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The Myth of the Great Wide Way

Posted by **Craig Raphael** in [Transportation & Streets](#)



The conventional practice of overdesigning even residential streets encourages speeding, compromises safety, and limits the potential of streets to serve as gathering places

On Thursday, July 2, the Transportation Construction Coalition, in conjunction with the Pacific Institute for Research & Evaluation, released a [study](#) that claims that deficient roadway conditions are the largest cause of our nation's more than 40,000 annual traffic fatalities—outpacing speeding, drunk driving and failure to use seatbelts. Although the study faults poor maintenance as a roadway condition that contributes to safety problems, it also calls for additional roadway capacity, wider travel lanes and bridges, and the addition or widening of shoulders. This argument fails to appreciate the relationship between upgrading roadway dimensions, travel speeds, and safety for all roadway users.

The authors must be careful in their recommendation to “make the [driving] environment more forgiving and protective.” In certain contexts, on freeways and expressways for example, larger design dimensions can result in improved vehicular safety. However, on the majority of the nation's roadway network, bigger, straighter and faster designs can contribute to speeding problems that increase crash severity and endanger pedestrians and cyclists.

There is an emerging body of literature that supports the connection with more “forgiving” street design and safety. Robert Nolan’s analysis in [“Traffic Fatalities and Injuries: The Effect of Changes in Infrastructure and Other Trends”](#) refutes the hypothesis that infrastructure improvements have been effective at reducing total fatalities and injuries. His research concluded that despite decades of upgrading roadways to standard (read: AASHTO Green Book “desirable” dimensions), demographic changes in age cohorts, increased seat-belt use, reduced alcohol consumption and increases in medical technology accounted for a larger share of overall reductions in fatalities. He further discovered that widening lanes or increasing capacity—conventionally expected to improve safety—actually increases speeds and compromises safety. The primary reason for this is that wider streets with fewer roadside objects create a false sense of security, and drivers may not recognize risky situations as readily due to a decrease in the difficulty of the driving task. Finally, Nolan found that when there are more arterial and collector lane widths of 12 ft or more, traffic fatalities and injuries increase. And, there does seem to be evidence that lane widths of over 11 ft do not contribute to a safer road environment.





PPS helped communities in San Mateo County, CA envision how to transform El Camino Real from a high speed arterial to a street safe for all users

Another landmark study by Eric Dumbaugh, [“Safe Streets, Livable Streets.”](#) traces the origin of the idea that fixed-objects along roadsides, such as street trees, are safety hazards. Dumbaugh’s research compares the crash records of two segments of the same roadway and concludes that fixed-objects actually enhance the safety of urban roadways by slowing traffic. This article uses quantitative evidence to propose an alternative to the conventional explanation of the dynamic between road design, driver behavior, and transportation safety—namely, that “safer” roadways are not always safer.

There are clear economic reasons why the Transportation Construction Coalition wants to promote the construction of new roadway capacity and the reconstruction of existing roadways, but wouldn’t it be great if they saw the benefit of retrofitting existing over-designed roadways to fit community contexts and allow streets to serve as places for people, not just cars?

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