The Rules That Made U.S. Roads So Deadly

Why did traffic fatalities rise on U.S. streets during the pandemic? Blame laws that lock in dangerous street designs and allow vehicles known to be more deadly to non-drivers.

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In New York, as in many U.S. cities, lighter traffic during the pandemic translated into more lethal crashes. *Photographer: Roberto Machado Noa/LightRocket via Getty Images*

A 25-year-old Yale Law student. A crossing guard. A 78-year-old woman. A high-school teacher. These are but four of the pedestrians and bikers counted among the 310 motor-vehicle-related deaths seen in 2020 in Connecticut, where I live. Our state saw one of the highest increases in the U.S. for such deaths: 22% more than in 2019.

Connecticut's fatality spike is part of a national trend. Earlier this month, the National Safety Council reported that more than 42,000 people in the U.S. died in motor vehicle crashes in 2020, an 8% increase over 2019. What makes this so surprising is that Americans traveled 13%

fewer miles by car, because of coronavirus-related lockdowns. So the 8% increase is really a 24% increase on a per-mile-traveled basis – the highest year-over-year jump in 96 years.

Unfortunately, this tragic loss of life was predictable. Outdated, industry-written laws lock in street designs that encourage excessive speed, and we drive vehicles known to be deadly to non-drivers.

You might think that these numbers were boosted by Americans' heavy-footed driving habits, or that we have a distracted driver (and pedestrian) crisis. While both may be factors, they would not make us unusual – while our fatality rate is. Compare us with Germany, for example, where a love for speed and widespread cellphone use has not resulted in the death rates we see in the U.S. German traffic deaths fell 12% in 2020, which tracks the country's 11% decrease in traffic volume.

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People drive the speeds the roads "tell" them to drive. And they drive the cars that are allowed to be built. As I've written in a recent law review article, U.S. laws dictate both.

Let's talk about U.S. road design rules first. They prioritize one thing: speed. A design manual known as the "Green Book" plays a leading role. Never heard of it? That's because it's written without public input by traffic engineers at the American Association of State Highway and Transportation Officials (AASHTO). The Green Book has been used for decades by the federal government, all 50 states, and countless municipalities. In general, it requires lanes that are too wide, which encourages cars to drive faster, and practically ignores pedestrians and bikers.

Fire codes, too, mandate overly wide streets, requiring 20 feet of unobstructed path for new or significantly improved streets. But city residents can't get involved in drafting fire codes, either. They are primarily drafted by an organization of building code officials that recently sued a group who put the code online, so people could actually read it. Despite efforts in some cities to reduce fire-code-mandated street widths, these codes dominate street design nationally.

And then there is the Manual of Uniform Traffic Control Devices (MUTCD), which governs signalization and, more importantly, speed limits. This manual is published by the Federal Highway Administration, a federal agency, which is a better alternative to the private rule-making of the Green Book and fire codes. But in one big way, it is deeply problematic: The MUTCD recommends setting speed limits that match the 85th percentile of actual free-flowing traffic, rounded up to the nearest 5 miles per hour. In effect, drivers breaking the law by speeding justifies raising speed limits even more. The MUTCD also standardizes signaling and pavement markings that often prioritize cars over all other road users.

Vehicle design regulations aren't much better: U.S. safety regulators prioritize the people inside the vehicle, largely ignoring the non-passenger impact of passenger vehicles. Unregulated, car manufacturers have flooded the market with oversized SUVs and pickup trucks with huge frontal surfaces and poor forward vision – design features that would fail to meet Europe's more stringent vehicle safety standards, and that make such machines more dangerous for pedestrians and those in smaller cars.

SUVs have contributed to the 81% increase in pedestrian fatalities between 2009 and 2018, and roads are deadlier for bikers and pedestrians than they have been in 30 years. Disproportionately represented among these fatalities are Black people, Native people and the elderly. Our laws value drivers and car passengers over everyone else who uses our roads.

5 Ways to Rewrite the Rules of the Road

To reverse these horrific trends, it's not just popular culture, which romanticizes speed, that must change. It's our regulatory culture. Design standards dictate how streets and vehicles look and function. Here are five things we can do to revise them.

First, we need to diversify the people who codify road design. AASHTO, the code councils and

the federal agency writing the MUTCD are dominated by white, male engineers who are trained to prioritize driver speed. We need women, people of color, transit users and bike-pedestrian advocates to bring new perspectives and cultural competencies into the conversation. We must also adopt the techniques already deployed by designers of slow or complete streets, which incorporate such features as narrower lanes, curb extensions (or bulb-outs), and chicanes to bring vehicle speeds down. This change must start at the top: The Department of Transportation and other federal agencies must no longer accept lopsided rules, written largely in secret, with a disparate impact on so many diverse road users. It's time to update and revise those federal standards, which will allow state and local standards to evolve as well.

Second, we must boost public input in the eleventh edition of the MUTCD. The Federal Highway Administration is now seeking public comment on its proposed updates to the MUTCD through a formal process all federal agencies must undergo when seeking to amend or create new policies. The proposed draft is riddled with problems. The 85th percentile rule, which raises speed limits when people speed, remains a central part of the draft. A few half-hearted attempts to address pedestrians, bicycles and transit are not enough. The MUTCD needs a complete overhaul, because it dictates the signage, crosswalks and signalization on practically every road in the country. Submit comments by May 14 asking the FHWA to go back to the drawing board.

Third, we need to establish non-driver safety as a formal priority of federal, state and local traffic agencies. The principal priority now is driver speed and convenience.

Fourth, federal regulators must start integrating the safety of non-drivers in vehicle safety tests. While this seems obvious, it has virtually never been done in the U.S. We know that roads have gotten less safe for non-drivers, but we don't know exactly how dangerous some cars are. Tests that can measure non-driver safety will pull back the curtain.

Finally, U.S. vehicle design standards should match European standards, imposing limitations on vehicle height and the stiffness and height of bumpers, and regulating accessories such as "bull bars" that have proven to be dangerous. One reason European streets tend to be safer is because vehicles known to be deadly to non-drivers and drivers of smaller cars are properly regulated.

For decades, we have known how to modify roads and vehicles to prevent or reduce the death toll of traffic crashes. Since 2012, dozens of U.S. cities – including New York, Los Angeles, and Chicago – have made pledges to follow the global "Vision Zero" campaign to eliminate all traffic fatalities and severe injuries. But their lack of progress indicates that making this pledge a reality requires structural change beyond what individual cities can do on their own.

We've watched other countries make incredible progress, but we have lacked the leadership to change our laws to prioritize road safety in the U.S. We have a new presidential administration, with a new Transportation Secretary in Pete Buttigieg, who seems poised to help us broaden our concept of what road safety is, and who roads are for. We can completely eliminate road fatalities by 2050 if we overhaul the laws that make more death a near certainty.

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