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State of Hawai'i Executive Branch

WORK WHERE YOU LIVE

Prepared for Stantec

August 2021

Revised September 2021

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

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August 23, 2021

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Dear Mr. Funakoshi:

SMS Research & Marketing Services is pleased to present the results of the Work Where You Live Survey, 2021. The survey was administered to State administrative employees managed by the Department of Human Resources Development, except the employees in the Hawai'i State Public Library System.

The project was intended to provide information on employee experiences and opinions that may be useful in planning and implementing State of Hawai'i telework policy and procedures in the future.

We are pleased to have a role in this challenging project. Should you have questions, please call us.

Regards,

Faith Rex
Vice President, SMS Research & Marketing Services, Inc.

ACKNOWLEDGEMENTS

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- Michael Motoki, Department of Transportation Services
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EXECUTIVE SUMMARY

The goal of the WWYL Survey was to gather and review the experiences of State Executive Branch employees that can be useful in telework policy and planning. The survey included an online survey link emailed to all State Executive Branch employees with state email addresses (11,117). A total of 3,986 surveys were completed by employees who worked on O‘ahu for a response rate of 38 percent. This provides precision and reliability at the +/-1.5 percentage points at the 95% confidence level. The results of the survey were expanded to represent 10,479 total State Executive Branch employees working on O‘ahu. The following are highlights from the study.

Overall, 74 precent of employees participated in teleworking from March 2020 through March 31, 2021. During the 13 months of the pandemic, the level of exposure to telework for the 7,707 employees was extensive. Four out of ten had more than six months experience working from home (3,100 employees), and only 18 percent had less than 20 days of telework.

The factor most highly associated with employees’ status as a teleworker or non-teleworker was the degree to which an individual’s job could be performed from home. Among employees who teleworked during the pandemic period, 54.5 percent reported that between 81 and 100 percent of their job responsibilities could be done through telework compared with 16.8 percent of non-telework employees. In addition, teleworkers were more likely to have longer commutes, be between the ages of 18 to 44 and have additional childcare responsibilities during the pandemic.

Satisfaction with the telework experience was very high with 68 percent of non-supervisory and 61 percent of supervisory personnel indicating they were “very satisfied” with their experience.

Fifty-four percent of supervisors and 61.9 percent of non-supervisory personnel would choose to telework for one or more days per week in the future. Among those employees who would like to work from home in the future, the average number of telework days preferred was 3.7 days. Close to one-third of those who prefer to telework in the future would choose to do so four or five days per week (30.8%).

If all State employees were granted their preferences concerning the number of days they would like to telework in the future, 14,945 driving trips would be saved per week. That is equivalent to 2,989 round trips per day. Based on their pre-pandemic distance and time to work, State executive employees would save almost 20,000 hours per week in traffic, most during peak hours. That would reduce single-occupancy vehicular traffic by 367,847 miles per week, or 73,569 miles per day.

INTRODUCTION

BACKGROUND

Across the country telework/work from home has become a tool to reduce daily "drive alone" commutes while maintaining productivity at work. In addition, a segment of employees prefers the option to work from home because of reduced commute time resulting in more family and personal time. The lockdown response to the COVID Pandemic in Hawai'i in 2020 and into 2021 was an unintended demonstration of the impact State, City and County of Honolulu, and many private sector employees working from home had on reducing traffic, increasing employee satisfaction, and maintaining productivity.

In Hawai'i, both the State and the City and County of Honolulu relied on policies and procedures that were already in place for telework. Over time there were some modifications and additional support provided such as access to data files, hardware and software hookups, and new work protocols. Benefits and issues surfaced over time.

Given the experience of the past year, both the State and the City and County of Honolulu agreed that this was the ideal time to review employees' feedback on teleworking and quantify potential impact to the workplace and traffic. Results will guide policy changes at the State level, and the related impact on transportation planning efforts. This collaboration became known as "Work Where You Live" (WWYL) project, and the first outcome was the survey, which is the subject of this report.

The intent of the WWYL study was to design and refine telework policies that provide City and County of Honolulu and State Executive Branch employees with expanded choices and flexibility to work from home. Those policies may provide direct incentives for recruitment and retention. In the long-term, policy outcomes are expected to reduce O'ahu's carbon footprint and greenhouse gas emissions, thereby supporting the State and the City and County of Honolulu objectives associated with energy efficiency, climate adaptation, resiliency, and sustainability. Telecommuting and flexibility in work hours may also result in reduced commute times, vehicle miles traveled, congestion, office space needs, and an improved quality of life on O'ahu. At a commuter level, the ability to telecommute could impact travel transit mode choices and as such, have downstream impacts that could shape transportation infrastructure and related decision-making across the region. The following report describes the results for the State of Hawai'i Executive Branch

OBJECTIVES

The goal of the WWYL Survey was to gather and review the experiences of State Executive Branch employees that can be useful in telework policy and planning. Specific objectives for the project were:

- To describe the telework situation on O'ahu during the pandemic: number and types of employees with telework experiences, and conditions under which telework was applied.
- To give voice to employees and supervisors of their telework experience: satisfaction, productivity, resources, support, and capacity for telework.
- To measure interest in continuing or beginning to telework in the future.
- To estimate actual and expected changes in transit mode resulting from telework and its impact on traffic and transportation on O'ahu.

SMS developed the approach and methods for the survey with the assistance of the Stantec team and the WWYL Steering Committee. Methods are described below.

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METHOD

Separate survey samples were developed for the State of Hawai‘i Executive Branch Departments under the jurisdiction of the Department of Human Resources Development (DHRD), the Department of Education (DOE), and the City and County of Honolulu. Two survey instruments were developed, one for the State of Hawai‘i Executive Branch Employees supported by DHRD and DOE administrative employees, and a separate survey for employees of the City and County of Honolulu. This report covers survey responses for State Executive Branch employees who work on O‘ahu only. A separate report was prepared for the City and County of Honolulu, and the data from DOE respondents was delivered to the DOE for analysis.

Survey Population

Based on the 2020 Report on State of Hawai‘i Executive Branch Workforce Profile to the Thirty-First State Legislature 2021 Regular Session submitted December 2020, which provides the workforce demographic data as of June 30, 2020, there were a total of 14,646 employees in the personnel system administered by DHRD. Of those, 11,117 had State email addresses with the Hawaii.gov extension and were sent a link to the survey. The emails included employees that do not work on O‘ahu but did not include the State of Hawai‘i Library employees since their email addresses do not have the Hawaii.gov extension. There was an overall response rate of 42%.

Only the 3,986 survey responses from O‘ahu employees were used for the WWYL analysis. According to DHRD there are 10,479 employees on O‘ahu. Therefore, the response rate for O‘ahu employees is 38%. This focus on the O‘ahu employees was a requirement from the funding organization.

The Survey Instrument

After discussion with the client and project team, an initial draft of the survey instrument was produced by the Redhill Group. They designed an instrument that was suited to online administration and would cover the content specified in the original project description. The initial draft was then reviewed by the WWYL Steering Committee. Over several weeks, the Steering Committee, the staff at SMS and Redhill Group worked diligently to perfect a survey instrument that would work for survey recipients and supply the information needs of all parties. The survey was then pre-tested by SMS and some changes were made before a final draft was produced and approved. A Copy of the State WWYL Survey for 2021 is attached as Appendix I.

Data Collection and Quality Control

Once the email lists were prepared and survey instrument was approved, the project was ready for mailing. One week prior to the initial email, an email was sent out to State Executive Branch employees by the Governor’s Office describing the survey project and encouraging participation. On June 6, 2021, emails with a link to the survey were sent out. Reminder emails were sent six days after the survey emailing. Response was quick and data collection was terminated on June 15, 2021.

The survey population prepared by the State included all employees who had State email addresses (11,117 surveys emailed.). A small number of those that responded (368) work on the neighbor islands. Those responses were not included in the analysis[1]. In the end, 3,986 surveys were completed by O‘ahu employees. The sample error estimate, an indicator of precision and reliability, was calculated to be plus-or-minus 1.5 percentage points at the 95 percent confidence level.

The survey data were weighted to represent 10,479 employees based on the demographics in the 2020 Report on State of Hawai‘i Executive Branch Workforce Profile to the Thirty-First State Legislature 2021 Regular Session submitted December 2020.

The response rate was relatively high at 38.0 percent. That included 1,138 supervisors and 2,848 non-supervisory employees; 3,263 people with telework experience during the pandemic and 723 persons who experienced no telework during the pandemic. The respondent group was distributed by age, gender, years of service to the state, and bargaining unit in a similar manner as the large group of employees. That relationship was made perfect by the weighting procedure. Overall, the results of the survey are representative of the target group (State Executive Branch employees with working e-mail addresses located in the City and County of Honolulu).

[1] The excluded survey results were delivered to the State to be used in their analysis of non-O‘ahu teleworkers.

TELEWORK SITUATION DURING THE PANDEMIC

A substantial part of the survey was devoted to describing the nature of the telework experience in Honolulu during the pandemic. There was a need to describe number and types of employees with telework experiences, and conditions under which telework was applied. That analysis was to take into consideration research questions like:

- How many employees were involved in telework during the pandemic?
- Are there any work-related, home-related, demographic, or travel-related characteristics that distinguish employees with telework experience from employees with no telework experience?
- Is there a set of those characteristics that is associated with who had telework experience and who did not?

TELEWORK EXPERIENCE IN HAWAIʻI

Our definition of telework experience in this survey is all State Executive Branch employees who teleworked from home for more than one day with the approval of their supervisor. State employees included in the survey population were 10,479 people who held positions between March 1, 2020, and March 31, 2021. Of those, 7,707 employees (73.5%) matched our definition of personnel that had telework experience during the pandemic.

Every department had some employees who worked from home during the pandemic (Table 1). Participation was strongest at the Department of Business, Economic Development & Tourism, Department of Human Resources Development, and Department of Transportation Administration. Participation in telework was lowest among the Department of Transportation: Airports, Department of Public Safety, and the Department of Taxation. Departments with fewer than 35 telework employees were combined[2] for reporting purposes.

[2] Specifically, the Office of the Governor and the Lieutenant Government were combined to form the Administrative Offices. There were only 26 weighted respondents for this entity and it will not be subject to further analysis in the remainder of this report.

