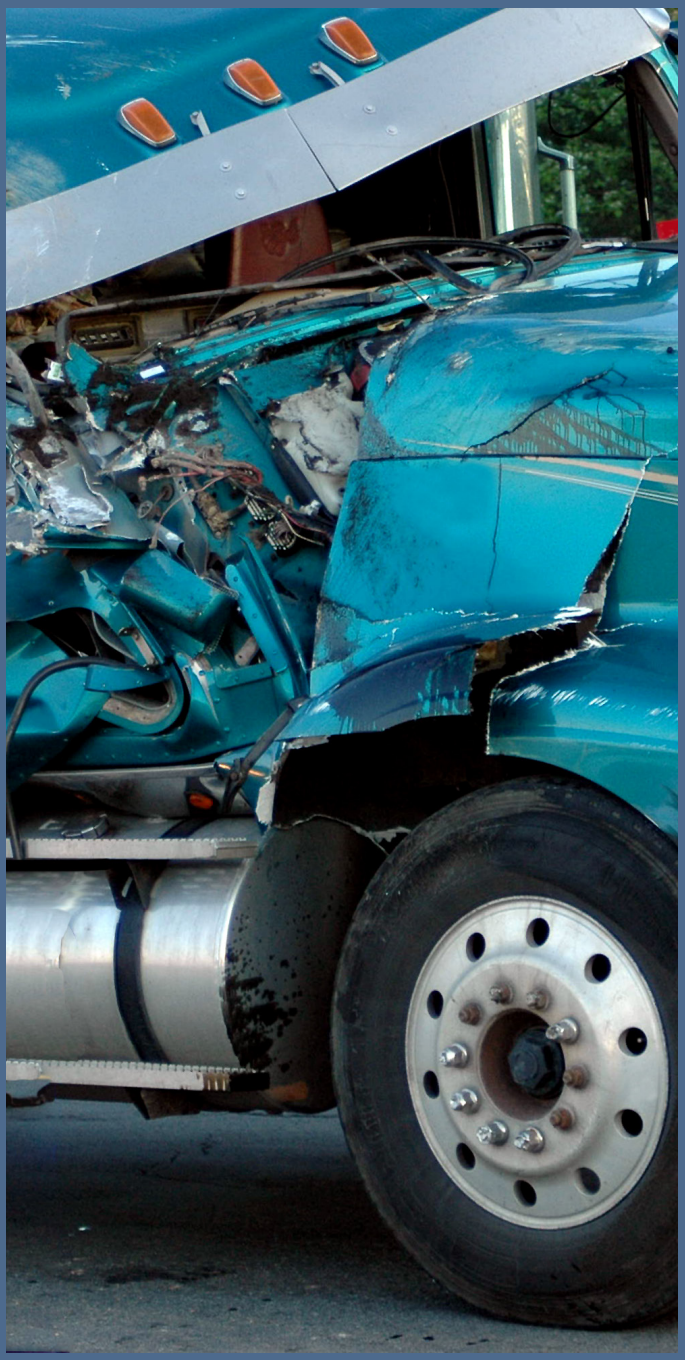

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PERSPECTIVES

Rapid Response in Accident Investigations: Key Considerations for Claims Handlers, Legal Counsel & Fleet or Construction Zone Safety Managers

Our perspectives feature the viewpoints of our subject matter experts on current topics and emerging trends.

THE ROLE OF AN ACCIDENT RECONSTRUCTIONIST & WHY THEY ARE NEEDED

Often, when a commercial motor vehicle driver reports an accident, the details of the collision are murky, and the severity of the accident is understated. The same can be true for injuries that occur in a construction zone. For a claim handler, transportation attorney, or fleet or construction zone safety manager to get a better understanding of the situation on the ground, immediate assistance is required. The most effective way to prepare for what could be a costly claim is to have a rapid response investigation conducted by an experienced accident reconstructionist. The investigator should have two goals in mind throughout the process: 1) understanding liability and 2) preparing for potential litigation. While it's possible for an independent adjuster or private investigator to gather information quickly, fully documenting evidence for reconstruction analysis and expert testimony is not their specialty. If the investigation remains in-house, employees could be turned into witnesses against the company. Having the knowledge and experience to effectively manage a rapid response is essential, as is the independence of an accident reconstructionist. In this article, we will give examples of the steps that can be taken in order to quickly assess the situation on the ground while simultaneously preparing for future litigation.

Rapid Response Following the Initial Call: The Accident Reconstructionist's Goals

Beginning with the initial call, communication throughout a rapid response assignment is critical. Although getting on the road quickly is a priority, client expectations such as urgency and scope of work should be confirmed before beginning work. The client is considered the hub of information, and any intelligence gathered in the field should be relayed back to them. Clients appreciate communication throughout the investigation, particularly since the reconstructionist may be their primary contact in the field. Key times to check in with the client are 1) after completing the vehicle inspection and 2) after completing the site inspection. The reconstructionist may be able to obtain new information such as claimant vehicle location or opinions of law enforcement officials, and these should be relayed immediately. While communication with the client is key, the engineer should use caution when communicating outside of the response team. One expects anything said at a tow yard to be repeated when the claimant, their family, or their attorney visit the site. Similarly, calls with law enforcement or owners of security cameras are not confidential. Emphasis should be placed on collecting as much information as possible while never sharing details of the investigation with third parties.

