



**ACES Research Report  
October 2020**

# **Puget Sound Travel Trends**

**Motorways and Shared-Ride Services  
form Foundation of Initial Recovery**



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**THE FUTURE OF COMMUTING**

A blurred, long-exposure photograph of a city street at night. The image shows streaks of light from traffic and buildings, creating a sense of motion and urban energy. The colors are dominated by warm yellows and oranges from streetlights and traffic, with cooler blues and greens from building lights and reflections on the wet pavement.

DISCOVERY  
INSTITUTE

**The Transportation Futures Research Fellowship  
Cascadia Center for Regional Development**

A number of projects, such as the I-405 bus-rapid transit proposal, have gone into hibernation since the COVID-19 recession, until financial shortages are better known and the Sound Transit board sets new schedule goals. The agency predicts a \$1 billion gap in 2021, and at least \$7 billion in tax-revenue shortfalls through 2041.

Lost ridership is arguably a greater crisis than money. Sound Transit's bus and train use is [down 80% from a year ago](#), while King County Metro ridership declined by 65%, as the pandemic continues to reduce commute trips. Whether people return to mass transit, and how soon, remains unclear.

However, Amazon last month announced plans to expand its workforce in Bellevue by 2025, and Sound Transit last week said it [picked a developer for a \\$500 million project](#) that includes offices, retail and housing adjacent to a light-rail operations and maintenance facility under construction there.



South Jackson Street, looking east from Pioneer Square, was bustling with cars, buses, a streetcar and pedestrians on July 15. (Alan Berner / The Seattle Times)

## See how Seattle-area commutes have changed over the years — including the impact of COVID-19

Cars and trucks are roaring back onto Puget Sound-area highways, after coronavirus kept people home earlier in 2020. This could mean a return to the hellacious traffic delays of the 2010s, unless people shake up their lifestyles by telecommuting or reducing driving. Here's a look at pre-pandemic commute habits and travel times, and how travel has changed this year. The 2018 data referenced here is the most recent available.

By Seattle Times staff

Published Sept. 25, 2020



Traffic Lab is a Seattle Times project that digs into the region's thorny transportation issues, spotlights promising approaches to easing gridlock, and helps readers find the best ways to get around. It is funded with the help of community sponsors Alaska Airlines, Kemper Development Co., Madrona Venture Group, NHL Seattle, PEMCO Mutual Insurance Company and Seattle Children's hospital. Seattle Times editors and reporters operate independently of our funders and maintain editorial control over Traffic Lab content.

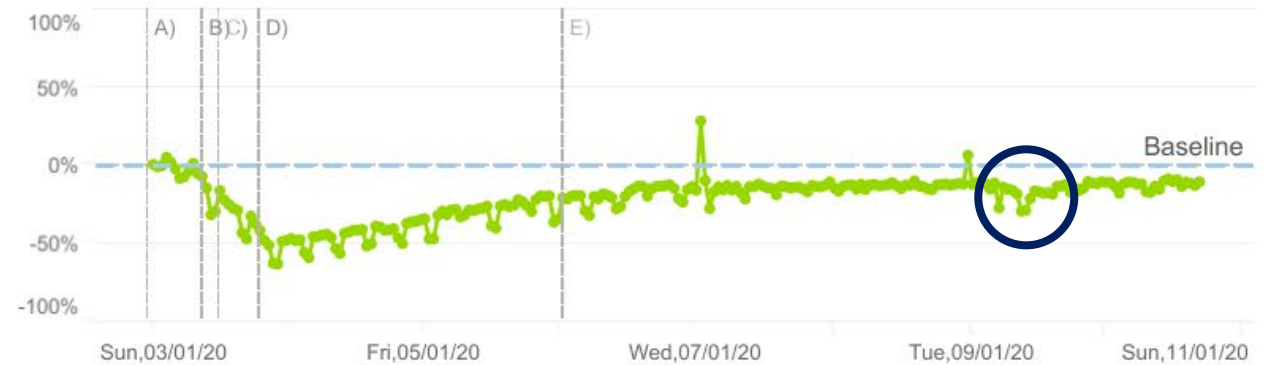
# Highway Traffic Recovery



## Highway Traffic

Data from 32 locations statewide

**-10%**  
compared to 2019 baseline



County

(All) ▼

Highway

(All) ▼

2020 Date

March 1, 2020   October 22, 2020

Darkening boxes indicate a larger change from the baseline

A) 2/29 - State of Emergency declared B) 3/12 - Schools Closed C) 3/16 - Ban on gatherings of 50+ people D) 3/25 - Stay Home, Stay Healthy order goes into effect E) 6/1 Stay Home, Stay Healthy order expired. Note: 5/30 - some King County data was impacted by protests

