



market decisions  
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# Winter Wave Summary Presentation

Ferry travel from January 3 through March 27, 2012

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*Part of the Washington State Transportation  
Commission 2012 Ferry Research Initiative*



Washington State  
Transportation Commission

Conducted by  
Market Decisions Corporation



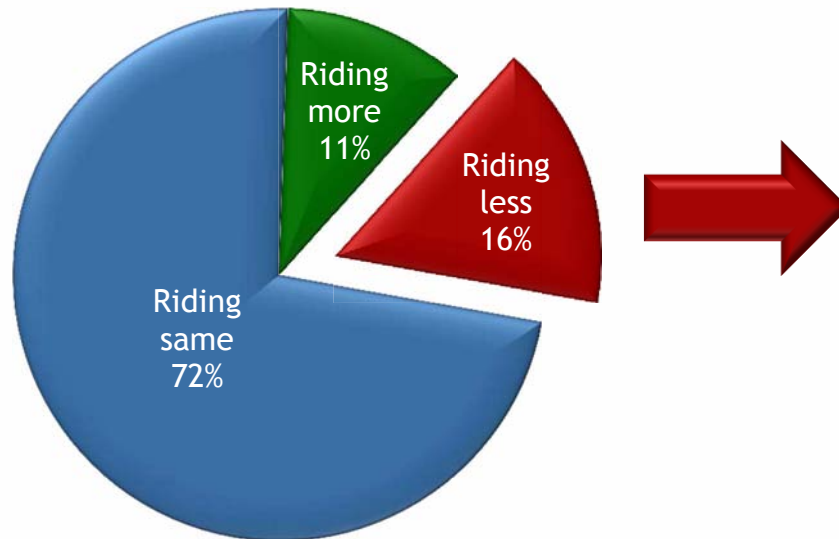
# Methodology

- ❖ In 2010, the Washington State Transportation Commission (WSTC) changed the process for how research is conducted regarding Washington State Ferries (WSF). In the past, stand-alone research projects were executed, but some of the issues facing ferry operations are of a longitudinal nature (changes over time). The decision was made to create the Ferry Riders' Opinion Group (FROG). FROG is an online community where ferry travelers have an ongoing opportunity to weigh in on ferry issues through surveys and quick polls (single questions). Since 2010, all WSF research has been conducted using the FROG panel.
- ❖ The research initiative in 2012 consists of the following main phases:
  - Winter Customer Survey (target audience: FROG panel members only)
  - Summer Customer Survey (target audience: FROG panel members & recreational/social riders)
- ❖ The main objective of the 2012 Winter research is to understand from the ferry riders' perspective their travel behavior, opinions, and attitudes regarding important issues currently facing the WSTC and WSF.
  - This overall objective resulted in the following areas of exploration:
    - Winter travel activity - ferry travel from January 3 through March 27, 2012.
    - Customer satisfaction - measure importance and satisfaction of terminal conditions, walk-on and transit services, toll booth interactions, loading and unloading procedures, vessel conditions, vessel crew interactions, on-time arrival and departures and WSF website and telephone services.
    - Household make-up - gauge household composition and ferry travel activity during the winter months.
    - Fare structure - measure support and impact of small car discounts.
    - Transit connections - determine impact of transit connections on ferry travel.
    - Tacoma Narrows Bridge - understand impact of Tacoma Narrows Bridge travel on ferry traffic.
    - Demographic characteristics of ferry customers - travel patterns, WSF satisfaction and demographic data.
- ❖ A total of one thousand seven hundred fifty-four (n=1,754) ferry riders completed the Winter 2012 survey between May 3 and May 15, 2012, yielding a maximum sample variable of +/- 2.3% at the 95% confidence level.



# Change in Ferry Ridership

## Ridership Compared To Year Ago (n=1,754)



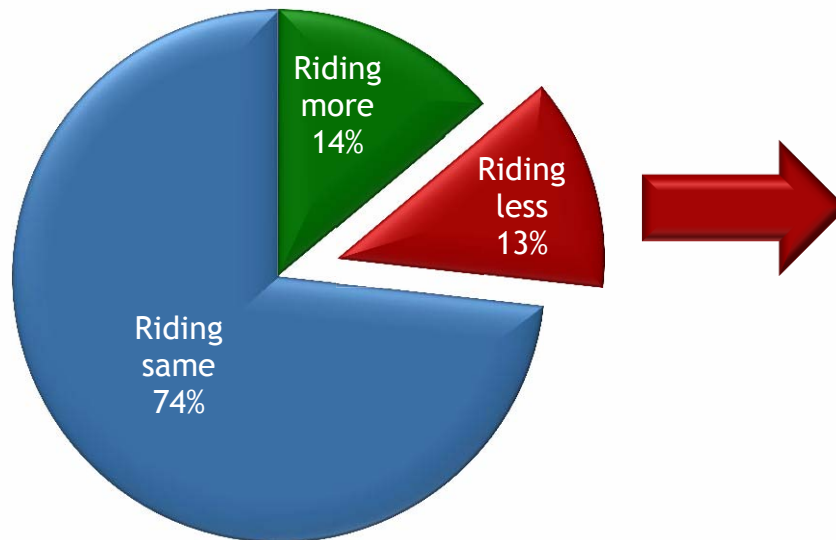
Top Reasons for Less Ridership	n=287
Less need to travel due to life circumstances	24%
Expensive/raising rates	15%
Changed jobs to a location that doesn't require as much ferry travel	14%
Started telecommuting/telecommute more	11%
Retired	11%
Moved to a location that doesn't require as much ferry travel	11%
Unemployed/employed part-time	10%

Q4 Compared to one year ago (Winter January-March 2011) would you say you personally ...  
Q5 Why do you ride the ferries less now?



# Expected Change in Ferry Ridership

## Expected Ridership in Next 2 Years (n=1,754)



Top Reasons for Lower Expected Ridership	n=220
Plan to move to a location that doesn't require as much ferry travel	23%
Expensive/raising rates	20%
Less need to travel due to life circumstances	14%
Plan to retire	13%
Plan to telecommute/will telecommute more	12%
Plan to change jobs to a location that doesn't require as much ferry travel	8%

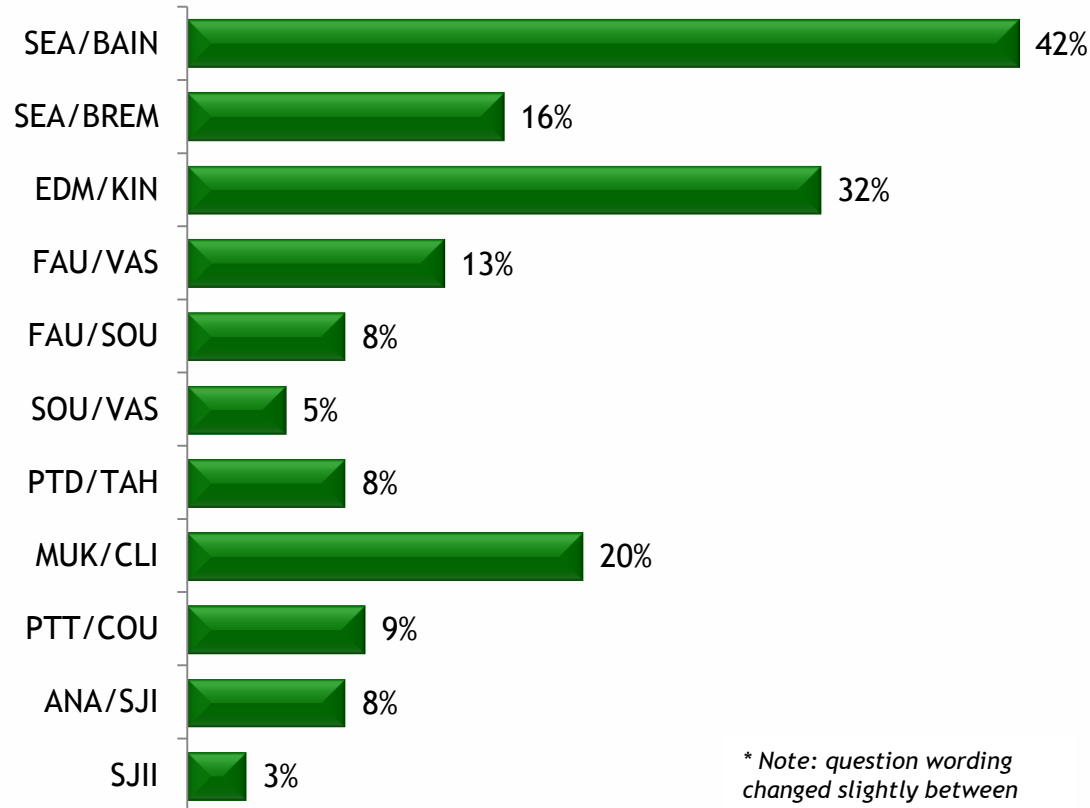
Q6 Looking forward 2 years, how would you guess your ferry ridership will change, if at all?

