Florida Department of Transportation
State Safety Office
Crash Data Academy

The Crash Investigation Process
How to ask a question:

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Crash Data Academy: The Crash Investigation Process

Presenter:
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Florida Highway Patrol
Overview of Florida Highway Patrol Crash Investigation Training

Florida Highway Patrol
Traffic Homicide Coordinator’s Office
Traffic Crash Investigation

The ten steps of the management process in a crash investigation.

1. Respond to the traffic crash scene safely.
2. Assess the scene of the crash.
3. Secure a safe work environment at the crash scene.
4. Provide emergency medical assistance to injured people, if necessary.
5. Obtain pertinent information.
Traffic Crash Investigation

The ten steps of the management process in a crash investigation.

6. Investigate the crash to determine how and why it occurred.
7. Return the scene to normal as quickly as possible, if appropriate.
8. Complete a driver exchange of information.
9. Take enforcement action.
10. Document the crash.
Steps 1 & 2: Responding and Assessing a Crash Scene

When *responding to a crash scene*, it is important to have as much information about the crash as possible and to respond safely and not cause additional traffic problems or involve yourself in a crash.
Responding and Assessing a Crash Scene

Once at the scene, the officer needs to **assess the scene of the crash**.

- The officer should approach from a distance to have an overall view of the scene. Locating the vehicle(s) and the property damaged will give the officer a perspective of the type of crash they are investigating.
Responding and Assessing a Crash Scene

Assess the scene of the crash.

- When assessing the scene, it is also important to be aware of possible dangers and hazards that could result in a fire.
  - If the fire is small enough and it is appropriate, the fire extinguisher from the patrol car could be used to extinguish the fire.
  - If it is a larger threat, the officer should request assistance from the fire department. It is also important to make sure any drivers, occupants or bystanders are at a safe distance away from the fire threat.
Responding and Assessing a Crash Scene

Assess the scene of the crash.
Responding and Assessing a Crash Scene

If the crash involves a commercial motor vehicle, additional attention to detail is needed due to contents of the load carried. The officer should look for special placards to determine if there are any hazards or risks associated with the load.
Step 3: Securing a Safe Work Environment

After assessing the scene, the officer needs to **secure a safe work environment**. Traffic crashes attract motorists’ attention causing them pay attention to the crash and not their driving. This can be dangerous and may cause secondary crashes. The officer needs to effectively control the scene. This can be obtained by positioning the patrol car properly with the emergency lights activated, traffic reflective and warning devices like traffic cones, vests, flares, barricades etc.
Securing a Safe Work Environment

Due to the vehicles and damaged properties and other associated hazards that are in the roadway, it may be necessary to divert traffic around the crash scene. This can be accomplished with the aforementioned traffic control devices.
Securing a Safe Work Environment

Traffic Cones

Crash

Patrol Car
Securing a Safe Work Environment
Securing a Safe Work Environment
Securing a Safe Work Environment

After the crash scene has been safely secured, the officer must assess the scene and request additional resources if needed. Other resources may include law enforcement, fire department, the Department of Transportation or a hazardous materials team.
Securing a Safe Work Environment

In addition to securing and protecting the scene for safety reasons, it is also important to preserve the scene for evidence, not moving evidence until the scene investigation is complete.

If the traffic crash involved serious bodily injury or a fatality, nothing except for the injured persons should be moved prior to the homicide investigator’s arrival.
Securing and Preserving a Crash Scene

Review the traffic conditions at a crash scene thoroughly to reduce the chance of secondary crashes occurring during a crash investigation.

Position the patrol vehicle at a visible, safe location to assist in controlling traffic flow and warning motorists during a crash investigation.
Securing and Preserving a Crash Scene

Activate the patrol vehicle emergency lights fully at the crash scene as a caution to all road users during a crash investigation.

Use the appropriate reflective and warning devices to protect the crash scene in accordance with agency policy during a crash investigation.

Re-route the vehicular traffic flow effectively at a crash scene in accordance with agency policy during a crash investigation.
Securing and Preserving a Crash Scene

Ensure the safety of all personal property at the crash scene in accordance with agency policies and procedures during a crash investigation.