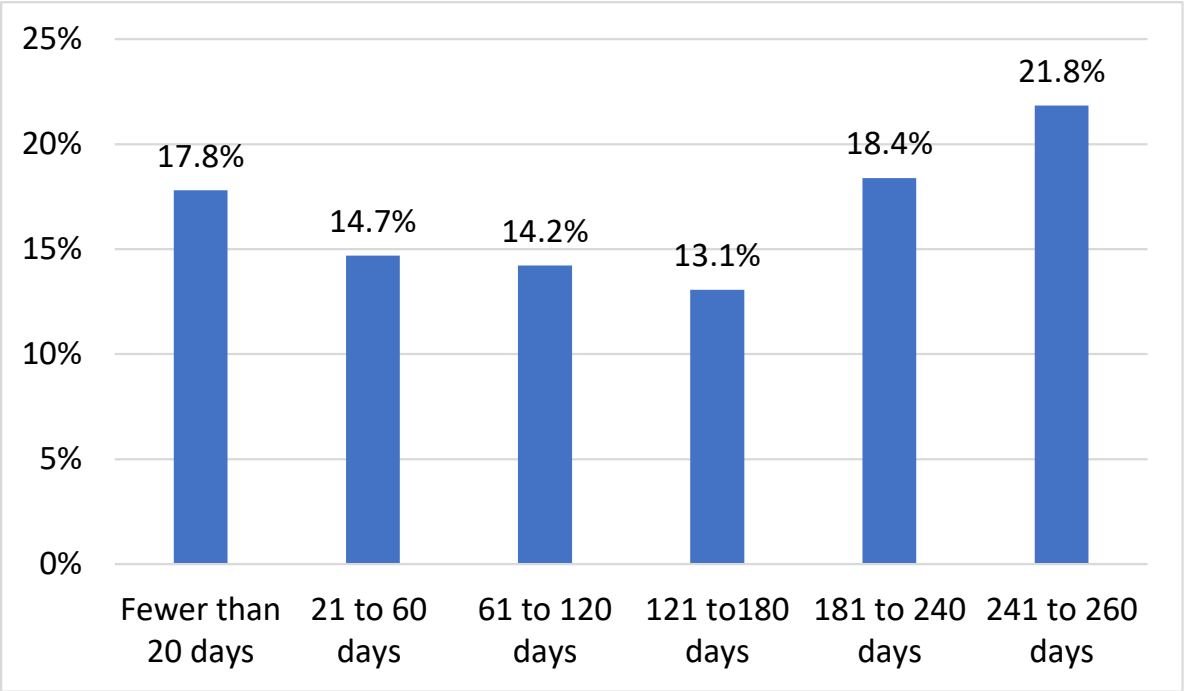
Table 1: Telework Experience During the COVID-19 Pandemic by Department

State Department	Had Telework Experience During the Pandemic	
	Number	Percent of Department Employees
Business, Economic Development & Tourism	183	94.9%
Human Resources Development	59	93.9%
DOT Administration	191	93.6%
Commerce & Consumer Affairs	325	92.7%
Land & Natural Resources	576	91.6%
Attorney General	428	85.9%
Hawaiian Home Lands	86	85.0%
Human Services	1.161	81.9%
Accounting & General Services	437	81.8%
Health	1,568	81.3%
DOT Harbors	743	75.1%
Budget & Finance	191	74.0%
Agriculture	153	70.0%
Administrative Offices	26	69.6%
Defense	192	68.9%
Labor & Industrial Relations	205	63.5%
DOT Highways	159	63.0%
Taxation	141	53.8%
Public Safety	781	45.6%
DOT Airports	102	44.7%
Total	7,707	73.5%

Source. Work Where You Live employee survey, 2021

Figure 1 below shows that the number of days employees spent working from home during the pandemic – a measure of the intensity of telework experience -- was broadly distributed. During the 13 months of the pandemic, the level of exposure to telework for the 7,707 employees was extensive. Four out of ten had more than six months experience working from home (3,100 employees), and only 18 percent had less than 20 days of telework.

Figure 1: Level of Telework Activity, Days Teleworked



Source. Work Where You Live employee survey, 2021

In all, the data suggest that survey respondents had adequate exposure to teleworking to lend confidence in their evaluation as shown in this report.

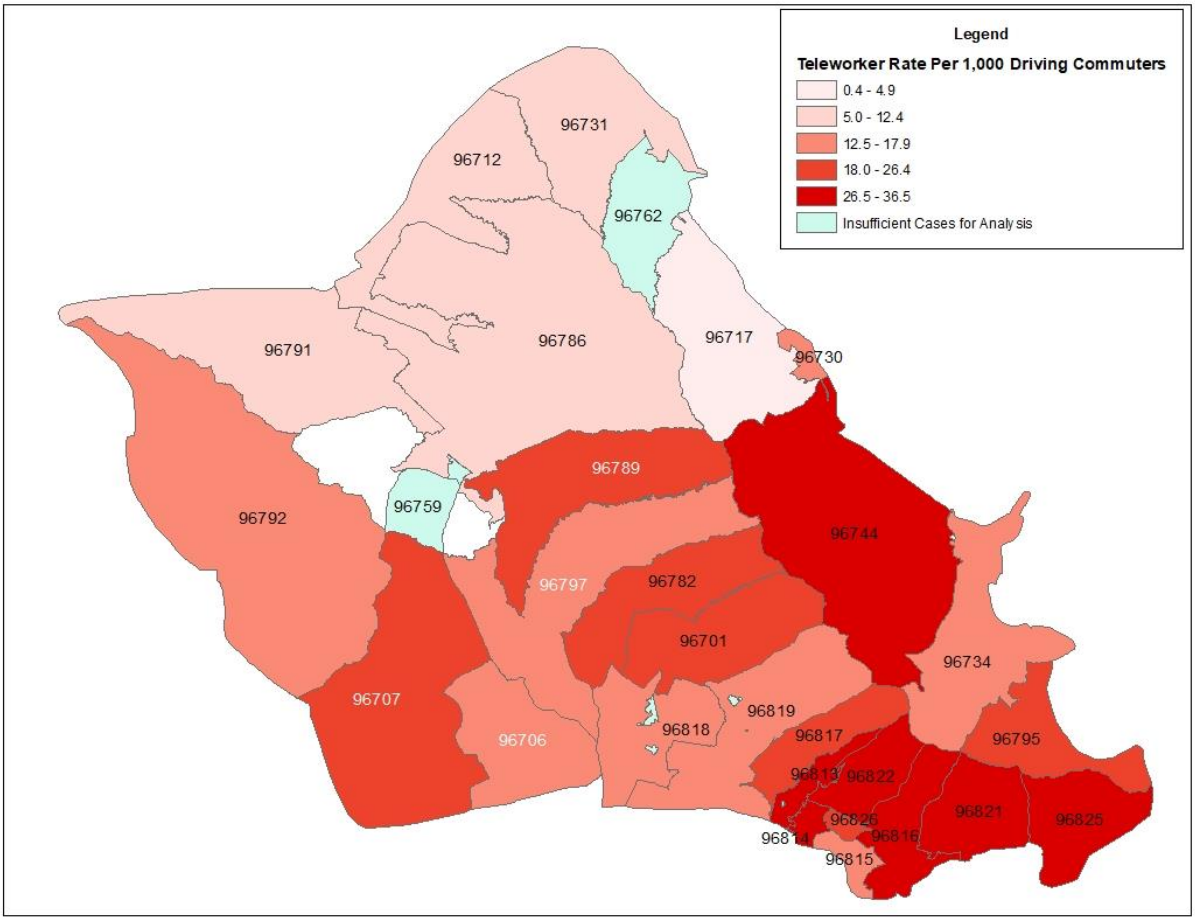
GEOGRAPHY

Employees with telework experience lived throughout the island of Oʻahu, with the highest concentrations in Kailua, the Primary Urban Center (PUC stretches from Waiʻʻalae-Kāhala to Pearl City), and East Honolulu (see Appendix Table F-3).

Since the number of teleworkers in any given area is related to the number of persons in that area who typically commute to work, we calculated the teleworker rate per 1,000 vehicular commuters for each home zip code. We did that by dividing the total number of driving commuters in a zip code[3] by the total number of teleworkers from the survey[4], and multiplied by 1,000. The rates were then overlaid on a map of Oʻahu zip codes as shown in Figure 2. Darker colors represent areas with higher concentrations of teleworkers adjusted for adults commuting. For example, in zip code 96816, which has a 2019 adult population of 42,289, the telework penetration for State employees was 30.7 per thousand. In zip code 96797, which has an even larger population (58,454), the teleworker rate per 1,000 commuter was 17.6.

[3] American Community Survey 2019, 5-year estimate
[4] Work Where You Live employee survey, 2021

Figure 2: Number Teleworkers per 1,000 Vehicular Commuters by Zip Code



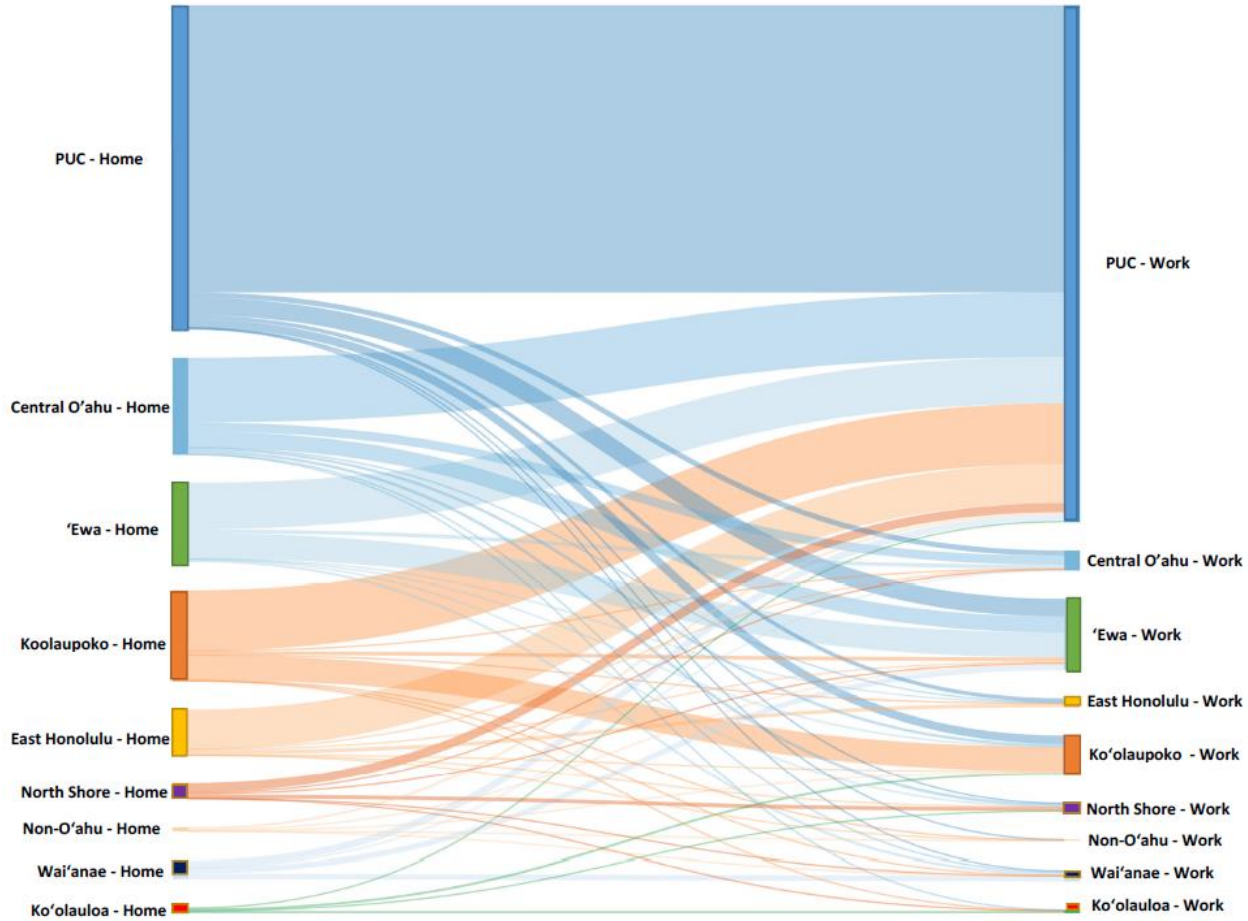
Source. Work Where You Live employee survey, 2021 and American Community Survey, 2019 5-year estimate

The rate shows concentrations of teleworkers were highest in Honolulu's PUC, East Honolulu, and Kāneʻohe where rates per thousand exceeded 26.5. The next highest rates (18.0 to 26.4) included suburban areas at greater distance from downtown – Waimānalo, ʻAiea, Pearl City, Mililani, and Kapolei. Some zip code areas like Kailua, Waikīkī, Kalihi, Moanalua, and Waipahu, stood apart compared with the suburbs, with rates per thousand between 12.5 and 17.9. Surprisingly, zip codes at greater distances from major employment centers had lower teleworker rates than those closer in. This may be affected by the relative distribution of State workers across the Island.

