

# Triangle Task Force

Washington State Ferries

July 19, 2018

# Schedule concepts

# Outreach Timeline

- **June Triangle Task Force**
  - Afternoon schedule concept review
  - Data of interest for August meeting
- **July Triangle Task Force**
  - Morning schedule concept review
- **August Combined TTF/FAC**
  - Draft complete schedule review
  - Data analysis and comparison
- **October Public Outreach**
  - Input on draft schedule
- **December Update to Summer Schedule**
  - Final schedule

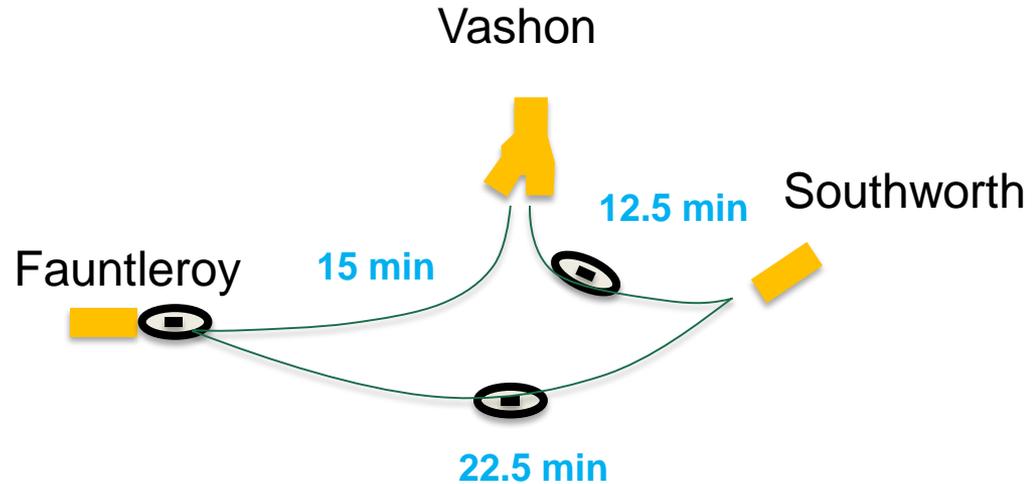
## CALENDAR 2018

JANUARY 2018							FEBRUARY 2018							MARCH 2018						
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6					1	2	3					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28				25	26	27	28	29	30	31
APRIL 2018							MAY 2018							JUNE 2018						
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7	1	2	3	4	5			3	4	5	6	7	8	9
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15	16	17	18	19	20	21	13	14	15	16	17	18	19	17	18	19	20	21	22	23
22	23	24	25	26	27	28	20	21	22	23	24	25	26	24	25	26	27	28	29	30
29	30						27	28	29	30	31									
JULY 2018							AUGUST 2018							SEPTEMBER 2018						
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
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29	30	31					26	27	28	29	30	31		23	24	25	26	27	28	29
OCTOBER 2018							NOVEMBER 2018							DECEMBER 2018						
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
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28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