Decide which agency will conduct the crash investigation by determining the jurisdiction of the crash location.
Securing and Preserving a Crash Scene

Determine the need for additional resources by thoroughly assessing the crash scene during a crash investigation.

Request dispatch to provide additional resources to manage unusual conditions at the crash scene during a crash investigation.
Securing and Preserving a Crash Scene

Preserve the crash scene for investigative purposes in accordance with agency policy during a crash investigation.

Provide efficient emergency medical assistance to injured people prior to the arrival of EMS during a crash investigation.
Step 4: Rendering First Aid

During the initial dispatch of the traffic crash to the officer, information should be given advising if there are injuries in the crash. The dispatch center will have Emergency Medical Services (EMS) en route but it is possible for the officer to arrive on scene prior to EMS. When this occurs, the officer will provide emergency medical assistance to the injured people and make sure that EMS is en route.
Rendering First Aid

It is common for the involved person(s) to be emotional regardless to the severity of the crash. The officer must remain calm and be empathetic to the person’s emotional state.

After attending to the injured, the officer needs to determine the jurisdiction of the crash. This can be accomplished by identifying the area where the first harmful event (first damage or injury producing event) occurred. The officer will need to examine the evidence at the scene to determine the area of collision (AOC). Once AOC has been established, the officer will exactly where the crash occurred.
Step 5: Obtaining Information

Once the scene is secure and the officer begins their investigation, the officer must **obtain pertinent information** by identifying the drivers of the vehicle involved in the crash and obtain their drivers’ license, vehicle registration and proof of insurance. The insurance information may be provided by a uniform paper or by electronic format.
Obtaining Information

The officer must verify all the information obtained to insure their validity.

After identifying the drivers and obtaining their information, the officer should identify the occupants and possible witnesses.
Obtaining Information

The officer should obtain and document statements from all persons in order to help determine the cause of the crash and properly cite violators.

All information and statements gathered will be part of the traffic crash investigation and crash report.

The officer must notify owners of damaged unattended vehicles and damaged property during the investigation.
Step 6: Investigating the How and Why

Once the officer has obtained the pertinent information, it is time to *investigate the crash to determine how and why it occurred*. The officer must interpret the evidence correctly.

Evidence such as roadway marks, debris, or vehicle damage are clues to how and why the crash occurred.

When examining the roadway, the officer should be aware of pre-existing roadway marks from previous crashes.
The officer will learn that short-lived evidence like skid marks, tire prints, debris, fluid trails, final rest of vehicles and bodies should be documented quickly by measurements and photographs while on scene due to their temporary existence. Short lived evidence can be moved, destroyed or altered.
Investigating the How and Why

Long term evidence such as deep gouges in the roadway will have a longer existence.
Investigating the How and Why

The damaged vehicle should be examined and will give the officer more information about the how and why.
Investigating the How and Why

By examining the scene evidence the officer will determine the path of travel of a vehicle involved in a crash using vehicle dynamics analysis during the crash investigation. The path of travel can be also be determined by locating tire marks, roadway surface marks and fluid trails.
Investigating the How and Why

The officer will be able to identify the different types of tire marks including:

- skid marks
- intermittent skid marks
- skip skid marks
- offset marks
- anti-lock braking scuff marks
- squeegee marks
- furrow marks
- scuff or yaw marks
- acceleration marks and tire prints
Investigating the How and Why
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Measure the skid marks found at the crash scene accurately in accordance with agency policy during a crash investigation.

When examining the vehicles involved in a crash, the officer should look closely for evidence to support who the driver was, injuries on the person that match interior damage etc.
Investigating the How and Why

The officer will take clear photographs of the involved vehicles and the crash scene in accordance with agency policy and procedures during a crash investigation.

Determine how the crash occurred by analyzing the collected evidence, observing the crash scene, and interviewing the people at the crash scene during a crash investigation.
Investigating the How and Why

During an investigation, there may be times when the officer is required to conduct a criminal investigation, beyond the civil crash investigation. These special circumstances may include hit and run crashes, DUI crashes, criminal activity associated with the crash etc.
Investigating the How and Why

The officer will understand and be familiar with crash report privilege. The crash report privilege protects the driver and allows the driver in a crash the chance to report the crash and give the information to the reporting officer for the traffic crash report. The officer must conduct a changing of hats, the reading of Miranda after the crash investigation and before any questioning of the suspected criminal activity.
Step 7: Returning the Crash Scene Back to Normal

After the crash investigation, the officer must return the scene to normal as quickly as possible.

