Prepared for:

Washington State Transportation Commission

2008 WSF Customer Survey

Final Report & Presentation

November 18, 2008

Prepared by:

integrating research and technology

ORC Opinion Research Corporation

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Study Background & Objectives

Statement of Purpose / Objectives

- Multi-phase study, the purpose and outcome of which are to:

Purpose

- To gather information on travel behavior and attitudes from a representative sample of ferry customers
- To identify fare policy, operational, and customer-centric strategies that could be effective in modifying peak hour vehicular travel and/or increasing walk-on passenger travel while continuing to accommodate demand for existing and future ridership

Key Outcomes

A better understanding of customers attitudes and behaviors to:

- Estimate the impact changes in fare policy, operational, or customer-centric strategies could have on travel behavior
- Inform decisions that will better utilize existing ferry capacity, increase operational efficiency, reduce the need for capital expansions, and improve cost-efficiency while maintaining ferry revenues and continuing to meet customer needs

Overall Study Approach

Qualitative Research

- Qualitative (Focus Group) Research

Survey Research

- On-Board Surveys
- General Market Area & Infrequent Rider Survey
- Freight Customer Survey

Strategy / Pricing Research

- Price Sensitivity Research
- Mode Sensitivity Research

Analysis / Reports / Outcomes

- Profile of Ferry Users
- Estimate of Demand for Different Types of Travel

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Qualitative Research

Approach

- Conducted to help inform the questionnaire design process for the on-board survey
  - Gain insights into how riders talk about their travel
- Nine (9) focus groups conducted – November / December 2007
  - Conducted where riders live
  - Mix of commuters and frequent / regular riders
  - All drove onto the ferry at least sometimes
- Recruitment process used multiple methods to reach potential participants
  - All participants were screened by phone prior to being invited
  - Ensured that we reached a broad and representative base of ferry customers
- In total more than 80 riders participated in the focus group research

Key Observations

- Ferry riders have relatively long and difficult trips.
  - This is notable for those driving onto the ferry.
  - Less so for walk-on riders.
- Trips are well-planned and relatively routine.
  - Vehicle drivers anticipate wait times and build that into their trip.
- Participants stated that they drive onto the ferry by necessity, not by choice. Factors that influence their decision include:
  - Whether they need for car at destination;
  - Availability of alternative modes to get to destination;
  - Amount of travel time; and
  - Total cost of trip.
- Participants who drive onto the ferries were open to alternatives.
  - Many stated they would walk on if there were viable public transportation alternatives available.

Key Observations (cont'd)

- Participants had clear opinions regarding options for managing demand.
  - Most felt that the time for a reservation system has come although they had many questions about how it would work and whether they would be willing to pay a fee to use it.
  - Opinions were clearly mixed regarding a preferred vehicle lane system. Primary concerns were about equity.
  - Opinions were also clearly mixed regarding congestion pricing policies.
  - Most opposed the idea of a High Occupancy Toll (HOT) lane.
- The universal feeling was that regular riders and commuters are the "backbone of the system" and should not be asked to do or pay any more than they currently do.
  - Most agreed that recreational travelers and occasional riders cause the spikes in demand that stress the system.

WSF Customer Characteristics

Rider Demographics

- Compared to the general population of the Puget Sound counties served by the ferries, WSF riders are:
  - Older;
  - More likely to be employed full-time; and
  - More affluent.

Demo	General Population*	WSF Riders	Winter	Summer
% Women	51%	52%	51%	53%
Median Age	45.4	51.0	52.2	50.2
% Employed FT	49%	61%	63%	60%
%Employed PT / Students	13%	15%	15%	16%
% Retired	16%	16%	16%	17%
Median HH Income	$58,159	$80,703	$80,663	$80,733

** Based on 7 counties surrounding Puget Sound: King, Snohomish, Pierce, Skagit, Island, Kitsap, Clallam*

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Recreational Riders

- Recreational riders are a unique and important segment of riders.
  - They account for 83 percent of the growth in summer ridership.
  - They both contribute revenue and place extra demand on the system in the summer months.

Demo	Non-Recreational Riders	Recreational Riders
% Women	50%	57%
Median Age	51.0	51.0
% Employed FT	64%	52%
%,Employed PT / Students	1%	18%
% Retired	14%	22%
Median HH Income	$79,805	$85,580

Freight

- 25 companies that ship freight on the ferries provided insights into their travel and scheduling issues.
- Companies schedule multiple trucks onto the ferry –55 to 60 percent of their fleet or an average of 4 to 6 per company.
- Fleets drive on trucks of all sizes.

20 to 30 Feet	30 to 60 Feet	More than 60 Feet
14	12	7

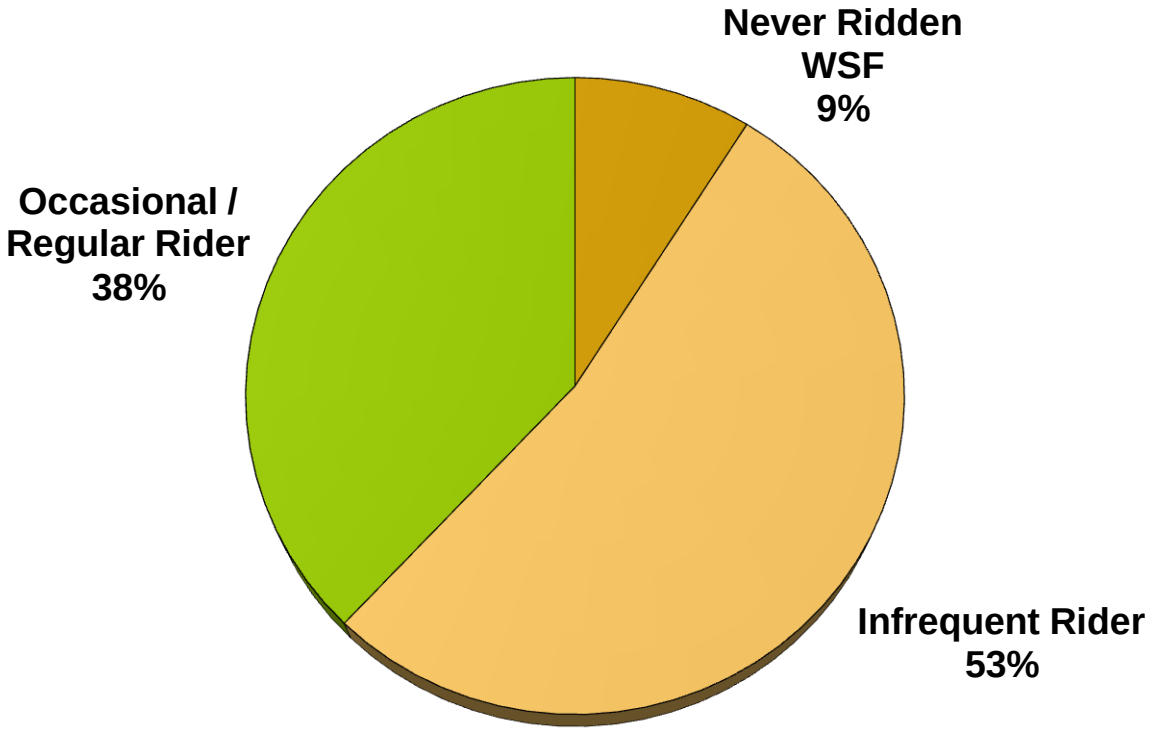
Freight (cont'd)

- Companies surveyed represented many different business sectors:
  - Retail and wholesale trade delivery (14 companies);
  - Utilities and construction (4 companies);
  - Services (4 companies);
  - For hire trucking (1 company); and
  - Mail or parcel service (1 company).

Travel Characteristics

Puget Sound Area Residents' Ridership on Washington State Ferries

- WSF is clearly a resource that serves all counties immediately surrounding the Puget Sound as well as those that ride on a regular basis.



* *Infrequent riders are defined as those that have ridden in the past but not in last 3 months; occasional / regular riders have ridden at least once in past 3 months and would most likely also be represented in the on-board survey*

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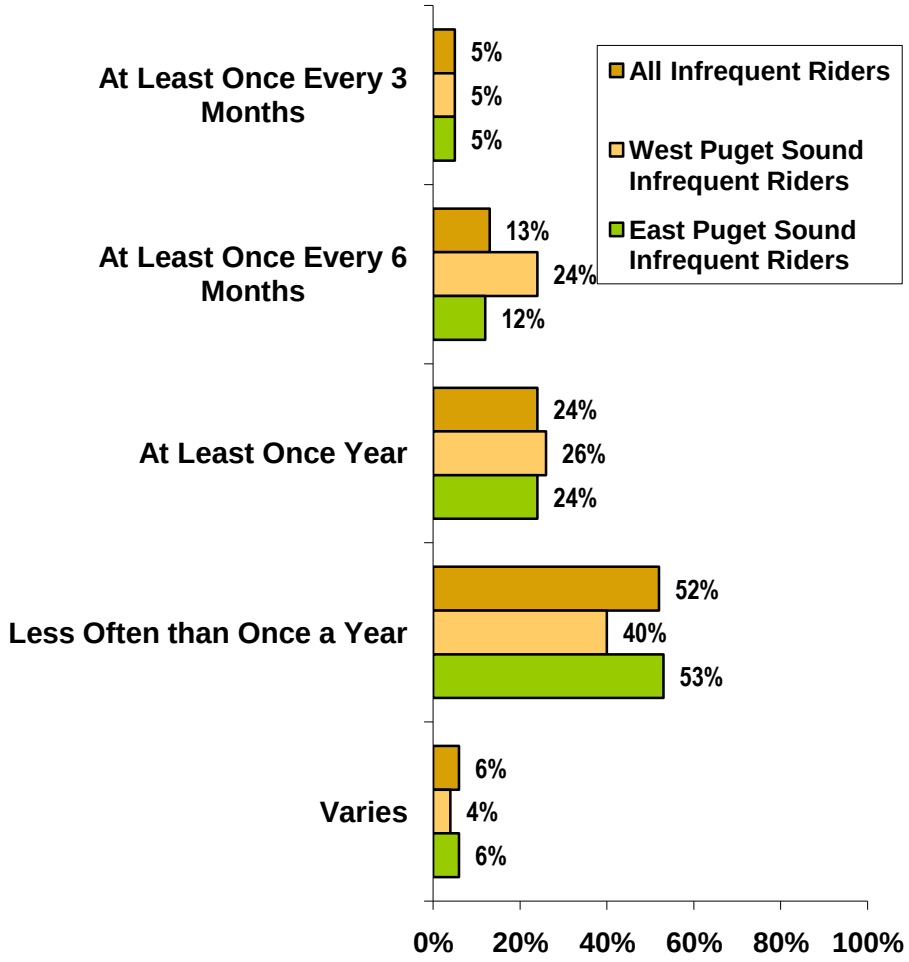
Frequency of Riding – Infrequent Riders*

- While the majority of infrequent riders rides less often than once a year, 24 percent rides at least once a year and 18 percent rides more often (at least every 6 months).
  - Not surprisingly, infrequent riders living in the communities on the west side of Puget Sound ride more often.



* *Infrequent riders are defined as those that have ridden in the past but not in last 3 months*

West Puget Sound Counties: Kitsap, Clallam, Island
East Puget Sound Counties: King, Snohomish, Pierce, Skagit
Note Island Communities (Vashon and San Juans) have no infrequent riders ; all have ridden at least once in past 3 months

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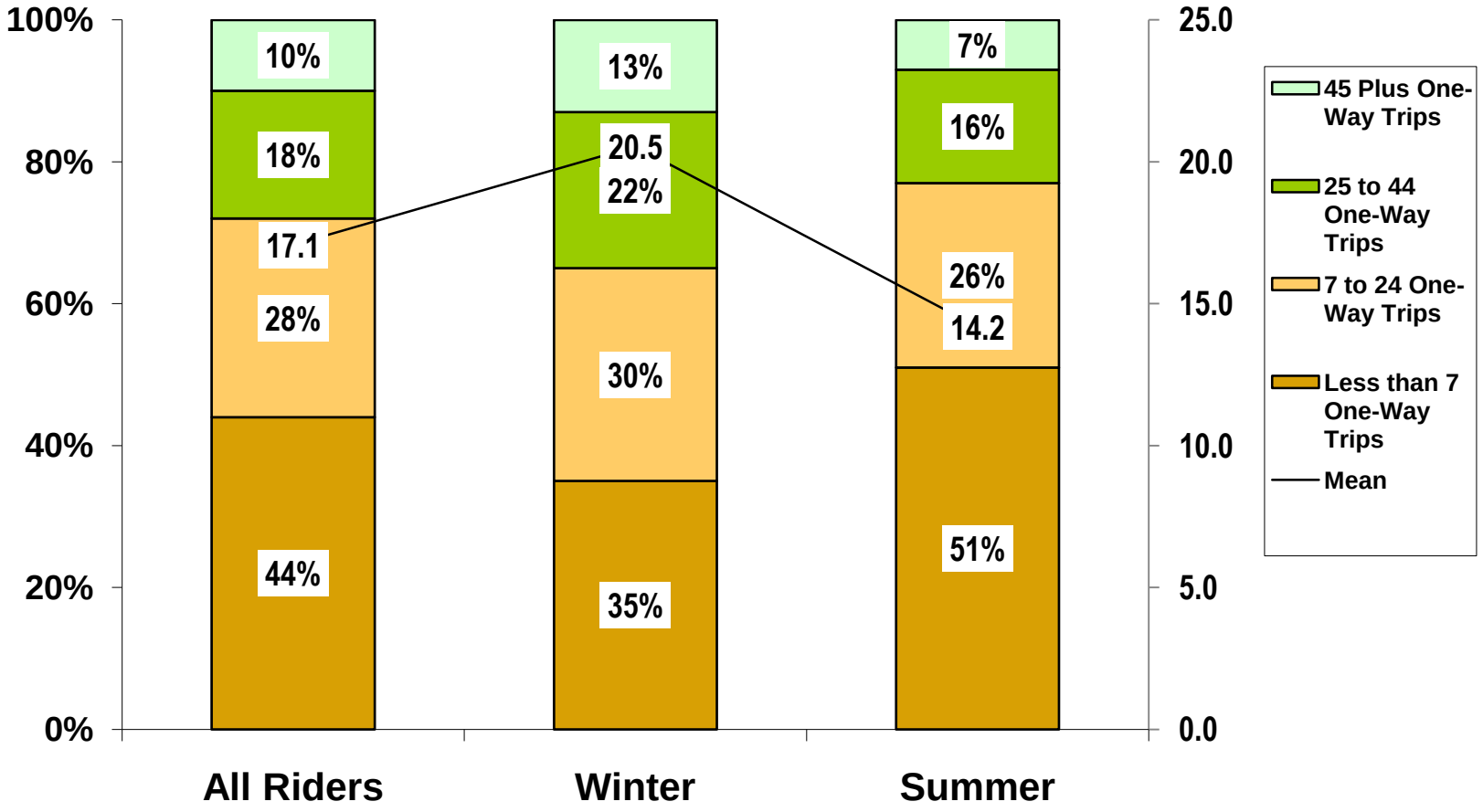
Frequency of Riding – Regular Riders*

- Among regular riders, the largest segments are those taking less than 25 one-way trips per month.



