Why are pedestrian traffic fatalities climbing in the US and not the rest of the world?

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Peter Furth, professor of civil and environmental engineering at Northeastern. Credit: Matthew Modoono/Northeastern University

Between 1980 and 2010, the number of pedestrians killed in traffic dropped steadily in the United States. Then, that trend reversed. In fact,

pedestrian traffic deaths reached a 40-year high in the United States in 2022.

But this is a uniquely American problem, according to Northeastern University transit planning expert Peter Furth.

"It's not happening in Europe, Canada, Japan—this is an American thing," says Furth, a professor of civil and environmental engineering at Northeastern.

So what's going on? Moreover, what can we do about it?

Furth cites two main factors responsible for the increase in pedestrian deaths.

First, people are now walking more, compared with the last decades of the 20th century.

"We came to have fewer pedestrian and fewer bike fatalities because fewer people were walking and riding bikes," Furth says.

Furth notes that in 1969, approximately half of all schoolchildren walked or biked to or from school, and 87% of those living within 1 mile of school walked or cycled. By 2004, fewer than 15% of children did, and by 2009, just 13% of children did.

Meanwhile, fewer people walking meant that pedestrian infrastructure was less of a priority in the increasingly sprawling suburbs of late 20th-century America, Furth explains.

Then, he says, because there was no pedestrian infrastructure, roads were considered unsafe for pedestrians, making people either choose or be forced to use vehicle transportation. Even some schools—for instance,

the one attended by his brother's children, Furth notes—forbade walking to school because it was considered unsafe.

"More and more, we've made it so people don't have to walk," Furth says.

However, Furth says a change occurred around 2009 as younger adults began moving back to cities from the suburbs.

"There was a movement in society to ride bikes and walk more," Furth says. "We're fighting back—people want to walk."

But Furth says this increased pedestrian traffic coincided with the car-focused urban planning in the United States, leading to more and more encounters between pedestrians, cyclists, and vehicles.

It also coincided with other trends: drivers moving toward increasingly bigger vehicles, particularly large SUVs and pickup trucks.

"Between 2009 and 2020, the front bumper has increased on pickup trucks and SUVs," Furth says. "When that front is higher than your hip height, you are 30 percent more likely to die than if you are hit by a car."

Furth explains that a vehicle that hits a pedestrian in the legs will generally throw the person up onto the vehicle's hood and windshield. If you're hit above the hips, however, you're likely to fall under the vehicle and get run over, Furth notes, leading to much more serious injury or death.

Large delivery trucks also have an increasingly urban presence.

"It used to be that large trucks would drop things in the warehouse, and then smaller trucks would make deliveries," Furth says. "Now we have

tractor-trailers making deliveries at all the supermarkets."

So, what can we do about these trends? Furth suggests design and technology to address these issues.

For delivery trucks, Furth suggests larger side windows to enable drivers to see pedestrians approaching the side of the truck—noting that large delivery trucks are particularly dangerous when making turns. He also recommended technology such as blind spot sensors for the front of the truck to detect pedestrians.

Design—specifically urban design—is also a great way to reduce pedestrian traffic fatalities, Furth says.

"Urban planning recognizes that where people want to walk, you've got to make it safer, and where people don't want to walk, you don't put a store there."

Furth cites trends like "daylighting," or installing infrastructure that prevents parking within 15 feet to 20 feet of an intersection to enhance visibility for approaching vehicles. Speed humps in neighborhoods reduce speeds much more effectively than readily ignored Go Slow signs and crossing islands dividing a crosswalk into two or more segments are both things that the city of Boston has increasingly done to enhance pedestrian safety.

"There are a lot of simple things that can be done to make pedestrians safer than a few jurisdictions have put in place," Furth says.

Then he adds—"but not many."

"The city of Boston deserves credit and is doing a lot of things," Furth continues, citing the city's goal to eliminate fatal pedestrian traffic

accidents by 2030 through the "Vision Zero" concept. "But on the national trend, the national trend is wider and wider roads, faster and faster speeds."

There is also more that Massachusetts can do.

Furth notes that Boston is petitioning the state to allow it to use speed cameras—which are prohibited in Massachusetts. And he noted with bemusement that it took until 2017 for the state to allow cities to enact a 25-mile-per-hour speed limit.

"Imagine that you weren't allowed to go slower than 30 mph for the speed limit," Furth says.

As for oversized trucks and SUVs, Furth is not too optimistic, noting that 80% of new car sales are for SUVs or trucks.

"Nobody's buying small cars anymore," Furth says. "What are we doing allowing these deadly vehicles to run around in our towns? It's an epidemic."

However, he suggested changing crash test ratings to account not just for the safety of the occupants of a vehicle but also the safety of pedestrians struck by vehicles. Furth also suggested that larger, heavier vehicles be priced higher, with the additional money going to an insurance fund.

And although better design and better laws may help reduce pedestrian traffic fatalities, something else may be required.

"There is a slowly growing willingness to say that convenience for driving really needs to be sacrificed a little bit for safety," Furth says.

He notes how daylighting projects in Boston's past were often doomed

before they got built.

"In the past, complaints about losing parking were enough," Furth says. "Now, it's a little more 'Get over it, that's part of life in the big city.'"

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