



Opinion Research Northwest

# 2008 Washington State Ferries Customer Survey



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Transportation Commission

## *Preliminary Findings On-Board Survey*



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# Project Overview



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# Statement of Purpose / Outcomes

## 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

# On-Board Survey Objectives

- Develop and implement a quantitative research methodology that yields reliable and statistically valid baseline results
  - Methodology must be replicable in future years
  - Methodology must provide reliable data at aggregate level and allow for reliable analysis among key customer segments
- Provide a comprehensive profile of WSF customers
  - Travel behavior
  - Demographics
- Test customer attitudes toward possible changes in fare policies and/or operations
  - Identify market segments most likely to be impacted by changes in pricing and/or operations

# Sampling

- A random sample of “trips” was selected
- Stratified by:
  - Route
    - Number of trips surveyed on each route ensures representation proportionate to ridership on that route
    - And a sample size large enough for reliable analysis at the route level
  - Time of day
    - Peak versus off-peak
    - Weekday versus weekend

# Sampling (cont'd)

- Data is weighted according to the sampling plan, to represent general population of WSF customers within routes
  - Currently uses January 2006 ridership data
  - Current 2008 data is now available from WSF and data will be updated to reflect current ridership figures
- The results provided today represent a preliminary picture of WSF customers
  - This data will be combined with the second wave of on-boards to provide a more comprehensive picture of customers

# Interviewing Outcomes

- We approached more than 29,000 WSF customers on 77 different trips during March 2008

Route	Estimated Returns*	Actual Returns	% of Estimate
Seattle / Bainbridge	1,789	2,060	115%
Seattle / Bremerton	581	758	130%
Edmonds / Kingston	1,000	996	100%
Mukilteo / Clinton	999	646	65%
Fauntleroy / Vashon / Southworth	539	519	96%
Point Defiance / Tahlequah	185	93	50%
Keystone / Port Townsend	200	128	64%
Anacortes / San Juans	191	271	142%
Total	5,510	5,471	99%

\* (based on January 2006 WSF Ridership)



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# Key Findings



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## *Customer Characteristics*

# Customer Demographics

- WSF customers match the gender split in the general population in Washington
  - 50% male / 50% female
- WSF customers are somewhat older than the general population in Washington
  - Relatively few (5%) are less than 25 years of age
  - Over half (54%) are between the ages of 45 and 64, compared to 36% in the general population
  - On average, WSF customers are 52 years of age

# Customer Demographics (cont'd)

- Four out of five (79%) WSF customers are employed
  - 63% are employed full-time
- 16% are retired
  - An above-average number of Mukilteo / Clinton, and Edmonds / Kingston customers are retired – 25% and 22%, respectively
- WSF customers are relatively affluent
  - Median household income is \$81,242 compared to
    - \$52,583 for Washingtonians in general
    - \$55,257 for Kitsap County

# Tenure Riding

- On average, WSF customers have been riding the ferries for 12 years – three out of five (60%) have been riding for more than 10 years

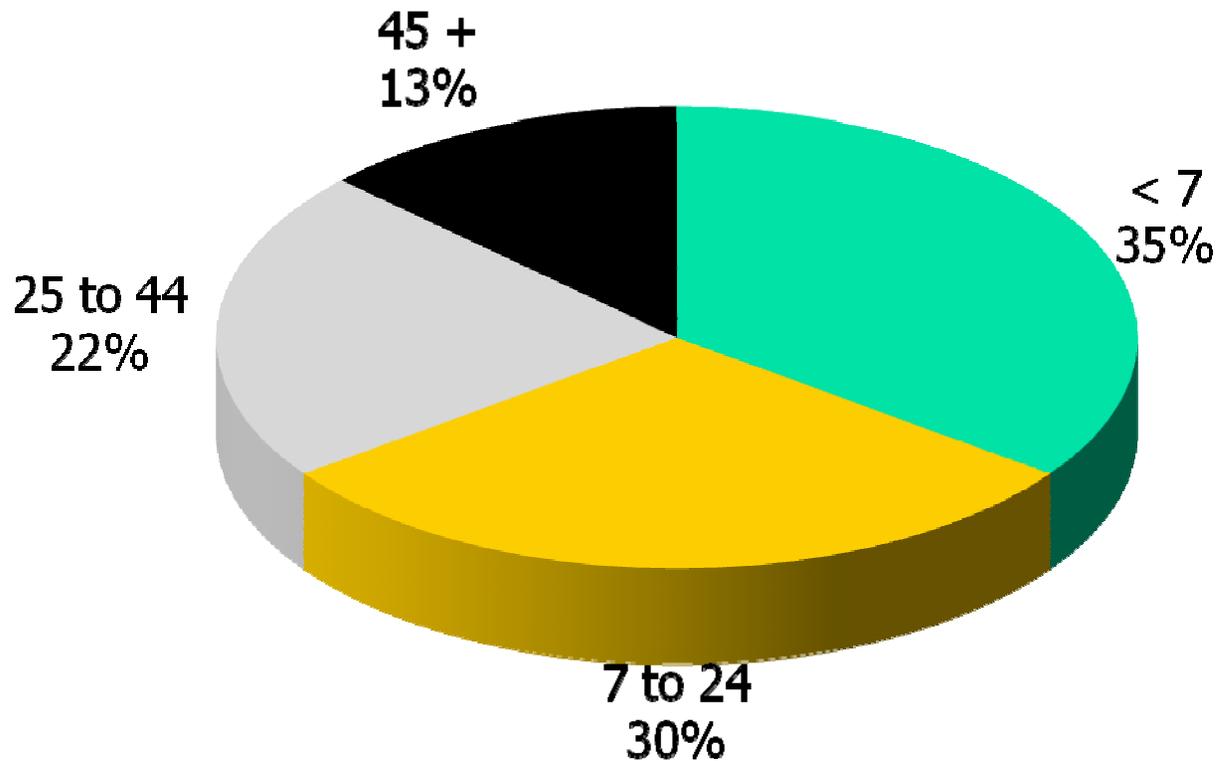
	ALL	SEA/ BAIN	SEA/ BRE	EDM/ KIN	FAU/ VAS	FAU/ SOU	PTD/ TAH	MUK/ CLI	KEY/ PTT	ANA/ SAN
First Time	2%	2%	3%	1%	<1%	2%	3%	0%	2%	5%
< 1 Year	4	4	9	4	2	10	0	3	7	2
1 – 2 Yrs.	6	7	10	5	6	6	1	6	7	4
3 – 5 Yrs.	12	13	13	11	14	13	12	14	9	8
6 – 10 Yrs.	15	15	21	15	17	14	11	14	11	9
> 10 Yrs.	60	59	43	64	61	56	73	63	63	72
Median	11.7	11.6	8.7	12.3	11.8	11.1	13.2	12.1	12.0	13.1

