Report
January 2022

Market Research Report

City & County of Honolulu
Honolulu Transportation Demand Management Plan

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Department of Transportation Services

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Prepared by the City and County of Honolulu Department of Transportation Services, in cooperation with the O'ahu Metropolitan Planning Organization and the United States Department of Transportation.

Contents

1 Introduction

Key Findings

The City & County of Honolulu Transportation Services, in cooperation with the O'ahu Metropolitan Planning Organization and the United States Department of Transportation, set out to better understand O'ahu residents' transportation behaviors and attitudes toward potential alternative modes of transportation. The results of the survey will guide the development and implementation of the Transit Demand Management Plan strategies for the City & County of Honolulu. Outreach was done island wide through email and telephone. The key findings from this survey are summarized below.

Driving Frequency – Two-thirds (66%) of those polled are what we would describe as heavy drivers using their vehicles five to seven days a week on average. One in five (20%) drives an automobile anywhere from two to four days a week. The remaining 14% drive less frequently than once a week.

Driver Highlights – From those who report driving a personal vehicle at least once per week.

- The vast majority of drivers on O'ahu feel that they are already consolidating their trips taken in their personal vehicle (38% strongly agree + 50% somewhat agree).
- Drivers believe that individual freedoms are of high importance, as the majority of drivers agree that "People should be allowed to use their cars/ trucks/ vans as much as they like" (38% strongly agree + 50% somewhat agree).
- Finding parking in residential areas is difficult for one in four O'ahu drivers (10% strongly agree + 16% somewhat agree).

Support for Alternative Forms of Transportation among Drivers

- Willingness is greater to adopt alternative forms of transportation amongst those who live in the urban core. This sentiment weakens as one moves out to the suburbs and rural O'ahu.
- There is greater pushback amongst larger households, particularly those who live in homes with multiple vehicles, when it comes to arguments supporting alternative forms of transportation.
- Those with a longer commute show a stronger pushback on topics related to alternative forms of transportation.
- Younger segments of the sample, particularly those who live and rent in the urban core of Honolulu, appear the easiest to convert or generally support topics promoting alternative forms of travel.

Travel Mode Influencers – There are a variety of factors that are considered when selecting a mode of transportation. Among the seven factors tested, five were identified as very important by the majority of research respondents: saving time / fastest way (66% very important), ability to carry items / cargo (60% very important), saving money (58% very important), air conditioning / climate control (54% very important) and privacy (53% very important). Other considerations include: the ability to transport other people (42% very important) and getting exercise (34% very important).

Parking at Home – Most (81%) of respondents who have at least one vehicle in their household indicate they park off-street in private garages, driveways or elsewhere on property. Nearly one in five (18%) utilize a parking lot, and another 18% park a vehicle on a public street.

Willingness to Pay for Parking – A majority of respondents with a vehicle (59%) indicate they would not be willing to pay for parking if doing so made finding a parking space easier when they needed it. Thirty-one percent would be willing to pay for parking at work, and 18% would be willing to pay for parking at home.

- Willingness to pay for parking at home is highest among residents of urban Honolulu.

Parking at Work – The majority of respondents who are employed (56%) enjoy free parking at work. One in four (23%) workers pays the entire cost to park at their place of employment. The remaining workers have their employer pay the entire cost of parking (14%) or have it partially covered by their employer (7%).

Smart Parking Meters – A majority (62%) of those polled would be more willing to use metered street parking if they could pay using credit/ debit cards.

Walkability – Nearly all research respondents (93%) live within a 10-minute walk from a bus stop. Significantly fewer individuals are within a 10-minute walk from a store to buy food (57%), their child's school or daycare (45%), and retail shopping options (44%). Just 15% live within a 10-minute walk from their place of employment.

Modes of Transportation – The results show that nearly everyone polled had ridden in a personal vehicle (97%) at least once in the past 12 months. Two-thirds (67%) of the sample had walked or used a wheelchair to get around while a third (34%) had participated in a rideshare program. One in five (21%) had ridden a bicycle and/or used TheBus. Fifteen percent had carpooled while two percent had tried a carshare program and/or used the HandiVan.

Methodology

The City & County of Honolulu, through primary contractor Steer Group, contracted Anthology Research to conduct a quantitative mixed-mode (online and telephone) study of fulltime, adult residents of Oʻahu (lives on Oʻahu a minimum of six months each year).

Data collection began on October 4, 2021 and ended on November 23, 2021. This coincided with work-from-home policies instituted as a result of the COVID-19 pandemic. Please

take note of the timing of the report and the impact of the pandemic in potentially impacting the perception of respondents. A total of n=1,009 completed surveys were collected during this period. The margin of error for an overall sample of this size is +/- 3.09 percentage points with a 95% confidence level.

Sampling quotas by County Council District were established to ensure equal representation of residents throughout the County. Anthology targeted collecting a minimum of n=100 surveys from residents in each of the nine Council Districts on island. The total number of completed surveys in each district are shown on the following page. Based on the disproportionate sampling design, the overall data were weighted to reflect population estimates of adults 18 years of age and older by major ethnic groups on Oʻahu.

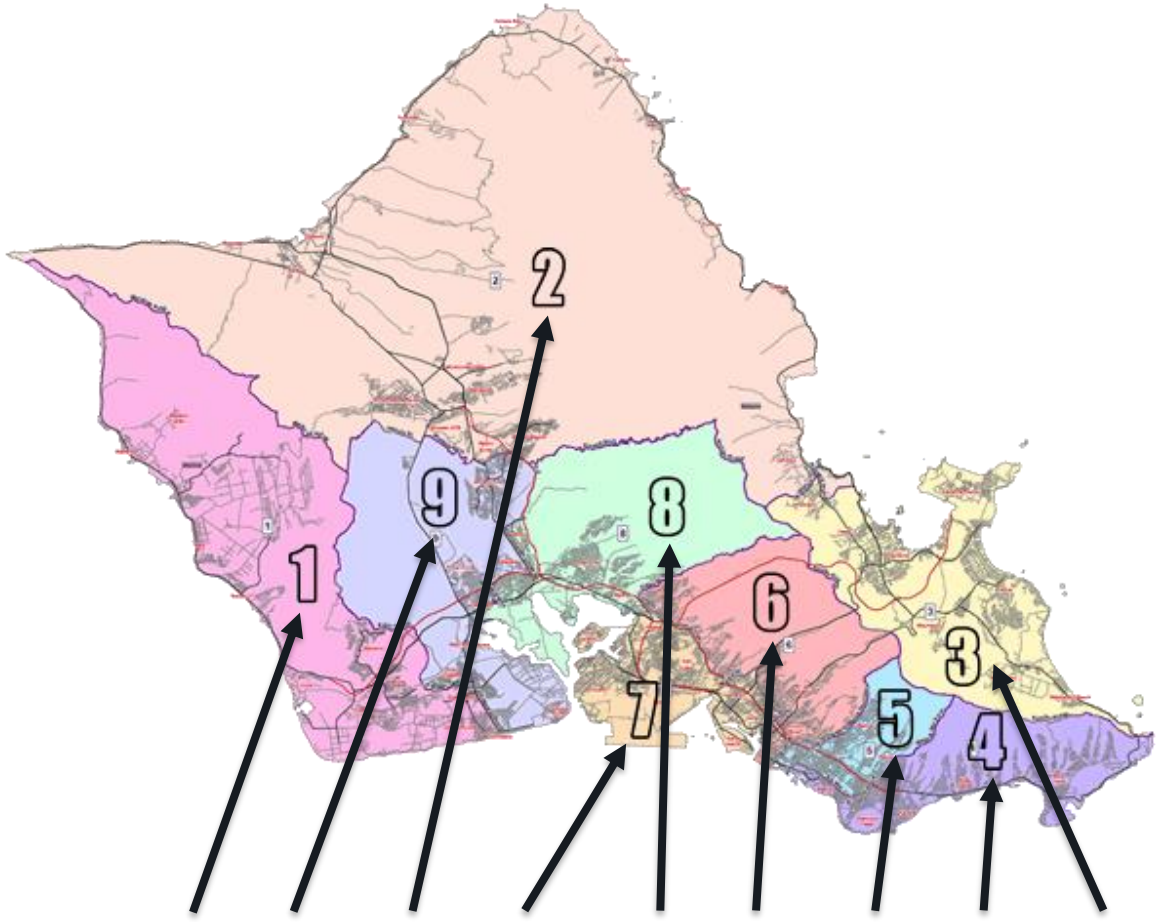
The sample for this mixed-mode survey was compiled from three sources: The sample for the Internet-based portion of the study was derived from a combination of third party online sample providers, purchased consumer and voter contact lists and Anthology's proprietary panel of Hawaiʻi residents. The sample used to generate the telephone surveys was derived using Anthology's proprietary Random Digit Dialing software and Voter Contact lists; both mobile and landline numbers were called.

The questionnaire used in this study was developed by the City & County of Honolulu with input from Anthology Research. A portion of the survey included key questions, used with permission, from "SEGMENT: Applicability of an Existing Segmentation Technique to TDM Social Marketing Campaigns in the United States." The SEGMENT study Market Segment Prediction Tool was used to calculate the driver segments shown in this report. The questionnaire is located in the appendix of this report.

(Note: The research design for this study is proprietary and should be considered the property of Anthology Research.)

Prepared by the City and County of Honolulu Department of Transportation Services, in cooperation with the Oʻahu Metropolitan Planning Organization and the United States Department of Transportation.

The graphic below shows the number of surveys collected in each region/ Council District.

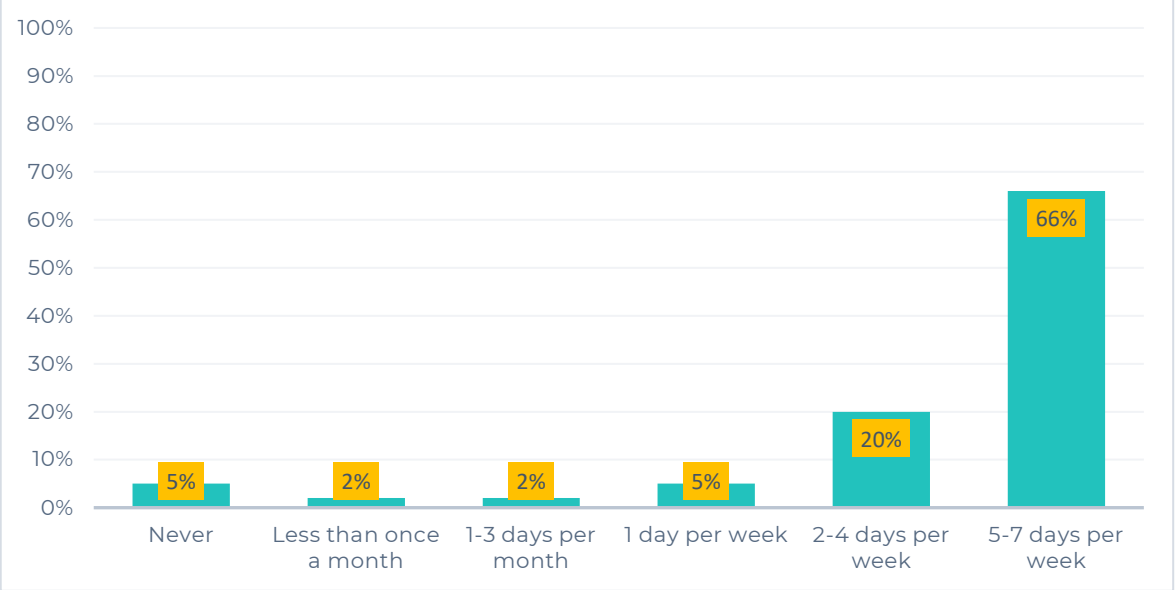


OVERALL	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
n=1,009	n=111	n=130	n=121	n=101	n=112	n=110	n=104	n=108	n=112

Note: The margin of error for an overall sample of n=1,009 is +/- 3.09 percentage points with a 95% confidence level. The margin of error for subsets of the overall sample, including at the council district level, may be higher than +/- 3.09 percentage points with a 95% confidence level.

2 Driving Frequency

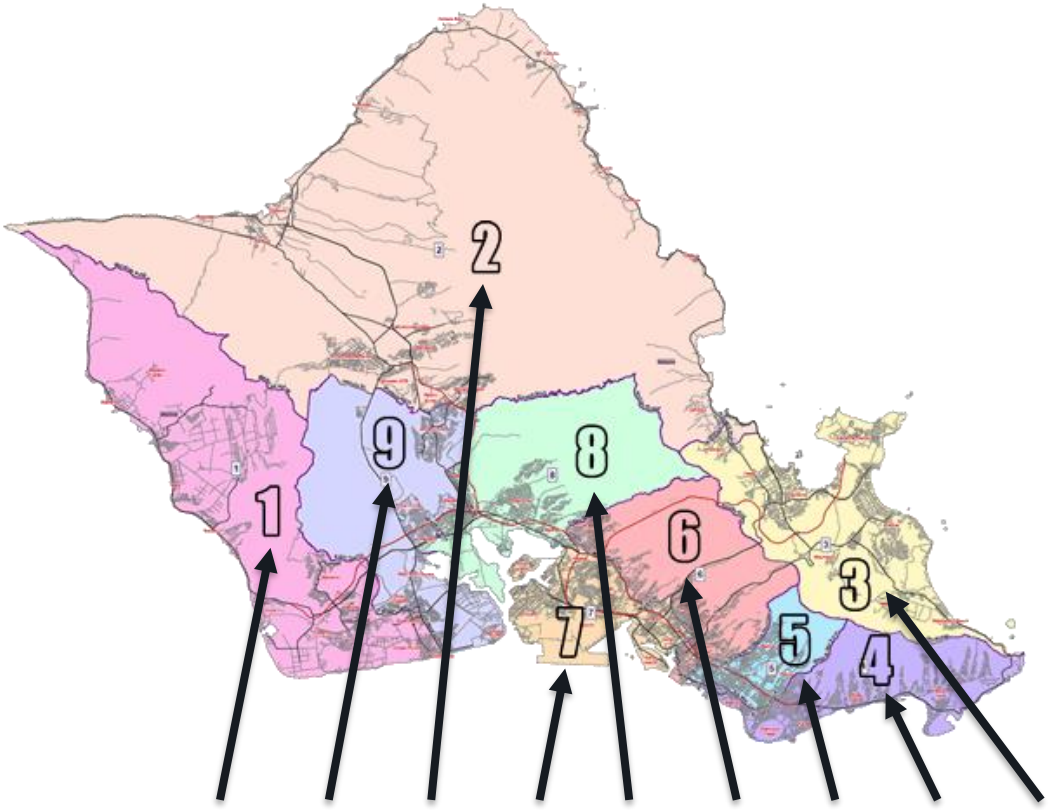
In this section of the study, research respondents were asked which of the following options best described how frequently they travel by car, truck, or van as a driver.