Returning the scene back to normal may be as simple as requesting the driver to move their vehicle out of the roadway and to the shoulder or it may be complex and the officer may need to request the assistance from a tow truck service.
Returning the Crash Scene Back to Normal

All debris and any hazardous materials must be cleared from the scene.

The scene and roadway must be returned back to normal before the officer leaves the scene.
Step 8: Exchanging Driver Information

Once the scene and roadway are back to normal, the office must **complete a driver exchange of information** for all persons involved in the crash and it must be completed at all crashes.

The exchange of information is required by law and it also serves as a way of providing driver license, vehicle registration and insurance to all persons involved in a crash.
Step 9: Taking Enforcement Action

Once the officer has concluded how and why the crash occurred, violations should be identified and citations should be issued.
Taking Enforcement Action

Three types of traffic violations usually occur in traffic crashes.

1. Contributing traffic violations - a direct cause or contribution to the crash. Example: Running a red light and hitting another vehicle

2. Non-contributing traffic violation - a violation that has no direct bearing or cause to the crash but was discovered during the crash investigation.

3. Non-traffic violation - a criminal offense that is discovered during the crash investigation.
Taking Enforcement Action

The following are the most common violations associated with traffic crashes:

- Driving too fast for conditions
- Following too closely
- Improper passing
- Defective equipment
- Ran stop sign
- Driving left of center
- Careless driving
- Violation of right of way
- Ran stop sign
- Violation of traffic control device
- Improper U turn
Step 10: Completing a Crash Report

The officer must document the crash by completing a traffic crash report.

Florida Traffic Crash Reports are used to report the traffic crash to the Department of Highway Safety and Motor Vehicles.

The Florida Traffic Crash Reports include a Long form, short form, update form and a driver report of traffic crash or driver exchange of information.
Questions?
Next FDOT Webinars

The tentative schedule as of 7/1/2016 is:

- Thursday, September 29th, 2016 - Traffic Crash Facts and the FIRES Portal
- Thursday, October 27th, 2016 - Vulnerable Road Users, Part 1
- Thursday, November 17th, 2016 - Commercial Vehicle Enforcement
- Thursday, December 15th, 2016 - Legal and Insurance Perspective on Crash Data
- Thursday, January 26th, 2017 - The Importance of Crash Data and Statistics
- Thursday, February 23rd, 2017 - Crash Typing

(dates and topics subject to change)

Please contact Shaun Davis at shaun.davis@dot.state.fl.us with any questions or comments.
Next FDOT Webinars

Register now!  
https://attendee.gotowebinar.com/register/8578031654679345411

The webinars generally occur on the last Thursday of the month from 2:30 pm to 3:30 pm ET.

For more information, including links to past webinars, please visit our website at: http://www.dot.state.fl.us/safety/11A-SafetyEngineering/crash%20data%20academy/academy.shtm
Resources (DHSMV & Signal 4)

• Florida Department of Highway Safety and Motor Vehicles Crash Reports –  http://www.flhsmv.gov/courts/crash/


• Signal 4 Analytics -  https://s4.geoplan.ufl.edu/
Resources (FDOT)

- FDOT State Safety Office - [http://www.dot.state.fl.us/safety/](http://www.dot.state.fl.us/safety/)


- FDOT SSO Crash Data Request On Line Form - [http://www.dot.state.fl.us/safety/11A-SafetyEngineering/TransSafEng/TrafCrashData_Form.html](http://www.dot.state.fl.us/safety/11A-SafetyEngineering/TransSafEng/TrafCrashData_Form.html)

- FDOT Traffic Safety Web Portal - [http://www2.dot.state.fl.us/trafficsafetywebportal/index.aspx](http://www2.dot.state.fl.us/trafficsafetywebportal/index.aspx)

- State Safety Office GIS Query Tool - [https://fdotwp1.dot.state.fl.us/SSOGis/Home.aspx](https://fdotwp1.dot.state.fl.us/SSOGis/Home.aspx)
Further questions?

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