www.theprintablecalendar.com

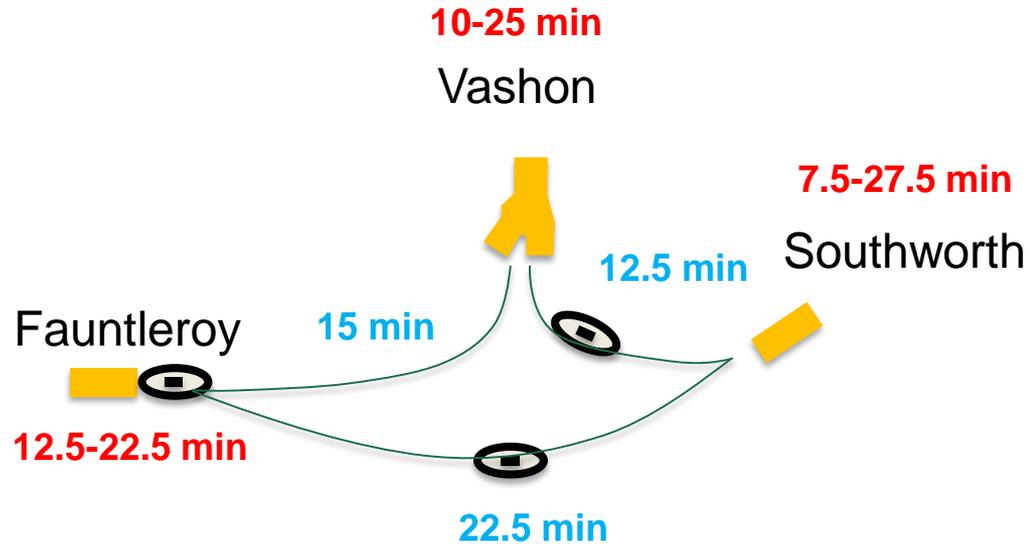
# Route operations

- **Vessels and crossings**
  - Three **vessels**
  - Three **destinations** (four slips)
  - Different **crossing times**



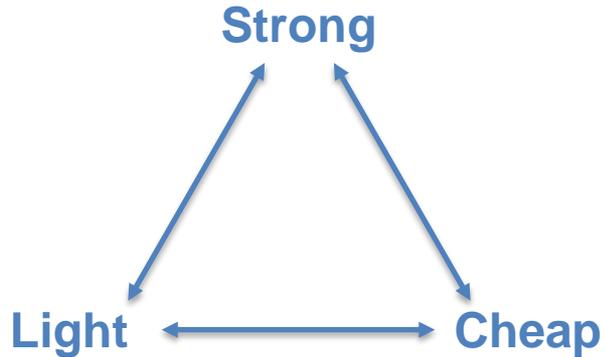
# Route operations

- **Vessels and crossings**
  - Three **vessels**
  - Three **destinations** (four slips)
  - Different **crossing times**
  - Varying **dwell times**
    - Unloading/loading
    - Destination(s)
    - Traveler mix



# Design Priorities

- Borrowing from engineering:



**PICK 2!**

# Schedule Priorities

- **Frequent**



- **Full**



- **On Time**



# Current Schedule Performance

- **Frequent**



- **Full**



- **On Time**



# Current schedule

	Westbound – Daily				Eastbound – Daily			
	Leave Fautleroy	Arrive Vashon	Leave Vashon	Arrive Southworth	Leave Southworth	Arrive Vashon	Leave Vashon	Arrive Fautleroy
1	-	-	-	-	0500	0512	0520	0535
2	0510	0525	0535	0547	0600	0612	0620	0635
3	-	-	-	-	-	-	0545	0600
4	0550	0605	0615	0627	0640	0652	0700	0715
5	0610	0625	-	-	-	-	0640	0655
6	0650	0705	0720	-	-	-	-	0735
7	0705	0720	0730	0742	0755	0807	0815	0830
8	0725	0740	-	-	-	-	0755	0810
9	0750	-	-	0812	0820	0832	0840	0855
10	0825	0840	-	-	-	-	0900	0915
11	0845	-	-	0907	0920	0932	0940	0955

# Proposed Schedule Concept #1

	Westbound – Daily				Eastbound – Daily			
	Leave Fautleroy	Arrive Vashon	Leave Vashon	Arrive Southworth	Leave Southworth	Arrive Vashon	Leave Vashon	Arrive Fautleroy
1	-	-	-	-	0500	0512	0520	0535
2	-	-	-	-	-	-	0545	0600
3	0525	0540	0550	0602	0615	-	-	0637
4	0550	0605	0615	0627	0640	0652	0705	0720
5	0610	0625	-	-	-	-	0640	0655
6	0650	0705	0715	0727	0740	0752	0800	0810
7	0705	0720	-	-	-	-	0735	0750
8	0730	-	-	0752	0810	-	-	0832
9	0800	0815	-	-	-	-	0830	0845
10	0825	0840	-	-	-	-	0900	0915
11	0845	-	-	0907	0920	0932	0940	0955