Travel Patterns

The connections between the home and work zip codes present a much more complex picture of commuter traffic flows. We used the survey data on home and work zip codes to demonstrate the complicated traffic flows generated by State executive employees (Figure 3).

Figure 3: Home Location and Work Location for all Commuter Trips



Source. Work Where You Live employee survey, 2021

Figure 3 provides a visual representation of the home and work locations for survey respondents. Nearly all employees who live in Koʻolaupoko and East Honolulu work in the PUC. Most Central Oʻahu residents also work in the PUC, although some travel to jobs in the ʻEwa region and Central Oʻahu. Similarly, the City and County of Honolulu employees who reside in ʻEwa most often work in the PUC or in ʻEwa.

The figure shows that a plurality of State employees live and work in the PUC. The fact that employees who live in other areas commute to the PUC for work is not surprising since most government jobs are located in downtown Honolulu and Kapolei

CHARACTERISTICS OF TELEWORK PERSONNEL

There were 21 survey questions used to describe aspects of telework during the pandemic. Six were work-related, including work status, years of service to the State, union membership, type of work schedule, access to the Internet at home, and available computer equipment at home.

Eight measured demographic characteristics of the employees, like age, gender, household size, presence of children in the home, need for extra childcare or care for adults, competition for the Internet from other teleworking adults, and children using the computer for virtual school learning.

Another six items were work trip-related. They included length of the usual morning trip to work in minutes and in miles, the length of the usual afternoon trip in minutes and miles, the time of day for a typical trip from home to work and the typical trip from work to home, and the number of days per week the employees used different travel modes to get to work. Related data tables are included in Appendix B.

Social and Demographic Characteristics

Telework personnel were more likely to be female (59%) than were non-telework personnel (53%). The median age for State employees who had telework experience was 47 years. For those without telework experience, the median age essentially equal at 47.7 years.

The median household size for both telework groups was 3.8 persons. An approximately equal percentage of households in each group included children, most often one or two household members under age 18. The median household income for employees who teleworked was $98,639. For non-telework employees, the median income was slightly lower at $94,467.

During the pandemic, both telework and non-telework employees shouldered additional responsibilities. Approximately 15 percent of the employees in these groups had additional daytime care responsibility for an adult. Additional childcare responsibilities were present in both groups, but more notably for teleworkers. Sixty-three percent of teleworkers reported additional childcare responsibilities during the pandemic versus 53 percent of non-teleworkers.

Those who teleworked during the pandemic were also asked about other household members who were either teleworking or attending school virtually while they worked from home. Over half of the teleworking employees stated that at least one other adult in their household was teleworking while they were working from home. Over one-third of teleworkers stated that at least one child in their household was attending school virtually while they worked at home.

Detailed data can be found in Appendix B-3 and B-4.

Work Related Characteristics

Just over one-quarter of State employees included in the present study were supervisors, while the remaining 72 percent had non-supervisory positions. More than three-quarters were Union members (77%). About 8 percent of them had worked for the State for less than a year, 43 percent had up to 10 years of service, a quarter of them had between 11 and 20 years of service, and the remaining 23 percent had been working for the State for more than 20 years.

Many State employees already had the tools necessary for telework. They had a computer or other suitable hardware (99.7%) and internet service at home (98.9%). They also expressed confidence that they could work from home successfully. More than six out of ten employees felt that between 60 and 100 percent of their job could be done from home (61.6%). Only 9.4 percent felt that no portion of their jobs could be done from home.

Detailed data can be found in Appendix Tables B-3 and B-5.

Distance and Time

Prior to the pandemic period, roughly 94 percent of all State employees surveyed were working a regular work week, five days a week for eight hours per day. For most employees, they left for work between 6:00 AM and 9:00 AM (81.3%) and left their workplace to go home between 3:00 PM and 7:00 PM (83.5%).

The nature of the commute to work was notably different for the telework and non-telework groups. Prior to the pandemic, telework employees traveled a median of 13.9 miles to work, while non-telework employees had a shorter commute of 9.9 miles. A more dramatic difference was each group's median travel time to work. Between their home and workplace, the median daily commute time for telework employees was 41 minutes while the median commute time for non-telework employees was significantly shorter at just 29 minutes. Assuming a five-day work week and similar travel times to and from work, that would suggest that the commute time for telework employees was two hours longer than non-telework employees each week.

Mode Choice

Prior to the COVID-19 pandemic, the vast majority of State employees commuted to work by car, either driving alone (78.5%) or carpooling (10.7%) at least one day per week. Another 9.8 percent of employees utilized public bus transportation. Three percent or less chose to walk (3.2%), ride a bicycle (1.5%), or some other form of transportation (2.2%) before the pandemic. Only 1.4 percent of study participants reported doing any number of days of telework prior to the pandemic.

Table 2: Mode of Travel to Work BEFORE the COVID-19 Pandemic by Supervisory Role

Travel Mode Before COVID-19	Supervisory Status					
	Supervisor		Non-Supervisor		Total	
	Number	Col%	Number	Col%	Number	Col%
Worked from home	42	1.4%	110	1.5%	151	1.4%
Drove alone	2,480	83.8%	5,742	76.4%	8,222	78.5%
Carpool	308	10.4%	812	10.8%	1,119	10.7%
Ride the bus	185	6.3%	837	11.1%	1,022	9.8%
Ride a bicycle	46	1.6%	112	1.5%	158	1.5%
Walk to work	85	2.9%	250	3.3%	335	3.2%
Other	53	1.8%	178	2.4%	231	2.2%
Responses	3,199	100%	8,040	100%	11,239	100%
Respondents	2,958	100%	7,521	100%	10,479	100%

Note: The respondents were allowed to select one or more mode of travel, so the percentage may not sum to 100%
Source. Work Where You Live employee survey, 2021

Stops

Another element of State employees' commute included in the present study was whether they made any stops on their way to or from work. Regarding the nature of their commute before COVID-19, survey participants were asked how many days per week they made any of seven types of stops on the way to or from work.

Prior to the pandemic, when traveling from home to work, telework employees made an average of .93 stops per week. The average among all non-telework employees was .87 stops each week.

Telework employees stopped to drop off or pick up another person nearly three days per week (mean=2.6 days). They also stopped an average of 1.9 days per week to buy food and one day per week to purchase items like groceries and gas. Non-telework employees dropped off or picked up another person on their way to the office 1.9 days per week. They also stopped 2.2 days per week, on average, to buy food. On average, non-telework employees stopped about one day each week to purchase goods (mean=1.2 days).

Telework employees were equally likely to make a stop during their commute home from the office as they were to make a stop in the morning. Non-telework employees, however, only stopped on their way home from work an average of .3 days per week. Like stops made on the way to work, stops made on the way home generally included dropping off or picking up someone else and buying food or other goods.

Detailed analysis of stops made while traveling to and from work can be found in Appendix Tables D-1 and D-2.

Table 3: Average Days and Total Stops To and From Work by Telework Experience

	Has Telework Experience		No Telework Experience	
	Total Stops	Mean Days	Total Stops	Mean Days
Stops Made on the Way TO Work				
Drop-off/pick up another person	7,267	2.6	1,492	1.9
Buy goods (groceries, clothes, gas)	2,854	1.0	1,187	1.2
Buy services (dry cleaner, banking, pet care)	486	0.3	273	0.5
Buy food (coffee, breakfast, dinner)	6,245	1.9	2,213	2.2
Other errands (post office, library, etc)	1,194	0.6	510	0.8
Exercise (gym, jog, etc)	1,055	0.7	330	0.7
Other	607	0.4	410	0.8
Stops Made on the Way FROM Work				
Drop-off/pick up another person	7,054	0.9	1,877	0.7
Buy goods (groceries, clothes, gas)	9,037	1.2	790	0.3
Buy services (dry cleaner, banking, pet care)	1,795	0.2	2,060	0.7
Buy food (coffee, breakfast, dinner)	7,001	0.9	1,179	0.4
Other errands (post office, library, etc)	3,513	0.5	1,566	0.6
Exercise (gym, jog, etc)	2,814	0.4	2,171	0.8
Other	974	0.1	2,480	0.9

Source. Work Where You Live employee survey, 2021

SUMMARY

In describing the telework situation among State employees, we identified many characteristics related to whether employees teleworked during the pandemic. For example, we found that teleworking employees were younger and more likely to be female than their non-teleworking counterparts.

All the various work-related, demographic, and travel-related characteristics were examined in an effort to determine if there was a set of characteristics the explained or drove telework choice. The result of this analysis was that no single element or set of elements drove employees to telework. This is more likely a function of the fact that telework status was not, in many cases an employee choice. It was most often a situation made necessary by the health risks associated with the global pandemic.

There was, however, a factor that emerged as most closely associated with employees' status as a teleworker or non-teleworker: the degree to which an individual's job could be performed from home.

Among employees who teleworked during the pandemic period, 54.5 percent reported that between 81 and 100 percent of their job responsibilities could be done through telework. An additional 19.2 percent stated that 61 to 80 percent of their work could be done from home and 11.7 percent felt that telework was appropriate for 41 to 60 percent of their work. Less than one percent stated that none of their job duties could be fulfilled through telework (0.9%).

Employees who did not have telework experience were also asked to estimate the percentage of their jobs they believed could be done via telework. Nearly one-third stated that no part of their jobs could be done working from home (32.9%). Seventeen percent felt that they could accomplish a minimal amount of work from home (1-20%). Only 16.8 percent of non-telework employees reported that 81 to 100 percent of their jobs could be done through telework.

Four other characteristics were found to be significantly different between State employees with telework experience and those that didn't have telework experience. Teleworkers were more likely to drive from home to work during peak travel times (6:00-8:59am) and drive home from work during afternoon rush hours (3:00-6:59 pm). Teleworkers were also significantly more likely than non-teleworkers to be young (between the ages of 18 and 39) and female.

Table 4: Characteristics that are Significantly Different Between Teleworking and Non-teleworking employees

	Telework	No Telework	Dif.
More than 60% of my job can be done from home	73.7%	28.0%	57.6
Drive from work to home during peak time: 3:00 to 6:59 pm	85.7%	71.3%	14.4
Trip to work takes 30 minutes or more	58.5%	46.0%	12.8
Drive from home to work during peak time: 6:00 to 8:59 am	79.8%	69.1%	10.7
During pandemic, additional daytime childcare responsibilities	62.8%	52.9%	9.94
Age: 18 – 39 years	38.9%	30.7%	8.2
Gender is female	55.2%	49.9%	5.3
Had a regular work schedule, (5 days, 8 hours)	95.2%	90.0%	5.2

Source. Work Where You Live employee survey, 2021

EVALUATION OF TELEWORK ATTRIBUTES

Two goals of the present study were to understand State employees' level of satisfaction with telework and determine if certain elements played a role in determining satisfaction. Survey respondents who had telework experience during the pandemic were presented with a set of 20 aspects of telework and asked to rate each element as better at home, better at work, or the same in both locations. Respondents who did not telework were presented with the same set of elements and asked to indicate whether they thought each would be better at home, better at work, or the same in both locations. In addition, supervisory personnel were asked to evaluate their telework experience and assess the telework experience of the employees they supervised.