*Q12: How many years have you been riding the ferries?*

# Frequency of Riding

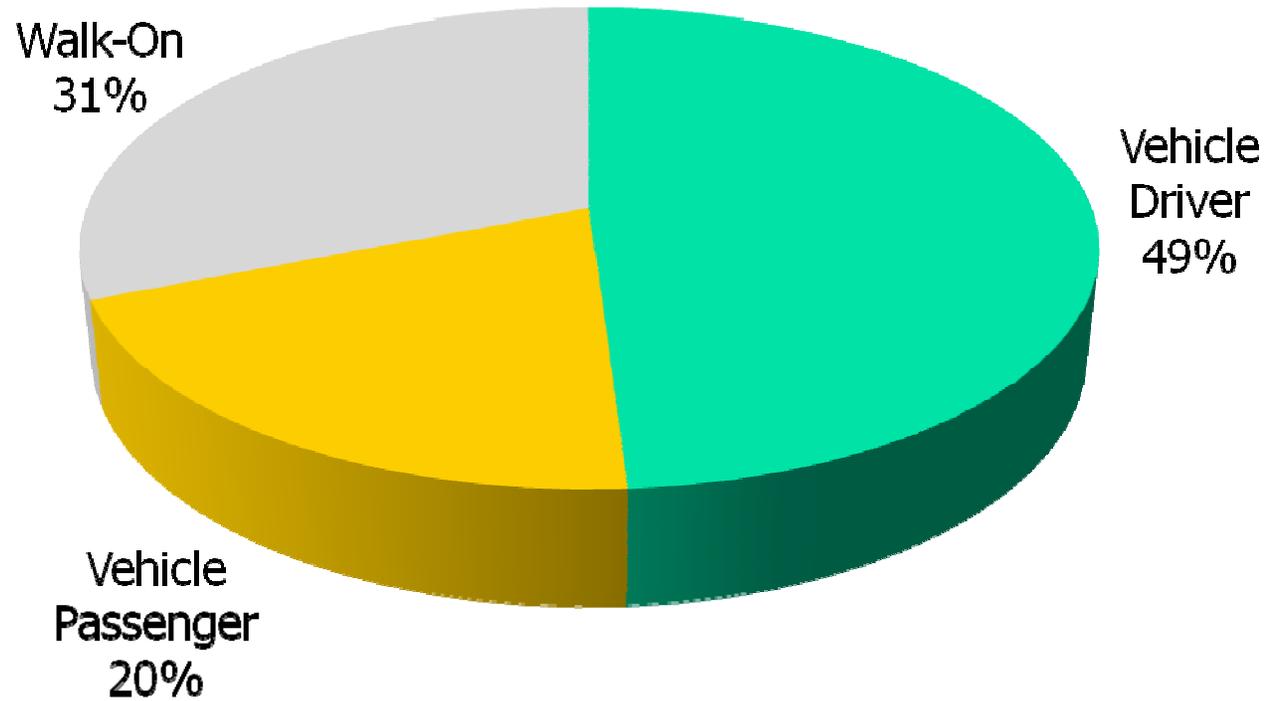
- WSF customers take an average of 21 one-way trips per month