** Regular riders are defined as those surveyed on-board the ferries*

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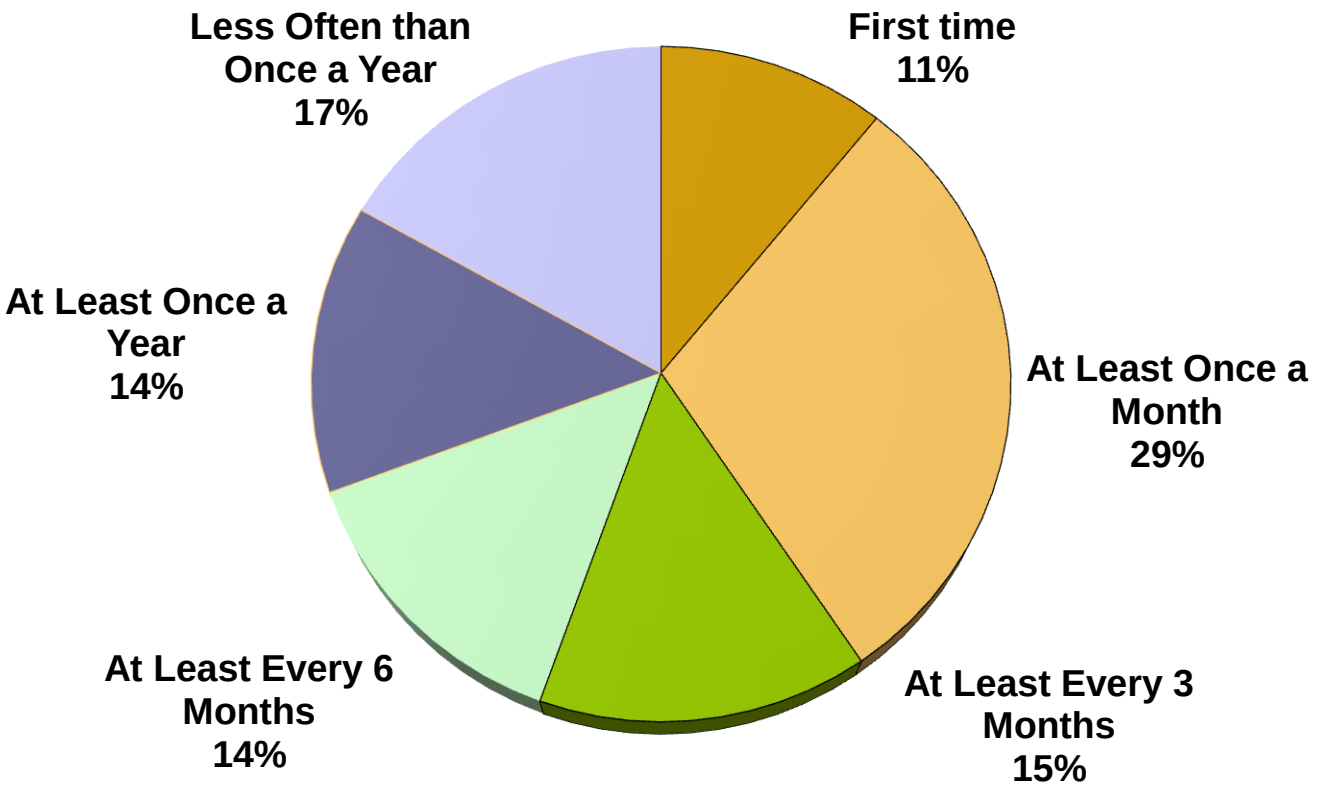
Frequency of Riding – Recreational Riders

- Recreational riders are a diverse segment ranging from first time riders to those riding at least once a month (for recreation).



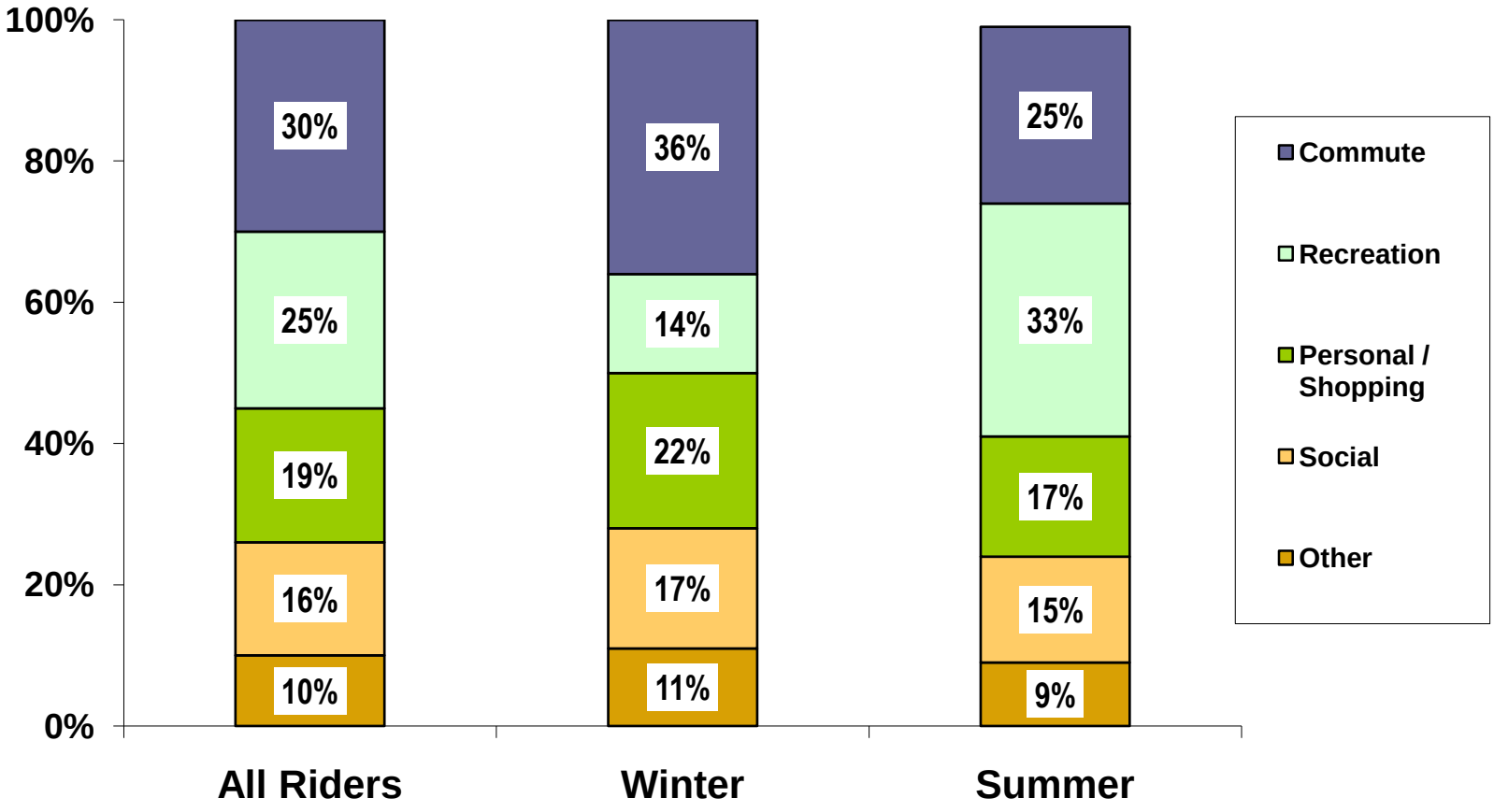
Frequency of Riding – Freight

- On average, the freight customers surveyed report that their trucks make 40 one-way trips on the ferry per month.

Number of One-Way Trips	# of Respondents	% of Respondents
Less than 15	4	17%
15 to 20	3	13%
21 to 30	5	21%
31 to 40	4	17%
41 or More	8	34%
Mean # of Monthly Trips		39.6

Trip Purpose – Regular Riders*

- Consistent with the figures for frequency of riding, WSF serves the needs of riders traveling for many different reasons.
  - The majority of trips are for non-commute purposes.



** Regular riders are defined as those surveyed on-board the ferries*

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Trip Purpose by Route

- Differences by route may indicate specific needs of riders on the route as well as their willingness and/or ability to change travel behaviors.

	ALL	SEA/ BAI	SEA/ BRE	EDM/ KIN	MUK/ CLI	FAU/ VAS	FAU/ SOU	PTD/ TAH	PTT/ KEY	ANA/ SAN
Commute	30%	36%	46%	23%	24%	38%	42%	48%	7%	3%
Winter	*36%*	*41%*	*50%*	*29%*	*27%*	*49%*	*43%*	*50%*	*14%*	*4%*
Summer	*25%*	*31%*	*43%*	*19%*	*22%*	*29%*	*42%*	*47%*	*2%*	*2%*
Recreation	25%	24%	17%	24%	21%	19%	15%	16%	44%	54%
Winter	*14%*	*16%*	*12%*	*13%*	*10%*	*10%*	*8%*	*11%*	*22%*	*34%*
Summer	*33%*	*30%*	*21%*	*32%*	*29%*	*26%*	*20%*	*19%*	*57%*	*63%*
Personal/Shopping	19%	19%	16%	18%	25%	22%	14%	17%	12%	18%
Winter	*22%*	*21%*	*16%*	*18%*	*30%*	*22%*	*15%*	*21%*	*15%*	*31%*
Summer	*17%*	*18%*	*15%*	*19%*	*21%*	*21%*	*13%*	*13%*	*10%*	*12%*
Social	16%	12%	10%	24%	19%	9%	19%	10%	26%	19%
Winter	*17%*	*12%*	*11%*	*29%*	*23%*	*6%*	*20%*	*9%*	*27%*	*21%*
Summer	*15%*	*13%*	*10%*	*20%*	*16%*	*10%*	*18%*	*11%*	*25%*	*17%*
Other	10%	9%	11%	11%	11%	13%	9%	9%	12%	6%
Winter	*11%*	*10%*	*10%*	*11%*	*10%*	*12%*	*13%*	*9%*	*21%*	*9%*
Summer	*9%*	*8%*	*11%*	*10%*	*11%*	*14%*	*7%*	*9%*	*6%*	*5%*

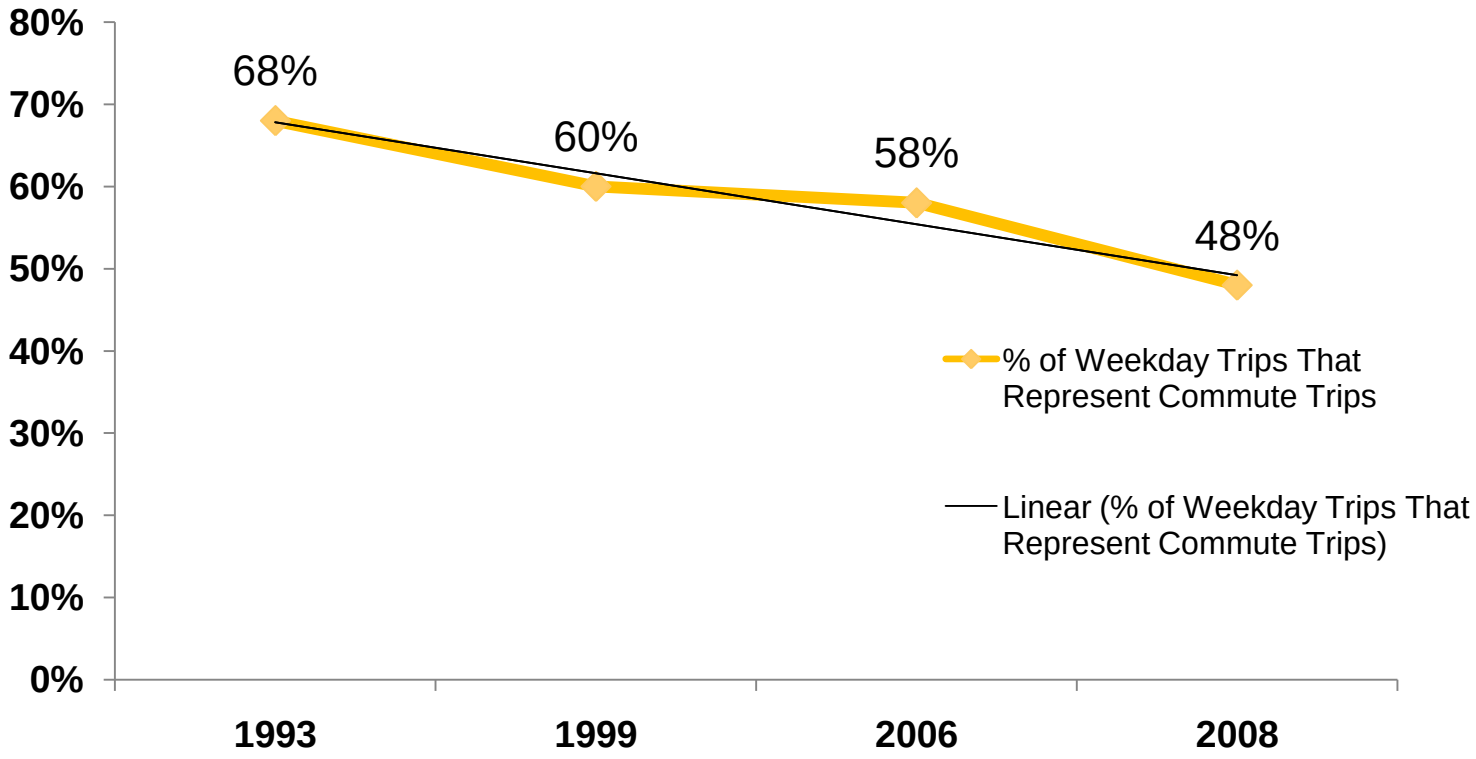
Change in Ridership Mix – Winter vs. Summer

- While the percentage of riders who are commuters decreases in the summer, there are no changes in the number of weekly commute trips.
- Eighty-three percent (83%) of the growth in summer ridership results from the increase in recreational travel.