Accident Investigations Involving Commercial Motor Vehicles (CMVs)

Commercial Motor Vehicles (CMVs) such as tractor-trailers weigh up to 80,000 pounds and can lead to significant claims when a collision involves serious injuries or fatalities. Documenting the conditions of a CMV is often the top priority of a rapid response assignment. There are many issues unique to CMVs that an accident reconstructionist can help navigate. For example, tractor-trailers are equipped with air brakes which can become out of adjustment, leading to diminished braking capabilities. Engineers can determine whether issues with the braking system contributed to the collision, i.e., whether they made a collision unavoidable or more severe. CMVs also have visibility requirements including placement of lights and retroreflective conspicuity tape. Other potential violations may relate to equipment (tires, crash bars, etc.) and hours of service. There are stricter regulations on carriers of hazardous materials or oversize/overweight loads. If the violations are significant, this could place the vehicle or driver in an "out-of-service" condition at the time of the collision. Even minor infractions such as a single nonfunctional light could become a significant issue in certain cases.

CMV Accidents Require Full Inspections & Rapid Response

After a crash, the owner of a CMV likely wants to place the vehicle back in service as soon as possible. If a truck returns to service before being fully documented, this could result in spoliation claims that distract from more important

issues in the case. Accident reconstructionists are trained in evidence collection including photographs, 3D scans, drone imagery, and EDR data. If truck lights, conspicuity tape, or brake adjustment could have contributed to the collision, the engineer can perform the equivalent of a post-crash DOT inspection, providing real-time feedback of any violations to the attorney handling the case. If the vehicle needs to return to service quickly, a full inspection is the best way to preserve evidence while minimizing risk of spoliation. Having a qualified accident reconstructionist conduct the investigation ensures that key evidence is collected in a forensically neutral manner and that the reconstructionist is ready for expert reporting and testimony. In addition, the engineer's preliminary verbal report allows you to know the strengths and weaknesses of the case without having to wait for official police reports, which may fail to answer key questions regarding liability.

ACCIDENT RECONSTRUCTIONISTS & NEW VEHICLE TECHNOLOGY

Most modern (2012+) vehicles are equipped with one or more event data recorders (EDRs). EDR data refers to any electronic data stored on the vehicle that might relate to the incident. For passenger vehicles, this data can be stored on airbag control modules (ACMs), infotainment systems, and active safety system processors. For CMVs, data sources include the engine control module (ECM), active safety system processors, and brake (ABS) controllers. Accident reconstructionists are trained in imaging EDR data using generally accepted, forensically neutral methods. They can also determine if any incident-related data might have been overwritten after the collision; for example, whether a tractor was moved at the accident scene or towed with the key on. In addition to EDRs, telematics devices such as GPS loggers or cameras are commonly used in commercial vehicles. Telematics data is stored in the cloud and accessible only to the fleet. An accident reconstructionist can help interpret and visualize both EDR and telematics data, which can be downloaded from nearly all makes of vehicle, including Mack & Volvo trucks.

Near Immediate Collision Site Documentation Post Accident Is Crucial

Whenever possible, the collision site should be documented immediately following the collision. Evidence fades quickly, including tire marks, gouges, fluid trails, police paint, debris, etc. In addition, any nearby security camera footage will only be available for a limited time. Too often, security camera footage is either not preserved, or is preserved in such a way that makes analysis difficult or impossible (e.g., playback of the video is recorded with a cellphone). In a construction zone, changes to signage and traffic controls occur daily, and special care must be taken to document observable signage as it would have appeared to involved parties during or just prior to an accident. While some collision evidence may be available years after a collision, many details will need to be reconstructed digitally to get a full picture of what happened. Digital reconstruction of photographic evidence can be more costly than direct measurement techniques available today. The simplest and most cost-effective way to preserve evidence is to capture it while it is fresh.

Accident Reconstruction Checklist

The list below can serve as a checklist for evidence that should be gathered by an accident reconstructionist on a rapid response assignment. It is important to note that some of the items listed are not applicable to every assignment.

- **Collision Site**
  - Locate the area of impact (AOI) and photograph it from all angles.
  - Photograph the line of sight for vehicles approaching the AOI.
  - Photograph evidence from the AOI to the location of final rest for each vehicle.
  - Photograph the final rest areas from all angles.
  - Capture aerial photos and videos.
  - Measure geometry using 3D scans and/or an aerial photo grid.

- Record vehicle approach videos.
- Obtain original DVR video footage for security cameras that may show the collision or the approach of any vehicle.
- Document construction zone signage and traffic controls.

- **Vehicles**
  - Photograph vehicle damage.
  - Locate any possible sources of incident data (ECM, radar, camera, telematics, GPS, etc.).
  - If authorized, image EDR data using forensically neutral methods.
  - If necessary, remove EDR data storage modules for future imaging.
  - Document any installed safety systems.
  - Document vehicle condition, including tires, brakes, aftermarket modifications, inspection tags, load, etc.
  - Conduct a Level 1 DOT inspection equivalent for CMVs and document it with photographs.
  - Photograph the condition of light bulb filaments, driver controls, and instrument cluster.
  - Conduct aerial photography.
  - Measure geometry using 3D scans and an aerial photo grid.

- **Other Information**
  - Interview tow drivers and obtain any photographs taken.
  - Interview the investigating officer(s) and report initial opinions.
  - Locate the claimant vehicle(s) and inspect if desired.

CONCLUSION

In recent years, more emphasis has been placed on collision rapid response. Fleets, insurance companies, and transportation attorneys have learned that what initially seems to be a minor incident can become costly in litigation. Soft tissue injuries, spoliation claims, unfavorable venues, talkative drivers, and many other factors can contribute to the lifetime cost of a claim. Gathering information, preserving evidence, and simply knowing what liabilities and weaknesses exist in the case up front can help resolve a case quickly and efficiently. Having experienced a ccident reconstruction experts on your side helps ensure you are well-informed about the crucial details that help you resolve a motor vehicle claim.

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