2010 Resident Opinion Survey On Oahu Transportation

Prepared for:

The Oahu Metropolitan Planning Organization

and

Parsons Brinckerhoff

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Table of Contents

	Page
Executive Summary	3
Research Objectives	8
Sample & Methodology	9
Selecting Priorities in Transportation	12
Priorities in Transportation: T6/EJ Residents	24
Other Suggestions for Improving Oahu Transportation	30
Importance of Transportation in Quality of Life	35
Making the System more Affordable and Accessible	41
Reducing Greenhouse Gas Emissions	48
Reducing Greenhouse Gases: T6/EJ Residents	55
Final Suggestions	62
2010 Patterns of Transportation: Oahu Residents	67
2010 Patterns of Transportation: T6/EJ Residents	75
Demographic Profile	81
Survey Questions	85

EXECUTIVE SUMMARY

Executive Summary (1 of 3)

1. PRIORITIES IN TRANSPORTATION

- Oahu transportation priorities in 2010 have not changed significantly since 2009, reflecting residents' ongoing concern with road maintenance, improving safety and easing congestion. Asked to rank a series of nine proposals in order of priority, **residents rank timely road maintenance highest, followed by designing safer roads** and **widening the H-1 freeway** to ease traffic congestion.

- These priorities do vary somewhat across the island. Easing congestion by widening H-1 is a higher priority for the West Oahu and Kapolei regions, while increasing road maintenance takes precedence in Honolulu and Windward Oahu.

- **Expansion of *TheBus* and vanpool services** is not a top priority island-wide but is very important to Oahu's Title VI/Environmental Justice (T6/EJ) residents, more of whom depend on mass transit for daily commuting. T6/EJ residents are concerned both with the roads and with improving transit services to make them more affordable and accessible to them given their heavier use of the transit system.

- Three different **extensions of the future rail transit system** (to UH Manoa, Waikiki and to West Kapolei) were also tested, with the extension to UH Manoa ranking in middle of 9 transportation priorities in 2010. Of the three rail extensions, the **extension to UH Manoa** is the top priority, which is not surprising given the large population in the urban center and Honolulu being the most common destination for commuters.

- Providing **more bike paths and walkways**, similarly, is low on the priority list but is apparently desirable to a specific segment of younger and mostly male residents, as well as to the East Honolulu community in general.

Executive Summary (2 of 3)

2. IMPROVING QUALITY OF LIFE

- Relative to improving residents' quality of life, overall, more *timely road maintenance* and *reducing aggressive driving* (via enforcement) should come before providing more bus shelters, road beautification, and bike paths according to residents' ratings of importance. The T6/EJ population, though, particularly bus riders, feels that improving the transit system is important, including providing *more bus shelters, crosswalks and sidewalks* for bus users.

3. MAKING TRANSPORTATION MORE ACCESSIBLE AND AFFORDABLE

- A proposal to *provide bus passes and vouchers* would be more effective, generally, than three other proposals aimed at making transportation more accessible and affordable (*providing bus shelters, promoting rideshare programs* and *expanding bike paths and walkways*). Monetary incentives like bus passes are strongly favored by Oahu's lower-income residents, which is not surprising given that some transit users complained in their comments about the high cost of *TheBus* and *The Handi-Van* service.

4. REDUCING GREENHOUSE GASES

- Most residents (**80%**) are at least somewhat aware of Greenhouse Gases and their impact on global climate change. When it comes to taking steps to reduce Greenhouse Gas emissions, though, out of a total of six suggestions, only one – *"supporting policies that promote communities where walking and biking is encouraged"* – would likely receive strong consideration by a majority of residents.*

* The other five changes to reduce Greenhouse Gases were: *Use of the rail transit system when available, switching to a hybrid or electric vehicle, begin carpooling or vanpooling to work, walk or bike more often,* and *use TheBus more often.*

Executive Summary (3 of 3)

5. REDUCING GREENHOUSE GASES (continued)

- While the other five suggestions did not appeal to a majority of the public, the suggestion to *switch to hybrid or electric vehicles* would be considered by a large minority of **43%.** Suggestions to *walk or bike more often* and to *use the future rail system more often* would be considered by over 1 in 3 residents. The suggestion least likely to be adopted is *carpooling*, which is resisted by many older residents 55+.

- The T6/EJ population, as a group, is much less aware of Greenhouse Gases than is the general population, a finding possibly related to the different personal priorities of lower-income residents. On the other hand, willingness to consider making changes to reduce Greenhouse Gases is higher across the board. Two in 3 T6/EJ residents indicated strong willingness to consider taking *TheBus* more often to reduce Greenhouse Gases versus just one-third of residents at large.

OBJECTIVES AND RESEARCH METHODS

Research Objectives

- The Oahu Metropolitan Planning Organization (OahuMPO), the Federally designated metropolitan planning organization for Oahu, is conducting an update of the OahuMPO Regional Transportation Plan (ORTP) to year 2035. The ORTP identifies short- and long-range strategies and actions that will lead to the development of an integrated, intermodal transportation system.
- The ORTP Public Outreach Plan's goal is to obtain feedback from interested communities and the public on ORTP goals. As part of this outreach process, the OahuMPO in 2009 commissioned a telephone survey among Oahu residents, and followed up with a second survey in 2010, with the primary objectives being:

  1. To assess initial issues and gather information about potential areas of concern regarding the Oahu transportation system.
  2. To obtain feedback on the most appropriate methods to fund needed improvements to the transportation system.

- This report discusses results of the follow-up 2010 survey conducted in the summer of 2010.

Sample and Methodology (1 of 3)

- The universe of respondents consisted of islandwide Oahu residents reached through random digit dialing (RDD).
- Telephone interviewing took place **August 4 through September 17, 2010**.
- Two samples were derived: (a) a random Oahu sample of n=600 adults, and (b) a sample of n=400 from the Oahu Title VI/Environmental Justice population based on Federal income guidelines for Title VI / Environmental Justice (T6/EJ) status.
- The Oahu samples of residents were weighted according to US Census data to reflect the Oahu population:
  - In the random sample, by age, gender and ethnic background according to 2008 Oahu Census data.
  - In the T6/EJ sample, by age, gender and geographic area according to 2008 Oahu Census data.

Sample and Methodology (2 of 3)

The Oahu random and T6/EJ samples were distributed (weighted) as follows:

WEIGHTED SAMPLING	West Oahu	Central Oahu	Metro Honolulu	East Honolulu	Windward No. Shore	TOTAL	Sampling Error
Oahu random	213	81	110	114	83	600	+/- 4.0%
Oahu T6/EJ	122	27	188	34	29	400	+/- 4.9%

The areas in both samples were defined as follows:

- **West Oahu:** Waianae, Kapolei, Ewa, Waipahu, Pearl City, Aiea.
- **Central Oahu:** Mililani, Mililani Mauka, Wahiawa.
- **Metro Honolulu:** Kalihi, Downtown, Makiki, Ala Moana.
- **East Honolulu:** Waikiki, Kaimuki, Kahala, Aina Haina, Niu Valley, Hawaii Kai.
- **Windward:** Kaneohe, Kailua, Waimanalo
- **North Shore:** Koolauloa, Haleiwa, Pupukea.

➢ **Statistical Analysis Sample Differences – In the following analysis, within the tables and charts, a shaded or boxed area signifies a statistically significant difference across columns or rows at the 95% level of confidence.**

Sample and Methodology (3 of 3)

The Title VI/Environmental Justice (T6/EJ) sample of 400 Oahu residents were qualified using a combination of household size and household income according to Federal Title VI guidelines for Hawaii (below). OmniTrak did not screen for Title VI ethnic criteria (Black, Hispanic, Amerindian/Alaska Eskimo, etc.), as these groups are too few to provide an adequate sampling:

No. in Household	Annual Household Income:
One	$12,500
Two	$16,800
Three	$21,100
Four	$25,400
Five	$29,700
Six	$34,000
Seven	$38,300
Eight	$42,600

In the following discussion, the T6/EJ sample is analyzed separately from the Oahu random sample and compared to Oahu random data where appropriate. The random sample results are presented first, followed by the T6/EJ data, with comparisons between the two made where appropriate.

Selecting Priorities In Transportation

Transportation Projects: Oahu Priorities in 2010

In 2010, a total of nine transportation priorities were grouped into three series of three proposals each, as follows:

- *"I'm going to read you a series of proposed ideas for the purpose of improving Oahu transportation. Please rank these in order of priority, with '1' being highest priority for consideration for funding, '2' being second highest, and '3' being third highest for consideration for funding."*

SERIES A: DESIGN ENHANCEMENTS

- ***Designing safer roads by installing improvements such as medians, speed bumps, synchronized traffic lights and left turn only lanes***
- ***Providing more bike and pedestrian walkways***
- ***Increasing maintenance and upkeep of existing roads and bridges***

SERIES B: EXPANSION OF INFRASTRUCTURE

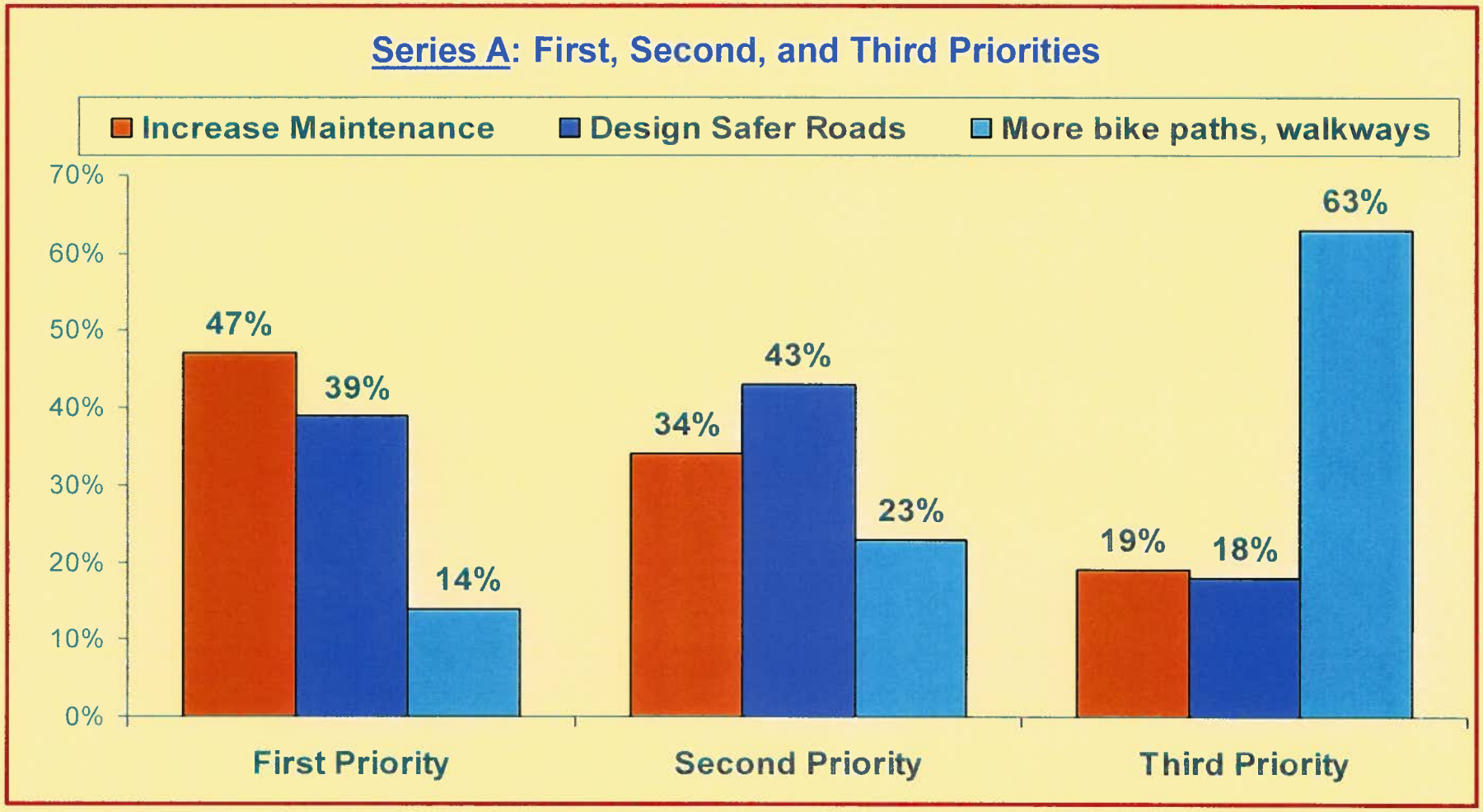
- ***Expanding TheBus and vanpool services island-wide***
- ***Widening H-1 freeway corridors and improving on and off ramps***
- ***Building new roads***

SERIES C: RAIL MASS TRANSIT

- ***Extending the west end of the rail system from East Kapolei to West Kapolei***
- ***Extending the east end of the rail system from Ala Moana Center to UH Manoa***
- ***Extending the east end of the rail system from Ala Moana Center to Waikiki***

Series A Design Enhancements: First to Third Priorities

Given a choice between (a) designing safer roads (b) more bike paths and walkways, and (c) increased road maintenance, the latter – *road maintenance* – ranked highest in this series by 8 points over the second of three proposals, road design.

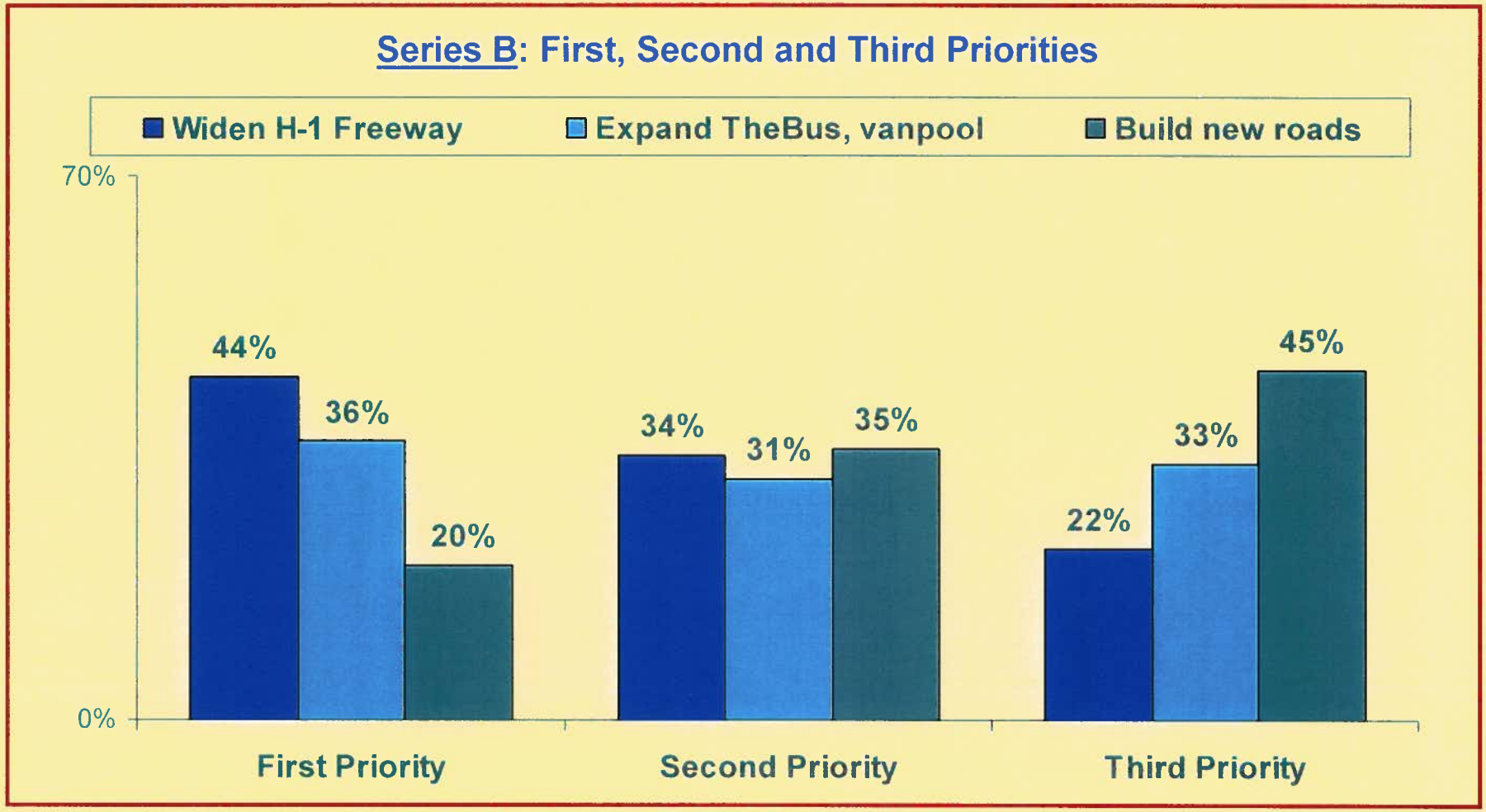


Bases: 600 Oahu residents.

Q9a. I'm now going to read you a series of proposed ideas for the purpose of improving Oahu transportation. Considering the limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding. [READ LIST]

Series B Infrastructure Expansion: First to Third Priorities

In the next series of choices presented to residents, (a) *widening H-1 freeway corridors* ranked first over (b) *expanding TheBus service,* and (c) *building new roads*.

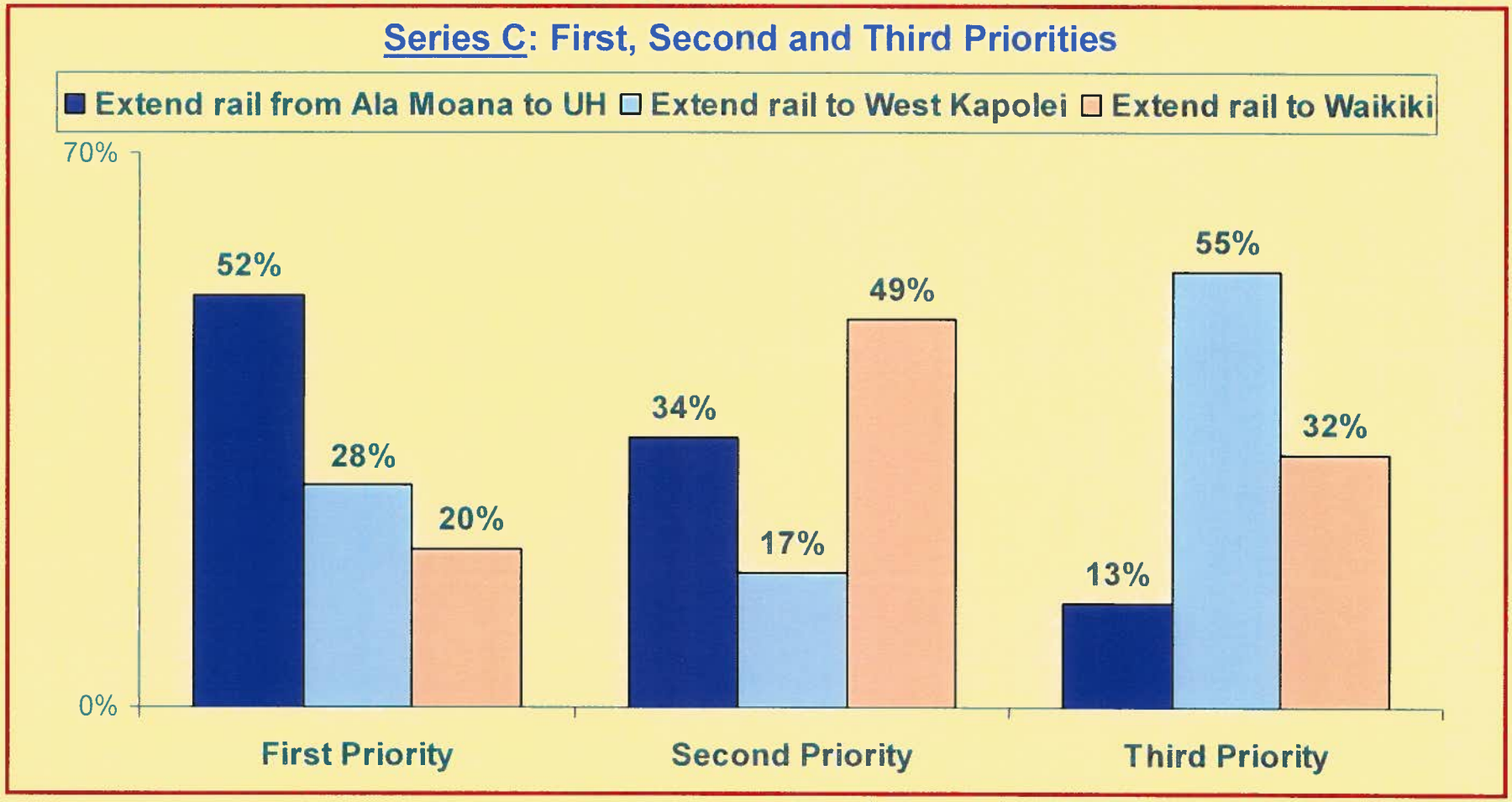


Bases: 600 Oahu residents.

Q9a. I'm now going to read you a series of proposed ideas for the purpose of improving Oahu transportation. Considering the limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding [READ LIST].

Series C Rail Extensions: First to Third Priorities

Among the choices for extending the rail system, the priority appears to be *extending the east end of the system to UH Manoa*, and secondly, extending it to Waikiki. The *extension to West Kapolei* ranks highly only as the third choice among three proposals.



Bases: 600 Oahu residents.

Q9a. I'm now going to read you a series of proposed ideas for the purpose of improving Oahu transportation. Considering the limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding [READ LIST].

Series C Rail Extension Priorities: By Area

There is no broad consensus on the top priority for extending rail, however. Support for the *West Kapolei extension* is highest in West and Central Oahu, while in other areas, residents heavily favor extending it east to UH Manoa.

Series C: First Priority	West Oahu	Central Oahu	Metro Honolulu	Windward/ North Shore	East Honolulu
Extending the east end of the rail system to UH Manoa	44%	41%	62%	50%	68%
Extending the west end from East Kapolei to West Kapolei	43%	37%	16%	22%	10%
Extending the east end of the rail system to Waikiki	13%	22%	21%	28%	22%
BASE	186	87	117	114	116

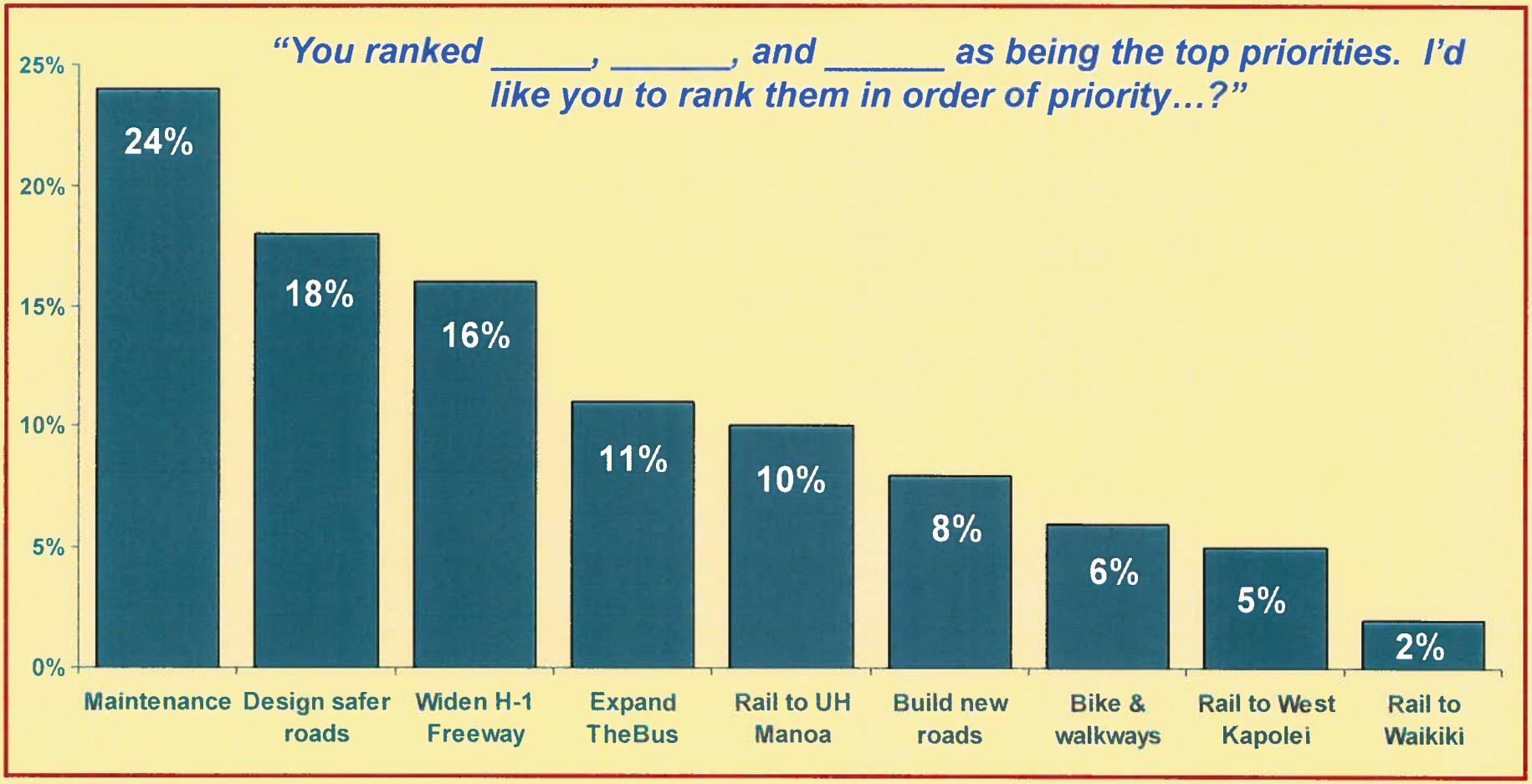
Within West Oahu, moreover, residents are divided on the West Kapolei extension.