**Total # of One-Way Trips / Month**

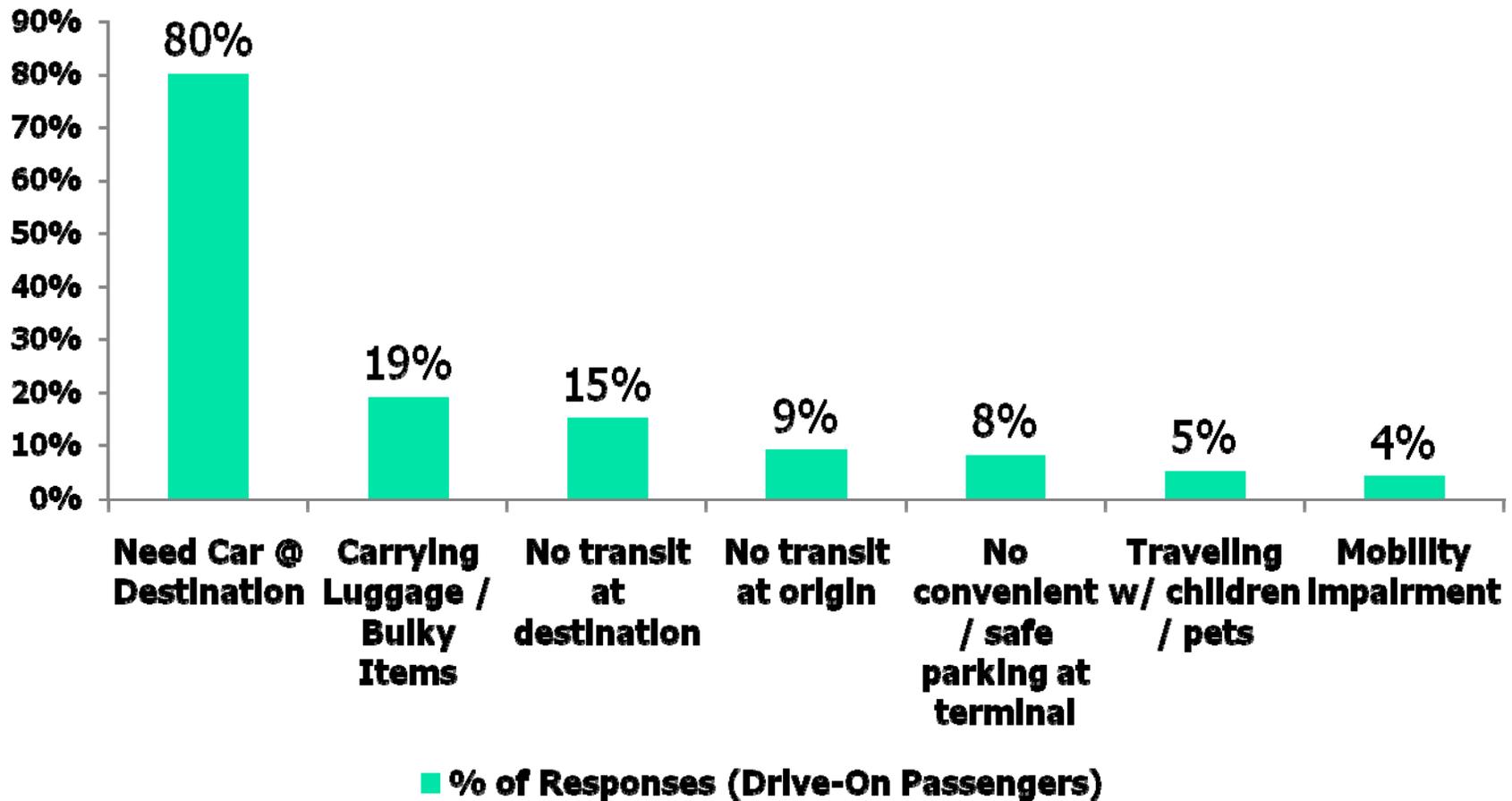


# Travel Mode

## Mode – Current Trip



# Factors Influencing Mode Choice



Q9B: Which of the following influenced your decision to drive on the ferry instead of walking on?  
(Sums to more than 100%; multiple response question)

# Frequency of Travel

- On average, the number of sampled trips taken monthly represents 76 percent of the total trips taken by a typical WSF customer

	Number of Sampled Trips / Month*	Total Monthly Trips**
< 7 Trips / Month	46%	35%
7 to 24 Trips / Month	24	30
25 to 44 Trips / Month	25	22
45 + Plus Trips / Month	5	14
Mean	16.6	20.8
Median	8.0	13.0

\* Q4: How many one-way trips do you take in a typical month for today's primary purpose between these two locations?

\*\* Q10: How many additional one-way trips do you take on the ferry in a typical month?

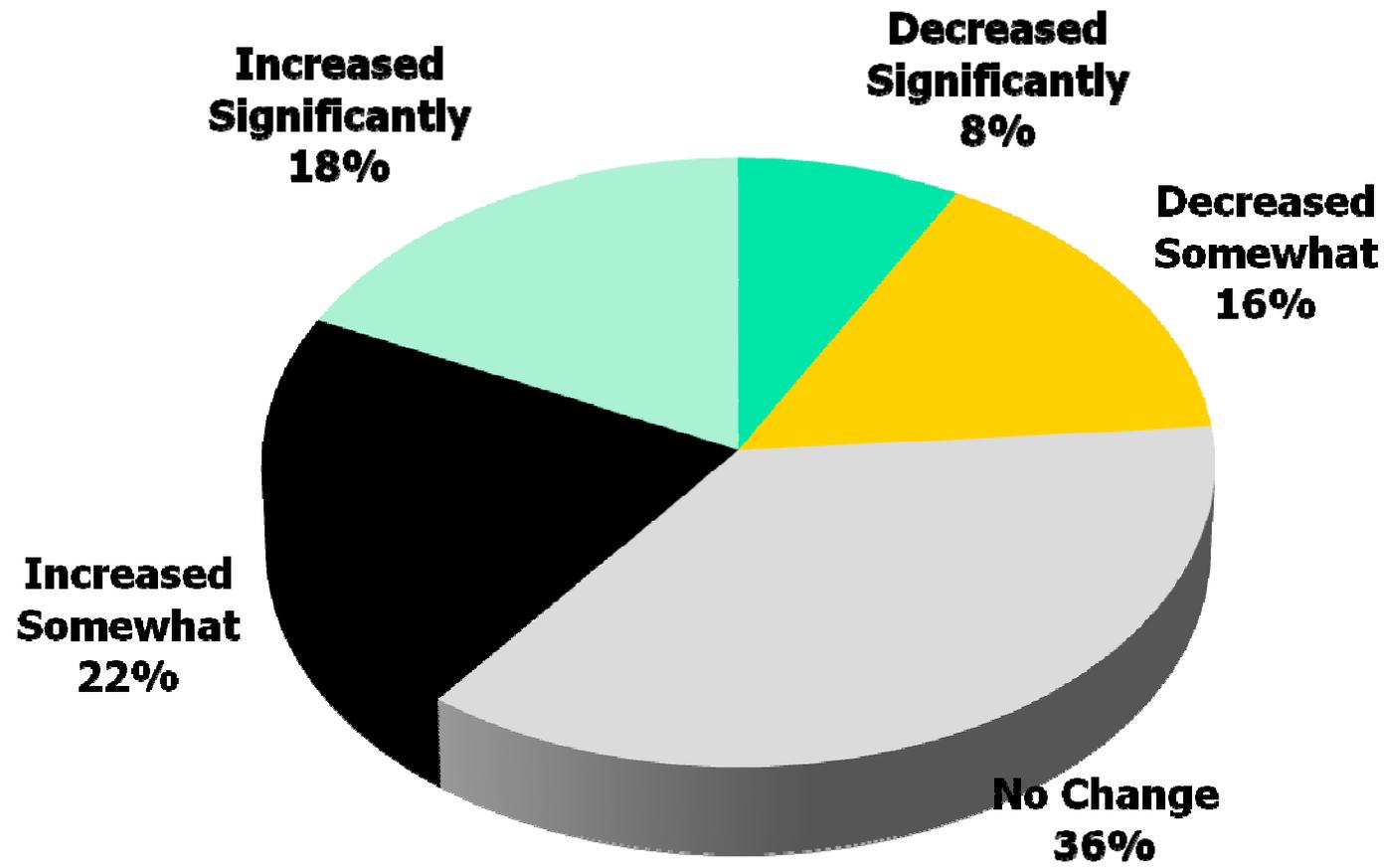
# # of Sampled Trips by Mode

- WSF customers take an average of 16 to 17 sampled (typical) trips / month
  - On average, they walk on for only 29% of these trips
  - Two out of five (39%) drive on all of the time

