



Olympia Meeting Summary  
October 16 & 17, 2018

Chairman Litt opened the meeting with introductions.

**Commission Business**

Commissioner Tortorelli moved adoption of the minutes from the July Commission action on Toll Exemptions. Commissioner Jennings seconded the motion and the minutes were adopted.

The Commissioners then discussed whether a verbatim transcript or minutes are necessary to record Commission rulemaking action in the future. Both the Commission and TVW record Commission meetings. After discussion, it was decided that prospectively, the Commission will adopt a written summary of rulemaking action.

Commissioner Jennings moved adoption of the Port Angeles Commission meeting summary. Commissioner Tortorelli seconded the motion and the Port Angeles Commission meeting summary was adopted.

Highlights of Commissioner reports:

- Commissioner Batra attended ferry team meeting and tolling team meetings.
- Following the Port Angeles meeting, Commissioner Jennings took another look at the Elwha Bridge. He also rode the Coho ferry to Victoria and was invited on the bridge with the Captain. He learned that much of the maintenance is done on the Coho while the ferry is in operation. The Coho is taken out of the water for only two weeks each year for full inspection and repair.
- Commissioner also Jennings attended tolling, ferry and RUC team meetings. He rode on the JTC bus tour and talked to many legislators. He also attended a meeting of the Columbia River Bridge group in Vancouver.
- Commissioner Young attended ferry team meeting, worked on the FROG survey, and met with WSF staff yesterday. She also rode on the JTC bus tour and reported that it was very good. On vacation, she saw the new Tom Foley Memorial Highway sign on US 395.
- Commissioner Litt said that the Port Angeles meeting was especially good. He also reported that the WTP Steering Committee met yesterday and the Plan is getting close to completion. It has been a very collaborative effort with WSDOT.

Commissioners discussed the proposed 2019 meeting agenda. They would like road meetings to have a morning tour, local meeting in the afternoon and subsequent morning.

Planning for a tri-state meeting is beginning. Possible meeting locations are Spokane or Clark County. Commissioner Batra favors Clark County because of the importance of I-5, and if the

focus is on technology and tolling, it is easier to get speakers to a larger population center. Commissioner Jennings suggests dropping the meeting in the Gorge for a Clark County meeting.

On Wednesday morning, discussion resumed. The Commissioners agreed to the revised 2019 schedule, with a tentative Tri-State meeting in Spokane, pending further discussions with California and Oregon.

Commissioners approved the outline and theme for the 2018 Annual Report and agreed to move forward with theme of Good, Bad, and Ugly without being negative or alarmist. They expressed support for the Local Funding Challenges, revised to ensure multi-modality.

### **Road Usage Charge Update**

Jeff Doyle, D'Artagnan Consulting, reported that the pilot has 2105 participants after the second open enrollment. Of these, about 50 are VIPs. There are 7 participants from Idaho and 23 from British Columbia.

There have been some technical issues with people who use the apps when they refresh them or when a driver is "signed out." The "real money" participant project with Oregon is going well.

Five participant focus groups were held in late September and early October. The mid-pilot survey had a 76% completion rate. Commissioner Tortorelli reported that he sat in on the Spokane focus group and was impressed by the facilitator and the engagement of participants.

Policy development is shifting to an approach that will use a straw man to set up issue presentation and discussion. The next RUC Steering Committee is November 29 at Sea-Tac Conference Center. The Mileage Based User Fee Alliance is meeting there the prior day; they are invited to the Steering Committee meeting.

### **WA RUC Pilot Project Update**

**Action:** *None.*

**Follow-Up:** **Continue to monitor.**

### **Autonomous Vehicle Work Group Update**

The Agenda is out for the October 24 Work Group meeting. All of the subcommittees have met and some may have recommendations for the Commission to consider. Three subcommittees will meet after the October Work Group Executive Committee meeting, and may suggest additional recommendations that were not heard by the Executive Committee. The Commission will act on recommendations at its December meeting.

The Executive Committee also will review a draft workplan next week. That workplan will be presented to the Commission in December, along with a budget for the next biennium.

UW Law School will report to the Executive Committee on the approaches that other states take toward AV licensing and regulation and make recommendations.

### **FY 2018 Toll Report**

Traffic volume has increased on all toll facilities in 2018. Adjusted gross toll revenue is up 4% over forecast projections.