Series C: First Priority	West Oahu	
	Kapolei to Leeward	Waipahu to Honolulu
Extending the east end to UH Manoa	32%	56%
Extending the west end to West Kapolei	61%	26%
Extending the east end to Waikiki	7%	19%
BASE	77	109

Those in the Ewa/Kapolei/ Leeward Coast end of the region most favor an extension from East to West Kapolei, while those closer to Honolulu tend to favor the east extension to UH Manoa, similar to preferences in the rest of the island.

Top Priority Chosen From Top Three Priorities

In a runoff of the highest priority from each of the three series, *increased road maintenance* was chosen by a plurality (though not a majority) of residents among the original nine proposals. Opinions are rather fragmented, however, with road projects generally considered higher in priority and the rail extensions deemed lower priorities.



Bases: 600 Oahu residents.
Q9b. You ranked ___, ___ and ___ as being the top priorities for funding. Again, considering limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding [READ LIST].

Top Individual Priorities: By Oahu Area

Support for *road maintenance* as a key priority varies somewhat across the island. In Metro Honolulu and Windward Oahu, *road maintenance* is highest-rated while in West Oahu, *widening the H-1 freeway* polls first and in East Honolulu, *providing more bike lanes and walkways* tops the list.

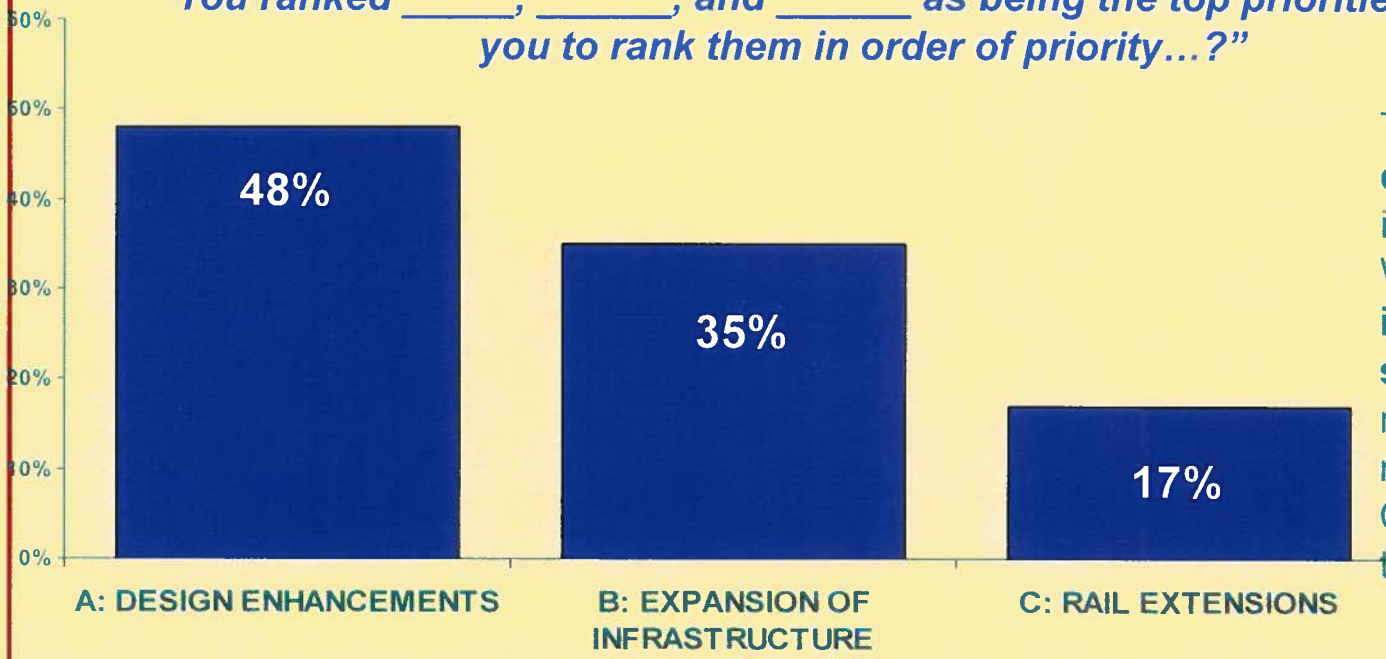
"You ranked __, __, and __ as the top priorities. Again, I'd like you to rank them in order of priority, with '1' being highest…"	WEST OAHU	CENTRAL OAHU	METRO HONOLULU	WINDWARD/ NORTH SHORE	EAST HONOLULU
Increasing road maintenance	23%	22%	29%	33%	17%
Designing safer roads	19%	14%	20%	26%	12%
Widening H-1 freeway corridors	25%	9%	11%	5%	16%
Expanding TheBus and vanpool services	7%	15%	8%	16%	18%
Extending the east end of rail to UH Manoa	7%	5%	15%	8%	14%
Building new roads	8%	26%	5%	5%	2%
Providing more bike & pedestrian walkways	2%	4%	3%	1%	19%
Extending west end of rail to West Kapolei	10%	2%	4%	3%	2%
Extending the east end of rail to Waikiki	---	3%	5%	5%	2%
BASE	186	67	117	114	116

Q9b. You ranked ___, ___ and ___ as being the top priorities for funding. Again, considering limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding.

Top Priorities: By Series Category

While no single proposal received a majority endorsement, it is safe to say that road enhancements and design in the aggregate have the most support. The proposals in Series A, which included *increased maintenance, designing safer roads* and *providing more bike paths*, together accounted for nearly half of residents' top priority choices.

"You ranked _____, _____, and _____ as being the top priorities. I'd like you to rank them in order of priority…?"



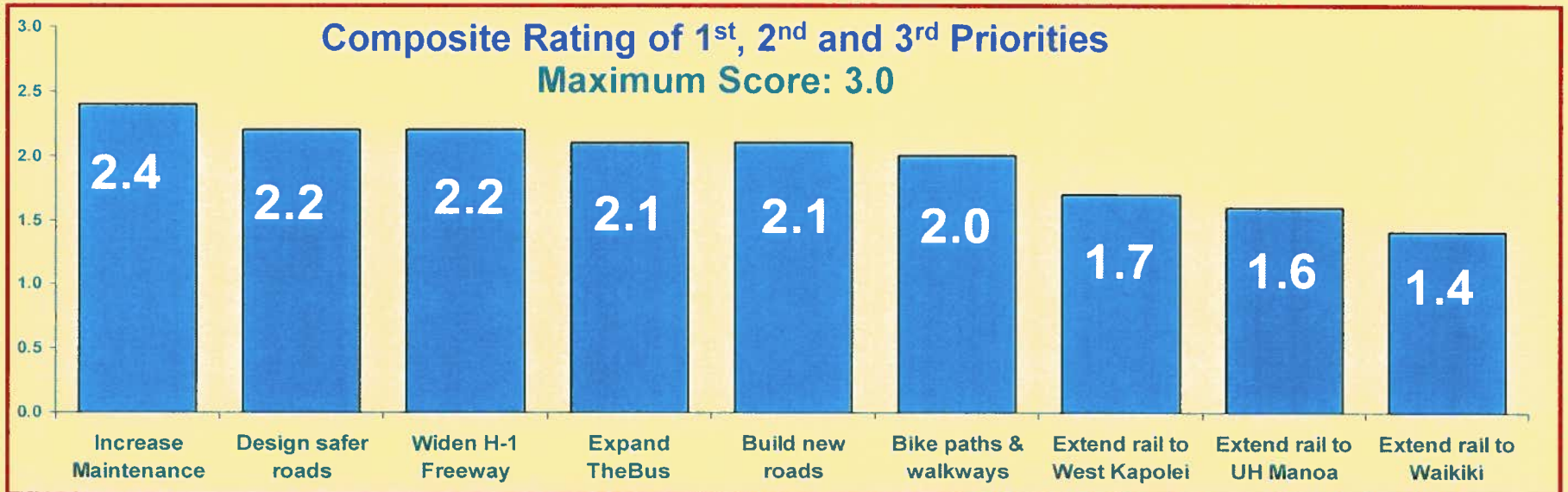
The category of **design enhancement** is most supported in Windward Oahu, while **infrastructure expansion** (including new road-building) finds most support in Central Oahu (see table below).

	West Oahu	Central Oahu	Metro Honolulu	Windward & North Shore	East Honolulu
SERIES A: DESIGN ENHANCEMENTS	44%	39%	53%	60%	47%
SERIES B: INFRASTRUCTURE EXPANSION	39%	50%	23%	25%	36%
SERIES C: RAIL TRANSIT EXPANSIONS	17%	10%	24%	16%	17%

Bases: 600 Oahu residents.
Q9b. You ranked ___, ___ and ___ as being the top priorities for funding. Again, considering limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding. [READ LIST].

Composite Ranking of Priorities

In a composite (mean) of the nine proposals from the runoff question, the top three priorities all concerned road improvements: *increased road maintenance, designing safer roads* and *widening H-1 corridors* (maximum score: 3.0).



	TOTAL	West Oahu	Central Oahu	Metro Honolulu	Windward & North Shore	East Honolulu
Increase maintenance of existing roads	2.4	2.3	2.4	2.5	2.6	2.2
Design safer roads by installing improve…	2.2	2.1	2.3	2.2	2.5	2.2
Widen H-1 freeway corridors	2.2	2.3	2.0	2.2	2.0	2.2
Expand *TheBus* and vanpool services	2.1	2.2	2.4	1.9	2.1	2.2
Building new roads	2.1	2.1	2.4	1.6	2.1	2.3
Provide more bike and ped. walkways	2.0	1.5	1.6	1.9	1.9	2.8
Extend the west end of rail to West Kapolei	1.7	1.8	1.5	1.8	1.4	1.6
Extend the east end of rail to UH Manoa	1.6	1.6	1.5	1.7	1.4	1.5
Extend the east end of rail to Waikiki	1.4	1.4	1.4	1.5	1.6	1.4

Base: 600 Oahu residents. * Composite rating is the average of rankings (reversed) across all four priority questions.

Profile: Residents Choosing Bike Paths, Walkways

The 14% of residents who chose "*Providing more bike and pedestrian walkways*" as the first priority (Series A) are more likely to live in East Honolulu.

	Not selecting "providing bike and pedestrian walkways"	Selecting "providing bike and pedestrian walkways" 1st Priority
BASE	516	84
GENDER		
Male	47%	66%
Female	53%	34%
AGE		
18-34	30%	51%
35-54	35%	30%
55+	36%	19%
Average (years)	46.9 years	39.5 years
INCOME		
Less than $35K	27%	16%
$35K to $75K	32%	54%
$75K to $100K	16%	5%
$100K+	26%	24%
EDUCATION		
High school or less	32%	34%
Business/some college	29%	18%
College grad/post grad	40%	48%
LENGTH OF RESIDENCE		
Less than 5 years	2%	20%
5 to 19 years	14%	12%
20 years or more	22%	22%
Born in Hawaii	59%	45%

East Honolulu has the most extensive bicycle path network of any area on Oahu.

Demographically, residents who favor more bike paths and walkways are more likely to be younger adults 18-34 and not born in Hawaii compared to those not favoring this option as a top priority.

Oahu Demographic Profile: Area of Residence

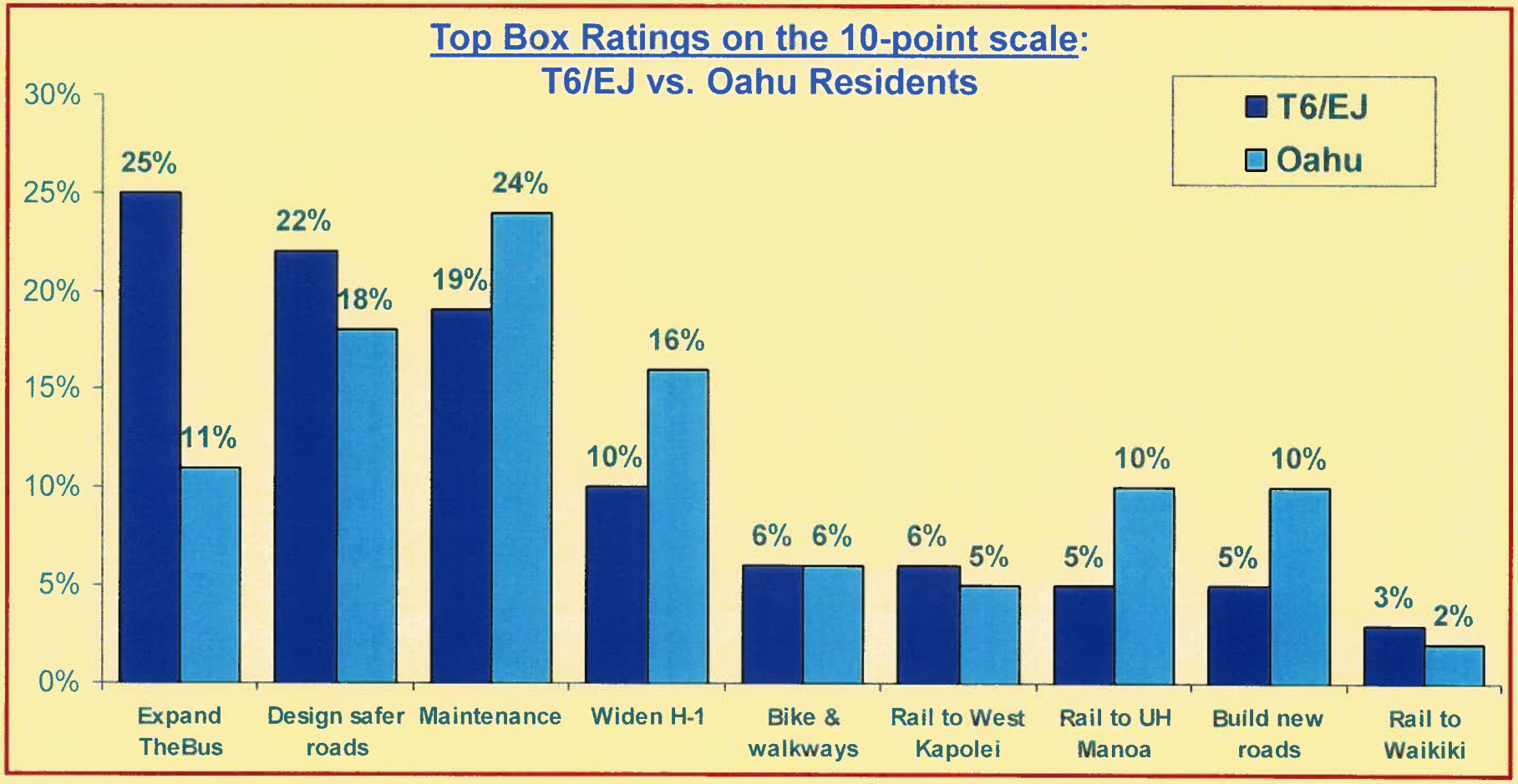
Looking at the demographics of each region, the key differences lie in age and ethnic distribution: West Oahu and Central Oahu are much younger, on average, than the rest of the island. Also, West Oahu is home to more Hawaiian and Filipino residents than other areas of Oahu.

	TOTAL	West Oahu	Central Oahu	Metro Honolulu	Windward No. Shore	East Honolulu
BASE	600	186	67	117	114	116
AGE						
18-34	33%	38%	42%	26%	13%	37%
35-54	34%	35%	37%	37%	36%	27%
55+	33%	27%	21%	37%	51%	36%
Average (years)	45.9	43.2	41.9	48.2	54.2	45.5
INCOME						
Less than $35K	25%	27%	18%	26%	22%	30%
$35K to $75K	35%	35%	37%	38%	41%	26%
$75K to $100K	14%	16%	13%	9%	10%	19%
$100K+	26%	21%	34%	28%	27%	26%
ETHNIC						
Caucasian	17%	12%	14%	15%	27%	21%
Hawaiian	24%	31%	14%	9%	34%	25%
Japanese	21%	16%	33%	22%	20%	24%
Filipino	12%	20%	17%	13%	6%	0%
Other	26%	21%	22%	41%	14%	30%
MODE OF TRANSPORT						
Drive	89%	88%	95%	85%	90%	90%
Bus	8%	9%	2%	11%	4%	10%
Other	3%	3%	3%	4%	6%	0%

Priorities In Transportation: T6/EJ Residents

First Priority in Transportation: T6/EJ Residents

T6/EJ priorities are different from those of Oahu residents as a whole based on runoff results among the top choices from each series. For the T6/EJ group, *expanding TheBus service* and *designing safer roads* come before *increasing road maintenance* and *H-1 freeway widening*.



Bases: 400 T6/EJ residents and 600 Oahu residents.

Q9b. You ranked ___, ___ and ___ as being the top priorities for funding. Again, considering limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding. [READ LIST].

First Priority of T6/EJ Residents: By Mode of Transport

The greater emphasis on mass transit stems from the relatively high proportion of T6/EJ residents (31%) using *TheBus* for daily commuting (Oahu sample: 8%). Expanding *TheBus* ranks as the top priority for transit users in this group. For those using vehicles as primary transportation, though, *increasing road maintenance* and *road design* rank higher than *TheBus* expansion.

"You ranked __, __, and __ as the top priorities. Again, I'd like you to rank them in order of priority, with '1' being highest..."	DRIVE	BUS	OTHER MEANS
Expanding *TheBus* and vanpool services	14%	30%	33%
Designing safer roads	21%	21%	36%
Increasing road maintenance	26%	12%	11%
Widening H-1 freeway corridors	15%	10%	4%
Providing more bike & pedestrian walkways	5%	7%	6%
Extending west end of rail to West Kapolei	6%	8%	3%
Extending the east end of rail to UH Manoa	7%	3%	8%
Building new roads	4%	3%	---
Extending the east end of rail to Waikiki	3%	6%	---
BASE	153	82	32

Q9b. You ranked ___, ___ and ___ as being the top priorities for funding. Again, considering limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding.

Q7a. What is your/their primary means of transportation from home to work or school?

First Priority of T6/EJ Residents: By Area

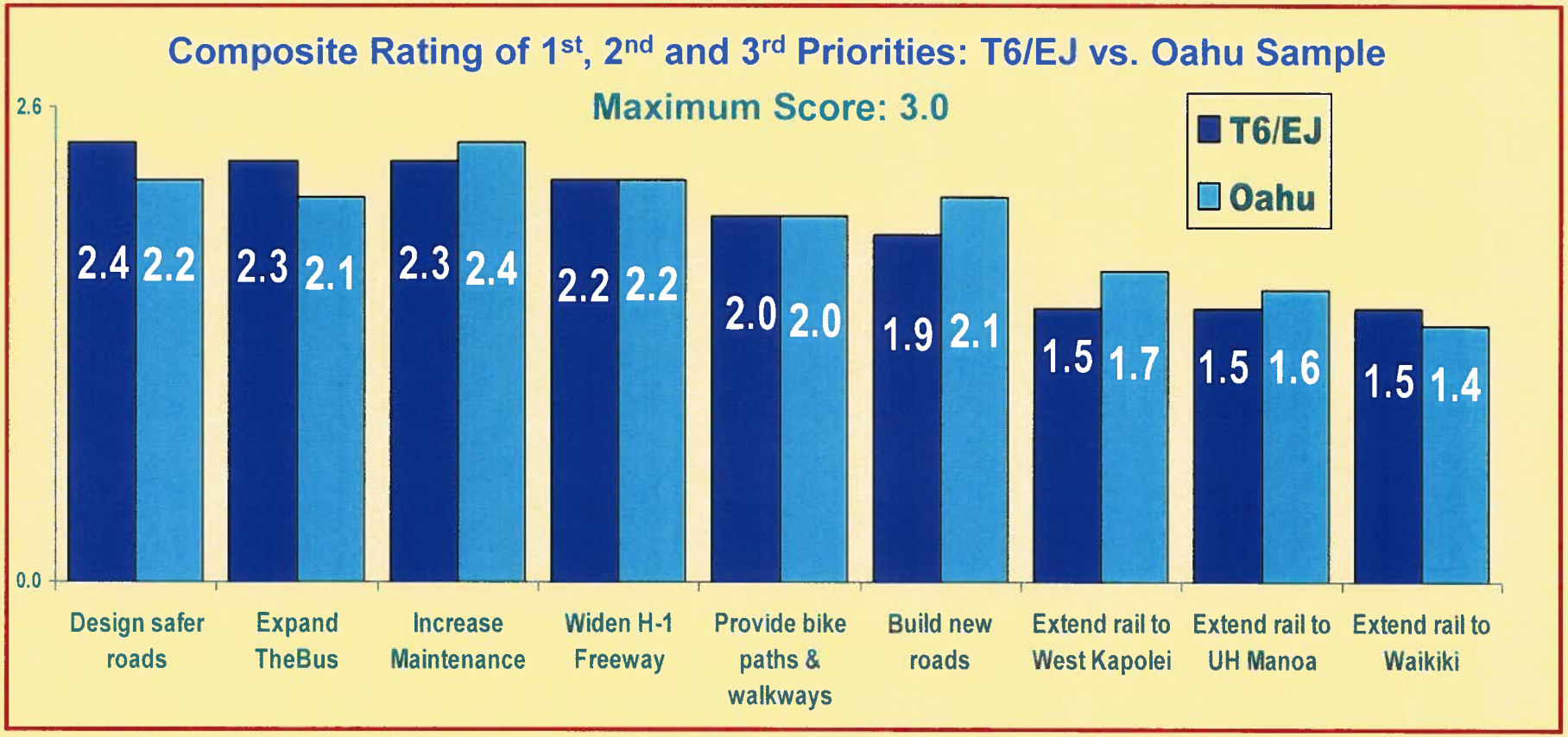
Designing safer roads, **ranked Number Two overall, is highest rated by T6/EJ residents in West Oahu and in Windward and North Shore areas but not in the urban zone of East Honolulu and Metro Honolulu. Metro Honolulu residents – the largest group of T6/EJ residents – rank *expanding TheBus* highest, followed by road design and road maintenance.**

"You ranked __, __, and __ as the top priorities. Again, I'd like you to rank them in order of priority, with '1' being highest..."	WEST OAHU	CENTRAL OAHU	METRO HONOLULU	WINDWARD/ NORTH SHORE	EAST HONOLULU
Expanding *TheBus* and vanpool services	22%	16%	25%	28%	40%
Designing safer roads	27%	7%	19%	28%	26%
Increasing road maintenance	19%	37%	18%	21%	9%
Widening H-1 freeway corridors	9%	21%	9%	8%	9%
Providing more bike & pedestrian walkways	5%	---	9%	5%	5%
Extending west end of rail to West Kapolei	9%	6%	5%	8%	---
Extending the east end of rail to UH Manoa	5%	7%	7%	2%	---
Building new roads	3%	7%	3%	---	7%
Extending the east end of rail to Waikiki	2%	---	5%	---	4%
BASE	122	27	188	29	34

Q9b. You ranked ___, ___ and ___ as being the top priorities for funding. Again, considering limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration for funding, "2" being the second highest and "3" being the third highest for consideration for funding.

Composite Ranking of Priorities: T6/EJ vs. Oahu

Comparing the composite (mean) ratings of both samples generally reinforces the finding that T6/EJ residents put more priority on *road design* and *expansion of bus service* than do residents at large (see page 24). On the other end of the scale, T6/EJ residents rank the various *rail extension* proposals lower, on average, as priorities than do Oahu residents as a whole.



Base: 400 T6/EJ residents and 600 Oahu residents

* Composite rating is the average of rankings (reversed) across all four priority questions.

