

Multivehicle Collision Involving a Milk Tank

Combination Vehicle and Stopped Traffic Queue

Phoenix, Arizona
June 9, 2021

This animation depicts the sequence of events during a multivehicle collision that occurred in Phoenix, Arizona on June 9, 2021, at 10:07 pm mountain standard time.

The animation begins with an overall map showing the location of Phoenix in Arizona, overlaid with an image of a Freightliner Cascadia truck tractor in combination with a Walker stainless tank trailer, like the combination vehicle involved in the crash. Next, a regional map of Phoenix shows the traveling route of the truck transporting milk from Stotz Dairy on the west side of Phoenix to the United Dairymen of Arizona cooperative plant on the east side of Phoenix. The crash location on State Route 202 is also indicated.

A map at higher magnification shows the crash location and the locations of two overhead dynamic message signs. Photographs of the two dynamic message signs are shown, along with the message that was displayed on both signs at the time of the crash: "LAW ENFORCEMENT AT PRIEST EXPECT TO STOP," which alternated with dynamic travel times. The first message sign is located about 3 miles west of the collision location, and the second message sign is about 330 feet east of the collision location. The location of Priest Drive is also shown on the map.

A map at higher magnification shows the local geometry of the roads near the crash location on State Route 202, which was just east of Exit 4 to 52nd Street. The map is replaced with an overhead photograph of the eastbound 5 travel lanes, with the right lane where the collision occurred highlighted.

Forward-facing Lytx DriveCam video shows the truck-tractor passing the 52nd Street exit, approaching visible red brake lights of slowing and stopped traffic ahead that

had formed a queue in the right lane. The video is stopped just before the truck collides with the end car in the queue.

The collision sequence of the vehicles involved is described using three-dimensional vehicle models. The first graphic shows eight vehicles in the right lane in order: the Freightliner Cascadia truck tractor in combination with a Walker stainless tank trailer; a gray Ford; a black Toyota; a gray Chevrolet SUV; a red Nissan; a white Dodge; a black Mercedes, and a white Lexus. Each passenger vehicle is circled and labeled as they are listed.

A series of stop-motion graphics then illustrate the sequence of the collision, but the illustration is not an exact reconstruction. Also, the graphics do not attempt to replicate the weather or lighting conditions at the time of the crash. The view is generally from the right rear of the truck. The collision sequence is followed by an image showing the final rest of all 8 vehicles involved. As a result of the crash, 4 persons were fatally injured, and 11 persons were transported to the hospital; the truck driver was not injured.

Two photographs illustrate the condition of the vehicles on the morning after the collision. The first photograph is a view looking westbound, with the Chevrolet and truck tractor in the foreground and the Nissan, Ford, Toyota, Mercedes, Dodge and Lexus visible in the background. The second photograph is a view looking eastbound, with the Lexus, Dodge, Mercedes, Ford and Toyota in the foreground and the truck tractor and Chevrolet in the background.

Phoenix Animation Script

1. On Wednesday, June 9th, 2021, at 10:07 pm mountain standard time, a multivehicle crash occurred in Phoenix, Arizona.
2. A Freightliner Cascadia truck tractor in combination with a fully loaded Walker stainless tank trailer, operated by Arizona Milk Transport, Incorporated, was

transporting milk from Stotz Dairy to the United Dairymen of Arizona cooperative plant in the Phoenix area.

3. While driving to United Dairymen, the truck driver passed under a dynamic message sign, stating "Law Enforcement at Priest Expect to Stop" alternating with the dynamic traffic times.
4. There was a second message sign with the same information displayed that was about 330 feet east of the collision location.
5. In the area of the crash, State Route 202, east of exit 4, 52nd Street, consists of 5 eastbound travel lanes with a posted speed limit of 65 mph.
6. The collision occurred in the right lane.
7. The truck-tractor was equipped with Lytx DriveCam image recorder with forward- and inward-facing cameras.
8. We are now going to show you the forward-facing DriveCam video from inside the truck as it approached the collision location.
9. The video will show the truck-tractor approaching the 52nd Street exit, and visible are red brake lights of slowing and stopped traffic ahead that formed a queue in the right lane.
10. The inward-facing video showed the driver did not react. Vehicle data showed he did not brake, and the truck tractor struck multiple vehicles at 62 mph.
11. A total of eight vehicles were involved, including six passenger cars and one sport utility vehicle that were stopped in the traffic queue.
12. The vehicles included: a Ford; a Toyota; a Chevrolet SUV; a Nissan; a Dodge; a Mercedes, and a Lexus.

Crash Sequence

1. The animation you are about to see is a close representation of the collision sequence and not an exact reconstruction. It will focus on the vehicles involved in the collision.
2. The tractor-trailer collided with the rear of the Ford, pushing it into the rear of the Toyota.

3. Both the Ford and Toyota traveled onto the right shoulder colliding with the barrier.
4. The tractor-trailer continued east in the right lane where it then collided with the rear of the Chevrolet.
5. The Chevrolet remained attached to the front of the truck-tractor for the rest of the collision.
6. The tractor-trailer and Chevrolet collided with the rear of the Nissan, pushing it into the rear of the Dodge, which was pushed into the rear of the Mercedes.
7. The Nissan traveled to the right shoulder and barrier wall.
8. The Dodge traveled to the left, rotated clockwise, and came to rest facing south.
9. The Mercedes continued east, rotating, coming to rest on the right shoulder and the right lane facing north.
10. The tractor-trailer and Chevrolet collided with the rear of the Lexus.
11. The driver's side of the Lexus sideswiped the front of the Dodge.
12. The Nissan continued east on the shoulder, rotating and coming to rest on the barrier facing westbound.
13. The Lexus came to rest in the left lane.
14. The tractor-trailer turned left traveling across the eastbound lanes.
15. The tractor-trailer and Chevrolet collided with the median barrier, redirecting the tractor-trailer and Chevrolet east along the barrier.
16. When the tractor-trailer struck the median barrier, the tanker separated from the truck tractor, and rolled over the barrier, landing in the westbound shoulder and adjacent left lane.
17. The truck tractor and Chevrolet continued eastbound coming to rest across the left two lanes.
18. A post-crash fire ensued, and the truck tractor and Chevrolet were consumed by the fire.

19. Here is a view showing the final rest of all 8 vehicles involved.

20. As a result of the crash 4 persons were fatally injured, and 11 persons were transported to the hospital.

21. The truck driver was not injured.