On the I-405 Express Toll Lanes:

- Total reported toll trips were 0.7% below forecast
- Total reported HOV exempt trips were 4.7% above forecast
- Total reported trips (toll & exempt) were 0.9% above forecast

There is technology from camera imagery to smart phone technology to detect HOV violators. WSDOT Toll Division is talking to other states to learn what they are doing. Nevertheless, ETL total reported adjusted gross toll revenue was 12% above forecast, up by \$2.6 million.

### [FY 2018 Tolling Report](#)

**Action:** *None.*

**Follow-Up:** *None.*

### **Status of Tolling Customer Service Center and Back Office Transition**

Jennifer Charlebois, Director, Systems and Engineering, Toll Division, reported that the current *Good To Go!* system was designed 10 years ago. Both technology and our customers' needs have changed significantly in that time. The *Good To Go!* customer service center now serves more than 1.5 million customers and processed more than 50 million transactions last year.

WSDOT has invested four years of planning, research, and development looking into best practices in other states, compiling customer feedback, and building a new scalable customer service center and billing system. The current operations contract expires in March 2019.

The new billing and payment system will be designed and managed by ETAN, a technology firm specializing in building toll payment systems used on toll roads throughout the country. *Good To Go!* customer service will be provided by AECOM, an engineering firm with more than 25 years of experience planning, implementing, staffing and operating toll collection projects.

There will be new payments options. Today, customers must deposit an initial balance of \$30 to open a *Good To Go!* Account. This creates an entry barrier for some customers and frustrates drivers who are exempt from paying tolls, such as I-405 HOV car pools. Future, expanded payment options include an alternative to depositing an initial balance. Customers will be able to make automatic payments after they drive, without requiring an initial account balance. No deposit will be required for people who only want to carpool or ride a motorcycle for free. Pre-paid accounts will remain an option.

Website improvements will include the ability to talk with a live customer service representative online when you need it, and more online self-service features and more intuitive navigation.

The start date is delayed, as previously reported. The vendor had delays in start-up and initial deliverable preparation. Preliminary design and requirements development is now complete and system development and configuration is underway. The testing phase begins in fall.

The tunnel opening will precede SR 99 tolling. Key SR 99 project completion elements that remain include: final testing, commissioning, handoff, portal tie-ins, and demolition of existing viaduct. WSDOT expects SR 99 tolling to create an influx of new customer activity.

### [Status of Tolling Customer Service Center and Back Office Transition](#)

**Action:** *None.*

**Follow-Up:** **Continue to monitor.**

### **Final Public Hearing, Proposed Rulemaking WSR 18-17-164**

Carl See, Senior Financial Analyst reviewed the history of Commission deliberation on SR 99 tolling:

- December 2017 – April 2018
  - Commission selected three Toll Rate Options.
- May – June 2018
  - Public comment period.
  - Public input meetings on Toll Rate Options.
- July – October 2018
  - Commission approved preferred Toll Rate Option on July 17<sup>th</sup> (Option A).
  - Public comment period.
  - [Proposed rule](#) published in WA State Register on September 5th.

SR 99 Tunnel Rate Setting Goals are consistent with statewide transportation goals and tolling guidelines:

- Meet all required funding and financial obligations.
- Minimize toll rates and diversion.
- Set exemptions and initial peak toll rate hours consistent with like facilities.

The Commission considered three options for how tolls the future on the SR 99 Tunnel. All three options included a weekday rate range, a weekend rate, and peak hour rates. The options differed by off-peak toll rates, including peak shoulder rates, and toll rate escalation plans.

Toll Rate Option A was selected for the following reasons:

- Best addresses funding obligations and financial requirements.
- Limits toll rate increases during initial years.
- Fewest toll rate changes each day.
- Proposed rate increases (escalation) less than projected inflation.
- Tolls increase 3% every three years beginning in 2022, pending Commission review.
- Proposed toll rate escalation enables lower rates initially, while meeting long-term financial commitments.

The Commission proposal aligns with system-wide tolling exemptions adopted in July 2018 in which the same non-HOV vehicles are exempt on all tolled facilities. SR 99 Tunnel tolling exemptions apply to buses, emergency vehicles, rideshare vans, and incident response and maintenance vehicles.

There was no public comment.

Commissioner Jennings moved adoption of Option A, without an effective date. To align the effective date of tolling with the opening of the tunnel, the Commission will reevaluate and set the effective date within 180 days of filing the CR-102 (no later than the February Commission meeting.) Commissioner Tortorelli seconded the motion.