T6/EJ Demographic Profile: By Area of Residence

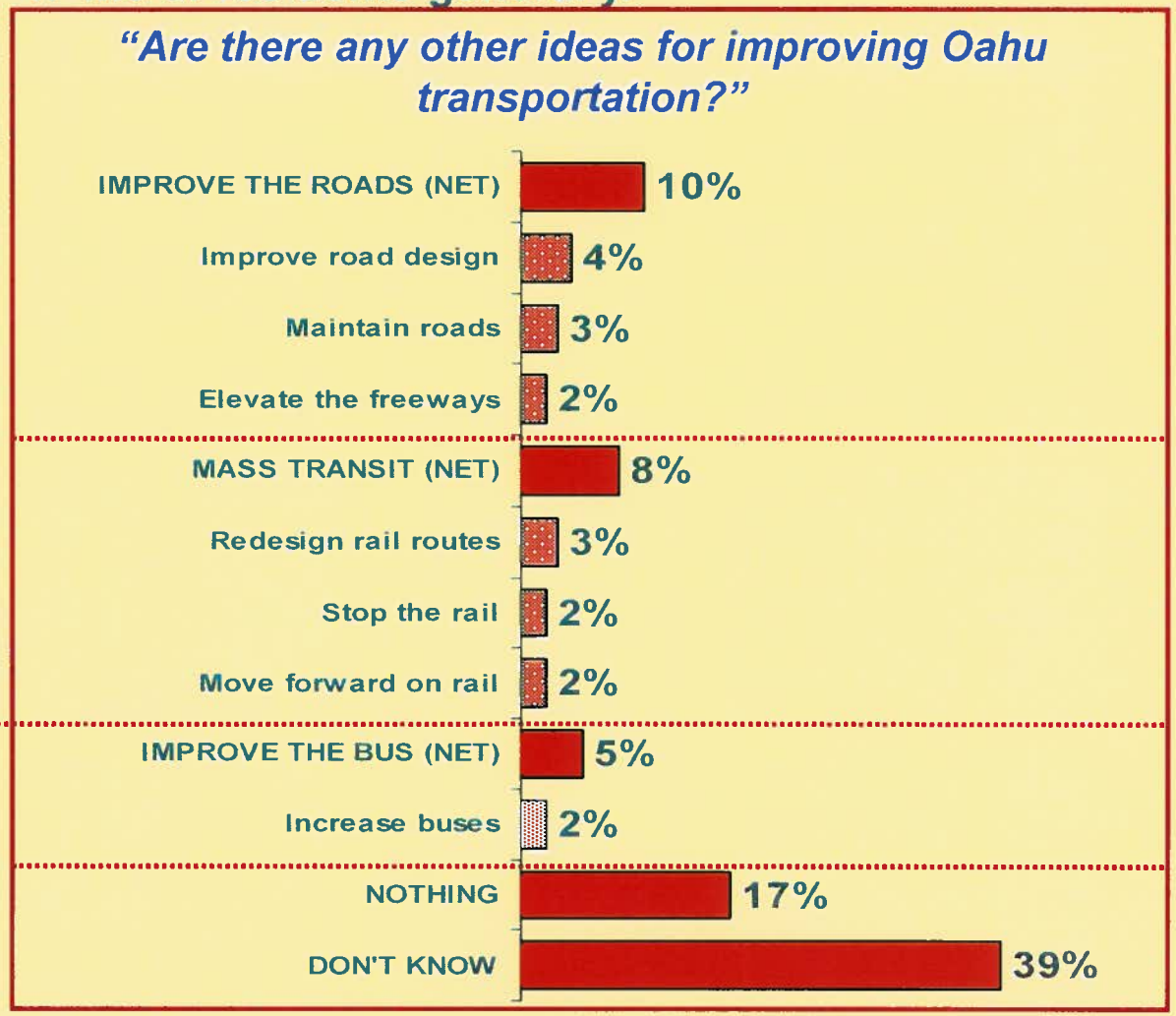
Looking at T6/EJ regional demographics, almost half the group lives in Metro Honolulu. Metro Honolulu is more ethnically diverse, with high proportions of Pacific Islanders, Southeast Asians and other minorities. Another key difference: a majority in Metro Honolulu do not use their own vehicles, either taking *TheBus* or using other means of transportation.

	TOTAL	West Oahu	Central Oahu	Metro Honolulu	Windward No. Shore	East Honolulu
BASE	400	122	27	188	29	34
AGE						
18-34	34%	33%	40%	40%	15%	22%
35-54	33%	33%	34%	29%	52%	41%
55+	32%	34%	27%	31%	32%	38%
Average (years)	46.4	46.9	42.4	45.1	49.8	51.0
INCOME						
Less than $12.5K	47%	40%	17%	51%	55%	60%
$12.5K to $25.4K	43%	43%	78%	39%	25%	41%
$25.4K to $34K	7%	12%	3%	6%	17%	0%
$34K+	3%	4%	0%	4%	4%	0%
ETHNIC						
Caucasian	12%	10%	30%	7%	19%	26%
Hawaiian	24%	31%	34%	12%	63%	13%
Japanese	10%	9%	77%	13%	2%	11%
Filipino	17%	27%	7%	17%	7%	0%
Other Ethnic	37%	20%	21%	51%	10%	50%
MODE OF TRANSPORT						
Drive	53%	59%	72%	40%	79%	61%
Bus	31%	28%	21%	38%	16%	27%
Other	16%	13%	7%	22%	5%	12%

Other Suggestions for Improving Oahu Transportation

Other Suggestions: Oahu Sample

Aside from the proposals raised previously, no other issue surfaced as a 'hot button' in transportation, though relieving traffic in various ways is a common theme of residents generally.



The only difference in responses: more residents in Leeward Oahu (Waianae, Ewa, Kapolei) than in other areas suggested various ways to *improve the road network* i.e., adding, expanding and building more roads in their communities.

Base: 600 Oahu residents.
Q9c. Are there any other ideas for improving Oahu transportation that I haven't mentioned?

Respondent Comments*

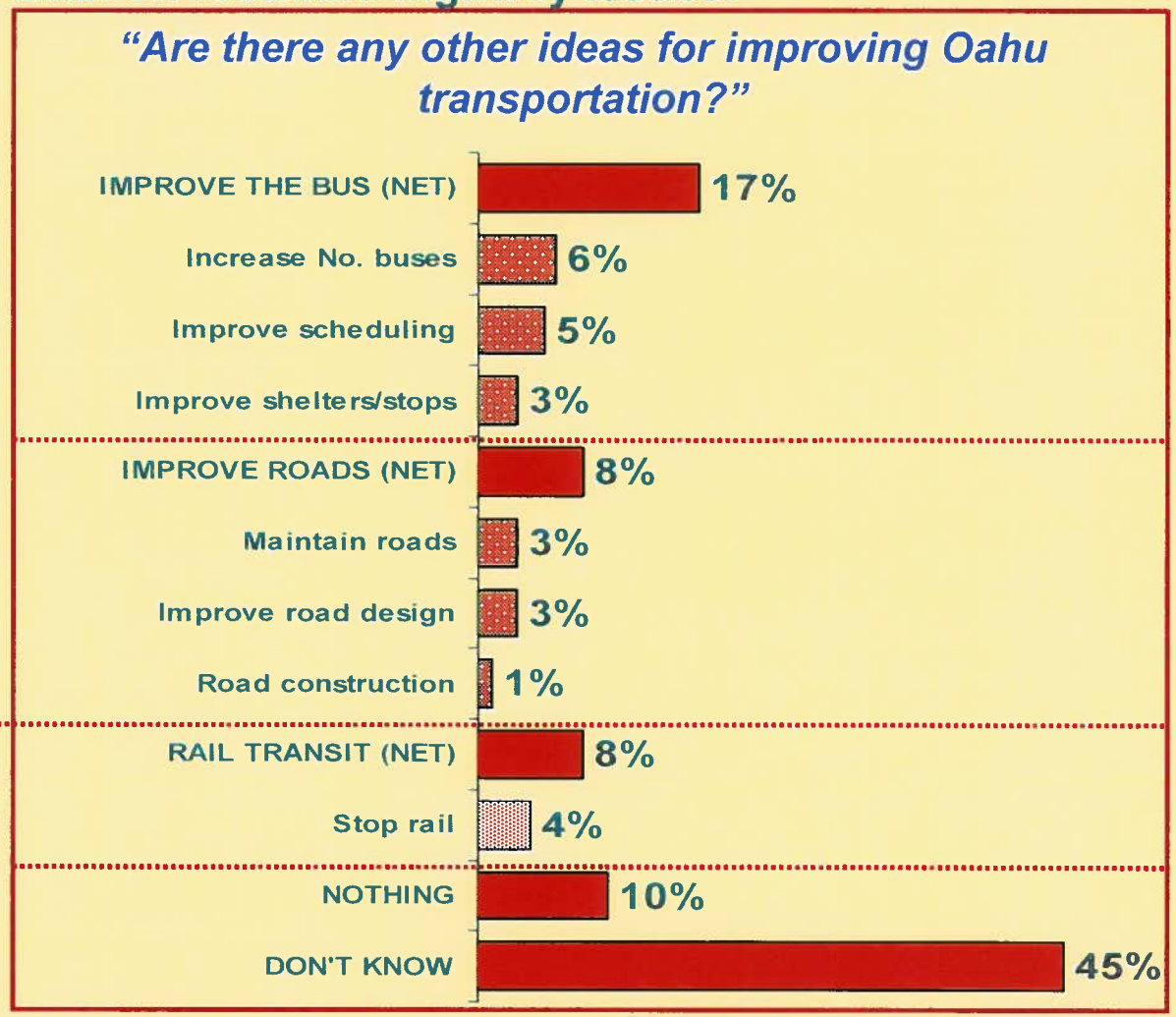
"Are there any other ideas for improving transportation?"

- *"The on- and off-ramp system of the freeways is a major contributor to traffic. People have come up with ideas to improve that and the State ought to listen. There are too many choke points. They need to widen H-1."*
- *"I am handicapped and the bus system is wonderful. The bus system should be extended especially in the country areas – every half hour to 11 pm or later."*
- *"I want to see road improvements because when I come into Waikiki and drive on Kalakaua Avenue, it's embarrassing. The roads are full of potholes and the City and State need to pay for our car repairs, like wheel alignment."*
- *"Scrap the rail and put more money into the bus system so that fares would be cheaper. We cannot have both a rail and a bus system."*
- *"Please do road maintenance at night so it does not disrupt the daytime traffic."*
- *"There is only one 24-hour bus going to Waianae. There should be more 24-hour buses going to more places, like the Circle Island bus."*
- *"We need to have better integrated bike ways because right now if you're on a bike path it just ends. There is no way you can make it from one end of the island to another."*

* These comments were selected at random and do not reflect a proportionate distribution of residents either by area or any demographic criteria

Other Suggestions: T6/EJ Residents

As noted previously, the main difference between T6/EJ residents and Oahu as a whole: T6/EJ residents are more focused on *TheBus* and other mass transit issues than on road and highway issues.



Most T6/EJ residents had no suggestions to make other than the priorities previously presented to them.

Over half of the comments about improving *TheBus* came from those using *TheBus* as their primary transportation.

Base: 400 T6/EJ Oahu residents.
Q9c. Are there any other ideas for improving Oahu transportation that I haven't mentioned?

T6/EJ Respondent Comments*

"Are there any other ideas for improving transportation?"

- *"One, don't give drivers licenses to high school students. Two, promote staggered work hours. Third, if and when rail is constructed, people still need to use their cars to get to the rail station."*
- *"Please increase services to the elderly. We need better Handi-Van pickups and drop-offs. The last time, I had to wait over an hour for a pickup and they never came back to get me after they dropped me off."*
- *"The number of accidents at crosswalks is terrible. This needs to be addressed. Possibly using the flag system in Japan would help."*
- *"I catch the bus and sometimes it is raining. The bus stops in the valley do not have covers to protect us as they do on the main roads."*
- *"Put back all the bus stops you took out and make Handi-Van more accessible because the buses can't board enough* [handicapped] *scooters."*
- *"Have more C bus stops. Where I live, the C does not stop on both sides of the road and there are a lot of people catching the C."*
- *"Add more hours to the bus system because after 11 pm there are too few buses."*
- *"On the North Shore, there is no bus system operating past 9 pm. It should extend much later because people work late and they can't get home."*

* These comments were selected at random and do not reflect a proportionate distribution of residents either by area or any demographic criteria

Importance of Transportation in Quality of Life

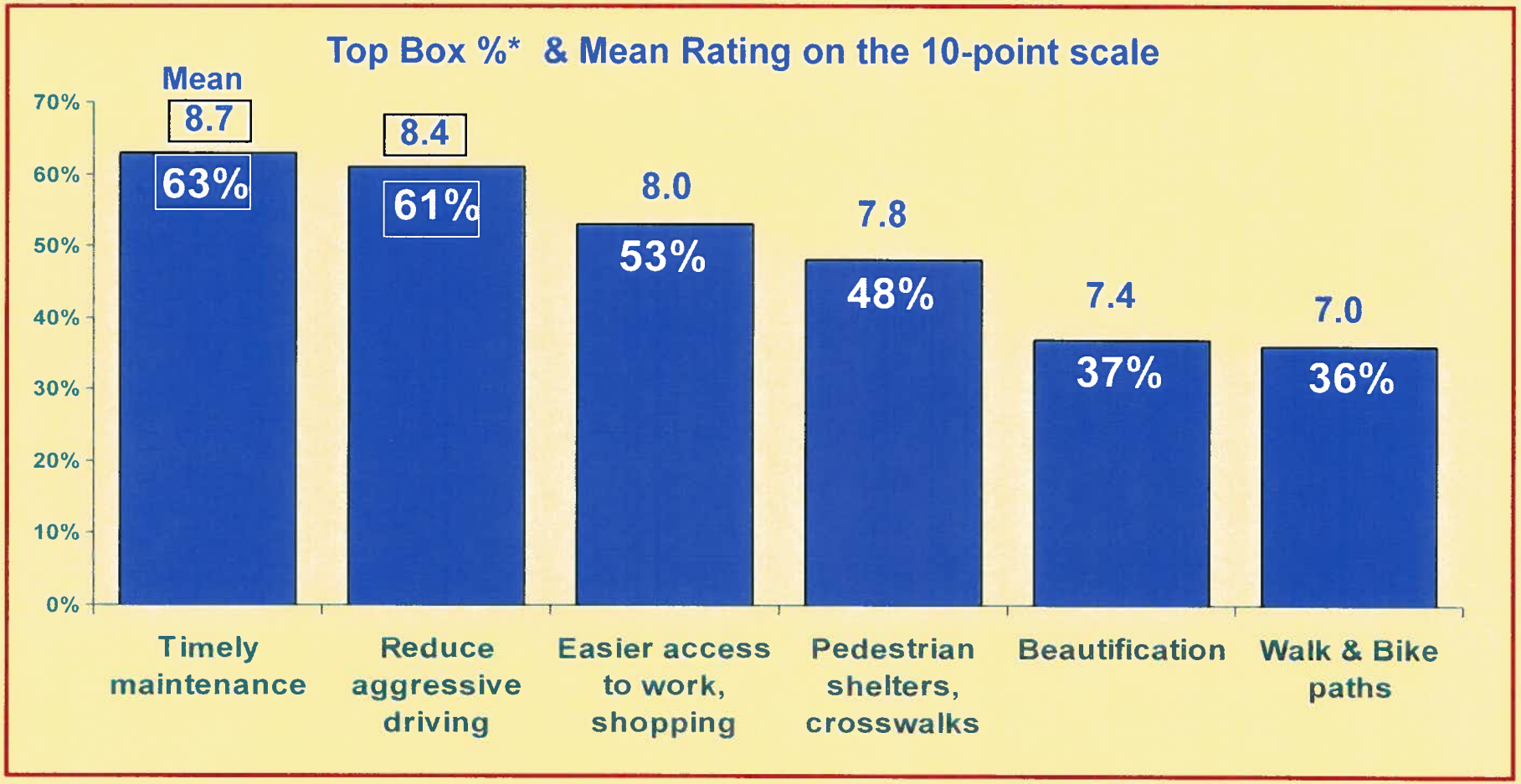
Transportation Proposals: Importance to Quality of Life

- *"Oahu's transportation system supports various forms of travel such as buses, cars, bicycling, walking and soon, a commuter train. Please tell me how important ___ is to your quality of life, using a 10-point scale with '10' being extremely important and '1' being not important at all to your quality of life."*
  - *Having more walking and bicycle routes and paths*
  - *Beautification of existing roads, bridges, transit stops and stations and walking and biking trails*
  - *Having more pedestrian-friendly bus shelters, crosswalks and sidewalks*
  - *Reducing aggressive driving by better enforcement of existing laws*
  - *Having easier access to work, shopping and other regular destinations*
  - *More timely road maintenance and repair*

NOTE: In the following graphs and tables, the "Top Box" percentage is defined as 9 to 10 ratings on the 10-point scale.

Importance to Quality of Life: Oahu Ratings

Ratings of the six proposed improvements reinforce the finding that road maintenance is a top priority for the Oahu public. *Timely road maintenance* received highest ratings overall, followed by *reducing aggressive driving by better enforcement* – similar to 2009 results.



Base: 600 Oahu residents in 2010. * Top Box is defined as 9 to 10 on the 10-point scale.

Q8: Please tell me how important ____ is to your quality of life, using a 10-point scale with 10 being extremely important to your quality of life and 1 being not important at all to your quality of life.

Top Box %: By Area of Residence & Transport Mode

West Oahu residents are more concerned with *reducing aggressive driving* and having *easier access to work & shopping* than are other Oahu residents.

Top Box (9-10) %: Importance	West Oahu	Central Oahu	Metro Honolulu	Windward/ No. Shore	East Honolulu
More timely road maintenance and repair	61%	72%	58%	64%	63%
Reduce aggressive driving by enforcement	67%	62%	46%	57%	65%
Easier access to work, shopping, and other	59%	49%	51%	44%	48%
Pedestrian-friendly bus shelters, crosswalks	52%	45%	44%	44%	45%
Beautification of existing roads, bridges…	42%	36%	27%	43%	33%
More walking & biking routes and paths	32%	36%	42%	36%	35%
BASE	213	81	110	83	114

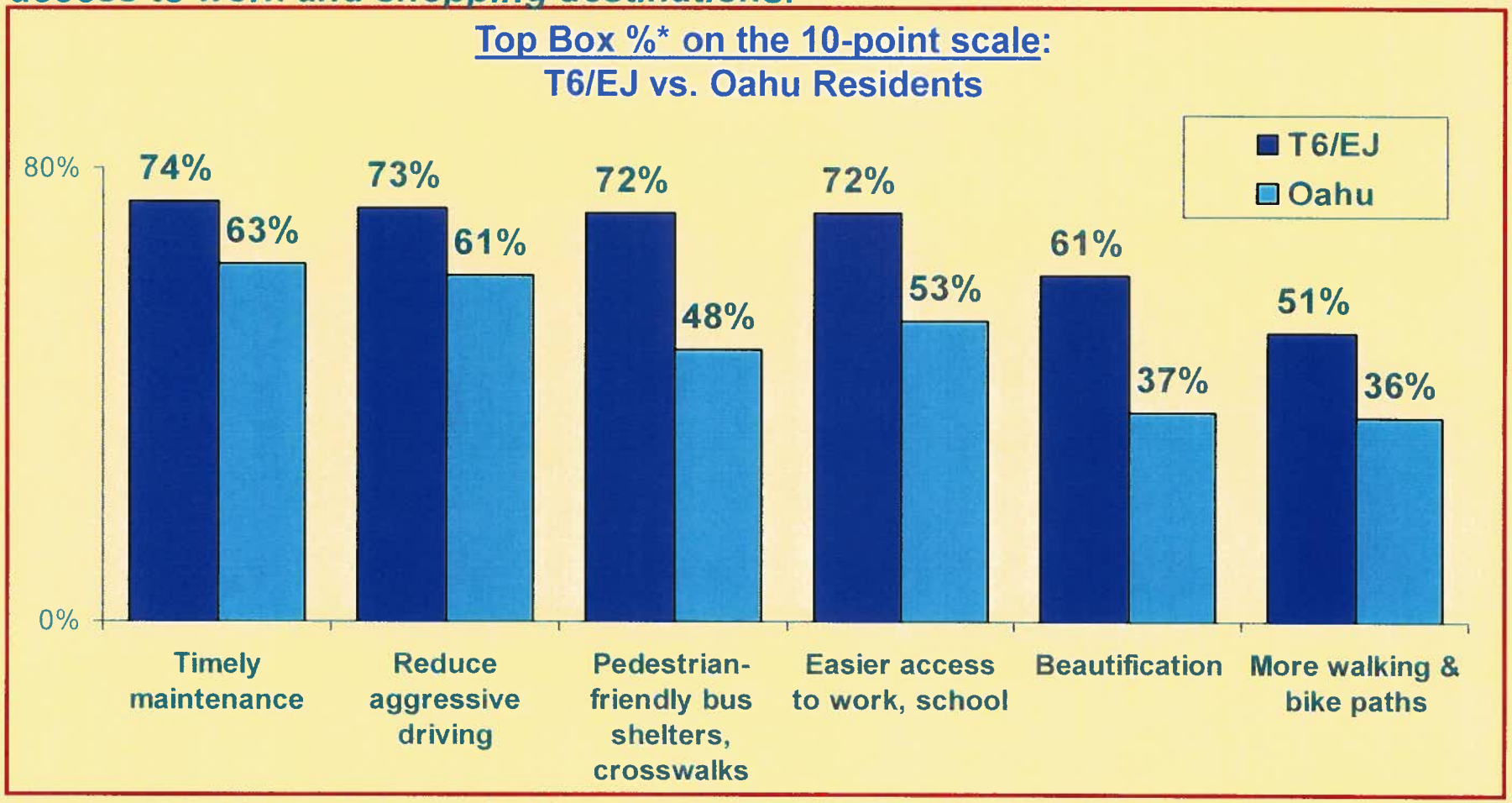
Top Box (9-10) %: Importance	Drive	Bus	Other
More timely road maintenance and repair	62%	44%	61%
Reduce aggressive driving by enforcement	60%	59%	59%
Easier access to work, shopping, and other	51%	63%	60%
Pedestrian-friendly bus shelters, crosswalks	45%	46%	75%
Beautification of existing roads, bridges…	37%	30%	48%
More walking & biking routes and paths	33%	27%	73%
BASE	427	37	15

Those who drive their own vehicles to work or school rate *road maintenance* higher in importance than do those taking the bus.

Q8. Tell me how important ____ is to your quality of life, using a 10-point scale with 10 being extremely important to your quality of life and 1 being not important at all to your quality of life.

Importance to Quality of Life: T6/EJ vs. Oahu

T6/EJ residents also rank *timely maintenance* highest in importance to their quality of life but differ from the population at large in putting a higher priority on *providing pedestrian-friendly bus shelters, crosswalks etc.* and having *easier access to work and shopping destinations.*



Base: 400 T6/EJ residents and 600 Oahu residents in 2010. *Top Box is defined as 9 to 10 on the 10-point scale.
Q8. Please tell me how important ____ is to your quality of life, using a 10-point scale with 10 being extremely important to your quality of life and 1 being not important at all to your quality of life.

T6/EJ Residents: By Area and Ethnic Segment

Timely road maintenance and having *easier access to frequent destinations* are of greatest concern for Windward and North Shore T6/EJ residents.

Top Box (9-10) %: Importance	West Oahu	Central Oahu	Metro Honolulu	Windward/ No. Shore	East Honolulu
More timely road maintenance and repair	78%	66%	73%	89%	64%
Pedestrian-friendly bus shelters, crosswalks	80%	63%	70%	68%	66%
Easier access to work, shopping, and other	76%	82%	68%	87%	69%
Reduce aggressive driving by enforcement	80%	60%	71%	79%	68%
Beautification of existing roads, bridges…	65%	62%	60%	50%	59%
More walking & biking routes and paths	53%	40%	53%	52%	45%
BASE	116	28	188	24	44

Top Box (9-10) %: Importance	Caucasian	Hawaiian	Japanese	Filipino	Other
More timely road maintenance…	76%	75%	70%	74%	72%
Pedestrian-friendly bus shelters…	75%	79%	71%	73%	65%
Easier access to work, shopping…	76%	79%	65%	76%	66%
Reduce aggressive driving…	75%	83%	66%	72%	67%
Beautification of roads, bridges	52%	68%	45%	71%	57%
More walking & biking paths	47%	60%	38%	50%	49%
BASE	48	92	40	64	143

Native Hawaiian T6/EJ residents generally rate the proposals higher than do other residents.

Q8. Tell me how important ____ is to your quality of life, using a 10-point scale with 10 being extremely important to your quality of life and 1 being not important at all to your quality of life.