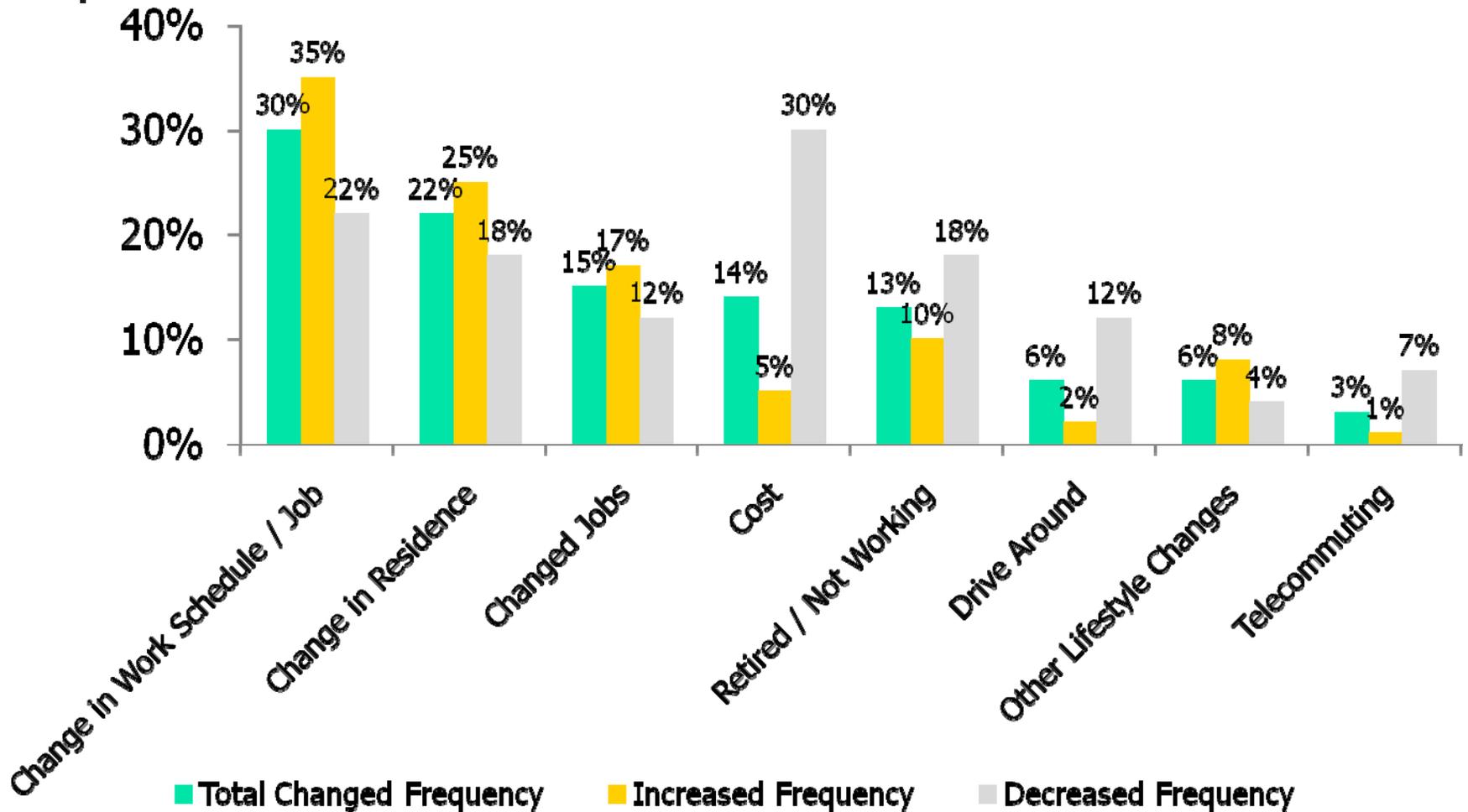
	Total Number of Monthly Trips				
	All	< 7	7 to 24	25 to 44	45 +
Average # of Sampled Trips	16.6	2.0	9.1	32.7	42.8
% of Sampled Trips Drive On	43%	47%	51%	37%	29%
% of Sampled Trips Vehicle Passenger	15%	26%	18%	5%	4%
% of Sampled Trips Walk-On Passenger	29%	20%	20%	41%	45%
% of Riders Whose Sampled Trips are 100% Vehicle / Vehicle Passenger	39%	45%	45%	32%	22%
% of Riders Whose Sampled Trips are 100% Walk-On	16%	15%	9%	24%	18%

# Change in Frequency of Riding

Q13: Since you started riding the ferries, has the frequency with which you ride . . .



# Reasons for Change in Ridership



Q14: Which of the following is the primary reason for the change?

