

What Causes Congestion?

In a word, “you.” Most of the Mojave Desert is not congested. But the rural portions also support very few jobs, has hardly any schools and provides a very small contribution to the nation’s economic production. The 100 largest metropolitan regions, on the other hand, contribute 70 percent of the gross domestic product and have 69 percent of the jobs (17). It is not surprising that congestion exists in large areas given the number of people and the amount of freight moving in many directions over the course of two peak periods of two or three hours each. *So the first cause—many people and lots of freight moving at the same time.*

The second cause is the slow growth in supply—both roads and public transportation—in the last 20 years. Congestion has increased even though there are more roads and more transit service. Travel by public transportation riders has increased 40 percent in the 101 urban areas studied in this report. The contribution of the road growth effect to the congestion problem is difficult to estimate. The data files used for the Urban Mobility Report include the growth in urban roadway and travel that results from job and population growth, transportation investments **and** expanding urbanized area boundaries. Roads in areas that were rural are re-designated as urban, causing the “urban” lane-miles to grow even if there are no roads constructed. But even given this shortcoming, the differences are dramatic—travel has increased 54 percent in big metro regions while road capacity on freeways and major streets has grown by only 36 percent (the actual new capacity is much smaller). *Too many people, too many trips over too short of a time period on a system that is too small—not really a new observation (1,2).*

A third factor causes many trips to be delayed by events that are irregular, but frequent. Crashes, vehicle breakdowns, improperly timed traffic signals, special events and weather are factors that cause a variety of traffic congestion problems. The effect of these events are made worse by the increasing travel volumes. *The solutions to each of these problems are different and are usually a combination of policies, practices, equipment and facilities.*

The commuting *uber reference*, *Commuting in America III (18)* confirmed the lengthening commute times, with average travel time to work growing 2 minutes (to 25.5 minutes) from 1990 to 2000, following a 1.7 minute increase in the decade before. This two-decade trend in commuting time growth raises concerns when compared to the growth in commuter volume—23 million more solo drivers in the 1980s, but only 13 million more single drivers in the 1990s. A greater growth in travel time with substantially fewer additional trips suggests that the transportation capacity built in earlier decades is being “used up.”

The proportion of commute trips going from one county to another and from one suburb to another has increased significantly. The long commutes—*Commuting in America III* labels a one-way trip over 1 hour as “extreme”—increased from 6 percent of commute trips to 8 percent. Over 12 percent of commuters in the largest metropolitan regions (over 5 million) had trips lengths beyond 60 minutes. With this as an alternative, it is not surprising that working at home and leaving for work before 6 a.m. also saw substantial increases.