Making the System More Affordable and Accessible

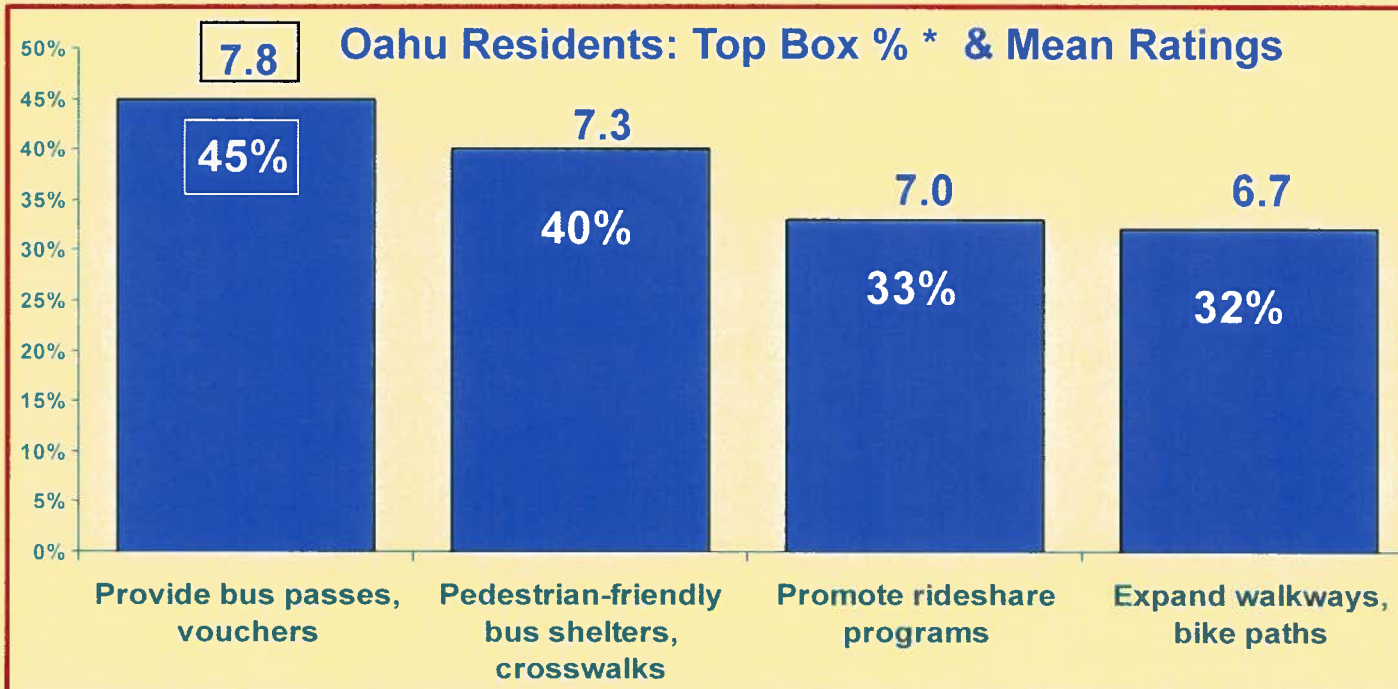
Making the System More Affordable and Accessible

- *"An objective of Oahu planners is to keep the island's transportation system affordable and accessible to Oahu's low to moderate income residents. Using a 10-point scale with '10' being extremely effective and '1' being not effective at all, how effective would ___ be in making Oahu's transportation system more affordable and accessible to our low to moderate income residents?"*

  - *Having more pedestrian-friendly bus shelters, crosswalks and sidewalks*
  - *Expanding pedestrian walkways and bicycle paths*
  - *Promoting ride-share programs like carpool and vanpooling*
  - *Providing bus passes, vouchers or other incentives for use in ride-share programs by qualified users*

Making the System More Affordable and Accessible

Of the four proposals, the idea of providing *"bus passes, vouchers or other incentives"* was rated highest, overall, for effectiveness in making transportation more affordable and accessible for moderate-income residents.



More support for *bus passes and vouchers* came from **Windward** Oahu residents.

More **West Oahu** residents endorsed *bus shelters, cross walks and sidewalks* than did residents in other areas (see table below).

	West Oahu	Central Oahu	Metro Honolulu	Windward & North Shore	East Honolulu
Providing bus passes, vouchers	46%	44%	41%	60%	35%
More pedestrian-friendly bus shelters	48%	29%	31%	43%	35%
Promote rideshare programs	32%	43%	28%	38%	27%
Expand walkways, bike paths	19%	34%	37%	42%	22%

Base: 600 Oahu residents in 2010 * Top Box is defined as 9-10 ratings on the 10-point scale

Q10: Using a 10-point scale with 10 =extremely effective and 1=not effective at all, how effective would ____ be in making Oahu's transportation system more affordable and accessible to our low to moderate income residents?

Top Box %: By Oahu Income Category

Income is a factor in the ratings of proposals. Oahu's lowest income residents (under $35,000 annually) are more transit-dependent than other residents, with twice the proportion of bus riders than in the rest of the public. Low-income residents tend to favor (a) bus passes and rideshare incentives, as well as (b) having more pedestrian-friendly bus shelters and crosswalks, more than those with higher incomes.

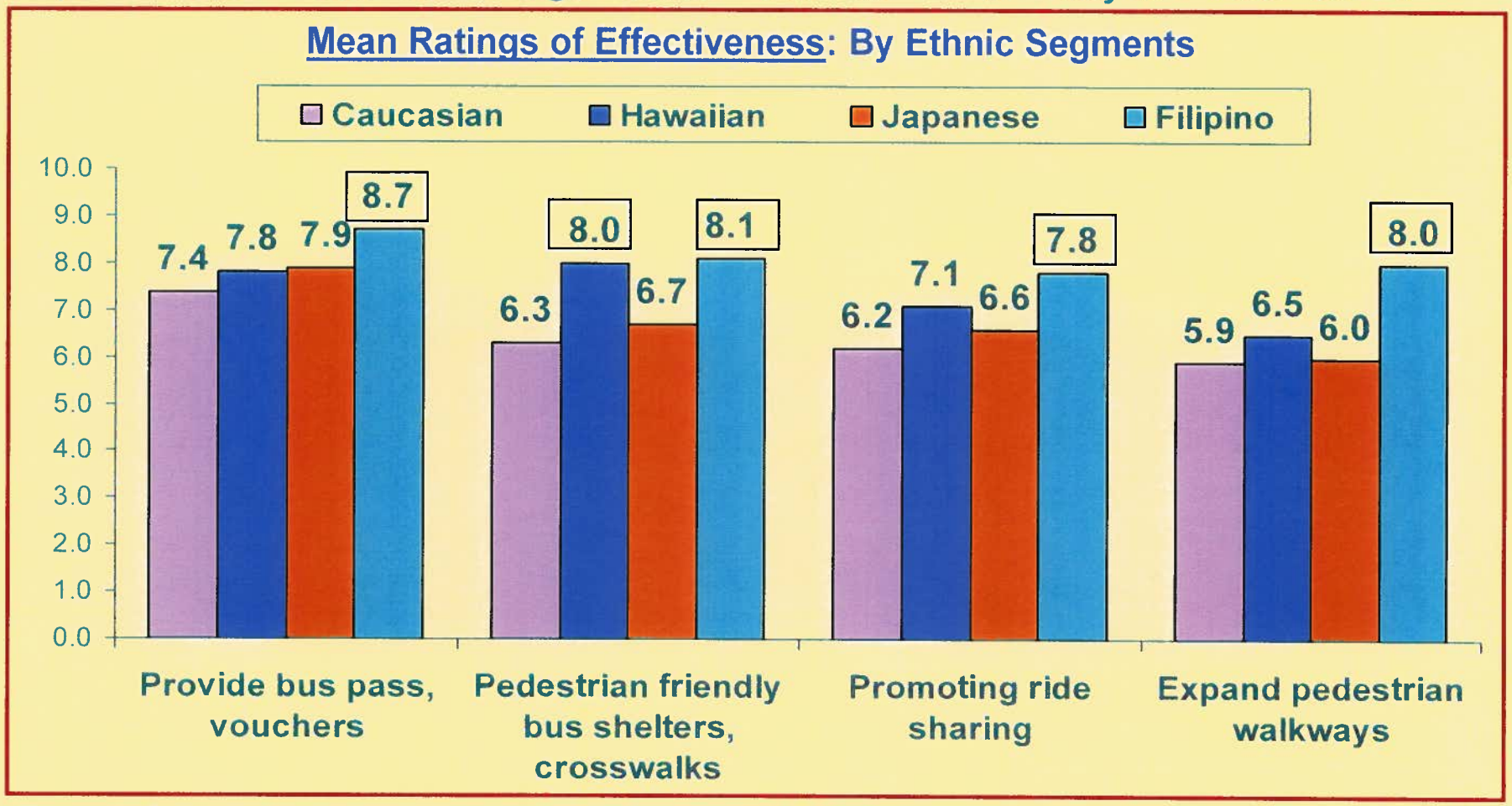
Top Box (9-10) %	Under $35,000	$35,000 to $75,000	$75,000 or more
Providing bus passes, vouchers and other incentives	53%	44%	35%
Having pedestrian-friendly bus shelters, crosswalks and sidewalks	50%	45%	29%
Promoting rideshare programs like carpooling and vanpooling	34%	44%	21%
Expanding pedestrian walkways and bike paths	32%	37%	29%
BASE	97	140	165

* Top Box is defined as 9-10 ratings on the 10-point scale.

Q10. Using a 10-point scale with 10 =extremely effective and 1=not effective at all, how effective would ____ be in making Oahu's transportation system more affordable and accessible to our low to moderate income residents?

Making the System More Affordable: By Ethnic Segment

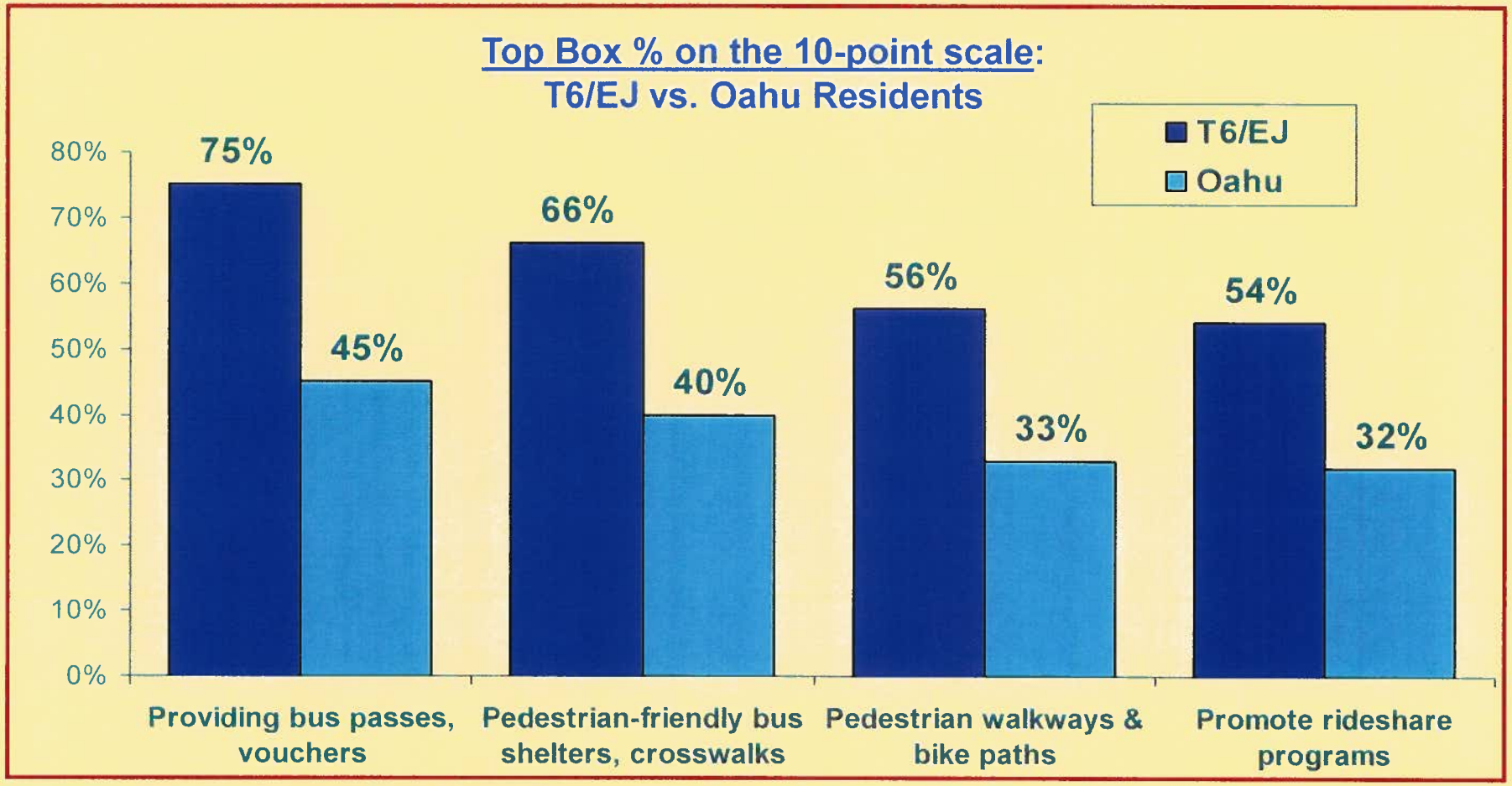
Among ethnic groups, the Filipino community is most in favor of making the system more affordable, and particularly by *providing bus passes and vouchers*. Biggest differences in ratings are between Filipino residents, who generally support all proposals, and Caucasians, a high number of whom feel that they won't be effective.



Bases: 170 Caucasian, 95 Hawaiian, 144 Japanese and 58 Filipino residents.
Q10: Using a 10-point scale with 10 =extremely effective and 1=not effective at all, how effective would ____ be in making Oahu's transportation system more affordable and accessible to our low to moderate income residents?

Making the System Affordable: T6/EJ vs. Oahu

Across the board, the T6/EJ group is much more favorable to proposals for improving affordability and accessibility than are residents at large. Three in 4 strongly favor providing *bus passes and vouchers,* and 2 in 3 favor *improving bus shelters, sidewalks and crosswalks* vs. under half of residents as a whole.



Bases: 400 T6/EJ residents and 600 Oahu residents. * Top Box is defined as 9-10 ratings on the 10-point scale.
Q10: Using a 10-point scale with 10 =extremely effective and 1=not effective at all, how effective would ____ be in making Oahu's transportation system more affordable and accessible to our low to moderate income residents?

T6/EJ Residents: By Oahu Area

In the T6/EJ population, support for *pedestrian-friendly bus shelters, crosswalks and sidewalks* is higher in West Oahu than in other areas. Relative to *promotion of rideshare programs*, support for it is higher in East Honolulu than elsewhere on Oahu.

Top Box (9-10) %: Effectiveness	West Oahu	Central Oahu	Metro Honolulu	Windward/ No. Shore	East Honolulu
Providing bus passes, vouchers or incentives	74%	78%	75%	70%	76%
Having more pedestrian-friendly bus shelters, crosswalks and sidewalks	72%	62%	69%	57%	49%
Expanding pedestrian walkways & bike paths	63%	54%	57%	45%	46%
Promoting ride-share programs	60%	43%	48%	44%	74%
BASE	122	27	187	29	34

Q10: Using a 10-point scale with 10 =extremely effective and 1=not effective at all, how effective would _____ be in making Oahu's transportation system more affordable and accessible to our low to moderate income residents?

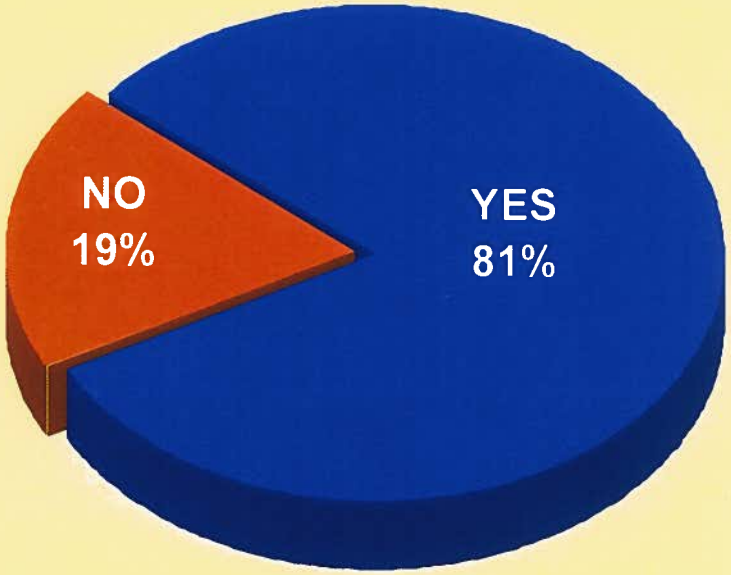
Reducing Greenhouse Gas Emissions

Awareness of Greenhouse Gases: Oahu Sample

Eight in 10 Oahu residents were aware of or have apparently heard of Greenhouse Gases based on responses to:

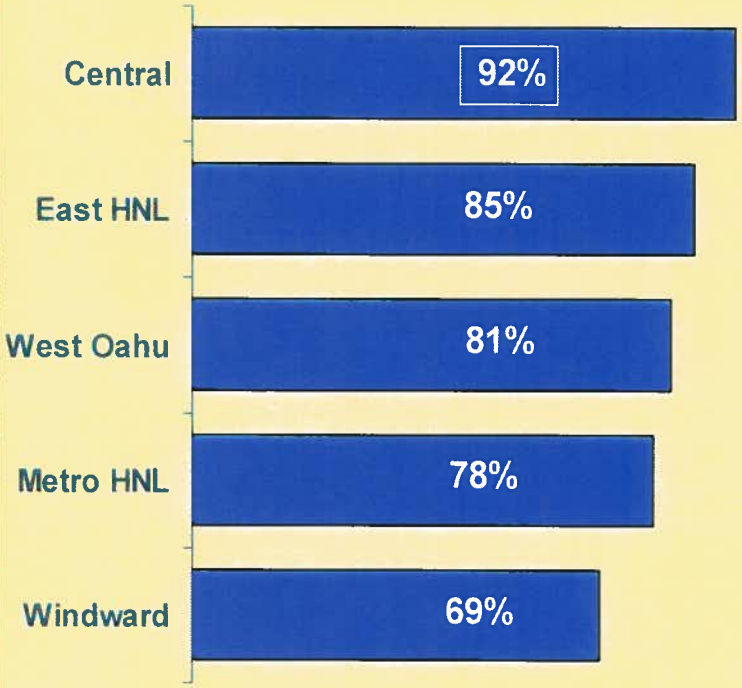
"One result of using cars and trucks for transportation are Greenhouse Gases which are gases released when vehicle engines burn gasoline as fuel. Have you heard of Greenhouse Gases?"

"Have you heard of Greenhouse Gases?"



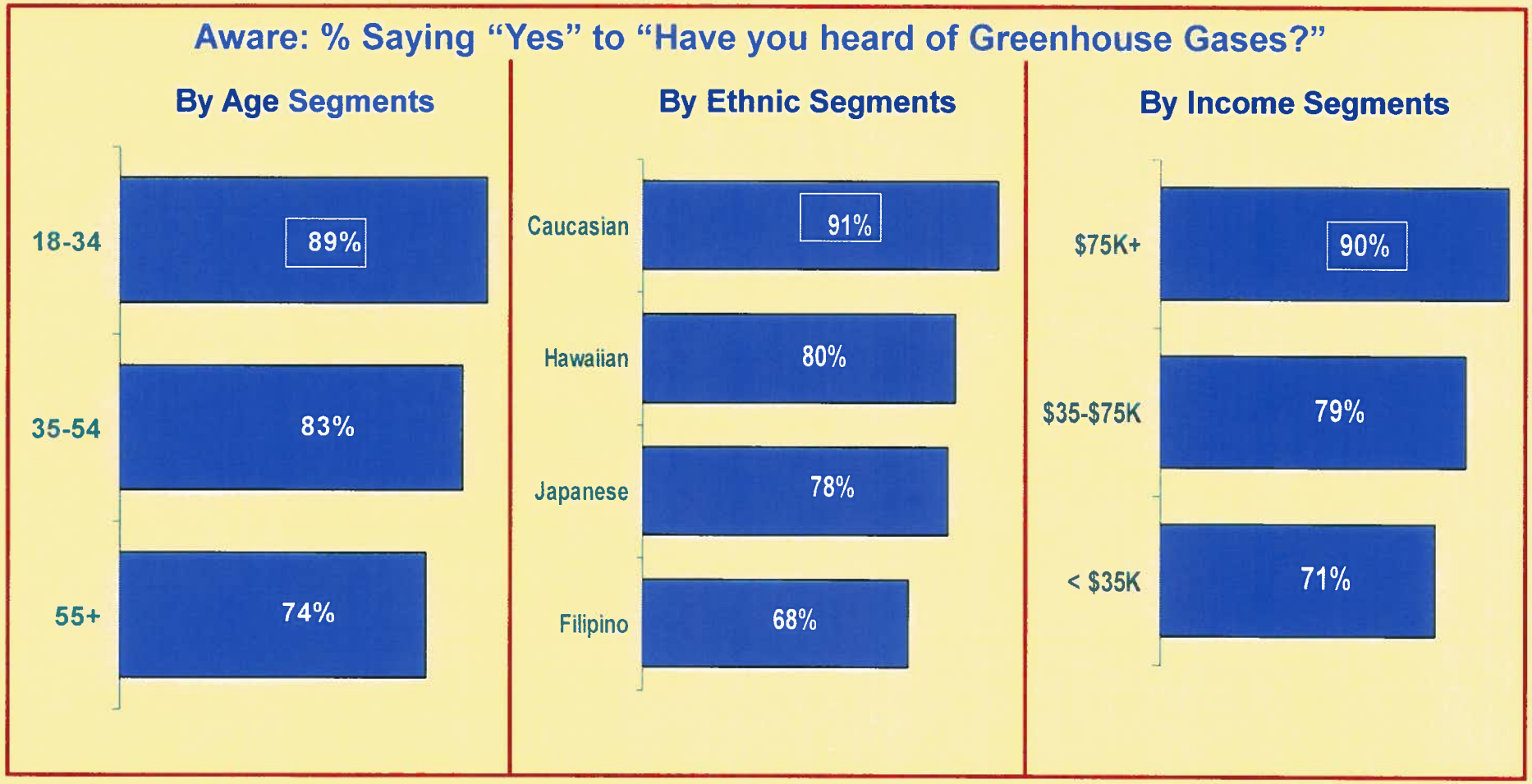
Base: 600 Oahu residents.

Aware: % 'YES' By Area



Awareness of Greenhouse Gases: Demographic Segments

High awareness of Greenhouse Gases is not uniform across the population; awareness is relatively higher among Caucasians, younger adults 18-34 and those with higher incomes ($75K+) than among other resident segments.



Bases: 600 Oahu residents.
Q12: One result of using cars and trucks for transportation are Greenhouse Gases, which are gases released when vehicle engines burn gasoline as fuel. Have you heard of Greenhouse Gases?