# Transit Ridership Recovery?

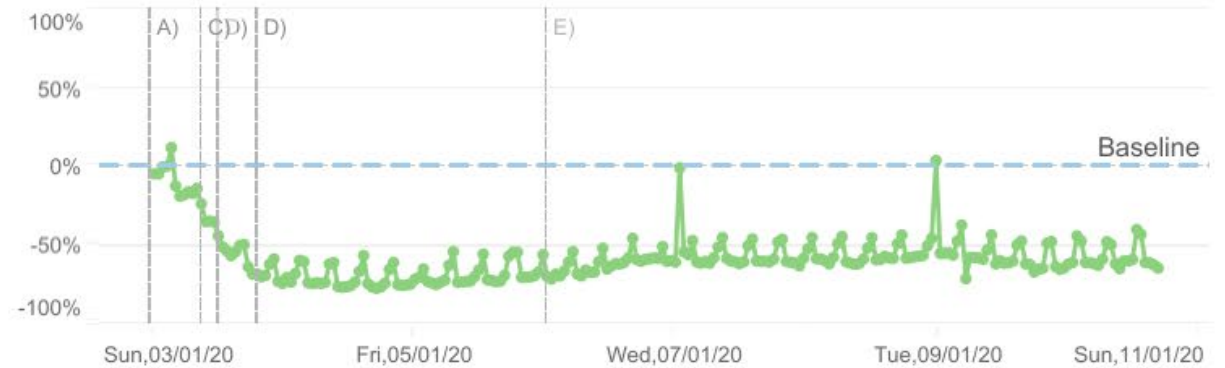


## Transit Ridership

Data from ten of the largest transit agencies

**-64%**

compared to 2019 baseline



Transit Agency

(All) ▼

Day of Week

(All) ▼

2020 Date

Sun, 03/01/20

Thu, 10/22/20



A) 2/29 - State of Emergency declared B) 3/12 - Schools Closed C) 3/16 - Ban on gatherings of 50+ people D) 3/25 - Stay Home, Stay Healthy order goes into effect E) 6/1 Stay Home, Stay Healthy order expired.

# People Choosing Highways



<b>HIGHWAY TRAFFIC</b>	<b>-10%</b>
<b>TOLL LANES &amp; BRIDGES</b>	<b>-36%</b>
<b>FERRIES</b>	<b>-38%</b>
<b>TRANSIT RIDERSHIP</b>	<b>-64%</b>
<b>PASSENGER RAIL</b>	<b>-87%</b>

<https://www.wsdot.wa.gov/about/covid-19-transportation-report/>

**DATA THROUGH Oct 22, 2020**

# Eastside Motorway Volumes



Highway	County	Traffic count location	Tue, 10/13/20	Wed, 10/14/20	Thu, 10/15/20	Fri, 10/16/20	Sat, 10/17/20	Sun, 10/18/20	Mon, 10/19/20	Tue, 10/20/20	Wed, 10/21/20	Thu, 10/22/20
	King	SR 167 at Kent (196th)	-9%	-2%	-2%	1%	-7%	-8%	-6%	-3%	-9%	-4%
	King	I-405 at Tukwila (Longacres)	-20%	-13%	-11%	-12%	-13%	-17%	-15%	-12%	-17%	-14%
		I-405 at Renton (37th)	-16%	-12%	-9%	-8%	-11%	-18%	-12%	-10%	-14%	-11%
		I-405 at Bellevue (NE 8th Street)	-20%	-14%	-9%	-13%	-14%	-21%	-16%	-14%	-17%	-14%
		I-405 at Kirkland (NE 132nd Street)	-21%	-16%	-15%	-17%	-14%	-20%	-18%	-16%	-19%	-16%
	King	SR 520 at SR 520 Floating Bridge	-50%	-46%	-44%	-40%	-31%	-39%	-50%	-48%	-49%	-48%
	King	I-90 at I-90 Floating Bridge	-34%	-29%	-29%	-29%	-22%	-30%	-33%	-31%	-36%	-32%
		I-90 at West of Bandera	-8%	8%	19%	8%	14%	0%	11%	14%	7%	24%