Two-thirds (66%) of those polled are what we would describe as heavy drivers using their vehicles five to seven days a week on average. One in five (20%) drives an automobile anywhere from two to four days a week. The remaining 14% drive less frequently than once a week.

- Those who live with at least one child in their homes (78%) were more likely to drive nearly every day of the week compared to those who do not live with children (61%).
- Driving frequency is higher amongst more affluent and educated segments of the sample. For example, 72% of those who live in homes with combined incomes in excess of $100K drive five to seven days a week. This number drops to 56% amongst those who live in homes with combined incomes below $50K.
- Those who are employed or students (77%) were more likely to drive nearly every day compared to those who are not employed or currently going to school (44%).

The graphic below highlights transportation modes used in the past 12 months by geographic region/ Council District.



	OVERALL	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
BASE	1,009	111	130	121	101	112	110	104	108	112
Never	5%	3%	3%	5%	6%	4%	5%	7%	8%	5%
Less than once a month	2%	1%	2%	0%	0%	2%	2%	5%	2%	2%
1-3 days per month	2%	4%	-	-	3%	1%	2%	3%	0%	5%
1 day per week	5%	5%	8%	5%	1%	5%	6%	2%	3%	6%
2-4 days per week	20%	20%	12%	26%	22%	19%	34%	14%	21%	16%
5-7 days per week	66%	68%	75%	64%	68%	70%	51%	69%	65%	67%
Classification based on SEGMENT Market Segment Prediction Tool Non-driver = Never + Less than once a month + 1-3 days per month Driver = 1 day per week + 2-4 days per week + 5-7 days per week										
NET Non-Driver	9%	8%	5%	5%	9%	7%	9%	15%	10%	12%
NET Driver	91%	93%	95%	95%	91%	94%	91%	85%	89%	89%

3 Driver Segments

Driver Segments

The overall results from the study were filtered to help identify the following four driver segments which will be highlighted throughout the report. The table below highlights the actual count that comprised each segment along with a description of each to aid the reader as they progress through the report.

As noted in the methodology section, these driver segments and associated descriptions were used with permission from "SEGMENT: Applicability of an Existing Segmentation Technique to TDM Social Marketing Campaigns in the United States."

	BASE	DESCRIPTION
Malcontented Motorists & Non-bikers	263	*This group likes driving, but not as much as the car lovers and devoted drivers do. They agree that it is important to reduce the number of cars, trucks, and vans on the road due to traffic noise and pollution. They also feel responsible about environmental problems and do not believe that climate change and global warming have been exaggerated. They somewhat believe that reducing car usage can help stop climate change. Nevertheless, they do not enjoy public transportation because driving is faster. Therefore, they do not have many options besides driving. A distinctive feature of this group is that they dislike bicycles and motorcycles, even though they acknowledge the health benefits of bicycling.*
Active Aspirers	183	*This group does not enjoy driving as much as people in other groups and would gladly cut down their car, truck, or van use if they could. They believe that driving is quicker than transportation but not cheaper because owning a car, truck, or van is expensive. They do not like traveling by taxicab and motorcycle. They have positive attitudes toward public transportation such as bus, subway, railroad, and ferryboat. They also enjoy biking and walking and highly appreciate the health benefits. They are highly aware of environmental responsibilities and climate change and would like to act on them. Therefore, this group believes that it is important to reduce the number of cars, trucks, and vans due to traffic noise and odor, and to solve environmental issues. If this group has to use a car to get to work, they would like to carpool.*
Open-minded Car Lovers	110	*Just like the Car Lovers/Devoted Drivers group, this group really loves to drive, does not want to cut down their car, truck or van use, and believes that there is no realistic alternative to driving. They strongly believe that people should be allowed to use their car/truck/van as much as they like and think that driving is a way to express themselves. Since they believe that driving is cheaper and quicker, they have unfavorable views toward public transportation. Nevertheless, they still like traveling by walking and biking and highly appreciate the health benefits. Despite their love for driving, this group feels responsible about environmental issues and does not believe that climate change and global warming have been exaggerated. Therefore, they think that it is important to reduce the number of car/truck/vans because of traffic noise and odor. This group is also open to carpooling.*
Car Lovers/ Devoted Drivers	61	*This group really loves to drive and does not want to cut down their car/truck/van use, and believes that there is no realistic alternative to driving. They believe that driving is a way to express themselves. As a result, they strongly believe that people should be allowed to use their car, truck, or van as much as they like. They have very negative attitudes towards biking and walking even though they understand the health benefits. They also have very negative attitudes towards any kind of public transportation and believe that cars, trucks, and vans are faster, cheaper and safer. However, they do not think that they are too dependent on cars, trucks, and vans. They also do not enjoy carpooling. They do not agree that cars, trucks, or vans create noise and odor nuisance or lead to an unhealthy lifestyle. Regarding environmental issues and climate change, this group somewhat believes that environmental threats have been exaggerated.*

Driver Profile

The table below provides a profile of each driver segment based on the various demographics spotlighted in this particular study. The numbers highlighted in red signify statistically significant differences with at least one other driver segment.

	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
REG VOTER	85%	77%	87%	89%
PRIMARY RESIDENCE				
Own	52%	51%	60%	57%
Rent	38%	39%	32%	31%
Live rent free	10%	9%	9%	12%
HOUSEHOLD SIZE				
1-2 persons	55%	51%	56%	55%
3-4 persons	36%	39%	36%	31%
5 or more	8%	10%	8%	13%
MEAN	3.18	3.52	3.09	3.18
EDUCATION				
HS/ Less	3%	10%	10%	7%
Some College	24%	35%	31%	28%
Four-year college grad	32%	33%	28%	36%
Post-graduate	40%	20%	30%	28%
YEARS IN HAWAII				
Born and Raised	45%	60%	72%	66%
Transplant	55%	40%	28%	34%
AGE				
18-34	25%	17%	17%	19%
35-49	38%	45%	44%	30%
50-64	25%	20%	33%	33%
65+	10%	18%	6%	18%
MEAN	45.08	47.05	46.36	49.72
ETHNICITY				
Caucasian	43%	26%	17%	21%
Japanese	18%	26%	43%	36%
Chinese	5%	3%	3%	3%
Filipino	8%	10%	8%	14%
Hawaiian	16%	26%	20%	20%
Other	7%	6%	5%	6%
HOUSEHOLD INCOME				
< $50K	11%	15%	20%	20%
$50K-$100K	35%	32%	41%	36%
$100K+	45%	40%	34%	34%
Rf	9%	13%	4%	11%
GENDER				
Male	36%	54%	33%	31%
Female	64%	44%	61%	69%

4 Driver Segment

In this section of the study those respondents who drive at least once a week were presented with a list of 17 statements and then asked how strongly they agreed or disagreed with each one. They were instructed to quantify their perceptions using a standard five-point rating scale highlighted in the table below. In addition to the percent results a mean or average score was also computed. The higher the mean score (closer to 5.00) the more strongly they agreed with each statement. Please note the varying number of respondents (BASE) for each statement when analyzing these results.

	BASE	Strongly agree (5)	Somewhat agree (4)	Neither (3)	Somewhat disagree (2)	Strongly disagree (1)	MEAN
I try to consolidate my trips taken in my car/ truck/ van	902	38%	50%	7%	4%	2%	4.18
People should be allowed to use their cars/ trucks/ vans as much as they like	914	28%	41%	22%	8%	2%	3.85
I feel a moral obligation to reduce the emission of greenhouse gases	903	19%	41%	26%	6%	7%	3.61
I would like traveling by ferryboat	810	22%	31%	26%	13%	8%	3.48
Reducing my car/truck/ van use would make me feel good	900	16%	35%	29%	12%	8%	3.39
I like traveling by walking	885	14%	35%	26%	16%	8%	3.31
I am NOT the kind of person to use public transportation	900	17%	20%	26%	26%	11%	3.06
I am NOT the kind of person who rides a bicycle	882	21%	19%	21%	24%	15%	3.06
I would like traveling by streetcar or trolley car	838	10%	26%	32%	19%	13%	3.00
Driving gives me a way to express myself	885	8%	20%	42%	18%	12%	2.93
In general, I would rather bicycle than use the bus	860	10%	21%	28%	25%	16%	2.82
I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work	788	11%	18%	26%	27%	18%	2.78
I like travelling by bicycle	811	9%	18%	26%	22%	24%	2.65
If I could, I would gladly do without a car/ truck/ van	909	8%	18%	17%	33%	23%	2.56
Finding a parking spot where I live is difficult	871	10%	16%	8%	34%	31%	2.41
I tend NOT to walk much because it's physically draining	902	6%	11%	19%	36%	29%	2.29
Environmental threats such as global warming have been exaggerated	907	7%	11%	21%	24%	37%	2.28

The five statements that received the highest mean scores from the driver segment are highlighted above in yellow signifying the strongest level of agreement amongst the various statements being tested. At the opposite end, the three statements with the lowest mean scores or overall level of agreement are highlighted in red.

The table below segments the results by mean score by driver segment. The purple shaded regions highlight statistically significant differences where the mean score was higher than at least two other driver segments of the sample. The areas shaded in yellow highlight statistically significant differences where the mean score was higher than one other driver segment of the sample. Once again, the higher the mean score (closer to 5.00) the more strongly they agree with each statement.

	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
I try to consolidate my trips taken in my car/ truck/ van	4.40	4.12	3.83	4.03
People should be allowed to use their cars/ trucks/ vans as much as they like	3.51	4.43	4.52	3.71
I feel a moral obligation to reduce the emission of greenhouse gases	4.24	3.27	2.60	3.45
I would like traveling by ferryboat	4.12	3.36	2.35	3.28
Reducing my car/truck/ van use would make me feel good	4.19	3.14	1.86	3.41
I like traveling by walking	4.07	3.51	2.14	3.06
I am NOT the kind of person to use public transportation	2.24	3.55	4.23	3.05
I am NOT the kind of person who rides a bicycle	2.06	2.20	3.91	3.85
I would like traveling by streetcar or trolley car	3.81	2.58	1.64	2.99
Driving gives me a way to express myself	2.48	3.43	3.34	2.89
In general, I would rather bicycle than use the bus	3.59	3.62	2.21	2.21
I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work	3.45	2.43	1.64	2.78
I like travelling by bicycle	3.62	3.47	1.43	1.99
If I could, I would gladly do without a car/ truck/ van	3.47	2.03	1.52	2.45
Finding a parking spot where I live is difficult	2.61	2.37	2.16	2.41
I tend NOT to walk much because it's physically draining	1.72	2.07	2.41	2.56
Environmental threats such as global warming have been exaggerated	1.49	3.03	3.07	2.23

Segmentation Analysis

The table below highlights statistically significant differences by mean score signifying a higher degree of agreement with each statement.

	STATISTICAL DIFFERENCES
*Stronger level of agreement from those who have **traveled on TheBus in the past year***	• *I like traveling by bicycle* • *Reducing my car/truck/van use would make me feel good* • *I would like traveling by streetcar or trolley car* • *I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work* • *I like traveling by walking*

	STATISTICAL DIFFERENCES
	• *I would like traveling by ferryboat* • *Finding parking where I live is difficult*
*Those **who have not traveled on TheBus in the past year** more strongly agree with the following*	• *I am NOT the kind of person to use public transportation* • *I am NOT the kind of person who rides a bicycle* • *In general, I would rather bicycle than use the bus* • *If I could, I would gladly do without a car/truck/van* • *People should be allowed to use their cars/trucks/ vans as much as they like*
*Stronger agreement from those with the **longest daily commutes***	• *Environmental threats such as global warming have been exaggerated* • *I tend NOT to walk much because it is physically demanding*
*Stronger agreement from those with **shorter daily commutes***	• *I feel a moral obligation to reduce the emission of greenhouse gases* • *I like traveling by walking*
***Males** more strongly agree with the following statements than females*	• *I like traveling by bicycle* • *In general, I would rather bicycle than use the bus* • *People should be allowed to use their cars/trucks/ vans as much as they like* • *Environmental threats such as global warming have been exaggerated*
*Stronger agreement from **female** respondents*	• *Reducing my car/truck/van use would make me feel good* • *I am NOT the kind of person who rides a bicycle*
*Stronger agreement from **Caucasians***	• *I like traveling by bicycle* • *I would like traveling by streetcar or trolley car* • *I feel a moral obligation to reduce the emission of greenhouse gases* • *I like traveling by walking* • *In general, I would rather bicycle than use the bus* • *I would like traveling by ferryboat*
*Stronger levels of agreement from **Japanese** respondents*	• *I feel a moral obligation to reduce the emission of greenhouse gases* • *I am NOT the kind of person to use public transportation* • *I am NOT the kind of person who rides a bicycle*

	STATISTICAL DIFFERENCES
***Native Hawaiians** provide higher levels of agreement*	• *I like traveling by bicycle* • *I would like traveling by ferryboat* • *Environmental threats such as global warming have been exaggerated*
*High level of agreement from **Filipino** respondents*	• *Driving gives me a way to express myself* • *Environmental threats such as global warming have been exaggerated*
***Those living in homes earning in excess of $100K** of the sample provided higher mean scores*	• *I am NOT the kind of person to use public transportation*
*Stronger sense of agreement **from those living in homes (<$50K)** respondents*	• *Driving gives me a way to express myself* • *I tend NOT to walk much because it is physically demanding*
***Respondents under the age of 35** of the sample provided higher mean scores*	• *Reducing my car/truck/van use would make me feel good* • *I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work*