Willingness to Consider Reducing Greenhouse Gases

To gauge the willingness of residents to make specific changes with the aim of reducing Greenhouse Gases, residents were asked to consider a series of six changes:

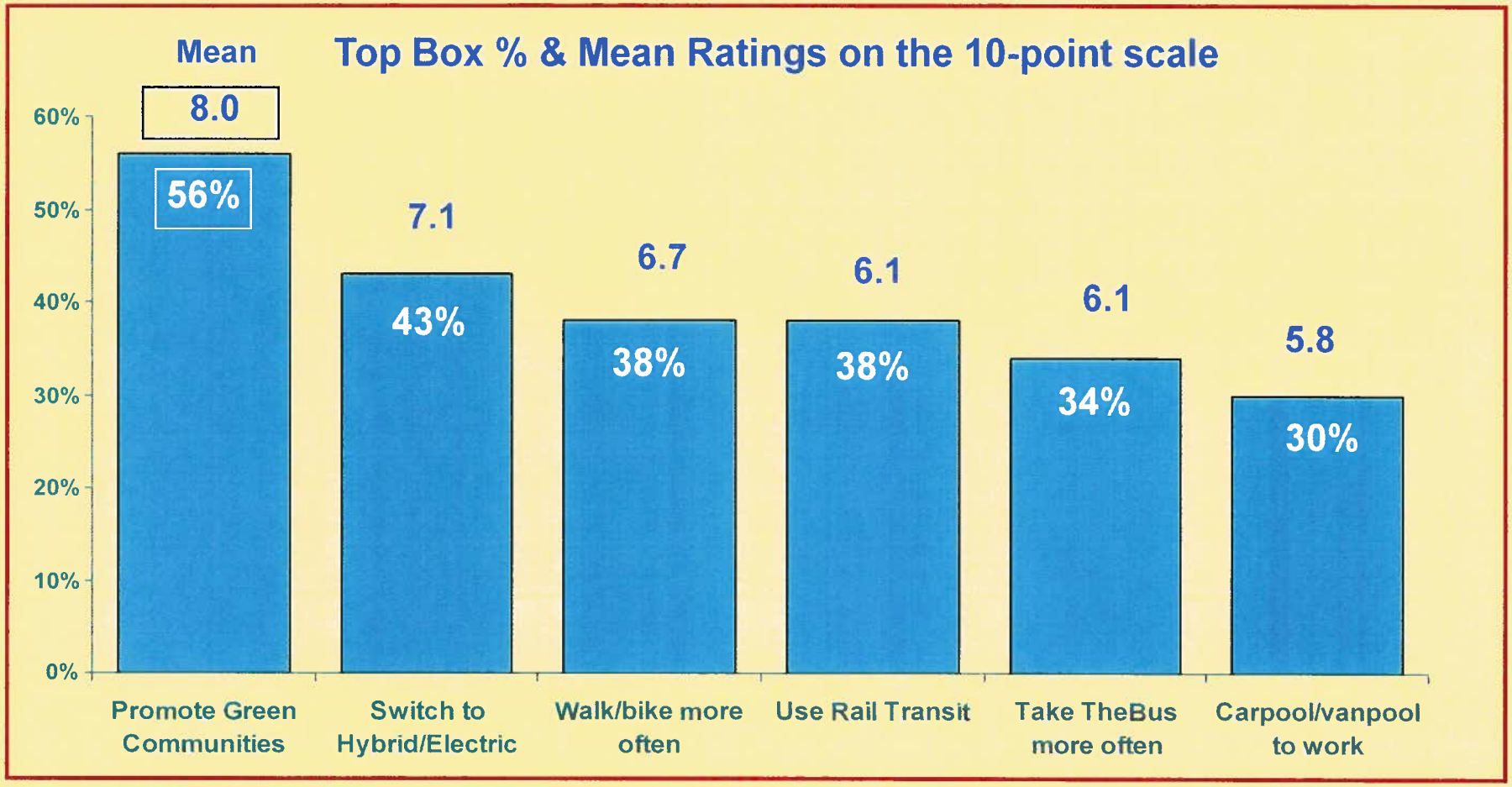
- *"Greenhouse Gas emissions warm the Earth's climate, resulting in raising sea levels and more intense storms and hurricanes. Using gasoline also causes air pollution from vehicle exhaust and adds to the high cost of living. Car owners can reduce these impacts in several ways, first by switching to cars with cleaner engines and alternative fuels, and second, by using public transit, bicycling and walking more often.*

- *Using a 10-point scale with '10' being extremely willing to consider and '1' being not willing at all to consider, please tell me how willing you are to ____ as a way to reduce Greenhouse Gas emissions from transportation."*

  - ***Consider switching to a hybrid or electric vehicle***
  - ***Begin carpooling or vanpooling to work***
  - ***Walk or bike more often***
  - ***Use TheBus more often***
  - ***Use the Rail Transit system when it is available***
  - ***Support policies and design that promote communities where walking and biking is encouraged and public transportation is easily accessible***

Reducing Greenhouse Gases

Supporting policies that promote communities where walking and biking is encouraged **ranked at the top of the list of suggestions to reduce Greenhouse gases. This was the only one in which over half the public (56%) is strongly willing to consider. Number two was the idea of *switching to hybrid or electric vehicles*, considered by 43% of residents.**



Base: 600 Oahu residents. * Top Box is defined as 9-10 ratings on the 10-point scale.
Q12. Using a 10-point scale where 10 means extremely willing to consider and 1 means not willing at all to consider, please tell me how willing you are to ____ as a way to reduce Greenhouse Gas emissions from transportation.

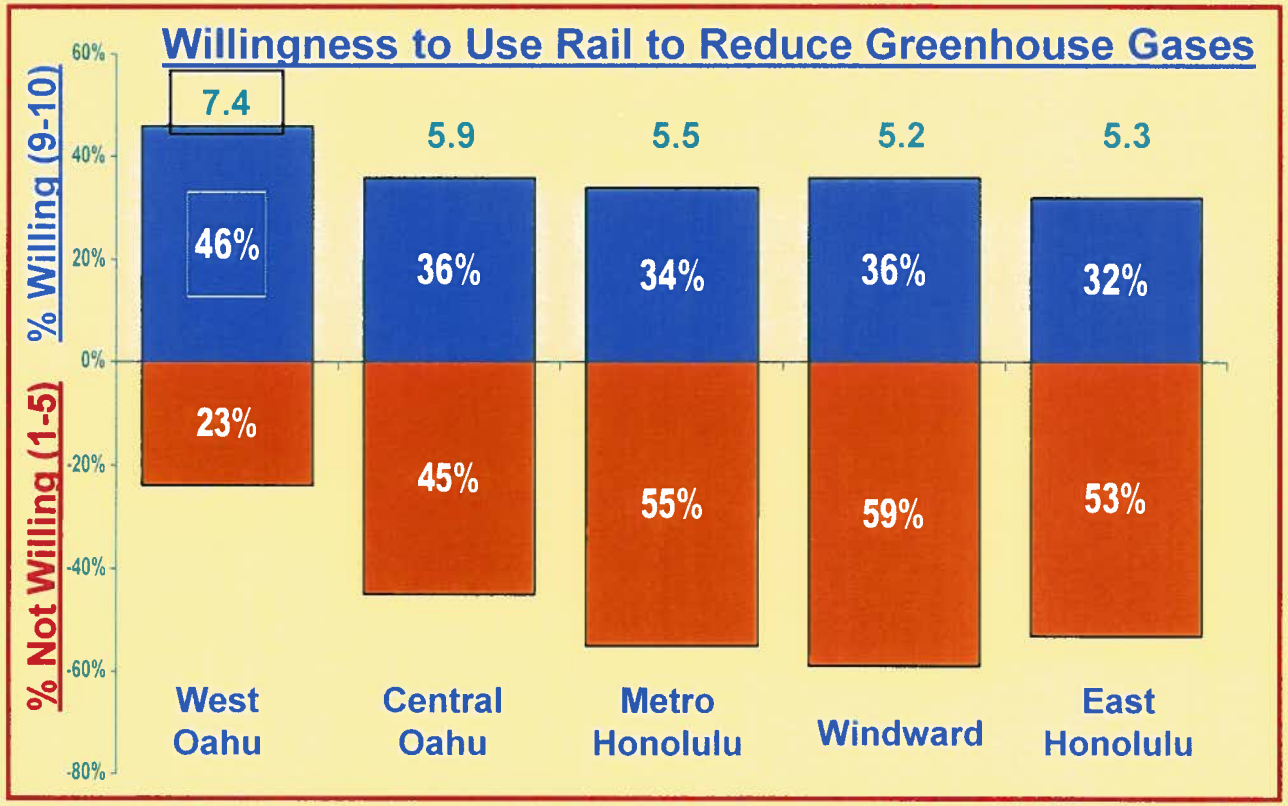
Top Box Willingness to Consider: By Area of Residence

Area of residence is a major factor in residents' willingness to make changes to reduce Greenhouse Gases. West Oahu and Windward Oahu residents are more willing to *switch to hybrid or electric cars* than other residents. West Oahu residents also show more willingness than do other residents to use *TheBus* more often as well as to *carpool to work or school* in order to reduce Greenhouse Gases.

Top Box %: Rating 9-10 of 10	West Oahu	Central Oahu	Metro Honolulu	Windward/ No. Shore	East Honolulu
Support policies and design that promote communities where walking and biking is encouraged and public transportation is easily accessible	56%	50%	56%	59%	58%
Switching to a hybrid or electric vehicle	50%	34%	31%	52%	42%
Walk or bike more often	33%	32%	39%	46%	43%
Use the rail transit system when it is available	46%	36%	32%	36%	32%
Use TheBus more often	39%	35%	32%	35%	23%
Begin carpooling or vanpooling to work	37%	32%	16%	31%	27%
BASE	183	67	112	108	114

Q9. Using a 10-point scale where 10 means extremely willing to consider and 1 means not willing at all to consider, please tell me how willing you are to ____ as a way to reduce Greenhouse Gas emissions from transportation.

Reducing Greenhouse Gases: Other Demographics



Using Rail. Willingness to use the rail system apparently turns on proximity to the rail route for commuting. Outside of West and Central Oahu, most residents are not willing to consider using rail as a way to reduce the Greenhouse Effect.

Switching to Hybrid/Electric Vehicles. Income is a key factor in switching to hybrids. About half (48%) of residents earning less than $35,000 are not willing to consider this option versus 23% of those earning $35,000 or more.

Using *TheBus*. Low income influences bus usage. Twice as many residents earning less than $35,000 (49%) as those earning $75,000 (26%) would consider taking *TheBus* more often.

Carpooling/Vanpooling. The biggest factor seems to be age, with 60% of adults 55+ not willing to consider carpooling versus 27% of young adults 18-34 not willing.

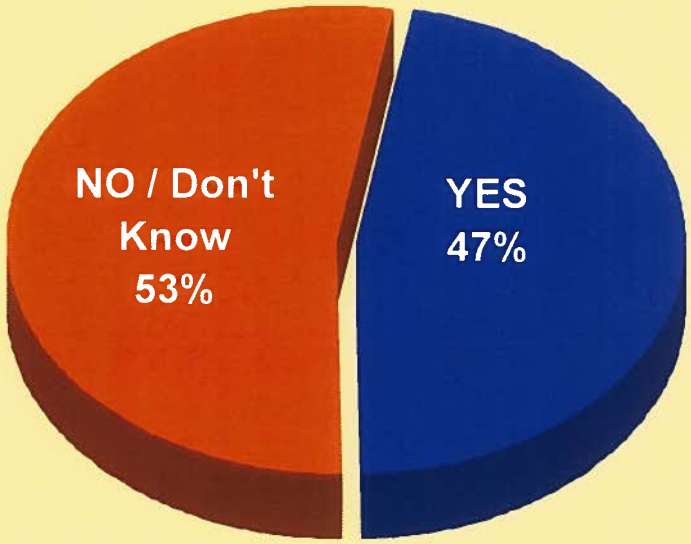
Reducing Greenhouse Gases: T6/EJ Residents

Awareness of Greenhouse Gases: T6/EJ Residents

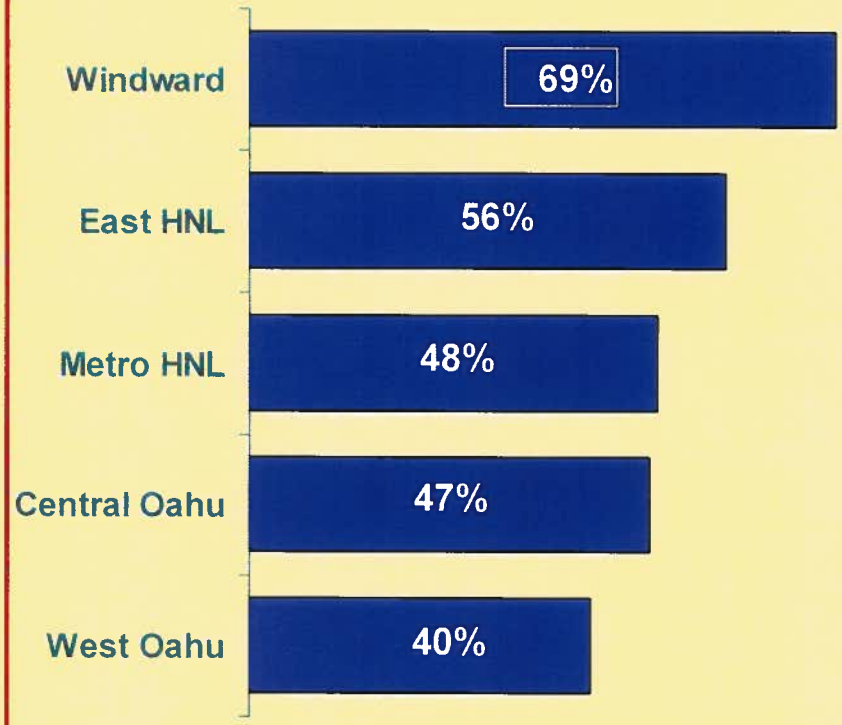
Awareness of Greenhouse Gases is much lower in the T6/EJ population (47%) than it is among residents as a whole (81%).

In the T6/EJ population, additionally, differences across the regions are significant, with those in Windward Oahu displaying higher awareness than those in West and Central Oahu.

"Have you heard of Greenhouse Gases?"



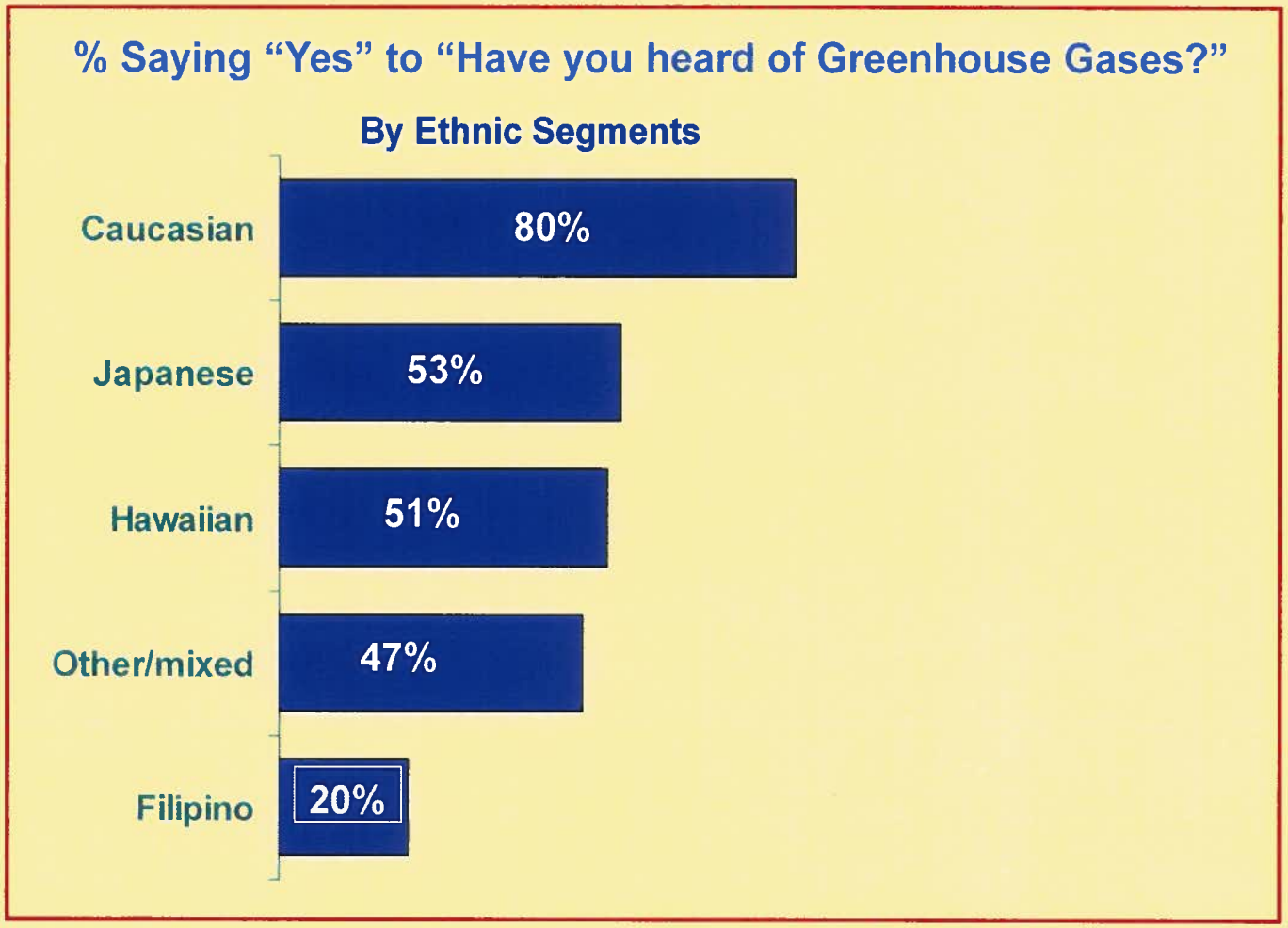
Aware: % 'YES' By Area



Bases: 400 T6/EJ residents: 29 Windward/North Shore, 34 East Honolulu, 188 Metro Honolulu, 27 Central Oahu and 122 in West Oahu.
Q11. One result of using cars and trucks for transportation are Greenhouses Gases which are gases released when vehicle engines burn gasoline as fuel. Have you heard of Greenhouse Gases?

Awareness of Greenhouse Gases: T6/EJ Ethnic Segments

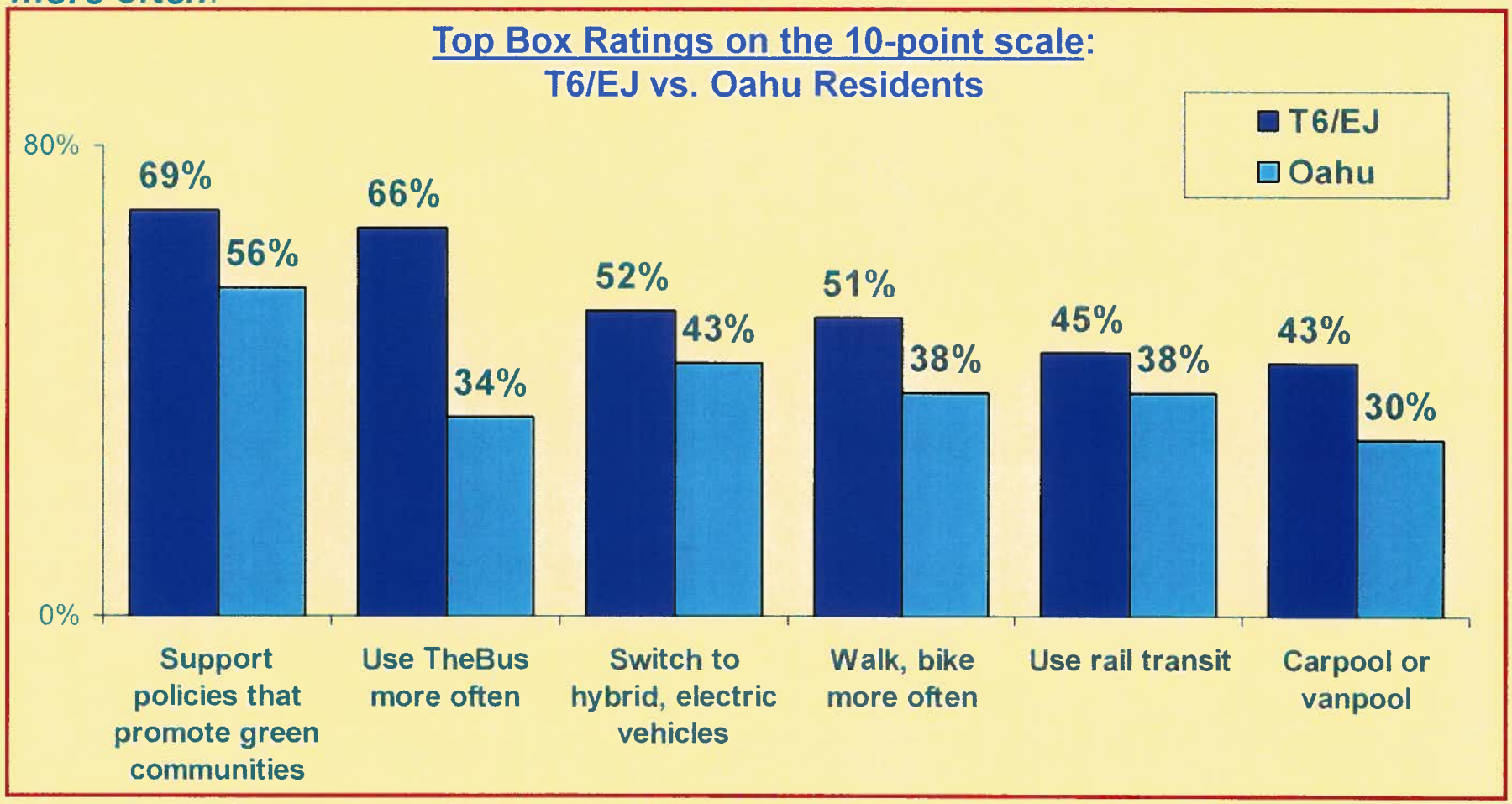
In the T6/EJ population, awareness of Greenhouse Gases is much higher among Caucasians than among all other major cultural groups.



Bases: 54 Caucasians, 56 Japanese, 94 Hawaiian, 106 Other and 70 Filipino T6/EJ residents.
Q11: One result of using cars and trucks for transportation are Greenhouse Gases, which are gases released when vehicle engines burn gasoline as fuel. Have you heard of Greenhouse Gases?

Reducing Greenhouse Gases: T6/EJ vs. Oahu

Across the board, T6/EJ residents are more willing to make changes to reduce Greenhouse Gases than the public at large. The biggest difference: twice the proportion of T6/EJ residents as residents at large would consider *using TheBus more often*.



Base: 400 T6/EJ residents and 600 Oahu residents
Q12: Using a 10-point scale where 10 means extremely willing to consider and 1 means not willing at all to consider, please tell me how willing you are to ____ as a way to reduce Greenhouse Gas emissions from transportation.

Reducing Greenhouse Gases: By Awareness of Gases

The data suggests that consideration of hybrid or electric vehicles by the T6/EJ population may be raised by more education about the effects of Greenhouse Gases.

Mean Rating on 10-point scale	Aware	Not Aware
Support policies…that promote communities where walking and biking is encouraged…	8.4	8.8
Use TheBus more often	7.7	8.4
Switching to a hybrid or electric vehicle	7.5	6.4
Walk or bike more often	7.1	7.0
Begin carpooling or vanpooling to work	6.6	5.8
Use the rail transit system when it is available	6.3	6.5
BASE	190	202

Those already aware of the Greenhouse Effect are more willing to consider switching to hybrid vehicles than those not aware.

No other proposals showed statistical differences based on awareness of green-house gases.

Q12. Using a 10-point scale where 10 means extremely willing to consider and 1 means not willing at all to consider, please tell me how willing you are to ____ as a way to reduce Greenhouse Gas emissions from transportation.

Reducing Greenhouse Gases: T6/EJ By Oahu Area

There is more willingness to *switch to hybrid or electric vehicles* in East Honolulu (70%) than in other areas. More willingness to use *the rail system* to reduce greenhouse gases exists in West Oahu and Metro Honolulu than in other areas.

Top Box %: Rating 9-10 of 10	West Oahu	Central Oahu	Metro Honolulu	Windward/ No. Shore	East Honolulu
Support policies…that promote communities where walking and biking is encouraged…	68%	64%	74%	73%	54%
Use TheBus more often	70%	64%	66%	66%	59%
Switching to a hybrid or electric vehicle	54%	63%	45%	51%	70%
Walk or bike more often	52%	40%	55%	61%	35%
Use the rail transit system when it is available	53%	34%	48%	21%	33%
Begin carpooling or vanpooling to work	47%	41%	45%	34%	31%
BASE	121	27	186	29	34

Q12 Using a 10-point scale where 10 means extremely willing to consider and 1 means not willing at all to consider, please tell me how willing you are to ____ as a way to reduce Greenhouse Gas emissions from transportation.

Reducing Greenhouse Gases: T6/EJ By Ethnic Segments

In the T6/EJ population, Caucasian and Native Hawaiian residents are more willing to consider changes to reduce Greenhouse Gases than other groups. The biggest differences concern switching to hybrid vehicles, considered by 2 in 3 Caucasian and Hawaiian residents versus under half of Japanese, Filipino and other minority groups.

