

Caught in a Jam

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Article:

Is traffic congestion a problem or a solution? Think about it the next time you're stuck in traffic, or waiting for a long red light to turn green. All those people, all those cars and SUVs, and they're in your way! Is the sea of vehicles that impedes your progress clear evidence of a great social ill, or is it just the way people solve the problem of where to work and live?

A new study, whose results were reported this week in the News & Record, has come down on the side of congestion being a problem. The study, by the non-profit The Road Information Program, or TRIP, focused on interstate highways and found that nearly half of the country's urban interstates are congested. TRIP claims that the increasing congestion threatens to undermine the many benefits of America's interstate-highway system.

According to the TRIP study, traffic on U.S. interstate highways increased by 37 percent over the last decade. That rate far outstripped the 13 percent growth in population and the five percent growth in interstate-highway capacity during that time. In North Carolina, interstate use rose by a whopping 59 percent, while the state's population and interstate-highway capacity grew 21 and 17 percent, respectively.

As a result, the proportion of congested urban interstates in the U.S. rose from 33 percent in 1996 to 41 percent in 2001. In North Carolina, 53 percent of our urban interstates are congested according to TRIP's reckoning. That was good enough to rank us 7th in the country in congestion, even though we're only the 11th-most populous state. And interstates here matter nearly as much as they do nationwide. In North Carolina, 19 percent of all traffic is carried by interstate highways, as compared to the national average of 24 percent.

To solve these problems, TRIP recommends using new transportation technologies and expanding highway capacity. So a big part of the solution is to build more interstates and widen the ones we have. Ironically, on the same page as the story about the TRIP study, the N&R ran an article describing efforts by the North Carolina Congressional delegation to increase our share of federal highway funds.

But because traffic congestion may not be a problem *per se*, but rather a solution to a different problem, more capacity will just bring on more congestion. We've seen it before, and it is one of the primary mechanisms underlying the array of problems known as urban/suburban sprawl. Not only does expanding road capacity encourage residential and business construction in new areas, but it often actually increases traffic congestion.

The term for this effect is *induced traffic*. The use of most of our interstates, as with our other roads, is close to free. The cost most people incur is limited to wear and tear on their vehicles, time spent on the road, and of course the gasoline they burn. Often, the only significant cost, at least in terms of affecting people's behavior, is congestion itself. When a new road is built or an existing one is widened, the new capacity tends to get used up to the point when congestion kicks in again.

A series of academic studies summarized by the Sierra Club quantifies this point. After new roads or new lanes are built, the short-term effect is for people to switch transportation modes and routes, increasing traffic on the road up to 10 to 50 percent of the *new* capacity.

In the long run, say after three or more years, changes in development patterns (this is where sprawl comes in) cause even more induced traffic. The studies' estimates of long-run traffic levels range from 50 to 100 percent of the new capacity. Obviously, if a new road is at 100 percent capacity, then congestion as a problem hasn't been solved.

Road building and widening induces traffic because there is little incentive for drivers to economize on the number of miles driven. One approach, then, is to formulate policies that address the costs of using roads. Some states are trying toll roads, with varying success. Usually, however, the purpose of the tolls is to cover roadway maintenance, not to change the way people drive.

And we could discuss increasing gasoline taxes up to a level that makes economic and environmental sense. Of course, there's little chance of that happening, even without the current administration in Washington.

A new proposal I came across recently is pay-as-you-drive (PAYD) automobile insurance. The idea is being promoted by such groups as the economics-savvy non-profit Environmental Defense. Most automobile insurance is now priced according to geography and to broad categories of use (e.g. pleasure vs. commuting). Under a PAYD policy, the premium would be at least partially a function of the number of miles driven. Mileage would be confirmed by including regular odometer checks in existing state inspections.

According to supporters of PAYD insurance, people who drive little are paying too much for insurance given the actual risks, and people who drive many miles are paying too little. Supporters claim that fairness dictates ending the subsidy of high-mileage drivers. And it would make everyone incur a new per-mile cost, which would lead them to economize on driving, thereby eventually mitigating traffic congestion.

PAYD insurance may or may not turn out to be popular, either with insurers or consumers. But we may get a chance to find out. Already a few states, most notably Texas, have rewritten insurance laws to allow insurers to try PAYD pricing.

Pricing congestion is one way to deal with the problem of congestion, and there are other approaches as well. But what if congestion isn't a problem after all? Regardless of the array of costs drivers face, they will continue to drive as long as the costs fail to outweigh the benefits. That's just economic common sense.

The current situation in most of the U.S. is one in which the direct costs of driving are minimal and congestion is increasing. One interpretation of this is that drivers don't mind. Under this interpretation, congestion is just a "cost of doing business" to drivers, a fact of life to be endured, even if complained about. But many people also complain about their jobs, yet we don't talk about finding ways to discourage employment. Just as a job is necessary to put food on the table, perhaps traffic congestion is necessary in people's minds as a way of moving themselves between job and table.

Traffic congestion appears to be basically okay with a lot of people. Those of us who don't like it can live in the middle of town and fret about increasing congestion. Those who don't mind it can live out at the city's fringe or in the county. The TRIP study probably isn't good news to those folks, but it's probably not bad news either.