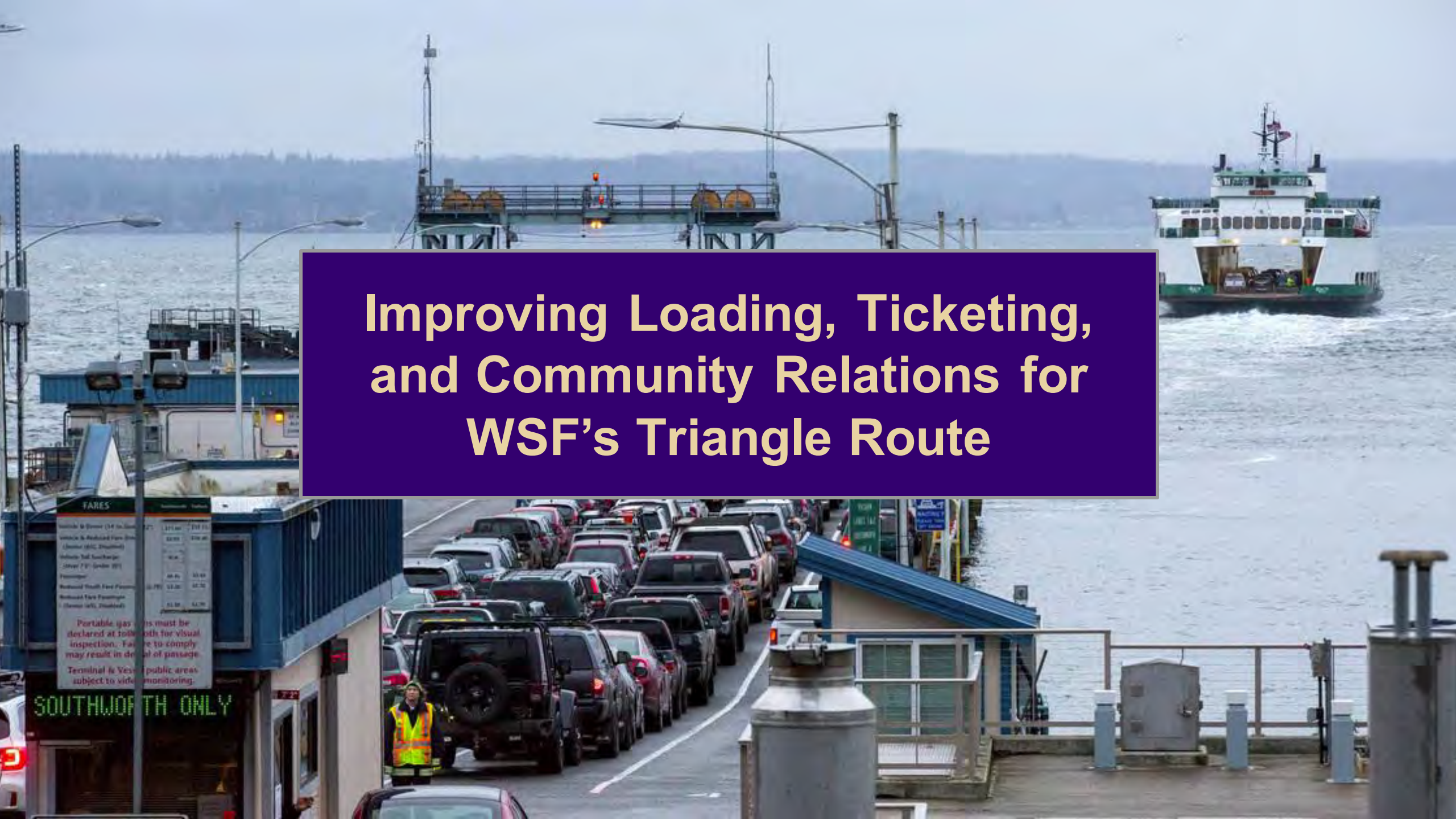


Improving Loading, Ticketing, and Community Relations for WSF's Triangle Route



FARES	
Vehicle & Driver (1st 10 lbs)	\$12.00
Vehicle & Reduced Fare Person (1st 10 lbs)	\$8.00
Vehicle Toll Surcharge (Over 7'0" Under 8'0")	N/A
Passenger	\$4.00
Reduced Fare Passenger (Over 7'0" Under 8'0")	\$2.00
Reduced Fare Passenger (Over 8'0", Disabled)	\$1.00

Portable gas tanks must be declared at toll booth for visual inspection. Failure to comply may result in denial of passage.

