

What are your responsibilities as the Troop or Agency handling the crash?

If the TCRU responds to your request for a crash reconstruction, it is the requesting agency's responsibility to secure the scene, gather preliminary information, prepare the SR1050 report, interview witnesses, immediately proceed with toxicology testing if the driver of the at-fault vehicle is alive, and brief the TCROs on what is known to them at the time they arrive on scene. Due to lengthy response times, many of these duties cannot wait for the TCRO to arrive on scene. Communication between the responding TCRO and the on-scene commander is vital for a thorough investigation.

If your agency has an inhouse reconstructionist or are part of a multijurisdictional reconstruction team, ISP TCRU can provide technical assistance with imaging Event Data Recorders (EDRs) in passenger cars and light trucks, imaging Engine Control Modules (ECMs) from heavy trucks, Kia/Hyundai imaging, Tesla imaging, Unmanned Aerial System overhead mapping, and scene diagramming.

What happens after the initial response?

TCROs will process the scene by photographing, mapping, analyzing vehicles and the roadway. TCRU will work with the Troop or Agency to ensure the vehicles involved are towed to a secure location for evidentiary reasons and further processing and will follow up with imaging Event Data Recorders (EDRs) in cars and light trucks and Engine Control Modules (ECMs) in heavy trucks; however, before accessing EDRs and ECMs, written consent or search warrants will be needed to process the data. TCRU can also conduct video analysis and image cellular phones. The TCRU will work in conjunction with the requesting agency to facilitate the follow up investigation and finalize a report.

What types of reports will be completed?

The TCRU has three levels of reports: Reconstruction, Response, and Supplementary Reports.

1. A Reconstruction Report is the most detailed type of report and is completed in cases most likely to result in criminal charges. A reconstruction report will contain a detailed interpretation and analysis of the scene evidence and often an opinion as to how and why the crash occurred. A reconstruction report will incorporate other portions of the investigation into the reconstruction officer's findings.
2. A Response Report is completed in a crash where there is no likelihood of the criminal charges, such as when the at-fault driver is deceased, and the case will be civil in nature. In these types of cases, the scene is processed just as a full reconstruction, all relevant data is collected and preserved, but there is not a full analysis of the crash.
3. A Supplemental Report is completed when the TCRU completes a portion of another agency's crash analysis such as a forensic diagram, Event Data Recorder, or an Engine Control Module imaging. In these cases, the requesting agency is completing the reconstruction, while ISP is providing the technical assistance.

The TCRU strives to complete cases in 120 days or less. This is not always possible as due to the reliance on outside entities for information to complete cases such as toxicology, autopsy findings, DNA analysis, etc. TCRU will provide the originating agency a copy of the final report and other investigative items such as photographs, if requested, at the conclusion of the investigation.



Illinois State Police
Traffic Crash Reconstruction Unit
ISP Communications Center (SCC)
(217) 786-6677



Illinois State Police Traffic Crash Reconstruction Unit



Who are we?

The Illinois State Police Statewide Traffic Crash Reconstruction Unit (TCRU) currently consists of 26 Traffic Crash Reconstruction Officers (TCROs) who respond on-scene to perform crash reconstructions of life-threatening and fatal traffic crashes. TCROs are available to respond 24 hours a day to any case that involves either a life-threatening injury and/or fatality. Many of the cases result in Reckless Homicide charges or other serious offenses against the at-fault driver.



What services does TCRU offer?

The TCROs duties include, but are not limited to, processing the initial crash scene, completing a scene diagram, conducting the follow up investigations and interviews, and serving search warrants for electronic data. TCROs also conduct structural analysis of crashed vehicles, collect, process, and analyze evidence. Many TCROs have advanced training in imaging and analyzing complex Event Data Recorder (EDR) modules. Since these investigations produce lengthy, technical reports, which are used by the criminal justice system to pursue criminal charges, TCROs are recognized as Court Experts in Crash Reconstruction and can render opinion(s) as to the how and why a crash occurred in criminal proceedings. In addition, TCROs often provide testimony in civil proceedings.

TCROs possess a firm understanding of mathematics and physics to conduct complex reconstruction calculations. All the TCROs are required to pass advanced crash investigation and crash reconstruction courses prior to taking the Illinois Law Enforcement Training and Standards Board examination. Additionally, TCROs take several advanced classes each year to stay current with cutting-edge technology.

How do you make a request for assistance?

Requests for TCRU are made through the ISP Communications Center in your area, or directly through the Springfield Communication Center (SCC), 24 hours a day, 7 days a week, at **(217) 786-6677**. The following information will be needed:

1. Location of the incident, including ISP Troop and County.
2. Number of Vehicles Involved.
3. Number of Fatalities and Injuries.
4. Known Drugs or Alcohol.
5. Special Circumstances (Juvenile, First Responder, Pursuit, High Profile, etc.)
6. Cad Incident Number. (ISP)
7. On Scene Contact Information / Name and phone number.

Information provided to the SCC will be forwarded to a TCRO who will contact the on-scene commander via phone to determine if TCRU will respond. TCRU will respond to the following types of crashes, including, but not limited to:

1. Multi-vehicle crashes involving life-threatening injuries or fatalities.
2. Single unit crashes involving life-threatening injuries or fatality of a passenger.
3. Hit and run crashes involving life threatening injuries or a fatality.
4. Multi-unit Commercial Motor Vehicle crashes involving life threatening injuries or fatalities.

This is not an exhaustive list. The TCRO fielding the call will determine if a response is warranted once the preliminary information is gathered.

TCRU will normally not respond to single unit, single occupant crashes where the driver is the only one injured or killed and there are no extenuating circumstances. Extenuating circumstances will be addressed on a case-by-case basis and include, but are not limited to, crashes involving juvenile(s) or crashes within a construction zone.

Illinois State Police Traffic Crash Reconstruction Unit

Unmanned Aircraft System (UAS) Callout Quick Reference

PLEASE CONTACT THE SPRINGFIELD COMMUNICATION CENTER TO REQUEST TCRU UAS FLIGHTS AT 217-786-6677.

The TCRU currently has 21 FAA Part 107 Licensed UAS Pilots available for callout. Each pilot is equipped with a DJI Mavic 2 Pro UAS or Matrice 210 and all ISP UAS flights must comply with OPS-086, FAA Part 107 Rules, and the Illinois Freedom from Drone Surveillance Act.

**TCRU UAS are located strategically
throughout the state.**

All flights must meet at least one of the below criteria:

- Crash Reconstruction
- Crime Scene
- Fugitive
- Imminent Harm to Life
- Missing Person
- Natural Disaster
- Owner Consent
- Search Warrant
- Terrorist Attack

TCRU UAS Capabilities:

- Day and night (limited visibility) flight capable (some with thermal capabilities).
- WebEx live feed UAS video and two-way audio with Pilot.
- 30-minute max flight time between battery changes.
- 3-Mile max range.
- 400 ft. max altitude above ground and above structures.

TCRU Flight Limitations:

- Flights beyond visual line of sight.
- Flights above people (can offset).
- Inclement weather (mist, rain, ice, snow).