WORK-RELATED FACTORS THAT ARE BETTER AT HOME OR OFFICE

Advantages of telework were defined as those elements for which most of the survey respondents rated the item as "better at home" or "much better at home." Elements for which a majority of respondents rated the item as "better at work" or "much better at work" were classified as advantages of working at the office.

For a small number of work-related elements, at least a plurality of respondents rated the item as the same at home and at work. In Table 5, items were assigned to the "Same" column for one of two reasons: (1) a strong majority of respondents rated them as the same, or (2) each response (home, same, work) received a similar number of responses.

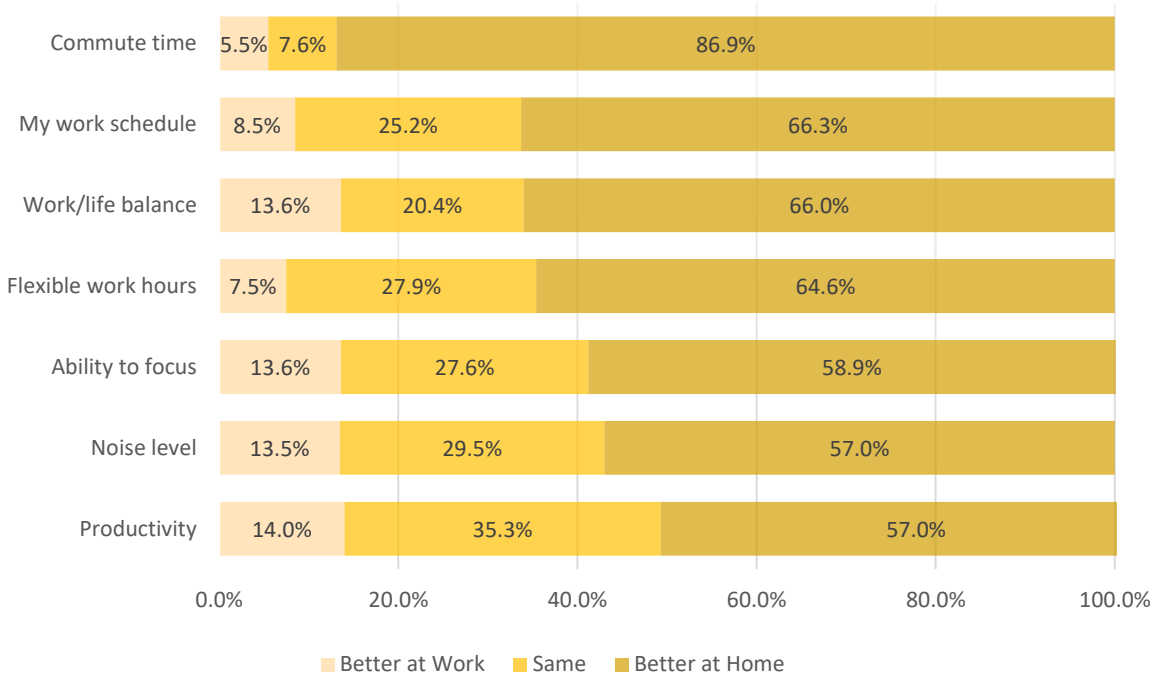
Table 5: Ratings for Evaluation Items

Better at Home	Same	Better at Work
My Commute time Work/Life balance Flexible work hours My work schedule Ability to focus, fewer interruptions Noise level Productivity	Physical arrangement of workspace Access to training Access to supervisors Access to software Tracking work status Access to databases Access to work-related files Ability to mentor or be mentored Collaboration with coworkers Computer equipment Internet Speed	Access to non-computer equipment Social interaction with coworkers

Details of elements rated better at home and better at work can be found in Appendix C.

State employees identified a variety of work-related elements that were rated as better or much better when working from home. These telework advantages included commute time, flexible work hours, work/life balance, work schedule, noise level, and ability to focus. Figure 4 shows the percentage of employees who rated each element as better when teleworking.

Figure 4: Work Elements that are Better at Home

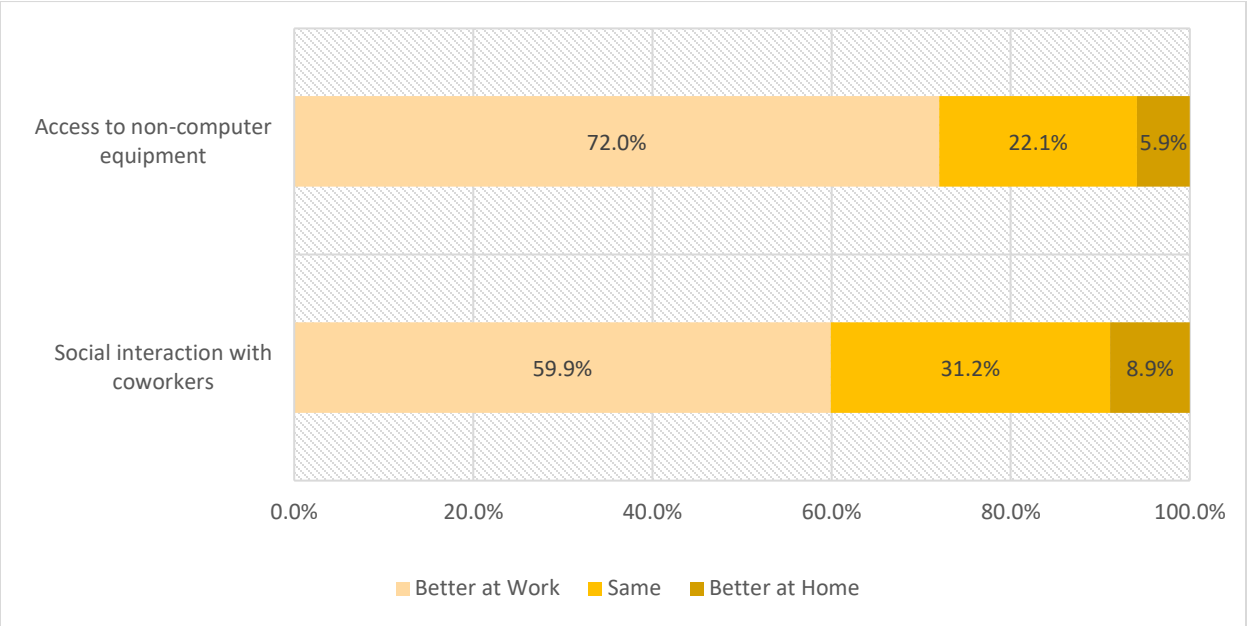


The distribution of advantages and disadvantages are useful in understanding how the survey population evaluated their telework experience during the pandemic. They are also useful in considering policy at the State level and for each of the State Departments.

It is perhaps trivial that nearly 87 percent of respondents agreed that their commute time was better at home than at work. There is no commute time if you work at home. It also seems clear that work schedules, flexible hours, and work/life balance would be among the highly rated characteristics of working from home. However, the fact that 57 percent felt that the productivity was higher at home than at work is significant and even surprising. The same could be said that the "better-at-home elements" included an ability to focus, have fewer interruptions, and a reduced noise level.

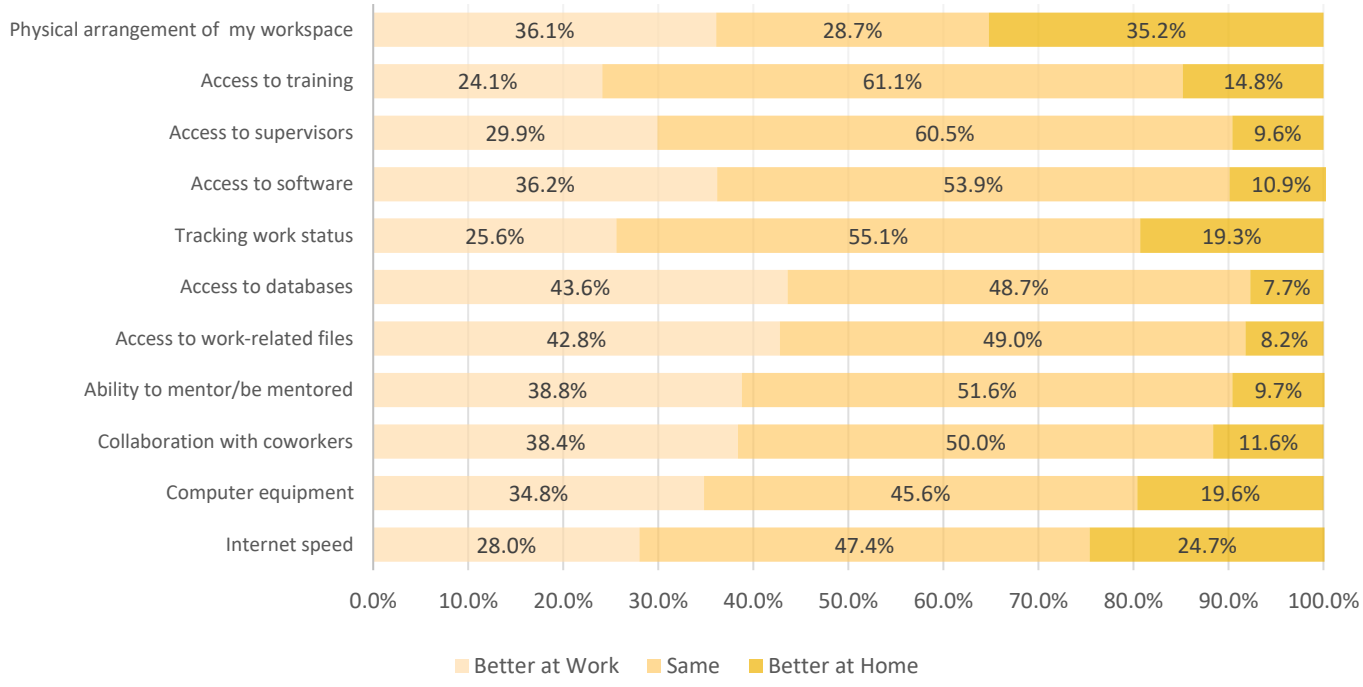
There was a high level of agreement among employees with regard to the items that were deemed better at the workplace (Figure 5). Employees noted that access to non-computer equipment, databases, and work-related files, as well as social interaction and collaboration with colleagues were better at the office. It was surprising that this list was not longer.

Figure 5: Evaluation Items that are Better at the Workplace



The remainder of the work-related elements were rated by State employees as being essentially the same at work and at home.

Figure 6: Evaluation Items that are about the Same at Home and the Workplace



With a single exception, all the items in Figure 6 were rated "the same" by at least a plurality of respondents. The ratings for the "physical arrangement of my workspace" were similar for home, same, and work and were therefore classified as "same."

None of the items in Figure 6 can be considered an advantage for work from home. Even the highest rated of these, Internet speed, got support from less than a quarter (24.7%) of the respondents.