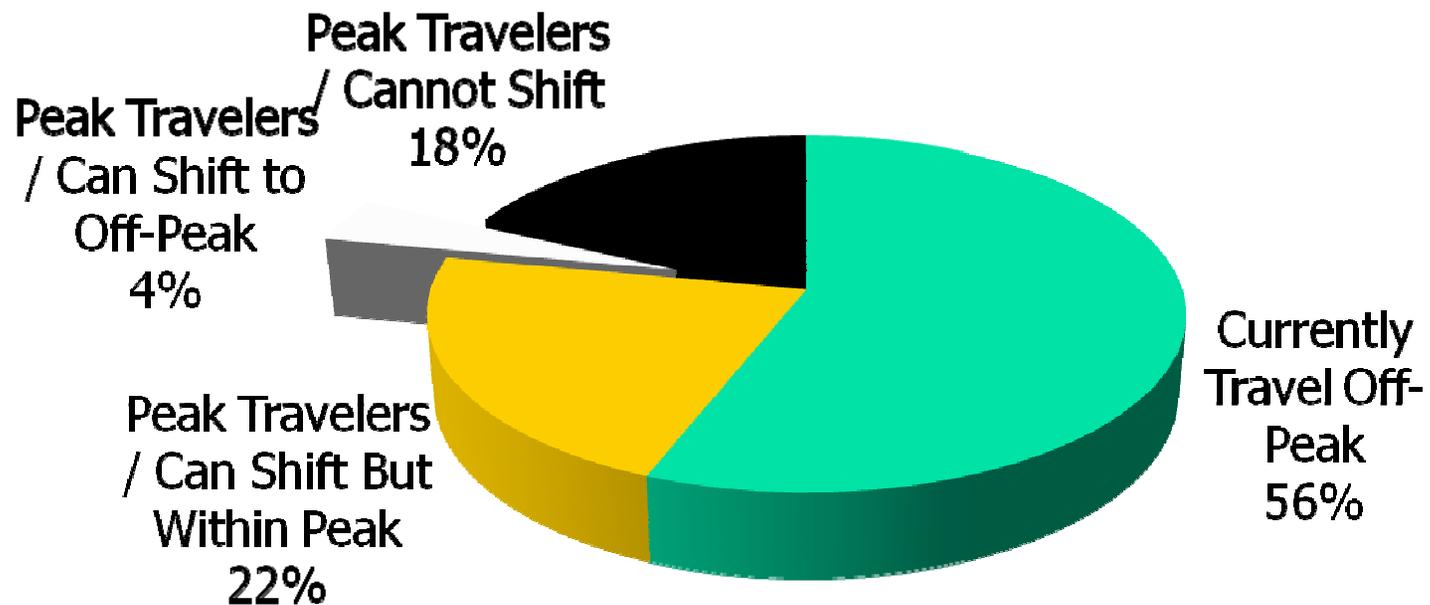
# Trip Purpose

	% of Trips	# of Weekly Trips
Commute Work / School	37%	140,355
Social	17	63,581
Personal Business	15	57,400
Tourism / Recreation	11	39,770
Work-Related Business	8	30,785
Medical	4	16,035
Special Event	4	13,467
Shopping	2	7,135
Other	2	9,238
Total Classified		377,764
Not Classified		10,551

*Q3: What is the primary purpose of this specific trip?*

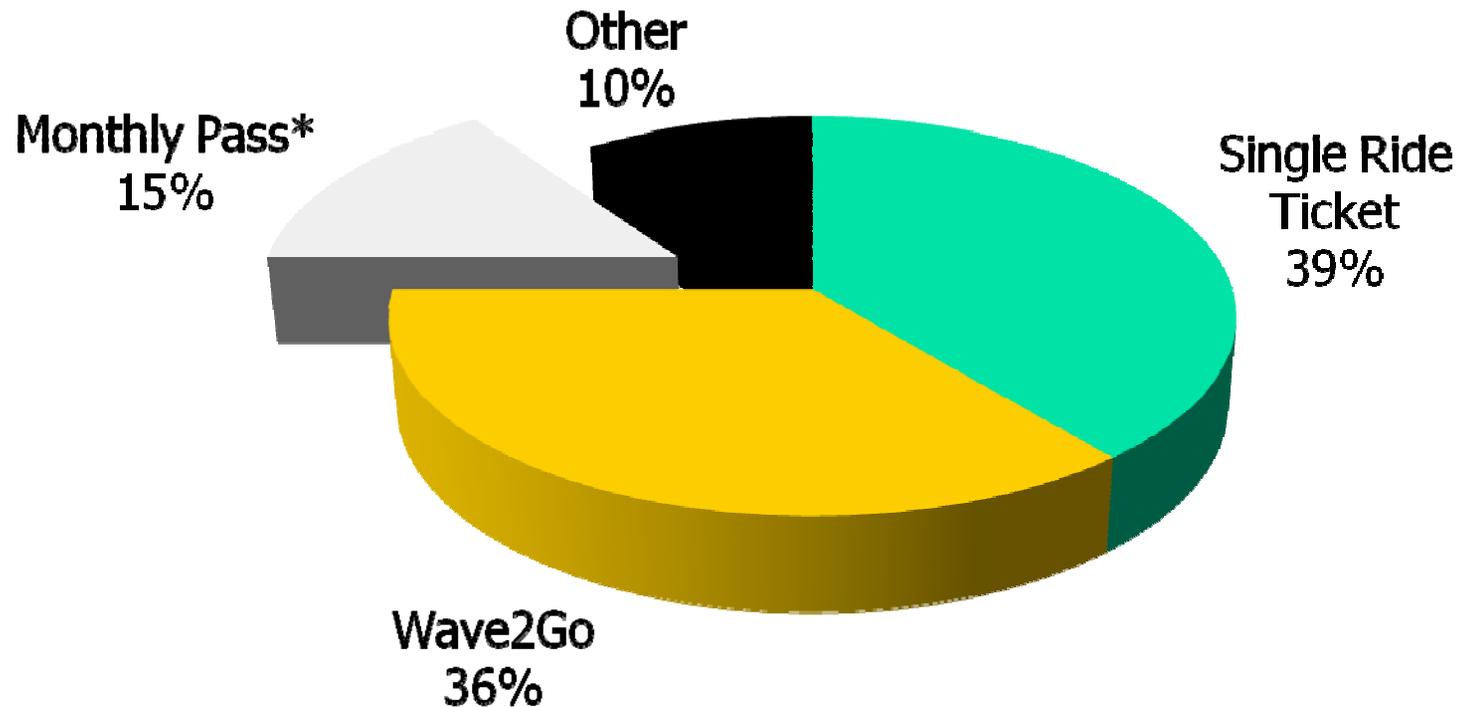
# Flexibility in Travel Time Choice

Q7: Could you have taken an earlier or later boat?  
If so, what time?



# Fare Payment

Q19: How did you pay your fare for your trip today?



