

THE CONGESTION CON: How more lanes and more money equals more traffic

In an expensive effort to curb congestion in urban regions, we have overwhelmingly prioritized one strategy: we have spent decades and hundreds of billions of dollars widening and building new highways. We added 30,511 new freeway lane-miles in the largest 100 urbanized areas between 1993 and 2017, an increase of 42 percent. That rate of road expansion significantly outstripped the 32 percent growth in population in those regions over the same time period. Yet this strategy has utterly failed to "solve" the problem at hand.

Those new lane-miles haven't come cheap. We know that states alone spent **more than \$500 billion on highway capital investments** in urbanized areas between 1993-2017, with a sizable portion going toward highway expansion.¹ And the initial construction costs are just the tip of the iceberg. For roads that are already in good condition, it still costs approximately \$24,000 per year on average to maintain each lane-mile in a state of good repair, creating significant financial liabilities now and for years into the future.²

We are spending billions to widen roads and seeing unimpressive, unpredictable results in return.

In those 100 urbanized areas, congestion has grown by a staggering 144 percent, far outpacing population growth. (For this report, congestion is measured as annual hours of delay using data from the Texas Transportation Institute's Urban Mobility Report).

Freeway capacity grew faster than population, yet delay exploded



Change in freeway lane-miles, population growth, and annual hours of delay in largest 100 urbanized areas from 1993-2017. Delay = extra time spent traveling at congested rather than free-flow speeds.

Further, the urbanized areas expanding their roads more rapidly aren't necessarily having more success curbing congestion—in fact, in many cases the opposite is true.

Why aren't we reducing congestion?

First, the average person drives significantly more each year in these 100 urbanized areas. Vehicle-miles traveled (VMT) per person increased by 20 percent between 1993-2017. This increase in driving is partially due to how we have allowed these urbanized areas to grow: letting development sprawl, creating greater distance between housing and other destinations, and forcing people to take longer and longer trips on a handful of regional highways to fulfill daily needs. We should be addressing those sources of congestion, but instead, we accept more driving and more traffic as unavoidable outcomes that we must address through costly highway expansions.

¹ Estimated by summing the total "Capital Outlays" in urbanized areas in Table SF-12 in FHWA's Highway Statistics dataset for years 1993-2017. Capital Outlays include both capacity expansion and repair projects. Available from: www.fhwa.dot.gov/policyinformation/statistics.cfm.

² Transportation for America. (2019). Repair Priorities. Available from: <u>http://t4america.org/maps-tools/repair-priorities/</u>. Note that this cost estimate is based on FHWA data for state-managed roads of various sizes, not just freeways.

This is a significantly more expensive and less effective approach than reducing the need to drive or length of trips. And unfortunately, spending billions to expand highways can actually make congestion worse by encouraging people to drive more than they otherwise would, a counterintuitive but well-documented phenomenon known as **induced demand**.

Eliminating congestion is also simply the wrong goal. While severe congestion can have real negative impacts, congestion is also generally a symptom of a successful, vibrant economy—a sign of a place people want to be. **Instead, we should be focused on providing and improving access.**

What does that mean? The core purpose of transportation infrastructure is to provide access to work, education, healthcare, groceries, recreation, and all other daily needs. Congestion can become a problem when it seriously obstructs access, but may not be a major problem if it doesn't. Car speeds don't necessarily tell us anything about whether or not the transportation network is succeeding at connecting as many people as possible to the things they need, as efficiently as possible. Yet a narrow emphasis on vehicle speed and delay underlies all of the regulations, procedures, and cultural norms behind transportation decisions, from the standards engineers use to design roads to the criteria states use to prioritize projects for funding. This leads us to widen roads reflexively, almost on autopilot, perpetuating the cycle that produces yet more traffic.

What needs to happen: Five policy recommendations

We need to face the music: we are doubling and tripling down on a failed strategy. We cannot keep relying on the same expensive and ineffective approach. With discussions underway about the next federal transportation legislation—a process that only happens every five years—now is the critical time to make changes before we pour billions more into a solution that doesn't work. The report recommends five key federal policy changes in the upcoming transportation reauthorization:

- 1. Reorient our national program around access—connect people to jobs and services.
- 2. Require that transportation agencies stop favoring new roads over maintenance.
- 3. Make short trips walkable by making them safe.
- 4. Remove restrictions on pricing and allow DOTs to manage congestion.
- 5. Reward infill development and make it easier for localities.

About the data in this report

This report examines changes in population, lane-miles of freeways, and congestion in the 100 largest urbanized areas in the United States between 1993 (the earliest year with a complete dataset for those 100 cities) and 2017. It also looks at other related changes in those cities like vehicle-miles traveled (VMT) and driving commute travel times. T4America used data from the Urban Mobility Report released periodically by the Texas Transportation Institute (TTI) for as much of this analysis as possible, including data on annual hours of delay and population growth.³ T4America used data from the Federal Highway Administration's (FHWA's) Highway Statistics Series to evaluate lane-miles of freeway added in each urbanized area, and change in VMT.⁴ Data for each urbanized area is available in the full report. **Download the full report at <u>http://t4america.org/</u>maps-tools/congestion-con**

4 Federal Highway Administration. Highway Statistics Series. Available at https://www.fhwa.dot.gov/policyinformation/statistics.cfm

³ Texas Transportation Institute. (2019). Urban Mobility Report. Available from: <u>https://static.tti.tamu.edu/tti.tamu.edu/documents/mobility-report-2019.pdf</u>.