

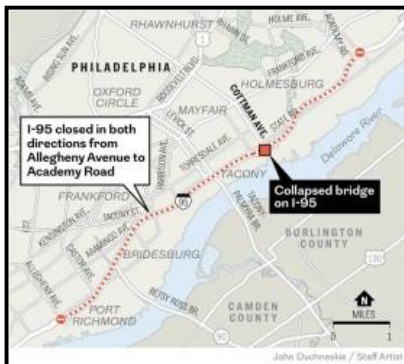
# What Happened on I95?

June 19, 2023

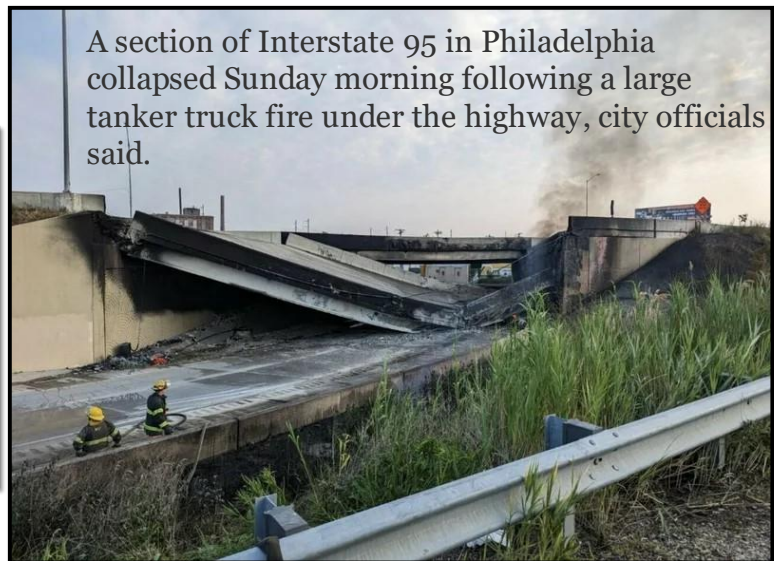
Brian L. Bullock, Founder Road Aware Safety Systems LLC

Tens of thousands of commuters are trying to find new routes to work in Philadelphia. Other motorists are looking for new routes to schools, day care, summer camps and other necessary trips. Interstate 95 was closed in both directions in NE Philadelphia last week and even with the temporary repair will be restricted to 3 lanes each direction until permanent repairs are completed. So, what happened Sunday morning, June 11?

## Tanker Fire Causes I95 Collapse



[A section of I-95 in Philadelphia has collapsed after a tanker truck fire : NPR](#)