	STATISTICAL DIFFERENCES
	• *In general, I would rather bicycle than use the bus* • *Finding parking where I live is difficult*
Higher levels of agreement from ***those 65 and older***	• *I feel a moral obligation to reduce the emission of greenhouse gases* • *Environmental threats such as global warming have been exaggerated (higher level of disagreement with this statement among this segment)* • *I tend NOT to walk much because it is physically demanding* • *I try to consolidate my trips taken in my car/truck/van*
Locals, born & raised in Hawaii *more strongly agree*	• *I am NOT the kind of person to use public transportation*
More likely to garner agreement from ***transplants to the state or those not born in Hawai'i***	• *I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work* • *Finding parking where I live is difficult*
More educated segments or those ***with a college degree*** *more strongly agree with the following*	• *Reducing my car/truck/van use would make me feel good* • *I would like traveling by streetcar or trolley car* • *I feel a moral obligation to reduce the emission of greenhouse gases* • *I like traveling by walking* • *If I could, I would gladly do without a car/truck/van* • *I try to consolidate my trips taken in my car/truck/van*
Greater sense of agreement from those ***without a college degree***	• *People should be allowed to use their cars/trucks/ vans as much as they like* • *Environmental threats such as global warming have been exaggerated* • *I tend NOT to walk much because it is physically demanding*
Stronger agreement from those who ***own their primary residents***	• *I am NOT the kind of person to use public transportation* • *I try to consolidate my trips taken in my car/truck/van*
Renters *agree with the following in greater numbers*	• *I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work* • *Finding parking where I live is difficult*
Those who are ***currently employed or go to school*** *more strongly agree with the following*	• *I like traveling by bicycle* • *Reducing my car/truck/van use would make me feel good* • *I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work* • *In general, I would rather bicycle than use the bus* • *Finding parking where I live is difficult*
Greater level of agreement from those who ***do not either work or go to school***	• *I am NOT the kind of person who rides a bicycle* • *Environmental threats such as global warming have been exaggerated* • *I tend NOT to walk much because it is physically demanding*
Households that ***contain at least one child*** *more strongly agree*	• *I like traveling by bicycle* • *In general, I would rather bicycle than use the bus*
Stronger agreement from those who ***do not live with children***	• *I feel a moral obligation to reduce the emission of greenhouse gases* • *I am NOT the kind of person who rides a bicycle* • *I tend NOT to walk much because it is physically demanding*

	STATISTICAL DIFFERENCES
*Those who live in the **urban Honolulu** more strongly agreed with the following*	• *I would like traveling by streetcar or trolley car* • *I feel a moral obligation to reduce the emission of greenhouse gases* • *I like traveling by walking* • *If I could, I would gladly do without a car/truck/van* • *Finding parking where I live is difficult*
*Strong level of agreement from those who **live in the suburbs***	• *I would like traveling by streetcar or trolley car* • *If I could, I would gladly do without a car/truck/van*
*Higher levels of agreement from those **living in rural O'ahu***	• *I would like traveling by ferryboat* • *Environmental threats such as global warming have been exaggerated*
*Respondents who **live alone** more strongly agree*	• *I would like traveling by streetcar or trolley car* • *I like traveling by walking*
*Stronger agreement from those **who live in larger households***	• *I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work* • *Environmental threats such as global warming have been exaggerated*
*Those who **live in homes with a single auto** more strongly agree compared to those living in homes with multiple vehicles*	• *I feel a moral obligation to reduce the emission of greenhouse gases* • *I like traveling by walking* • *I would like traveling by ferryboat* • *Finding parking where I live is difficult*
*Higher levels of agreement from those who **live in homes with multiple vehicles***	• *I am NOT the kind of person to use public transportation* • *People should be allowed to use their cars/trucks/ vans as much as they like* • *Environmental threats such as global warming have been exaggerated*
*Those who **drive 5-7 days a week** more strongly agree with the following*	• *Driving gives me a way to express myself* • *People should be allowed to use their cars/trucks/ vans as much as they like* • *Environmental threats such as global warming have been exaggerated*
*Stronger level of agreement from those who **do not drive as frequently***	• *I feel a moral obligation to reduce the emission of greenhouse gases* • *I am NOT the kind of person who rides a bicycle* • *If I could, I would gladly do without a car/truck/van* • *I try to consolidate my trips taken in my car/truck/van* • *I tend NOT to walk much because it is physically demanding*

A quick summation of the segmentation analysis shows a greater willingness to adopt alternative forms of transportation amongst those who live in the urban core. This sentiment weakens as one moves out to the suburbs and rural O'ahu.

There is also greater pushback amongst larger households, particularly those who live in homes with multiple vehicles, when it comes to arguments supporting alternative forms of transportation.

The daily commute also plays a key role in how research respondents generally fall in line regarding this topic in general. Those with a longer commute show a stronger pushback on topics related to alternative forms of transportation.

Younger segments of the sample, particularly those who live and rent in the urban core of Honolulu, appear the easiest to convert or generally support topics promoting alternative forms of travel.

5 Non Driver Segment

In this section of the study those respondents who drive just three times a month or less were presented with a list of 18 statements and then asked how strongly they agreed or disagreed with each one. They were instructed to quantify their perceptions using a standard five-point rating scale highlighted in the table below. In addition to the percent results a mean or average score was also computed. The higher the mean score (closer to 5.00) the more strongly they agreed with each statement. Please note the relatively small bases when examining these results.

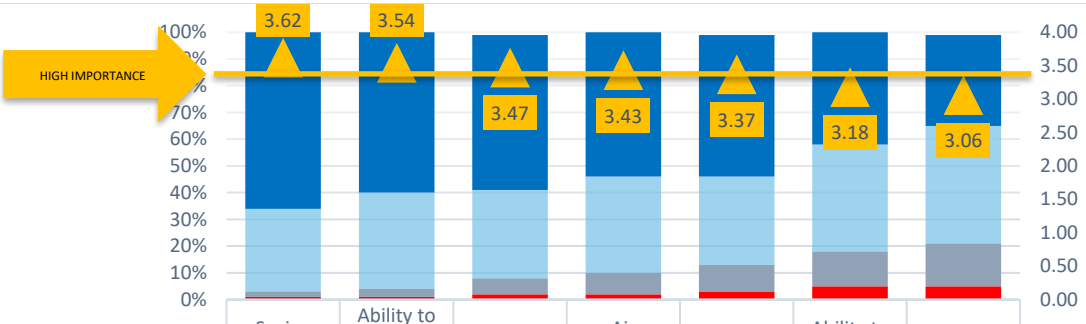
	BASE	Strongly agree (5)	Somewhat agree (4)	Neither (3)	Somewhat disagree (2)	Strongly disagree (1)	MEAN
I like saving money by NOT driving	84	32%	40%	18%	6%	4%	3.90
Walking can be the quickest way to travel for short journeys	88	24%	59%	4%	9%	4%	3.89
I feel a moral obligation to reduce the emission of greenhouse gases	87	27%	36%	24%	11%	2%	3.75
Traffic congestion is a problem in my local area	91	36%	26%	22%	5%	10%	3.72
Finding a parking spot where I live is difficult	81	31%	21%	21%	20%	6%	3.51
I do NOT know anyone with whom to carpool	66	22%	38%	16%	10%	14%	3.43
I like traveling by TheBus	88	16%	34%	27%	15%	7%	3.38
I would like traveling by ferryboat	79	23%	28%	22%	7%	19%	3.30
Finding a parking space at work is difficult	54	28%	20%	10%	33%	9%	3.24
There are many problems with using public transportation	89	9%	24%	37%	25%	5%	3.09
I would like traveling by subway or elevated rail	85	18%	31%	16%	11%	24%	3.07
I have no need to drive as public transport/walking/cycling are all adequate	86	18%	20%	21%	22%	19%	2.97
I do NOT need to have a car/truck/van	86	16%	17%	19%	25%	22%	2.80
In general, I would rather walk than use the bus	91	11%	19%	27%	26%	18%	2.79
I like traveling by taxicab	80	3%	15%	26%	29%	27%	2.39
I am NOT the kind of person to use public transportation	91	15%	6%	7%	34%	38%	2.27
I had a bad experience as a carpool passenger in the past	44	1%	10%	33%	26%	30%	2.26
My employer reimburses bicycle commuting expenses	40	12%	3%	15%	15%	54%	2.05

The five most effective arguments that influence the non-driver segment are highlighted in yellow in the table above. Conversely, the bottom three ranked statements are shaded in red based on mean scores once again.

6 Travel Mode Influencers

Importance Ratings

In this section of the study residents of the City & County of Honolulu were presented with seven incentives that might impact the transportation choices of research respondents. After being presented with each they were asked to rate its importance in helping them to determine how they prefer to travel on-island. They were instructed to quantify their perceptions using a standard four-point rating scale highlighted in the table below. In addition to the percent results a mean or average score was also computed. The higher the mean score (closer to 4.00) the greater its importance in the decision-making process.



	Saving time/ fastest way	Ability to carry items/ cargo	Saving money	Air conditioning	Privacy	Ability to transport other ppl	Getting exercise
Very important (4)	66%	60%	58%	54%	53%	42%	34%
Somewhat important (3)	31%	36%	33%	36%	33%	40%	44%
Somewhat unimportant (2)	2%	3%	6%	8%	10%	13%	16%
Very unimportant (1)	1%	1%	2%	2%	3%	5%	5%
DK/Rf							
BASE	1009	1009	1009	1009	1009	1009	1009
MEAN	3.62	3.54	3.47	3.43	3.37	3.18	3.06

Overall, two of the seven influencers received mean scores above 3.50 signifying a high degree of importance placed on the fastest mode of transportation (3.62) and the ability to carry cargo/ items (3.54).

Each of the other five items received mean scores that exceeded 3.00 signifying that each was of relative importance to a large proportion of the sample. Saving money and air-conditioning fell just slightly below the 3.50 threshold.

The table below segments the results by mean score by driver type. The areas shaded in purple show segments that were statistically higher than at least two other segments. The areas shaded in yellow were statistically higher than one other segment.

	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
Saving time/ fastest way	3.54	3.71	3.80	3.69
Ability to carry items/ cargo	3.48	3.60	3.78	3.56
Saving money	3.53	3.48	3.32	3.50
Air conditioning	3.22	3.44	3.69	3.51
Privacy	3.04	3.65	3.84	3.42
Ability to transport other people	3.12	3.38	3.21	3.19
Getting exercise	3.23	3.13	2.69	2.99

Segmentation Analysis

The table below highlights statistically significant differences by mean score signifying a higher degree of agreement.

	STATISTICAL DIFFERENCES
*Greater impact amongst those who have **ridden TheBus in the past year***	• *Saving money*
*Higher mean scores from those who have **NOT ridden TheBus in the past year***	• *Saving time/ fastest way* • *Privacy* • *Air conditioning*
*The following have a greater influence on **those with longer commutes***	• *Privacy*
***Females** provided higher mean scores than males*	• *Saving money* • *Saving time/ fastest way* • *Ability to carry items/ cargo* • *Privacy* • *Air conditioning* • *Getting exercise*
*Least important to **Caucasians***	• *Saving money* • *Saving time/ fastest way* • *Privacy*
*Less of an impact on **seniors***	• *Saving money* • *Saving time/ fastest way*
*More of an influence amongst **less affluent segments***	• *Saving money* • *Privacy*
*Higher mean scores from less educated segments or **those without a college degree***	• *Saving money* • *Privacy*
*More of an impact amongst **transplants to the state***	• *Saving money*
***Renters** provide higher mean scores*	• *Saving money*
*Those who **live in rural parts of the island** gave higher mean scores*	• *Saving money*
*More of an impact amongst those who are **employed or students***	• *Saving money* • *Saving time/ fastest way* • *Ability to transport other people* • *Getting exercise*
*Has more of an influence amongst those **living in large households***	• *Saving money* • *Ability to transport other people* • *Privacy* • *Getting exercise*

	STATISTICAL DIFFERENCES
*Has more of an influence amongst those **living in large households***	• *Saving money* • *Ability to transport other people*

	• *Privacy* • *Getting exercise*
*Higher mean scores from those who **do not have a vehicle***	• *Saving money*
***Households with at least one child** are more influenced*	• *Saving time/ fastest way* • *Ability to transport other people* • *Privacy* • *Air conditioning*
***Households with multiple vehicles** provide higher mean scores*	• *Ability to transport other people*
*Those who **drive 5-7 days a week** gave higher mean scores*	• *Saving money* • *Saving time/ fastest way* • *Ability to carry items/ cargo* • *Ability to transport other people* • *Privacy* • *Air conditioning*

7 Household Background

Number of Residents

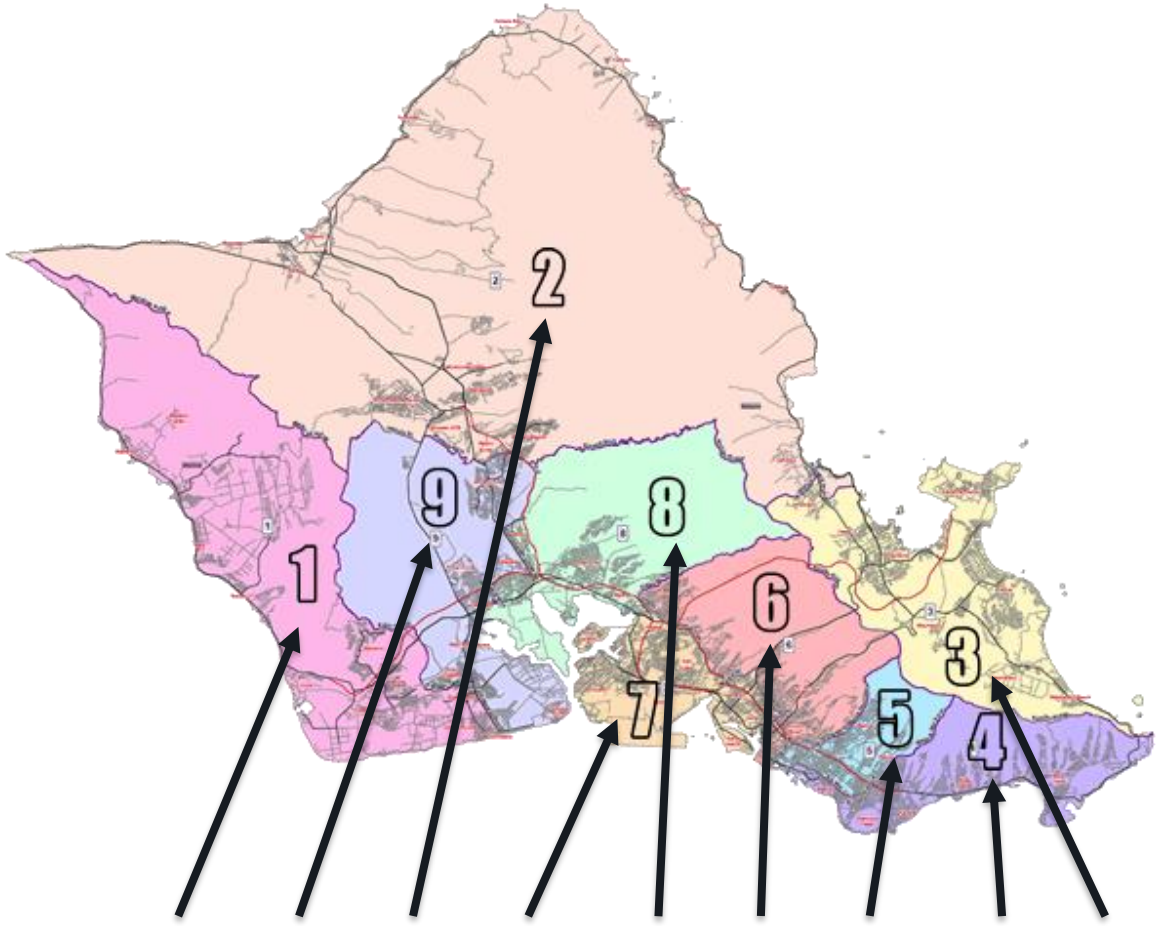
In this initial section of the study residents of the City & County of Honolulu were asked how many persons currently reside in their household.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	1009	183	110	61	263
One	17%	17%	12%	10%	16%
Two	34%	30%	30%	24%	28%
3-4	35%	41%	38%	49%	41%
5+	14%	12%	20%	17%	14%
MEAN	2.92	2.91	3.42	3.27	3.00
MEDIAN	2	3	3	3	3

Overall, 17% live alone with 34% residing in homes with two individuals. Thirty-five percent live in homes of three to four persons while 14% live in homes of five or more residents. The mean or average number of residents per household in the study is 2.92 with the median being lower at two individuals.