\* Includes monthly WSF pass and Puget Pass



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# Key Findings

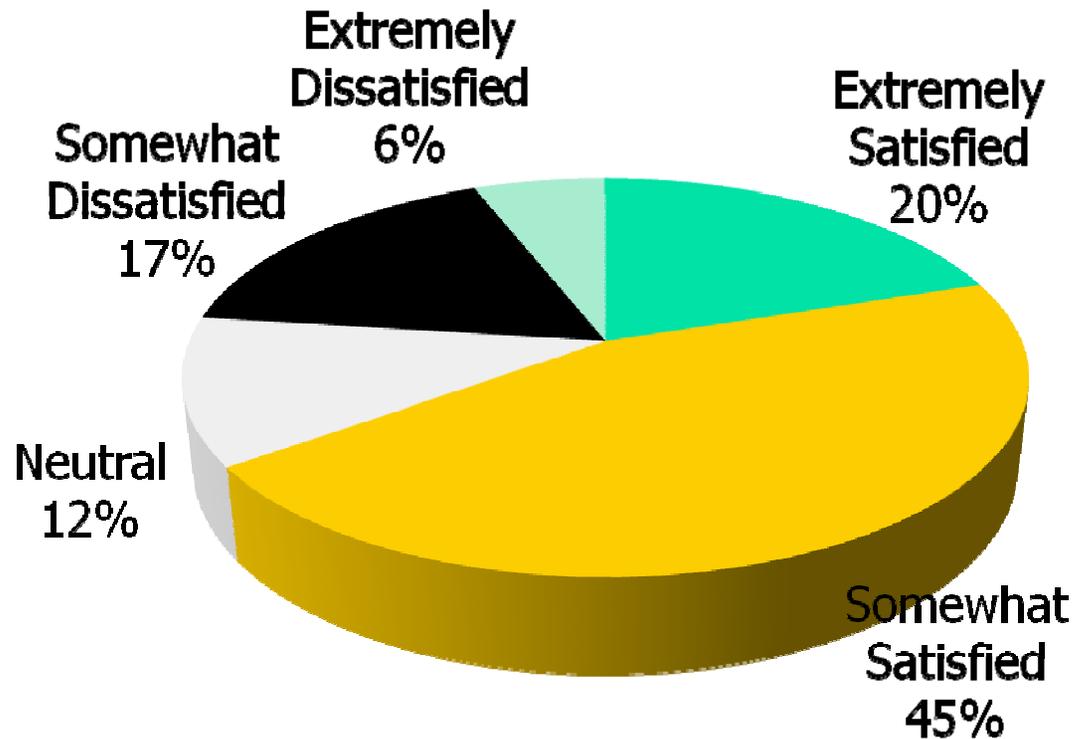


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## *Attitudes toward WSF*

# Quality of Service

Q32: Overall, how satisfied are you with WSF?



Mean = 3.55

*(Based on 5-point scale where "1" means "extremely dissatisfied" and "5" means "extremely satisfied")*

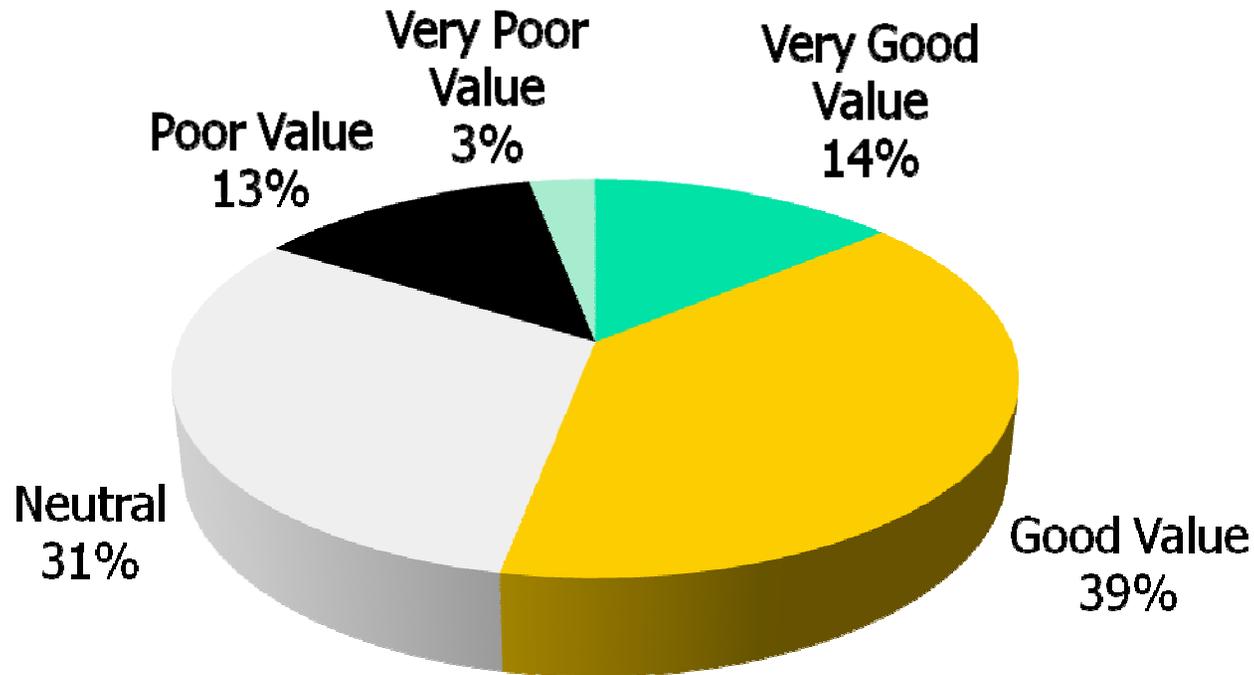
# Change from 2002

	2002	2008	% Change
Extremely Satisfied	26%	20%	(6%)
Somewhat Satisfied	48	45	(3%)
Neutral	11	12	1%
Somewhat Dissatisfied	11	17	6%
Extremely Dissatisfied	3	6	3%

*Q32: Overall, how satisfied are you with Washington State Ferries?*

# Value of Service

Q33: Which of the following best describes the value of riding WSF?



Mean = 3.46

*(Based on 5-point scale where "1" means "a very poor value" and "5" means "a very good value")*

# Change from 2002

	2002	2008	% Change
Very Good Value	11%	14%	3%
Good Value	37	39	2%
Neutral	32	31	(1%)
Poor Value	14	13	(1%)
Very Poor Value	5	3	(2%)