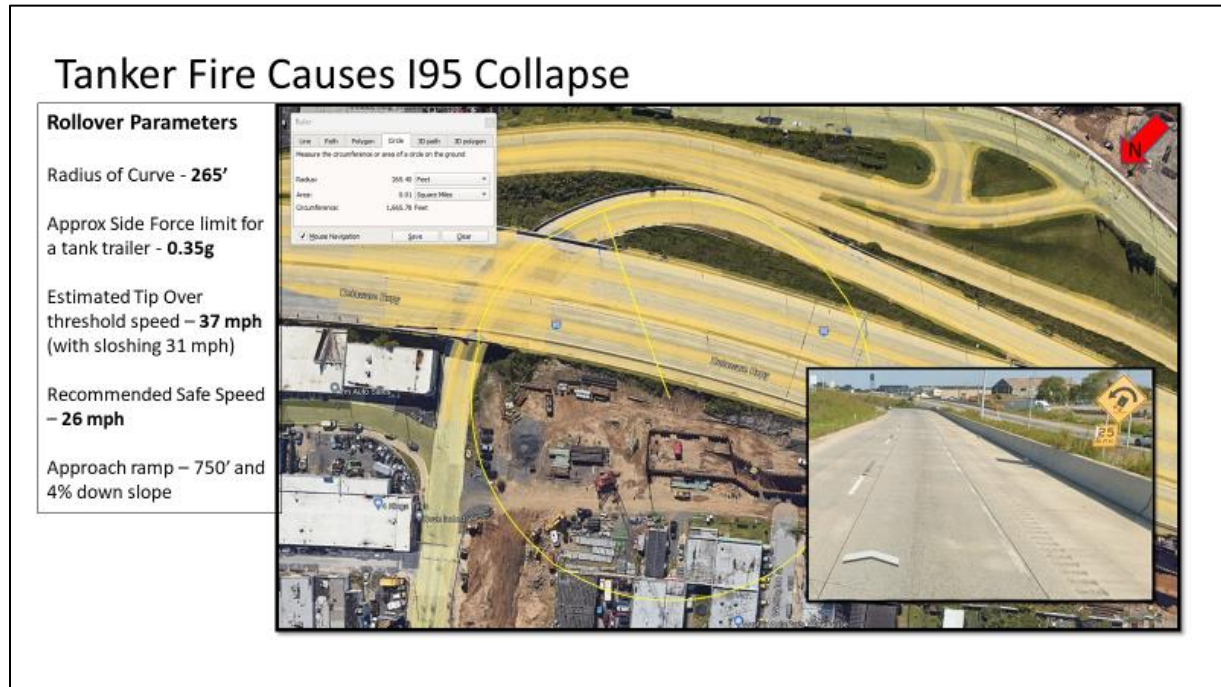


A section of Interstate 95 in Philadelphia collapsed Sunday morning following a large tanker truck fire under the highway, city officials said.

The proximate cause was a tanker truck fire that ignited on Cottman Avenue where it passes beneath the I95 roadway. The intensity and duration of the fire weakened the steel supporting beams for the overpass to the point that they could no longer support the northbound portion of the roadway.

An exit off I95 northbound feeds traffic onto Cottman Ave. It is unlikely that there was conflicting traffic since there is no entrance to the northbound freeway at Cottman Ave. The pictures of the scene suggest that the most intense portion of the fire occurred on the north edge of the underpass. The north edge was also the location where the first responders were pouring water to contain the fire. Video shows the semi-truck descending the ramp and then impacting the barrier on the right side precipitating an immediate explosion. All of this suggests

that the driver lost control of the vehicle, hit the barrier and the tanker rolled over onto the right edge of the Cottman roadway, rupturing one or more tanks which fed the resulting fire.



As shown above, the Cottman exit has a tight radius curve that requires a semi-truck to slow down after leaving the traffic lanes on I95. There is a 750 ft. approach to the curve with a 4% downslope. This provides ample time to slow to a safe speed before entering the curve. The tip over threshold speed for a tanker is approximately 37 mph (with some variation depending on the condition of the tires, undercarriage, and trailer). If it was a partial load the tip over threshold speed could be much lower due to sloshing (approximately 31 mph).

Reports say the driver was experienced and had run this route previously. So, what happened Sunday morning? Was the driver distracted in those critical moments on the approach? Did the driver get complacent and run it just a little faster than in the past? Was there an obstruction or person in the right-hand lane that made it necessary to sharpen the turn by switching to the left lane? Was there a medical issue?

We may never know unless the tractor was equipped with a dash cam that somehow survived the conflagration. **Road-Aware** has been developed to alert truck drivers and provide recommended safe speeds\* on curves and descents based on their vehicle and load. It is our aspiration that using this system would help prevent this type of disaster, loss of life, and destruction. The use of **Road-Aware** in several field trials has been instrumental in improving driver performance in critical sections of the roadway where geometry if not approached properly can lead to tragedy as happened here. See more at [www.road-aware.com](http://www.road-aware.com)

(\*Note: recommended safe speeds are calculated for each geometry and are specific to the dynamics of the vehicle. They also apply a safety factor that accommodates a trailer in poor condition or rapid lane changes.)