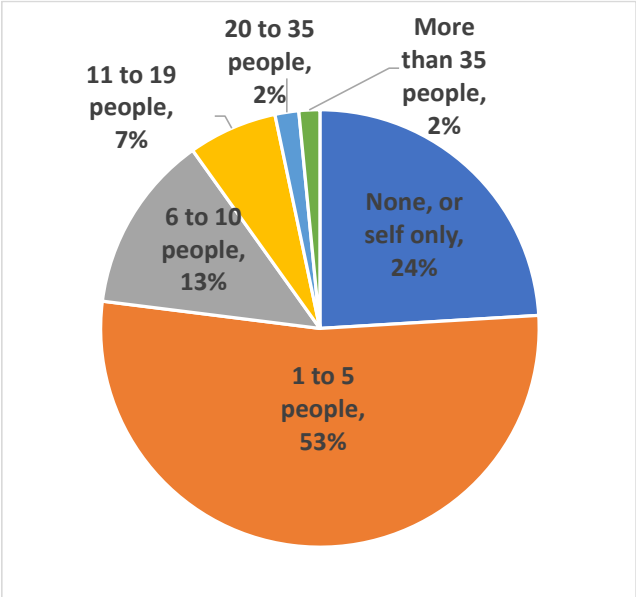
Three more items were rated as positive for work from the workplace and were rated "same" by less than a majority. These were, "access to databases," and "access to work related files," "collaboration with coworkers," and "computer equipment." These items may be of interest to telework planners and policymakers as possible barriers to telework.

Supervisors Evaluation of Telework

We also asked employees in a supervisory role to provide their opinions about how they thought teleworking was affecting the people they supervised. Roughly 28 percent of State employees supervised at least one person during the pandemic. Of those 2,958 supervisors, more than three-quarters had at least one employee who worked from home during the pandemic period (76%). Most supervisors were responsible for between one and five telework employees (53%), with only 3.3 percent who supervised more than 20 people.

When supervisors were asked to estimate the percentage of their employees' jobs that could be accomplished through telework, their responses differed considerably from the responses at the non-supervisory employees. About 15 percent said none of the job could be done from home; approximately 47 percent estimated that between 1 and 59 percent could be done from home; and 38 percent said more than 60 percent of their jobs could be done from home.

Figure 7: Supervisors' Number of Employees who Teleworked during the Pandemic

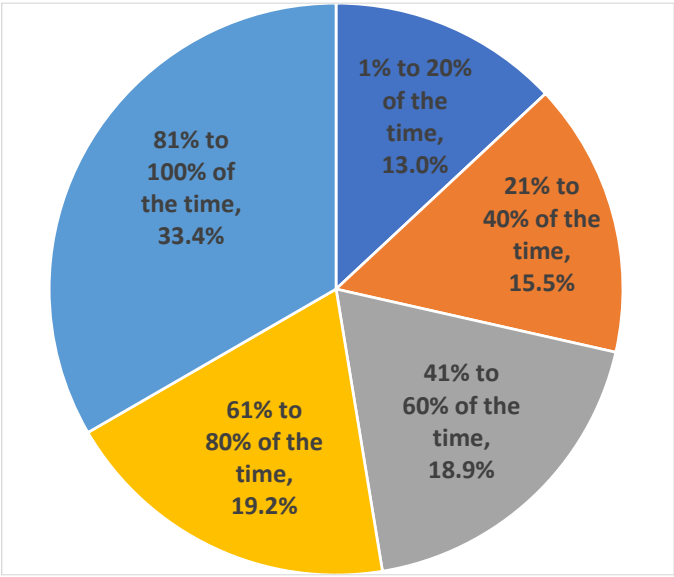


Source. Work Where You Live employee survey, 2021

The amount of time employees spent working from home varied widely. Just under 30 percent of the employees performed 40 percent or less of their job-related tasks from home. More than one-third (33.4%) accomplished most of their job responsibilities (81 to 100 percent) while working from home.

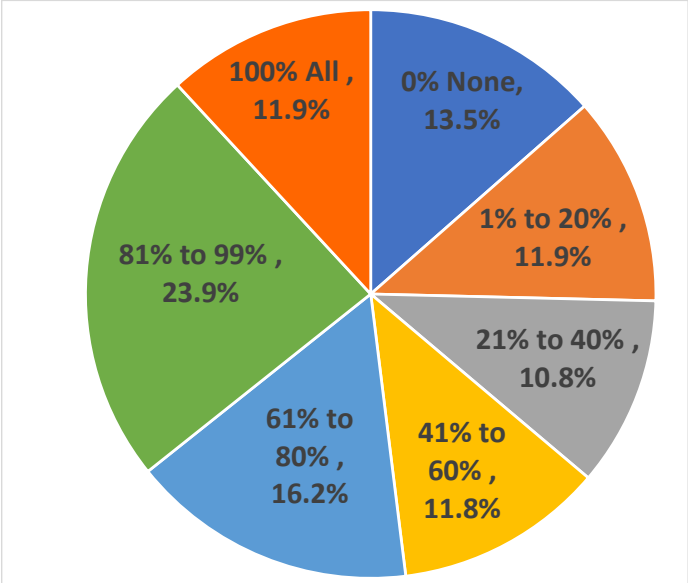
When supervisors were asked to estimate the percentage of their employees' jobs that could be accomplished through telework, an approximately equal number stated that all (11.9%) or none (13.5%) of the tasks could be done from home. However, most of the other supervisors (52%) judged that between 41 and 99 percent of employees' jobs could be done through telework.

Figure 8: Percentage of Time Employees Teleworked during the Pandemic



Source. Work Where You Live employee survey, 2021

Figure 9: Percentage of Work Supervisors Say Employees Can Do From Home

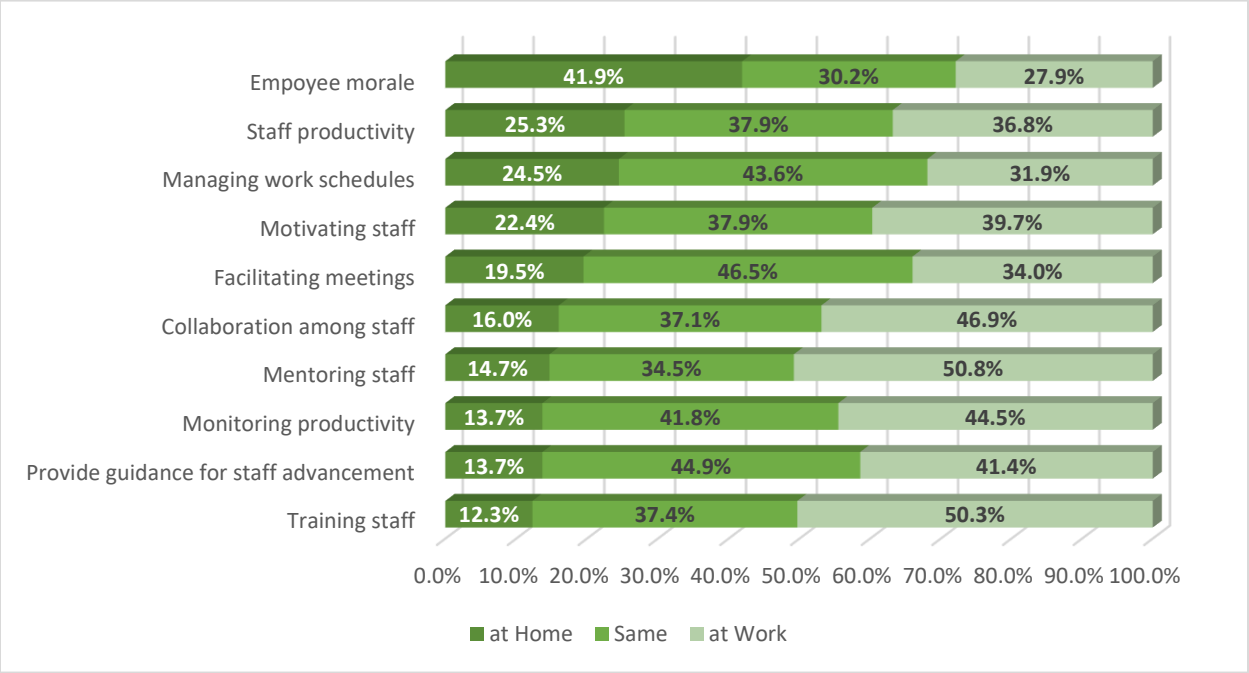


Source. Work Where You Live employee survey, 2021

Supervisors were asked to evaluate an additional set of ten work-related issues as being "better at home" or "better at work" for their employees. There were striking differences between the ratings between supervisors whose employees teleworked and supervisors who did not have employees teleworking.

Supervisors who did not have employees teleworking during the pandemic believed that all ten of the items presented were "better at work." The supervisors of employees who teleworked, however, rated some elements as "better at home" and some as "better at work." Mentoring and training staff was viewed by supervisors of telework employees as more easily accomplished at the office, while employee morale was rated as better at home. The remaining aspects of work were reported to be essentially the same at home as at work. Detailed tables can be found in Appendix G.

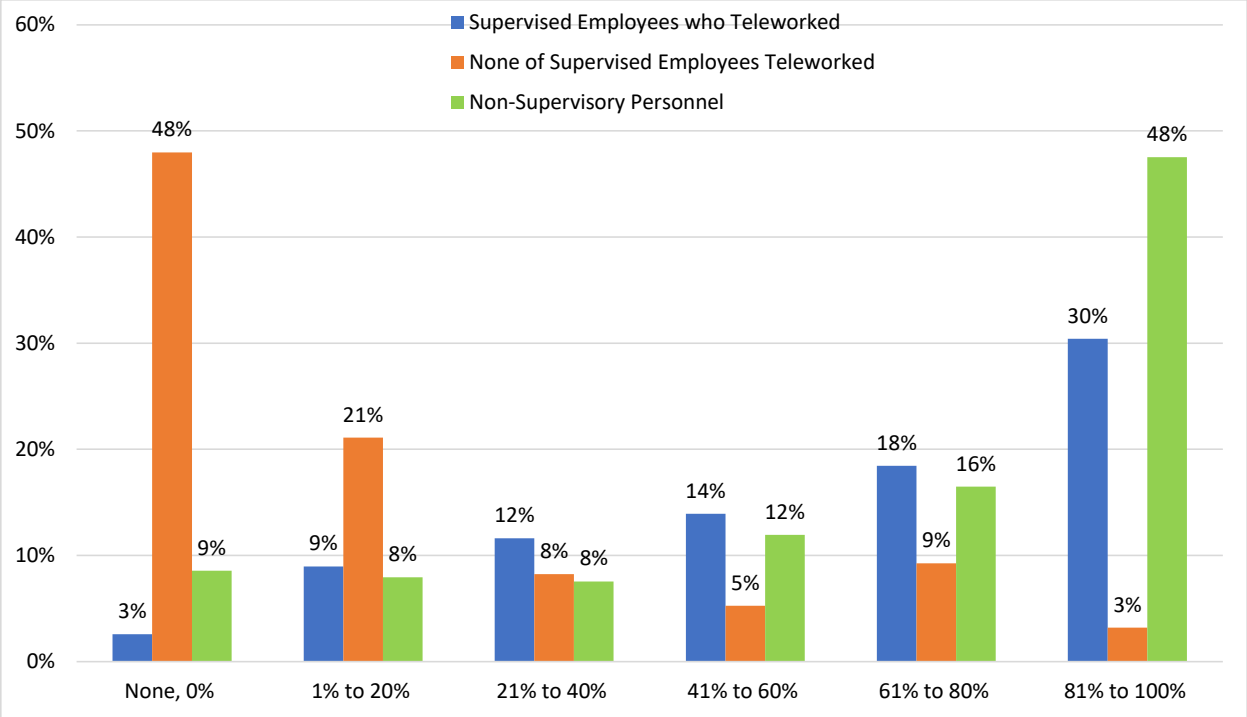
Figure 10: All Supervisors' Interaction with Employees



Source. Work Where You Live employee survey, 2021

Evaluating the perceptions of all supervisors together (as above) does not necessarily provide the most accurate insights. It was interesting to note that the perspective of supervisors who had no employees teleworking during the pandemic was markedly different from that of supervisors of telework employees and non-supervisory personnel. As shown in the figure below, nearly half of non-supervisors felt that 81 to 100 percent of their job could be performed from home. Thirty percent of the supervisors of telework employees shared this opinion, while only three percent of supervisors with no employees who teleworked offered this response. Close to half of the supervisors whose employees had not teleworked (48%) stated that it would be impossible for employees to do any part of their job from home.