*Q33: Which of the following best describes the value of riding WSF?*



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# Key Findings

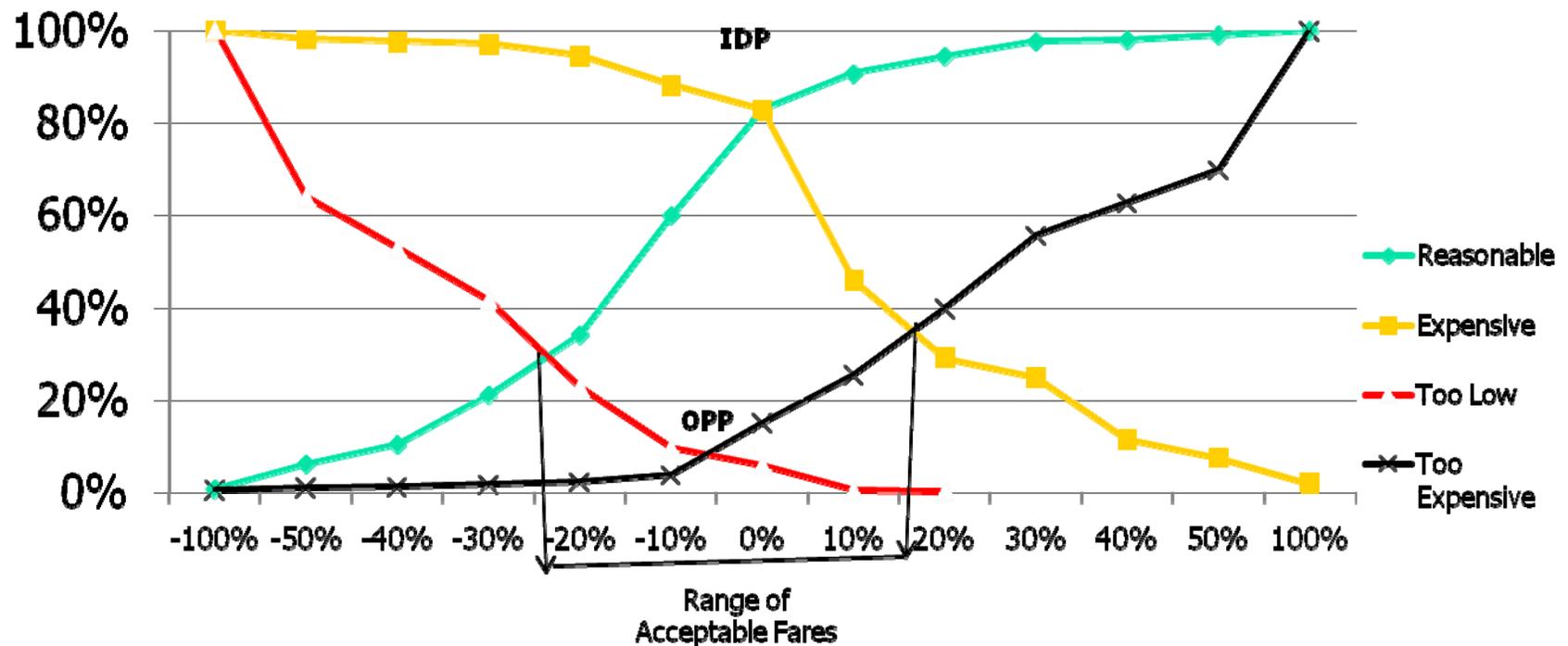


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## *Fares and Fare Policies*

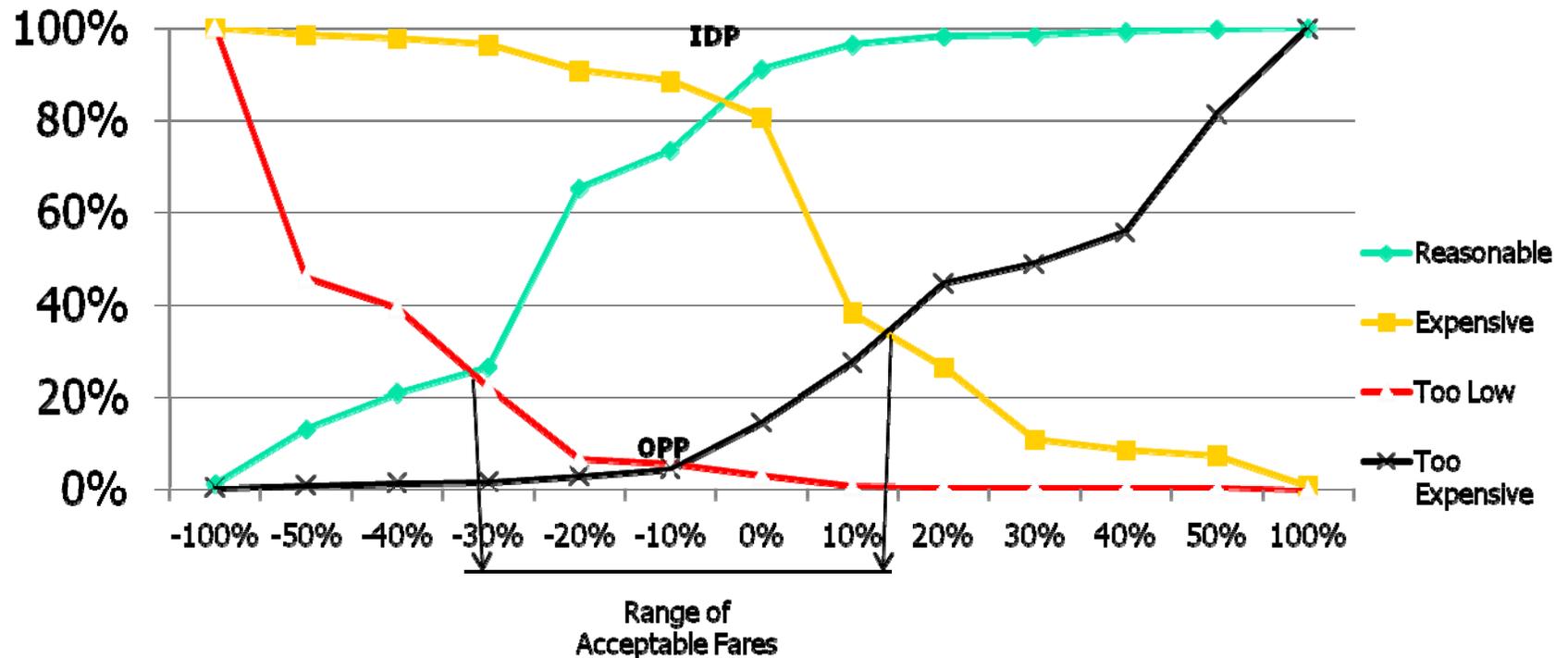
# Fare Sensitivity Meter – Vehicle

- Clearly customers would like lower fares – as much as 25% lower
- However, it would be acceptable for the posted (non-discounted) vehicle to increase by as much as 15%



# Fare Sensitivity Meter – Walk-On

- Walk-on customers indicate that the posted (non-discounted) walk-on fare could increase by as much as 15%



# Fare Policies

	Mean	% Agree	% Disagree
Overall Support	2.96		
Offer discount to vehicle passengers purchasing round trip tickets	4.11	76%	9%
Offer a stored value card	3.90	69	10
Change booth layout so 2 vehicles can pay at once	3.82	62	9
Use in-vehicle transponders	3.70	62	17
Larger vehicles pay more than smaller vehicles	3.10	47	37
Vehicles during off-peak hours should receive discount	2.96	42	39
On-board ticketing	2.95	38	35
Occasional riders should pay more than regular riders	2.55	32	52
Limit forms of payment for vehicles at toll booths	2.41	23	56
Vehicles during peak hours should pay higher fare	2.29	25	60
Eliminate ticket purchases at ticket counters for walk-ons	1.88	9	72
Eliminate ticket purchases at toll booths for vehicle passengers	1.85	11	75

