*Much Ado About Traffic Safety*

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On the fifth day of spring 2020, Connecticut’s roads became nearly deserted as the governor ordered that all but essential businesses and institutions stop in-person operations as a world-wide pandemic took hold. Despite near-universal compliance with the stay-at-home order, 301 people—the most since 2016—would die in motor vehicle crashes by year’s end. The upward trend shown in the Crash Data Table continued through 2021 with traffic fatalities rising to 323.  Connecticut’s experience reflects the national trend in which motor-vehicle crashes killed 38,680 people in 2020. While traffic deaths across the US fell by 8% in the 2010’s, pedestrian fatalities spiked by 42%.

 Street design, motor-vehicle types (Chart), driving behaviors (distraction, speeding, or driver impairment), weather, visibility, time of day, and enforcement inconsistency contribute to the rise in traffic fatalities. Crash investigators’ frequent attribution of responsibility to the last event in a causal chain reinforces the perception that a single act or actor is at fault. To illustrate: On a foggy day, the driver of a SUV is traveling at the posted 40 miles-per-hour speed limit when the limit drops to 25 as the road approaches a town though the road’s lanes do not narrow—a design feature that organically compels a driver to apply the brakes—while a sign showing the lower speed limit is obstructed. As the now-speeding driver enters the town center, a pedestrian crosses the road at an intersection without a stoplight. The driver strikes the pedestrian. The last event in the causal chain is the error made by the speeding driver. Overlooking the foggy weather obscuring the driver’s vision, flawed traffic engineering that failed to compel them to slow down, and the SUV’s weight that made the force of the impact greater than **a sedan would have**, the police likely hold the SUV driver responsible for the crash. Such judgments are not limited to drivers. A pedestrian might be blamed for crossing a street where there is no crosswalk (even if the nearest one is several hundred yards away) or a cyclist might be cited for not wearing a helmet (though a protected bike lane would have prevented the crash entirely). News stories reinforce narratives that focus on the humans involved rather than taking weather, street and road design, and motor vehicle features into account.

 Promoting human error as the principal cause of crashes makes it less likely that Congress will require that auto makers include safety features such as blind-spot or pedestrian detection systems as standard equipment on their trucks, cars, and utility vehicles **sold in the United States**. Public education campaigns encouraging defensive driving, speed-limit compliance, and bicycle and pedestrian awareness are less expensive than hiring more traffic engineers to design narrower curvilinear streets and roundabouts in place of straight and wide multi-lane local streets with traffic signals. While roundabouts may lead to more crashes, they are low-speed crashes that cause much less severe injuries (graphic) than high-speed crashes typical of those occurring at signalized intersections. These measures are part of a comprehensive strategy to reduce road, street, and sidewalk fatalities called Vision Zero, with zero as the targeted number of traffic deaths.

 At least two schools of thought have formed about strategies most likely to achieve the ultimate vision zero goal. One is built on public education, a combination of street signs, pavement markings, and concentrated enforcement. The other concentrates on street and road design to organically reduce traffic speeds, the use of roundabouts in place of stop signs and signalized intersections, minimizing street signs and pavement markings in favor of design that causes vehicle operators to drive more slowly, and requirements for motor vehicle design and operating features focused on pedestrian safety. An analysis of Vision Zero strategies published in Sweden found that road and vehicle design that reduces pedestrian injuries means that up to 63% of traffic fatalities could be avoided.

 Regardless of which strategies traffic authorities adopt to achieve Vision Zero goals, cultural transformation from the overwhelming use (85%) of single-occupant vehicles as the favored commuting mode to more diversified ways of getting around such as walking, bicycling, scooters, ride sharing, buses, and rail is the greatest challenge policy makers and traffic engineers must address to make local streets accessible and safe for everyone to use. n