

Citizens for Appropriate Transportation (CAT)
Eisenhower Transportation Corridor
INDUCED TRAVEL DEMAND

After two years and \$140 million spent retooling the notoriously congested Hillside Strangler, travel times on the Eisenhower Expy. remain virtually unchanged, new state data show.....What was unexpected, state officials said, was the influx of thousands of additional vehicles since the project to widen and reconfigure the pavement was largely completed last fall. "The traffic volumes have increased," said Ken Jonak, engineer of operations for the Illinois Department of Transportation's Chicago area district. "it's kind of like the old prophecy, 'If you build it, they will come.'"

Chicago Sun-Times, May 16, 2002

Mr. Jonak's simple observation summarizes the complex issue of "induced travel demand," or the degree to which building new highway capacity encourages new car and truck trips that would not have otherwise occurred.

While Illinois's Department of Transportation may be surprised, the concept of induced demand and its implications are simple if viewed in economic terms.

Think of travel as something you purchase. The price you pay includes both the dollars and the time you spend. If the price of gasoline were \$10 per gallon, people would travel less than if it were 10 cents per gallon. This simple lesson of price vs. demand can be applied to time just as easily. If the time it takes to get somewhere doubled, fewer people would make the trip. And if the time it takes to go somewhere dropped – by adding a lane to the Eisenhower, for instance – then more people would drive.

In some cases, induced demand can be a good thing. State Departments of Transportation frequently boast about the siting of new housing and jobs resulting from highway investments. Indeed, one could question the value of a public investment that did not attract users just as one could question the value of a private sector product that did not attract customers.

But induced demand also brings with it three serious problems.

First, induced demand increases community and environmental impacts.

In the case of the Eisenhower, induced traffic would have three sources:

1. People using the expressway instead of city streets for trips they are already taking;
2. People switching from CTA, Metra, and bus to car for trips they are already taking; and
3. People taking new trips they weren't taking before.

Unfortunately, you can't choose which of these three kinds of traffic to get. While moving traffic off city streets and onto the highway is beneficial, it comes at the cost of reduced public transit use and an absolute increase in the number of cars on the road. When new capacity induces new cars and trucks to use the Expressway, more noise and air pollution result.

Second, increased capacity can cause sprawl. Not only do drivers change their short-term behavior in reaction to changes in price and time, but they change their long-term behavior as well. How long it takes to drive to work, for example, is a significant criterion in people's choice of where to live. Reduce the travel time, and you encourage people to live further away. As Washington Post columnist Neil Pierce explains, "the added traffic...grows and grows over the long term as people travel further and further on the new or widened roads to take advantage of

less expensive land. So government actually pushes sprawling development, siphoning growth and vitality from existing cities and closer-in suburbs. City and established suburb residents pay most of the bill."

Third, more cars mean more congestion. The irony is that induced demand can undermine the very purpose for expanding the highway – reducing congestion.

Evidence from around the country suggests that induced demand on an urban highway like the Eisenhower could be significant, leaving the road almost as congested as it is now:

- A study of highway projects in the mid-Atlantic states concluded that between 20% and 60% of new highway capacity was consumed by new vehicles – induced demand – within two years of the project's completion.
- A University of California study of urban highway projects in that state concluded that 90% of the new highway capacity is taken up by induced traffic.
- Looking at the reverse side of the issue, when the 1989 earthquake destroyed San Francisco's Embarcadero Freeway, so much traffic was eliminated that the city chose not to rebuild the highway.

And, of course, there is every reason to believe that if expanding capacity on the Eisenhower in Hillside didn't relieve traffic congestion, increasing capacity between Mannheim Road and Austin Boulevard won't either.

A thorough and honest environmental impact statement would carefully model the induced demand of the proposed highway expansion and weigh the purported travel time benefits against the environmental costs of the project and the demand it induces. Unfortunately, the Illinois Department of Transportation has not yet agreed to conduct such a study.

Air pollution update: Our last issue brief described the air pollution consequences of automobile and truck exhaust. A few days after our brief was mailed, the United States Environmental Protection Agency released its findings concluding that long-term exposure to diesel exhaust is likely to cause lung cancer and other respiratory diseases.

Kevin Brubaker - September 2002