## Proposed Schedule Concept #2

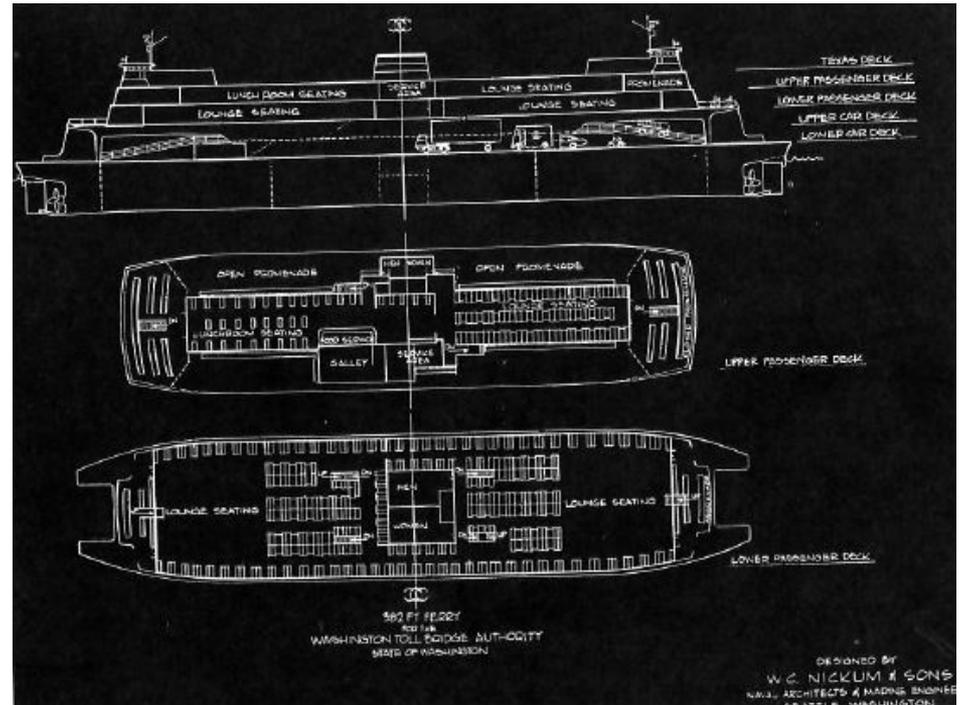
Westbound – Daily				Eastbound – Daily			
Leave Fautleroy	Arrive Vashon	Leave Vashon	Arrive Southworth	Leave Southworth	Arrive Vashon	Leave Vashon	Arrive Fautleroy
1	-	-	-	0500	0512	0520	0535
2	1510	0525	0535	0600	-	-	0622
3	-	-	-	-	-	0545	0600
4	0550	0605	0615	0640	0652	0705	0720
5	0615	0630	-	-	-	0640	0655
6	0645	-	-	0720	0732	0745	0800
7	0705	0720	0730	0755	0807	0820	0835
8	0740	-	-	0815	0827	0840	0855
9	0820	-	-	0855	0907	0920	0935
10	0855	-	-	0930	0942	0955	1010

