaks from vehicle and runs down a grade.

Soak-in fluid leaks from the vehicle and soaks onto porous surface such as soil or gravel.

Investigators Interview Should be:

Conducted with the operators, drivers of other involved vehicles, witnesses, police, fire, EMS, and passengers.

Interviews may be conduct at the scene or at a later time. Later interviews may be conducted over the phone, or in person, but should be done in person in a neutral location.

- Ask for permission to record/document the interview prior to starting the interview.
- Be courteous and patient.

If the interviewee is a witness to the collision, they are under no obligation to speak with you and should be treated with respect.

Drug & Alcohol Testing Post Incident

Testing employees for prohibited drug use and possible alcohol misuse is required after all accidents or "incidents" that meets FTA threshold for testing (49CFR Part 655.44).

Post-accident drug and alcohol tests must be performed as soon as possible following the accident. If an alcohol test is not administered within 2 hours following the accident, the employer must still attempt to administer the test, and prepare and maintain on file a record stating the reason(s) the test was not promptly administered.

If a drug and alcohol test is still not administered within 8 hours following the accident, the employer shall cease attempts to administer an alcohol test and shall maintain records as to why the test was not performed.

If a drug test has not been performed within the first eight hours following the accident, the employer must document the reason for delay and continue to attempt to administer the test. After 32 hours, the employer must cease attempts to conduct the drug test and document why the test was not performed.

Police Report

The transit property and the incident investigator should file, reference, and use police reports as a tool for the investigators final findings. Police reports can be used to identify causal factors, to develop recordable accident and disciplinary polices.

Bus Fires

Bus fires are one of the common incident in transit. Operators should be observant of burning odors, smoke and/or flames and listen for visual/audible warning devices.

In the event of a bus fire the operator should:

- Pull the vehicle off the road to a safe location to evacuate the vehicle.
  - Shut off the engine
  - Open all the doors
  - Evacuate all the passengers
  - Position reflectors
  - Use of Emergency Exit as required

If it is safe, put out the fire with your fire extinguisher. If it is not safe, wait for emergency personnel.

Equipment can be replaced—LIVES CAN NOT!

Fires should be investigated by a third party contractor and it is also important to obtain fire department investigation findings.

Additional Information

This Reference Guide to Incident Investigation is a simple, easy to use pocket guide reference. For additional details about incident investigations for bus transit systems including best practices, forms, sample policies and procedures and additional copies of this pocket guide, please visit our website at ***www.cutr.usf.edu/bussafety.***

GUIDE for BUS TRANSIT INCIDENT INVESTIGATION

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