Q7 What is the main reason you anticipate you will ride the ferries less in the next 2 years?



# Winter Period Ridership - Overall

Route Ridership (n=1,691)



\* Note: question wording changed slightly between 2010 and 2012

Route Ridership 2010	Avg. # of trips per month per rider*	
	2012	2010
38%	12.5	11.2
16%	12.7	13.1
32%	6.5	7.6
13%	12.9	13.5
6%	13.0	13.4
4%	7.3	5.6
9%	6.1	6.5
21%	12.3	13.4
10%	2.6	3.0
8%	4.6	4.2
3%	5.0	4.0

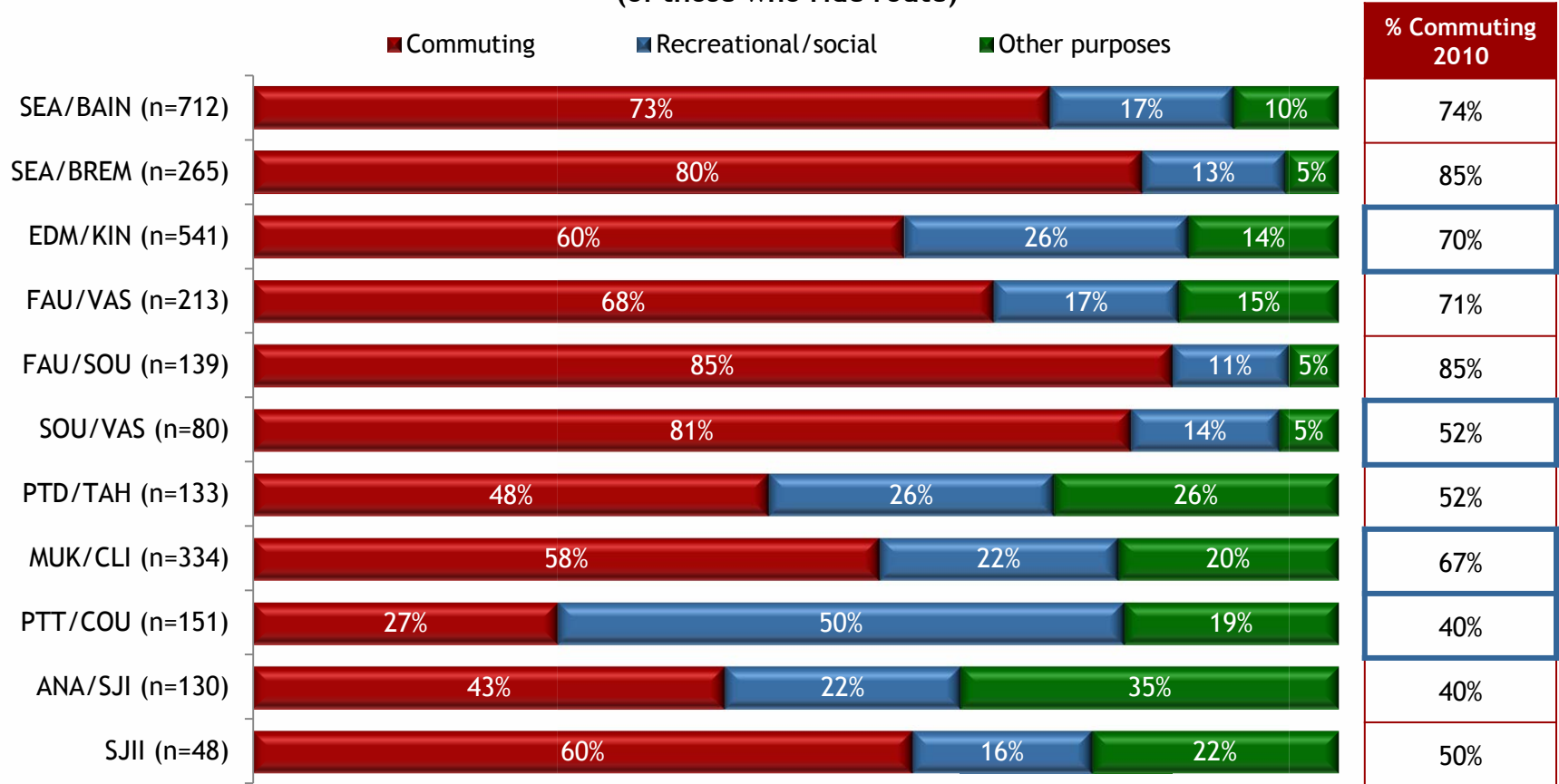
Q1 Which of the following route(s) have you ridden during the Winter Schedule period (January-March 2012)?

Q2 To get an idea of how people are using the ferry system in the winter months, could you please give us a guesstimate for the route(s) shown below - how many round trips (two one-way trips = one round trip) per month you take during the Winter period?



# Winter Period Ridership - Commuting Trips

**Ratio of Trips Per Month by Purpose**  
(of those who ride route)

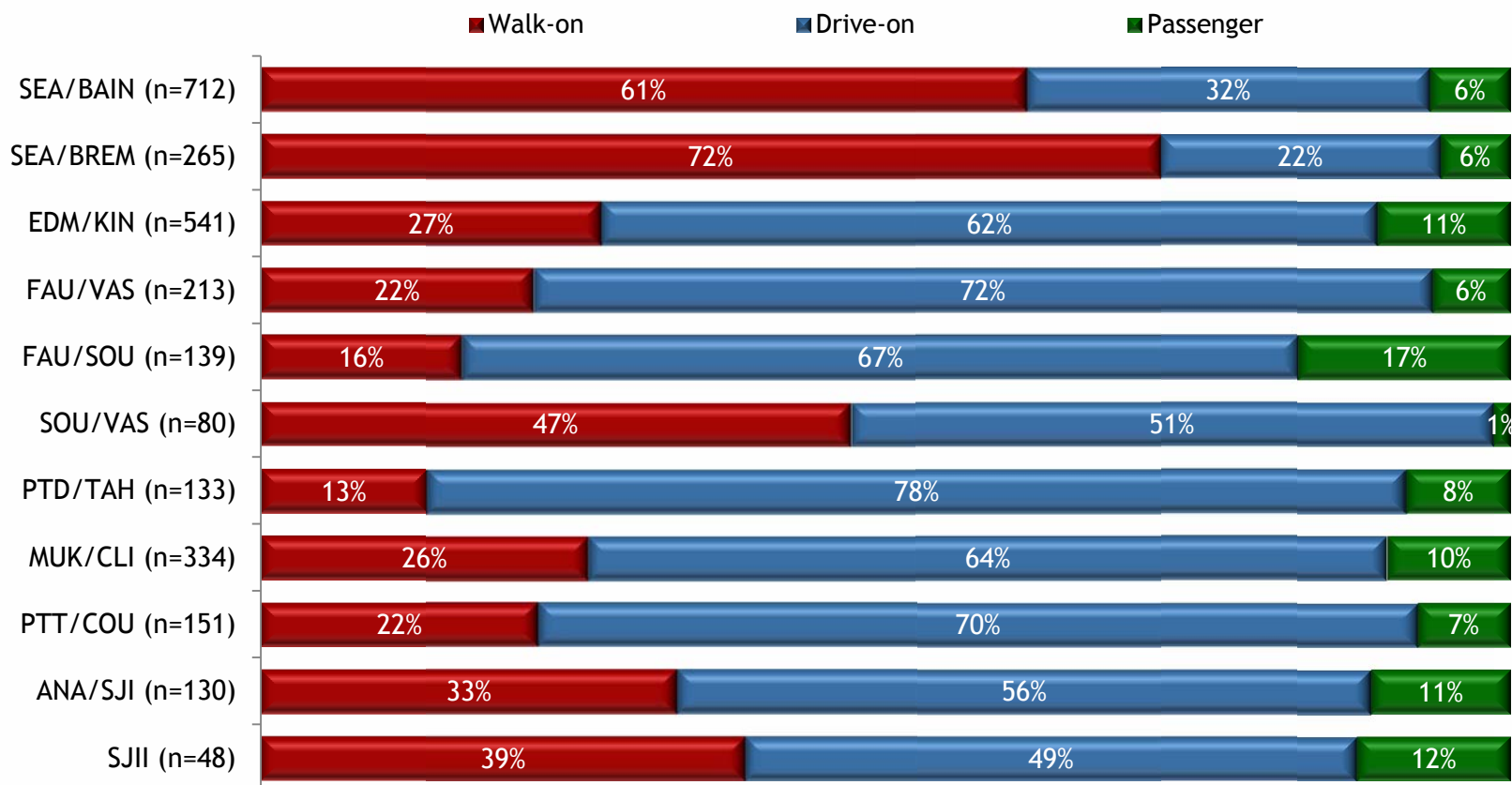


Q3 How many of those round trips were for the primary purpose of commuting (getting to and from work/school), how many were for primarily recreational/social purposes (seeing friends/going to events, etc.) and how many were for other purposes (shopping, medical appointments, etc.)?