Figure 11: Percentage of Work That Can Be Done From Home



Source. Work Where You Live employee survey, 2021

These results suggest that the actual telework experience tends to change the perspectives of both supervisors and non-supervisory personnel. If a large percentage of employees are permitted to telework in the future, all supervisors may benefit from additional training in telework-related topics. For example, ways to motivate and mentor staff, strategies for monitoring productivity, and methods for encouraging collaboration among staff would likely benefit supervisors of employees who work remotely. Future telework planners should be aware that a different approach may be required for supervisors who themselves have no telework experience, and whose employees have had no telework experience.

Monitoring Productivity

Open-ended input was solicited from all supervisors in response to the following question: What methods could supervisors use to monitor the performance of their subordinates when subordinates are teleworking? These responses were categorized using a word cloud. A word cloud is a visual representation of word frequency. The more commonly the term appears within the text being analyzed, the larger the word appears in the image generated. Thus, word clouds are a simple tool to identify the focus of written material.

Analysis of the 901 responses submitted by supervisors resulted in the word cloud in Figure 12.

Figure 12: Methods for Monitoring Employee Performance During Telework

SATISFACTION WITH THE TELEWORK EXPERIENCE

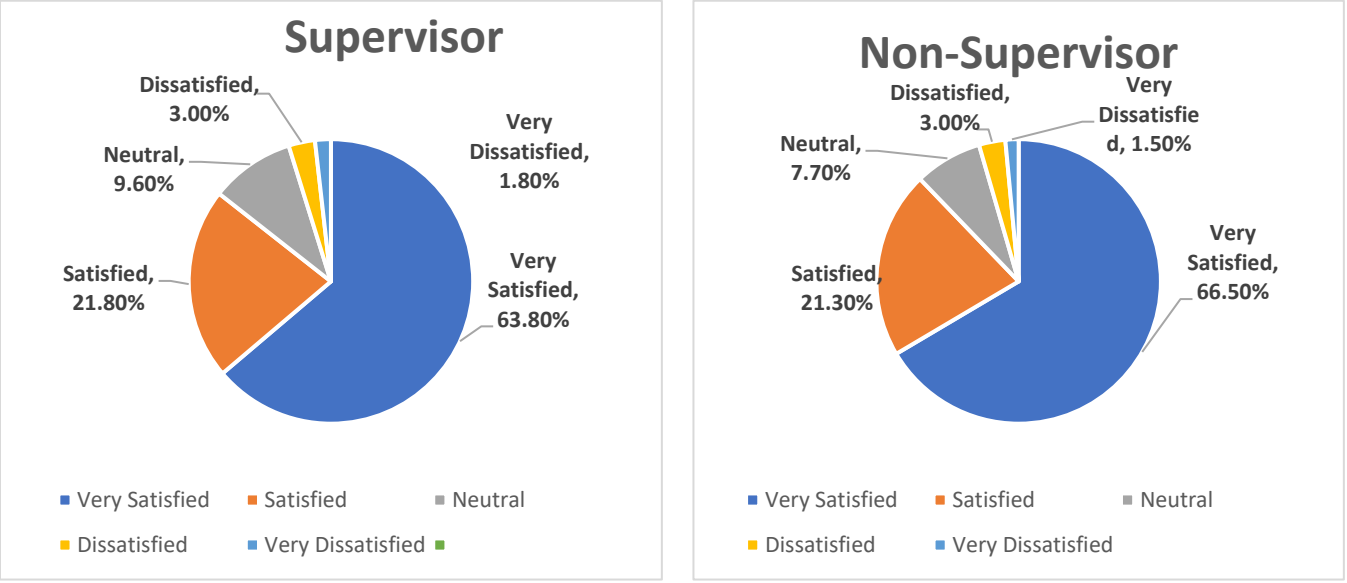
Employees who teleworked during the pandemic were generally satisfied with their experience. Eighty-seven percent of teleworkers stated that they were satisfied (21.5%) or very satisfied (65.7%) with their overall telework experience (Table 6). There were 8.2 percent of teleworkers who were neither satisfied nor dissatisfied, and five percent of teleworkers stated that they were dissatisfied or very dissatisfied with their telework experience. Detailed satisfaction data can be found in Appendix Table C-1.

Table 6: Satisfaction with the Telework Experience during the Pandemic by Supervisory Role

Overall satisfaction with telework experience	SUPERVISOR OR NOT					
	Supervisor		Non-Supervisor		Total	
	Count	Pct.	Count	Pct.	Count	Pct.
Very satisfied	1,340	63.8%	3,726	66.5%	5,066	65.7%
Satisfied	458	21.8%	1,197	21.3%	1,655	21.5%
Neutral	202	9.6%	431	7.7%	633	8.2%
Dissatisfied	62	3.0%	169	3.0%	231	3.0%
Very Dissatisfied	37	1.8%	84	1.5%	120	1.6%
Total	2,099	100.0%	5,607	100.0%	7,707	100.0%

Source. Work Where You Live employee survey, 2021

Figure 13: Supervisor and Non-Supervisor's Satisfaction of Telework among State Employees



Subsequent analysis showed that satisfaction was highly correlated with the evaluative items discussed earlier (see Appendix Table C-1). This suggests that those 'better at home' and 'better at work' items drive overall satisfaction with the telework experience. This reinforces our belief that these are the items that will be valuable to telework planners and policymakers in the future.

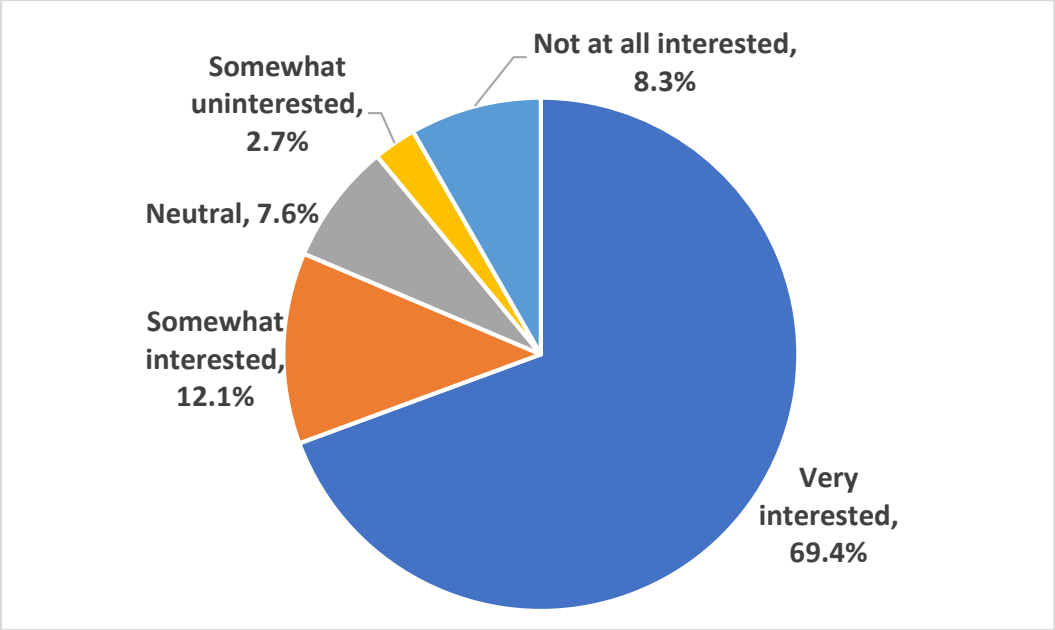
INTEREST IN TELEWORK

Satisfaction measured employees' judgement that the telework experience was pleasant or useful to them. Interest in telework measured whether or not employees would like to telework in the future. Interest was measured for supervisors and non-supervisory personnel, whether or not they had telework experience during the COVID-19 pandemic.

As expected, satisfaction and interest were highly correlated. There were some people who were very satisfied with the recent telework experience but not at all interested in telework in the future.

Overall, 81.5 percent of State Executive Branch employees said they were interested in teleworking at some time in the future. Fully 69.4 percent were very interested, and 12.1 percent were somewhat interested (Figure 14). Another 7.6 percent were neutral on the idea and 11 percent were not interested.

Figure 14. Interest in Telework in the Future for All Employees



Source. Work Where You Live employee survey, 2021

CHOICE OF FUTURE TRAVEL MODES

State employees who participated in this study were also asked about their preferred mode of travel to and from work in the future. Overall, 59.5 percent of those surveyed would choose to telework in the future (Table 7). Seventy percent of those who had telework experience during the pandemic would choose to telework in the future.