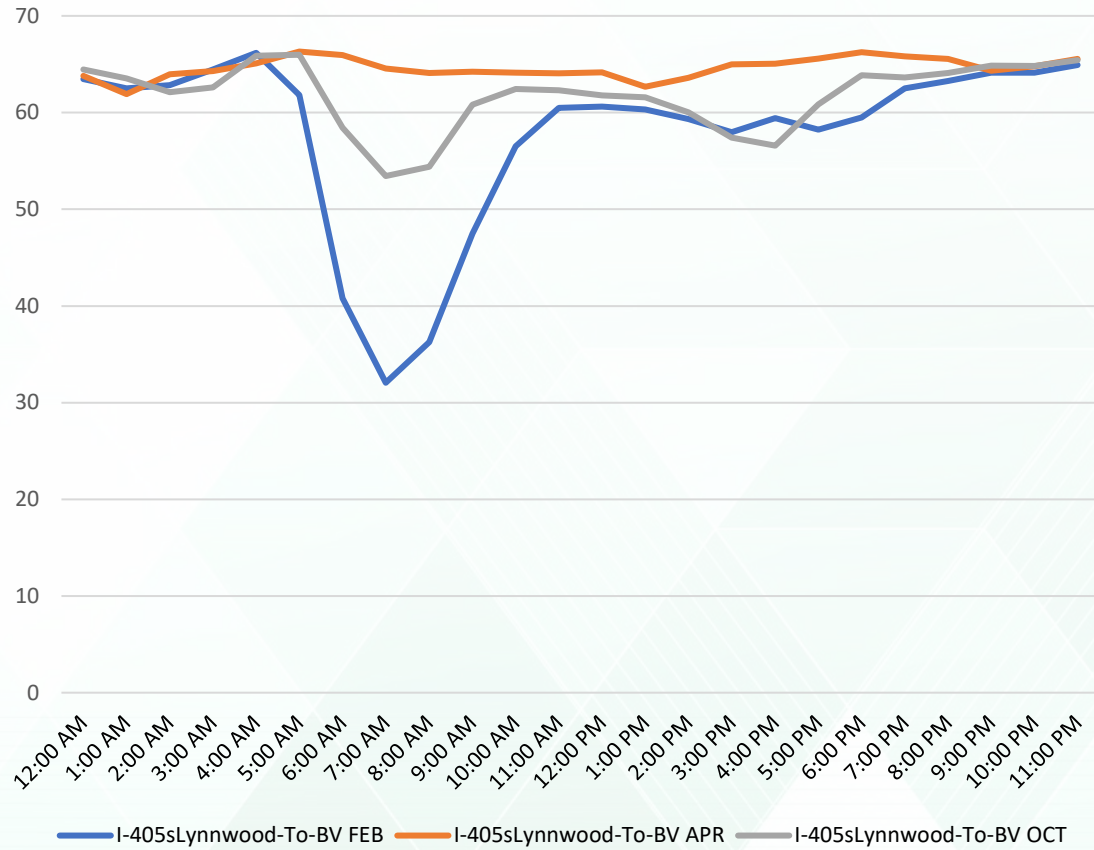




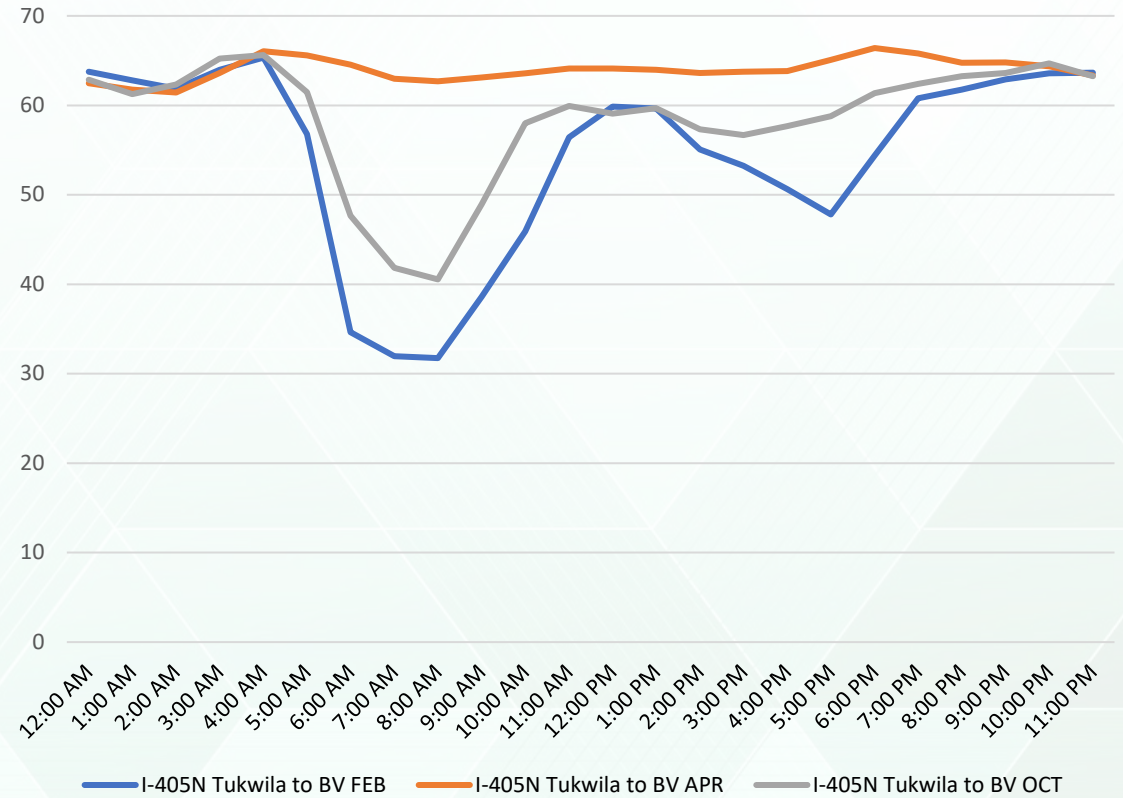
# into Bellevue



