

# ***Beyond Gridlock***

Meeting California's Transportation  
Needs in the Tweny First Century

Surface Transportation Policy Project

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# **Acknowledgements**

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# ***Table of Contents***

INTRODUCTION	page 4
CALIFORNIA'S TRANSPORTATION NEEDS: AS DIVERSE AS OUR POPULATION	page 5
CHAPTER TWO: HIGHWAY CONSTRUCTION AND TRAFFIC DEMAND	page 11
CHAPTER THREE: THE UNDERLYING CAUSES OF TRAFFIC CONGESTION	page 15
CHAPTER FOUR: THE ROLE OF PUBLIC TRANSIT	page 19
CHAPTER FIVE: TRENDS IN TRANSPORTATION SPENDING	page 23
CHAPTER SIX: THE NEED FOR A VISION: IT'S NOT IF WE GROW, IT'S HOW	page 26
A NEW TRANSPORTATION AGENDA FOR CALIFORNIA	page 30
CONCLUSION: THE NEED FOR STATE AND REGIONAL LEADERSHIP	page 35

# **Introduction**

Infrastructure investments in general, and transportation funding in particular, are increasingly seen as some of the most pressing policy issues affecting all levels of government in California today. The state has long been home to some of the fastest growing regions in the United States, and now is facing a near doubling of the population—from 34 million to 58 million—by 2040. In the face of such an overwhelming increase in the number of California residents, there has understandably been strong interest in exactly how the state can provide both the physical infrastructure and the social services to keep pace.

Indeed, there are some who claim that state and local governments, particularly in the area of transportation, have failed to provide adequate infrastructure even for the existing population. Many argue that this is evidenced by increasing traffic congestion on the state's highways, and that in order to solve the problem, the state must get back into the business of building highways, something that proponents claim California has not done since the massive freeway construction projects undertaken in the 1950s and '60s.

But as policy experts and lawmakers continue to entertain plans for transportation system improvements and new spending, there are many unanswered questions that must be addressed regarding exactly how California should best target any new investments. How has the state spent its money on transportation programs in the past and what's been the result? Are we investing public funds in such a way as to provide mobility and access to all Californians? How have our public transit systems fared; do they provide a critical service to the state's residents or have they failed and why? How do current growth and development patterns impact our transportation needs and vice versa? And will simply spending more money on transportation fix our current problems over the long term, or does the system by which transportation spending decisions are made need to be overhauled?

The intention of this report is to begin to answer some of these critical questions, clarify issues in the ongoing debate over transportation issues, and recommend a more comprehensive approach to the complex problems of traffic, mobility and growth. We begin with a broad overview of the many transportation-related issues that the state faces today. Subsequent chapters are broken down by issue areas: traffic congestion, public transit, transportation spending, linking land use with transportation, and ,finally, the need for a new vision.

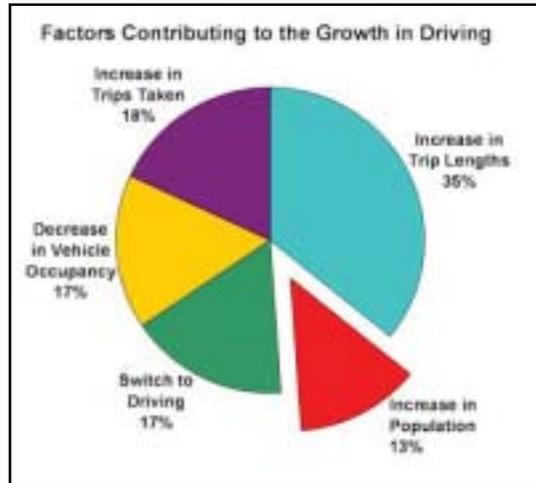
Despite the many complexities involved in the transportation debate, one thing is clear: without a more informed understanding of where we've been and where we're heading, California will be woefully unprepared to plan for its future.

out California, requiring long distance commutes between the workplace, stores, other errands and home.