Table 7: Preference for Telework in the Future by State Department

	Preferred Travel Mode in the Future					
	Chose no Telework		Chose some telework		Total	
State Department	Count	Row N %	Count	Row N %	Count	Row N %
Commerce & Consumer Affairs	82	23.5%	268	76.5%	350	100.0%
Administrative Offices	10	27.3%	27	72.7%	37	100.0%
Land & Natural Resources	174	27.6%	456	72.4%	629	100.0%
Business, Economic Development & Tourism	58	30.1%	135	69.9%	193	100.0%
Transportation	524	31.3%	1,149	68.7%	1,672	100.0%
Health	632	32.7%	1,298	67.3%	1,929	100.0%
Accounting & General Services	195	36.4%	340	63.6%	535	100.0%
Human Resources Development	23	37.2%	40	62.8%	63	100.0%
Human Services	568	40.0%	851	60.0%	1,418	100.0%
Labor & Industrial Relations	131	40.4%	193	59.6%	324	100.0%
Hawaiian Home Lands	42	41.8%	59	58.2%	101	100.0%
Budget & Finance	108	42.0%	149	58.0%	258	100.0%
Attorney General	229	45.9%	270	54.1%	499	100.0%
Agriculture	103	47.4%	115	52.6%	218	100.0%
Defense	135	48.2%	145	51.8%	279	100.0%
Taxation	141	53.9%	121	46.1%	262	100.0%
Public Safety	1,086	63.4%	626	36.6%	1,711	100.0%
Total	4,240	40.5%	6,239	59.5%	10,479	100.0%

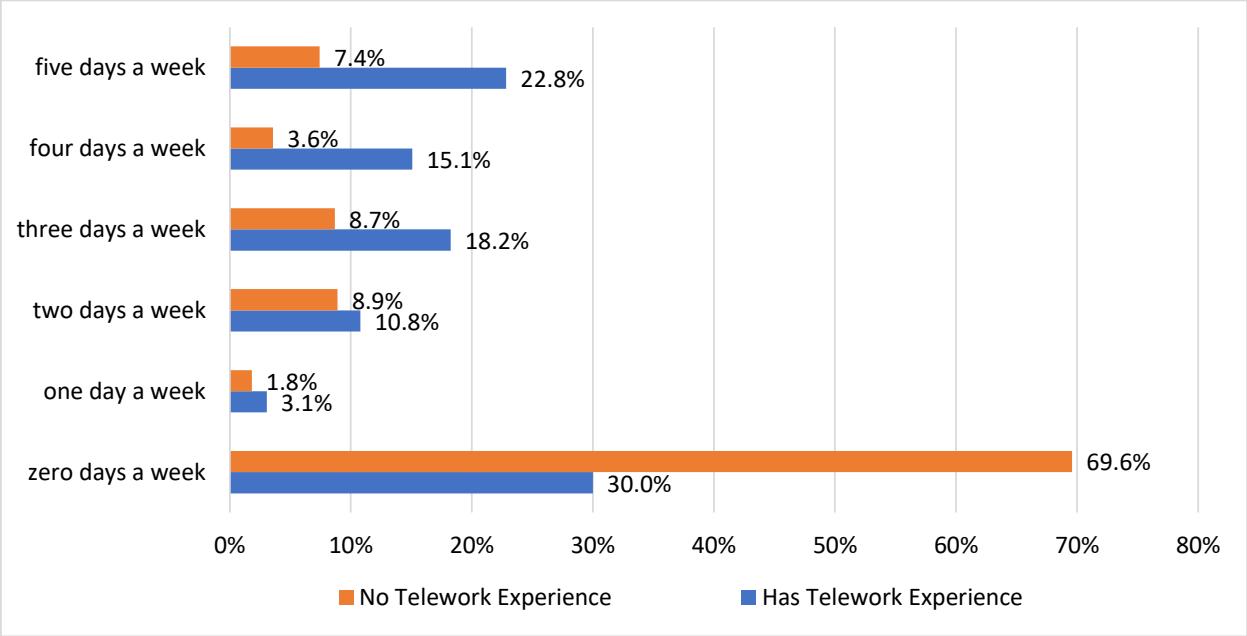
Source. Work Where You Live employee survey, 2021
Note: Numbers weighted to State Executive Branch O'ahu employee population (10,479).

Some State departments were more inclined than others to opt for telework in the future. The choice to telework was more prevalent for employees in the Department of Commerce & Consumer Affairs (76.5%), Governor/Lt. Governor's Office (72.7%), and the Department of Land & Natural Resources (72.4%). Employees of the Public Safety (36.6%) and Taxation (46.1%) departments were least likely to choose teleworking in the future.

Preferred Number of Telework Days

Among those employees who would like to work from home in the future, the average number of telework days preferred was 3.7 days. Close to one-third of those who prefer to telework in the future would choose to do so four or five days per week (30.8%).

Figure 15: Preferred Future Telework Days by Telework Experience



Source. Work Where You Live employee survey, 2021

PREFERRED MODE OF TRAVEL TO WORK IN THE FUTURE

Nearly all aspects of everyday life shifted during the global pandemic and the commute to work was included in that group. In particular, quarantine and social distancing requirements prompted the workforce to find new ways to operate. For many State Executive Branch employees, this meant a shift to working from home.

The percentage of employees who teleworked jumped from 1.4 percent before the pandemic to 58.6 percent. The rate of folks driving to work alone fell more than 30 percent to 39.1 percent, and the number of coworkers choosing to carpool to work also decreased notably. All other modes of travel decreased slightly during the pandemic period.

When asked about their preferred mode of travel to work in the future, State employees seem to have been influenced by their experiences during the pandemic. The overwhelming majority of respondents would opt to drive alone for a few days each week (63.5%) and work from home the other days (59.5%). The number of days preferred varied from person to person, but non-supervisory personnel generally preferred fewer days of driving to work and more days teleworking than did the supervisors.

Table 8: Future Travel Mode Choices by Number of Days Preferred

In the future, how many days would you prefer to travel by…	Preferred Number of Days					
	0	1	2	3	4	5
No travel, work from home	4,240	287	1,079	1,647	1,261	1,965
Drive alone	3,821	1,143	1,391	872	216	3,036
Carpool	9,668	178	122	158	37	316
Ride the bus	9,767	130	148	88	41	305
Ride a bicycle	10,225	94	77	26	1	56
Walk	10,123	69	103	71	12	102
Other	10,217	60	38	27	3	133

Source. Work Where You Live employee survey, 2021
Note: Trips by mode for the weighted population of State Executive Branch Employees.

Change in Mode Choice, Before COVID and Future Preference

Employees' choice of travel mode before the COVID-19 pandemic is shown on the left and their preferred mode of travel in the future is depicted on the right. As evidenced by the 58 percent difference, a significant portion of the employees in the drive alone, carpool, and combined other categories before the pandemic would choose to transition to telework in the future.

Table 9: Travel Mode Before the Pandemic and Preferred Future Choice

Travel Mode	Before Pandemic		Preferred Future		Change	
	Count	Pct.	Count	Pct.	Count	Pct.
Work from Home	151	1.4%	6,239	59.5%	6,088	58.1%
Drive alone	8,222	78.5%	6,658	63.5%	-1,564	-15.0%
Carpool	1,119	10.7%	811	7.7%	-308	-3.0%
Ride the bus	1022	9.8%	712	6.8%	-310	-3.0%
Ride a bicycle	158	1.5%	254	2.4%	96	0.9%
Walk	335	3.2%	356	3.4%	21	0.2%
Other	231	2.2%	262	2.5%	31	0.3%
Total Employees	10,479	100.0%	10,479	100.0%	0	0.0%

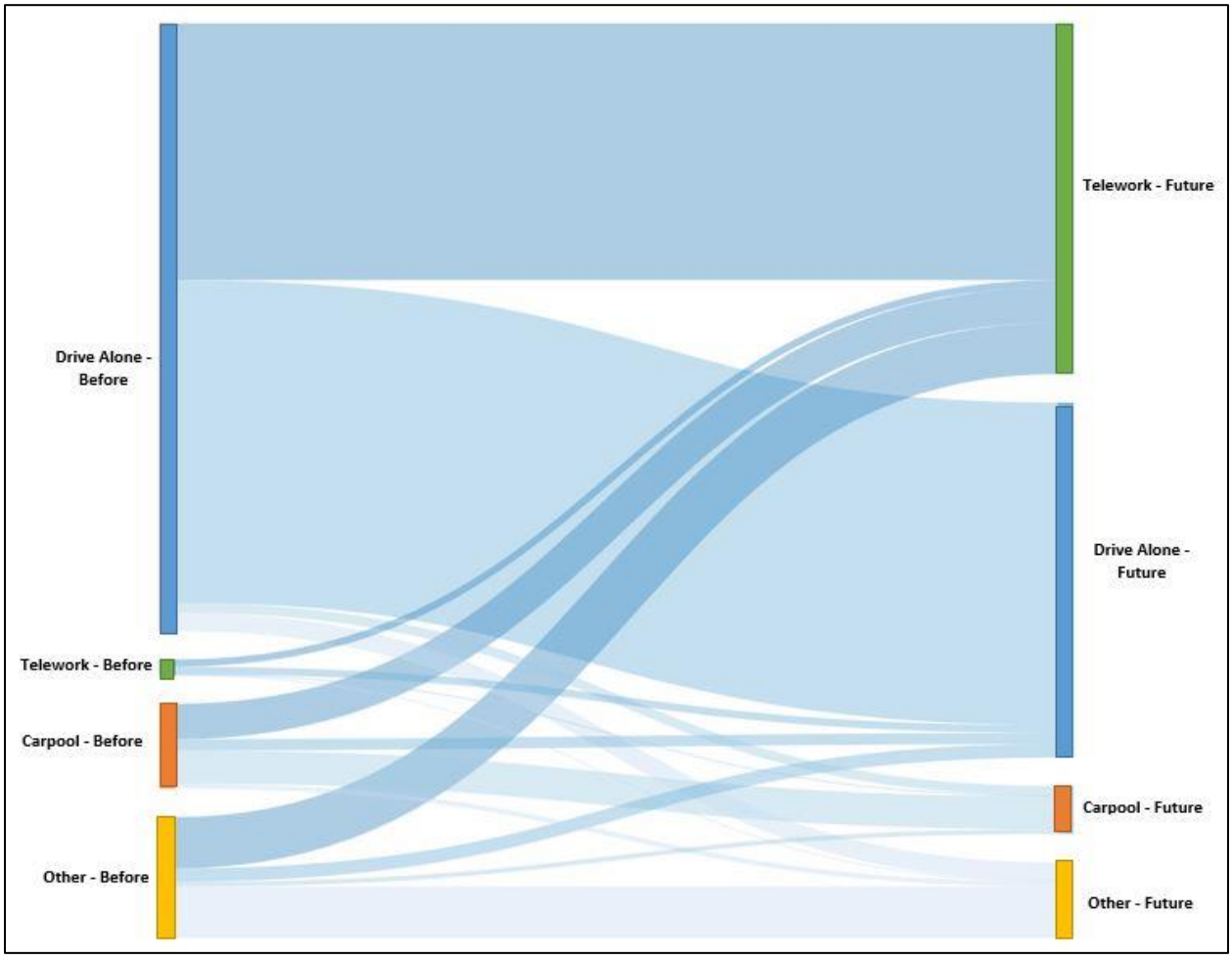
Source. Work Where You Live employee survey, 2021
Note: Trips by mode for the weighted population of State Executive Branch Employees.

Although it did not represent a frequent choice among employees, there was a slight uptick in personnel who said they would prefer to walk or ride a bicycle to work for one or more days each week.

A notable proportion of workers that carpooled or used alternate methods of transportation to work prior to the pandemic would continue using the same travel mode in the future. Slightly more than half of the workers who drove alone to work in the past would choose to continue driving alone to work in the future.

Regardless of how many tables we examine, the pattern of mode change between the pre-COVID travel mode and the preferred future modes is very complex. Figure 16 demonstrates how complicated those choices are. To simplify the flow, we have combined the infrequently used modes (bus, bicycle, walking, and other) and eliminated the number of days per week. The graph shows choices, not trips. The thickness of each flow line represents the number of persons making that pre-COVID-to-future choice move.

Figure 16: Sankey Chart of Prior and Future Modes of Travel to Work



Source. Work Where You Live employee survey, 2021

Prior to the pandemic, travel modes were dominated by single-occupancy vehicular travel. Carpooling and other travel modes accounted for less than 35 percent of the picture, and work from home was virtually unknown. If State employees were able to achieve their future preferences, the new set of choices would include a similar proportion of telework and driving alone. Carpooling and other travel modes would also see decreases in favor of telework.

PREFERRED FUTURE TRAVEL MODE BY CHARACTERISTICS

Employees who would like to work from home in the future had several characteristics that distinguished them from those who would not opt to telework going forward. First, future telework employees tended to be younger, with nearly one-quarter falling between the ages of 18 and 34 (23.7%). The group who did not prefer telework was much more likely to be age 55 or older (60.2%).

