

Could we have a transportation system with zero deaths from car crashes and zero emissions? That seems utopian but it's not as crazy as it sounds. Even if we don't get all the way to zero, we could get much closer than you might think.

In *The Road to Zero*, RAND researchers provide a roadmap to zero crash fatalities by 2050. It involves a combination of strategies. Safer roads, such as more use of roundabouts to slow traffic and better pedestrian crossings, are one ingredient. Other ingredients are greater public safety awareness and shorter response times for medical services. Cars could also be designed to reduce pedestrian fatalities in collisions. One key strategy involves a fleet of smarter, if not necessarily fully autonomous vehicles, to eliminate the risks of driver error. Cars that refuse to start when they detect a driver's intoxication would dramatically reduce accidents.

In addition, congestion pricing would both reduce pollution and accident risks. As a RAND researcher [points out](#), London and Stockholm both experienced dramatic decreases in traffic after introducing these charges, accompanied by increases in buses and bike riders. A [study](#) showed that London's congestion charge significantly reduced accidents. These cities have also found ways to ensure that the poor are not disadvantaged by the charges. And, as [this study](#) shows, there's a clear relationship between air pollution and traffic congestion.

Before saying anything more about emissions, I'd like to play economist for a moment. There were 40,000 traffic fatalities last year. Using EPA's standard figure for lives saved, this means that it would be worth spending \$360 billion dollars to eliminate fatal accidents. The actual number is actually higher, because the measures needed to reduce fatal accidents would also reduce nonfatal but still costly ones.

What about zero emissions? The mayor of London has released a [plan](#) to make London zero emissions by 2050. The report on the plan explains that:

"It will only be possible to bring about a zero carbon city by 2050 if all vehicles have zero exhaust emissions by that date. The Government's aim for all new cars and vans to be zero emission from 2040 is not ambitious enough, and should be accelerated to ensure that all new cars and vans are zero emission from 2030, with all new heavy vehicles (over 3.5 tonnes) being zero emission from 2040."

The plan contains a detailed timetable to reach this ambitious target (pp. 100-101), so this

isn't just pie in the sky. And if London can do it, there's no reason New York, San Francisco and Houston couldn't do so. For electric vehicles to truly count as zero emissions, you also need a zero emission electricity grid, another heavy lift but one that might be possible with renewables, energy storage, and perhaps nuclear or carbon sequestration.

Zero emissions and fatalities may or may not be a realistic target for 2050. But thinking seriously about these targets should cause us to raise our level of ambition. Even if we can only get to ninety percent reductions, that would still be a great achievement. We tend to get bogged down in the day-to-day challenges of making progress, but now and then, it's good to think big.