Commissioner Batra asked if the financial obligation would be affected by a later effective date. Mr. See answered that the rulemaking would need to restart if action not taken within 180 days.

### [SR 99 Toll Rates Hearing](#)

**Action:** *The toll rates were adopted unanimously.*

**Follow-Up:** **Set the effective date within 180 days of filing the CR-102 (no later than the February Commission meeting.)**

### **What does the Transportation Future Hold?**

Neil Pedersen, Executive Director of the Transportation Research Board, the nation's leading transportation research body, briefed the Commission on how autonomous vehicles and other emerging transportation technologies may impact long-term transportation planning and funding. Disruptive technologies in transportation include the following:

- Connected vehicles, in which internal devices connect vehicles to other vehicles, to infrastructure, to the cloud, and to other road users.
- Shared mobility services, including Transportation Network Companies (TNCs) such as Uber and Lyft. Other shared mobility services including carsharing, bikesharing and microtransit.
- Shared AVs are on-demand self-driving vehicles that operate as part of a privately or publicly managed fleet. Almost all examples of Mobility as a Service (MaaS) include two elements:
  - A single account that is used to access and pay for a range of public and private travel options across multiple modes, and
  - A real time journey planner that provides information on what multi-modal travel options are available to go from origin to destination, so the traveler can choose which option best meets their travel time and cost requirements.
- Driverless shuttles
- Automated buses on separate transit ways
- Heavy truck platooning in dedicated lanes, offering cost savings and fuel/emissions reductions
- Small package delivery vehicles

Leading thinkers argue that to achieve the greatest benefits from all of these disruptive technologies, policies and planning should aim to take advantage of the benefits of all of these technologies in combination. Under this scenario, vehicles would no longer be privately owned, but would be available on demand and trips would be shared with other travelers.

WSDOT and others are moving from referring to CV/AV or other terms that are vehicle focused to the term Cooperative Automated Transportation. It focuses on the entire multi-modal transportation system, not just vehicles and emphasizes achievement of broader goals.

State, regional and local governments use policy levers to ensure safe and efficient operation of public roadways, to foster equity across users of the system, and to mitigate negative effects of transportation. For automated vehicles (AV), connected vehicles (CV), electric vehicles (EV), and shared vehicles, a range of policy levers could influence private choices toward outcomes that would benefit society.

To mitigate safety risks through testing, training and public education

- Enact legislation to legalize AV testing
- Enact legislation to stimulate CV or AV testing
- Modify driver training standards and curricula
- Increase public awareness

To encourage shared AV use (and mitigate increased VMT and vehicle emissions):

- Subsidize Shared AV use
- Implement transit benefits
- Implement a parking cash-out strategy
- Implement location-efficient mortgages
- Implement land use policies and parking requirements
- Apply road use charging

To address liability issues that may impact market development:

- Implement a no-fault insurance approach
- Require motorists to carry more insurance

To enhance safety, congestion, and air quality benefits by influencing market demand:

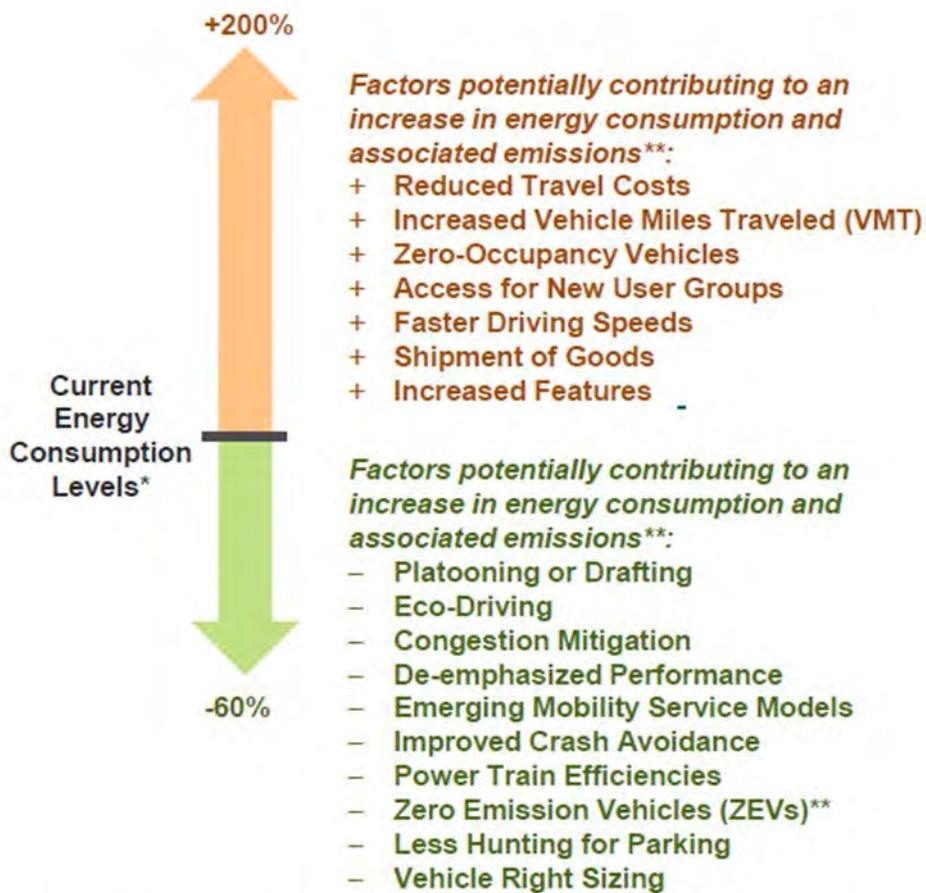
- Subsidize CV- equipped vehicles
- Invest in CV infrastructure
- Grant AV- and CV-equipped vehicles privileged access to dedicated lanes
- Grant signal priority to AV- and CV-equipped vehicles
- Grant parking access to AV- and CV-equipped vehicles
- Implement new contractual mechanisms with private service providers

The exact timing, magnitude, type, and locations of the changes are difficult to predict, posing new risk to infrastructure investment decisions. Implementation is likely to influence level of demand, travel modes, planning and investment decisions, physical transportation infrastructure, and geographic areas for all personal mobility and goods movement. Change may occur quickly for certain modes, while it may take decades to realize the impacts and obtain market stability for other modes. Transit systems may be impacted soon as shared rides and comprehensive MaaS platforms grow; however, impacts to parking and land use changes may take many years.

In the past planning was predicated on the assumption that past trends in travel behavior and choices will continue two or three decades into the future with only minor alterations. Impact on auto ownership, availability, and vehicle use patterns will affect demand. Planning for AV technology is one of deep uncertainty. Variables include:

- Deployment timeline
- Adoption rates

- Market penetration
- Cost of technology and vehicles
- Private vs. fleet ownership
- Willingness to share vehicles
- Impacts of crashes and cybersecurity incidents
- Public acceptance
- Induced demand
- Impacts on land use
- Liability case law
- Parking impacts
- Policy and regulatory impacts



*Figure 2. Energy Impacts of Connectivity and Automation*

It is possible to manage deep uncertainty by seeking a robust decision—one that performs well across a wide range of futures, preferences, and worldviews, though it may not be optimal in any particular one. The key to any good planning process is establishing outcome-based goals, then policy and investment strategies to achieve those goals. In the case of CAT, developing a set of use cases will help inform strategies that should be developed for each goal. These strategies can then be tested under various scenarios based on different sets of assumptions related to the uncertainties.

Possible Use Cases include:

- Low speed AV transit shuttles serving downtown areas
- First/mile last mile AV shuttle services
- Priority lane system for SAEVs
- Truck platooning
- Major connected vehicle investment
- Major EV charging infrastructure investment
- AV paratransit services

Issues to Consider:

- Lengthy transition period before Shared Autonomous Electric Vehicles are the vast majority of the fleet. Pederson thinks 2040 before AVs are majority of vehicles.
- Transition issues with mixed fleets of AVs and human drivers and issues with Level 3 and 4 vehicles.
- Public education and managing public expectations.
- Impacts on funding

Other policy considerations include:

- Liability Framework (Personal negligence? Product liability? Ownership)?
- Data requirements
- Insurance
- Enforcement
- Changes to vehicle codes

Longer term issues to consider:

- Impacts on jobs that depend on human drivers (truck, taxi, and bus drivers)
- Equity issues (disabled, economically disadvantaged)
- Land use impacts
- Congestion management
- Integrating SAVs with transit

Has there been research into whether drivers' ability to resume control of a Level 3 or 4 vehicle? Even some Level 2 vehicles appear to be getting into crashes due to reliance on driver assist function.

