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What you need to know about traffic

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Introduction

Traffic is on our minds. Drivers are stuck in traffic, but at the political leadership level all that is talked about are 'multi-modal solutions', not traffic congestion relief.

Sound Transit is building the \$96.2 billion light rail and express bus transit; the 2019 Legislature discussed a state transportation package that ranged from \$6 to \$17 billion; Paine Field is flying passengers, and drivers are stuck in traffic on I-405, I-5, the SR 2 Trestle and dozens of other chronic choke points. The Washington State Department of Transportation (WSDOT) reports that congestion doubled from 2010 to 2017; the Highway 99 tunnel is open; the viaduct is coming down; and we hear from our state Highway Design Engineer that "our highways are crumbling under our feet."

People value the freedom of their cars. They can go where they want to go when they want to go in the shortest amount of time in a car. Convenient access to jobs is an important driver of the economy. Job location is extremely diverse around the region.

What is missing is an honest discussion about what the plan is to deal with 'traffic.' Traffic congestion comes up in every conversation about transportation. Most people are stuck in it. Customers and employees of businesses are bogged down in it. Walking works within about ½ mile; bicycling works for about 0.3% of the people; transit works for about 5% of the daily trips; cars on roads works in congestion for 80+% of us. We can do better.

Transit is a small component of our transportation system

According to ST and the Puget Sound Regional Council (PSRC), when the current plan for light rail is complete in 2041, it is scheduled to carry just under one half of 1 percent (0.5%) of the daily person trips in the Sound Transit (ST) taxing district. Bus transit (mostly King County Metro, but also Community Transit, Pierce Transit and Kitsap Transit will carry about 4.5% of the daily trips (all on roads), making the total daily transit share about 5%. We don't talk about the trips in cars that are stuck in traffic.

Perspective is lost:

- Only about fifteen percent of total daily person trips are made by commuters.
- Only about ten percent of daily person trips are in the P.M. peak hour.

- Only about nine percent of the region's jobs are in Downtown Seattle.
- About ninety-nine and a half percent (99.5%) of the daily person trips use our roads (all bus transit, cars, trucks, vanpools, pedestrians, bicyclists – all except the light rail and commuter rail passengers).
- About seventy percent (70%) of all tax and other revenue collected for transportation in King County is spent on bus and rail transit service and construction.

The environmental issues (Quality of Life and Energy)

The environmental discussion is biased. Traffic congestion has a significant impact on quality of life. Our health and the Orca whales are important long-term issues; traffic congestion has an impact that is potentially life threatening through added stress, road rage and traffic collisions. Loss of personal time impacts our daily lives.

Every street or highway project that gets constructed cleans the storm water and replaces the fish culverts to modern standards. The Puget Sound region got out of the air quality quagmire decades ago, mainly with technological upgrades to the internal combustion engine of the automobile along with hydro-electric and nuclear power. The Puget Sound area's environmental clean-up of sewage running into our lakes in the 1960's with the Forward Thrust program is legendary.

On an energy consumption basis, an average passenger car uses less energy per passenger mile than transit buses or light rail on a nationwide basis according to the US Department of Energy Transportation Energy Data Book # 35. A passenger car traveling at highway speeds uses fuel at a lower rate per mile than a car on a congested freeway like I-405.

The gas tax

The gas tax (gasoline and diesel fuel for motor vehicles) is an ideal carbon tax. Based on the volume of gas purchased, the gas tax provides an incentive to use fewer gallons by using a smaller vehicle with better gas mileage, carpooling, using public mass transit, or making fewer and shorter trips.

In Washington State, the gas tax has the added advantage of being protected by the 18th Amendment of the State Constitution. Our constitution requires that gas tax revenues be deposited in the Motor Vehicle Fund and be restricted to use "for highway purposes." Also, in Washington state, the legislature has required electric vehicle owners to pay a \$150 annual fee as a substitute for gas tax not paid.

The gas tax has two additional features:

- a.) It has a very low (about 0.5%) cost to collect because the gas tax is collected at the refinery, not at the gas pump; the state collects over \$2 billion of tax per year with very few invoices; and

- b.) Gas tax revenue is not connected to inflation; therefore, receipts grow only by:
 - i.) increased gallons sold, or
 - ii.) a legislative change in the rate (currently at \$0.494 per gallon state tax plus \$0.184 per gallon federal tax).

The average Washington family buys about 500 gallons of gas per vehicle per year and pays about \$350 per year per car in gas tax. This means that for about \$1 a day one gets to use any non-tolled road or street in America. This is an enormous deal! We are paying a minimal amount for roads and the price does not go up with inflation.

Underfunding our roads

Yet, we, as a society, have made the choice to underfund our roads. The 47,000-mile Interstate Highway System of America has been a huge success. It is wearing out. Highway pavements last 30-50 years; bridges and structures last 50-70 years. Washington's Interstate Highways were constructed primarily in the 1960's, '70's and '80s. West Lake Sammamish Parkway, an arterial in Bellevue was constructed in the 1930's. The original concrete pavement on the Parkway still exists and is totally worn out. This is endemic at all jurisdictional levels.

Secretary of Transportation Roger Millar, the administrator of WSDOT, has stated publicly that WSDOT recently received about \$510 million a year for Maintenance and Preservation, yet he needs \$1.3 billion a year to maintain the state system in a Good State of Repair. The 2019 legislative response was to reduce the \$510 million per year to \$250 million per year. If the roof leaks once, some will get a repairman to fix the leak. After 3 or 5 'fixes' the owner will replace the roof, finding the rot that has accumulated during the short-term fix periods. Pavements and bridges react much the same way. Maintain them properly or replace them later at much higher cost.

A three-year \$7 million analysis and environmental documentation was completed for the I-405 corridor in 2002 resulting in a fully approved I-405 Master Plan by all local, regional and state jurisdictions plus a Federal Record of Decision (ROD). The plan had a year 2020 horizon which was designed to handle the traffic in 2020.

The I-405 Master Plan currently sits at about 35% completion with another 10% funded for construction (Bellevue to Renton Express Toll Lanes and the SR 522 interchange). The remaining unfunded I-405 projects to complete the Master Plan add up to \$14 billion in 2018 dollars. That is, we have a plan, we know what to do and the legislature has decided to not fund it. At this rate, it will take over a century to construct the remainder of the 2020 Master Plan.

The rest of the Puget Sound region and the state has a similar backlog of unfunded projects. A simple search of planning agency projects, maintenance needs and court mandated fish culvert repair reveals a \$100 billion statewide roadway needs list. The 2019 Legislature 'considered' but did not pass a \$6 to \$17 billion package for the next 10 years.

The concept that “we can’t build our way out of congestion” is nonsense. It merely is a decision that our leaders have made. That is a decision that can and must be changed.

Real transportation leadership is lacking

This is not real transportation leadership. This is fantasy thinking. Do the voters of the state really want to condemn themselves to congestion for ever and ever with the public safety issues, potholes and broken bridges that do not work?

If Sound Transit can convince voters to come up with \$96.2 billion to build a light rail system to carry 0.5% of the region’s trips, can’t we have an honest conversation about a \$100 billion 25-year program to support the other 99.5% of the daily trips in the state?

The answer is “**yes we can**”, and we must move forward with an honest conversation.