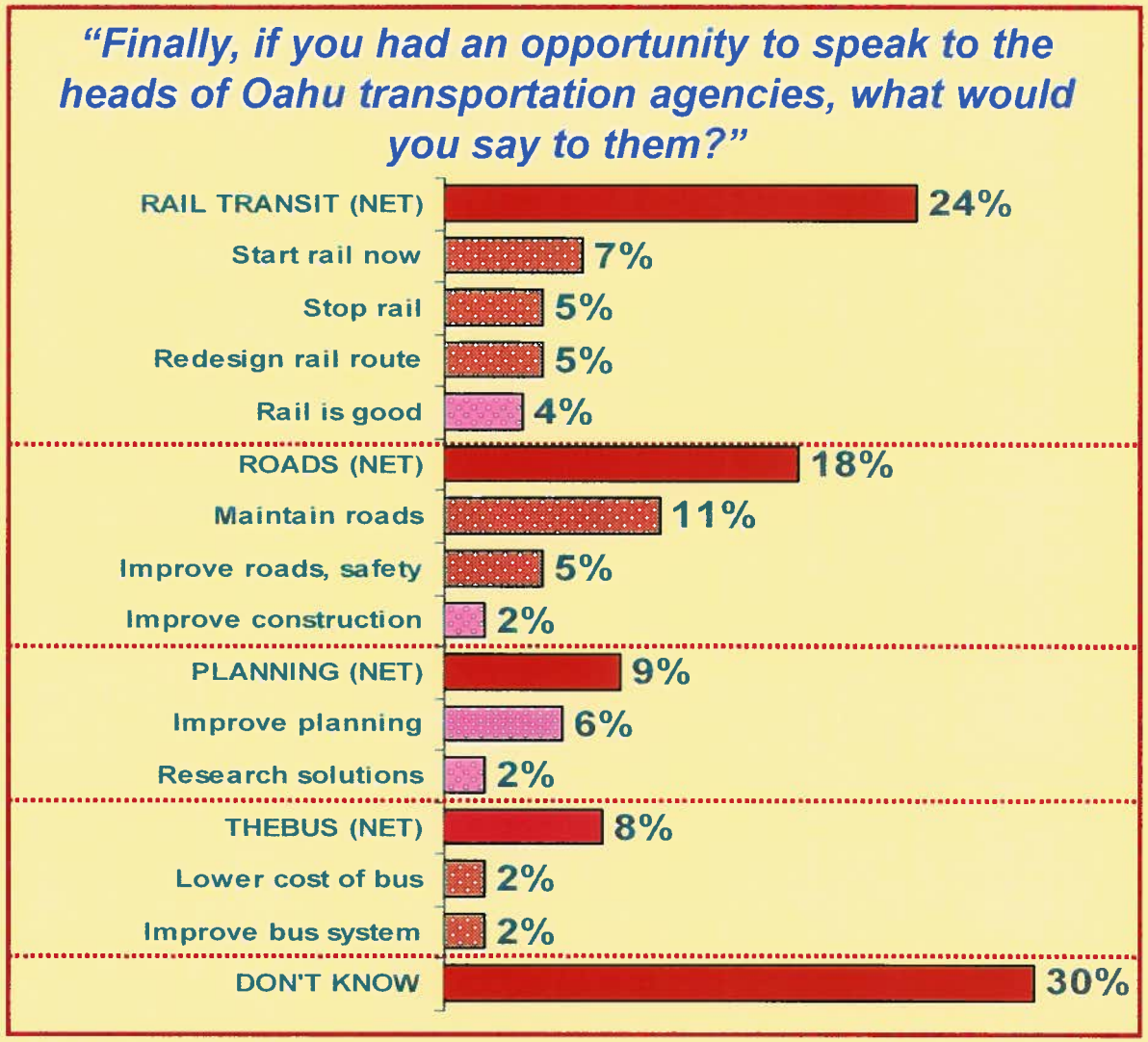
Top Box %: Rating 9-10 of 10	Caucasian	Hawaiian	Japanese	Filipino	Other/ Mixed
Support policies…that promote communities where walking and biking is encouraged…	79%	76%	69%	69%	61%
Use TheBus more often	66%	74%	56%	64%	65%
Switching to a hybrid or electric vehicle	66%	66%	44%	38%	46%
Walk or bike more often	48%	62%	34%	52%	51%
Use the rail transit system when it is available	53%	32%	32%	56%	52%
Begin carpooling or vanpooling to work	58%	45%	26%	43%	42%
BASE	58	94	56	70	106

Q9. Using a 10-point scale where 10 means extremely willing to consider and 1 means not willing at all to consider, please tell me how willing you are to ____ as a way to reduce Greenhouse Gas emissions from transportation.

Final Suggestions

Final Suggestions for the Transportation System

Comments about rail transit, road improvements and maintenance account for most suggestions offered to Oahu transportation agencies at the end of the survey.



The only difference is that there is more emphasis from **East Honolulu** residents in redesigning rail routes and on good transportation planning generally.

Base: 600 Oahu residents.
Q13. Finally, if you had an opportunity to speak to the heads of the Oahu transportation agencies, what would you say to them?

Oahu Respondent Comments*

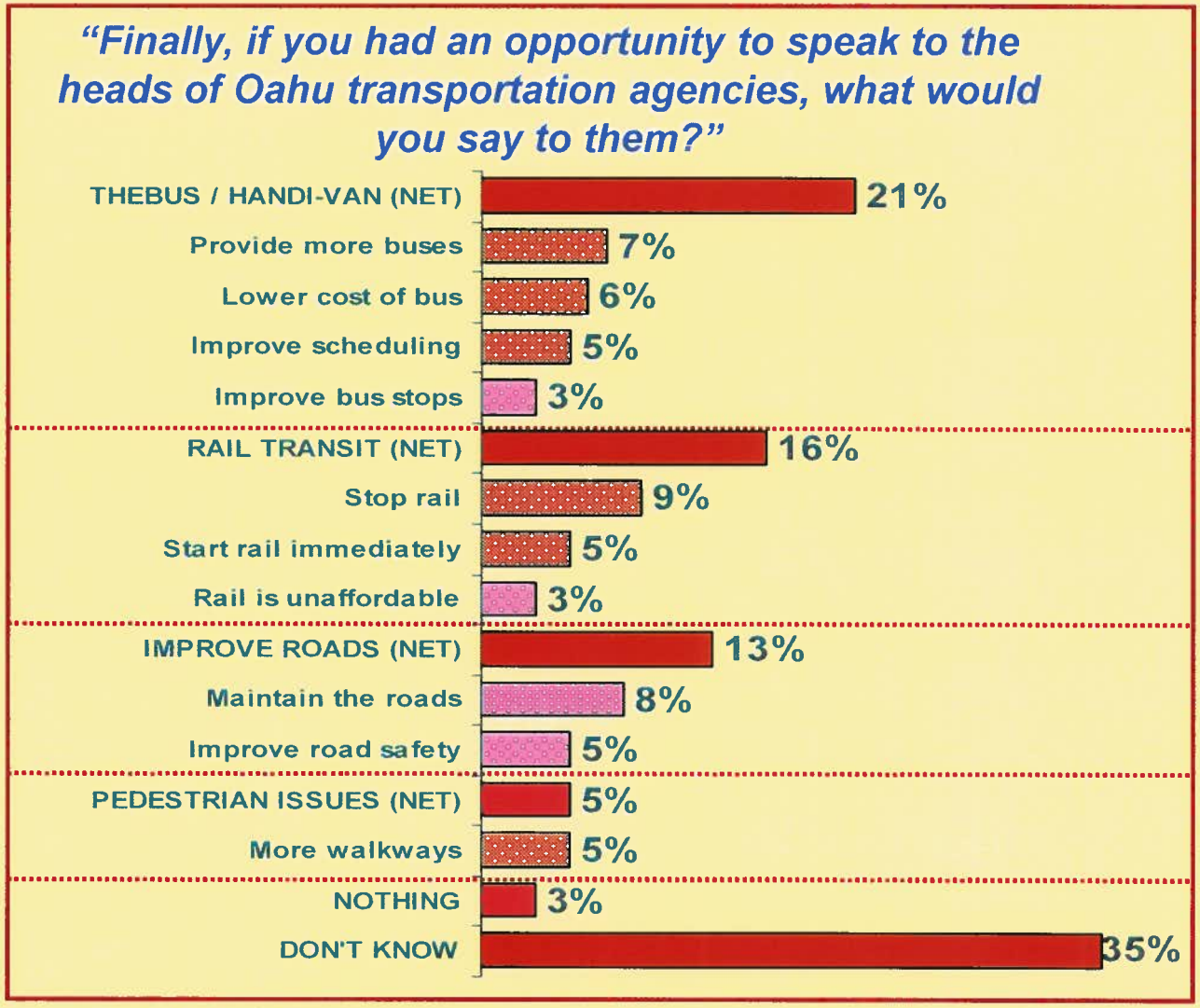
"If you had the opportunity to speak to the heads of the Oahu transportation agencies, what would you say to them?"

- *"Get the rail system up to Central Oahu. I think a lot of people would ride it if it went up to Central Oahu."*
- *"I would say rail is a nice idea but if it costs billions of dollars, how will we fund it? We can't even take care of our existing freeways and roads."*
- *"Rush hour is a mess. Something has to be done from Ewa to downtown ."*
- *"You are trying to apply an urban template to suburban lifestyles. We are spread out all over the place. You planned an island that is suburban/regional and now you are trying to fix it with urban solutions."*
- *"In order to get people to ride the rail or the bus, you need to make it more affordable. The amount we pay is almost equivalent to what we pay in gas."*
- *"I would support making Hawaii a leader in green technology using alternative energy like wind energy."*
- *"Kill the rail project and widen the freeways. Put an elevated lane right through to Honolulu.*
- *"Build the roads with better materials so we have fewer problems because they are always fixing the roads."*

* These comments were selected at random and do not reflect a proportionate distribution of residents either by area or any demographic criteria

T6/EJ Residents: Final Suggestions

Making *TheBus* and Handi-Vans more convenient and affordable, especially in remote areas like the North Shore, are key concerns of T6/EJ residents.



While much feedback was heard on rail transit, there seems to be no consensus in the T6/EJ population either in favor of or against the rail system.

Base: 400 Oahu residents.
Q13. Finally, if you had an opportunity to speak to the heads of the Oahu transportation agencies, what would you say to them?

T6/EJ Respondent Comments*

"If you had the opportunity to speak to the heads of the Oahu transportation agencies, what would you say to them?"

- *"We need more Handi-Vans and I need to have vouchers for myself. Sometimes I don't go to my doctor appointments because I don't have money for Handi-Van."*
- *"Handicapped people should ride in the handicapped vans and not the bus. They take up so much room that there are not enough seats for old people."*
- *"Promote a pedestrian-friendly lifestyle. Have bus fares go cheaper because they are constantly hiking up. Monthly passes should be $40 not $60."*
- *"No rail. Have more buses and make the fares cheaper. Make it cheaper for younger people and working people."*
- *"Have safer crosswalks and stop the right turn on red. When people turn on red, they don't look out for pedestrians."*
- *"They're doing a good job but could they please make the bus hours longer?"*
- *"Fronting Waimea Valley, they need a crosswalk so I can catch the bus. I have to jaywalk to the bus stop and it's dangerous."*
- *"West side people are neglected. The roads are a mess and there are always accidents because there is no enforcement. The roads need widening and we need proper sidewalks and crosswalks."*

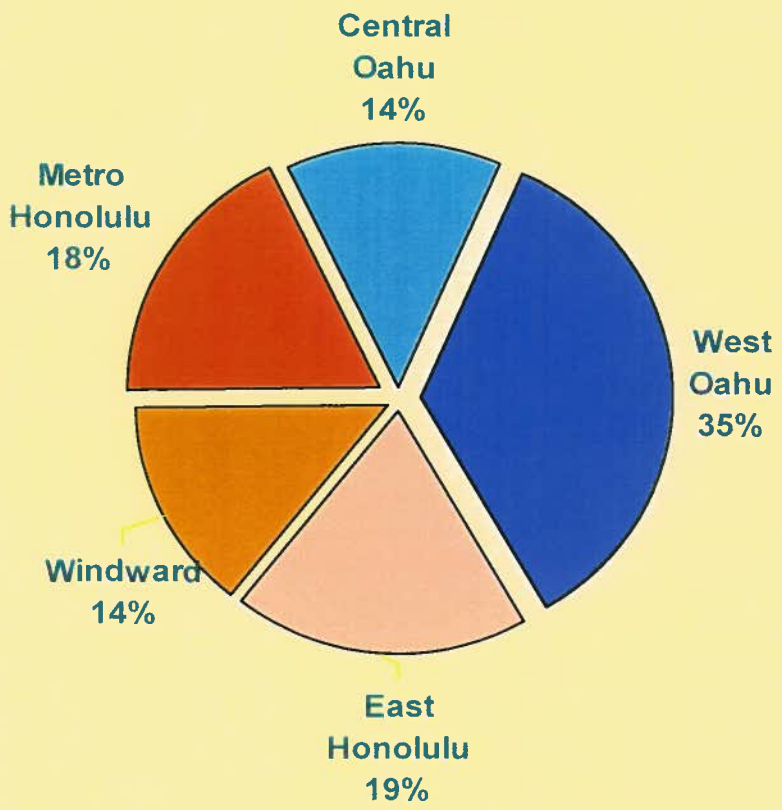
* These comments were selected at random and do not reflect a proportionate distribution of residents either by area or any demographic criteria

2010 Patterns of Transportation: Oahu Residents

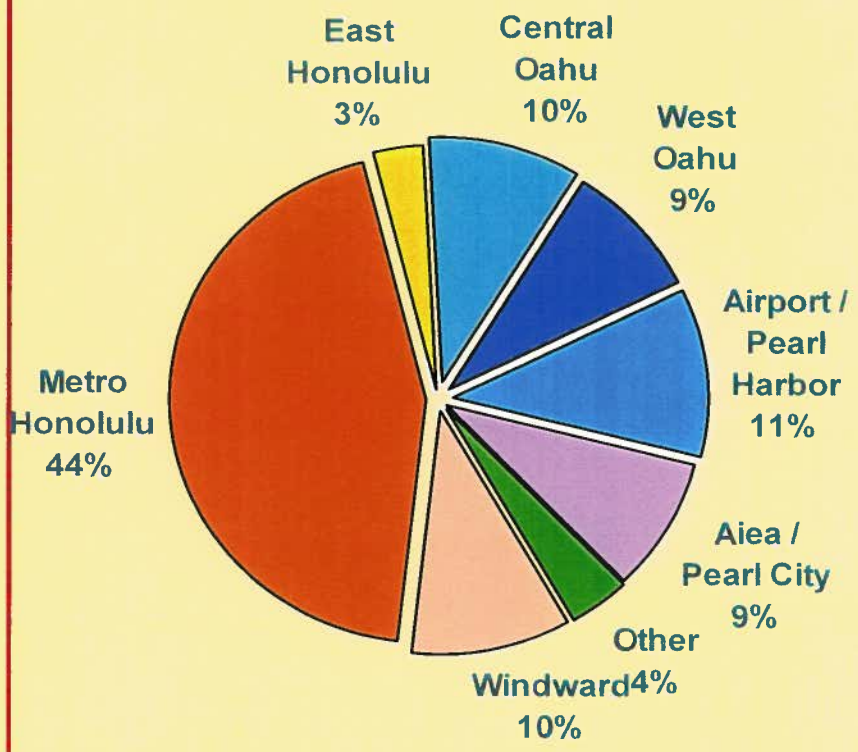
Oahu Employed: 2010 Residence vs. Work Location

In 2010, 80% of residents are employed or full-time students, with the highest proportion of residents living in suburban West or Central Oahu and the biggest concentration of jobs being in Metro Honolulu, similar to 2009 results.

"In what area do you live?"



"In what area do you or the oldest employed... work or go to school?"



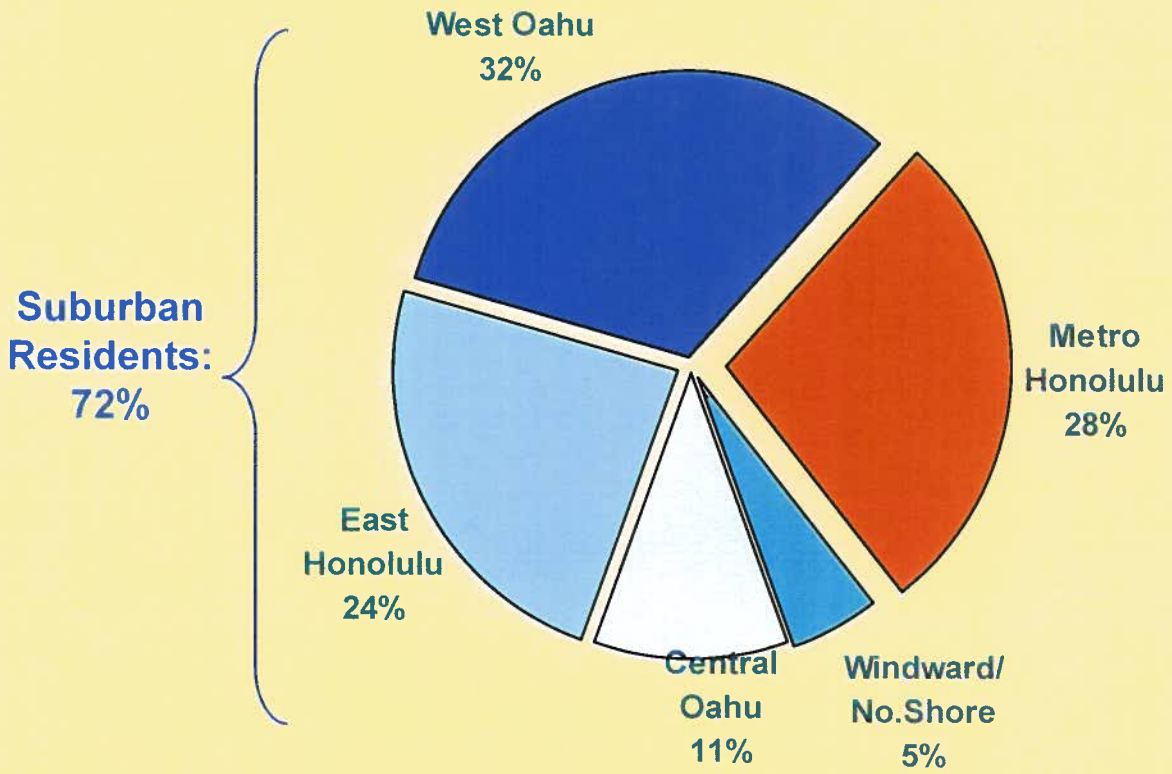
Base: 480 residents with someone in the household who is employed or a full-time student.
Q1. In what area do you live?
Q5. In what area do you or does the oldest employed in the household work or go to school?

Honolulu Employees: By Area of Residence

In 2010 as in 2009, 3 in 4 adults working or going to school in Honolulu come from suburban areas outside Honolulu.

HONOLULU EMPLOYEES/STUDENTS:

"In what area do you live?"



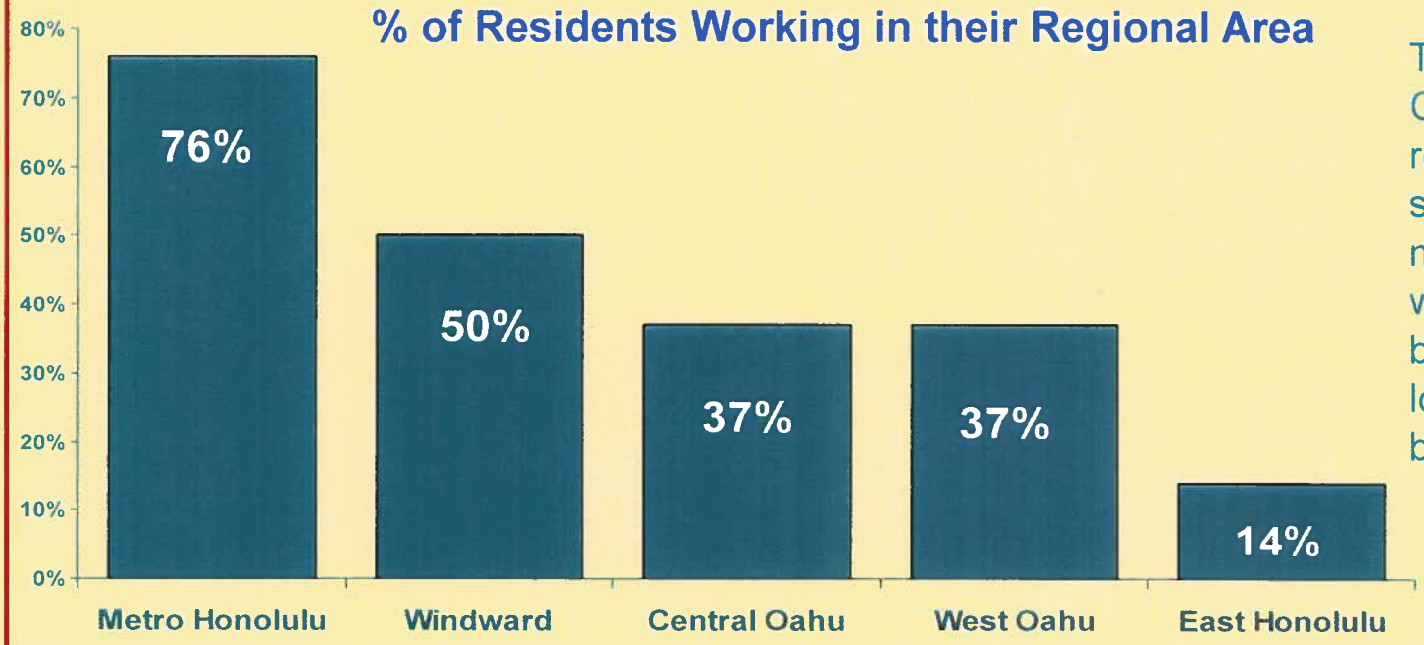
Over 40% of Honolulu workers or students commute from **West** or **Central Oahu** areas.

Another 24% commute from **East Oahu** areas.

Base: 215 residents who are employed or a full-time student in the Metro Honolulu area.
Q1. In what area do you live?
Q5. In what area do you or does the oldest employed in the household work or go to school?

Working Where You Live: By Oahu Area

Looking at patterns of local employment (i.e., the proportion of residents working in their local regions), Metro Honolulu leads all areas at 76%, followed by Windward/North Shore areas at 50% of residents working locally.



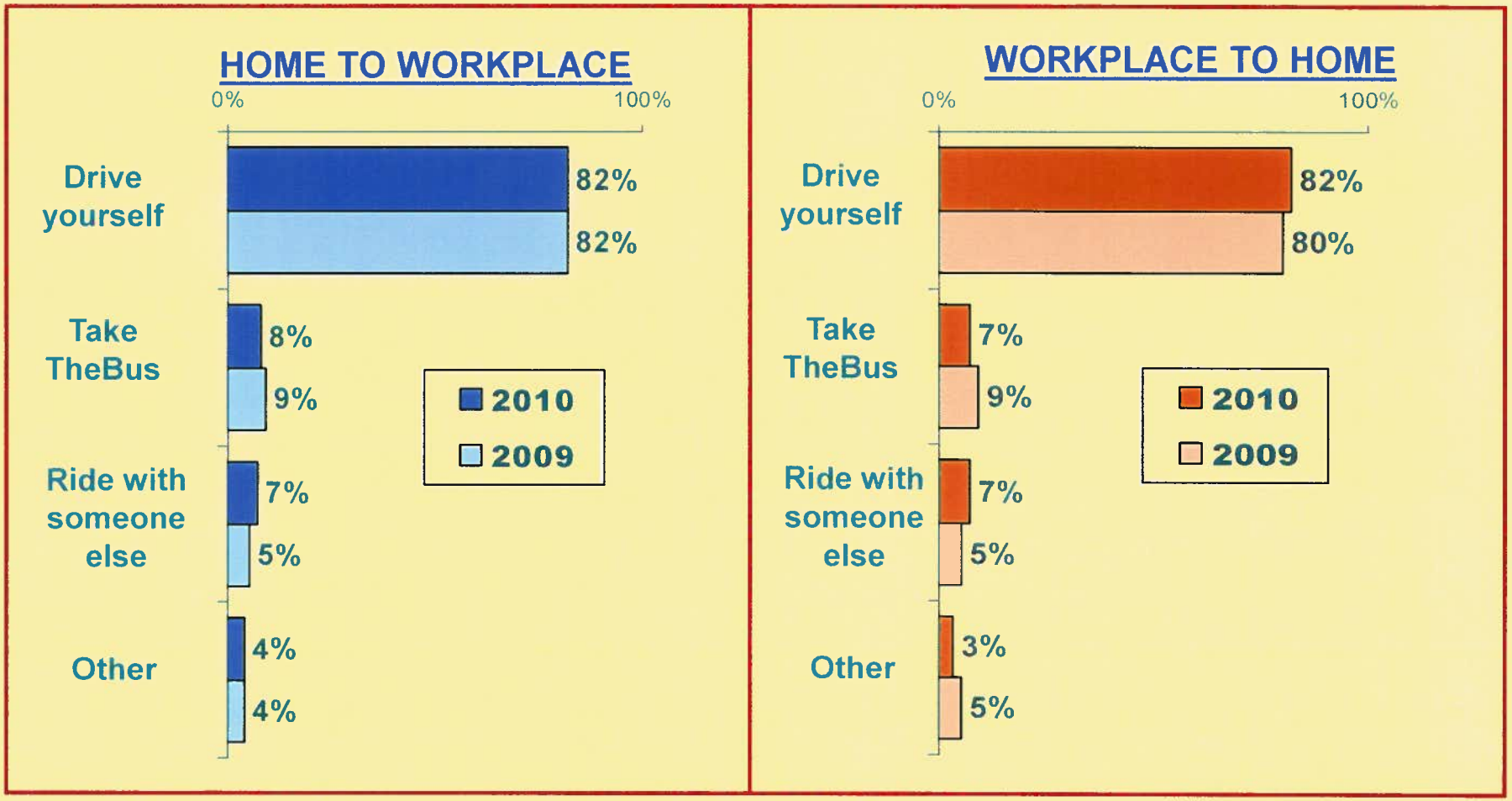
The West Oahu and Central Oahu regions also provide significant employment for residents, with over 1 in 3 of both areas working locally (see table below).