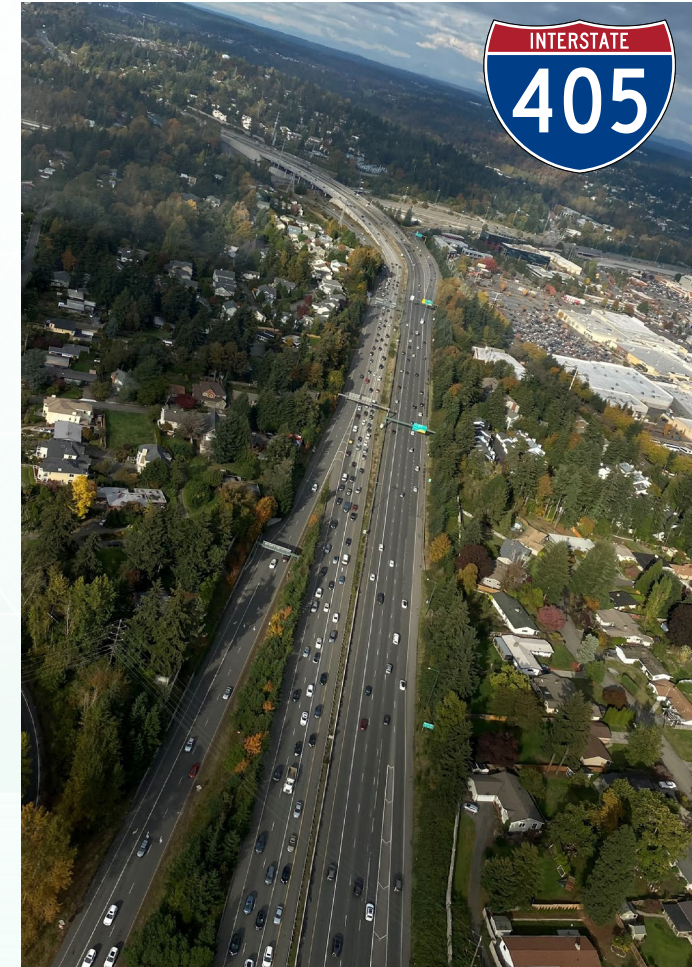
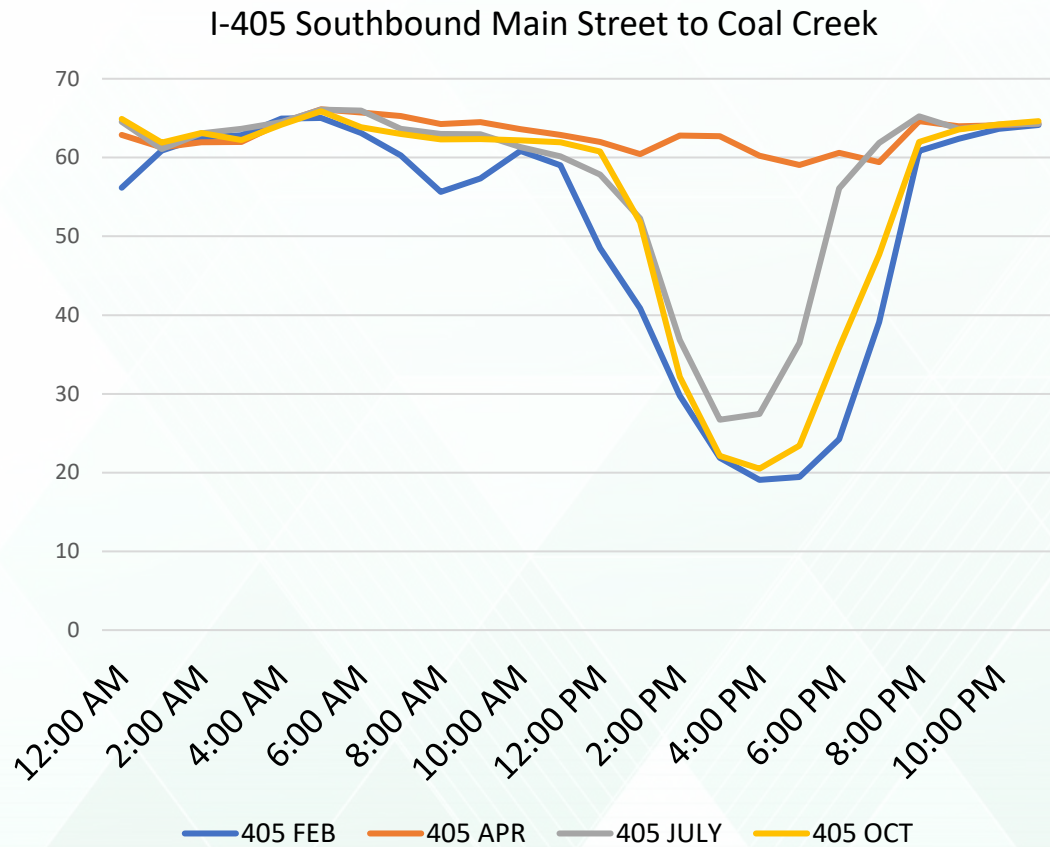
### I-405 SOUTHBOUND - Lynnwood to Bellevue