Terminal & Vehicle monitoring.

SOUTHJOINT ONLY

Evans School Research

Charge

- > Analyze alternatives for ticketing/loading at Fauntleroy ferry terminal
- > Explore ways to improve community engagement and understanding

Professor Alison Cullen - Principal Investigator
Associate Professor Stephen Page
Zane Gustafson, Zach Kearn, Emily Scott, Shelby Thomas – 2nd year masters students



Research Approach

- > Gather Information
- > Develop Criteria
- > Identify Operational Alternatives
- > Compare Alternatives
- > Assess Community Engagement
- > Consider Cross-Cutting Issues
- > Distill Recommendations



Gathering Information to identify and refine Alternatives and Criteria

- > Direct observation:
vessels/docks
- > Stakeholder interviews
- > Public meetings
- > Data collection
 - > WSF records and observations
 - > Reports, Surveys
 - > Fleet Advisories
 - > Executive Order



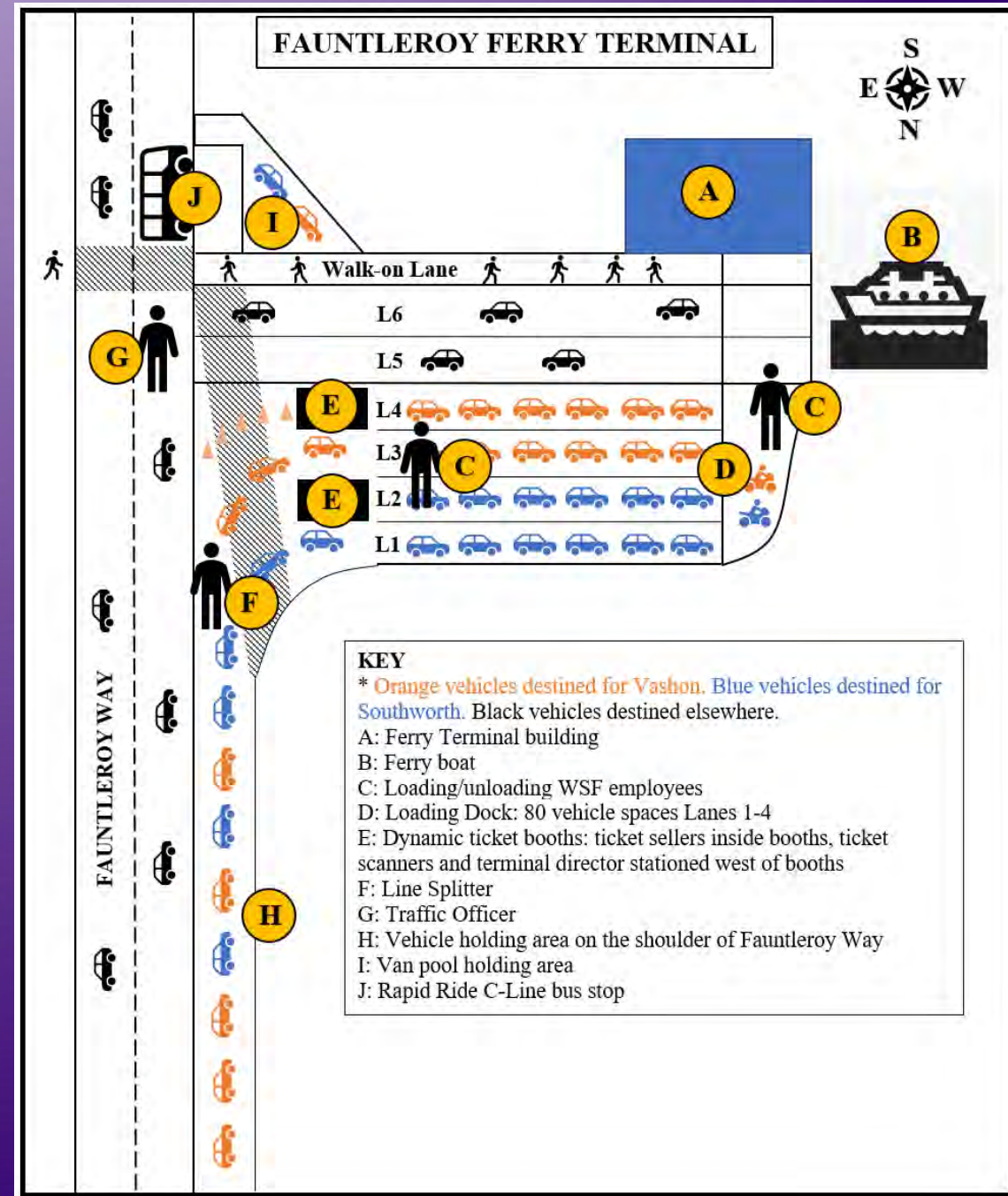
Triangle Route: Superlatives in the WSF System