"In what area do you… work or go to school?"	West Oahu	Central Oahu	Metro Honolulu	Windward & North Shore	East Honolulu
Metro Honolulu	47%	23%	76%	21%	70%
Windward Oahu	4%	2%	1%	50%	7%
Central Oahu	9%	37%	2%	---	1%
West Oahu	37%	26%	11%	12%	4%
East Honolulu	---	10%	8%	3%	14%

Bases: 600 Oahu residents. Q5. In what area do you or does the oldest person work or go to school?

Tracking Primary Transportation Mode: 2009 to 2010

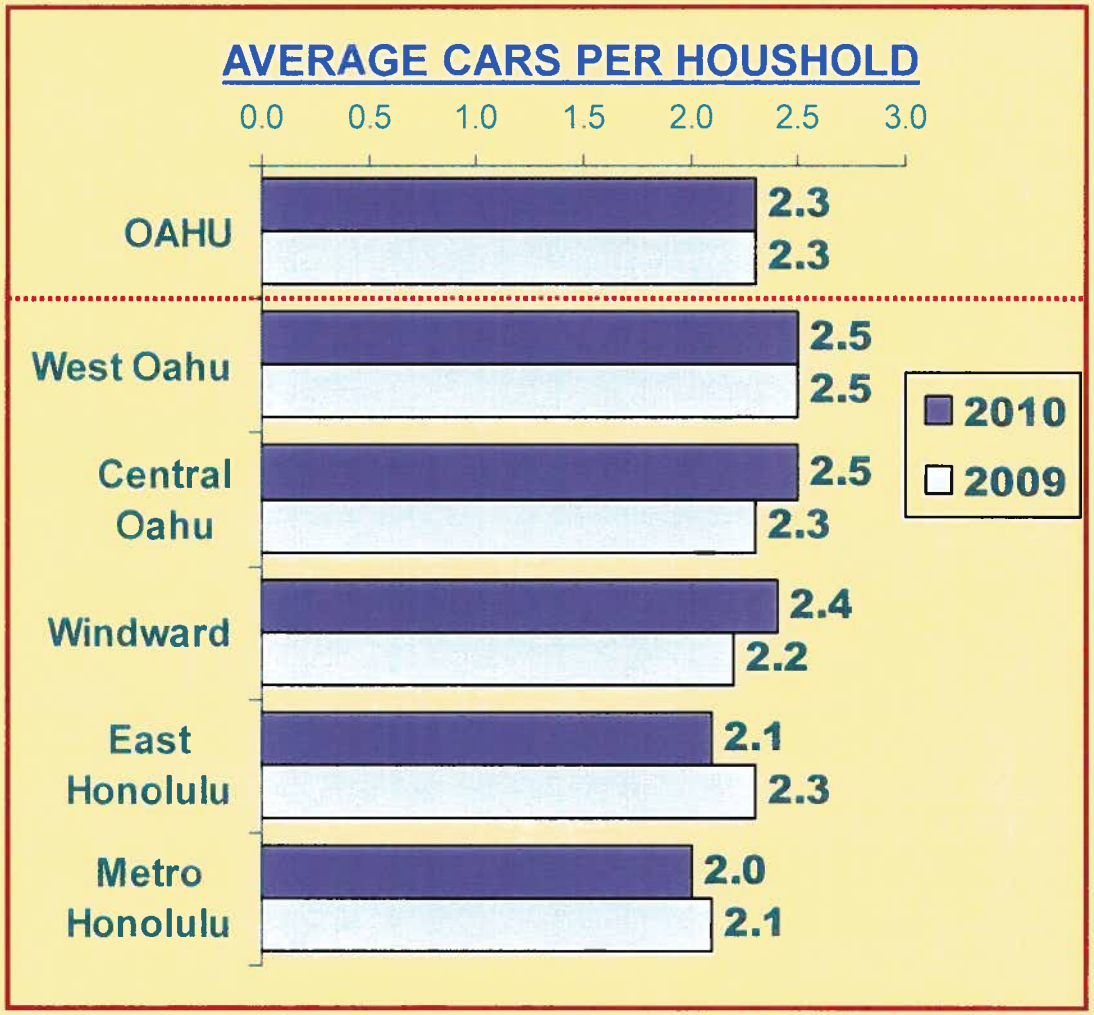
In both 2009 and 2010, eight in ten residents drive to work/school in a car, truck, motorcycle or moped. Just under 1 in 10 take the bus, and only 1 in 20 carpool with others.



Base: 480 and 481 Oahu residents who are employed or are full-time students in 2010 and 2009, respectively.
Q7a. [ASK FOR RESPONDENT IF EMPLOYED. IF RESPONDENT IS NOT EMPLOYED, ASK FOR OLDEST EMPLOYED MEMBER OF HOUSEHOLD] What is your/their primary means of transportation from home to work? Do you/they...[READ LIST]
Q7b. What is your/their primary means of transportation from work to home? Do you/they...[READ LIST]

Tracking Number of Cars Per Household

Oahu households have, on average, slightly more than two cars or light trucks (mean 2.3) available for driving, though the average varies by area of the island.



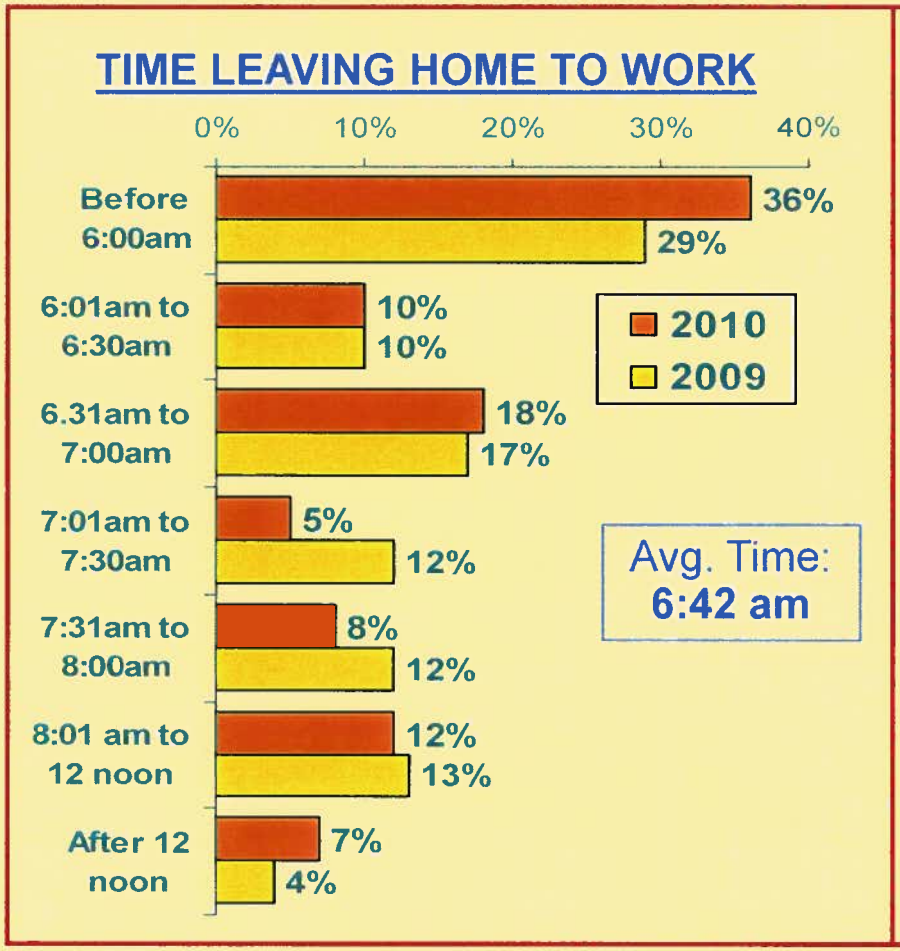
97% of Oahu households have at least one vehicle available.

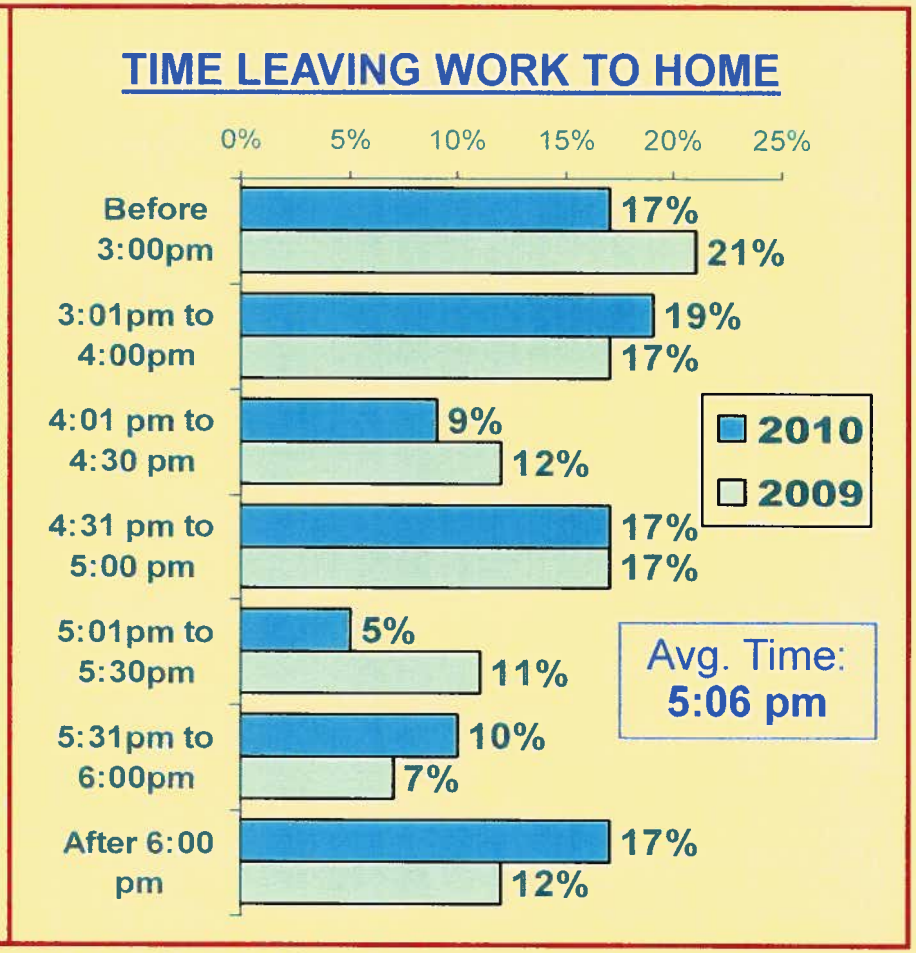
The proportion of multi-vehicle households (2+ cars) **is highest in West and Central Oahu**, at 78% and 85% of households reporting 2+ cars available, compared to just 56% in **Metro Honolulu**.

Base: 600 and 601 Oahu residents in 2010 and 2009, respectively.
Q6. How many cars or light trucks are available to your household?

Tracking Departure Time Among Oahu Residents

In 2010 as in 2009, morning peak traffic starts early, before 6:00 am. In the afternoon, rush hour starts before 3:00 pm and apparently lasts through 6:00 pm.





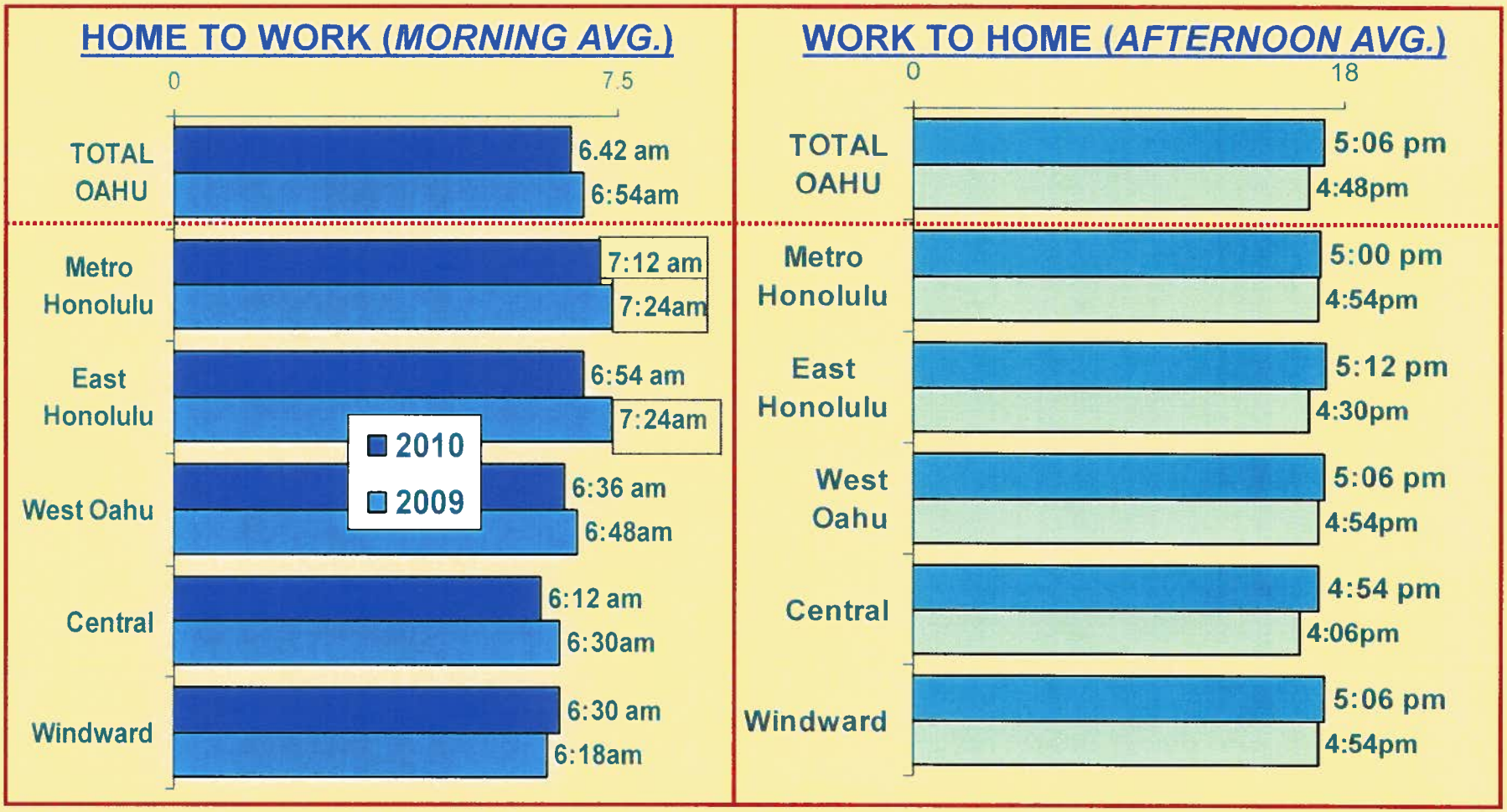
Note: Morning Average calculates the average time of those who leave home to work in the morning.
Afternoon Average calculates the average time of those who leave work to home in the afternoon.

Base: 480 and 481 residents who are employed or full-time students in 2010 and 2009, respectively.

Q6: [ASK FOR RESPONDENT IF EMPLOYED. IF RESPONDENT IS NOT EMPLOYED, ASK FOR OLDEST EMPLOYED MEMBER OF HOUSEHOLD] Given your or the oldest working member of the household working hours, at what time do you generally leave...?

Tracking Departure Time: By Area of Residence

In 2010, morning traffic starts at 6:42 am, on average, slightly earlier than in 2009 (6:54 am). Afternoon departure averages 5:06 pm, slightly later than in 2009 (4:48 pm). As in 2009, suburban residents leave much earlier than Honolulu residents, on average.



Note: Morning Average calculates the average time of those who leave home to work in the morning. Afternoon Average calculates the average time of those who leave work to home in the afternoon.

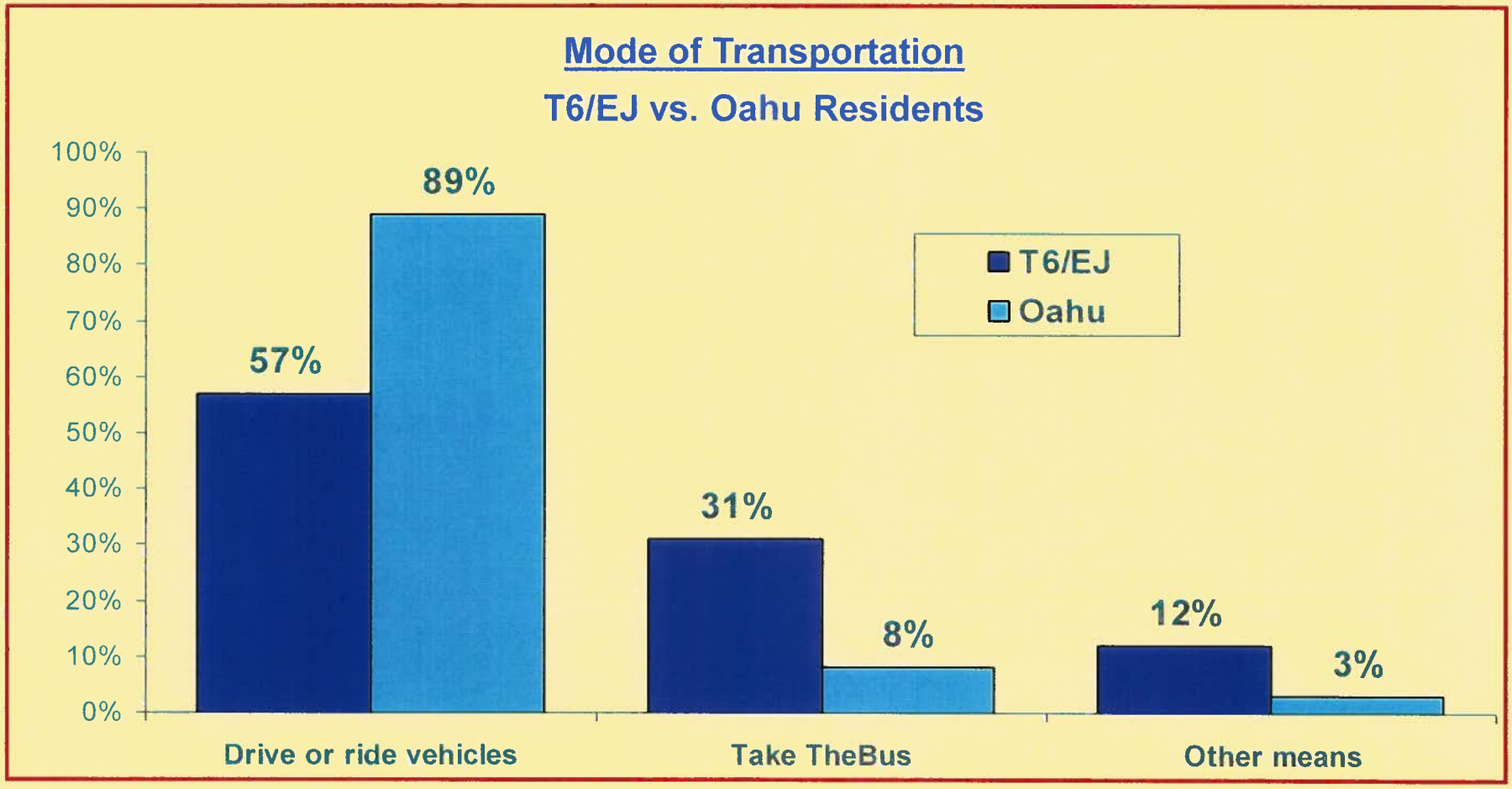
Base: Varies

Q6: Given your or the oldest working member of the household working hours, at what time do you generally leave...

2010 Patterns of Transportation: T6/EJ Residents

Mode of Transportation: T6/EJ vs. Oahu Residents

T6/EJ residents as a group are more dependent on public transit than the population at large, which is overwhelmingly dependent on vehicles for daily commuting. A majority of riders of *TheBus* – 2 in 3 – are T6/EJ residents.

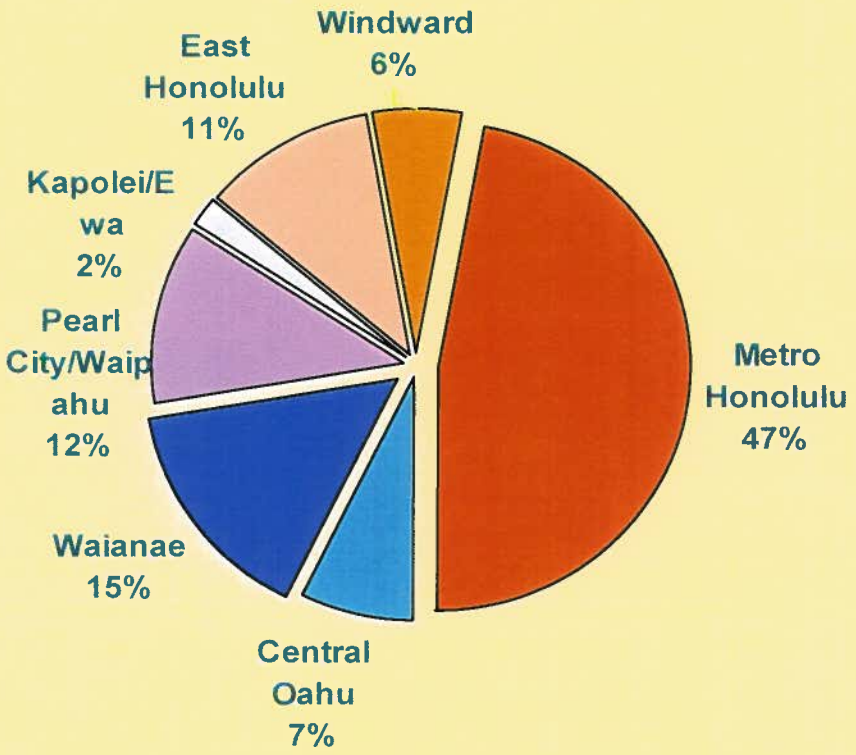


Bases: 269 employed T6/EJ residents and 480 employed Oahu residents.
Q7b. What is your of the oldest employed in your household primary means of transportation from work to home?

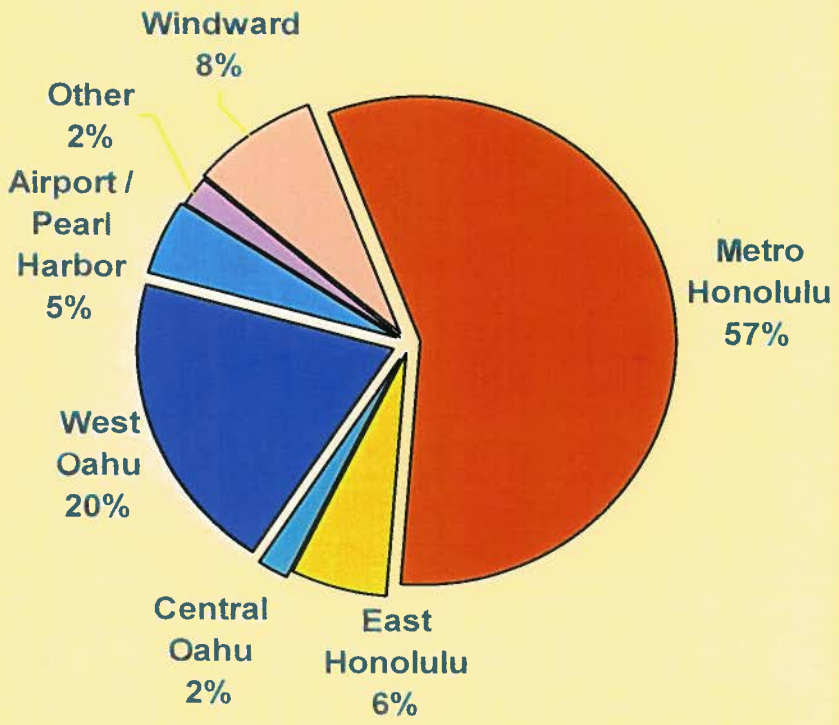
Employed T6/EJ Residents: Residence vs. Work Location

While the Oahu population is spread throughout the island, over half of T6/EJ residents both live and work in the urban areas of Honolulu and use the mass transit system or other means to commute daily.