	Number of Weekly Trips / Month		
Trip Purpose	**Winter**	**Summer**	**% Change**
Commute	142,357	141,490	-1%
Recreation	57,519	184,376	221%
Personal / Shopping	87,484	95,220	9%
Social	70,026	83,879	20%
Other	42,987	51,402	20%
Total	411,377	564,099	37%

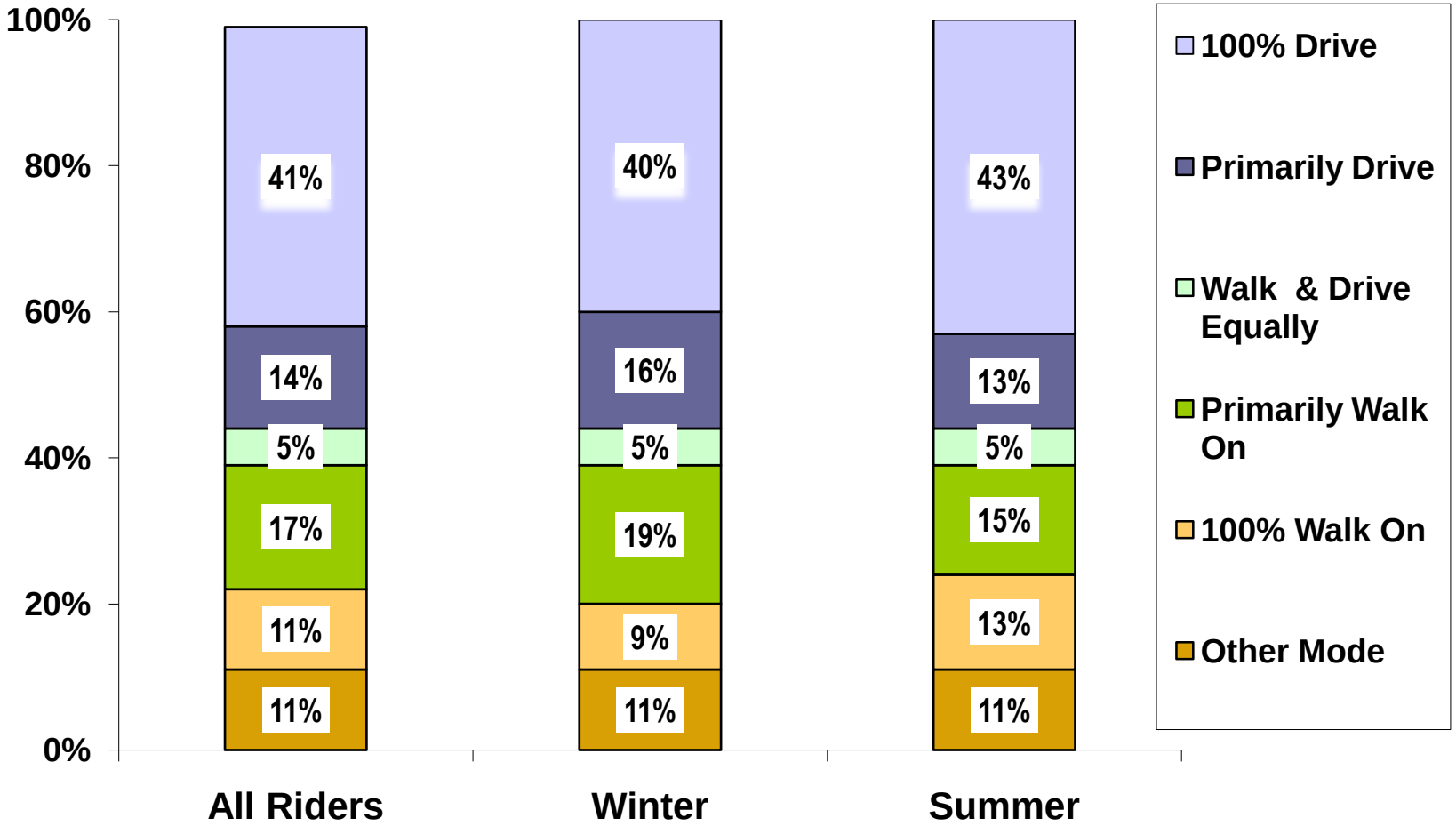
Trends in Percent of Total Trips that are Commute Trips

- There has been a downward trend in the percentage of commute trips on WSF since 1993 and this trend is accelerating.



Boarding Mode – Regular Riders

- Two out of five (41%) riders drive onto the ferry for 100 percent of their trips.



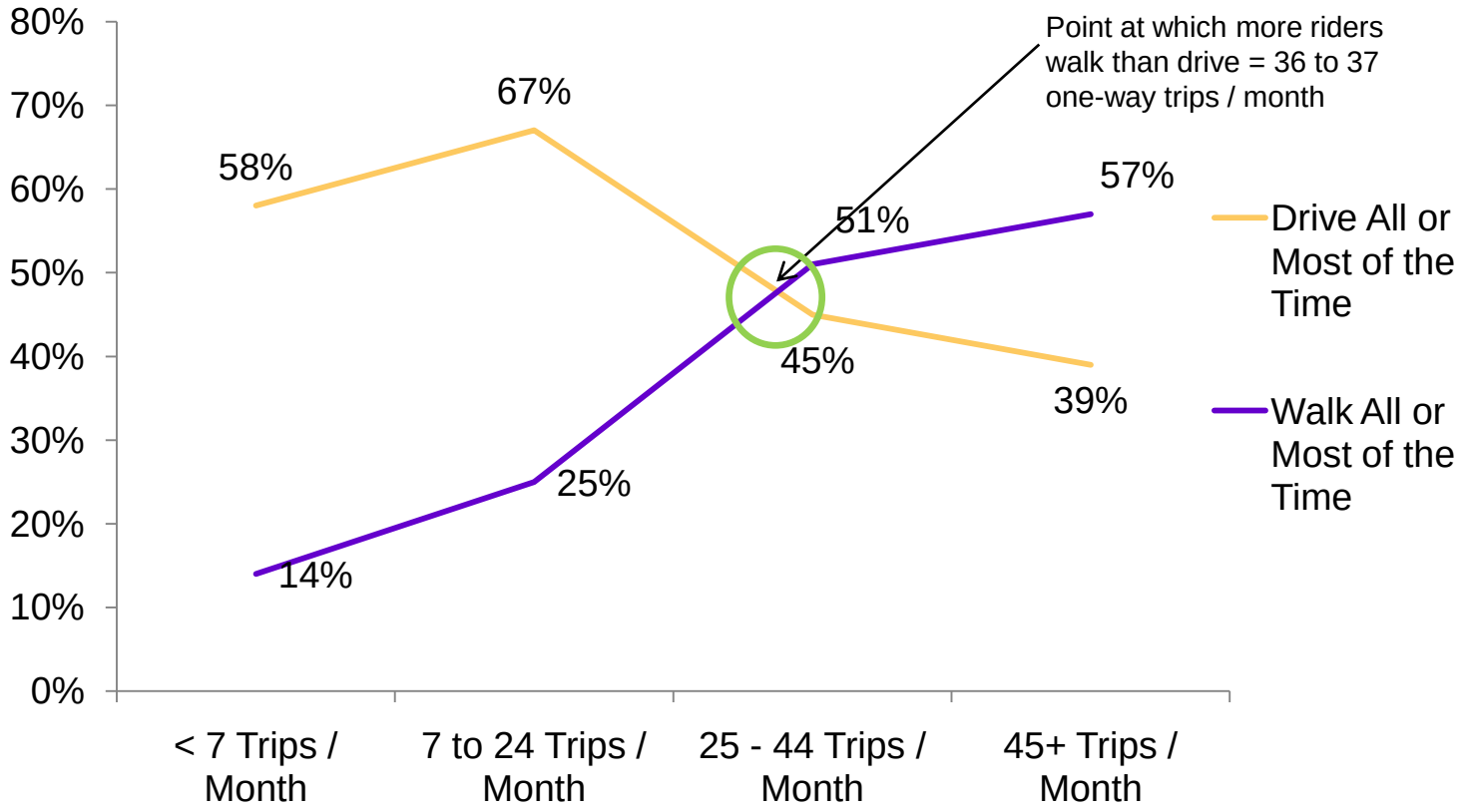
Boarding Mode by Route

- The extent to which riders drive versus walk on varies by route and reflects the characteristics of riders on that route and their need for a car.

	ALL	SEA/ BAI	SEA / BRE	EDM / KIN	MUK / CLI	FAU / VAS	FAU / SOU	PTD / TAH	PTT / KEY	ANA / SAN
100% Drive	41%	27%	28%	52%	56%	41%	49%	47%	54%	48%
Primarily Drive	14%	15%	8%	12%	17%	26%	13%	12%	12%	8%
Drive / Walk Equally	5%	6%	6%	6%	4%	2%	6%	1%	5%	5%
Primarily Walk	17%	29%	22%	9%	10%	17%	15%	27%	6%	4%
100% Walk	11%	13%	29%	9%	4%	7%	8%	1%	6%	8%
Other	11%	10%	8%	11%	9%	7%	9%	11%	18%	26%

Boarding Mode by Frequency of Riding

- Moreover, the extent to which riders drive versus walk on varies by the frequency with which they ride – the more they ride, the more likely they are to walk onto the ferry all or most of the time.



Boarding Mode – Recreation Trips

- More than two-thirds (69%) of recreational travelers drive onto the ferry as a driver or a passenger in a vehicle.
  - Vehicle occupancy is higher among recreational travelers.

	Non-Recreational Riders	Recreational Riders		
		All	Winter	Summer
Vehicle Driver	44%	35%	43%	32%
Vehicle Passenger	18%	34%	29%	36%
Walk-On Passenger	38%	31%	28%	32%
Average Vehicle Occupancy	1.6	2.5	2.3	2.5

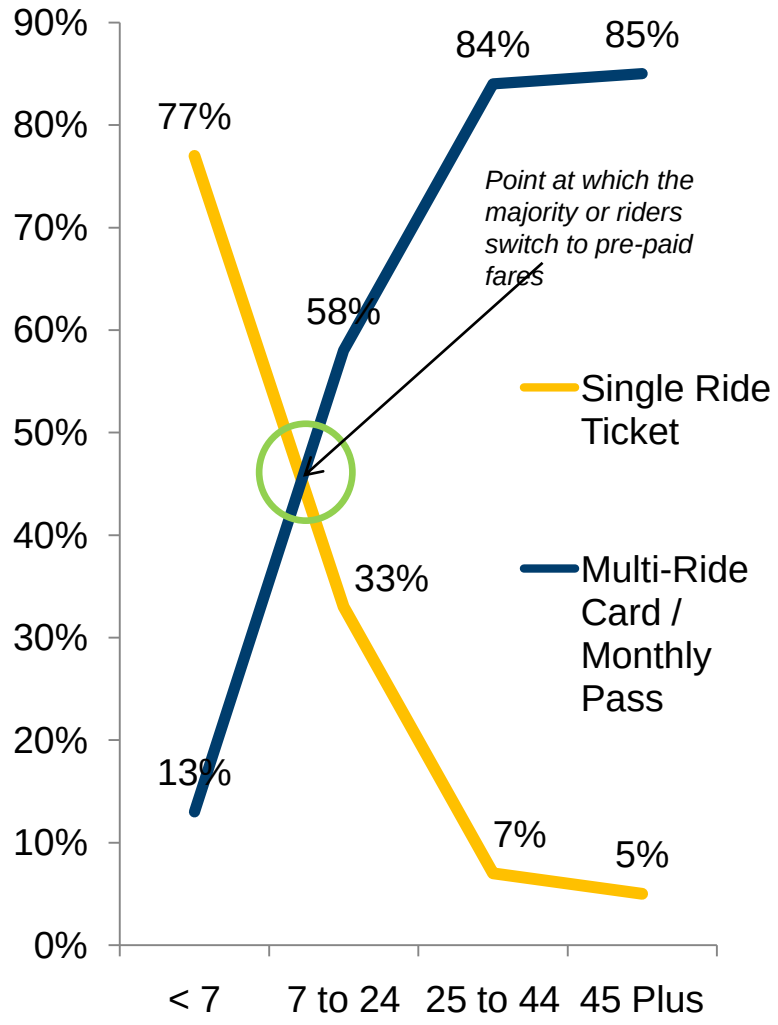
Summary of Key Findings – Travel Characteristics

- WSF serves a broad and diverse customer base . . .
  - With varied travel patterns, and
  - With many different needs and expectations for service.
- While commuters and regular riders (those taking 25 or more one-way rides per month) represent an important segment of the customer base WSF serves, they are a smaller segment of the overall customer base than expected.
- A significant number of riders drive onto the ferry all or most of the time.
  - These riders are generally less frequent riders. This could suggest that they could be less sensitive to the cost of fares. Moreover, they are less likely to be interested in other strategies, such as improved transit services, that provide alternatives to driving on.

Attitudes Surrounding Fares

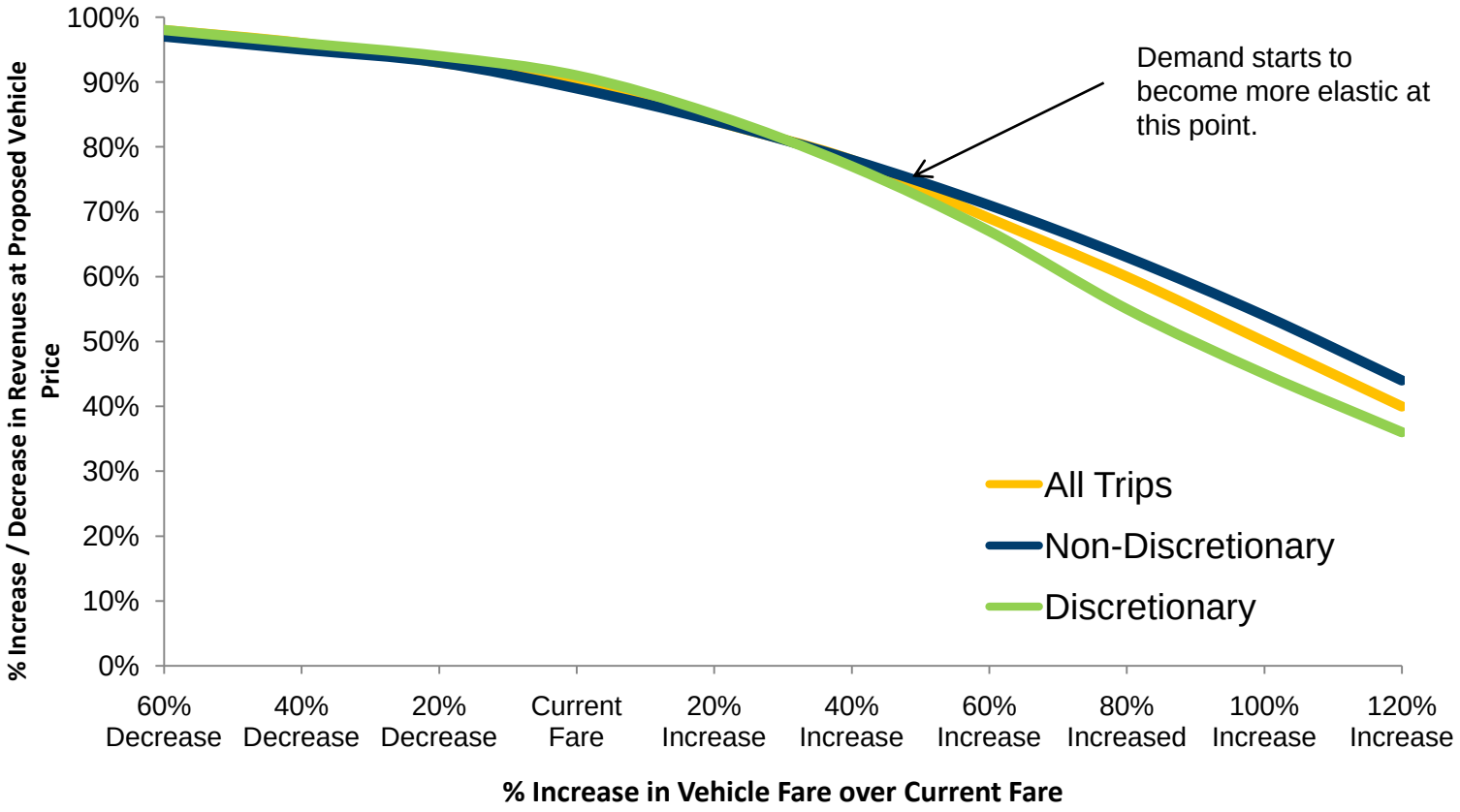
Fare Payment

- Riders are almost equally likely to pay with a single-ride ticket (47%) versus a discounted fare (50%).
- Not surprisingly, choice of fare media is related to the frequency with which they ride.
  - The point at which riders appear to switch between paying with a single-ride ticket and a pre-paid fare is between 18 and 19 one-way trips per month.



