

Comment from Robin Chase

Posted by the **National Highway Traffic Safety Administration** on Mar 22, 2022

The NCAP program needs to include safety impacts on those outside the vehicle, bringing itself in line with European standards, as well as being the right thing to do.

This recent study by the Insurance Institute of Highway Safety, reported here in the Washington Post: <https://ggwash.org/view/84111/drivers-of-large-vehicles-more-likely-to-strike-pedestrians-when-turning-study-finds?emci=b88e976c-1ca9-ec11-a22a-281878b85110&emdi=739253e9-1da9-ec11-a22a-281878b85110&ceid=5764689>

finds that: "researchers found that crashes in which a driver kills a walker are three times more likely to involve a left turn if that motorist was piloting an SUV at the time of impact, compared to fatal walking crashes involving the drivers of smaller cars.

Fatal crashes involving pick-up truck drivers, meanwhile, are four times more likely to involve a driver making a left — and when it comes to right-turn crashes, they're still 89 percent more likely. Right-turning SUV drivers are 63 percent more likely to strike a person than the drivers of smaller vehicles."

There are many other studies which show this finding.

Meanwhile, at the Federal level, two laudable transportation policies are being pushed in our efforts to meet our CO2 emission goals of 50% reductions by 2030:

- 1) more people need to walk, cycle, and take public transit for trips
- 2) Swap EVs for ICEs

EVs are about 1200 lbs heavier than ICEs. Research here

[<https://library.bayesia.com/articles/#!bayesialab-knowledge-hub/vehicle-size-weight-and-injury-risk>] finds that:

“As opposed to a homogenous scenario of having predominantly light vehicles on the road, this bimodal distribution of vehicles increases the injury risk versus the baseline. This suggests that a universally lighter fleet, once established, would lower injury risk, while a weight-wise diverse fleet would increase risk”

While heavier vehicles are safer for their own occupants, they are more hazardous for people walking, cycling or in other lighter vehicles. A 2012 UC Berkeley study [https://are.berkeley.edu/~mlanderson/pdf/anderson_auffhammer.pdf] found that “being hit by a vehicle that is 1,000 pounds heavier generates a 40-50% increase in fatality risk”. Which matches the pedestrian and cycling fatality rates the US uniquely is witnessing with the rise of an increasingly heavy fleet of passenger vehicles.

The proposed changes to NCAP will help improve safety, but we must do more, taking the real needs/fatalities of pedestrians and cyclings into account and test our vehicles accordingly.

Thank you.