

NARROWING TRAVEL LANES SAVES LIVES

With rising pedestrian and cyclist fatalities, U.S. cities need cost-effective ways to improve safety within existing roadways.

There's a solution hiding in plain sight.

- → 40% increase in pedestrian fatalities and 44% increase in cyclist fatalities from 2010 to 2018.
- → 16% increase in the number of deadly car accidents in the U.S. between 2018-2022.
- → About 8% of streets in New York City have a dedicated bike lane, despite being one of the most bike-friendly cities in the U.S.

A national study of **1,117 streets** in **seven U.S. cities** evaluated how travel lane widths impact traffic safety. The findings? **Wider lanes are not necessarily safer.** In fact, narrowing travel lanes can **improve safety, optimize sidewalks and bike lanes, reduce environmental impacts and boost economic activity.**

KEY INSIGHTS

- 9, 10 and 11 ft. lanes did not increase accident risk or frequency, compared to 12-ft. lanes.
- Wider lanes at faster speeds had significantly more crashes than narrower lanes, but slower speeds had no difference.
- Narrower lanes help the environment by allowing more users in less space and using less pavement.
- Narrowing lanes offers great opportunities for adding bike lanes and wider sidewalks to existing streets without compromising safety.





HOW DEPARTMENTS OF TRANSPORTATION ACROSS 5 STATES ARE IMPROVING ROAD SAFETY

- Florida: FDOT uses a context classification system, allowing designers to choose the best design based on the area's needs.
- Vermont: VTrans was the first state to change the minimum lane width to 9 feet in urban areas.
- Oregon: ODOT uses design criteria vs. standards for more flexibility in decisions about lane width and street design.
- → California: Caltrans uses a "complete streets" approach, considering the needs and safety of all users to determine street design.
- Delaware: DelDOT rarely uses less than 11-ft. lanes, due to higher speeds and more transit vehicles.

"HERE ON THE EAST COAST OUR ROADWAY CORRIDORS
ARE REALLY TIGHT. IF WE CAN NARROW OUR ROADWAYS
IN DELAWARE TO ACCOMMODATE MORE CYCLISTS
AND PEDESTRIANS IT WILL MAKE A HUGE DIFFERENCE."

Mike Simmons

Chief of Project Development South,

Delaware Department of Transportation

RECOMMENDATIONS

- Take a holistic approach to street design by considering the needs of all users, over speed and traffic efficiency.
- Start with 10-ft. lanes in slower speed urban areas and let engineers justify wider widths.
- Establish a context-appropriate speed before determining lane width.
- 4 Launch a lane repurposing program to add a bike lane or wider sidewalk.

The best roads for travel lane reduction projects are 11-13-ft. lanes in urban areas with slower speeds and streets with less traffic, limited street parking, fewer lanes, low degrees of curvature, and no raised medians.



Ready to get started? For more information and to read the full report, visit narrowlanes.americanhealth.jhu.edu