# Boarding Method

## Ratio of Trips Per Month by Boarding Method (of those who ride route)

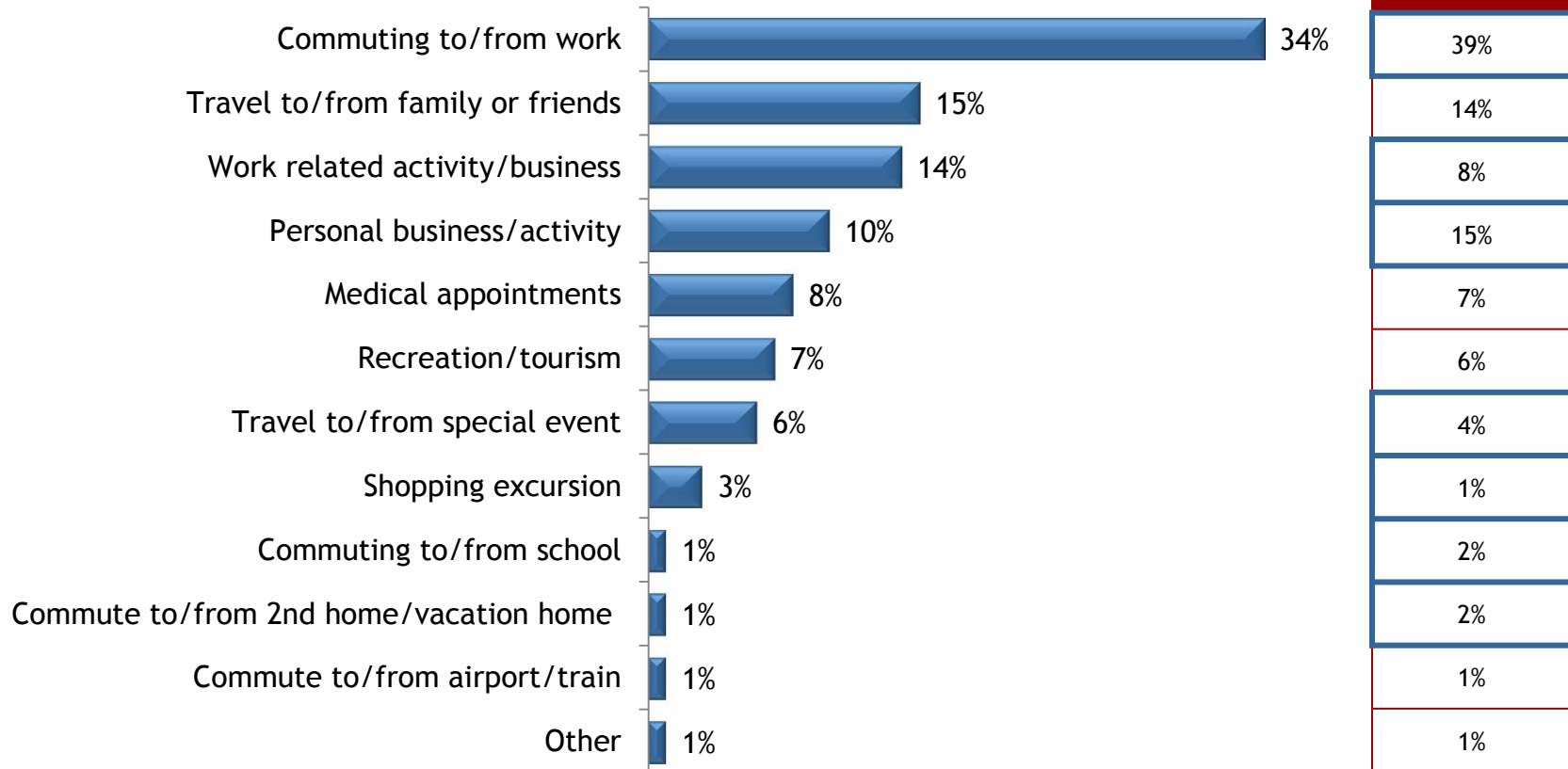


Q8 During the Winter Schedule period, how many of your ferry trips for each route were boarded using the following methods?



# Purpose of Last Ferry Ride

**Purpose of Last Ferry Ride**  
(n=1,691)



Q12 Thinking about your LAST FERRY RIDE ONLY on the {INSERT Q10 NAME HERE} route, which of the following was the PRIMARY PURPOSE for that specific trip?

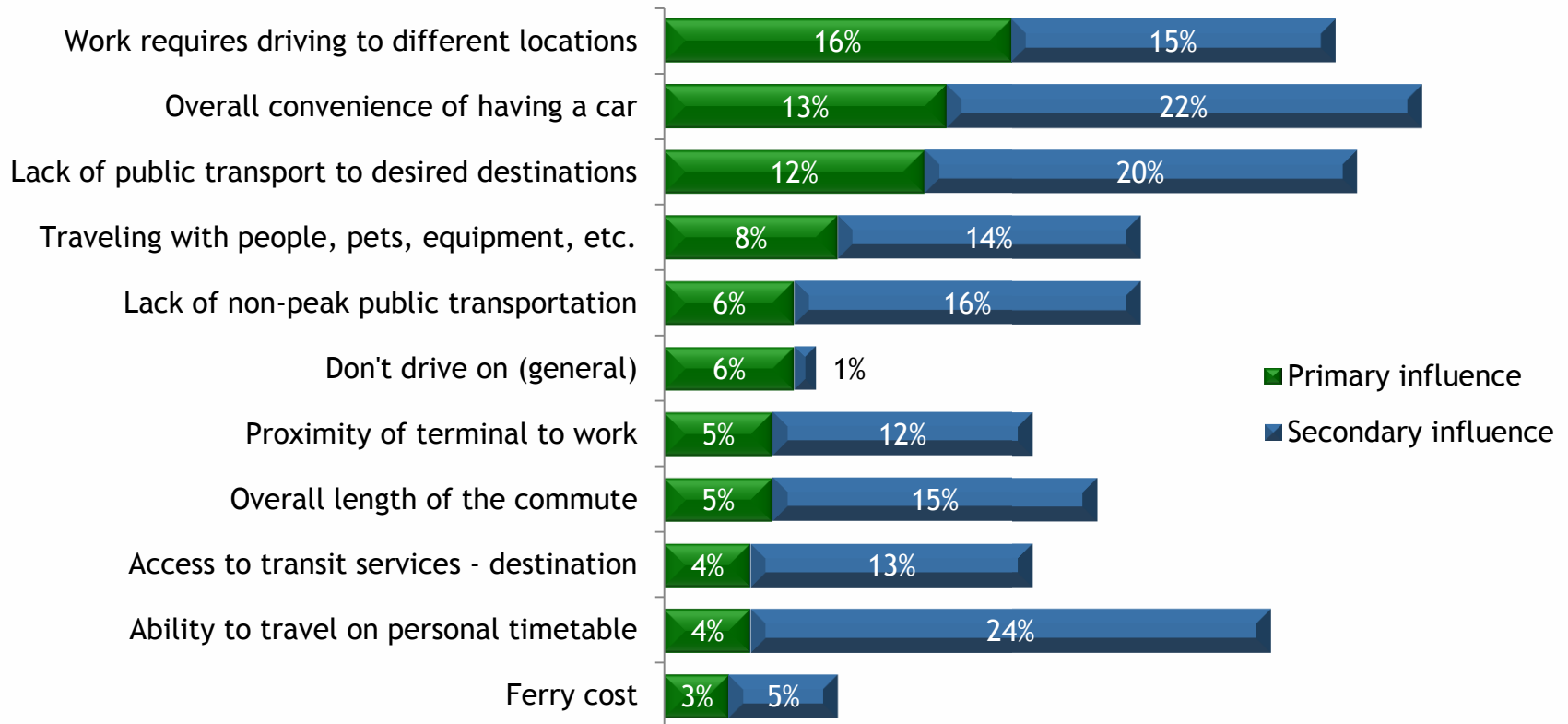




# Factors Impacting Drive-On

## Top Commuting Drive-On Influences

Among Commuters  
(n=912)



Q55 For commuting purposes, which single factor most affects your decision to drive-on instead of walking on the ferry?