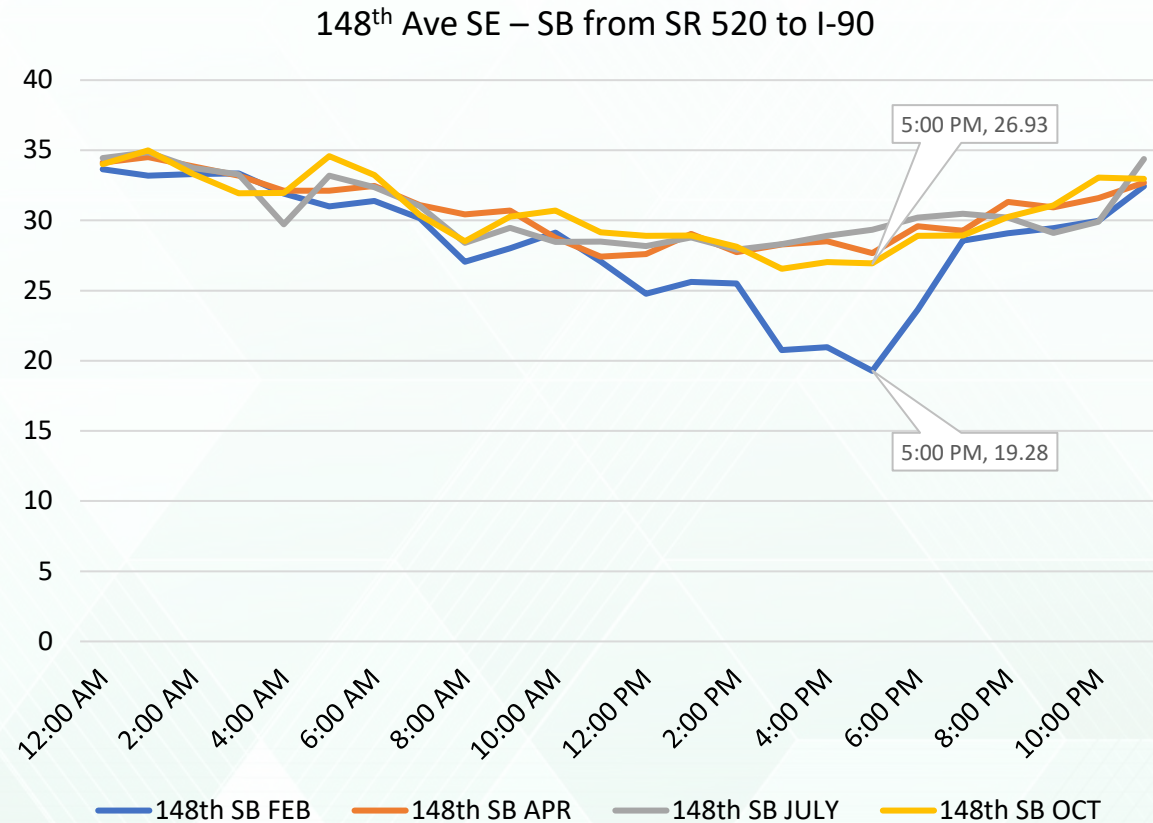
### I-405 NB - Tukwila to Bellevue



# Bellevue's Southbound Slog is Back



# Bellevue's Arterial Congestion



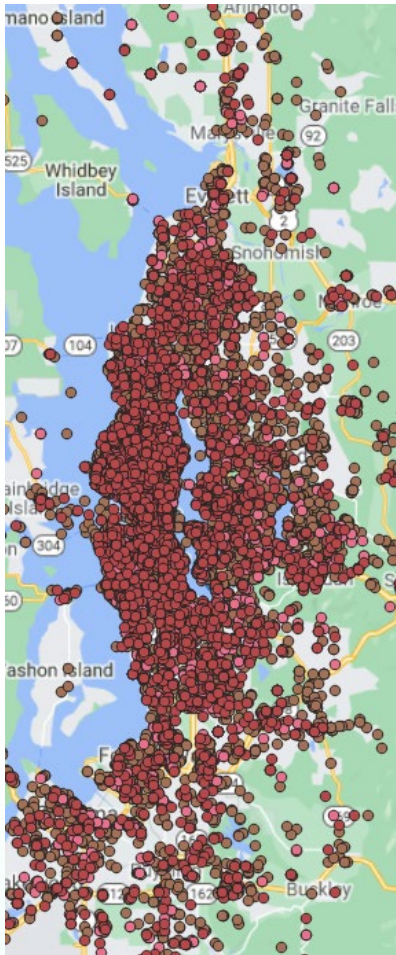
# Regional CBD Trips

Month Compared to February	Downtown Bellevue	Downtown Seattle
April	-80%	-86%
October	-50%	-71%

# Congestion Returns on the Eastside

- **I-405 SB between Main St and Coal Ck Parkway**
  - Volume (traffic counts) remains down 12-15%
  - Volumes recovered quickly from late-March and April fall-off of 40 to 70%
  - Congestion has returned in the usual locations
  - Bellevue neighborhoods remain at risk due to diversion
- **I-405 SB in Kirkland is MORE congested *in the middle of the day***
  - Auxiliary lanes were removed during toll lane construction (and more will be removed in future projects), increasing crash risk and reducing efficiency of the motorway, especially when toll lanes are priced but underutilized
- **Cross-Lake volumes remains depressed while transit ridership has stagnated**

# Seattle CBD Trips



City	FEB	APRIL	OCT
Seattle	54%	58%	56%
Bellevue	6%	3%	4%
Renton	2%	2%	2%
Kirkland	2%	1%	1%
Sammamish	2%	1%	1%
Issaquah	2%	1%	1%
Mercer Island	2%	2%	2%
Redmond	2%	0%	1%
Tacoma	2%	2%	1%
SeaTac	1%	1%	2%