- Those who reside in homes with multiple vehicles tend to contain more residents. For example, amongst those who live in homes with more than one automobile, the average household size is 3.42 (mean). This number, household size falls to 1.85 (mean) amongst those living in homes with a single car.
- Those who have longer daily commutes for either work and/or school tend to live in larger households. For example, amongst those who have a daily commute of 11 or more miles, 66% live in homes of three or more persons. As a point of comparison, this number shrinks to 45% amongst those whose commute is less than five miles a day.
- Female (3 persons median) respondents tend to live in larger households compared to males (2 persons median).
- When segmented by ethnicity we find Native Hawaiians (3 persons median) and Filipinos (4 persons median) living in larger households compared to Caucasian (2 persons median) and Japanese (2 persons median) respondents.
- Younger segments of the sample, particularly those under the age of 50 tend to live in larger homes.
- Less educated segments of the sample or those without a college degree (3 person median) live in larger homes compared to college graduates (2 person median).

The graphic below highlights household size by geographic region/ Council District. Areas shaded in purple were statistically higher than two or more other Council Districts while those areas shaded in yellow were statistically higher than one other Council District.

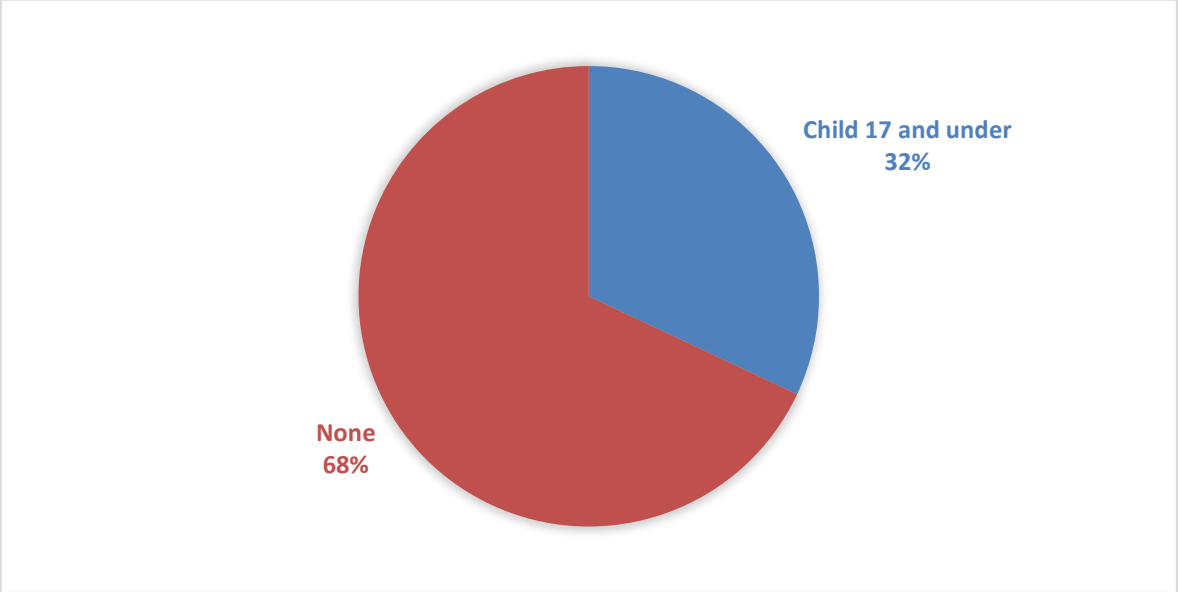


	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
BASE	111	130	121	101	112	110	104	108	112
MEAN	3.35	3.04	3.36	2.75	3.39	2.63	2.46	2.30	2.85
MEDIAN	3	3	3	2	3	2	2	2	2

Those living the furthest from the urban core of Honolulu or who live in the suburbs tend to live in larger households.

Child in Household

Next, research respondents were asked how many, if any, persons in their households were 17 years of age or younger.



One in three (32%) respondents live in a home with at least one child under the age of 18. The table below breaks down household penetration by the age of the child. Overall, one in ten (10%) lives in a home with a child under the age of five. Nearly one in five (19%) lives in a home with at least one child between the ages of five and 12. Sixteen percent live in homes with a child between the ages of 13 and 17.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	1009	183	110	61	263
< 5 years old	10%	8%	16%	13%	12%
5-12 years old	19%	25%	29%	30%	17%
13-17 years old	16%	18%	18%	18%	18%

- The likelihood of having at least one child in the household is higher amongst those homes with multiple vehicles (38%). As a point of comparison, amongst those who live in homes with a single auto, 21% have a child under 18 that lives with them.
- Those who live in the urban core (22%) were the least likely to live in homes with at least one child. As a point of comparison, this number increases to 36% amongst those who live in the suburbs and rises further to 40% amongst those who live in rural Oʻahu.
- Female (37%) respondents were more likely to live with a child than males (24%).
- Those who have not used TheBus (35%) in the past year are more likely to live with a child compared to TheBus users (25%).
- Native Hawaiians and Filipino residents were more likely to live with children than were Caucasians and Japanese residents.

Adult 60+ in Household

The table below highlights the proportion of households that contain a member who is 60 years of age and older.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	1008	183	110	61	263
Adult 60+	52%	34%	38%	38%	51%
None	48%	66%	62%	62%	49%

Overall, half (52%) of those polled live in homes where at least one person is an adult 60 years of age or older.

8 Vehicles in Household

Number of Vehicles

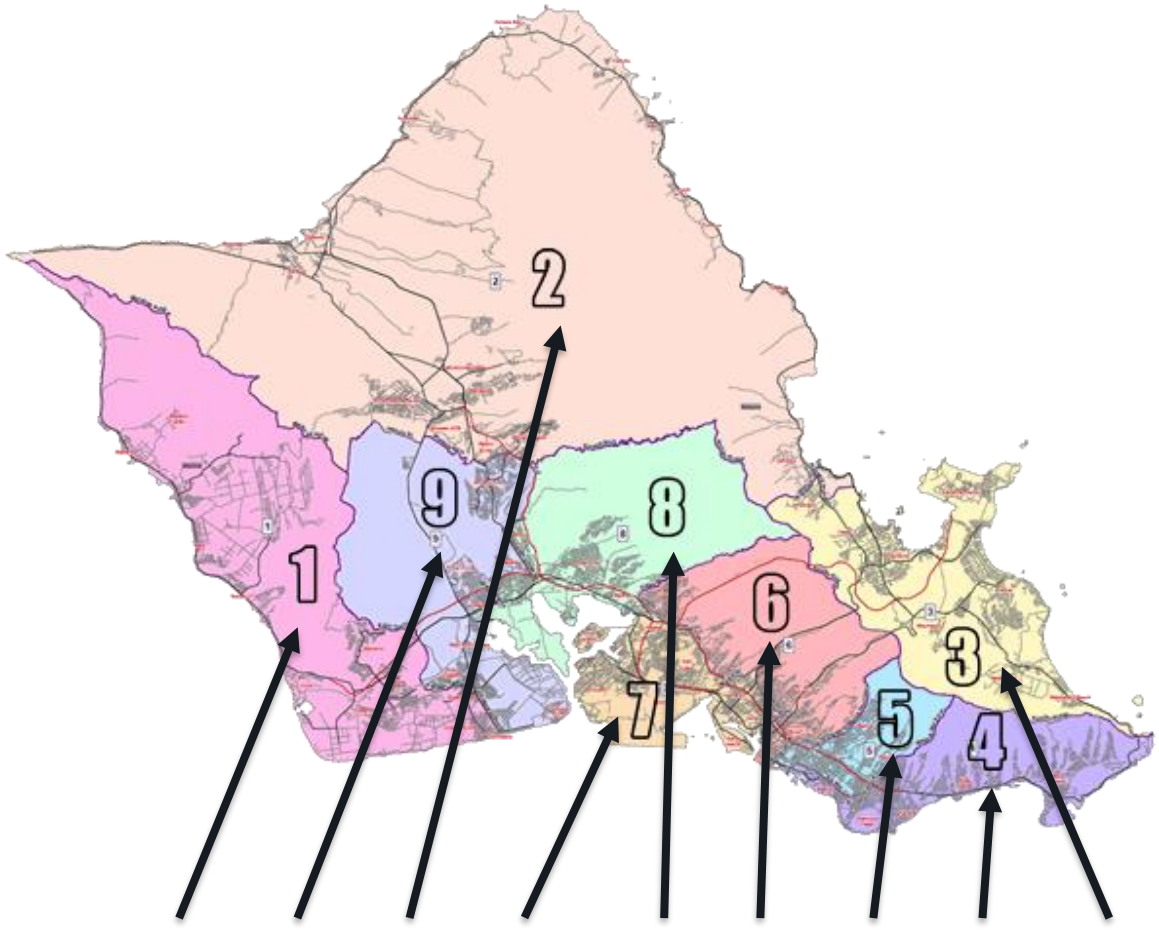
In this initial section of the study residents of the City & County of Honolulu were asked how many vehicles are presently owned or could be assigned to their household.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	1009	183	110	61	263
None	4%	1%	-	-	1%
One vehicle	28%	31%	16%	24%	31%
Two vehicles	39%	35%	49%	34%	36%
3+ vehicles	29%	33%	35%	41%	32%
MEAN	2.12	2.22	2.53	2.47	2.16
MEDIAN	2	2	2	2	2

Nearly everyone (96%) polled resides in a home with at least one vehicle. Overall, 28% live in a household with just a single car while 39% live in a home with two vehicles. Twenty-nine percent live in households with three or more cars. The mean number of vehicles per household is 2.12 with the median being two vehicles.

- Those who have longer commutes tend to live in homes with a greater number of vehicles. For example, amongst those who have a daily commute of 11 or more miles, 44% live in homes with three or more vehicles. As a point of comparison, this number drops to 23% amongst those who have short commutes of less than five miles.
- Those respondents who live in homes with at least one child under 18 (41% three or more vehicles) were significantly more likely to live in homes with a larger number of vehicles compared to those who do not live with a child under 18 (24% three or more vehicles).
- Males were more likely to live in homes with a larger number of vehicles compared to female respondents.
- Amongst the major ethnic groups in the state, Native Hawaiians (35% three or more cars) and Filipinos (38% three or more cars) live in homes with a larger number of vehicles compared to Caucasians (22% three or more cars) and Japanese (30% three or more cars).
- The number of vehicles per household increases with household size and household income.
- Those who live in rural (38% 3+ cars) and suburban (34% 3+ cars) parts of O'ahu own a larger number of vehicles than do those who live in the urban core (14% 3+ cars).

The graphic below highlights the total number of vehicles in the household by geographic region/ Council District. Areas shaded in purple were statistically higher than two or more other Council Districts while those shaded in yellow were statistically higher than one other Council District.

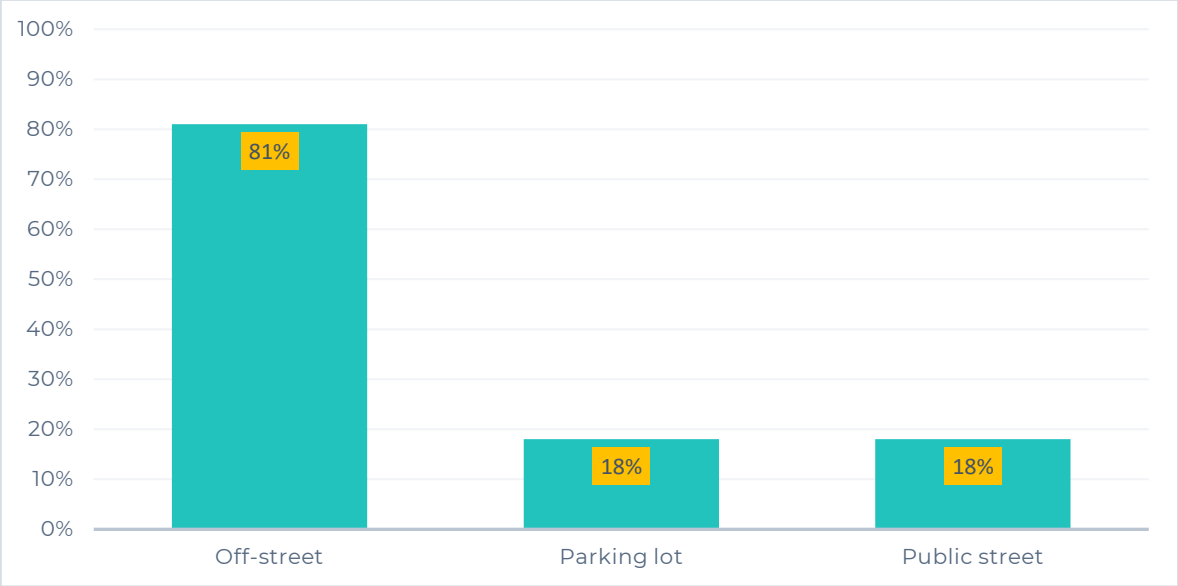


	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
BASE	111	130	121	101	112	110	104	108	112
MEAN	2.40	2.31	2.52	1.93	2.25	1.77	1.76	1.72	2.28
MEDIAN	2	2	2	2	2	2	2	2	2

9 Parking

Parking at Home

In this next section of the study those who have at least one vehicle in their household were asked where the cars and trucks were parked while at home.