*Q21A to Q21L: Indicate the extent to which WSF should do each of the following. Mean based on 5-point scale where "1" means "strongly disagree" and "5" means "strongly agree."*



# Key Findings



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## *Proposed Operational Strategies*

# Improvements to Passenger Access

	Mean	% Agree	% Disagree
Overall Support	3.66		
Offer discounts / incentives to walk-on / bicycle passengers	4.17	77%	9%
Provide dedicated lanes to safely drop off passengers	4.00	73	8
Provide / improve sidewalk connections to terminals	3.70	57	10
Provide / improve bicycle connections	3.70	58	11
Provide sheltered / secure bike parking at terminals	3.69	57	11
Provide covered / separated pedestrian walkways	3.67	58	13
Provide flex car rentals on destination side of terminal	3.61	56	14
Allow passengers to reserve / pay for parking on-line / by telephone	3.44	49	18
Provide secure / covered parking with covered walkways	3.36	47	22
Develop a bike sharing program at terminals	3.21	34	18

*Q16A to Q16J: Indicate the extent to which WSF should implement this strategy to encourage more bicycle and walk-on traffic? Mean based on 5-point scale where "1" means "strongly disagree" and "5" means "strongly agree."*

# Improvements to Encourage Use of Alternative Modes

	Mean	% Agree	% Disagree
Overall Support	3.83		
Coordinate transit and ferry schedules to leave adequate time	4.28	82%	5%
Provide new transit routes to serve the ferry with non or limited stop service	4.01	71	6
Provide more park-and-ride lots with good transit connections	3.96	70	7
Provide access for buses to drop off / pickup passengers closer to terminals	3.89	66	8
Allow smaller vanpools	3.76	60	9
Create dedicated lanes for buses	3.75	60	10
Provided dedicated vanpool / carpool staging areas / lanes	3.66	56	12
Give unregistered carpools the same benefits as formal / registered carpools	3.35	47	22

*Q18A to Q18H: Indicate the extent to which WSF should implement this strategy to encourage more use of transit and carpools / vanpools? Mean based on 5-point scale where "1" means "strongly disagree" and "5" means "strongly agree."*

# Frequency of Using Reservation System

	All	# of Vehicle Trips Monthly			
		< 7	7 to 24	25 to 44	45 +
Every Time Drive on	8%	8%	6%	8%	15%
Frequently (once or twice a week)	5	3	8	11	6
Occasionally (once or twice a month)	16	14	18	17	13
Rarely (a few times a year)	28	32	24	18	14
Never	27	27	26	29	<b>43</b>
Only in an Emergency	13	13	14	15	6

*Q24: If a reservation system was offered, how often would you pay a reasonable premium to reserve a guaranteed space on the ferry for your vehicle at a specific boarding time?*

# Willingness to Pay for Reservation

	# of Vehicle Trips Monthly				
	All	< 7	7 to 24	25 to 44	45 +
10% Premium	3.31	3.44	3.20	3.09	2.69
20% Premium	2.84	3.01	2.69	2.54	2.19
33% Premium	2.26	2.43	2.09	2.02	1.77
50% Premium	1.73	1.86	1.59	1.54	1.44
100% Premium	1.34	1.41	1.26	1.24	1.21

*Q25A to Q25E: To what extent would you be willing to pay each of the following additional premiums over the [average non-discounted vehicle fare] for a guaranteed space on the ferry for your vehicle at a specific boarding time for your typical trip? Mean based on 5-point scale where "1" means "not at all willing" and "5" means "very willing."*

# Frequency of Using Preferred Lanes

	All	# of Vehicle Trips Monthly			
		< 7	7 to 24	25 to 44	45 +
Every Time Drive on	9%	7%	9%	<b>13%</b>	<b>19%</b>
Frequently (once or twice a week)	7	3	10	<b>16</b>	<b>17</b>
Occasionally (once or twice a month)	16	15	20	15	11
Rarely (a few times a year)	23	28	18	12	12
Never	30	31	30	30	34
Only in an Emergency	12	13	11	11	5

*Q28: If a preferred vehicle lane was available to regular vehicle ferry users, how often would you pay a reasonable premium to use the lane when driving on the ferry?*

# Willingness to Pay for Preferred Lane

	All	# of Vehicle Trips Monthly			
		< 7	7 to 24	25 to 44	45 +
10% Premium	3.34	3.45	3.24	3.33	3.12
20% Premium	2.95	3.10	2.81	2.86	2.50
33% Premium	2.28	2.42	2.17	2.12	2.03
50% Premium	1.75	1.88	2.66	1.63	1.55
100% Premium	1.35	1.45	1.28	1.26	1.33

*Q29A to Q29E: To what extent would you be willing to pay each of the following additional premiums over the [average non-discounted vehicle fare] to use a preferred vehicle lane for your typical trip? Mean based on 5-point scale where "1" means "not at all willing" and "5" means "very willing."*

# HOT Lanes

	All	# of Vehicle Trips Monthly			
		< 7	7 to 24	25 to 44	45 +
Strongly Agree	13%	16%	12%	5%	9%
Somewhat Agree	16	20	14	6	4
Neutral	14	16	10	13	5
Somewhat Disagree	11	11	10	9	6
Strongly Disagree	46	37	54	<b>68</b>	<b>77</b>
Mean	2.40	2.67	2.20	<b>1.72</b>	<b>1.62</b>

*Q30: To what extent do you agree or disagree that WSF should institute a high occupancy toll (HOT) program? Mean based on 5-point scale where "1" means "strongly disagree" and "5" means "strongly agree."*



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# Next Steps



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# Additional Research

- On-Board Survey
  - 2<sup>nd</sup> wave to be completed in July 2008
  - Purpose: To develop a profile of summer riders, including regular and recreational customers
  - Shorter, more targeted questionnaire
- Freight Customers
  - Have identified 50 plus freight customers
  - Will be asked to participate in on-line forum to provide detailed descriptions of travel behavior, decision-making, and service considerations

# Additional Research (con't)

- Strategy Testing Research
  - Finalizing design to test customer response to:
    - Strategies to encourage shift from vehicle to walk-on
    - Congestion pricing to encourage mode shift from vehicle to walk-on and/or to off-peak travel periods
    - An across-the-board fare increase
- General Market Area Survey
  - RDD household survey of primary counties served by WSF
  - Will provide reliable estimate of percent of population who currently uses the system and the extent to which use has decreased / stopped