1. Fauntleroy is oldest *and* smallest dock in the system
2. Vashon-Fauntleroy leg: Highest percentage of single occupancy vehicles (SOVs) in the entire system
3. Southworth-Fauntleroy ridership grew faster in 2017 than ridership on any other leg in the system



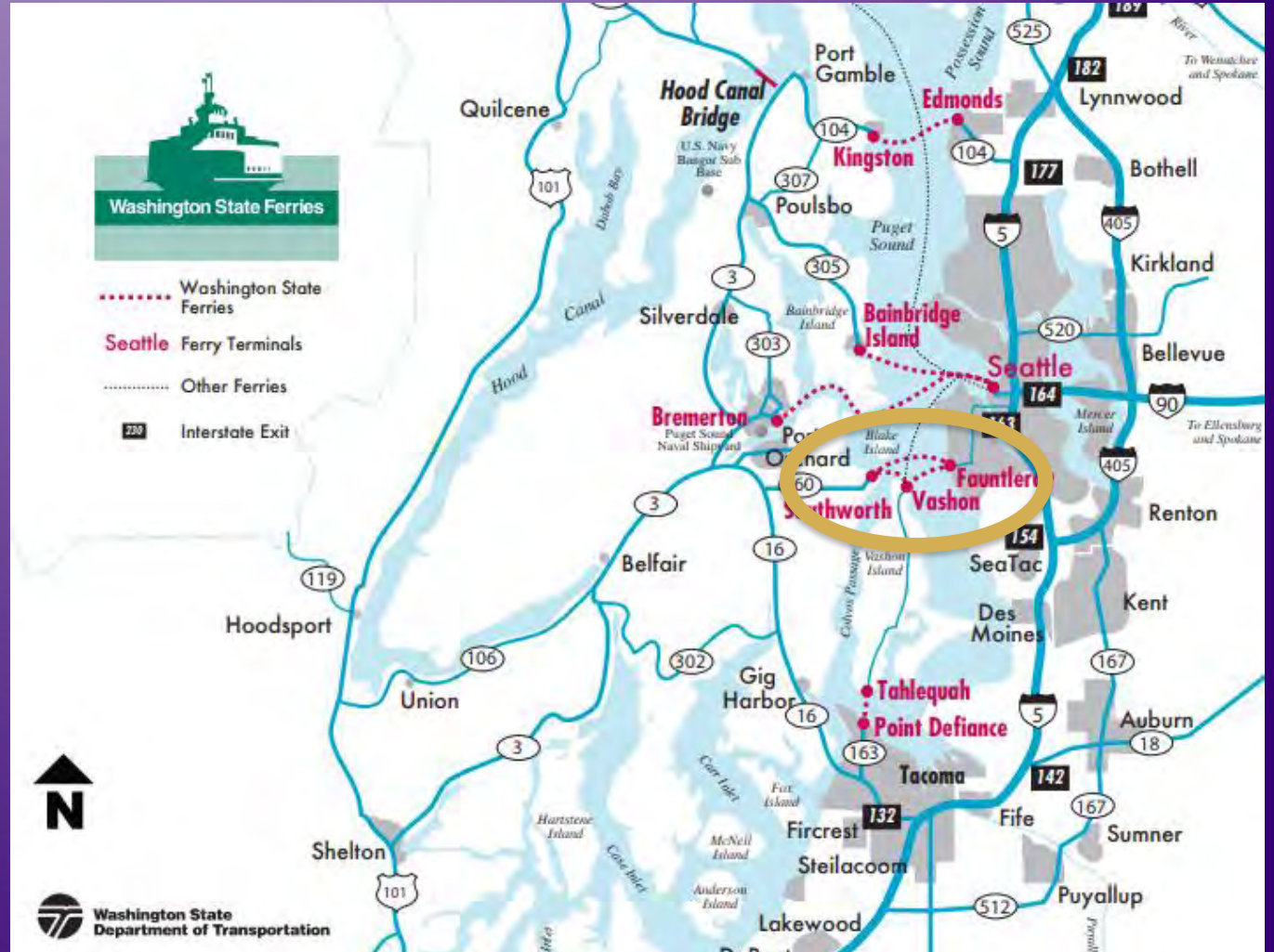
Fauntleroy Dock

- > 80-car dock, 124-car boats