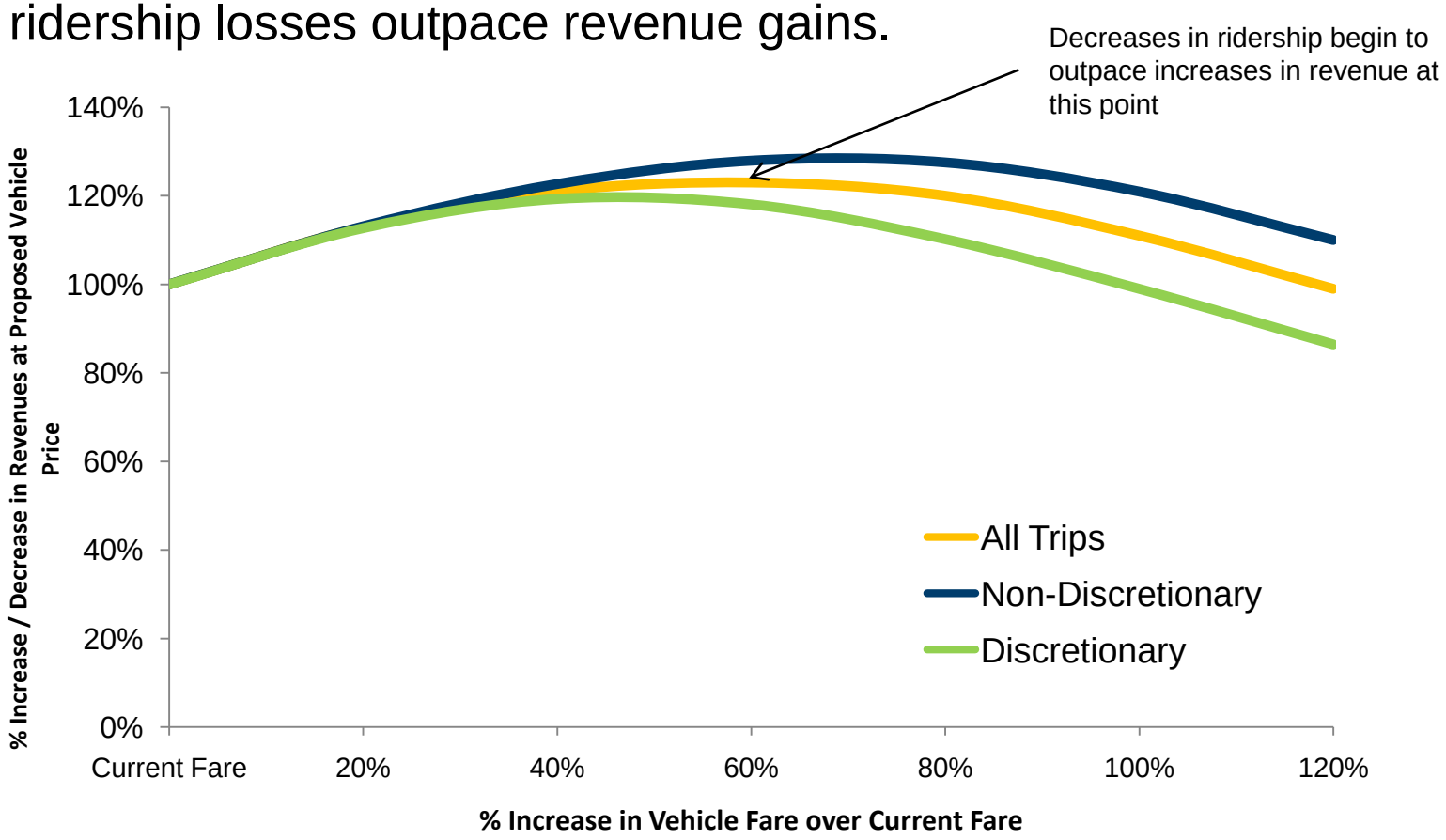
Overall Price Sensitivity for Drive-On Peak Weekday Travel

- Demand is inelastic at or above the current price points.
  - That is, a 10 percent increase in fares does not create a corresponding 10 percent decrease in ridership.



Revenue Analysis for Drive-On Peak Weekday Travel

- As fares increase, gains in revenue offset losses in ridership.
- Fares could increase by as much as 60 plus percent before ridership losses outpace revenue gains.



Attitudes toward Proposed Fare Policies

- Peak weekday winter vehicle drivers opinions are mixed as to whether drivers using the ferry during off-peak hours should receive a discount.
- They are clearly opposed to the idea of charging vehicle drivers a higher fare during peak travel hours.

	Peak Winter Drivers	SEA /BAI	SEA / BRE	EDM / KIN	MUK / CLI	FAU / VAS	FAU / SOU	PTD / TAH	PTT / KEY	ANA / SAN
	Passengers driving a vehicle onto ferry during off-peak travel hours receive a discount									
Net Agree	35%	40%	38%	33%	29%	25%	35%	35%	39%	45%
Net Disagree	48%	47%	44%	49%	54%	59%	43%	56%	36%	36%
	Passengers driving a vehicle onto ferry during peak travel hours pay a higher fare									
Net Agree	15%	18%	11%	12%	15%	14%	11%	12%	19%	16%
Net Disagree	75%	73%	79% %	77%	73%	80%	81%	84%	62%	70%

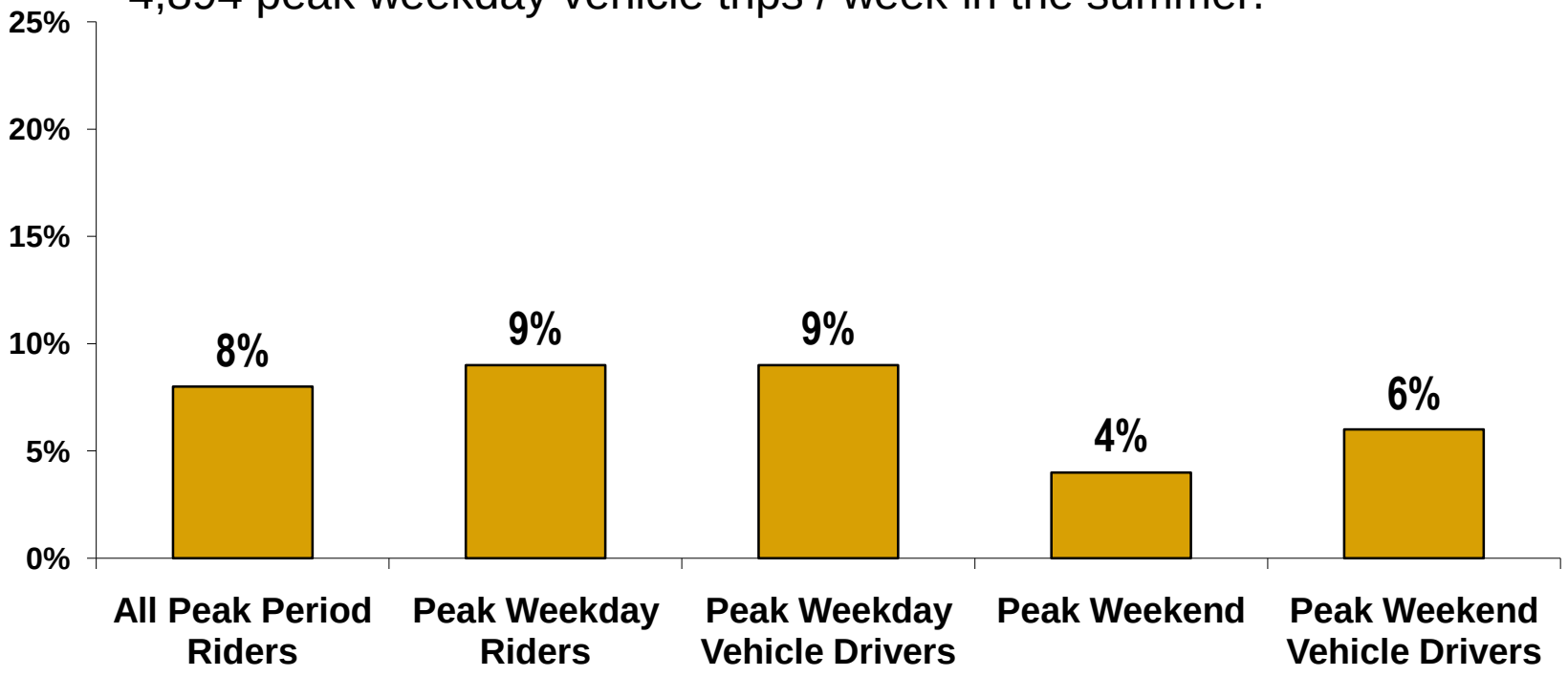
Summary of Key Findings – Fares

- Riders have clearly matched their choice of fare media to match their travel behavior
  - This would suggest that they are discount conscious but also aware of possible downsides of not being able to use the number of rides purchased before the expiration.
- Fares can clearly increase and not have a significantly negative impact on ridership.
- At the same time reasonable fare increases could provide some of the necessary funds for the improvements customer desire.
- Riders are clearly opposed to the concept of a congestion pricing program. However, as will be discussed in the next section. . .
  - A congestion pricing program could have the desired effect of shifting vehicle traffic to off-peak travel hours.

Opportunities to Shift Vehicle Demand

Flexibility to Change Travel Behavior

- While less than one out of ten riders who drive onto the ferry in the peak travel periods say they could travel at a different time, this translates to a decrease of . . .
  - 4,606 peak weekday vehicle trips / week in the winter, and
  - 4,894 peak weekday vehicle trips / week in the summer.



Flexibility to Change Travel Behavior by Route

- While there is little variation in the percentage of riders and vehicle drivers that can change travel times by route, shifts on some routes clearly have more impact than on others.

	ALL	SEA / BAI	SEA / BRE	EDM / KIN	MUK / CLI	FAU / VAS	FAU / SOU	PTD / TAH
	All Peak Period Riders							
% Can Change Peak to Off-Peak	8%	9%	9%	8%	9%	4%	10%	1%
# of Winter Trips / Wk	12,112	3,698	2,785	2,950	2,193	236	128	123
# of Summer Trips / Wk	12,928	5,048	1,661	1,631	2,566	867	1,155	-
	Peak Period Vehicle Drivers							
% Can Change Peak to Off-Peak	8%	8%	11%	9%	10%	7%	9%	-
# of Winter Trips / Wk	4,606	720	650	1,640	1,283	236	77	-
# of Summer Trips / Wk	4,894	1,201	407	796	1,321	750	418	-

Riders who Have Access to and Are Willing to Take Transit

- Seven percent (7%) peak weekday vehicle drivers are “very willing” to use transit ***and*** currently have transit available; an additional 6 percent are “somewhat willing” and have transit available.
  - Shifting some of this traffic could help free up valuable vehicle space in peak periods.

	Vehicle Drivers			
	All	**Peak Weekday**	**Off-Peak Weekday**	**Weekend**
% Very Willing to Use Transit	23%	23%	20%	26%
% Have Access to Transit	40%	43%	42%	33%
# of Weekly Vehicle Trips	13,782	4,708	5,535	3,539
% Somewhat Willing to Use Transit	27%	26%	25%	32%
% Have Access to Transit	32%	33%	28%	35%
# of Weekly Vehicle Trips	13,468	4,188	4,643	4,637
Potential Reduction in Weekly Trips	27,250	8,896	10,178	8,176

Access to & Willingness to Use Transit by Route

- Seattle / Bainbridge and Fauntleroy / Vashon represent routes that have the greatest potential to build on existing transit services.

	ALL	SEA / BAI	SEA / BRE	EDM/ KIN	MUK/ CLI	FAU/ VAS	FAU/ SOU	PTD/ TAH	PTT/ KEY	ANA/ SAN
% Access to	67%	80%	70%	49%	74%	82%	67%	73%	52%	27%
% of Vehicle Drivers Willing to Use	23%	31%	24%	20%	21%	27%	18%	20%	16%	15%
Total Potential	9%	25%	17%	10%	16%	22%	12%	15%	8%	4%

Riders who Are Willing to Take Transit but Have Limited or No Access

- Increasing access to transit could result in a further decrease in the number of peak weekday vehicle trips.
  - Notably, providing service to those “very willing” to use transit and have transit at their destination but not near their home (6% of peak weekday vehicle drivers) could decrease the # of peak weekday vehicle trips by 4,024 weekly trips.

	Vehicle Drivers			
	All	**Peak Weekday**	**Off-Peak Weekday**	**Weekend**
% Very Willing to Use Transit	23%	23%	20%	26%
% Have Access at Home / Not Destination	33%	37%	33%	31%
# of Weekly Vehicle Trips	11,662	4,024	4,317	3,320
% Have Access at Destination / Not Home	7%	6%	5%	8%
# of Weekly Vehicle Trips	2,325	714	716	896
% No Access	20%	14%	19%	28%
# of Weekly Vehicle Trips	7,068	1,546	2,487	3,036
Potential Reduction in Weekly Trips	21,055	6,284	7,520	7,252

Price Sensitivity Conjoint Research – Overview of Approach

- Respondents who completed the March On-Board Survey participated in an additional research study, the primary purpose of which was to understand the. . .
  - Trade-offs that ferry riders are likely to make when deciding what mode to use (walk or drive on) and when to travel (peak or off-peak periods) under different fare situations.
- A total of 688 study participants provided data on a total of 838 different trips.
  - Respondents self-defined trips as non-discretionary versus discretionary and provided data for each trip type they take.
- Respondents were presented with up to 16 different trip choices and were asked to choose among five options for making the trip:
  1. Drive-on the sailing chosen for the most recent trip,
  2. Drive-on an earlier sailing,
  3. Drive-on a later sailing,
  4. Walk-on the sailing chosen for the most recent trip, or
  5. Make the trip some other way or not at all.