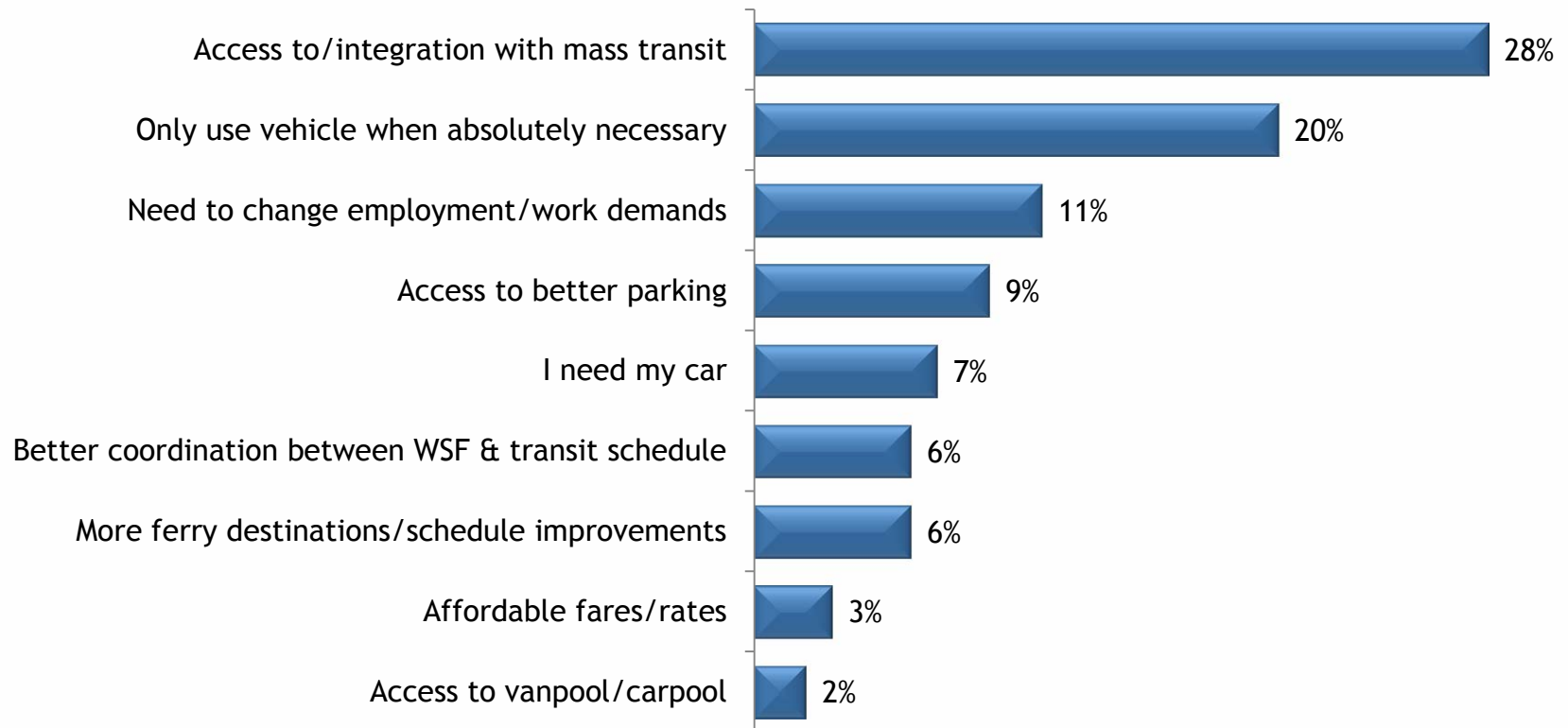
Q55B For commuting purposes, which other factors affect your decision to drive-on instead of walking on the ferry?



# Ways to Increase Walk-On

## Top Changes to Influence More Walk-On Commuting

Among Commuters  
(n=912)



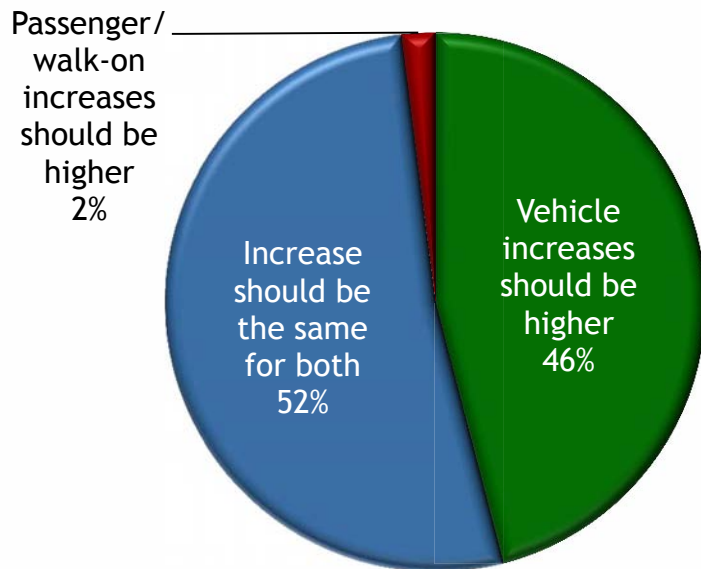
Q56 What would have to happen for you to drive on less and walk on the ferry more for all or some of your commuting trips?



# Vehicle vs. Passenger Fare Increases

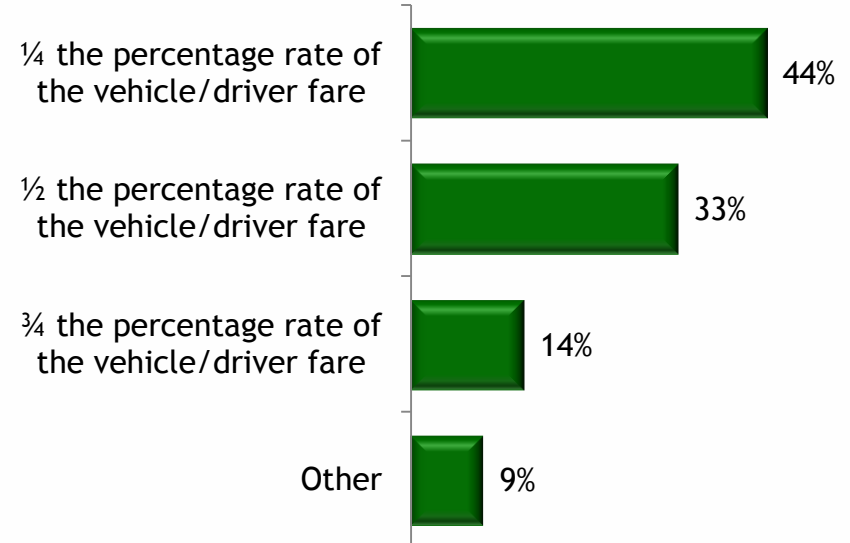
## Greater Fare Increases for Vehicles

(n=1,754)



## Rate of Passenger/Walk-on Fare

(n=798)



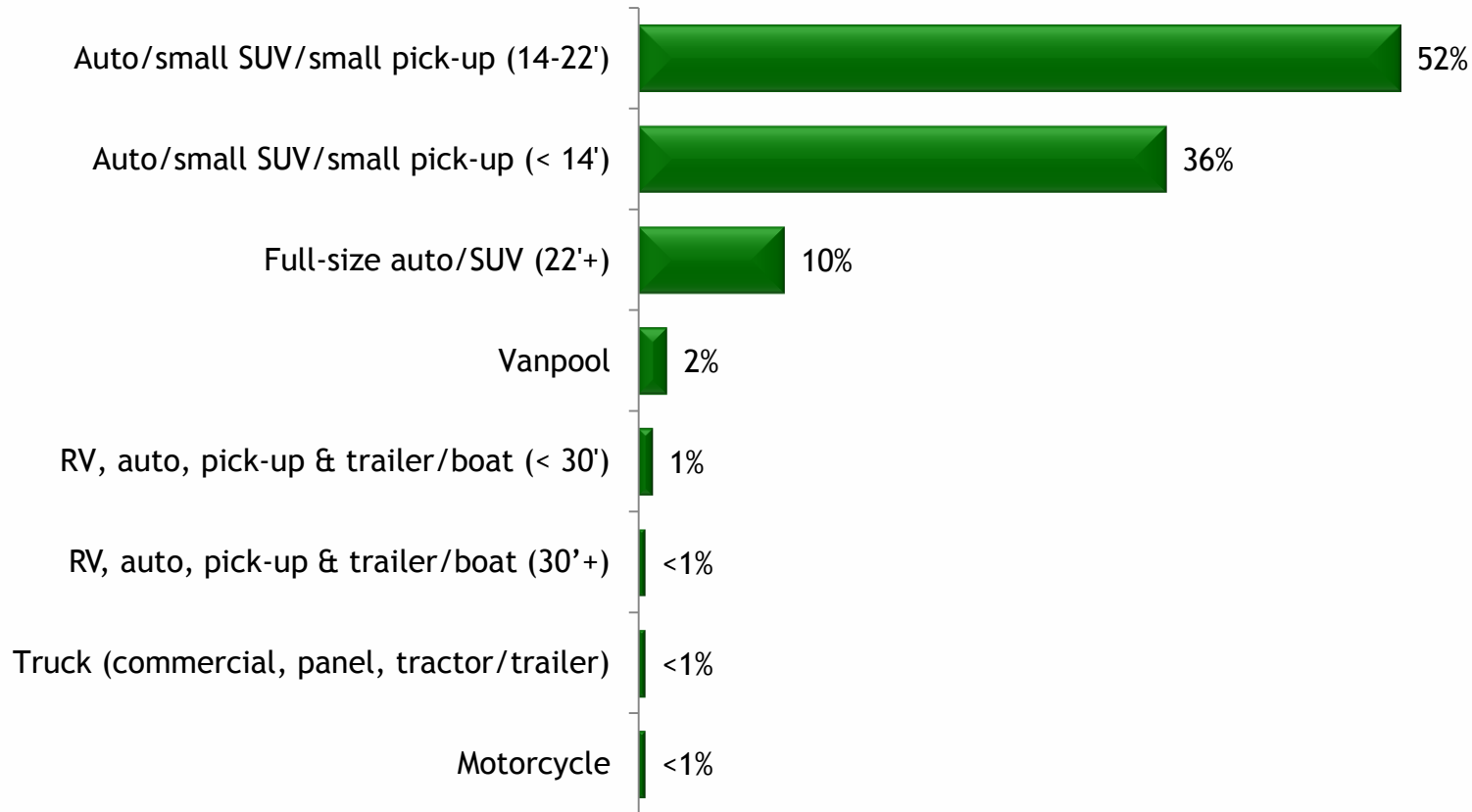
Q53 To encourage more walk-on usage of the ferries, how would you feel about any fare percentage increases being greater for vehicles than for passengers/walk-ons?