### [Connected and Automated Vehicles](#)

**Action:** *None.*

**Follow-Up:** **Incorporate this guidance into WTP 2040 and Beyond.**

### **Technology and Transportation: Waze, Uber and Luum**

Jackson Taylor, Manager, Public Sector Partnerships, UberPNW, reported that in March, the Mercer Island City Council approved \$20,000 toward a pilot to encourage use of Uber and Lyft ridesharing as a first/last mile solution to the Mercer Island park and ride. The goals are:

- Shared rides: Testing how fluctuation of shared rides incentives changes behavior of commuters.

- Transit collaborations: Promoting the idea of using Uber and public transit as a substitute to the SOV commute
- Infrastructural choices: Demonstrating that Uber can obviate the need to build additional park and ride infrastructure in certain circumstances.

The project includes two phases. In Phase 1, from April 23 - June 30, rides will cost:

\$2 UberX

\$1.90 UberPOOL

In Phase 2, from July 1 - October 31, rides will cost:

\$5 UberX

\$2 UberPOOL

As of September 30, 2018, there have been 2125 trips using the service by 412 unique riders. Ninety percent of the trips began within 10 minutes of request. Shared rides as a percentage of total rides moved from 17% of trips in July to 71% of trips in September. Total trips increased 2.24 times above the baseline.

Steven Lemeshow, Strategic Partnerships, explained that the mission of Waze Carpool is to get people to end congestion by changing the way people move with everyday acts of cooperation. Waze Carpool connects drivers and passengers with similar destinations to commute together on the most optimal routes.

Waze Carpool is different from taxis or ride hailing services:

- Front seat
- Best routes on rides already happening
- Sharing travel costs, not earning income
- Drivers are not professional

How does Waze Carpool work?

- Enter home and work address
- Scroll through matches to find best fit for you
- You decide who joins your ride
- Choose one or more carpoolers and send an offer

E. Sohler Hall, CEO of Luum, a company that embraces “Enterprise-Grade Commute Management,” sees software as a service for employers. Luum identifies the problem as a new breed of commute challenges, higher parking costs, increased congestion and longer commute times, due to urban growth. Seeing the employer as the organizing framework for most effectively serving the greatest number of individuals in their mobility needs, Luum offers an integrated software platform for employers and their employees to meet mobility needs at scale through the combination of employee demographic information, employer policy, flexible daily commute options, and capturing actual employee commute behavior.

In Washington State, Luum serves 17 major employers and over 210,000 employees. It has demonstrated through measurement that commute trip reduction works as an employee benefit works. Drive Alone Rates dropped at Delta Dental from 75% to 15%, at Providence from 56% to 47%, and at Seattle Children’s Hospital from 43% to 33%.

[Uber PNW](#)  
[Waze Carpool](#)  
[Luum](#)

**Action:** *None.*

**Follow-Up:** *None at this time.*

**Autonomous, Connected, Electric and Shared Mobility: Bellevue's CommutePool Proposal**

Steve Marshall, Transportation Technology Partnership Manager, City of Bellevue, described how the city is partnering with other public and private partners to improve commute options for its workforce and reduce congestion. Bellevue's Smart Mobility Vision is to use innovation and partnerships to deploy emerging technologies to enhance the safety, sustainability, efficiency, and accessibility of Bellevue's transportation system.

The CommutePool idea starts with rideshare requests from mobile apps within a similar geographic area and timeframe, then a pick-up at a central designated leased parking lot. The rideshare to Bellevue/Kirkland will provide drop-offs at central locations to enable riders to head to their places of employment.

The six Building Blocks for the flexible, electric autonomous CommutePool Network:

- Employer partnerships
- Smartphone application
- CommutePool Network Administration
- Fleet Operator
- Curb Management System
- Electric Charging Infrastructure

Smart Mobility Goals:

1. Make Bellevue a nationally recognized leader
2. Improve safety
3. Leverage Bellevue's ITS network to support the growth of the technology industry
4. Improve the efficiency of the roadway network
5. Expand and enhance ITS functions
6. Create more mobility choices
7. Provide accurate and timely information
8. Enhance sustainability
9. Pursue private and public-sector partnerships

[Autonomous, Connected, Electric and Shared Mobility  
Bellevue Brochure](#)

**Action:** *None.*

**Follow-Up:** *None at this time.*

## **Secretary's Report**

Keith Metcalf said that WSDOT is on top of the developments in technology and Connected Automated Technology.