# Proposed Schedule Concept #3

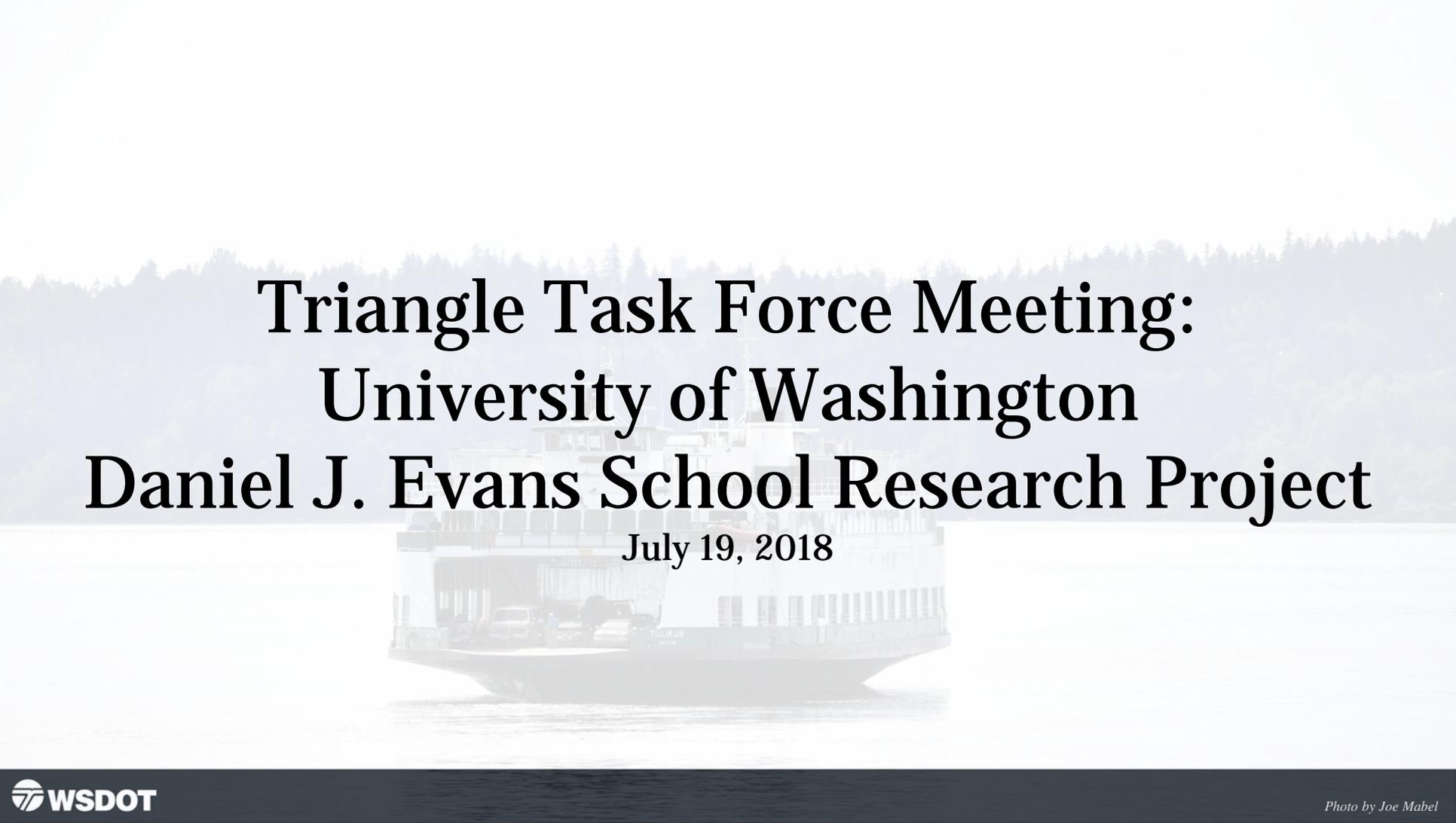
Westbound – Daily				Eastbound – Daily			
Leave Fautleroy	Arrive Vashon	Leave Vashon	Arrive Southworth	Leave Southworth	Arrive Vashon	Leave Vashon	Arrive Fautleroy
1	-	-	-	0500	0512	0520	0535
2	1510	-	0532	0550	0602	0615	0627
3	-	-	-	-	-	0545	0600
4	0550	0605	0615	0627	0640	0652	0705
5	0615	0630	-	-	-	0640	0655
6	0645	-	0707	0720	0732	0745	0800
7	0705	0720	0730	0742	0755	0807	0820
8	0740	-	0802	0815	0827	0840	0855
9	0820	-	0842	0855	0907	0920	0935
10	0855	-	0917	0930	0942	0955	1010

# Data of Interest

- Boat size/capacity
- Load limits (existing & potential)
- Empty space counts
- Wait time/queue length
- Origin/destination sailing counts
- Throughput
- Medical evacuations
- Growth in drive-around traffic
- ...
- What else?



# University of Washington study



**Triangle Task Force Meeting:  
University of Washington  
Daniel J. Evans School Research Project**

July 19, 2018

# Who Are We?



# What Is Our Scope?

Identify and compare alternatives for improving ticketing and loading procedures at the Fauntleroy terminal - subject to available data

- Pull together widely discussed and “moon shot” **alternatives**
- Develop **transparent criteria** to compare alternatives, with respect to *environmental*, *economic* and *social/community* values
- When, why and by whom is each alternative favored?
- What issue is each trying to solve?