Sample Conjoint Screen

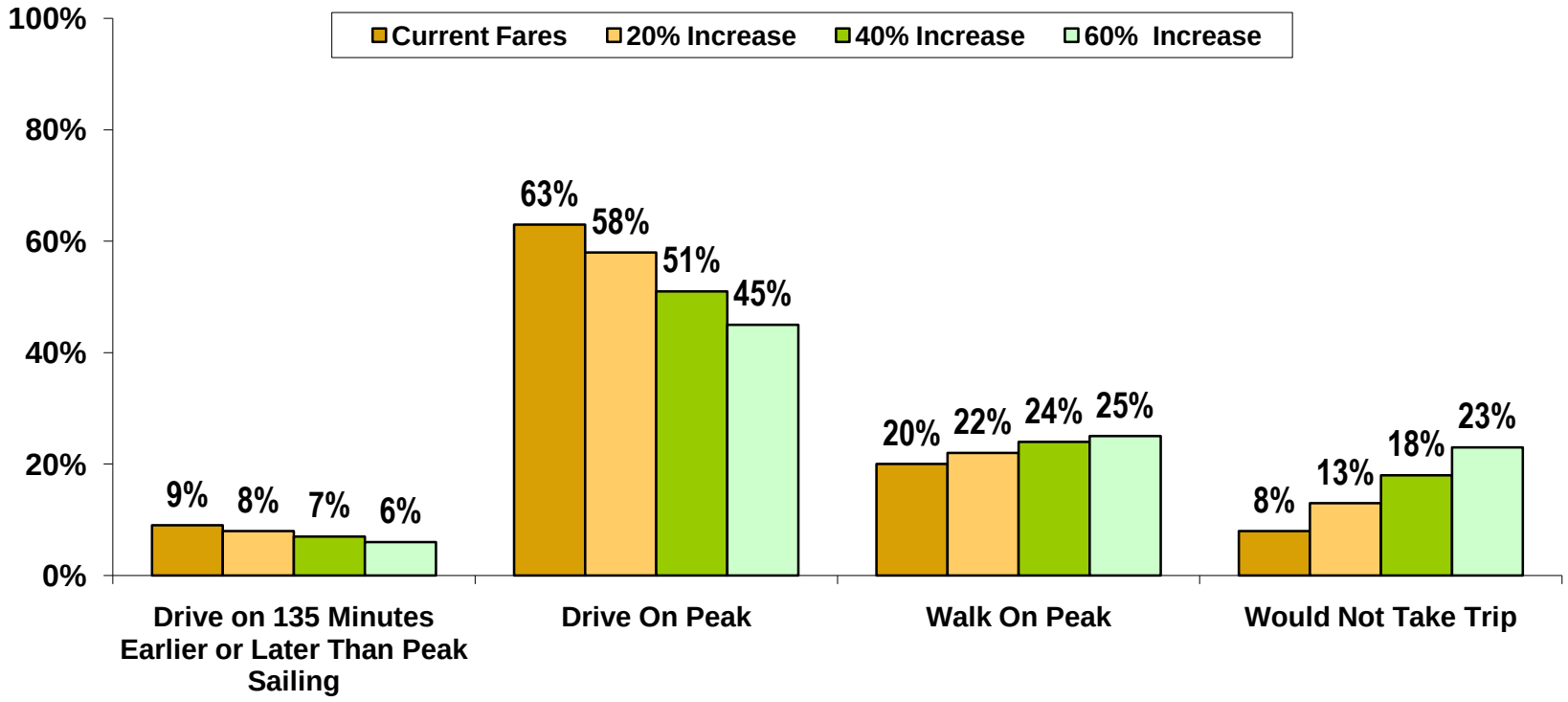
Imagine that WSF came up with a new pricing schedule. Thinking about your recent **NON-discretionary** trip (*[Purpose from Screen 22]*), if these were your only options, which would you choose?

I would **Walk on** the **Current** ferry that departs at **4:00pm** where I need to be at the terminal **5 min** before departure and where the one-way fare is **$1.60**	I would **Drive on** the **Current** ferry that departs at **4:00pm** where I need to be at the terminal **60 min** before departure and where the one-way fare is **$14.55**	I would **Drive on** the **earlier** ferry that departs at **2:30pm** where I need to be at the terminal **5 min** before departure and where the one-way fare is **$16.65**	I would **Drive on** the **later** ferry that departs at **4:45pm** where I need to be at the terminal **5 min** before departure and where the one-way fare is **$14.55**	**NONE:** I would **NOT** make this **NON-discretionary trip** Given these drive-on and walk-on options/fares , I would just not use the ferries and find some other way to accomplish my trip purpose (either on-island or combined with another trip or not at all such as changing jobs)

Choose by clicking one of the buttons above.

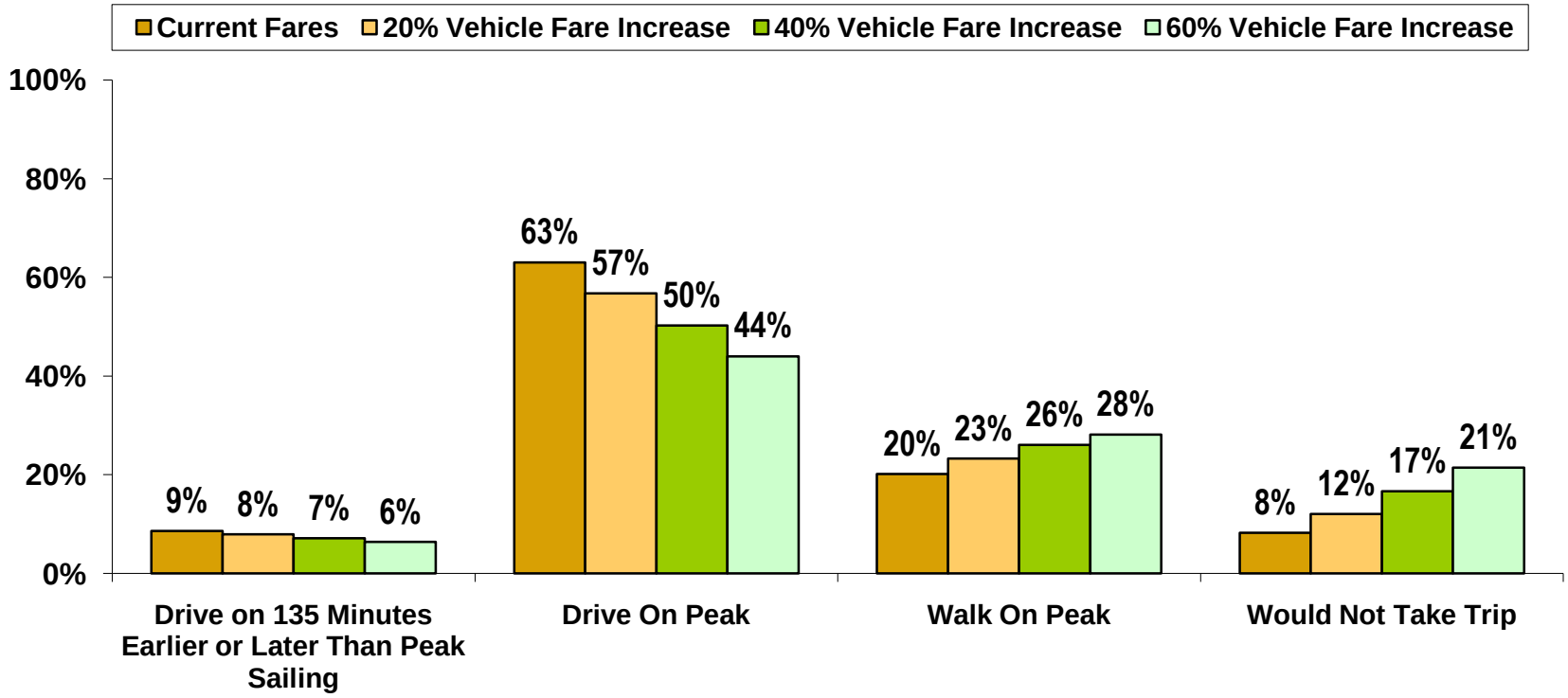
Key Results: Likely Travel Behavior with an Across-the-Board Fare Increase (Vehicle & Walk-On)

- An across-the-board increase would have a slight impact on likely travel behavior.
- A 20 percent increase in fares would potentially:
  - Decrease the percentage of drive-on peak travel by 9 percent.
  - Increase the percentage of walk-on peak travel by 9 percent.
  - Increase the percentage who would not take the trip by 53 percent.



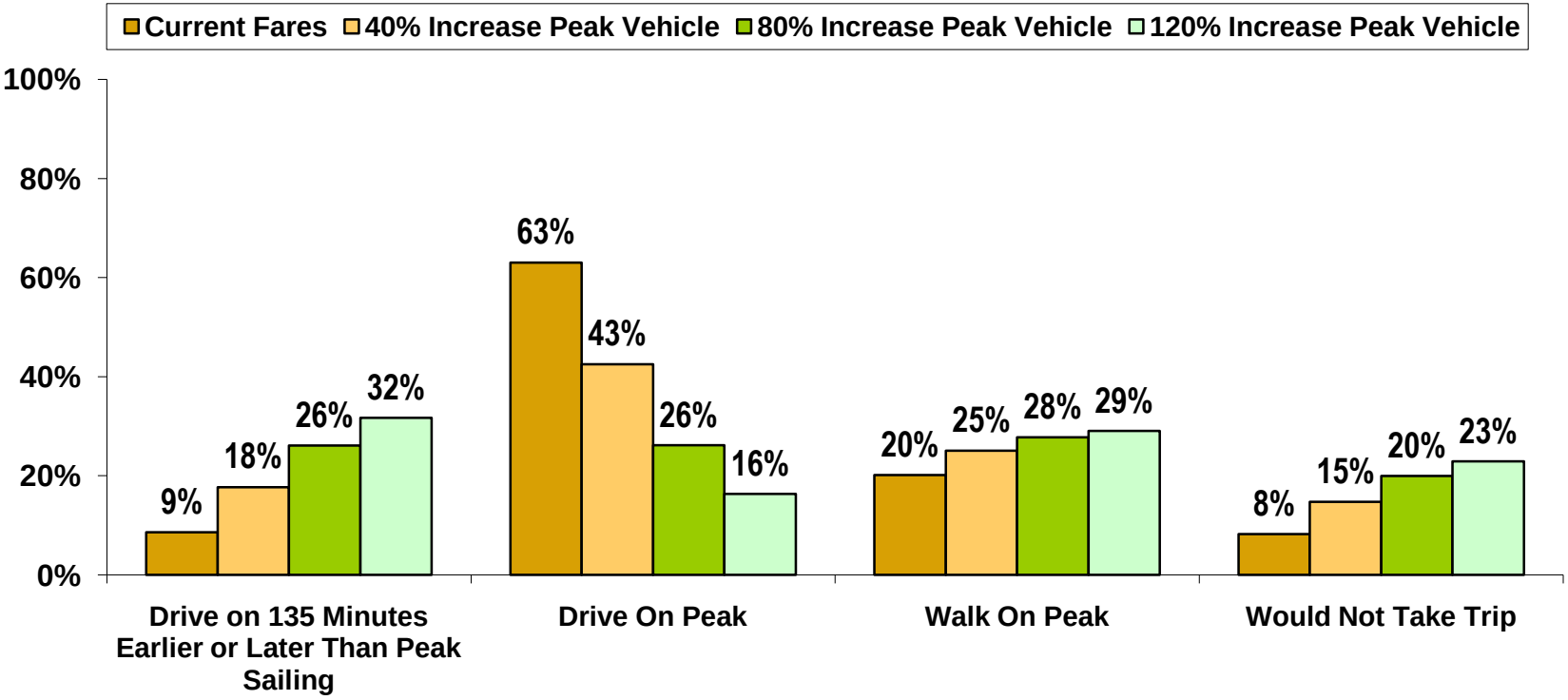
Likely Behavior with an Increase in Vehicle Fares and No Increase in Walk-On Fares

- Increasing vehicle fares while maintaining walk-on fares . . .
  - Has approximately the same impact on drive-on peak travel as an across-the-board fare increase.
  - Has a somewhat greater impact on walk-on peak travel than an across-the-board fare increase.



Likely Behavior with an Increase in Peak Vehicle Fares and No Change to Off-Peak

- Increasing peak vehicle fares while maintaining current vehicle fares during off-peak could have a significant impact on peak vehicle traffic.
- A 40 percent increase in peak vehicle fares could result in a . . .
  - 33 percent decrease in peak vehicle traffic, and
  - 106 percent increase in off-peak vehicle traffic.



Mode Shift Sensitivity Conjoint Research Overview

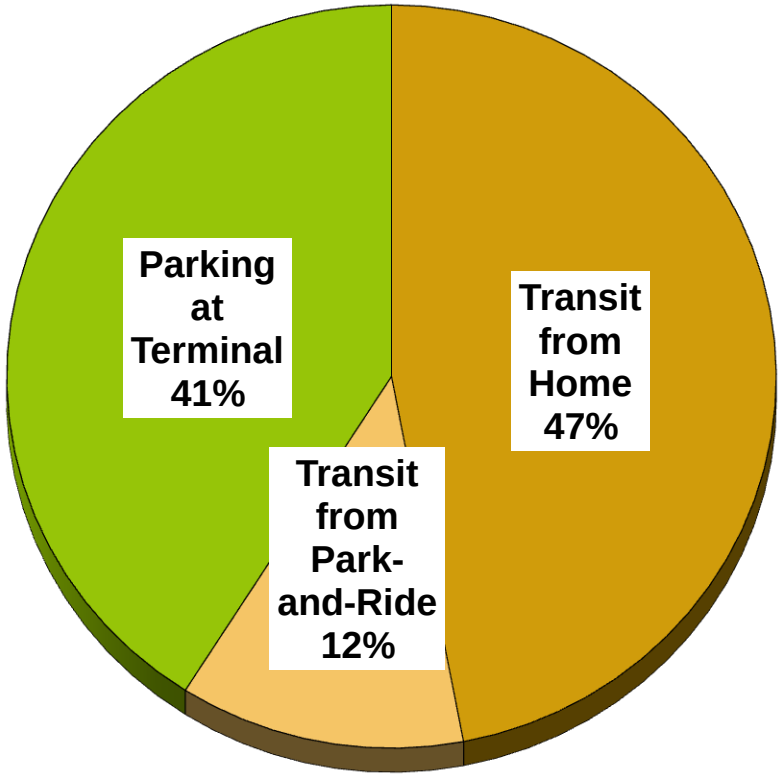
- Additional research was completed with vehicle drivers who completed the summer on-board surveys and agreed to participate in additional research.
  - Over 2,000 agreed to do additional research.
  - 675 participated in this study.
  - 461 completed a complex conjoint exercise.
- Purpose of the research was to gauge the potential to encourage current vehicle drivers to walk onto the ferry through a combination of incentives and disincentives, including:
  - Access to transit service or terminal parking where they live,
  - Access to transit or other transportation at their destination terminal,
  - Improved passenger access at the terminals,
  - Time it takes to make the trip walking compared with driving,
  - Cost of trip walking compared with driving; and
  - Availability of other services that remove potential barriers to walking.

