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TRAFFIC CONGESTION

Build It And They'll Come

A growing body of research has shown that widening highways is only a temporary solution at best to the complex problem of traffic congestion. Indeed, research has pointed to a phenomenon known as "induced traffic" that suggests new and wider highways actually create additional traffic, above and beyond what can be attributed to rapid population increases and economic growth. In larger metropolitan areas, drivers will often abandon carpools and public transit when additional roadway space is made available through highway widenings or new road construction, thus creating additional trips and more traffic. In the longer term, the promise of more convenient transportation access allows commuters to live further from work, increasing development pressures and thus fueling even more traffic demand. (It should be noted that any form of transportation can produce this effect; whether it was "streetcar suburbs" at the turn of the 20th century or new commuter trains attracting Silicon Valley workers to live in the Central Valley with the promise of a more convenient commute.)

REGIONAL IMPACTS FROM "INDUCED TRAFFIC"			
Metropolitan area (UZA)	Forecast annual growth rate in VMT (on freeways & arterials), assuming current growth trends	Forecast annual growth rate in VMT (on freeways & arterials), with no growth in roadway capacity	Percent of total VMT growth attributable to "induced traffic"

Bakersfield	9.0%	6.8%	24.6%
Fresno	5.8%	5.1%	12.4%
Los Angeles	-0.01%	-0.8%	100.0%
Sacramento	3.3%	1.5%	54.6%
San Diego	1.3%	0.4%	72.6%
San Francisco-Oakland	0.6%	-0.4%	100.0%
San Jose	1.3%	0.3%	73.6%
AVERAGE	3.0%	1.6%	45.2%

Note: VMT = vehicle miles traveled or overall mileage driven; Los Angeles and San Francisco have negative growth in VMT when no lane miles are constructed, thus 100% of growth is attributed to the induced travel effect. Source: Robert Noland, 2000.

The Federal Highway Administration has recently concluded that this phenomenon of "induced traffic" does in fact occur quite frequently in metropolitan areas throughout the United States. Another detailed study has also concluded that traffic in the Bay Area and Los Angeles would actually decrease if no new highway expansion took place. It also determined that two-thirds of the growth in traffic in San Jose and San Diego in the coming decades will be attributable to induced demand.

A recent study conducted by the U.C. Berkeley Institute for Transportation Studies concluded that 90 percent of all new highway capacity added to California's metropolitan areas is filled within four years, and 60 percent-70 percent of all new county-level highway capacity is filled within two years. This, authors Mark Hansen and Yuanlin Huang explain, means an additional highway lane-mile constructed in the San Francisco Bay Area, Los Angeles or San Diego regions would increase traffic by 10,000-12,000 vehicle-miles traveled per day; in Sacramento and Stockton would equate to 7,000-8,000 additional VMT; and in smaller but nonetheless rapidly growing areas like Modesto, Merced, Monterey and Bakersfield would translate into an additional 3,000-6,000 VMT per day. The authors conclude:

"Our results suggest that the urban state highway lane miles added since 1970 have, on the whole, yielded little in the way of level of service improvements. Consistent with previous work, we find that increasing highway supply results in higher vehicle miles traveled (VMT). An induced traffic impact of such magnitude must be considered when assessing road capacity enhancements, whether in a broad policy context or on a project specific basis."

Several other reports in recent years have pointed to similar conclusions. In 1998, the Legislative Analyst's Office revealed the results of its own research on the issue and cautioned

policymakers about the promise of relying solely on new highway construction in order to reduce traffic congestion throughout California:

"New road capacity will typically lead to new traffic, especially in urban areas, because people and businesses benefit from the mobility that the transportation system provides and seek to use it to their benefit. Ultimately, road use will increase, leading to congestion of new road capacity. For this reason, expansion of the existing transportation will rarely alleviate congestion permanently; however, by restraining demand this tendency can be offset and existing congested roads, as well as new roads, can be made to operate efficiently."

The growing belief that induced traffic largely offsets any short-term congestion relief gains also led authorities in the United Kingdom to cancel more than 70 planned highway construction and road expansion projects in the 1990s alone. Similar experiences have been reported by transportation officials in Germany, Holland and Japan. Many of these countries have retooled their transportation programs to incorporate a more balanced approach to managing traffic congestion as well as a new emphasis on growth management techniques, more compact development patterns, and other land use strategies as a way of beginning to combat what officials and experts see as the underlying cause of increasing traffic volumes.

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