Washington

Statewide "*Moving Washington*" Program *circa 2008*

Moving Washington is the Governor's 10-year, three-pronged strategy to Combat congestion: 1) *Operate Efficiently* that which exists; 2) *Manage Travel Demand*; and 3) *Add Capacity*, which itself is a three-tiered program;

i) Tier 1's are immediate, low-cost, operational fixes;
ii) Tier 2's are medium-cost design-builds, and
iii) Tier 3's are major future-planned system upgrades.

Problem – How to Make the Most of a Transportation Budget

Using a combination of annual and "earmarked" state gas taxes, plus the normal Federal allocations, Washington uses a system of performance goals and measures to justify, warrant, and select candidate projects. Elected officials are educated to "buy in" to use metrics – and less-so political means – to determine projects. Achieving "maximum throughput" is the defining target for the basis for congestion relief decisions. "The annual percent of system that is congested" is defined as the % of lane miles that are routinely less than 70% of posted speeds. *For more information: http://www.wsdot.wa.gov/MovingWashington/*

Solution – Use Performance Measures as a Strong Decision Metric

Travel times and reliability are important measures to commuters and also to WSDOT in determining candidate projects. *"WSDOT aims to provide and maintain a system that yields the most productivity or efficiency, rather than focus on providing a system that is free flowing, but in which fewer vehicles can pass through a segment during peaks."* Maximum throughput is achieved when vehicles travel at speeds between 42 and 51 mph (roughly 70% to 85% of 60 mph) because more vehicles can pass a segment than would be at posted speeds. This happens because at the lesser speeds, vehicle headways can condense more safely. WSDOT measures "highway segments" (e.g., similar lane congruencies, geometrics and adjacent land use) and targets the inefficient ones. Stand-alone segments are candidates for Tier 1 and Tier 2 projects (see above) and "linked" segments become candidates for Tier 3, all things considered.

Lessons Learned

In the 2000's, several "capacity expansion projects" (a WSDOT euphemism for bottlenecks, et al) provide examples of WSDOT's process.

- **I-405** -- Adding either one- or two-lanes where necessary to reduce local congestion.
- **I-405 'South Bellevue'** -- Adding general purpose NB and SB lanes, and a SB HOV lane.
- **SR 518** -- Adding a third EB lane between I-5 and SeaTac Airport to relieve a long-suffering recurrent problem.
- **I-205 at Mill Plain Exit and 112th connector** -- create a direct connection to NE 112th Ave. from NB I-205 off-ramp to Mill Plain Blvd. This addressed safety problems too.
- **Increased use of intelligent technologies** -- WSDOT has committed to investing in IT strategies like Active Traffic Management, more cameras and ramp meters, and strategies to manage demand (i.e., van pooling, park & rides, commute options). The ATM "Smarter Highways" signs on I-5 and SR 520, and soon-to-be on the I-90 floating bridge, are national models. In the U.S., only Minneapolis (IRIS ™) has similar technology, on I-35W.