A majority (81%) of the vehicles on O'ahu are parked off of the street in private garages and/or on the property of the owner. Eighteen percent parks their vehicle(s) in a parking lot, while another 18% park at least one car on a public street.

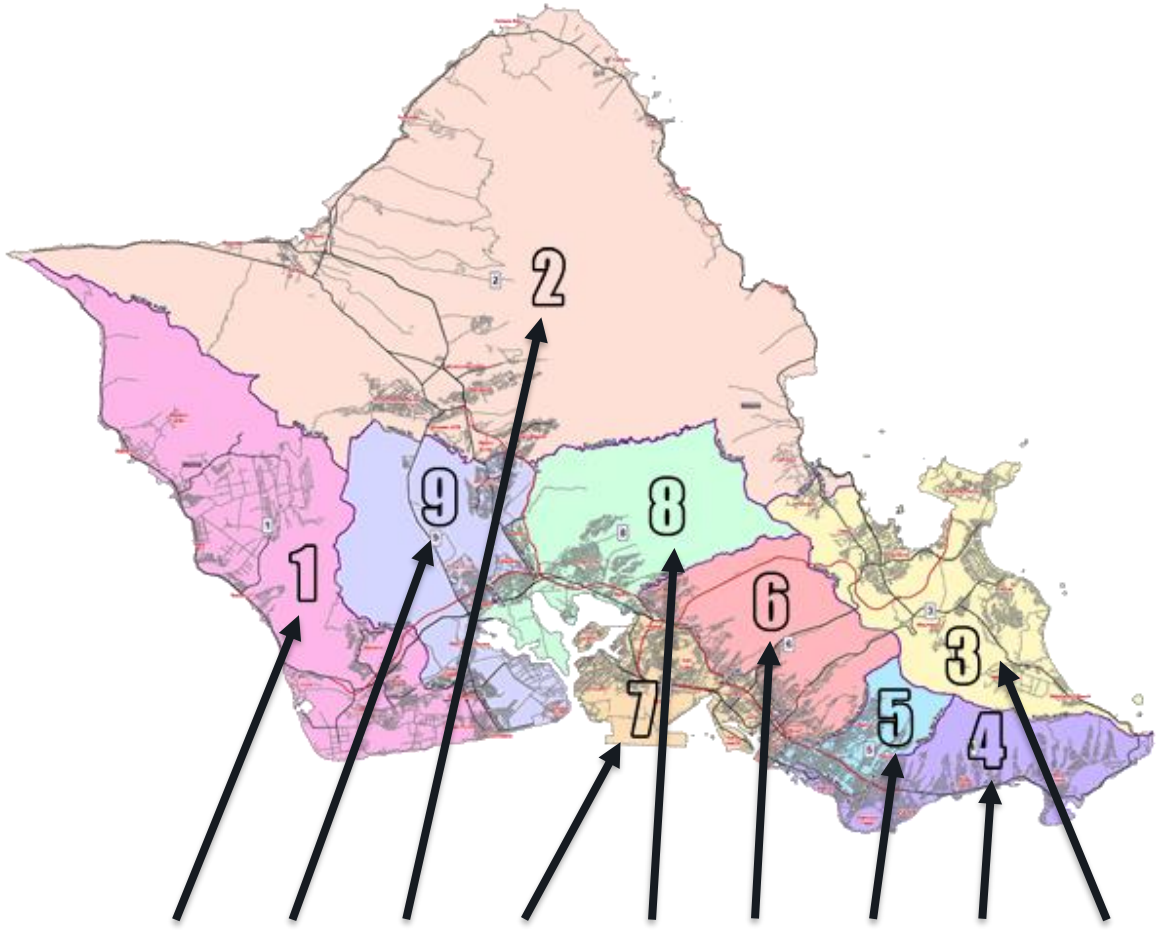
Parking Fees

Regardless of whether they have a vehicle at their disposal each respondent was asked if they would be willing to pay for parking if doing so made finding a parking space easier when they needed it.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	1009	183	110	61	263
Yes, at home	18%	24%	14%	12%	18%
Yes, at work	31%	44%	31%	33%	35%
No	59%	47%	60%	64%	56%

Overall, 18% of those polled would be willing to pay for parking at their place of residence if it meant finding a parking would be easier. Thirty-one percent would be willing to pay for parking at work. A majority (59%) are unwilling to pay for parking in either situation.

The graphic below highlights the results by geographic region/ Council District. Areas shaded in yellow highlight statistically significant differences.



	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
BASE	111	130	121	101	112	110	104	108	112
Yes – home	15%	14%	6%	20%	18%	29%	26%	24%	14%
Yes – work	37%	32%	24%	30%	31%	28%	32%	36%	33%
No	58%	62%	72%	59%	60%	56%	56%	48%	58%

Those living in Metro Honolulu and East Honolulu are the most willing to pay for parking at their residence if it meant it would be easier to find/ obtain while those who live in Council District 2 were the least likely.

10 Personal Vehicle Access

Personal Vehicle

Nearly everyone polled has a personal vehicle that they use.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	1009	183	110	61	263
Personal vehicle	94%	95%	100%	98%	97%
No	6%	5%	-	2%	3%

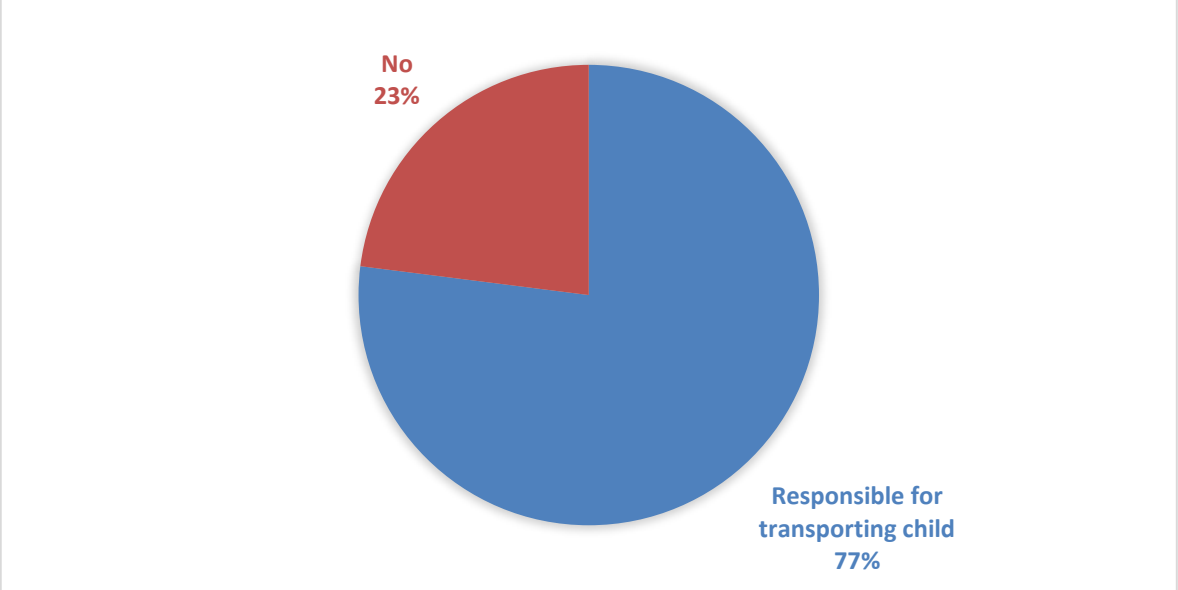
Next, those who have a personal vehicle that they use were asked if they share this car or truck with others in the household.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	832	152	96	56	222
Yes, share vehicle	42%	52%	43%	37%	38%
No	58%	48%	57%	63%	62%

Two in five (42%) of this subset of the sample shares their car or truck with others in their household.

- The longer the daily commute the less likely they are to share their vehicle. For example, amongst those with a relatively short commute of under five miles, 47% share their car or truck with others in their household. This number falls to 32% amongst those whose daily commute is 11 or more miles.

Those who have access to a vehicle and also have a child in their home (n=326) were then asked if they were responsible for taking this minor to and/or from school/ daycare.

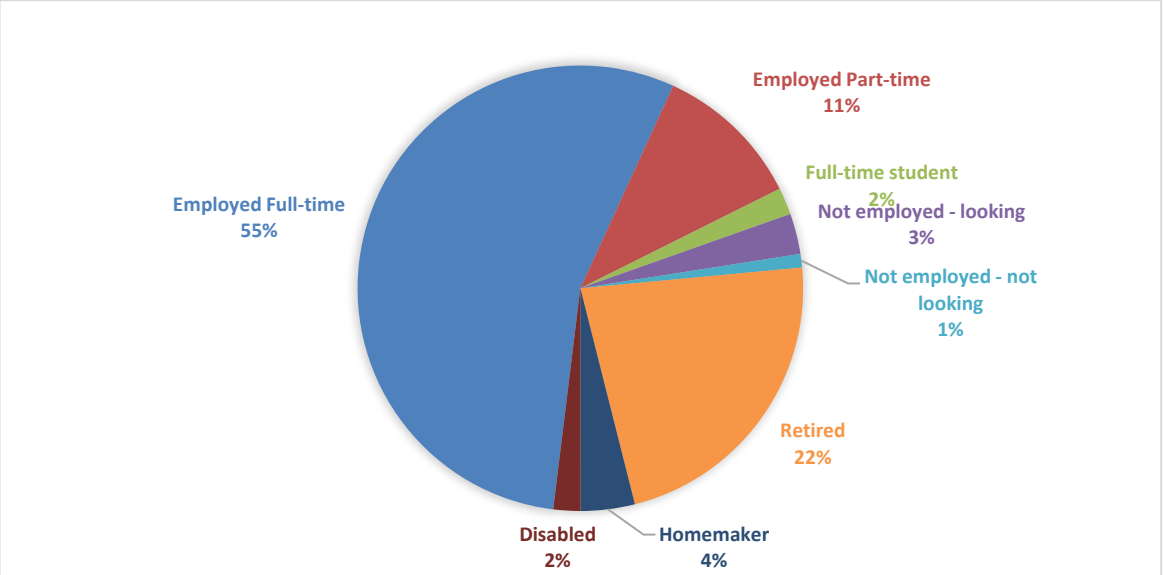


The results from this section highlights that a majority (77%) of this subset of the sample is responsible for the transport of the children in their homes to and from school/ daycare.

11 Daily Commute

Employment Status

At the outset of this section of the study research respondents were asked about their current employment status.



The results show 68% of those polled are currently employed (55% full-time/ 11% part-time) or are going to school (2% full-time student) providing the basis for potential daily commuters amongst a relatively large proportion of the sample.

Daily Commute

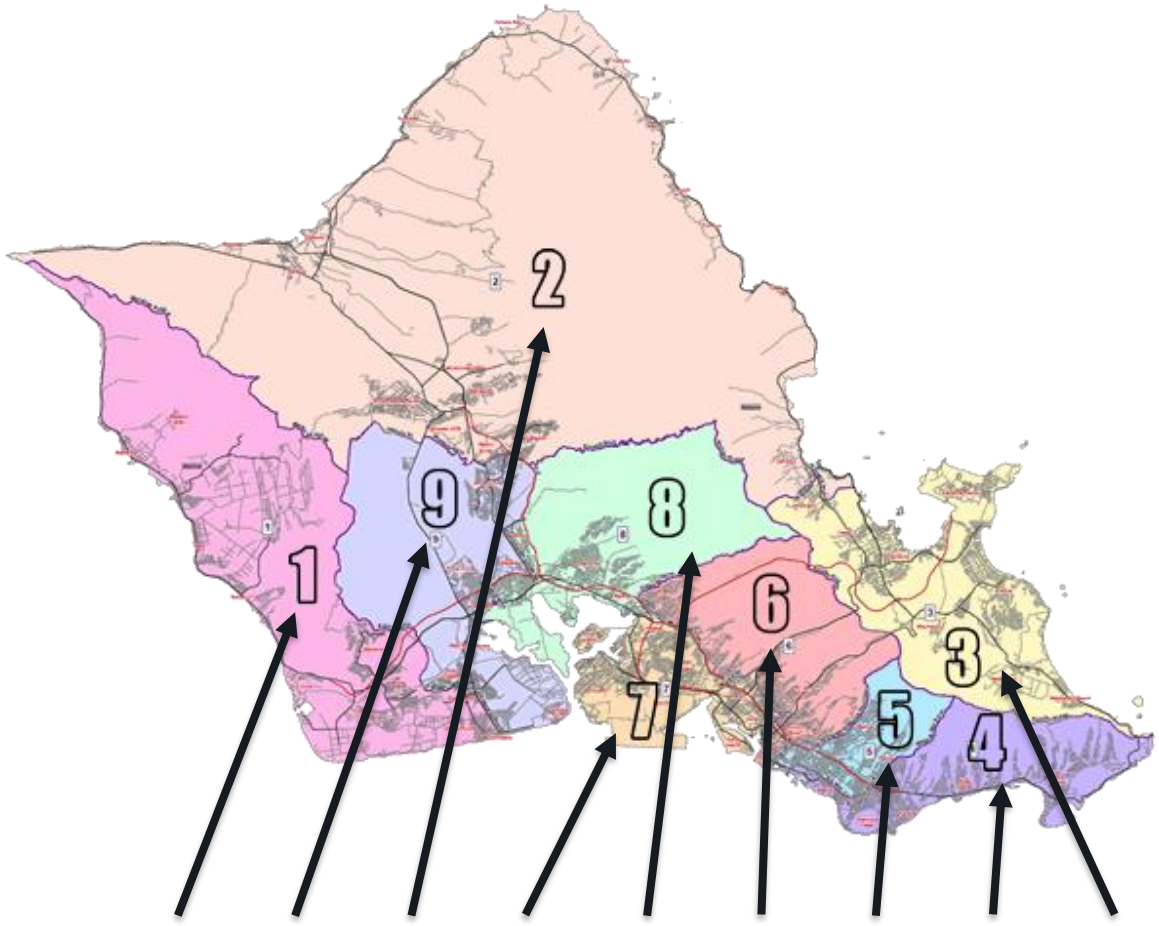
In this section of the study those who are employed or attending school were asked to estimate their daily commute in miles.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	692	160	91	45	203
< 5 miles	31%	31%	28%	21%	26%
5-10 miles	28%	27%	32%	24%	30%
11+ miles	41%	41%	40%	55%	44%
MEAN	11.10	12.03	11.92	13.13	11.73
MEDIAN	8	8	9	12	10
MIN	0	0	0	1	0
MAX	100	100	70	34	52

Overall, the typical daily commute amongst this subset of the sample is 11.10 with the median being lower at eight miles per day.