# Additionally:

- Assess and recommend approaches for **community engagement**
- Analyze long-run **sensitivity** - what if constraints relax?
- **Communicate** with community, legislature, and others along with WSF

Commissioned by Washington State  
Legislature (6/15 - 12/15/2018)



# Agenda for Today:

- Update since last month
- Alternatives and Criteria for Evaluating Alternatives
- What are we hearing thus far?
- Where are we heading next?
- Breakout sessions
  - Get feedback on criteria and alternatives
  - Explore what is important, what is success from different perspectives
  - Gather suggestions and insights to inform our research moving ahead

# Sources of Information:

- Dock visits to observe queuing, ticketing, loading
- Ferry rides to observe loading, unloading, sailing, dwell time
- Interviews and meetings with WSF staff, Task Force members, and others
- Exploring available WSF data:
  - Customer satisfaction
  - Driver destinations
  - Tollbooth operations
  - Terminal services
  - Practical solutions
- Reviewing studies and resources:
  - Community engagement plans
  - Cedar River Fare Media Study
  - Scheduling plans
  - WSDOT Connecting Washington Report

# Types of Criteria to Evaluate Alternatives

What is the value added (or the cost) of various alternatives from the perspective of the public, ecological systems, Legislature, WSF, etc

- Social and Public Value Impacts
- Economic Impacts
- Environmental Impacts

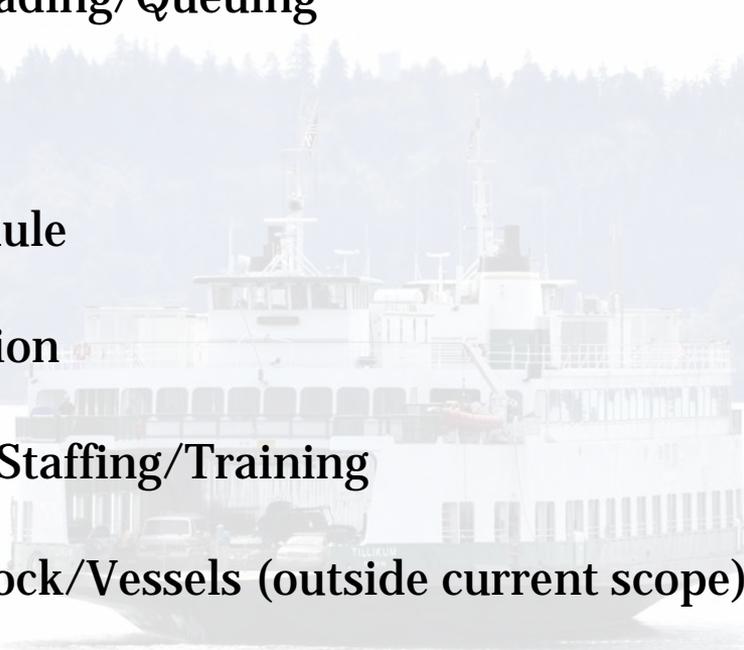


# Specific Criteria to Gauge Value of Each Alternative

- Ability to Meet Demand
- Time Spent getting through Tollbooth
- Impact on WSF Revenue
- Cost
- On-time Performance
- Unused Capacity (empty spaces on boats)
- Customer Satisfaction
- Customer Understanding of Process
- Technical and/or Technological Feasibility
- Equity in Service by Community
- Equity in Wait Times
- Safety for Passengers
- Safety for WSF Staff
- Safety of Traffic Officer(s)
- Relationship between WSF & communities
- Ecosystem Health
- Other Environmental Impacts

# Categories of Alternatives - some overlap

- Ticketing/Loading/Queuing
- Fares
- Sailing Schedule
- Communication
- Operations - Staffing/Training
- Structural/Dock/Vessels (outside current scope)