**Trips into Downtown  
Seattle Compared to  
Period Before  
Government Orders**

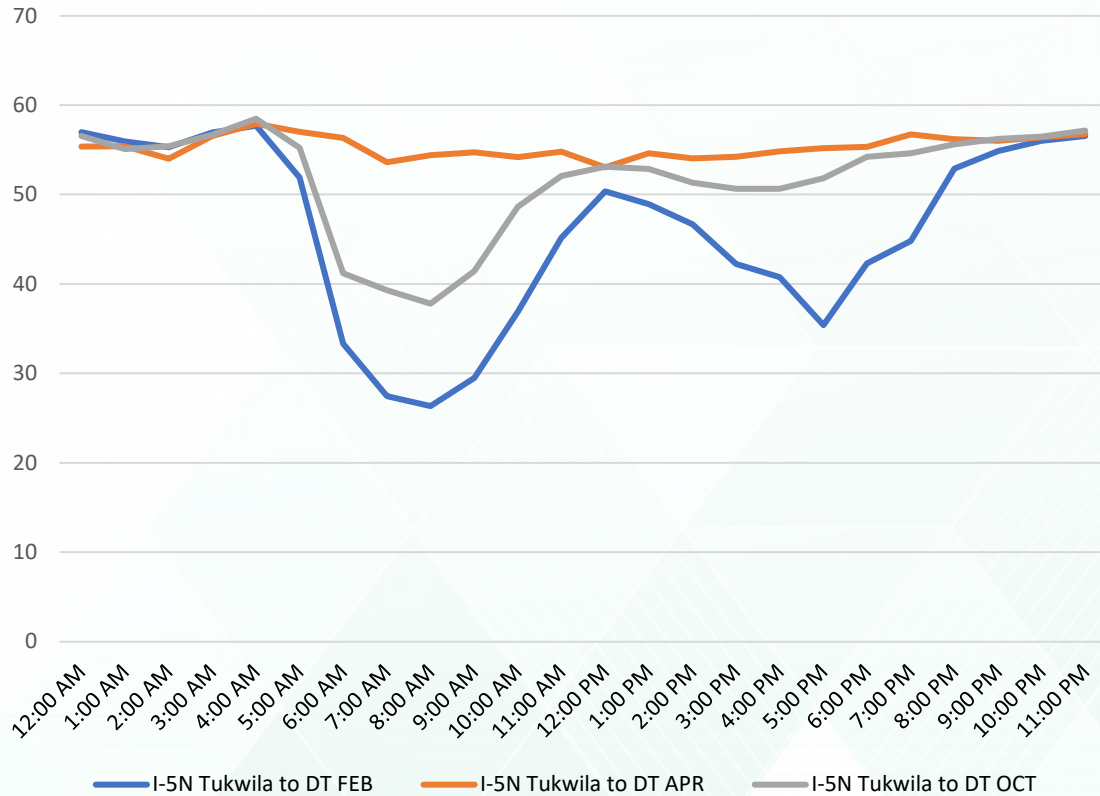
APRIL	- 86%
OCT	- 71%



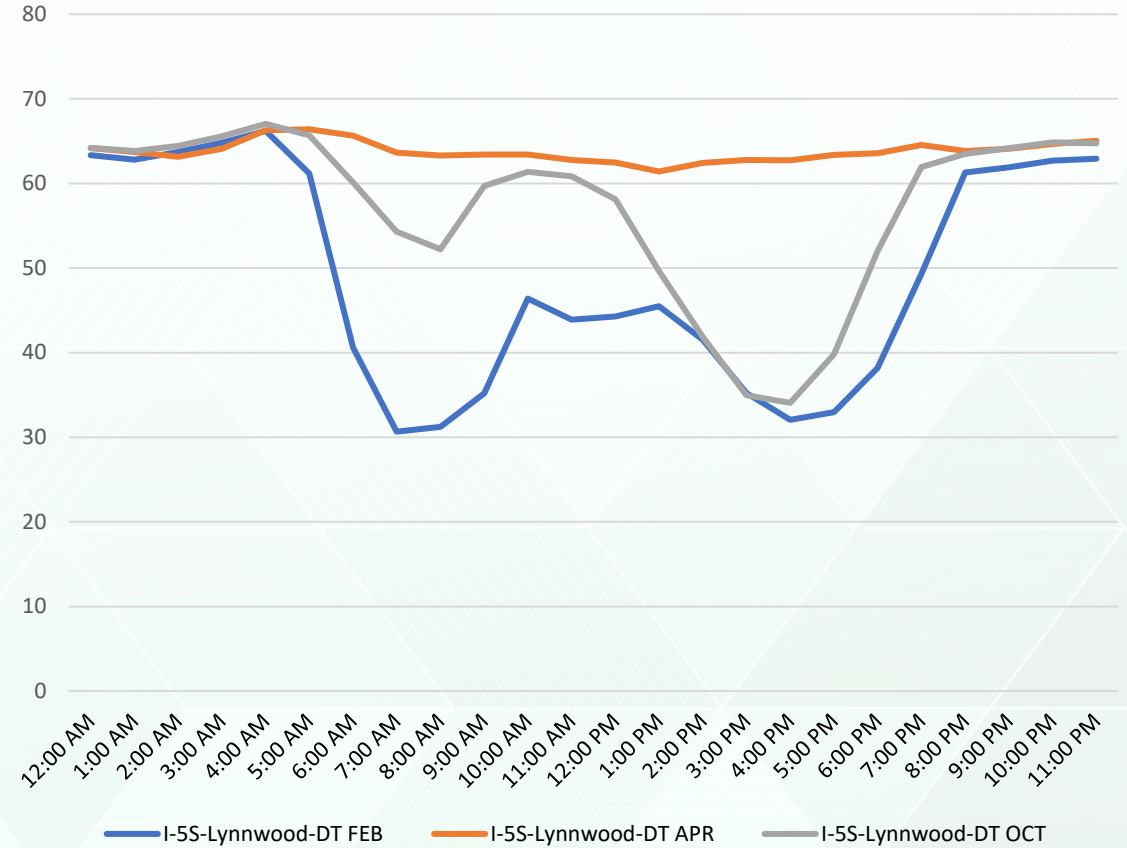