- > One vehicle holding lane
- > One boat-slip, two destinations
- > Two toll booths
- > Limited wireless connectivity



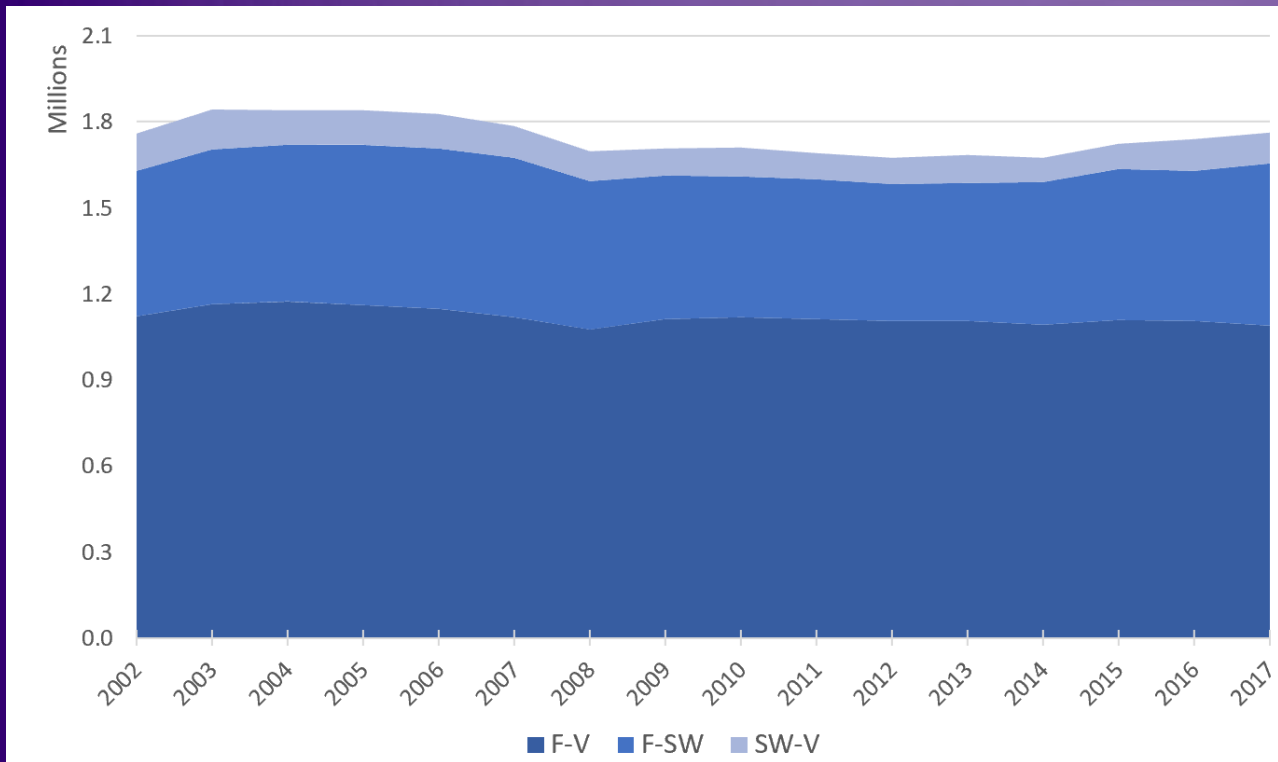
Stakeholder Environment

- > 3 communities with distinct perspectives and needs
- > Multiple city and county jurisdictions
- > Multiple operational partners