Sample Conjoint Screen

Transportation to Ferry Terminal From Home	Drive and **park at a park-and-ride lot for free and take transit service** from the park-and-ride lot to the ferry terminal	**Curb-to-curb transit service** from your home to the ferry terminal (i.e., transit vehicle picks you up at your home and drops you off in front of the terminal)	Drive and **park at a park-and-ride lot for $5/day and take transit service** from the park-and-ride lot to the ferry terminal	**Curb-to-curb transit service** from your home to the ferry terminal (i.e., transit vehicle picks you up at your home and drops you off in front of the terminal)
Terminal Walkway Improvements (Click for Definition)	**Enclosed and Heated Walkways**	**Enclosed and Heated Walkways**	**Enclosed and Heated Walkways**	**Open Air Walkways**
Transportation from the Ferry Terminal to Your Final Destination (Click for Definition)	**Specially** scheduled transit service (average **2 minute wait**) from the ferry terminal pickup point **direct to** your final destination	**Park for free a 2nd car** in secured garage **at arrival terminal** you use to get to your final destination	**Specially** scheduled transit service (average **2 minute wait**) from the ferry terminal pickup point **direct to** your final destination	**Specially** scheduled transit service (average **2 minute wait**) from the ferry terminal pickup point **direct to** your final destination
Total Trip Time if Walk-On the Ferry (Current drive-on trip time: 150 minutes)	**262.5** minutes	**135** minutes	**135** minutes	**187.5** minutes
Cost of Trip - Ferry/Transit/Gas only (Current drive-on cost: $5.00)	**$ 2.50**	**$ 3.50**	**$ 2.50**	**$ 2.50**
Access to a Guaranteed Ride Home Program (Click for Definition)	**Free** (ferry fare cost only)	**$20.00** (plus ferry fare)	**Free** (ferry fare cost only)	**Free** (ferry fare cost only)
Access to a Carsharing Program at Arrival Terminal	**Free rental** for 5 hours (pay cost of gas only)	**Free rental** for 5 hours (pay cost of gas only)	**$20.00** for 5 hour rental (plus gas)	**Free rental** for 5 hours (pay cost of gas only)
Availablity of Package / Luggage Handling Service (Click for Definition)	**$5.00** for up to 5 package/luggage handling	**Free** for up to 5 package/luggage handling	**Free** for up to 5 package/luggage handling	**Free** for up to 5 package/luggage handling
	◯ A possibility ◯ Won't work for me	◯ A possibility ◯ Won't work for me	◯ A possibility ◯ Won't work for me	◯ A possibility ◯ Won't work for me

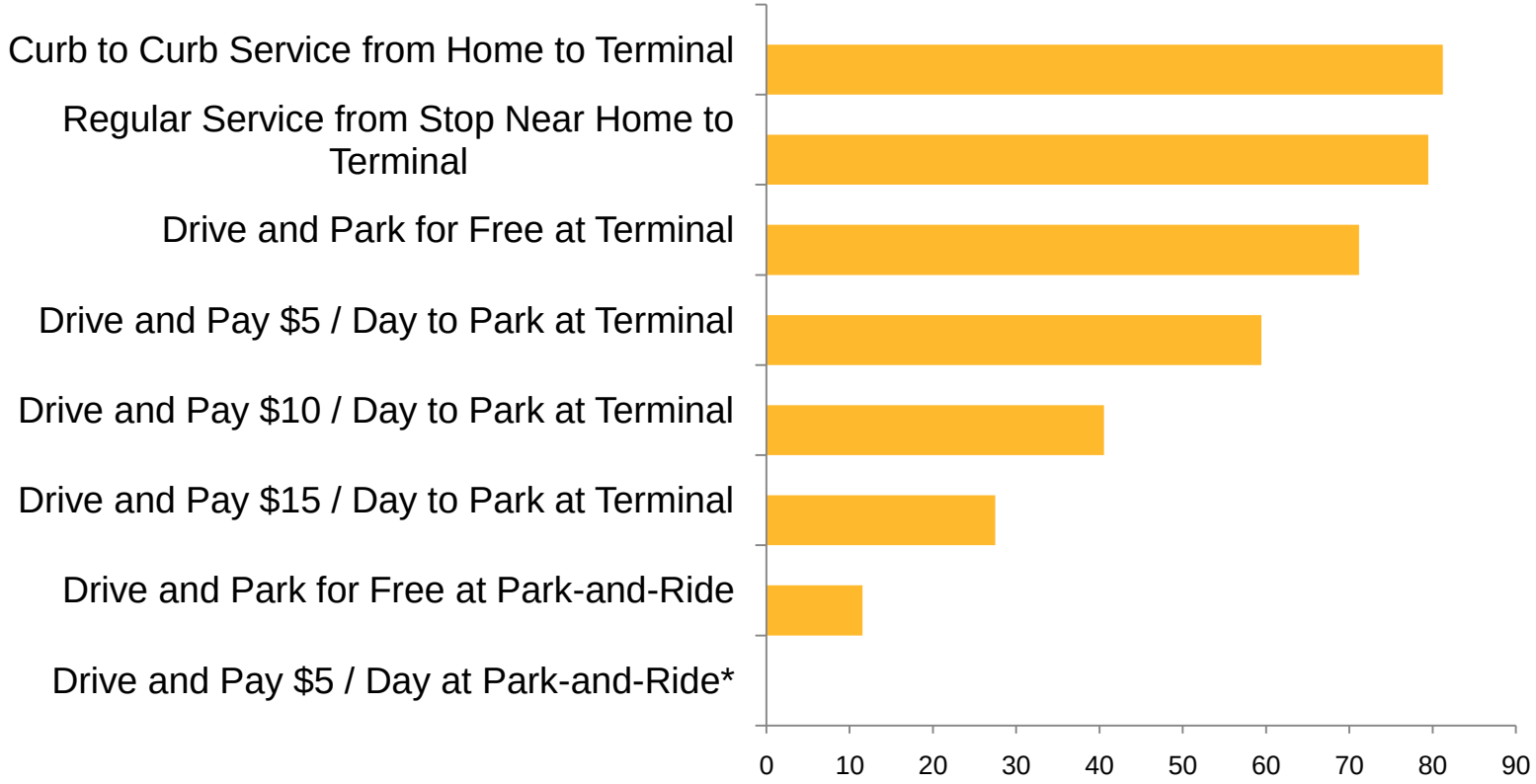
Key Findings: Preferred Option to Get from Home to Terminal

- When asked to choose:
  - Riders prefer taking transit to the terminal over driving their car and parking at the terminal.
- Driving to a park-and-ride lot and then taking transit to the terminal is not an attractive choice.



Preference for Different Options for Getting from Home to Terminal

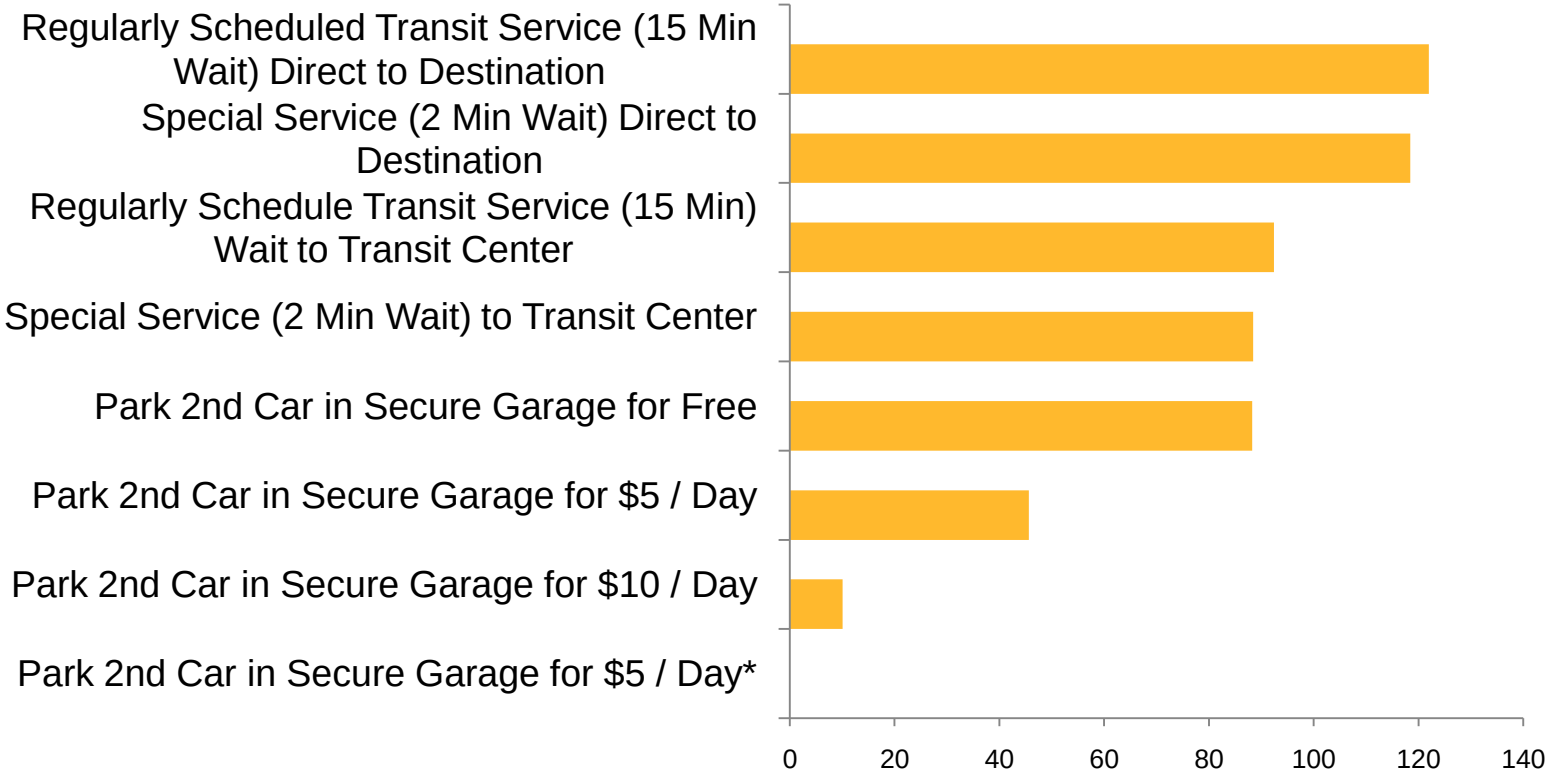
- It is noteworthy that there is little difference in preference for the more expensive approach of providing curb-to-curb service versus the more traditional fixed route (with stops) transit service.



**Utilities are scaled to zero, such that the level with lowest utility has a value of zero; bar then does now show.*

Preference for Different Options for Getting from Terminal to Final Destination

- It is noteworthy that there is little difference in preference for regular transit service with a potential 15 minute wait over special service with a 2 minute wait.



**Utilities are scaled to zero, such that the level with lowest utility has a value of zero; bar then does now show.*

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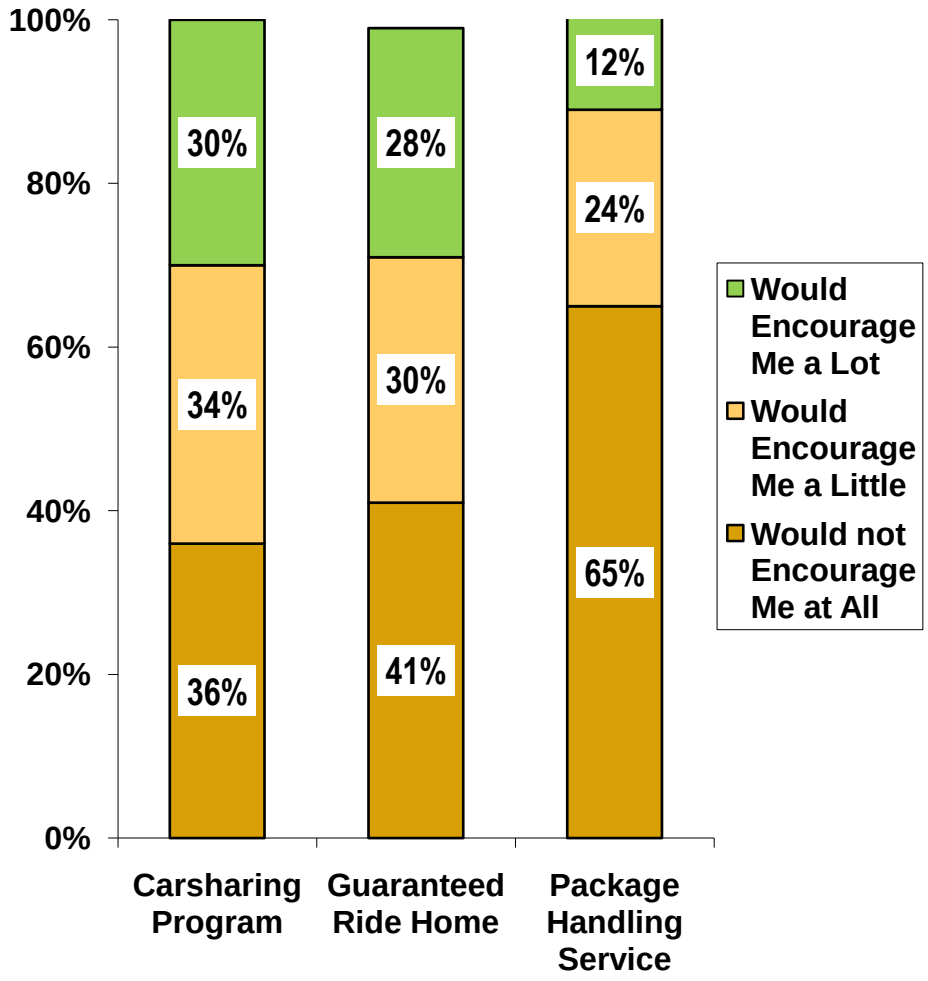
Interest in Convenience Services to Help Mobility

- Riders clearly see value in a guaranteed ride home and car sharing program
- Less interest in a package handling service (helping to load package and luggage), except among:
  - San Juan Island riders
  - Non-commuters