Q54 At which of these rates should the passenger/walk-on fare grow: compared to the vehicle/driver fare percentage?



# Vehicle Drove on for Last Ferry Ride

Vehicle Type  
(n=1,145)



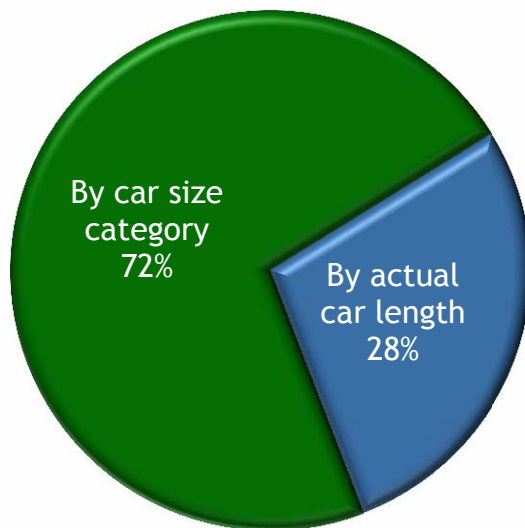
Q14 Thinking about your LAST FERRY RIDE ONLY on the {INSERT Q10 NAME HERE} route, which of the following best describes the vehicle you drove on the ferry?



# Fare Structure by Car Size

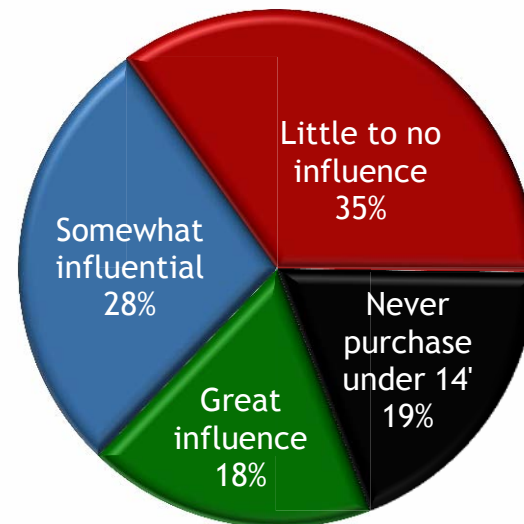
## Vehicle Fare Preference

(n=1,754)



## Fare Impact on Vehicle Purchase Decision

(n=1,754)

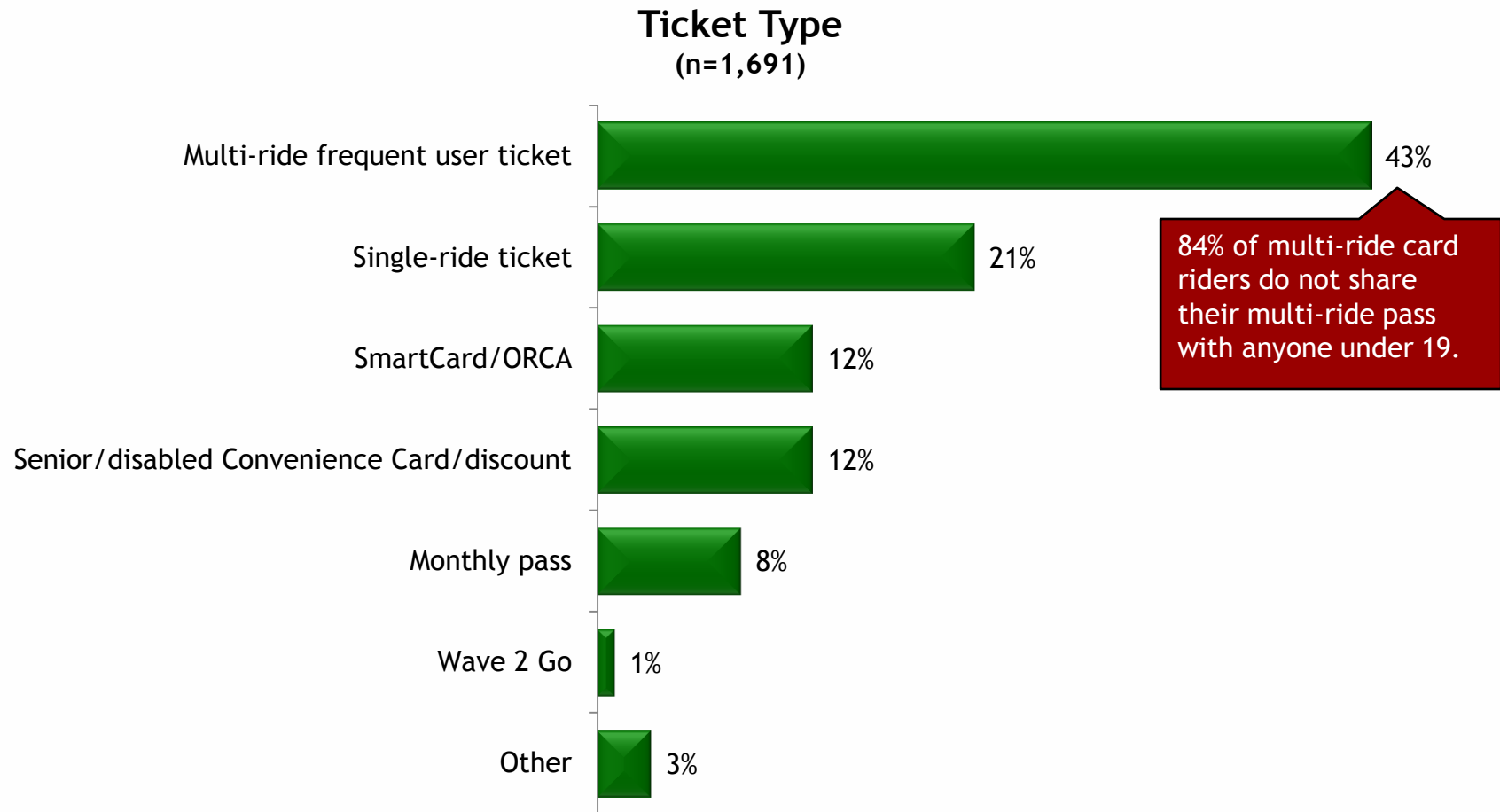


Q51 Now we have some questions for you about possible changes to the WSF fare structure. Would you prefer paying the vehicle fare using the current car size categories (i.e., car under 14", car 14-22', etc.) or pay by the foot (i.e., actual car length based upon a per foot charge)?

Q52 If in the future vehicles under 14 feet may get a 30% discount off of the regular vehicle fare, how much of an influence, if at all, would a 30% discount be on your decision to purchase a small car under 14 feet?



# Ticket Used on Last Ferry Ride



Q16 Finally, thinking about your LAST FERRY RIDE ONLY on the {INSERT Q10} route, what kind of ticket were you travelling on?

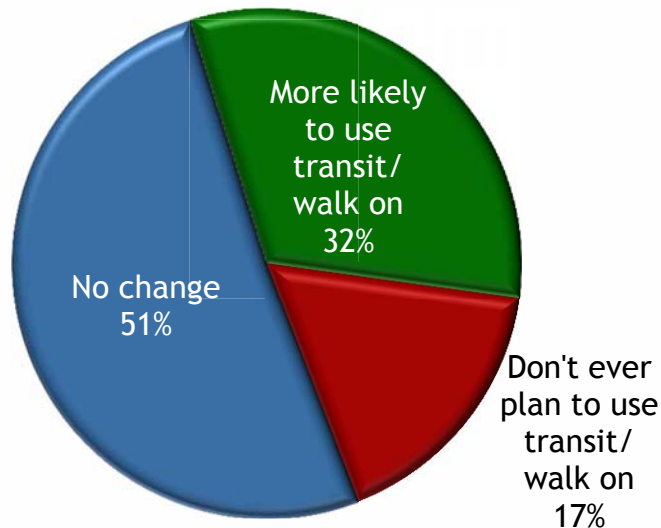
Q16B Do you share your multi-ride card with anyone under the age of 19?