Population and Ridership Trends

Total Ridership Over Time by Leg



Ridership Change from 2012 - 2017



Narrowing the Range of Alternatives

		CRITERIA				
		Community Satisfaction/ Relationship	Ability to Meet Demand	Equity	Safety	Farebox Recovery
ALTERNATIVES	Status Quo					
	Implement <i>Good To Go!</i> System					
	Reinstitute Bypass Lane					
	Improve WiFi/Scanner Connectivity and Implement Upstream Mobile Transactions					
	Improve Training, Management, and Retention of Triangle Route Staff					
	Staff a Second Traffic Officer at Fautleroy Dock During Rush Hour					



Environmental Sustainability:

A cross-cutting criterion

- > Gov. Inslee Executive Order 18-01 (calls for reduction in GHG emissions)
- > Ticketing and Loading Recommendations
 - > Decrease wait times/lines = > decreased idling = > decreased CO2 emissions
- > System-wide Environmental Considerations
 - > Schedule interacts with on-time performance
 - > Electrify fleet
 - > Provide incentives for walk-on passengers vs. drive vs. SOV
 - > Infrastructure interacts with eco-system impacts



Comparing the Alternatives

		CRITERIA				
		Community Satisfaction/ Relationship	Ability to Meet Demand	Equity	Safety	Farebox Recovery
ALTERNATIVES	Status Quo	Red	Yellow	Yellow	Yellow	Yellow
	Implement <i>Good To Go!</i> System	Green	Green	Red	Yellow	Yellow
	Reinstitute Bypass Lane	Yellow	Yellow	Yellow	Red	Red
	Improve WiFi/Scanner Connectivity and Implement Upstream Mobile Transactions	Yellow	Green	Yellow	Yellow	Green
	Improve Training, Management, and Retention of Triangle Route Staff	Yellow	Yellow	Yellow	Green	Red
	Staff a Second Traffic Officer at Fautleroy Dock During Rush Hour	Yellow	Green	Yellow	Green	Red



Scoring Alternatives on Environmental Sustainability

- > GTG and other direct loading approaches result in less CO₂ emissions
- > GTG and other direct loading could incent - sail rather than drive
- > Staff training, management and retention improvements can result in small gains on environmental margins
- > Environmental considerations trade off with dwell time and vessel speed



System-Wide Considerations

- > Community understanding
- > Performance measures
- > Infrastructure
- > Schedule
- > Finance and budget
- > Data Limitations



Cross-Cutting Recommendations

1. Improve staff training, management, and retention
2. Revise WSF's performance measures
3. Improve data collection and analysis
4. Refine community engagement strategies



Improving Community Engagement

1. Customize community engagement
2. Cross-community consultation
 - Revise Ferry Advisory Committees
 - Dialogues facilitated by a neutral party
3. Expand WSF's social media presence
4. Increase public information and outreach – vessels, terminals
5. Smart-phone app: real-time estimates of wait times



Ticketing and Loading Recommendations

- > Short-Run
 - > Fast track vehicle loading
- > Long-Run
 - > Direct Loading via **Good To Go!**



Recommendation Requirements: Fast Track Loading

- > Connectivity: *Better wifi coverage or mobile data access*
- > Technology: *updated mobile devices*
- > Personnel: *2nd traffic officer, roving dock-staff position*
- > Funding and authorization for the above



Recommendation Requirements: **Good to Go!**

> Fare Simplification

- > Car+Driver or Car+Driver+Passenger(s); vehicle size
- > Need to compensate for lost passenger fares
- > Possible equity implications for SOVs (Vashon), but also incentives to carpool

> Infrastructure: Cameras that record low-speed, tight-flow traffic

> Coast Guard / Homeland Security procedures

- > Headcount
- > Vehicle screenings

> Funding and authorization for the above



Questions?