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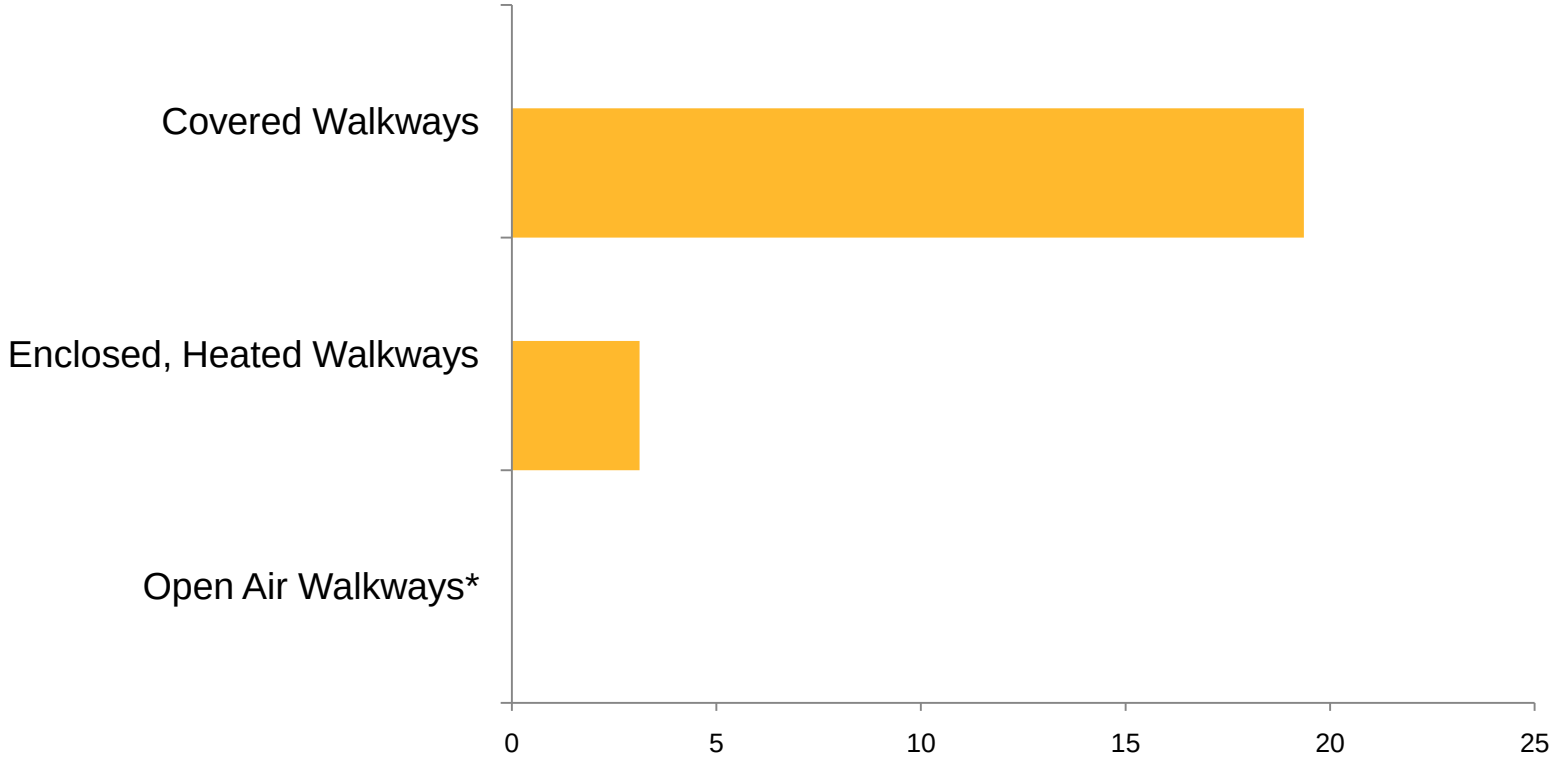
Preference for Passenger Access at Terminals

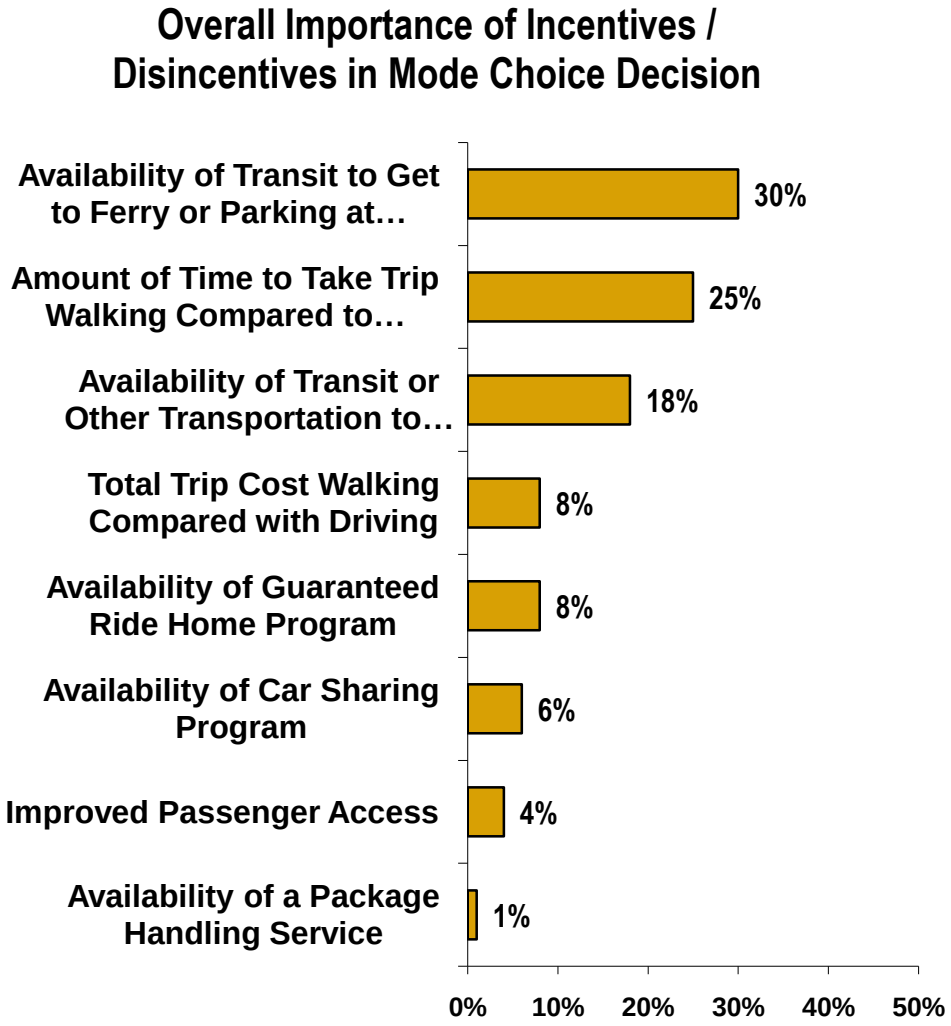
- Contrary to what one might expect, the highest preference is not given to enclosed and heated walkways.
  - Instead, riders have higher preference for overhead, covered walkways.



**Utilities are scaled to zero, such that the level with lowest utility has a value of zero; bar then does now show.*

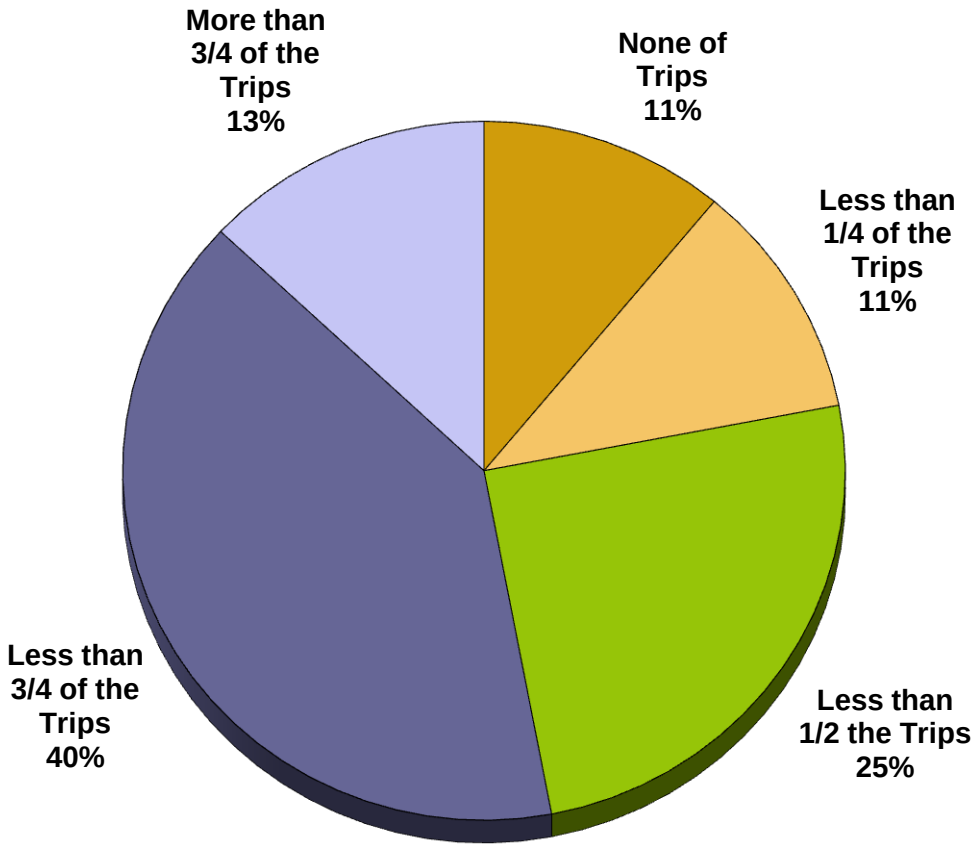
Important Factors in Mode Choice Decision

- Three factors clearly dominate the decision to drive versus walk-on:
  - The availability of transit or another alternative such as transit from a park-and-ride lot or parking at the ferry to get from their home to the ferry;
  - The amount of time the trip takes walking instead of driving;
  - The availability of transit or a second car to get to their final destination.
- Time is three times as important as cost!!!!!



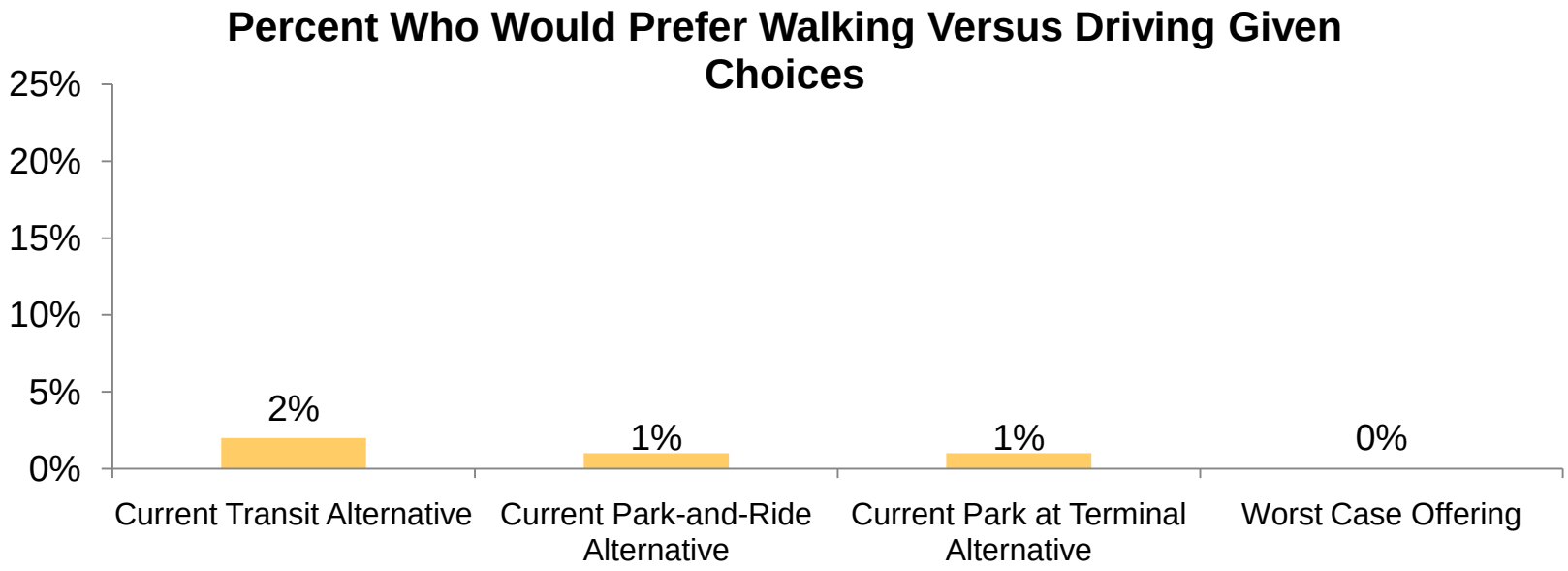
Percentage of Trips that Could be Possibilities for Walking

- More than half (53%) of vehicle drivers feel that at least half of the trips they were shown would be possibilities for them to take as a walk-on passenger



Preference for Existing Services

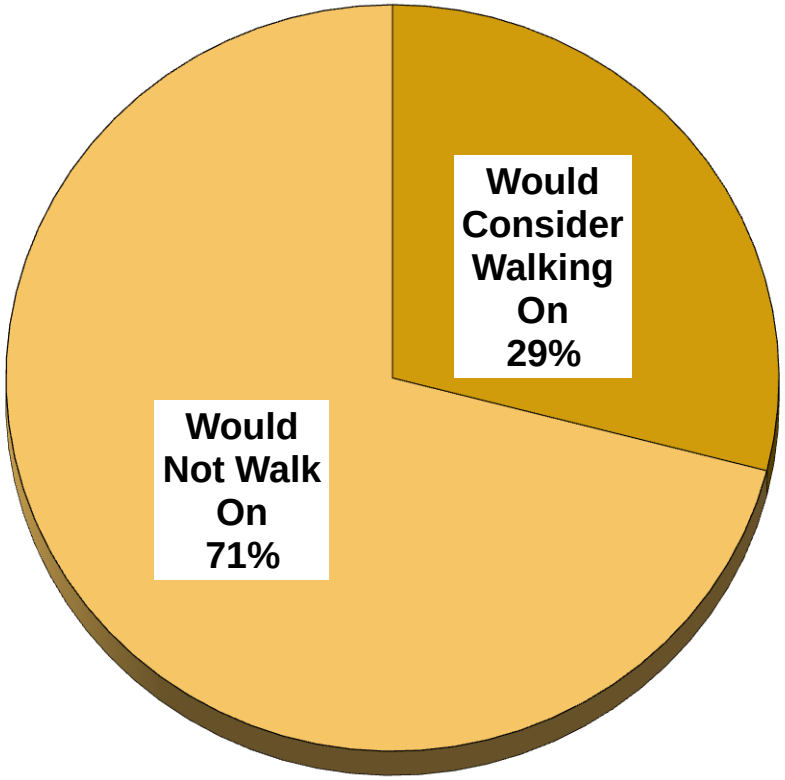
- It is clear that the existing alternatives do not fit current vehicle drivers' needs.