SR 99 tunnel testing is complete.

Ferry system continues to struggle with state of good repair. Had to adjust San Juan's schedule and eliminated Anacortes-Sidney run.

The SR 162 bridge over the Puyallup River was closed for safety reasons; WSDOT is working on getting a temporary bridge in place.

Had final I-5 closure for the year for reconstruction.

WSDOT continues to struggle with hiring staff and retention. There are new Regional Administrator in Northwest and North Central Regions. Now, there is a vacancy in the Southwest Region.

## **Washington Transportation Plan 2040 and Beyond**

Thera Black reported on the outreach and public comment on the Draft WTP 2040. Improving Intercity Public Transportation will be added as a tough topic. Also thumbs up for:

- ✓ Introduction of Equity as a transportation concern
- ✓ Inclusive approach towards Regional Perspectives
- ✓ Treatment of several topics, especially:
  - Transportation-Land Use Connection
  - System Resilience
  - Practical Solutions
  - Health and the Environment
- ✓ Readability and graphic quality
- ✓ Incorporating Advisory Group feedback

More emphasis needed:

- More funding for preservation and maintenance
- Flexible funding for multimodal and emerging needs
- Potential for negative societal implications of technology
- Economic importance of US-Canada border crossings
- Preserve economic viability of small rural airports
- Role of small airports in supporting disaster response
- Role of Marine Highway System in critical freight network
- Importance of education and enforcement to improve safety
- Importance of park-and-ride facilities in a multimodal system

## **[WTP 2040 Public Review Draft](#)**

**Action: *Revise recommendations on concurrency and local funding flexibility.***

**Follow-Up: Complete final draft for review by Commission and WTP Steering Committee by November 21.**

### **Ferry Riders' Opinion Group Reservation Study Report**

Bill Young, Research Assurance, reported on the June 2018 ferry riders' survey measuring satisfaction with the reservation program and its potential for expansion. A total of 4,988 surveys were completed in July 2018 (July 9 – August 3, 2018). The data was weighted by route according to the June 2018 WSF traffic report, based on the last trip taken.

Fifty five percent (55%) of the FROG panel members responding to the 2018 survey have used or tried to use the WSF reservation system. Similar to 2016, about 85% of those who used the system had no problems completing their reservation. Eleven percent that used the system had problems and 5% tried to use the system but never completed the reservation.

The majority of the 3,270 riders who have used the WSF reservation system are satisfied with it (79%) with 11% being dissatisfied. This is an improvement over the results from 2015 but no real change from 2016 (79% satisfaction / 13% dissatisfaction). Twenty percent of full time San Juan residents who use the system are dissatisfied with it. In contrast 9% of San Juan visitors and 12% of part time San Juan residents who used the system are dissatisfied.

Dissatisfaction is down to 20% for permanent residents on all islands, from 26% in 2016. When broken out by the San Juan County residency, riders living on Orcas (21% - down from 23% in 2016) are the most dissatisfied followed by San Juan Island (19% - down from 25% in 2016) and Lopez Island (16% - down from 32% in 2016).

The 2,908 riders who have used the WSF reservation system from Anacortes, Friday Harbor, or Orcas Island were asked about their level of anxiety over not making the tollbooth in time and thus losing their reservation.

- Similar to 2016, 35% in 2018 say it is a large worry, and 62% say it is either a worry or large worry to them.
- Similar to 2016, only 10% in 2018 actually have experience not getting to the tollbooth on time.
- Full time San Juan Islands residents worry more so (71% in 2018, 77% in 2016) than part time San Juan Islands residents (64% in both 2018/2016) or San Juan Islands visitors (62% in 2018, 57% in 2016).
- San Juan (74%) and Lopez (72%) residents worry more than Orcas (67%) residents.
- Full time San Juan Islands residents have actually missed sailings (18% in 2018, 21% in 2016) more often than part time San Juan Islands residents (11% in 2018, 12% in 2016) or San Juan Islands visitors (7% in 2018, 9% in 2016).
- Actual missed sailings is highest among San Juan (21%) residents following by Orcas (16%) and Lopez (14%).

How should WSF determine whether you have arrived on time for your reservation? By 58%, riders prefer that arrival at the end of the line within 45 minutes of sailing to arrival at the tollbooth within 30 minutes of sailing. Riders suggested ways to determine if you have arrived in line within 45 minutes of sailing:

- Take a camera shot of time/ferry line.