# Combined Transit Tickets & Fare Discounts

## Impact of Combined Fare Discount

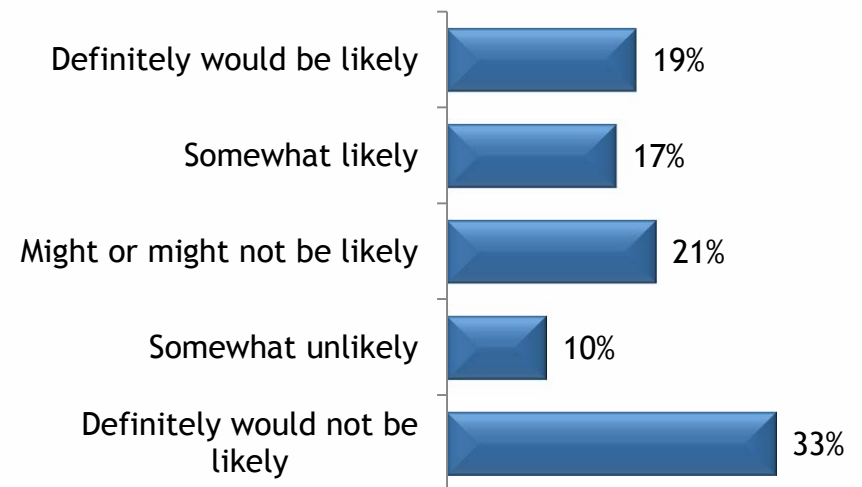
(n=1,754)



## Impact of 30% Ferry/Bus Discount

Among Those Driving On

(n=1,465)



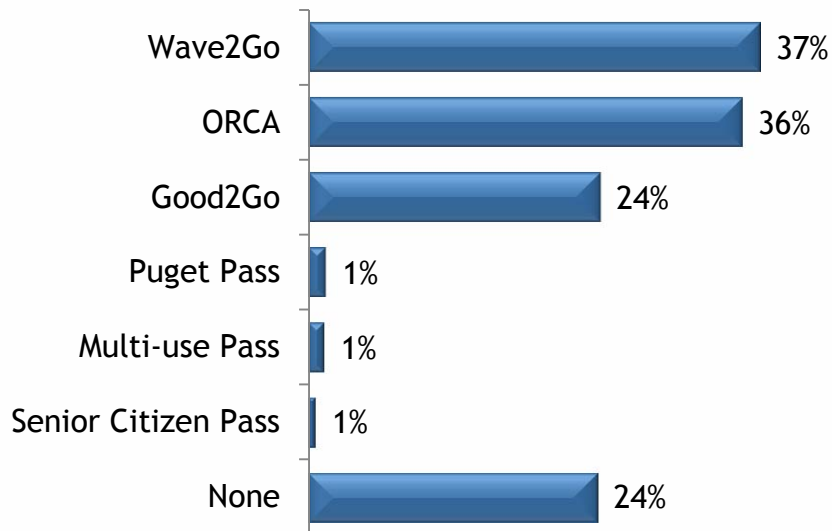
- Q60 Would you be more likely to use transit and walk onto the ferry if you got a discount on both your ferry fare and transit pass when used in combination via the ORCA Card?
- Q61 How likely would you be to walk onto the ferry instead of driving on, if you received a 30% discount on a ferry/bus combined ticket?



# Pre-Paid Passes

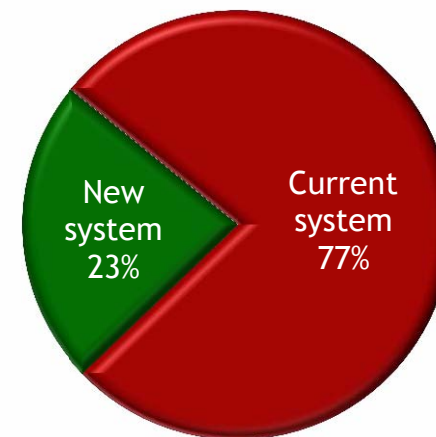
## Current Pass Ownership

(n=1,754)



## Fare Payment System Preference

(n=1,754)



Q65 Which of the following payment cards/passes do you currently have?

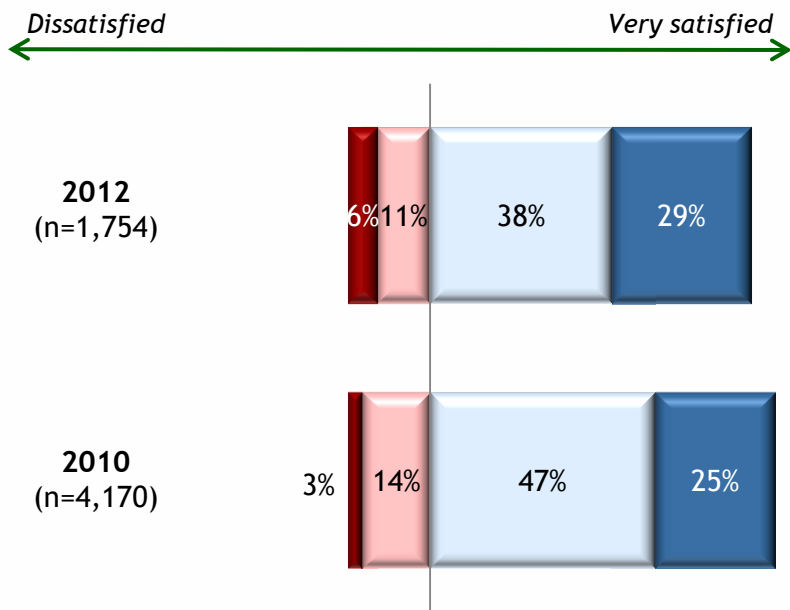
Q66 The current WSF fare system charges for every person in the vehicle, requiring all passengers be counted. Also, pre-paid multi-ride passes expire within 90 days and are usable only on WSF. If the "Good2Go" system that charges by the vehicle (in use on the Tacoma Narrows Bridge and SR 520) were used to pay for fares on WSF, you could pay your fares electronically and have any number of passengers in the vehicle at no additional charge. However, because of this fact and to result in no net loss to revenues, vehicle fares would have to be raised significantly to compensate for the loss of passenger fare revenue. The "Good2Go" pass would never expire and could be used on all toll roads & bridges, as well as WSF. Based on this description, would you rather have:





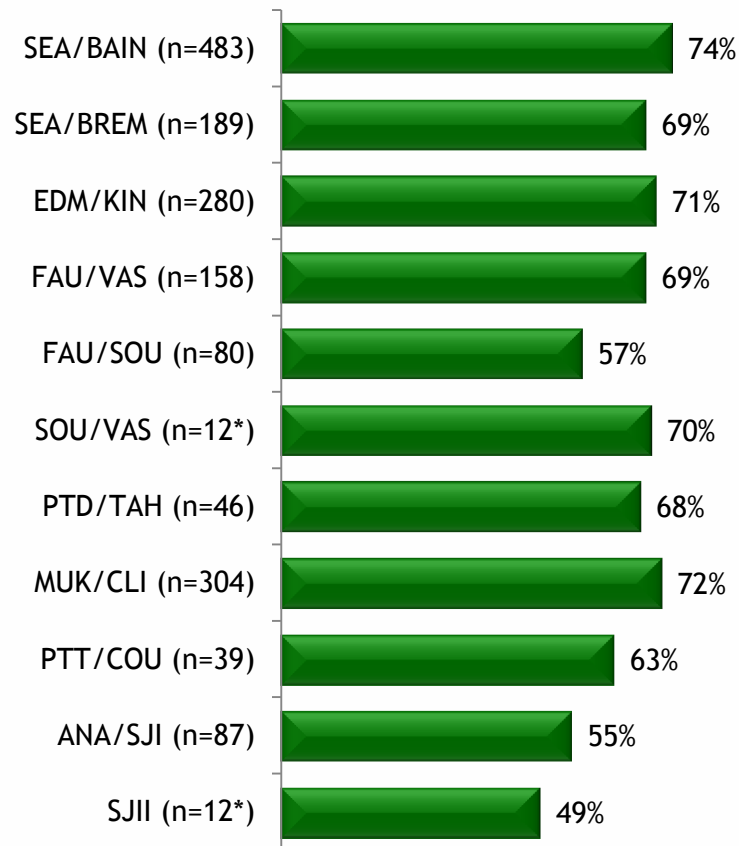
# Overall Satisfaction

## Overall Satisfaction with WSF - Significant Changes



Only ratings of satisfaction (4-5) or dissatisfaction (1-2) are shown.  
Ratings of 3 or don't know are not shown.