Current transit scenario: Transit from stop near home, open air walkways at some terminals / enclosed at others, regularly scheduled service to a transit center to reach destination, takes 50 percent longer than current drive-on trip, 70 percent of cost, guaranteed ride home program would cost $20, car sharing is $80, and a package service would cost $10.
Current park-and-ride scenario: Drive to park-and-ride lot, open air walkways at some terminals / enclosed at others, regularly scheduled service to a transit center to reach destination, takes 50 percent longer than current drive-on trip, 70 percent of cost, guaranteed ride home program would cost $20, car sharing is $80, and a package service would cost $10.
Current park at terminal scenario: Park at terminal for $5 / day, open air walkways at some terminals / enclosed at others, regularly scheduled service to a transit center to reach destination, takes 50 percent longer than current drive-on trip, 70 percent of cost, guaranteed ride home program would cost $20, car sharing is $80, and a package service would cost $10.
Worst case scenario: Drive to park-and-ride and pay $5, open air walkways at all terminals, park a second car for $15 / day, takes twice as long to get to destination, cost is the same as driving, all services charged at highest possible rates

Preference for Best Case Option

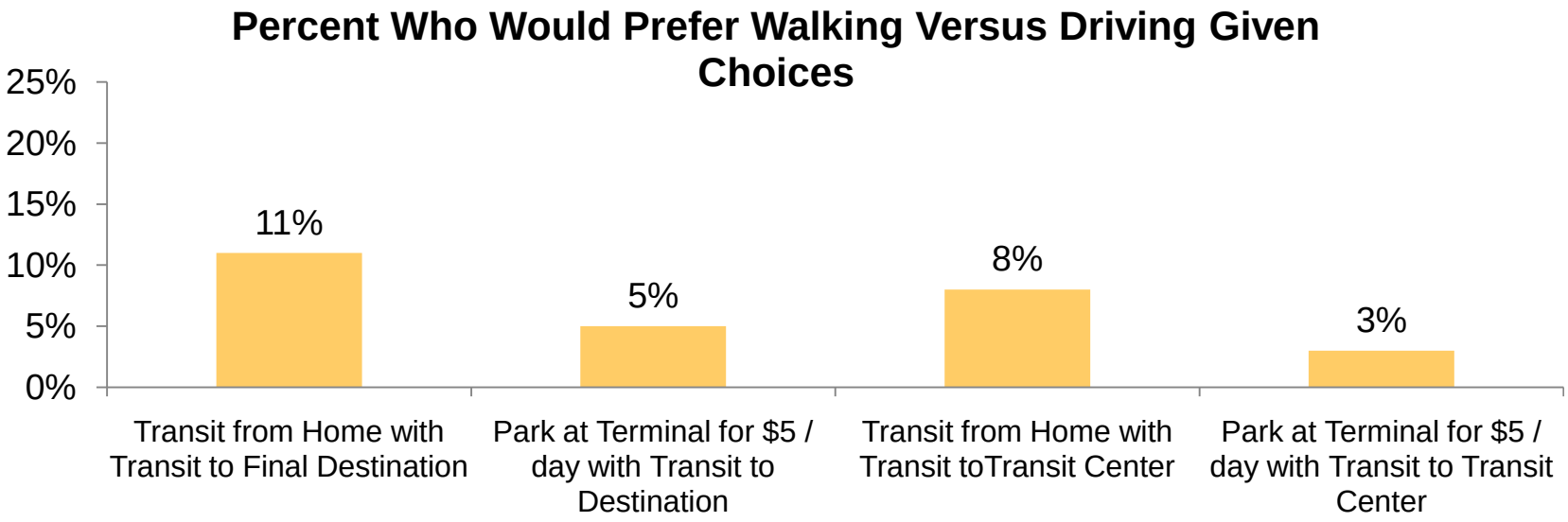
- If you vehicle drivers could get everything they want*, potentially 29 percent of them would consider walking onto the ferry.
  - However, the total offering is most likely unrealistic.



Best case scenario: Transit from stop near home, enclosed walkways at all terminals, regularly scheduled service direct to destination, takes 10 percent less time than current drive-on trip, 50 percent of cost, all services at no cost

Preference for Potential Services

- It is possible to configure a reasonable set of options that would encourage between 11 and 16 percent of drivers to walk onto the ferry.



All other choices held constant at and assumes that:
A guaranteed ride home program could be structured that would cost the rider $10 to use
A car sharing program could be structured that would cost the rider $40.00 to use for five hours
A package handling program could be offered for $5.00 for five packages / pieces of luggage
Covered walkways to get to the terminal
Trip cost 50% of the cost to drive
Time to get to destination is 90% of time to drive

Transit Improvements

- Winter riders clearly support all of the proposed transit improvements.
  - Support is highest among Fauntleroy / Vashon and Point Defiance / Tahlequah riders.

	ALL WINTER	SEA/ BAI	SEA / BRE	EDM/ KIN	MUK / CLI	FAU / VAS	FAU / SOU	PTD / TAH	PTT / KEY	ANA / SAN
	% Agree That WSF Should. . .									
Coordinate transit & ferry schedules	82%	83%	83%	79%	78%	**90%**	82%	**93%**	78%	78%
Provide new transit routes	71%	69%	71%	70%	67%	83%	73%	80%	65%	74%
Provide more park-and-ride lots	70%	70%	69%	72%	68%	75%	67%	74%	72%	69%
Closer access to drop off / pick up passengers	67%	65%	68%	70%	63%	71%	62%	68%	75%	68%
Create dedicated lanes for buses to access terminals	61%	63%	63%	60%	59%	64%	52%	63%	55%	51%

Summary of Key Findings – Opportunities to Shift Peak Vehicle Demand

- Small but critical segments have the flexibility to shift their travel behaviors.
  - While small, these shifts could translate to substantial increased capacity.
- As noted in the previous section, an across-the-board fare increase will have little effect on ridership behavior.
  - Similarly, an increase in vehicle fares while maintaining current walk-on fares has little effect.
- Increasing vehicle fares during peak travel periods maintaining or decreasing fares during off-peak periods has a significant effect on behavior.
  - Notably, there is a significant shift of vehicle traffic to off-peak hours.
  - There is also the potential to lose some ridership.

Summary of Key Findings (cont'd)

- Vehicle drivers are clearly interested in the development of transit and other services that would enable them to walk onto to the ferry instead of driving.
  - However, their likelihood of using these services will be tempered by the impact walking onto the ferry and using transit or another means to get to their destination will have on their total trip time.
  - The addition of other services that remove the barrier to using transit will have minimal impact.

Operational Strategies

Improvements to Walk-On Experience

- Riders generally support most improvements to walk-on passenger access.

	All Winter Riders	SEA/ BAI	SEA/ BRE	EDM / KIN	MUK/ CLI	FAU/ VAH	FAU/ SOU	PTD / TAH	PTT/ KEY	ANA/ SAN
					% Agree That WSF Should . . .					
Offer fare discounts / incentives	79%	**82%**	**81%**	75%	76%	**88%**	75%	83%	69%	76%
Provide dedicated drop-off lanes	74%	77%	78%	73%	74%	77%	66%	68%	64%	62%
Provide sheltered secure bike parking	58%	**62%**	59%	57%	56%	60%	52%	53%	50%	55%
Improve sidewalk connections	57%	**66%**	**60%**	52%	57%	45%	53%	41%	41%	57%
Improve bicycle connections	58%	**68%**	55%	57%	52%	51%	51%	51%	54%	60%
Provide separate, covered walkways	58%	**61%**	**64%**	**60%**	58%	45%	56%	39%	52%	55%
Offer a car sharing programs	57%	58%	52%	55%	55%	63%	52%	57%	48%	**69%**
Phone / online parking reservations	49%	44%	49%	52%	58%	32%	48%	42%	54%	66%
Secure / sheltered bike parking	47%	39%	55%	52%	52%	45%	45%	49%	46%	45%

Attitudes toward a Reservation System

- Riders clearly have opinions about how a reservation system should be structured.
- They agree that . . .
  - The system should be dynamic and be able to inform people on how much capacity is reserved, how much is available for reservation, and how much is open for first come, first serve.
    - 70% agrees
  - There should be a policy that penalizes those that do not arrive on time – specifically that their space would be released for general boarding and they would forfeit their reserved space and payment.
    - 66% agrees
  - The system would offer a feature that would allow frequent users to be able to book a full week's travel with a single visit.
    - 56% agrees

Attitudes toward a Reservation System (cont'd)

- On the other hand, they have mixed opinions as to whether . . .
  - The amount of space that is set aside for reservations should be limited.
    - 47% agrees / 35% disagrees
  - Those using the reservation system should pay a premium fare.
    - 46% agrees / 37% disagrees
  - Regular riders should be given a priority.
    - 46% agrees / 32% disagrees
  - Some space should be available a month or more in advance while some should be available the day ahead.
    - 47% agrees / 28% disagrees
  - The system should be used only on those routes with high recreation / tourist traffic.
    - 40% agrees / 33% disagrees

Willingness to Pay for a Reservation

- In general, riders are more willing than unwilling to pay some level of a premium for a guaranteed spot at a guaranteed sailing time.
  - There are significant differences by route.

	ALL	SEA /BAI	SEA / BRE	EDM/ KIN	MUK/ CLI	FAU/ VAS	FAU/ SOU	PTD/ TAH	PTT/ KEY	ANA/ SAN	ANA/ SID
	Unwilling to Pay Any Premium Amount										
Winter	20%	19%	21%	23%	17%	19%	25%	14%	**33%**	22%	n.a.
Summer	32%	31%	27%	33%	**37%**	33%	28%	33%	32%	35%	**33%**
	Willing to Pay Some Premium										
Winter	47%	**51%**	44%	42%	**51%**	35%	38%	41%	**50%**	**58%**	n.a.
Summer	40%	42%	40%	40%	34%	36%	**44%**	31%	38%	**51%**	42%

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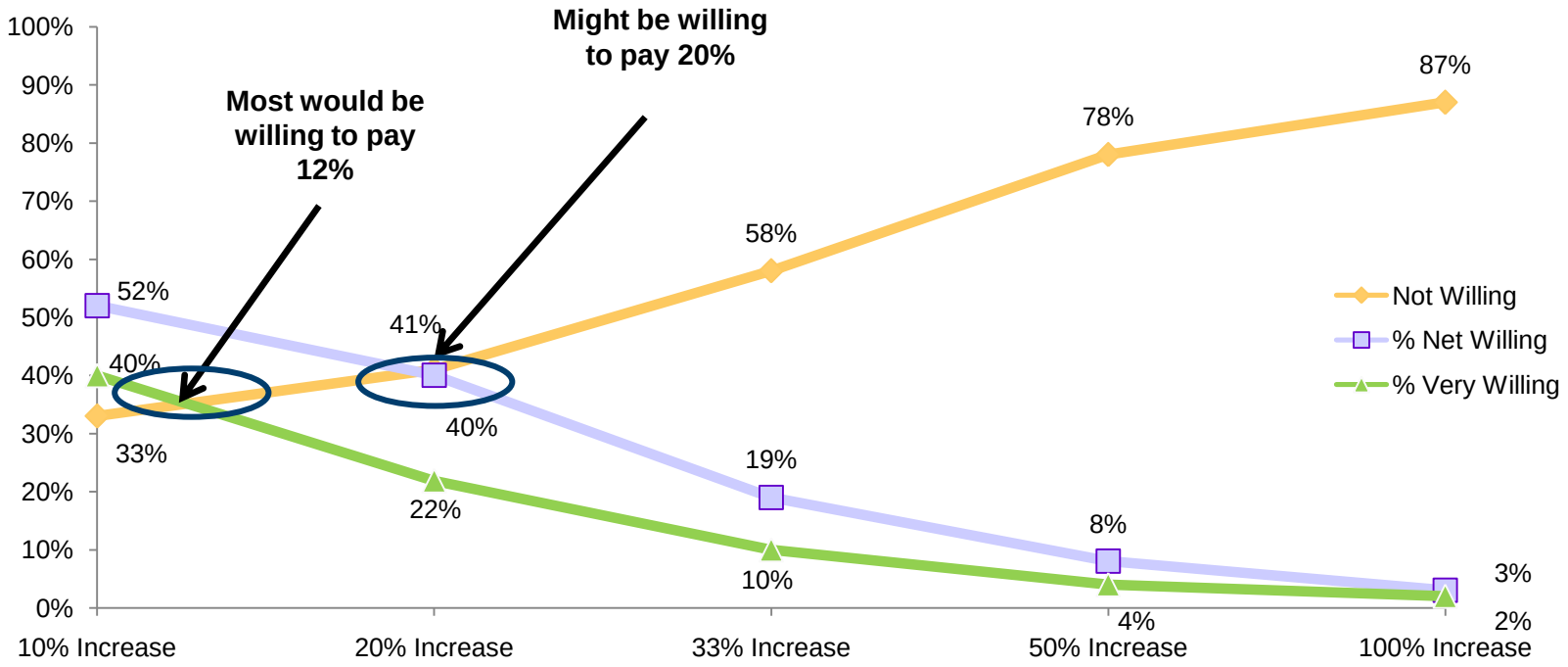
Premium Level Willing to Pay

- Riders appear willing to pay slightly more than a 10 percent premium.
  - They might be willing to pay as much as 20 percent.



Premium Level Willing to by Route

- Riders on Fauntleroy / Vashon and Point Defiance / Tahlequah are willing to pay only the smallest (10%) premium.

	ALL	SEA/ BAI	SEA / BRE	EDM/ KIN	MUK/ CLI	FAU/ VAS	FAU/ SOU	PTD/ TAH	PTT/ KEY	ANA/ SAN	ANA/ SID
	10% Over Current Average Vehicle Fare										
Net Willing	52%	56%	47%	50%	51%	**43%**	50%	**41%**	51%	70%	54%
Net Unwilling	33%	31%	34%	34%	35%	**40%**	35%	**42%**	28%	18%	25%
	20% Over Current Average Vehicle Fare										
Net Willing	40%	44%	37%	38%	41%	29%	35%	29%	43%	57%	31%
Net Unwilling	41%	39%	43%	43%	43%	47%	45%	56%	34%	25%	51%
	33% Over Current Average Vehicle Fare										
Net Willing	19%	20%	16%	19%	21%	13%	12%	8%	18%	29%	8%
Net Unwilling	58%	56%	59%	60%	58%	65%	65%	64%	54%	46%	69%

Summary of Key Findings – Operational Strategies

- All riders support improvements to the walk-on passenger experience.
  - There are clear differences by route that suggest opportunities for targeted improvements.
- Riders have clear opinions regarding a reservation system and how it should work. They appear to feel that a reservation system should be offered.
- Overall, riders are willing to pay a reasonable premium for a reservation – between 12 and 20 percent over the current fare.

Overview of Reporting

Final Analysis & Reporting

- The Executive Summary is supported by a series of Technical Papers. . .
  - Technical Paper #1: Qualitative (Focus Group) Research
  - Technical Paper #2: WSF Customer Characteristics
  - Technical Paper #3: Opportunities to Shift Peak Vehicle Demand
  - Technical Paper #4: Attitudes Surrounding Fares
  - Technical Paper #5: Attitudes toward Proposed Operational Strategies
  - Technical Paper #6: General Attitudes Toward WSF
  - Technical Paper #7: General Market Area and Infrequent Rider Survey
  - Technical Paper #8: Freight Customer Survey
- All Technical Papers are contained on the CD accompanying the Executive Summary

Other Supporting Documentation

- Also included on the CD are supporting materials related to the project. . .
  - Past presentations
  - A video highlight of the focus group research
  - Comprehensive data tabulations of the on-board survey data for the March only, July only, and combined March & July survey waves
    - By route and by boarding mode and travel time within route
    - Ridership characteristics
    - Demographics
    - Attitudes
  - Data tabulations or frequencies for other survey efforts
- Final raw datasets in SPSS are available from WSTC upon request

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Questions?