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**DATE:** March 13, 2003  
**TO:** CETA  
**FROM:** Jim MacIsaac  
**SUBJECT:** The LRT = 12 Freeway Lane Myth

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On the March 12 Dave Ross talk program Ms. Sullivan, Sound Transit Board of Directors, unequivocally stated to Mr. Ross that "When this system is up and running, Northgate to Sea-Tac in 2020, it will carry as many people every day as I-5 does today."

*This is one of the greatest mistruths that Sound Transit has been repeating since before the 1996 election.* Sound Transit and its rail supporters must stop iterating this absolute falsehood. It compares the total theoretical "boardings" of the rail system to just one count location on a freeway. That is not how a proper comparison should be made.

Please refer to the attached diagram of the I-5/Central Link corridor from Northgate to S.200<sup>th</sup> Street. The right side diagram illustrates the **2020** average weekday ridership estimates for the Central Link project assuming it is fully completed and operational by 2009 from S.200<sup>th</sup> Street to Northgate. The estimate of 157,000 boardings per day comes from the 1999 Central Link EIS and its accompanying operations reports (adjusted to include the extension to Northgate).

The boardings estimates are the sum of the bolded numbers adjacent to the bolded arrows.

Though there are presumably 157,000 boardings by 2020, not all riders appear on the rail line at any one point. A total of 87,600 riders (55% of total boardings) would be onboard at the maximum load point just northeast of the Westlake Station. An estimated 31,600 (36%) of the maximum load trips ride less than two miles to/from the First/Capital Hills Stations. North of the U-District total weekday ridership drops to 26,000. South of the Rainier Valley (Seattle south city limit) this "regional" rail project will be carrying only 17,100 rides per day by 2020.

Now review the left-side pair of diagrams for person-trip estimates that the I-5 freeway was carrying during year 2000. The left diagram illustrates person-trips carried by private vehicles; the right diagram illustrates person-trips carried on express bus transit using I-5. The 2000 traffic counts from the WSDOT *2000 Ramp & Roadway* report were increased by 35% (all-day average vehicle occupancy or AVO) to obtain person-trip estimates on the freeway at and between ramp groups. The transit rider estimates are derived from the Metro Transit 1998 CBD bus survey. They were adjusted to include Pierce and Community Transit bus riders that were not included in the Metro bus survey.

Vehicle counts at all on-ramps plus half the two-way thru-traffic count at the S.200<sup>th</sup> and Northgate ends of the comparison length of I-5 times an AVO of 1.35 reflects person-trip "boardings" along I-5.

During year 2000, private vehicles carried 1,145,100 person-trip boardings of this 23-mile portion of I-5. Public transit added another 73,400 boardings in 2000. ***So this 10-12 lane freeway carried 1,218,500 average weekday person-trip “boardings” in 2000 compared to 157,200 boardings on Central Link – nearly 8 times more boardings than projected for Central Link by 2020.*** This is the true comparison of Central Link to the I-5 freeway.

**Screenline comparison.** Another comparison is persons carried on any given segment of the corridor. In 2000 I-5 carried 412,700 persons per day across the Ship Canal. By 2020 Central Link (to Northgate) is estimated to carry 72,200 persons per day across the Ship Canal, but over half of these are simply transferred from I-5 express buses. So Central Link by 2020 will have added about 35,000 transit person trips over what I-5 carried in 2000 across the Ship Canal.

***In terms of new trips, Central Link by 2020 will add only about 10% to the persons carried by a 12-lane freeway at the Ship Canal screenline in 2000.*** Without Central Link I-5 would need to carry an additional 70 articulated bus trips in the peak direction during the peak hour to accommodate this rider increase. All of those added buses could easily fit into well-managed transit/HOV lanes on I-5 and through the existing Downtown Seattle Transit Tunnel (DSTT).

As far as downtown Seattle is concerned, Central Link adds no new “practical capacity”. It merely preempts the existing bus capacity of the DSTT. When Link is extended north, it will preempt all bus capacity of the DSTT but be carrying fewer trips than could be carried by buses.

Past studies of how many “seats” could be theoretically carried by trains through the DSTT are largely irrelevant UNLESS an additional light rail line across Lake Washington is added to the rail system and UNLESS people choose to fill those seats and all standing room. Even then at best, the difference between DSTT bus and rail capacity is marginal. It would be difficult for rail supporters to say that rail would add even the equivalent people-moving capacity of one freeway lane each way through downtown Seattle.

**I-5 Traffic Volume Reduction.** Another myth that must be put to bed is the claim that Central Link will reduce traffic volumes on I-5. Page 2-5 of the 1999 EIS admits that the Link project would have an insignificant effect on traffic volumes compared to No Action. And this is easy to rationalize.

About 60% of the Link trips to and from downtown Seattle are generated on First/Capital Hills and through the Rainier Valley. If any of these trips are attracted out of cars, that would have no effect on I-5 traffic volumes since such car trips do not use I-5.

North of Northgate and south of Boeing Access Road the light rail project from S.200<sup>th</sup> to Northgate would have little effect other than just transferring passengers from express buses to the rail line (see attachment). The reason for this lack of attraction to the “regional” transit market is the low speeds of Link compared to non-stop or limited stop express bus transit services already in existence and building.

***So please put these false myths of reducing traffic volumes and adding capacity equivalent to a 12-lane freeway out of consideration. In the real world they have absolutely no truth.***