## Overall Satisfaction by Route (Top Box 4-5)

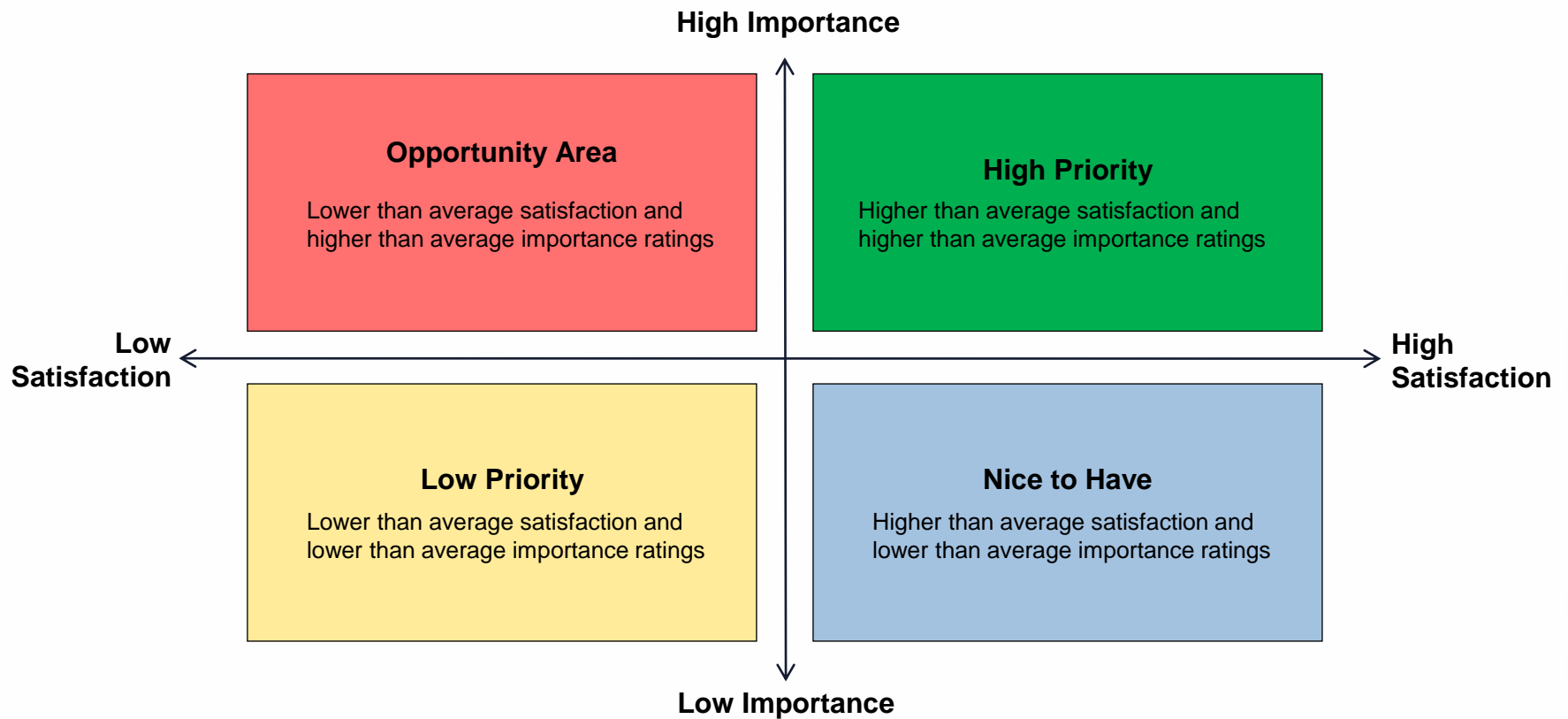


Q1 For this survey, we are interested in your experiences and opinions of Washington State Ferries during the Winter Schedule period, January 3<sup>rd</sup>-March 27<sup>th</sup>. All things considered, how satisfied are you with the service provided by Washington State Ferries?



# Gap Analysis

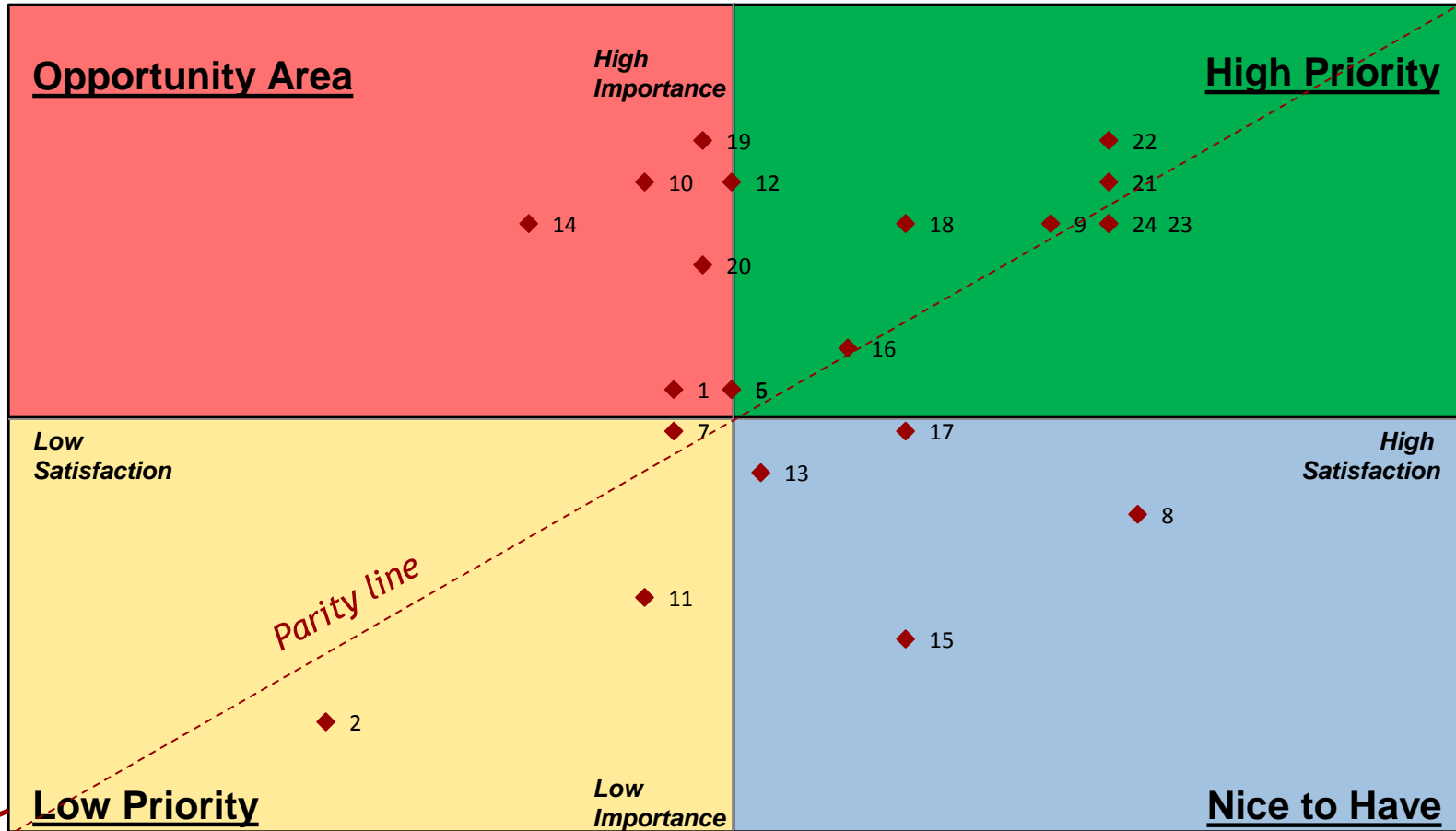
- ❖ The following slides present quadrant charts outlining the relative importance of each ferry attribute and the relative satisfaction of each attribute.





# Overall Gap Analysis

Satisfaction vs. Importance Ratings (n=726-1,691)



3, 4



# Gap Analysis Summary Overview

- ❖ The following slides present an overview of the quad chart analysis, similar to the table to the right.
  - Each quad chart consists of four quadrants:
    - Opportunity area (red)
    - High priority (green)
    - Nice to have (blue)
    - Low priority (yellow)
- ❖ To aid the legislature in the decision making process of where to focus resources, the quad charts were overlaid with the parity line.
  - The parity line represents where importance and satisfaction is equal.
  - This additional analysis identifies the ferry attributes with the greatest disparity between satisfaction and importance.
    - The numbers in the table is the distance to the parity line.
    - The darker the color, the bigger the disparity.
- ❖ The legislature should focus on the features in the opportunity area that are the darkest shade of red (i.e., greatest disparity within the opportunity area).