- Those in this subset of the sample who have used TheBus in the past year (7 miles median) have a shorter daily commute compared to those who have not used TheBus (10 miles median).
- Less educated segments of this subset of the sample or those without a college degree (10 miles median) have longer commutes compared to those with a college degree (8 miles median).
- Commuters who live in rural O'ahu (15 miles median) have longer commutes compared to those living in the urban core (5 miles median).
- The average daily commute is higher as the number of vehicles in the household increases. For example, the average daily commute amongst those who live in homes without a vehicle is 2.30 miles (median). This average increases to 5 miles (median) amongst those who live in homes with a single vehicle and tops out at 10 miles (median) amongst those who live in homes with multiple vehicles.

- The graphic below breaks out the daily commute by area (Council District). Areas shaded in purple highlight areas that were statistically higher than two or more other Council Districts.



	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
BASE	79	94	80	63	78	72	78	81	67
<5 miles	25%	12%	26%	24%	16%	60%	60%	32%	27%
5-10 miles	11%	25%	15%	53%	38%	29%	29%	48%	16%
11+ miles	63%	63%	60%	23%	47%	11%	11%	20%	57%
MEAN	16.59	15.80	16.13	7.79	11.29	5.47	5.07	7.25	11.82
MEDIAN	15	15	15	6	10	4	3	6	12

The longest commutes are from those who reside outside of the urban core of Honolulu.

Potential Impact of Remote Work Options

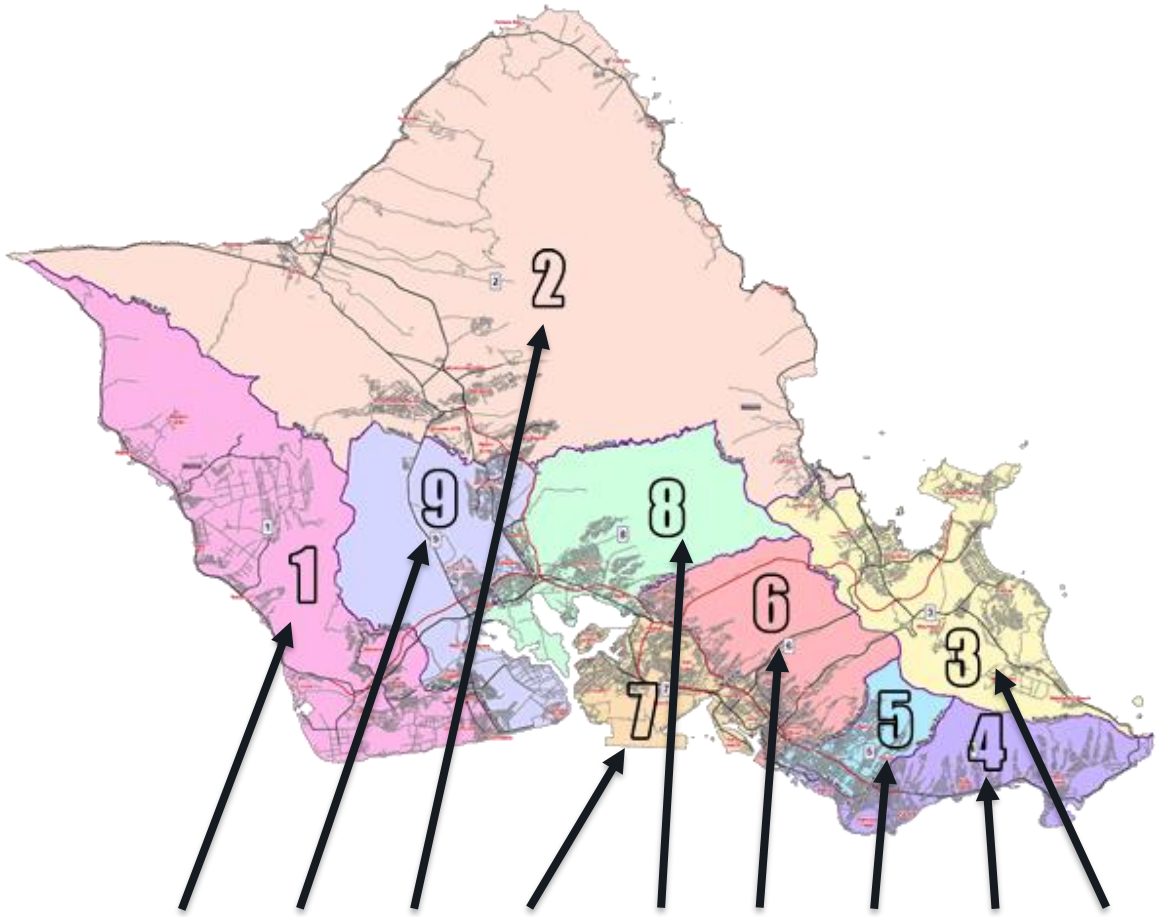
In this next section of the study those who are currently employed were asked if their job can be performed remotely from home or from another location.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	677	158	89	45	197
Yes, always	15%	18%	11%	11%	17%
Yes, sometimes	42%	45%	37%	42%	44%
NET	57%	63%	48%	53%	61%

A little over half (57%) of those who are currently employed indicates that at least some of the time they are able to work remotely from home or another location.

- The research shows that those with the shortest daily commute to be the most likely to have the option of working remotely. For example, amongst those with a daily commute of less than five miles, 69% are able to work at least some of the time on a remote basis. As a point of comparison, this number shrinks to 52% or fewer amongst those with commutes in excess of five miles.
- Less affluent segments are the least likely to have the ability to work remotely. Just 36% of those who are employed and reside in homes with combined incomes below $50K have the option to work at least part of the time remotely. This number increases as respondents become more affluent eventually topping out at 66% amongst workers who reside in homes that exceed $100K.
- When segmented by gender we find that females (61%) are more likely to be able to work remotely than males (50%).
- Just 36% of workers without a college degree have the option to work remotely. This number rises to 70% amongst those with a college degree.
- Those who live in the heart of Honolulu/ Council District 5 at 76% were the most likely to have the option of working remotely. As a point of comparison, only 47% of those who say they live in a rural environment have the option of working remotely.

The graphic below breaks out the potential impact remote work can have by area (Council District). Areas shaded in yellow highlight statistically significant differences from one other Council District.



	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
BASE	77	94	77	63	77	71	73	80	65
Yes, always	10%	19%	17%	6%	10%	17%	17%	17%	22%
Sometimes	33%	40%	39%	39%	41%	40%	59%	42%	43%
NET	43%	59%	56%	45%	51%	57%	76%	59%	65%

Those who live in the heart of Honolulu/ Council District 5 at 76% were the most likely to have the option of working remotely. Those who live in Council Districts 1/7/8 were the least likely to have this option.

Employee Parking

Those respondents were currently employed in either a full and/or part-time basis were then asked which of the following options best mirrored their current situation.

	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	677	158	89	45	197
Free parking	56%	52%	73%	64%	52%
I pay the entire cost of parking	23%	22%	11%	24%	26%
My employer pays the entire cost of parking	14%	15%	12%	8%	14%
My employer pays a portion of the cost of my parking at work	7%	10%	4%	4%	8%

For a little over half (56%) of those who are currently employed the cost of parking at work is not a deterrent to driving as parking is free of charge. For seven percent their place of employment helps to subsidize this cost with partial coverage of parking expenses. One in four (23%) actually pays the entire cost to park at their place of employment. The remaining 14% are fortunate to have their employer cover the entire cost to park at or near their place of work.

- When segmented by those who have used TheBus in the past year (46%) we find these individuals to be less likely to have free parking at work. Those who have not used TheBus in the past year (59%) were more likely to have parking that is readily available for free.

Metered Parking – Credit / Debit Cards

Each respondent was then asked if they would be more willing to use metered street parking if they accepted credit/ debit cards.

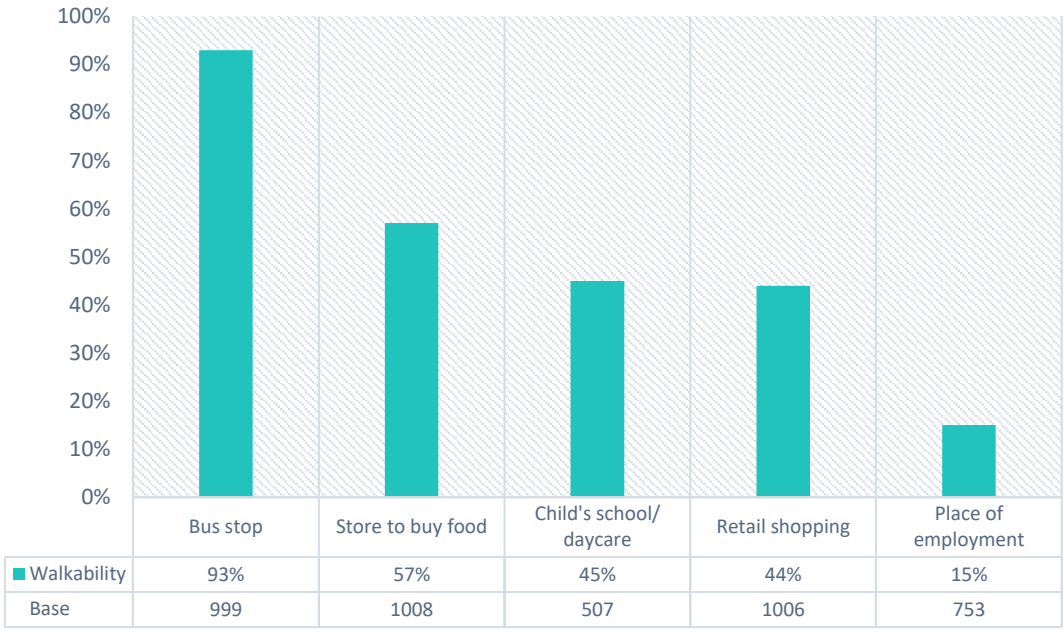
	OVERALL	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	1009	183	110	61	263
Yes	62%	80%	59%	52%	60%
No	38%	20%	41%	48%	40%

A majority (62%) of those polled would be more willing to use metered street parking if they could pay using credit/ debit cards.

- The appeal of metered parking that takes credit/ debit cards is less appealing to less affluent segments of the sample. For example, amongst those who live in homes in the bottom incomes tier (<$50K), 53% say this development would have no impact on them. As a point of comparison, 69% of those who live in homes with combined incomes that exceed $100K say this would make them more likely to use metered street parking.

12 Primary Residence - Walkability

Residents of the City & County of Honolulu were asked if their primary residence was within a 10-minute walking distance to each of the following general destinations.



	Bus stop	Store to buy food	Child's school/ daycare	Retail shopping	Place of employment
Walkability	93%	57%	45%	44%	15%
Base	999	1008	507	1006	753

Nearly everyone (93%) who responded to this question lives within a 10-minute walk from a bus stop.

Significantly less individuals are within a 10-minute walk from a store to buy food (57%), their child's school or daycare (45%), and retail shopping options (44%).

Just 15% live within a 10-minute walk from their place of employment.

The table below breaks out the results by driver segment showing the percentage that live within a 10-minute walk from each destination.

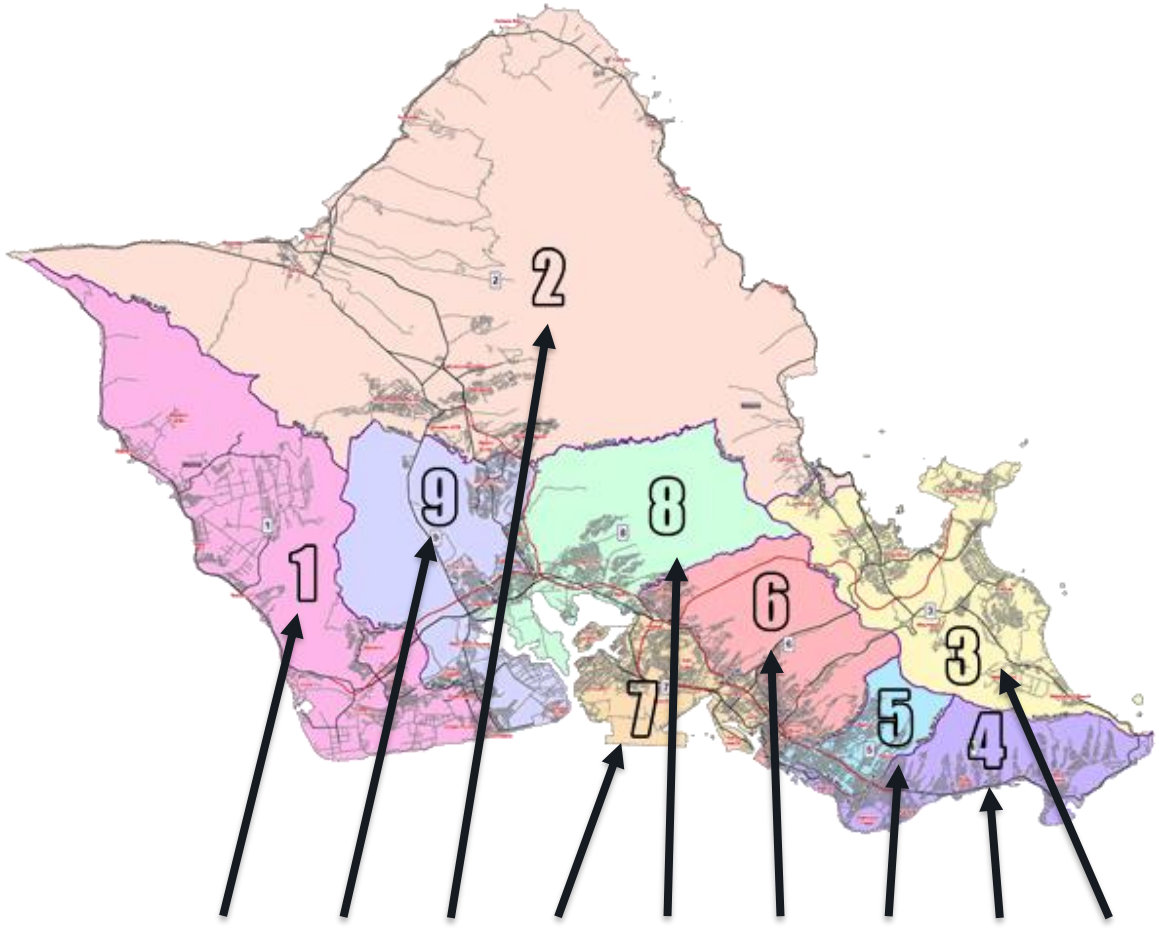
	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
Bus stop	96%	95%	92%	93%
Store to buy food	66%	65%	48%	54%
Child's school/ daycare	44%	39%	46%	42%
Retail shopping	47%	43%	38%	47%
Place of employment	15%	20%	13%	11%

Segmentation Analysis

The table below highlights statistically significant differences by demographic segments highlighted in the data tables.

