

## News & Events

[News Releases](#)

[Newsletters](#)

- [Driving Insights](#)

- [In the Driver's Seat](#)

[DriveCam Blog](#)

- [Driver](#)

- [Operations](#)

- [Safety](#)

- [Legal](#)

[DriveCam Academy](#)

### Latest Blog Posts

[Photogrammetry Techniques in Accident Reconstruction](#)

[The Danger of a Cell Phone Policy without Enforcement](#)

[The Power of Physical Evidence in Accident Reconstruction](#)



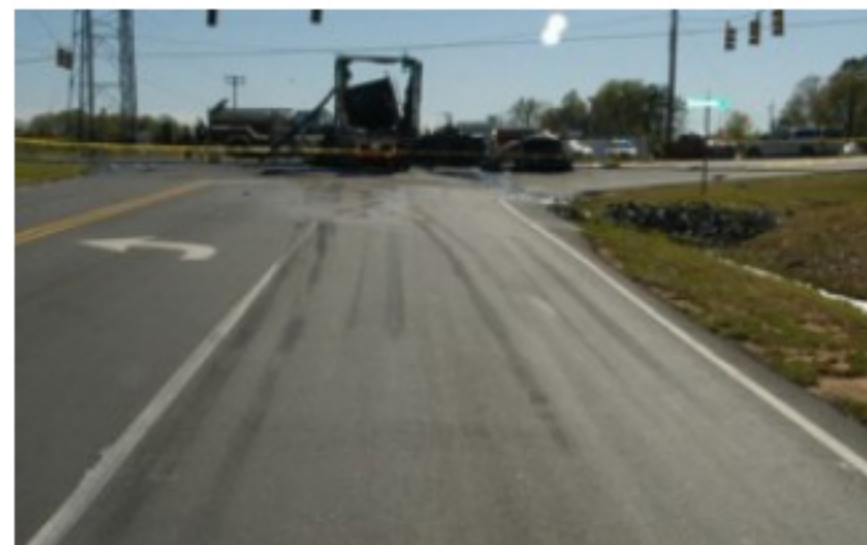
[Home](#) > [Blog](#) > [The Power of Physical Evidence in Accident Reconstruction](#)

## The Power of Physical Evidence in Accident Reconstruction

Posted on August 3, 2011 by [williamneale](#) in [Blog](#), [Legal](#)

Accident reconstruction relies heavily on the quality and abundance of physical evidence resulting from the accident. With the proper documentation of physical evidence, an accident can be reconstructed and issues such as the speeds of the vehicles, their position on the roadway, or whether brakes were applied prior to impact can be determined. The amount of crush or damage on the front of a vehicle, for instance, along with its weight can be measured and used to determine how much energy was needed to create that amount of crush. Energy can then be correlated to the vehicle's speed.

Other common physical evidence includes tire marks, gouge marks and debris left on the roadway. This evidence allows a reconstructionist to determine the point of impact, the impact configuration between the vehicles and even handling, steering and braking by the drivers. Unfortunately, evidence does not last forever; often, important evidence deteriorates or disappears quickly. For this reason, good documentation of the physical evidence is critical.



*Photograph showing tire marks and gouges*

Documentation often takes form through photographs by the police or other first responding personnel, such as fire departments. A lesser known source of documentation, but one that is becoming more prevalent, is surveillance footage. Stores, casinos, and even parking lots often have surveillance cameras that can actually capture the accident as it occurs. A third source that is becoming more frequent is in-cab video, such as the video from DriveCam. Video like this can be extremely helpful in documenting events in the crash. And, because it includes GPS data, one can determine the speed, location and heading of the vehicle involved in the crash. One crucial benefit of DriveCam technology is that certain issues that are rarely known can be captured on video. These include whether the stoplight red or green, if emergency vehicles had sirens on, whether the driver was using a cell phone or what the position of other vehicles were during the accident.





*Surveillance Footage*



*Drive Cam Footage*

Whether it is a photograph, surveillance video or in-cab video footage, physical evidence documented through these types of visual media can determine the quality and thoroughness of the reconstruction of the accident. They can also help shorten the length of time it takes to reconstruct the accident and ultimately, reduce the costs without reducing accuracy.

---

William Neale is the Director of Visualization at Kineticorp, a forensic engineering company that specializes in accident reconstruction, and 3D animation and visualization. Mr. Neale is the Chairman of the Animation Committee for the Accident Reconstruction Session of SAE (Society of Automotive Engineers). Mr. Neale is also a member of the Society of Forensic Engineers and Scientists, and has been practicing in the area of Accident Reconstruction since 2000.

---

**CATS:** Blog, Legal

**TAGS:** accident reconstruction, Commercial Transportation, Driver Behavior, Driver Error, Driver Safety, Fleet Safety, road safety, Video Event Recorder

 [Comments RSS](#)

---

Comments are closed on this post.