Code	Attributes	TOTAL
19	Bathrooms on the ferries are clean and well maintained	5%
12	Loading procedures are efficient	4%
20	Vessels are well maintained (not rusty/dirty) and safe (not cluttered)	3%
1	Terminals are clean and well maintained	2%
5	Easy loading and unloading for walk-on	1%
6	Passenger loading procedures are efficient	1%
18	Passenger seating areas are clean and comfortable	-1%
16	Unloading procedures are efficient	-2%
9	Buying tickets is easy and quick	-4%
22	Vessel crew is helpful, competent and knowledgeable	-4%
21	Vessel crew is friendly, courteous and polite	-5%
23	On-time/dependable departures	-6%
24	On-time/dependable arrivals	-6%
8	Toll booth staff is friendly, courteous and polite	-11%
15	Unloading crew is friendly, courteous and polite	-8%
17	Unloading crews provide clear directions and/or hand signals	-4%
13	Loads ferries to capacity with little room between cars	-2%
4	Adequate parking near terminals	12%
3	Schedule is adequately coordinated with transit services at terminal	6%
2	Terminals are comfortable	5%
7	Passenger unloading procedures are efficient	1%
11	Loading crew is friendly, courteous and polite	-1%



# Gap Analysis Summary Overview

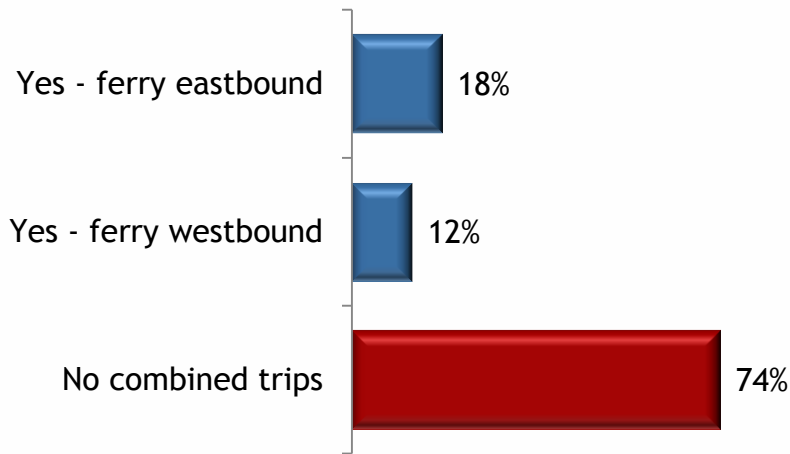
Code	Attributes	TOTAL	SEA/ BAIN	SEA/ BREM	EDM/ KIN	FAU/ VAS/ SOU	PTD/ TAH	MUK/ CLI	PTT/ COU	ANA/ SJI
19	Bathrooms on the ferries are clean and well maintained	5%	6%	25%	3%	-2%	-2%	5%	-3%	1%
12	Loading procedures are efficient	4%	3%	3%	1%	10%	11%	4%	12%	9%
20	Vessels are well maintained (not rusty/dirty) and safe (not cluttered)	3%	2%	16%	-2%	1%	-4%	4%	3%	9%
1	Terminals are clean and well maintained	2%	10%	5%	-2%	-7%	-13%	-6%	-1%	1%
5	Easy loading and unloading for walk-on	1%	4%	-5%	3%	-3%	-14%	5%	1%	-5%
6	Passenger loading procedures are efficient	1%	1%	0%	-1%	-4%	-6%	3%	-7%	4%
18	Passenger seating areas are clean and comfortable	-1%	2%	17%	-2%	-7%	-13%	-8%	-7%	-1%
16	Unloading procedures are efficient	-2%	-1%	-2%	0%	-2%	1%	-4%	10%	2%
9	Buying tickets is easy and quick	-4%	-6%	-10%	-4%	0%	-3%	-2%	-1%	-6%
22	Vessel crew is helpful, competent and knowledgeable	-4%	-5%	-4%	-2%	-6%	-3%	-7%	1%	-3%
21	Vessel crew is friendly, courteous and polite	-5%	-5%	-2%	-1%	-8%	-3%	-7%	-3%	-8%
23	On-time/dependable departures	-6%	-5%	-9%	-8%	1%	-1%	-11%	2%	1%
24	On-time/dependable arrivals	-6%	-5%	-8%	-6%	-2%	-5%	-10%	-1%	0%
8	Toll booth staff is friendly, courteous and polite	-11%	-14%	-14%	-12%	-7%	-18%	-10%	-6%	-13%
15	Unloading crew is friendly, courteous and polite	-8%	-10%	-10%	-5%	-10%	-4%	-5%	4%	-10%
17	Unloading crews provide clear directions and/or hand signals	-4%	-9%	-5%	-3%	-4%	10%	-2%	-3%	-5%
13	Loads ferries to capacity with little room between cars	-2%	-4%	-12%	-2%	6%	5%	2%	0%	-6%
4	Adequate parking near terminals	12%	6%	-2%	22%	12%	28%	31%	12%	6%
3	Schedule is adequately coordinated with transit services at terminal	6%	6%	4%	4%	17%	23%	0%	-23%	10%
2	Terminals are comfortable	5%	13%	5%	6%	-2%	-5%	-7%	3%	8%
7	Passenger unloading procedures are efficient	1%	5%	1%	-1%	-6%	-4%	0%	-2%	4%
11	Loading crew is friendly, courteous and polite	-1%	-2%	-2%	-1%	-2%	-2%	4%	1%	-4%



# Tacoma Narrows Bridge

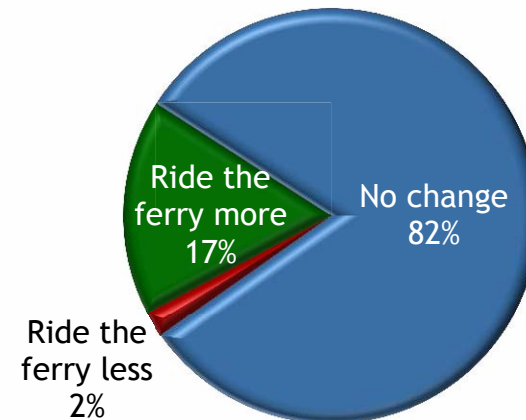
## WSF + Tacoma Narrows Trip

(n=1,754)



## Impact of TNB Toll Change

(n=462)



- Q62 During the Winter period, has anyone in your household used the Tacoma Narrows Bridge in conjunction with a ferry to make a round trip between the west and east Sound?
- Q63 During the Winter (Jan-Mar 2012) period, how often in a typical month do you make a ferry trip (going one way) in conjunction with the Tacoma Narrows Bridge (going the other way)?
- Q64 How would your ferry riding change, if at all, assuming you were charged the same toll in both directions on the Tacoma Narrows Bridge?



# Household Characteristics

Household Make-up	Respondent n=1691	Household Member 1 n=1341	Household Member 2 n=483	Household Member 3 n=264
Average Age	57	55	28	21
Average Round Trips per Month	15	9	6	5
Average % per Purpose	68% Commuting 18% Recreational/Social 14% Other Purpose	50% Commuting 28% Recreational/Social 22% Other Purpose	33% Commuting 45% Recreational/Social 22% Other Purpose	18% Commuting 55% Recreational/Social 27% Other Purpose
Average % Per Boarding Method	36% Walk-on 54% Drive-on 9% Passenger	32% Walk-on 51% Drive-on 17% Passenger	28% Walk-on 43% Drive-on 29% Passenger	22% Walk-on 31% Drive-on 47% Passenger
Primary Boarding Methods	44% Vehicle driver 23% Passenger 25% Walk on	46% Vehicle driver 28% Passenger 21% Walk on	22% Vehicle driver 51% Passenger 24% Walk on	12% Vehicle driver 62% Passenger 22% Walk on
Primary Ticket Type	43% Multi ride ticket 21% Single ride ticket	39% Multi ride ticket 35% Single ride ticket	37% Multi ride ticket 45% Single ride ticket	37% Multi ride ticket 46% Single ride ticket
Ferry Travel Compared to a Year Ago	11% Riding More 72% Riding Same 16% Riding Less	9% Riding More 72% Riding Same 14% Riding Less	13% Riding More 68% Riding Same 16% Riding Less	12% Riding More 71% Riding Same 11% Riding Less

- Q50A How old are each of the household members?
- Q50B How many round trips (two one-way trips = one round trip) per month does each household member take, on average, during the Winter (Jan-Mar 2012) period?
- Q50C How many of those round trips were for commuting (getting to and from work/school), how many were for recreational/social (seeing friends/going to events, etc.) and how many were for other purposes (shopping, medical appointments, etc.)?
- Q50D During the Winter (Jan-Mar 2012) period, how many of their ferry trips are walk-on, drive-on, or passenger?
- Q50E How did they typically board the ferry during the Winter (Jan-Mar 2012) period?
- Q50F How did they typically pay for their fare, during the Winter (Jan-Mar 2012) period?
- Q50G Are they generally traveling more, less or the same as last winter (Jan-Mar 2011)?