# Alternatives re: Ticketing/Loading/Queuing

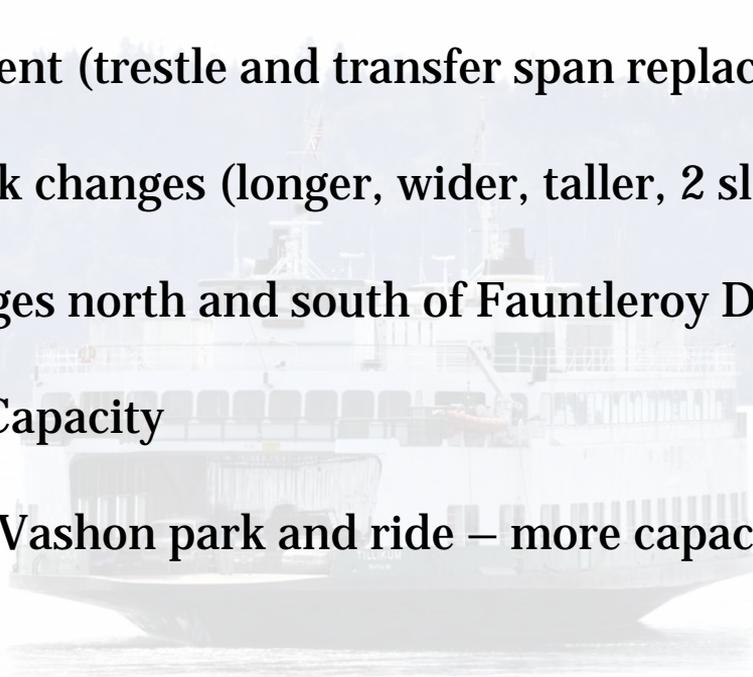
- Increase Fauntleroy terminal staffing during rush hour
- Revisit space allocation for SW dual destination boats
- Change loading layout for dual destination boats
- Unload cars before foot traffic
- Institute pre-ticketing dedicated lane
- Implement wireless access on dock and along Fauntleroy Way
- Bicycle or other for traffic officer
- Re-institute bypass lane
- Redefine peak time as 1 - 7 pm
- Vehicle mobile ticket sales on dock
- On-vessel vehicle ticket sales
- Implement vehicle reservations
- Implement Good to Go! system
- Expand integration with ORCA system
- Update handheld scanners

# Alternatives re: Fares/Operations/Communication

- Coordinate w/transit connections
- Re-route some V/SW ferries to downtown Seattle
- Incent oversize vehicle trip timing
- Increase vehicle fares to incent walk-ons
- Flat rate for car and driver only
- Preferential fares for dual destination riders
- Reduce or eliminate walk on fares
- Optimize schedule per Justin
- Charge eastbound
- Educate drivers re queuing and navigating tollbooth
- Communicate wait time to F vehicles in real time
- Educate riders re transit connections
- Educate riders re pre-ticketing
- Reconsider/prioritize performance metrics
- Train & Retain Triangle Route staff

# Longer Term Alternatives

- Dock replacement (trestle and transfer span replacement)
- Fauntleroy dock changes (longer, wider, taller, 2 slip)
- Roadway changes north and south of Fauntleroy Dock
- Smaller Ferry Capacity
- Parking lot for Vashon park and ride – more capacity



# Assessing Alternatives Against Criteria

		Criteria				
		Cost	Ability to meet demand	On-time performance	Safety	...
Alternatives	Improve wireless access dock & Fautleroy Way					
	Bicycle/ segway/ golfcart for traffic cop					
	Implement Good to Go!					
	Revisit space allocation for SW dual destination boats					
	Optimize schedule per Justin et al					
	⋮					

# Community engagement analysis & suggestions

- Current activity: Explore what's been done, modes and media employed, **what** information was produced, **who** was the intended audience, what was the intended goal (**why**)?
- Existing Strategies: WSTC FROG Surveys, WSDOT 2016 Community Engagement Plan, Long Range Plan community engagement design, public meetings, social media, TTF, FACs etc.
- **Our objective:** identify the gaps and develop suggestions for future WSF community engagement and public education.

# What we are hearing so far overall:

- Many ideas and alternatives for change and improvement
- Many perspectives on what is important, what is feasible, what is success
- Tradeoffs - variable preferences about balancing competing objectives
  
- Constraints and the “What Would it Take?” Question
  - Budget, Increased Staff, Technology
  - Data Requirements for Planning and Optimizing
  - Public Understanding of Processes

**Communication/engagement supports shift from frustrated to aware**

**Notable level of understanding/appreciation for WSF efforts heard!**

# Next Steps:

- Continue to interview TTF, WSF staff and others
- Hone Alternatives and Criteria
- **Analyze alternatives transparently in a structured framework**
  - Evaluate against explicit criteria
  - Develop stakeholder profiles for weighing the criteria - reflect which criteria matter and how much each matters
  - Consider how subsets of the criteria cluster or tradeoff?
  - Ask “what would it take” to make various alternatives fly?
  - How do available data support these comparisons?

# Questions?



# Breakout Sessions



# Breakout Sessions:

## I. Criteria

What's missing or needs revision?

Which criteria are most important to your community - such that you'd weight them more strongly in assessments of the alternatives?

## II. Alternatives

What's missing or needs revision?

Which alternatives are most likely to improve the Triangle Route?  
Based on which criteria?

What would it take to make various alternatives fly?

# Thank you!