- 45 minutes prior to the boat departing (not SCHEDULED, but ACTUAL), either have an agent walk down the line and put a slip under the windshield wiper of the last car, or write down the license number of the last car.
- Have one of the workers walk the line with a hand held device to confirm who has reservations.
- Code of Honor. They can ask each car how long they were in line, most will be honest.

Almost half (47%) of respondents said they have made multiple reservations for themselves for the same trip. Of those who have, 52% reported they have done so in the last 30 days. Similar to 2016, 55% in 2018 said the no-show fees should be raised to \$24 (compared to \$23 in 2016). Visitors to San Juan Islands (57%) are more likely to agree to increasing the no-show fees than either part time San Juan Islands residents (54%) or full time San Juan Islands residents (39%). Those living on Lopez Island (46%) are more likely to want the no-show fees increased than Orcas (39%) or San Juan (36%) Island residents.

The 1,231 riders who have taken or are likely to take the Anacortes / Sidney BC route were asked if they would take the trip under the current fare structure (or if fares increased by 10% and 25%). Five percent (5%) said they would most likely not take the trip at the current fare level. Those saying “no” increased about 2.5 times when fares increased by 10% and 6.5 times when fares increased 25%.

Of the 4,088 riders who use or will use the Central Puget Sound ferry routes, 36% would support developing a reservation system while 41% would oppose the development. Support for a central Puget Sound reservation system is uniform across users of all potential routes except for those that travel on/off Vashon Island. One third would want reservations on only Friday afternoon through Sunday sailings. About one in five either want it on all sailings (20%), have a suggested alternative method (21%), or don’t know which is better (18%).

[June 2018 WSF Reservation Survey](#)

[June 2018 WSF Reservation Survey Final Report](#)

**Action:** *None.*

**Follow-Up:** Use this information in revising Operational Strategies.

### **Housing, Transportation and Health**

Rad Cunningham, Senior Epidemiologist, Built Environment Section Environmental Public Health, Washington State Department of Health reported how the cost of transportation and housing are inextricably linked. The Washington State Department of Health is working with its partners on healthy community design to find innovative ways to reduce housing and transportation costs. This work is focused on policies that impact density, land use mix, accessibility, and their connection to public health and physical activity.

Two of the five criteria in the Health Agenda for Community Design connect directly to transportation:

Increasing Safe, Healthy, Active Living:

Increasing exercise, recreation and other daily activities that lower the risk of cardiovascular disease and other chronic disease; Improving safety and reducing injury and crime; Increasing access to healthy food.

Social Equity:

Strengthening equity, connectedness, inclusion, civic participation to increase happiness and ensure communities function more effectively through housing and public space design.

Housing and transportation costs are identifiable by census tract. Frequently low housing costs are accompanied by high transportation costs. During the period ending in 2015, Washington residents spent 52% of their monthly income on housing and transportation combined, and transportation costs alone were 21% of median income. Combined housing and transportation costs are up from 47% for the period ending in 2011. Traffic fatalities are increasing for all modes over the last four years.

Pedestrian and bicyclist fatalities doubled since 2013.

The young and aged are most at risk for death or injury as pedestrians or bicyclists. Adults over 65 are 13% of population, but 25% of fatalities. Adults who drove the most have obesity rates three times higher than those who drove the least.

Five questions to consider:

- Can cities and regions prosper more fairly?
- Is the "affordable" housing crisis in desirable places solvable?
- Are cities prepared for significant demographic, cultural and climatic changes coming in the near future?
- Should urban plans and projects be scrutinized for public health impacts?
- Should transportation planning reorient from cars to people?

Healthy Community Design

**Action:** *None.*

**Follow-Up:** *None at this time.*

Reflections and Recommendations

Commissioners began the goal of learning more about AVs and want to continue this effort.

**TRANSPORTATION COMMISSION**

\_\_\_\_\_  
JERRY LITT, Chairman

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ROY JENNINGS, Vice-Chairman

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SHIV BATRA, Member

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HESTER SEREBRIN, Member

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JOE TORTORELLI, Member

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DEBBIE YOUNG, Member

\_\_\_\_\_  
JAMES A. RESTUCCI, Member

ATTEST:

\_\_\_\_\_  
REEMA GRIFFITH, Executive Director

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DATE OF APPROVAL