

Subject: ETTACC Rept. 12/21/07
From: "Johnston, Bob" <rajohnston@ucdavis.edu>
Date: Thu, 03 Jan 2008 21:53:06 -0800
To: schurch@arb.ca.gov
CC: Bob Johnston <rajohnston@ucdavis.edu>

Steve,

Quite a monster rept. !!

A few comments:

1. On p. 3-5 the table has road congestion pricing in it, but this is not discussed in this section. Area congestion pricing is. I also note that road congestion pricing can be expected to increase VMT, but pushing travel to the shoulder periods and off-peak periods. This is not well-studied.
2. Pg. 3-10 and throughout Sec. 3: Reducing traffic congestion is generally discussed, except in one place (3-11), as not inducing more travel. Any speeding up of traffic will induce longer trips (distance) and more trips. In my regional travel modeling experience, you have to stop adding highway capacity (freeways, expressways, highways) and build only rail and BRT transit and add in fuel taxes, over time, gradually, so you do not free up too much highway capacity too fast. Otherwise, you get more VMT. The best empirical article is Robt. Cervero, 2004?, J. of the Am. Plng. Assoc. The official rept. is the NAS study, Expanding Metropolitan Highways, about 1995. See findings on pp. 220 and 222.
3. Pg. 3-12, last item: Land use decisions are almost all made at the city and county level. Planning, zoning, permitting, codes.
4. Pg. 3-13, second item: Sandag is not a LU agency. It is an MPO.
5. Pg. 3-16: I'd label subsection C. Area Congestion Charges. Also, replace Norway with Bergen.
6. This Section leaves out a very inexpensive and effective policy, **reducing the rate of increase of parking spaces in the CBD**. Portland, Oregon is the most-successful city and county in the U.S. in reducing the growth in GHGs (one percent, 1990-2005). They prohibit parking in large commercial bldgs. in the CBD and make them locate near to LRT lines. They also built a lot of LRT and stopped new freeway building. The site is <http://www.portlandonline.com/osd/index.cfm?c=ebijg>
7. This Section is also weak on parking charges, as separate from cashout. Parking charges, even for just worktrips, are very effective in reducing auto trips. Lots of studies, mine and MTC's and others.
8. All-day freeway, or all-roads, tolls is missing. The latter requires a bit of electronics.
9. Increasing urban density for housing and employment needs more emphasis. Not just in Transit Villages, but all of a city, especially near rail stations, but also along BRT lines, and in the CBD and other employment centers. This is why EU cities can sustain good transit systems, with good coverage.
10. PRT is not cost-effective, in any proposal I've ever seen.
11. Section 3 is also missing Urban Limit Lines. These are needed, in addition to densification, as sprawl is unreachable with transit. Also, sprawl uses farmland, reduces our ability to control wildfires, kills off habitats, and reduces forest biomass. A large number of cities in Calif. have ULLs, but they are rolled out too soon and the infill does not have density minimums, which are necessary. Urban Growth Boundaries in Oregon work quite well.
12. Also, please do more on increasing the walk and bike modes. These are the cheapest and lowest in energy use and GHGs. We could double walk from about 7% to about 14% and triple or more bike from about 2% to 5-10%. EU cities and regions have much larger bike shares.

Sorry to focus on what's missing, but the rest is pretty good.

Attached is a rept. on transport and land use policies to reduce VMT, taken from past regional modeling exercises in the U.S. and EU. The paper did not get accepted and so the citation is: <http://www.vtpi.org/johnston.pdf>

<<Review of All Scenario Studies-3-TRB-07.pdf>>

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