	STATISTICAL DIFFERENCES
*Those with **shorter work commutes** were more likely to also live within a 10-minute walk from the following*	• *Store to buy food* • *Place of employment* • *Retail shopping*
*Those who have **access to a personal vehicle** were more likely to live within a 10-minute walk*	• *Bus stop*
*Those who have used **TheBus in the past year** were more likely to live within a 10-minute walk from the following compared to those who have not*	• *Store to buy food* • *Place of employment* • *Retail shopping*
***Native Hawaiians** and **Filipinos** more likely to live within a 10-minute walk compared to Japanese respondents*	• *Place of employment*
***Younger segments** of the sample were more likely to live within a 10-minute walking distance*	• *Store to buy food*
***Renters** were also more likely to live closer distances to the following*	• *Store to buy food*
*Those who **moved to Hawaii from elsewhere** were more likely to live within a 10-minute walk*	• *Store to buy food*
*Research respondents who say they **live in the urban core** were more likely to live within a 10-minute walk from the following*	• *Store to buy food* • *Place of employment* • *Bus stop* • *Retail shopping*
*Those who **live in suburban areas** more likely to live within a 10-minute walk compared to those living in rural O'ahu.*	• *Bus stop* • *Retail shopping*
*Those who are **currently employed** were more likely to live within a 10-minute walk*	• *Store to buy food*
*Less educated segments or those **without a college degree** were more likely to live within a 10-minute walk*	• *Child's school or daycare*
*Those who are **currently employed** were more likely to live within a 10-minute walk from*	• *Retail shopping*
*Those who **live in homes with a single vehicle** were more likely to be within a 10-minute walk compared to those living in homes with multiple cars*	• *Retail shopping* • *Place of employment* • *Store to buy food*
***Households that contain at least one child** were more likely to live within walking distance*	• *Store to buy food*

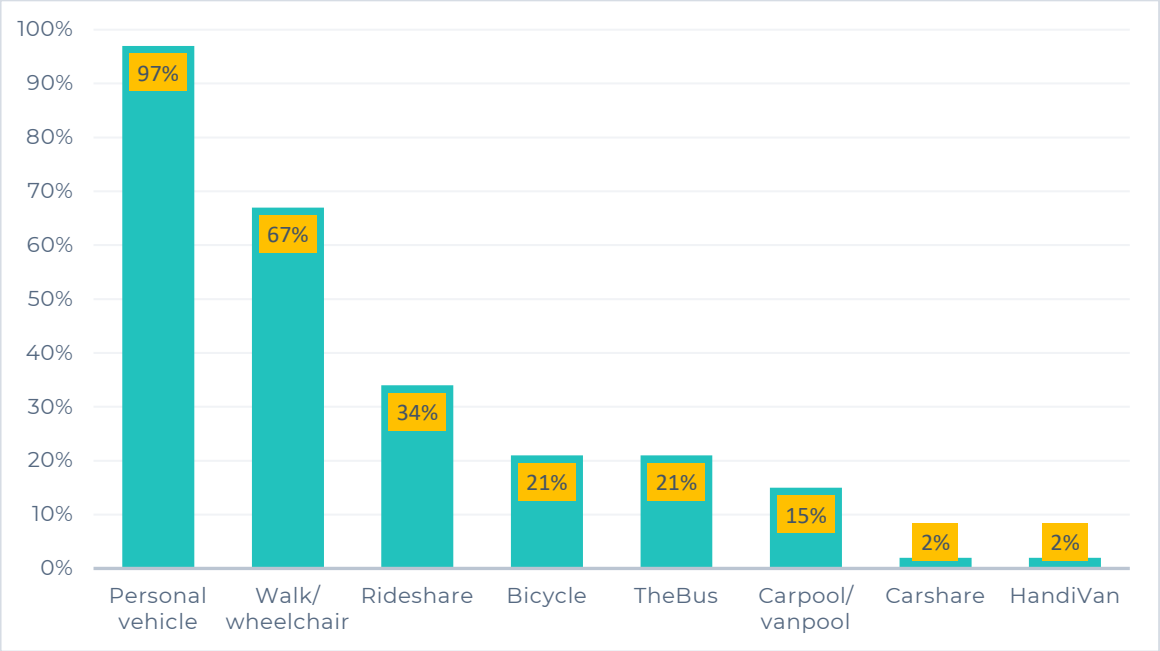
The graphic below highlights destinations that were within a 10-minute walk by geographic region/ Council District. The areas shaded in purple highlight areas with statistically significant differences compared to two or more other Council Districts. The areas shaded in yellow highlight areas where a Council District was statistically different from one other Council District.



	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
Bus stop	88%	88%	88%	98%	93%	97%	99%	100%	93%
Store to buy food	49%	56%	45%	62%	56%	60%	70%	55%	59%
Child's school/ daycare	47%	51%	58%	54%	33%	46%	41%	30%	38%
Retail shopping	32%	49%	33%	38%	45%	43%	53%	55%	48%
Place of employment	14%	6%	17%	7%	9%	24%	18%	20%	21%

13 Area of Residence

At the outset of this section of the study residents of the City & County of Honolulu were asked if they have used the following forms of transportation within the past 12 months.



The results show that nearly everyone polled had ridden in a personal vehicle (97%) at least once in the past 12 months.

Two-thirds (67%) of the sample had walked or used a wheelchair to get around while a third (34%) had participated in a rideshare program. One in five (21%) had ridden a bicycle and/or used TheBus. Fifteen percent had carpooled while two percent had tried a carshare program and/or used the HandiVan.

The table below breaks out the results by driver segment showing the proportion that have used each mode of transportation in the past 12 months. The areas shaded in purple highlight segments that were statistically higher than at least two other segments. Those shaded in yellow were statistically higher than one other segment.

	Active Aspirers	Open-minded Car Lovers	Car Lovers/ Devoted Drivers	Malcontented Motorists & Non-bikers
BASE	183	110	61	263
Personal vehicle	100%	100%	100%	100%
Walk/ wheelchair	85%	73%	48%	59%
Rideshare	50%	33%	28%	36%
Bicycle	49%	39%	11%	7%
TheBus	21%	16%	10%	16%
Carpool/ vanpool	20%	20%	12%	15%
Carshare	3%	3%	-	1%
HandiVan	-	2%	2%	2%

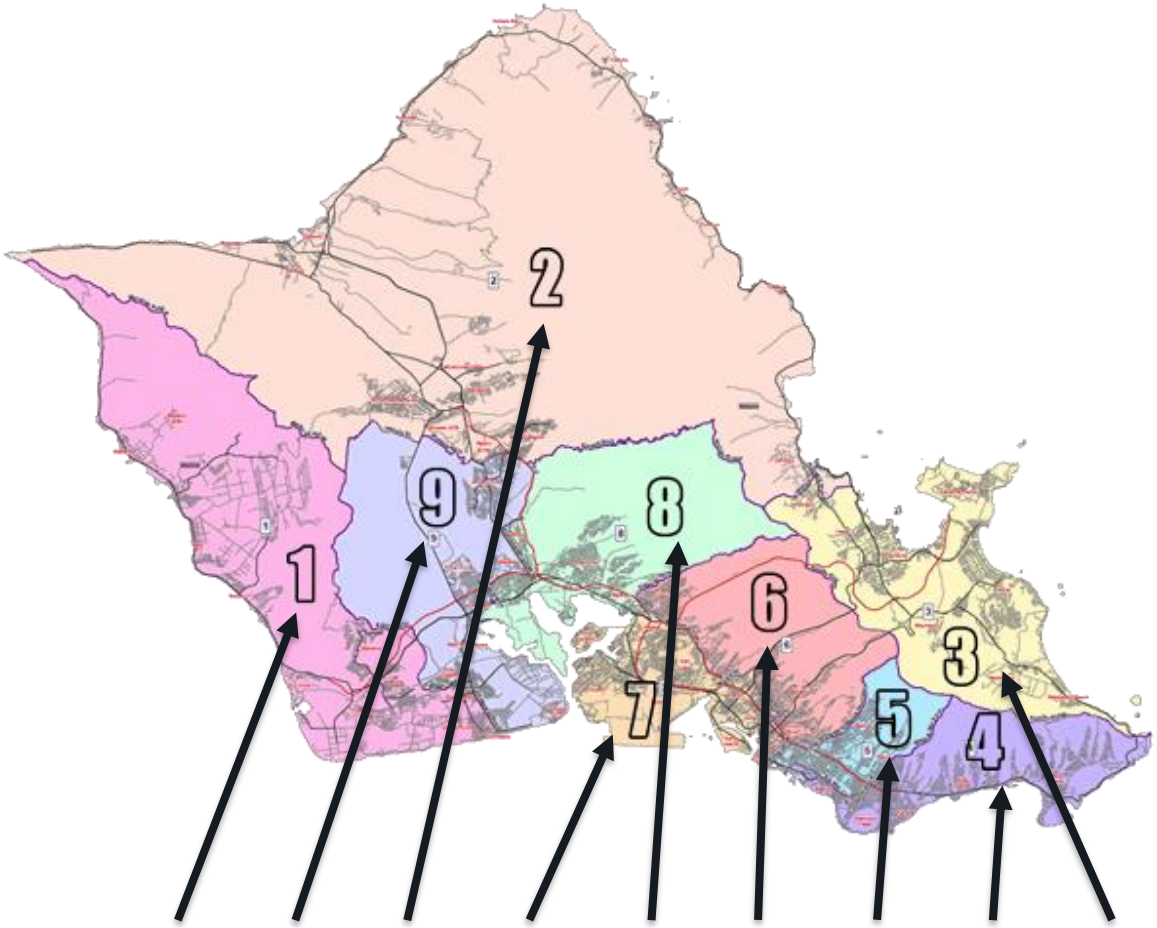
Segmentation Analysis

The table below highlights statistically significant differences by demographic segments highlighted in the data tables.

	STATISTICAL DIFFERENCES
*More likely to have been used by those **without access to a personal vehicle***	• *Rideshare* • *TheBus*
*Those with **shorter daily commutes** were more likely to use the following forms of transportation*	• *Walk/ wheelchair* • *Rideshare* • *TheBus*
***Male respondents** were more likely to use the following modes of transportation compared to females*	• *Walk/ wheelchair* • *Bicycle* • *TheBus*
*The following forms of transportation were used more by **females***	• *Carpool/ vanpool*
*More likely to be used by **Caucasians** when compared to Japanese residents*	• *Rideshare* • *Bicycle*
***Caucasians** were more likely to use this mode of transportation compared to Native Hawaiians and Filipinos*	• *Walk/ wheelchair*
***Filipinos** were more likely to use than Japanese*	• *Carpool/ vanpool*
*Higher likelihood of usage amongst **younger segments** of the sample*	• *Walk/ wheelchair* • *Rideshare* • *Bicycle* • *Carpool/ vanpool*
*Greater usage by **less affluent** segments*	• *TheBus*
*More educated segments or those **with a college degree** were more likely to use in the past 12 months*	• *Personal vehicle* • *Walk/ wheelchair* • *Rideshare* • *Bicycle*
*Those **without a college degree** were more likely to use*	• *TheBus*
***Transplants** or those not from Hawaii showed greater usage*	• *Rideshare* • *TheBus* • *Carpool/ vanpool*
***Renters** were more likely to have used the following modes of transportation in the past 12 months*	• *Rideshare* • *TheBus* • *Carpool/ vanpool*

	STATISTICAL DIFFERENCES
Greater usage amongst those who reside in ***urban Honolulu***	• *Walk/ wheelchair* • *Rideshare* • *Bicycle* • *TheBus* • *Carshare*
Those who are ***employed*** *were more likely to use the following forms of transportation*	• *Rideshare* • *Bicycle* • *Carpool/ vanpool*
Those who live in ***homes with just a single vehicle*** *were more likely to use the following transportation modes compared to those living in homes with multiple vehicles*	• *Walk/ wheelchair* • *TheBus*
Those who ***live alone*** *were more likely to have used the following in the past year*	• *TheBus*
More likely to be used in the past year by those ***who live with children***	• *Personal vehicle* • *Bicycle* • *Carpool/ vanpool*
Those ***living in homes without any children*** *were more likely to use the following*	• *TheBus*

The graphic below highlights transportation modes used in the past 12 months by geographic region/ Council District.