# into Seattle



### I-5 N Tukwila to DT Seattle



### I-5 S Lynnwood to DT Seattle





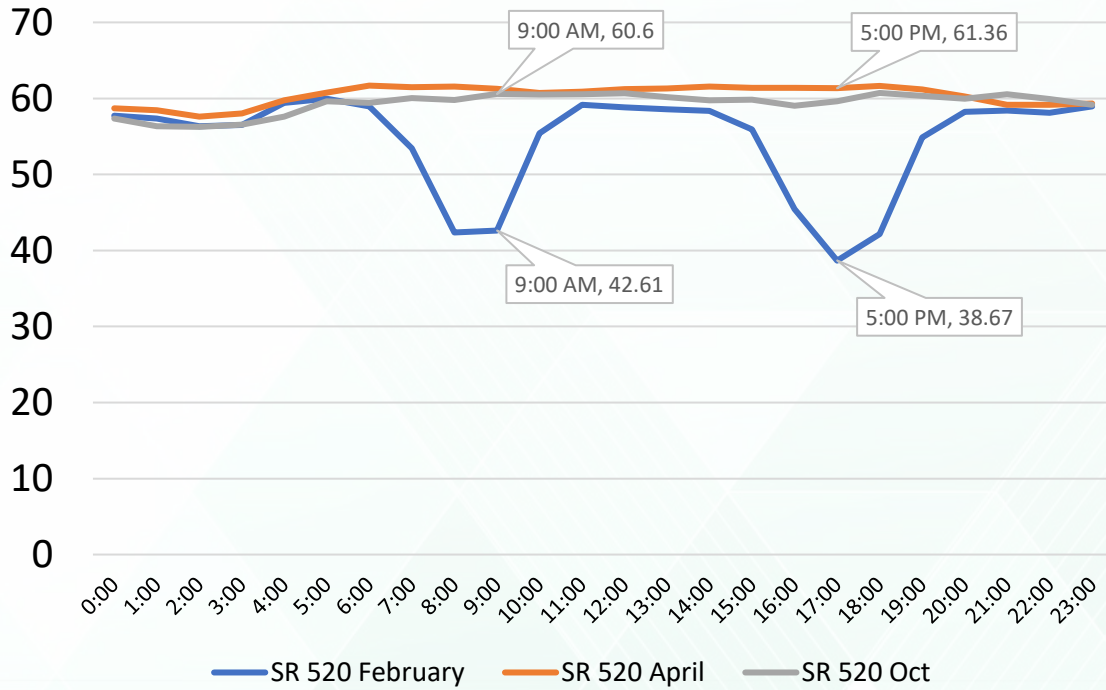
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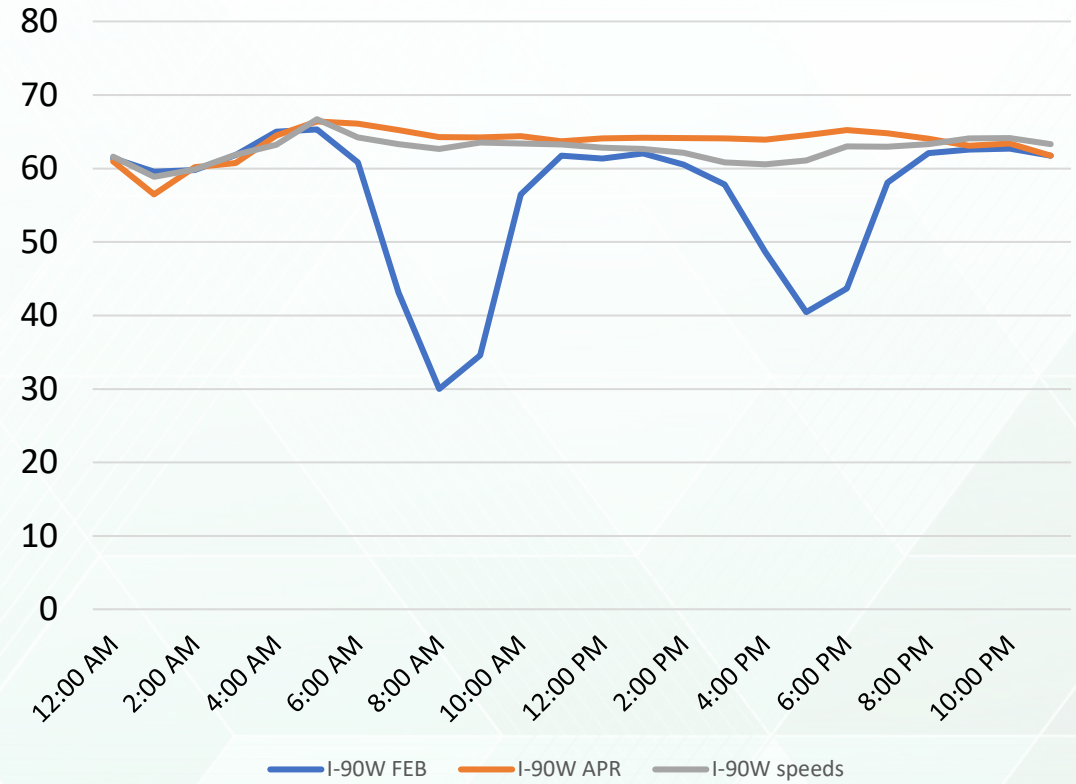
# Bridges into Seattle