"In what area do you live?"
T6/EJ Residents



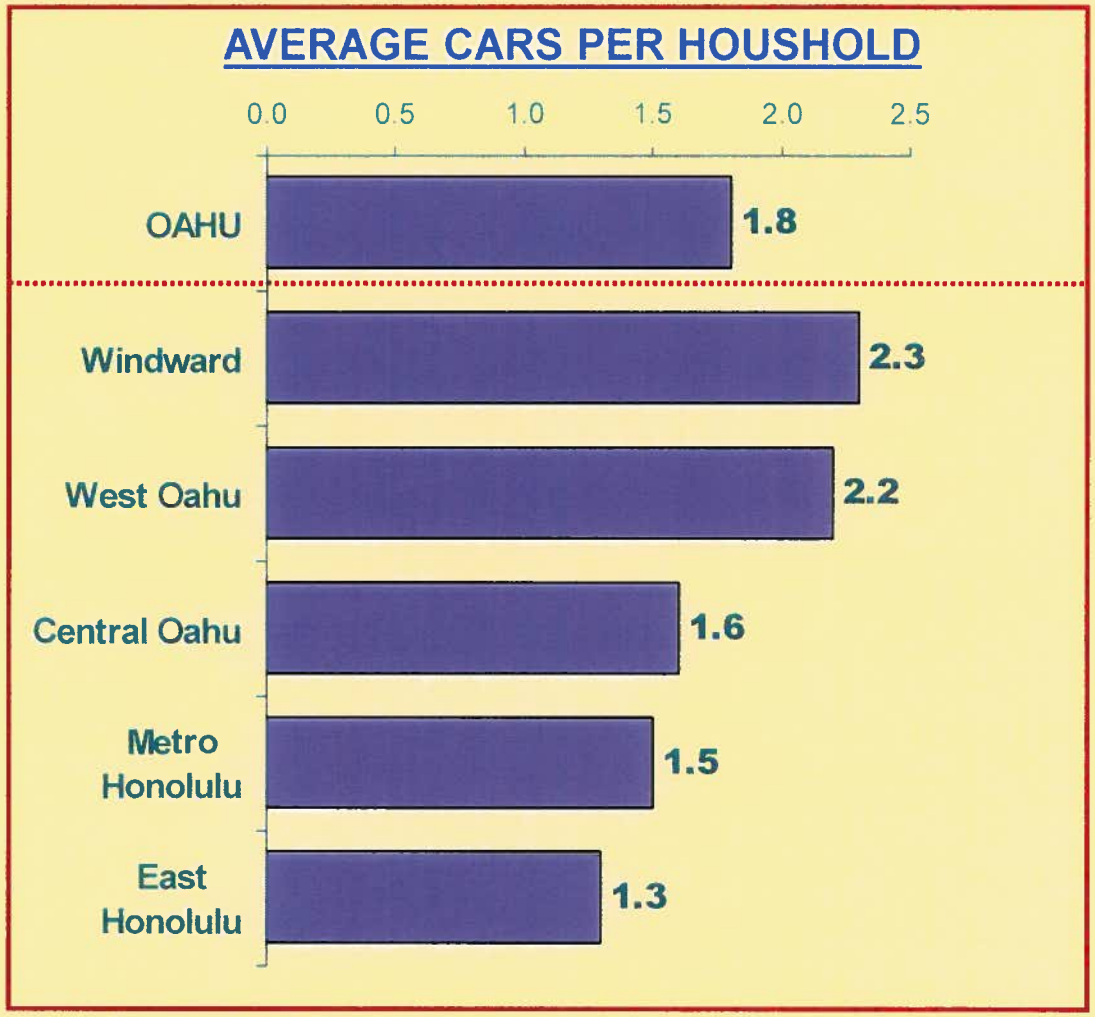
"In what area do you or the oldest employed work or go to school?"
T6/EJ Residents



Base: 269 T6/EJ residents with someone in the household who is employed or a full-time student.
Q1. In what area do you live?
Q5. In what area do you or does the oldest employed in the household work or go to school?

T6/EJ Residents: Number of Cars Per Household

Another difference between the Oahu population and the T6/EJ group: the latter have fewer vehicles available to them, averaging under 1.8 cars per household versus 2.3 for the island as a whole.



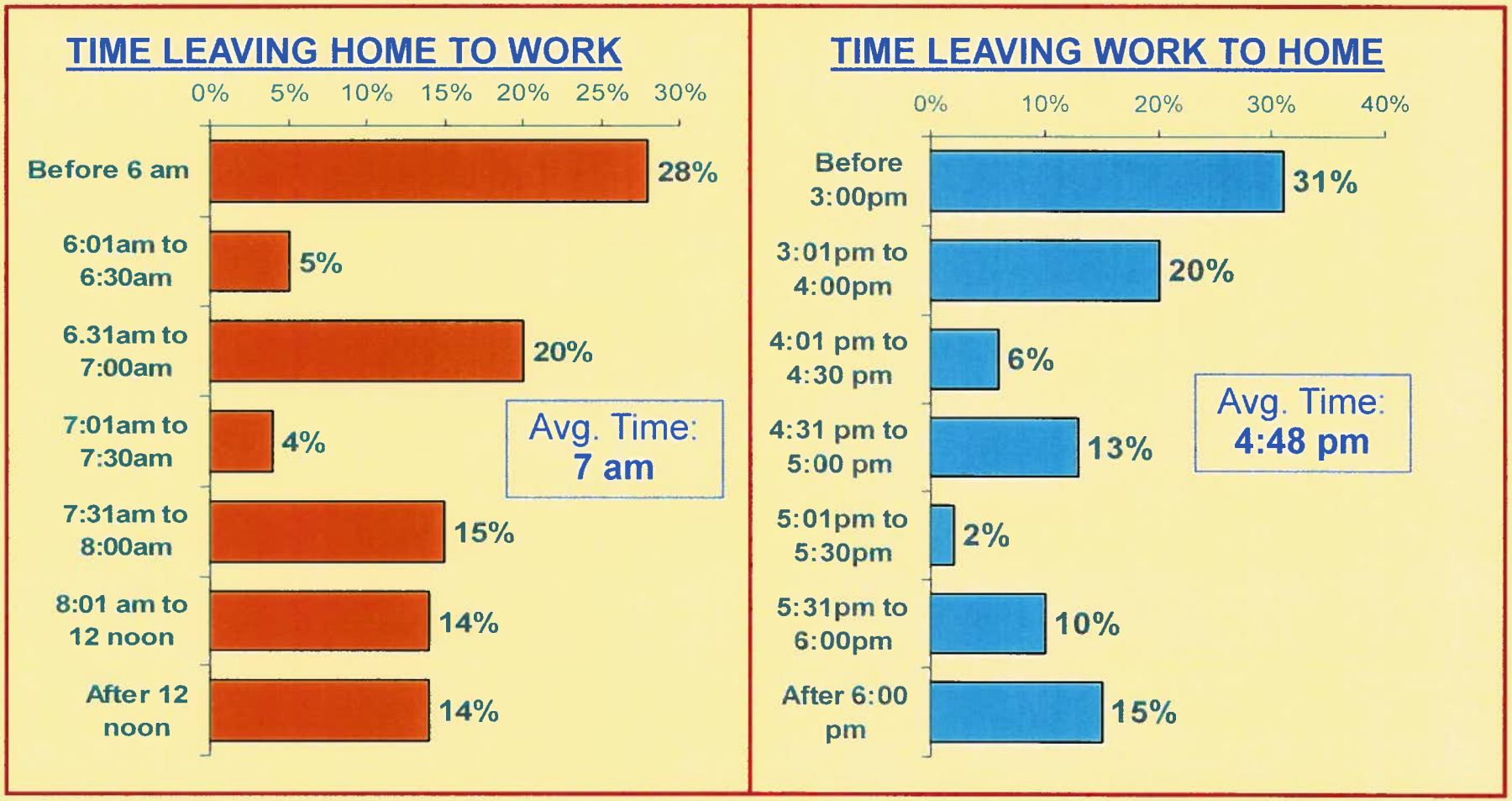
Base: 400 T6/EJ Oahu residents in 2010.
Q6: How many cars or light trucks are available to your household?

About **1 in 3 T6/EJ households (31%) have no vehicles** available to them, compared to just 3% of Oahu households at large.

Vehicle availability varies widely by area of the island. In **Metro and East Honolulu**, the group averages only 1.5 and 1.3 vehicles per household, with a high proportion (36% and 48%, respectively) reporting no vehicles available for commuting purposes.

T6/EJ Residents: Departure Times

The group's average morning time of departure is slightly later than that of Oahu overall (7 am to 6:42 am), and its average afternoon time is slightly later (4:48 to 5:06 pm). About one in ten apparently work a late shift, departing work after 9 pm.



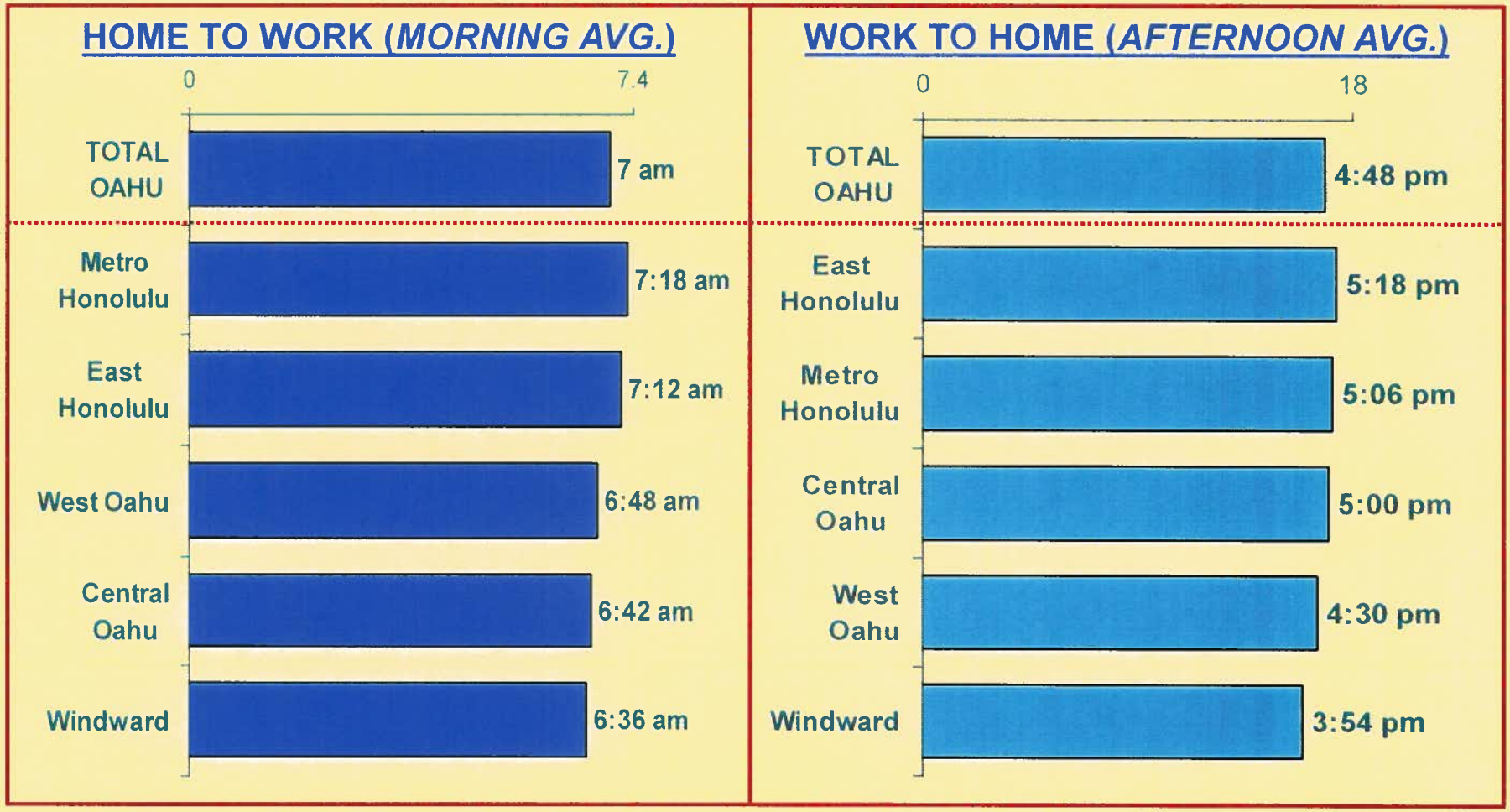
Note: Morning Average calculates the average time of those who leave home to work in the morning.
Afternoon Average calculates the average time of those who leave work to home in the afternoon.

Base: 2549 T6/EJ residents who are employed or full-time students in 2010.

Q6: [ASK FOR RESPONDENT IF EMPLOYED. IF RESPONDENT IS NOT EMPLOYED, ASK FOR OLDEST EMPLOYED MEMBER OF HOUSEHOLD] Given your or the oldest working member of the household working hours, at what time do you generally leave...?

T6/EJ Residents: Average Departure Time By Area

Specific area drive times for T6/EJ residents are not significantly different from those of Oahu residents. In both groups, Windward residents tend to leave earliest for work/school, on average, while Metro Honolulu depart latest.



Note: Morning Average calculates the average time of those who leave home to work in the morning. Afternoon Average calculates the average time of those who leave work to home in the afternoon.

Base: Varies

Q6. Given your or the oldest working member of the household working hours, at what time do you generally leave...

Demographic Profile

Profile of Respondents: Oahu & T6/EJ Residents

	OAHU	T6/EJ
BASE	600	400
GENDER		
Male	50%	40%
Female	50%	60%
AGE		
18-34	33%	34%
35-54	34%	33%
55+	33%	32%
Average	45.9 yr	46.4 yr
INCOME		
Less than $35,000	25%	97%
$35,000 but less than $50,000	16%	3%
$50,000 but less than $75,000	19%	---
$75,000 but less than $100,000	14%	---
$100,000 and over	26%	---

Profile of Respondents: Oahu & T6/EJ Residents

	OAHU	T6/EJ
BASE	600	400
HOUSEHOLD SIZE		
1-2	33%	36%
3-4	40%	29%
5 or more	27%	34%
Average	3.8	3.8
ETHNIC BACKGROUND		
Caucasian	17%	12%
Hawaiian/part-Hawaiian	24%	24%
Japanese	21%	10%
Filipino	13%	17%
Other *	25%	37%
REGION		
West Oahu	36%	29%
Central Oahu	13%	7%
Metro Honolulu	18%	47%
Windward / North Shore	14%	6%
East Honolulu	19%	11%

*"Other" includes anyone not in the four major categories, such as Chinese, Southeast Asians, African American, Samoans and Micronesians, to name a few, plus residents reporting themselves as "mixed-race." See next page.

Profile: Ethnic Background of "Other" Category

	OAHU	T6/EJ
BASE	146	143
ETHNIC BACKGROUND: OTHER		
Mixed Ethnic	6%	2%
Chinese	9%	7%
Other Asian*	1%	5%
Other Polynesian**	3%	5%
Samoan	<1%	5%
Micronesian	0%	5%
Hispanic	1%	3%
Korean	<1%	2%
Portuguese	1%	2%
Native American	2%	<1%
African American	<1%	<1%

*"Other Asian" may include any Asian background excluding Chinese, Japanese or Koreans such Vietnamese, Laotian, Asian Indian, etc.
** Other Polynesian" may include any Polynesian background excluding Native Hawaiians and Samoans such as Tongan, Fijian, Maori, etc..

Survey Questions

Good afternoon/evening, I'm ___ from OmniTrak Group, Inc., a professional research company in Honolulu. We're calling this afternoon/evening to conduct a brief survey on transportation matters, and I'd like to ask you a few questions if I may. First...

A. Are you 18 years of age or older?

Yes 1 – **[CONTINUE]**

No 2 – **[ASK FOR PERSON IN HOUSEHOLD 18 YEARS OR OLDER AND REPEAT INTRODUCTION. IF NONE, THANK, TERMINATE & TALLY]**

B. Are you a resident of the State of Hawaii for more than 6 months a year?

Yes 1 – **[CONTINUE]**

No 2 – **[THANK, TERMINATE & TALLY]**

C. Do you or does anyone in your household work for a ____ **[READ LIST]?**

a. Research company [THANK & TERMINATE]

b. State of Hawaii, Dept. of Transportation **[THANK & TERMINATE]**

c. County of Honolulu, Dept. of Transportation Services **[THANK & TERMINATE]**

d. Civil engineering or urban planning firms specifically for transportation services **[THANK & TERMINATE]**

e. Media/Advertising/Public Relations **[THANK & TERMINATE]**

f. Other **[CONTINUE]**

Q1. In what area do you live? That is, where is your home or main place of residence? **[DO NOT READ]**

1. Leeward Oahu (Pearl City/Pearl Ridge/Waipahu/ Waikele)
2. Kapolei (Villages of Kapolei/Ko Olina/ Makakilo/ Honokai Hale/ Barber's Point/Kalaeloa/ Campbell Industrial)
3. Ewa/ Ewa Beach (West Loch/Ewa Gentry/ Fort Weaver side of Ewa)
4. Waianae Coast (Nanakuli / Maili / Waianae/ Makaha)
5. Downtown Honolulu
6. Waikiki/Kapahulu
7. Kapiolani Corridor
8. East Honolulu (Kaimuki to Hawai'i Kai)
9. UH-McCully-Moiliili
10. Pearl Harbor
11. Airport / Iwilei
12. Windward
13. North Shore
14. Central Oahu (Mililani/Wahiawa)

50=Other **(Please Specify)**_____

Q2. How many cars or light trucks are available to your household?

Q3. Are you currently employed or a full-time student?

Q4. How many people in your household are employed or are full-time students

Q5. **[IF RESPONDENT IS NOT EMPLOYED OR NOT A FULL-TIME STUDENT, ASK FOR THE OLDEST EMPLOYED OR ENROLLED HOUSEHOLD MEMBER]** In what area do/does the **[INSERT]** work or go to school?

AREA CODELIST

1. Leeward Oahu (Pearl City/Pearl Ridge/Waipahu/ Waikele)
2. Kapolei (Villages of Kapolei/Ko Olina/ Makakilo/ Honokai Hale/ Barber's Point/Kalaeloa/ Campbell Industrial)
3. Ewa/ Ewa Beach (West Loch/Ewa Gentry/ Fort Weaver side of Ewa)
4. Waianae Coast (Nanakuli / Maili / Waianae/ Makaha)
5. Downtown Honolulu
6. Waikiki/Kapahulu
7. Kapiolani Corridor
8. East Honolulu (Kaimuki to Hawai'i Kai)
9. UH-McCully-Moiliili
10. Pearl Harbor
11. Airport/Iwilei
12. Windward
13. North Shore
14. Central Oahu (Mililani/Wahiawa)

50=Other **(Please Specify)**_____

Q6. At what time **[INSERT]** generally leave... ___You ___Oldest Person in Household

Home for work or school: 1=a.m. 2=p.m.

Workplace or school for home: 1=a.m. 2=p.m.

Q7a. What is your/their primary means of transportation from home to work? Do you/they... **[READ LIST]**

Q7b. What is your/their primary means of transportation from work to home? Do you/they... **[READ LIST]**

1. Drive yourself in your car, van or truck
2. Ride with someone else in car, van or truck
3. Take TheBus
4. Ride vanpool or other subscription service4
5. Ride The Handi-Van
6. Ride motorcycle/moped
7. Bike or walk
8. Other, please specify: _____

Q8. Oahu's transportation system supports various forms of travel such as buses, cars, bicycling , walking and soon, a commuter train. Please tell me how important **[INSERT RATING]** is to your quality of life, using a 10-point scale with 10 being Extremely Important to you quality of life and 1 being not Important At All to your quality of life. You may use any number between 1 and 10 to indicate your impressions... **[READ LIST]**

a. Having more walking and bicycle routes and paths

b. Beautification of existing roads, bridges, transit stops and stations and walking and biking traits

c. Having more pedestrian-friendly bus shelters, crosswalks and sidewalks

d. Reducing aggressive driving by better enforcement of existing laws

e. Having easier access to work, shopping and other regular destinations

f. More timely road maintenance and repair

Q9a. I'm now going to read you a series of proposed ideas for the purpose of improving Oahu transportation. Considering limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for consideration of funding, "2" being the second highest and "3" being the third highest for consideration of funding. The first series of ideas include... **[INSERT] [ROTATE]**

SERIES A:

a. Designing safer roads by installing improvements such as medians, speed bumps, synchronized traffic lights and left turn only lanes

b. Providing more bike and pedestrian walkways

c. Increasing maintenance and upkeep of existing roads and bridges

SERIES B:

a. Expanding TheBus and vanpool services island-wide

b. Widening H-1 Freeway corridors and improving on and off-ramps

c. Building new roads

SERIES C:

a. Extending the west end of the rail system from East Kapolei to West Kapolei

b. Extending the east end of the rail system from Ala Moana Center to UH Manoa

c. Extending the east end of the rail system from Ala Moana Center to Waikiki

Q9b. You ranked **[INSERT], [INSERT]** and **[INSERT]** as being the top priorities for funding. Again, considering limits on funding, I'd like you to rank them in order of priority with "1" being the highest priority for considering for funding, "2" being the second highest for consideration for funding and "3" being the third highest for consideration for funding.

FIRST PRIORITY: _____

SECOND PRIORITY: _____

THIRD PRIORITY: _____

Q9c. Are there any other ideas fro improving Oahu transportation that I haven't mentioned? [PROBE]

Q10. An objective of Oahu Planners is to keep the island's transportation system affordable and accessible to Oahu's low to moderate income residents. Using a 10-point scale with "10" being extremely effective and "1" being not effective at all, how effective would [INSERT] be in making Oahu's transportation system more affordable and accessible to our low to moderate income residents? **[ROTATE]**

a. Having more pedestrian-friendly bus shelters, crosswalks and sidewalks

b. Expanding pedestrian walkways and bicycle paths

c. Promoting ride-share programs like carpooling and vanpooling

d. Providing bus passes, vouchers or other incentives for use in ride-share programs by quaified users

Q11. Shifting subjects a bit... one result of using cars and trucks for transportation are Greenhouse Gases which are gases released when vehicle engines burn gasoline as fuel. Have you heard of Greenhouse Gases?

Yes

No

Q12. Greenhouse Gas emissions warm the Earth's climate, resulting in rising sea levels and more intense storms and hurricanes. Using gasoline also causes air pollution from vehicle exhaust and adds to the high cost of living. Car owners can reduce these impacts in several ways, first by switching to cars with cleaner engines and alternative fuels, and second, by using public transit, bicycling and walking more often. Using a 10-point scale with "10" being extremely willing to consider and "1" being not willing at all to consider, please tell me how willing you are to... **[INSERT]** as a way to reduce Greenhouse Gas emissions from transportation. Again, you may use any number between 1 and 10 to indicate your impressions.

a. consider switching to a hybrid or electric vehicle

b. Begin carpooling or vanpooling to work

c. Walk or bike more often

d. Use TheBus more often

e. Use the Rail Transit system when it is available

f. Support policies and design that promote communities where walking and biking is encouraged and public transportation is easily accessible

Q13. Finally, if you had an opportunity to speak to the heads of the Oahu transportation agencies, what would you say to them? **[PROBE]**

Now, I have a few last questions for classification purposes only.

D1. What was your age on your last birthday?

D2. What is your ethnic background? **[IF MORE THAN ONE:]** With which do you identify the most?

1. Caucasian
2. Chinese
3. Filipino
4. Hawaiian/part Hawaiian
5. Japanese
6. African-American
7. Mixed
8. Other Asian
9. Hispanic
10. Other Polynesian
11. Samoan
12. Korean
13. Portuguese
14. Native American
15. Other

D3. How many people, including children, live in your household?

D4. What is your marital status? *

1=Single, never married
2=Married
3=Divorced, separated, widowed
9=[REFUSED]

D5. What is the last grade in school you completed? *

1=Less than High School
2=High School Graduate
3=Business/Trade School
4=Some College
5=College Graduate/Post Graduate
8=[DON'T KNOW / REFUSED]

* Data on marital status, educational background and industry of employment were collected as part of standard data collection procedures but not determined to be relevant for analysis purposes in the foregoing report.

[IF EMPLOYED FROM Q2]

D6. In what industry do you work? *

1=Chairman/President/CEO/Executive
2=Management
3=Partner/owner/proprietor
4=Professional
5=Technical
6=Sales
7=Service for hotel/restaurant, etc.
8=Administrative/clerical
9=Not employed
20=retired
50=Other (Specify) _____

* Data on marital status, educational background and industry of employment were collected as part of standard data collection procedures but not determined to be relevant for analysis purposes in the foregoing report.

D7. Which of the following categories includes your household's total annual income from all sources before taxes for 2008? **[READ LIST]**

1=Less than $15,000
2=$15,000 but less than $25,000
3=$25,000 but less than $35,000
4=$35,000 but less than $50,000
5=$50,000 but less than $75,000
6=$75,000 but less than $100,000
7=$100,000 and over

D8. How many years have you lived in Hawaii? *

1=Less than one year
2=One to four years
3=Five to nine years
4=10 to 19 years
5=20 years or more
6=Born here

D9. **[RECORD, DO NOT ASK]** Gender of respondent?

1=Male
2=Female

These are all the questions I have for you. Thank you and have a nice day.