- **Economic Disincentives For Greater Efficiency.** The skewed pricing signals given to travelers appear to make highway travel, even at the most congested periods of the day, entirely free, while public transit and commuter rail are often perceived as too expensive. While tolls and peak hour congestion pricing are politically unpopular and must be handled carefully to ensure social equity, their absence as a traffic demand management tool greatly exacerbates roadway congestion problems.

*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.)



**TABLE 9: 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	9.00%	6.80%	24.60%
Fresno	5.80%	5.10%	12.40%
Los Angeles	-0.01%	-0.80%	100.00%
Sacramento	3.30%	1.50%	54.60%
San Diego	1.30%	0.40%	72.60%
San Francisco-Oakland	0.60%	-0.40%	100.00%
San Jose	1.30%	0.30%	73.60%
AVERAGE	3.00%	1.60%	45.20%

**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.”<sup>2</sup>

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.

### *Cost-Effective Congestion Management*

Combine the phenomenon of “induced traffic” with the fact that more than 50 percent of all freeway

traffic jams are caused by construction-related delays or traffic accidents, and it becomes clear that what California needs is a far more sophisticated approach in trying to manage congestion. Other states have utilized a diversity of strategies including better real-time traveler information technologies, peak-hour congestion pricing, coordination of transportation and land use goals, telecommuting, staggered work hours, strong financial incentives promoting ridesharing and vanpooling, and better traffic incident management.

The experience of other states and countries in attempting to solve traffic congestion problems, in addition to the evidence provided by growing bodies of research, are absolutely critical lessons for policymakers. There is an overwhelming temptation at any level of government to want to believe in both the quick fix to a problem like traffic congestion as well as to hope that by simply throwing more money at it, the problem itself will disappear. But the futility of trying to build our way out of congestion is an emerging reality that has led many other industrialized countries to dramatically alter their approach to transportation. Instead, many states and other countries are beginning to favor more balanced and cost-effective approaches that rely on a diversity of solutions and a more sophisticated overall approach to traffic management.

## Endnotes

<sup>1</sup> National Association of Home Builders.

<sup>2</sup> California Legislative Analyst's Office, "Developing and Funding an Efficient Transportation System," March 1998

# ***Conclusion: The Need for State and Regional Leadership***

Finally, what's perhaps most important is a recognition that solving these problems will require strong leadership from the state level in addition to management, planning and eventual implementation at the regional and local levels. Getting there demands that every region in California step back from current assumptions, project "wish lists" and the status quo, and undertake some risky but visionary planning with strong public involvement that asks where each region wants to be in 20, 30 or 50 years.

Transportation policies must also recognize that congestion relief is just one of several goals that need to be addressed as we strive to improve the quality of life for all Californians. Transportation programs must work towards the goals of cleaner air, of providing access to jobs and services for the poor, disabled, and communities of color, of minimizing traffic-related fatalities and injuries, and promoting physical health and safe communities. Traffic congestion must thus be tackled within a broader context of economic, environmental and social goals and its solutions must be compatible and work in support of, rather than against, solutions identified for the broader range of issues.

These are absolutely critical lessons for policymakers to understand, since there is an overwhelming temptation at any level of government to hope for the "quick fix" to a problem like traffic congestion, and hope that by directing more financial resources into the existing decision-making systems the problem itself will disappear.

Unfortunately, the reality is that until several very important fiscal frameworks change, traffic congestion in California will likely never go away, regardless of how bold our political intentions are and how many billions of taxpayer dollars we're willing to dedicate to the problem. Among other things, the state needs the leadership necessary to successfully manage our existing transportation networks more efficiently, to establish sound performance criteria and measurements that reward smart growth practices with additional transportation funds, to relax local zoning codes and ordinances that mandate scattered development and low-density sprawl, and begin once again to allow different patterns of growth to occur, including mixed-use developments and more walkable neighborhoods.

There is clearly much at stake in the debate over transportation and growth. The two issues, inextricably linked, will undoubtedly have a profound impact on whether or not we can sustain the state's economic growth, improve public health, protect the environment, and maintain California's quality of life for many future generations to come.