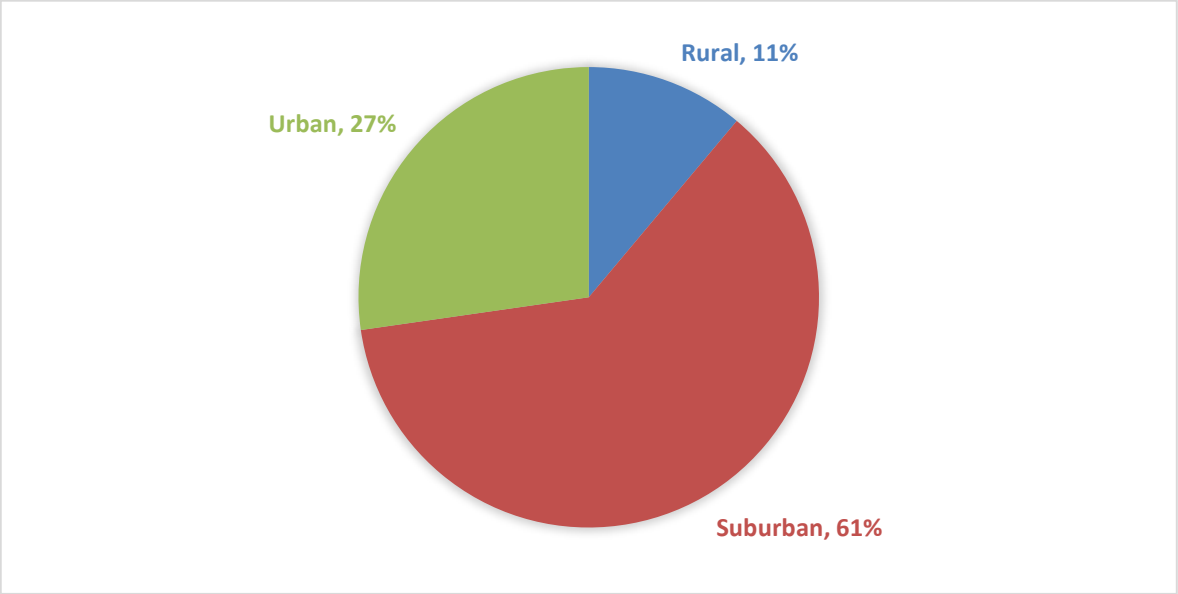


	Council District 1	Council District 9	Council District 2	Council District 7	Council District 8	Council District 6	Council District 5	Council District 4	Council District 3
BASE	111	130	121	101	112	110	104	108	112
Personal vehicle	97%	100%	99%	97%	98%	96%	94%	95%	94%
Walk/ wheelchair	58%	60%	66%	63%	62%	68%	76%	76%	73%
Rideshare	24%	21%	25%	34%	32%	43%	53%	43%	34%
Bicycle	16%	20%	27%	21%	14%	25%	25%	22%	22%
TheBus	20%	13%	13%	20%	19%	25%	32%	28%	20%
Carpool/ vanpool	10%	10%	15%	13%	18%	13%	21%	16%	17%
Carshare	2%	1%	2%	2%	3%	4%	4%	4%	-
HandiVan	3%	-	5%	1%	4%	1%	-	0%	5%

Usage of rideshare services and TheBus appear to be less of an option for those in West O'ahu, Central O'ahu and the North Shore. Usage of these transportation options is highest in the urban core.

14 Area of Residence

Each respondent was asked which of the following three options best described their place of residence.



A majority (61%) of those polled reside in the suburbs while one in four (27%) lives in the urban core of Honolulu, while 11% describe themselves as living in rural O'ahu.

- When segmented by those who have used TheBus in the past year we find a higher proportion of residents who live in urban Honolulu (38%). As a point of comparison, amongst those who have not used TheBus in the past year the proportion of those who live in urban Honolulu drops to 25%. Conversely, amongst those who have not used TheBus, there is a higher percentage of suburbanites at 64%.
- The proportion of respondents who live in the suburbs increases as respondents become more affluent.
- With most of the jobs centered in urban Honolulu we note that those with longer commutes tend to have larger proportions of those living in the suburbs and rural O'ahu comprising their bases.

15 Profile of Respondents

	OVERALL	COMMENTS
REG VOTER	86%	A majority of those polled are registered to vote.
PRIMARY RESIDENCE		
Own	59%	A little more than half are current homeowners.
Rent	33%	
Live rent free	9%	
HOUSEHOLD SIZE		
1 person	17%	
2 persons	34%	
3-4 persons	35%	
5 or more	14%	
MEAN	2.92	
EDUCATION		
High School/ Less	7%	A majority of those polled possess a college degree.
Some College	31%	
Four-year college grad	32%	
Post-graduate	28%	
YEARS IN HAWAII		
Born and Raised	58%	A little more than half were born & raised on O'ahu.
Transplant	42%	
AGE		
18-34	16%	The average age of those polled was 51.67 with the median being 52.
35-49	30%	
50-64	27%	
65+	26%	
MEAN	51.67	
ETHNICITY		
Caucasian	29%	Data weighted to reflect estimates of adults 18+ on O'ahu.
Japanese	28%	
Chinese	4%	
Filipino	12%	
Hawaiian	18%	
Other	6%	
HOUSEHOLD INCOME		
< $50K	20%	
$50K-$100K	34%	
$100K+	35%	
Rf	11%	
GENDER		
Male	37%	
Female	62%	

16 Appendix/Questionnaire

2021 Transit Demand Management (TDM) Study

AUGUST 2021

Sample size: n=1,000, targeting n=100 in each of nine Council Districts
Audience: Fulltime O'ahu residents only

Aloha, I'm _____ from Anthology Research, a market research company based here in Hawaii. We're conducting a study today/this evening on behalf of the City & County of Honolulu about transportation options for O'ahu residents. There are no right or wrong answers in this survey and everything you tell us will be kept confidential and never attached to any information that could identify you.

We are not selling or promoting any product or service. This is market research only.

May I speak to someone 18 years of age or older who lives in this household?

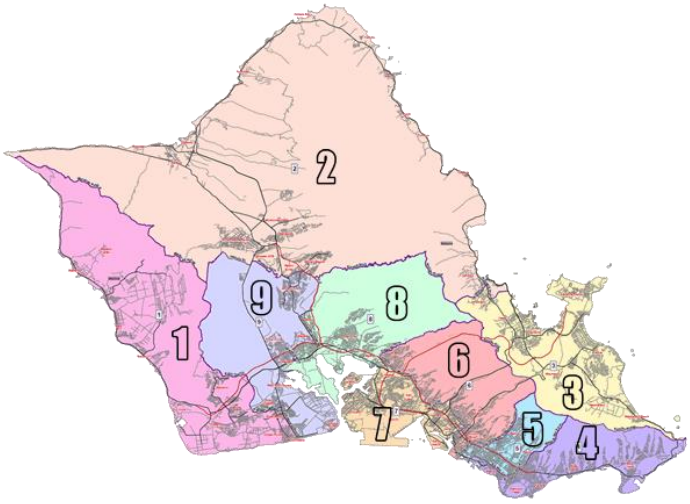
(VERIFY IF PERSON IS 18 YEARS OLD OR OLDER. IF NO ONE AVAILABLE, TERMINATE)

A. Are you a resident of O'ahu (lives on island at least 6 months out of the year)?
    1. Yes
    2. No (TERMINATE)

B. Are you 18 years of age or older?
    1. Yes
    2. No **(TERMINATE)**

CHECK QUOTAS AND CONTINUE IF NEEDED

C. In which area of O'ahu do you live? (Please click the area) If you don't know or are not sure, please select "Don't know."



1. Don't know which area I live.

Cx. If DON'T KNOW, ASK: What are major cross streets nearest to your home?

And what is your zip code? _____

CXX. What are major cross streets nearest to your home (OPEN END)

First, let us ask a few questions about you and your household.

1. Which one of the following best describes the area on O'ahu where you live?
    1. Rural – "country"
    2. Suburban – large residential areas outside of urban Honolulu
    3. Urban – densely populated area of Honolulu

2. Is your primary residence within a 10-minute walking distance to each of the following destinations?

		Yes	No	N/A
1.	Store to buy food	1	2	3
2.	Your place of employment	1	2	3
3.	Bus stop	1	2	3
4.	Your children's school or daycare	1	2	3
5.	Retail shopping	1	2	3

3. Yes or no, have you personally used each of the following forms of transportation in the last 12 months?

		Yes	No
1.	TheBus	1	2
2.	Rideshare (Uber / Lyft)	1	2
3.	Bicycle	1	2
4.	Walk / Use wheelchair	1	2
5.	Carpool / vanpool	1	2
6.	Carshare (Hui / Zipcar)	1	2
7.	Personal vehicle (car/truck/van)	1	2
8.	HandiVan	1	2

4. What is your current employment status?
    1. Employed full time
    2. Employed part time
    3. Fulltime student
    4. Not employed, looking for work
    5. Not employed, not looking for work
    6. Retired, not employed
    7. Homemaker
    8. Disabled

5. **[IF EMPLOYED OR IN SCHOOL]** Approximately how far in miles do you typically commute from home to work or school? _____

    (If less than a mile, please enter '1')

    (If you do not commute to work or school, please enter '0')

6. **[IF EMPLOYED]** Regardless of whether you typically drive to work, do you or does your employer pay for your parking at work?
    1. Neither, parking is free
    2. I pay the entire cost of my parking at work
    3. My employer pays the entire cost of my parking at work
    4. My employer pays a portion of the cost of my parking at work

7. **[IF EMPLOYED]** Can your job be performed "remotely," from home or another location?
    1. Yes, always
    2. Yes, sometimes
    3. No, never

8. Including yourself, how many persons live in your household? [Record #] _____

9. **[IF MORE THAN ONE IN HH]** How many people, if any, are 17 years of age or younger?

    Newborn to under five (5) years old _____

    5 to 12 years old _____

    13 to 17 years old _____

10. **[IF MORE THAN ONE IN HH]** And how many people, if any, are 60 years of age or older? [Record #] _____

11. In total, how many personal vehicles does your household currently have (leased, owned or company vehicle)? _____ **[VALIDATE WHOLE NUMBER] [IF ZERO, SKIP TO Q16]**

12. Where are your household's vehicles parked at home? (Select all that apply)
    1. Off street parking (driveway, garage, elsewhere on property)
    2. On public street
    3. Parking lot (paid or unpaid)
    4. Somewhere else (please specify:)_____

13. Do you personally have a vehicle (car/truck/van) that you use?
    1. Yes
    2. No

14. **[IF MORE THAN ONE IN HH]** Do you share the vehicle (car/truck/van) with others in the household?
    1. Yes
    2. No

15. **[IF ANY MINORS IN HH AND HAS PERSONAL VEHICLE OR SHARES A VEHICLE]** Are you responsible for driving children 17 years or younger to school or daycare?
    1. Yes
    2. No

16. In the past 12 months, how frequently have you traveled by car, truck, or van as a driver?
    1. Never
    2. Less than once a month
    3. 1 to 3 days per month
    4. About 1 day per week
    5. 2 to 4 days per week
    6. 5 to 7 days per week

[IF SELECTED 1, 2, or 3 IN Q16, SHOW Q16a]

16a. How much do you agree or disagree with each of the following statements?

Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree. N/A

1. I am NOT the kind of person to use public transportation
2. My employer reimburses bicycle commuting expenses
3. I would like traveling by subway or elevated rail
4. I do NOT need to have a car/truck/van
5. I like traveling by taxicab
6. Traffic congestion is a problem in my local area
7. I have no need to drive as public transport/walking/cycling are all adequate
8. In general, I would rather walk than use the bus
9. I would like traveling by ferryboat
10. I feel a moral obligation to reduce the emission of greenhouse gases
11. I like traveling by TheBus
12. There are many problems with using public transportation
13. I do NOT know anyone with whom to carpool
14. Walking can be the quickest way to travel for short journeys
15. I had a bad experience as a carpool passenger in the past
16. Finding a parking space at work is difficult
17. Finding a parking spot where I live is difficult
18. I like saving money by NOT driving

[IF SELECTED 4, 5 or 6 IN Q16, SHOW Q16b]

16b. How much do you agree or disagree with each of the following statements?

Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree N/A

1. I like traveling by bicycle
2. Reducing my car/truck/van use would make me feel good
3. I would like traveling by streetcar or trolley car
4. I feel a moral obligation to reduce the emission of greenhouse gases
5. I am NOT the kind of person to use public transportation
6. I am NOT the kind of person who rides a bicycle
7. Driving gives me a way to express myself
8. I would rather be a carpool passenger to read, use smartphones, or sleep on the way to work
9. I like traveling by walking (to/from destination)
10. In general, I would rather bicycle than use the bus
11. If I could, I would gladly do without a car/truck/van
12. I would like traveling by ferryboat
13. People should be allowed to use their cars/trucks/vans as much as they like
14. Environmental threats such as global warming have been exaggerated
15. I tend NOT to walk much because it is physically demanding
16. Finding a parking spot where I live is difficult
17. I try to consolidate my trips taken in my car/truck/van

Next, we would like to get your overall opinions about transportation options.

17. How important are each of the following in selecting a way to travel on island, from one place to another?

	Very Important	Somewhat important	Somewhat unimportant	Very unimportant
1. Saving money	1	2	3	4
2. Saving time / fastest way	1	2	3	4
3. Ability to carry items / cargo	1	2	3	4
4. Ability to transport other people	1	2	3	4
5.Privacy	1	2	3	4
6.Air conditioning / Climate control	1	2	3	4
7.Getting exercise	1	2	3	4

18. In general, would you be willing to pay for parking if doing so made finding a parking space easier when you need it? (Select all that apply)
    1. Yes, at home
    2. Yes, at work
    3. No, not willing to pay for parking

19. Would you be willing to use metered street parking more often if meters accepted credit/debit cards?
    1. Yes
    2. No

Because we want to ensure we include all kinds of people in this survey, we need to ask the following questions for statistical purposes only.

D1. Are you registered to vote in Hawaii?

1. Yes
2. No

D2. What was your age on your last birthday? [Record age] _____

D3. What was the highest level of education you have achieved?

1. Less than high school graduate
2. High school graduate
3. Some college
4. College graduate (bachelor's degree)
5. Post graduate and beyond

D4. Do you own or rent your home?

1. Own
2. Rent
3. Live rent free

D5. Were you born in Hawaii?

1. Yes
2. No

D6. What is your ethnic identification? ***[IF MORE THAN ONE, ASK:*** "With which do you identify the most?" ***IF NO CHOICE, CIRCLE MIXED***]

1. Caucasian
2. Japanese
3. Chinese
4. Filipino
5. Hawaiian/Part-Hawaiian
6. Portuguese
7. African-American
8. Other ethnicity not listed above (SPECIFY: _____
9. Mixed
10. Prefer not to say

D7. Finally, below are listed some broad categories of income and we would like you to indicate the category that includes your household's income before taxes in 2020. Please consider and include in your thinking the income of all persons living in your household as well as income from all sources including investments, retirement funds, etc.

Again, just indicate the correct category.

1. Less than $20,000
2. $20,000 - $29,999
3. $30,000 - $39,999
4. $40,000 - $49,999
5. $50,000 - $59,999
6. $60,000 - $74,999
7. $75,000 - $99,999
8. $100,000 - $149,999
9. $150,000 - $199,999
10. $200,000 - $249,999
11. $250,000 or more
12. Refused / Don't know

D8. Gender

1. Male
2. Female
3. Nonbinary

Control Information

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Prepared for

City & County of Honolulu

Department of Transportation Services