

### Infrastructure Problems on Cities

**Would** you liked to be on a road on the brink of collapsing? America's roads and bridges cause issues that range from the small daily inconveniences of longer commutes to safety concerns and economic burdens. Below, CED has highlighted US infrastructure's most pressing problems. **In** 2014, traffic congestion wasted 6.9 billion hours of motorists' travel time and almost 3.1 billion gallons of fuel. Driving on poor roads cost motorists roughly \$112 billion in additional repair and operating costs annually. **If** the average daily delay for a UPS truck is five minutes due to bad road conditions or congestion and capacity issues, that translates to \$105 million in additional annual costs to UPS alone. **Americans** take over 200 million trips daily across deficient bridges in the 102 largest metropolitan regions. U.S. roads infrastructure received a D rating in the most recent American Society of Civil Engineers report; poor infrastructure has led to an increase in traffic fatalities by 7% from 2014 to 2015. **There are a lot of problems with the infrastructure of America's roads which can be solved by investing in them and maintaining them by taking care of them.**

**New** sources of funding are needed to keep our roads and bridges safe and reliable. **CED** has recommended transitioning to mileage-based user fees or MBUFs to meet this need. Drivers would pay a distance-based fee to use the roads with the price per mile depending on the demand for road space at that time of day. **Such** change would not only increase funds for road upkeep but would also decongest roads as people may opt to drive at a "cheaper" time.

Like mileage-based user fees, managed lanes would be an additional source of revenue that can go towards maintenance and creation of new roads and bridges. In this system, unlike with MBUFs, people would opt in to pay a fee or a premium to use uncongested lanes, thus achieving a more reliable commute or travel experience. Managed traffic lanes would ultimately have the same effect as MBUFs, with less congestion and more funds to go towards future infrastructure improvement.

Too often road and bridge projects are driven by politics rather than system needs, wasting both time and money. Instead, CED urges governments to employ a more data-driven approach that emphasizes engineering reviews in their infrastructure project selection. Though it may sound trite, our government leaders respond to the demands of their constituents. Americans must urge that their tax dollars are spent efficiently and effectively. Ultimately, the state of our roads and bridges affects every American daily and should be a high priority. The public return on infrastructure merits public dollars of investment, including careful planning and innovation.

From early investment in technology to the building and maintaining of roads, the private and public sectors have countless opportunities to work together. The private sector often comes armed with the tools to make sweeping changes that the public sector neither has the budget nor the expertise to enact. Consequently, CED has highlighted the potential for public/private partnerships throughout the road building process. CED believes that the new program should facilitate extensive partnerships that take the form of design-build-finance-operate-maintain contracts, in which private corporations are involved in every step. These partnerships should extend

beyond just the building and maintenance of roads; local, state, and federal governments can improve the state of American infrastructure by investing in private organizations that research and develop improvements in all areas related to transportation. Driverless vehicles, better construction materials that prolong the lives of roads and bridges, real-time traffic, and weather alerts, and more should be universal in the 21st century and could have an enormous impact on the health of American infrastructure. With public-private partnerships, these technological developments are not far off.

The developing world cities are suffering many very serious problems. These are a consequence of the rapid population growth, a lack of capital to invest and a non-existent, very poor and/or outdated infrastructure. We can indeed fix the cities problems, but it takes attention. So, we can be able to fix the infrastructure problems of the road by investing in them and maintaining them by taking care of them.