### SR 520 Average Speeds



### I-90 WB I-405 to I-5



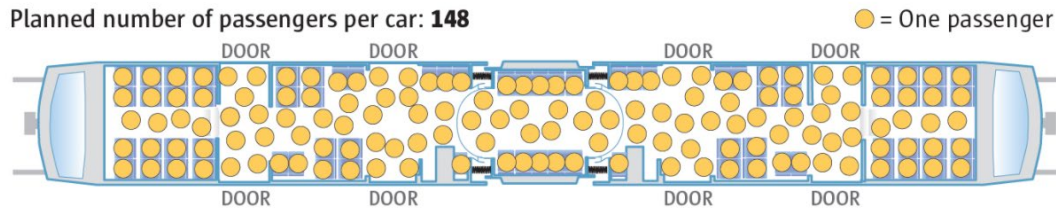


# Light Rail Service Impacts and Solutions

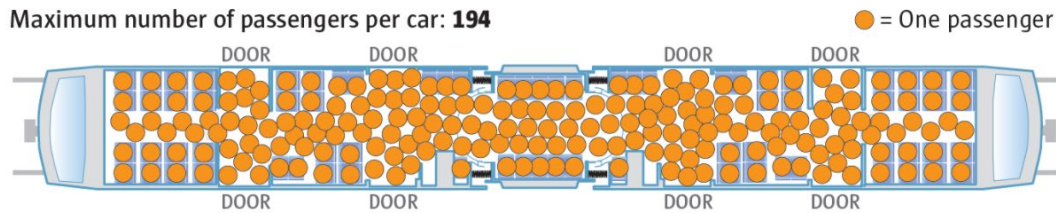
## A full train

Sound Transit's magic number is 148 riders per railcar – where there are twice as many passengers as seats. A maximum 194 people is considered OK for a few stops, after a ballgame, for example. A “crush load” is 252 people.

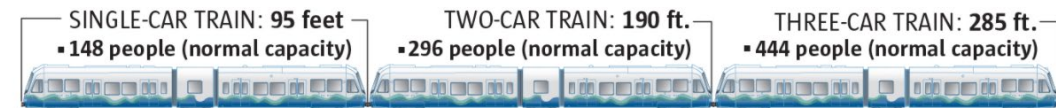
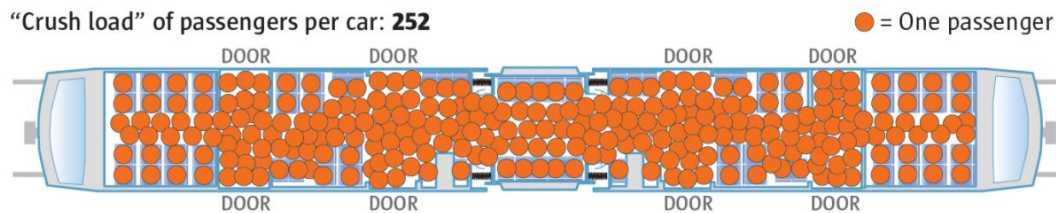
Planned number of passengers per car: **148**



Maximum number of passengers per car: **194**



“Crush load” of passengers per car: **252**



Source: Sound Transit, Transportation Research Board

MARK NOWLIN / THE SEATTLE TIMES

- **“Crush loads” and even planned normal loads on public transit violate government mandates regarding physical (“social”) distancing**
- **Light Rail trains have reached “crush load” numerous times since early 2016, according to the *Seattle Times***
- **50% of “crush load” is 126 passengers; a “virus-safe” railcar can only carry 60 to 80 passengers with physical distancing measures in place**
- **Doubling the number of railcars in service is nearly impossible without lead time for railcar acquisition, typically several years**

# New Mobility Can Meet Peoples' Needs

Originally published August 8, 2016 at 6:00 am | Updated January 18, 2017 at 10:37 am



1 of 2 | People ride the southbound Sound Transit Link light-rail line from the International District/Chinatown Station to the Stadium... (Lindsey Wasson/The Seattle Times) More ▾

Sound Transit trains are suddenly filling 40 percent of the time at rush hour, causing some rider grumbling and a closer look at adding capacity.

cruise



# Diversity and Innovation

- **Huge opportunity to launch safe, individualized, on-demand, electric-powered shuttle services**
- **The outdated fixed-route, fixed-schedule model cannot support new trends in midday travel**
- **Transforming Park & Ride facilities into Mobility Marketplaces can create some demand for transit but primary benefit will be sustainable hubs for EV charging and driver comfort stations**

## Sharing a Better Future **cruise**



Robert Grant [Follow](#)

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