A much larger percentage of the employees who indicated they would prefer to telework in the future had children in their household and had experienced additional daytime childcare responsibilities during the pandemic. The flexibility afforded to these parents and caregivers by working from home made telework an attractive option.

The long commute times encountered before the pandemic prompted numerous employees to see the advantage of teleworking in the future. Among those who prefer telework, 60.8 percent had a commute to work of more than 30 minutes pre-COVID. Conversely, the commute for more than half of employees who would not choose telework in the future was less than 30 minutes before the pandemic (54.3%).

Finally, employees working in non-supervisory roles were more likely to prefer telework opportunities in the future than were supervisors.

Detailed data can be found in Appendix D.

Future Telework Choice by Previous Telework Experience

Among those who teleworked during the pandemic, 86 percent preferred to work from home at least one day per week in the future. Of those, 70.1 percent stated they were “very interested,” and 15.8 percent said they were “somewhat interested” in future telework. Fully 32.6 percent of those wanted to telework 5 days a week.

For employees who had not worked from home previously, 51 percent wanted to work from home in the future (29.1% very interested; 21.8% somewhat interested) and 24.4 percent of those, wanted telework for 5 days.

The higher level of interest in future telework among those who have teleworked in the past indicates that experience with telework brings with it both satisfaction and interest in continuing the experience. On the downside, people who had not experienced work from home in the past are less likely to choose telework in the future. In the next several sections we will investigate how that happens.

Further detail can be found in Appendix Tables C-2 and C-3.

Future Telework Choice by Perceived Advantages

State Executive Branch employees who preferred telework in the future typically noted several key advantages to working from home. Included in these were a better work schedule, enhanced work-life balance, and better productivity. Conversely, the employees who would not choose telework in the future generally cited the disadvantages of telework they experienced during the pandemic, such as reduced social interaction and collaboration with coworkers and limited access to supervisors.

Interestingly, both those interested in future telework and those not interested, identified access to non-computer equipment (e.g., Xerox copier, printer, etc.) as a significant disadvantage to telework. For those who would prefer future telework, however, the other benefits outweighed that concern. Detailed data can be found in Appendix C-5.

Preferred Future Travel Mode by Satisfaction with Telework Experience

Satisfaction with the telework experience was strongly related to an employee's preference for telework in the future. Among those who were very satisfied or satisfied, 77 percent chose to work from home at least one day a week. Among those who were dissatisfied or very dissatisfied, only 19.1 percent would choose some telework during the week. (Appendix Table C-3).

Although highly correlated, not everyone who was satisfied with their telework experience would continue or take up telework in the future. The difference reflects the fact that some jobs and life circumstances are better suited to telework than others. Thus, while some employees were satisfied with their telework experience, they would not choose to telework at this time.

Interest by Supervisors

Once again, the findings were comparable for supervisory and non-supervisory personnel. Fifty-four percent of supervisors and 61.9 percent of non-supervisory personnel would choose to telework for one or more days per week in the future.

Results for the preferred number of telework days per week were higher for non-supervisory employees. Supervisors would opt for a median of 2.8 days of telework each week, while non-supervisory personnel would choose to work from home for a median of 3.7 days per week. Detailed data can be found in Appendix G.

Table 10: Preferred Travel to Work Methods in the Future

Preferred Travel Mode in the Future	Supervisory Status					
	Supervisor		Non-Supervisor		Total	
	Number	Percent	Number	Percent	Number	Percent
Work from Home	1,584	53.5%	4,655	61.9%	6,239	59.5%
Drive Alone	2,132	73.1%	4,527	60.2%	6,658	63.4%
Carpool	250	8.4%	562	7.5%	811	7.7%
Ride the bus	133	4.5%	579	7.7%	712	6.8%
Ride a bicycle	70	2.4%	183	2.4%	254	2.4%
Walk to work	71	2.4%	285	3.8%	356	3.4%
Other	59	2.0%	203	2.7%	262	2.5%

Note: Figures are round trips per week. The respondents were allowed to select one or more mode of travel, hence the column percentages will not sum to 100%
Note: Trips by Mode expanded to State Executive Branch O'ahu employee population (10,479).
Source. Work Where You Live employee survey, 2021

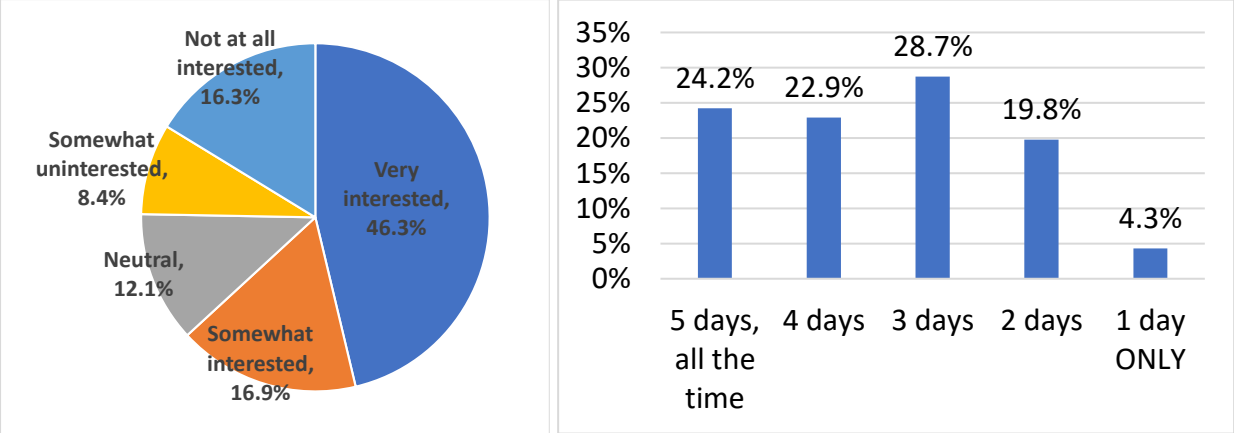
Previous telework experience significantly impacted supervisors' interest in future telework, both for themselves and for their employees. For example, nearly half of the supervisors who had telework experience during the pandemic were "very interested" in having their employees telework in the future (48%), compared to just 14 percent of supervisors with no prior telework experience.

Previous telework experience had very little influence on the number of days that supervisors were willing to allow their employees to telework in the future. The average number of days for supervisors with previous telework experience was 2.9 days, while the average was 2.7 days for those with no prior experience.

While their willingness to allow employees to telework was not particularly affected by their previous experience, the number of days supervisors would choose to telework themselves was clearly impacted. Supervisors who teleworked during the pandemic preferred an average of 1.4 days of telework per week, on average, in the future. However, the average number of future telework days preferred by those who had not worked from home was only 0.5 days.

Supervisors were not only asked about their own personal experience with telework, but also about their impressions based on the teleworking employees they supervised. Supervisors who had employees that worked from home during the pandemic were presented with a series of questions to determine the extent of teleworking and the perceptions of the impact. The majority of supervisors (59.3%) had between one and five employees who teleworked during the pandemic. The frequency of telework was pretty evenly divided among supervisors' employees, with 22 percent teleworking 61 to 80 percent of the time and about 16 percent working either 41 to 60 or 81 to 100 percent of the time.

Figure 17: Supervisors' Interest in Employees' Teleworking and Number of Days Allowed



Source. Work Where You Live employee survey, 2021

When asked about the percentage of employees' jobs that could be accomplished through telework, supervisors were almost evenly split. Roughly 18 percent of supervisors stated that 41 to 60 or 61 to 80 percent of employees' jobs could be done from home. An additional 17 percent thought that 81 to 99 percent of their jobs could be managed through telework. Detailed data can be found in Appendix G.

When State supervisors were prompted to provide their level of interest in allowing their employees to telework in the future, 63.2 percent were interested. Again, interest was significantly higher among supervisors who had employees working from home during the pandemic (73.8%) than for those who had not (29.4%).

Interest by Department

As noted earlier, differences were noted between departments in the level of interest in teleworking in the future. Departments with the highest percentage of employees interested in working from home in the future included Commerce and Consumer Affairs (77%), Governor and Lt. Governor Offices (73%), Land and Natural Resources (72%), and Business, Economic Development and Tourism (70%). Detailed data can be found in Appendix Table E-1.

Supervisors' concerns about teleworking seemed related to their opinion about what percentage of their employees' jobs were suited to telework. That opinion was also associated with the number of days they would allow their employees to telework. Readers will find detailed data in Appendix G.

TRANSIT-RELATED ISSUES: TRIPS SAVED

One of the most important objectives of the WWYL survey 2021 was to investigate the transit-related impacts of telework. It was understood that working from home would eliminate the needs for at least some vehicular work trips each week. The objective was to quantify the traffic changes that would be generated by reducing single occupancy round trips for work.

TRIPS SAVED

Mode Changes

Not all mode choices represented mode changes. State employees listed their travel mode choices for the future (Table 10) and many of those represented travel mode changes from their pre-pandemic travel mode (Figure 16). In Table 11, we compare travel mode choices with travel mode changes. Overall, the 15,292 mode choices resulted in about 8,068 mode changes (52.8%) and the plurality of those were associated with selecting at least some telework in the future.

As shown in Table 11, 6,113 of the 6,239 State employees who would prefer to telework in the future were not working from home before the pandemic. Similarly, of the 712 employees who would like to ride TheBus in the future, 191 were not bus riders pre-COVID.

Table 11: Future Mode Changes and Choices, 2021

	Future Travel Modes and Trip Counts				
	Choices		Changes		Percent New to Mode
	Number	Avg. Days per Week*	Number	Avg Days per week*	
Telework	6,239	3.56	6,113	3.57	98.0%
Drive Alone	6,658	3.39	1,004	3.02	15.1%
Carpool	811	3.24	255	2.62	31.4%
Ride TheBus	712	3.34	191	2.94	26.8%
Ride a bicycle	254	2.40	170	2.44	66.9%
Walk	356	2.93	183	2.45	51.4%
Other	262	3.42	152	2.79	58.0%
Total	15,292	---	8,068	---	52.8%

*Among employees who prefer to use that mode of travel in the future

Source. Work Where You Live employee survey, 2021
Note: State Executive Branch O'ahu employee population (10,479).

Nearly all the telework choices were changes from past behavior and relatively few drive-alone choices were changes. The percent of choices that were changed is very high, again suggesting that introducing telework will generate new patterns of commuter travel for O'ahu.

The average days per week for nearly all modes deceased from the past levels, another indication that the mixture of modes in the weekly travel agenda added to the complexity of traffic patterns.

Trip Savings

Not all mode changes represent trips saved. For purposes of this report, a round trip is saved when a respondent who drove alone before the pandemic chose to telework at least one day a week in the future. We operationalized that definition as shown below. The chart shows the number of saved trips for each drive/telework dyad.

Table 12: Number of Saved Trips by Drive/Telework Combination

Pre-COVID Drive Days	Future Number of Days Preferred					
	0	1	2	3	4	5
0	-	-	-	-	-	-
1	-	1	1	1	1	1
2	-	1	2	2	2	2
3	-	1	2	3	3	3
4	-	1	2	3	4	4
5	-	1	2	3	4	5

Thus, for every day an employee preferred to telework in lieu of driving alone to work, a round-trip saved was recorded. For example, if an employee chose to drive alone five days per week before the pandemic (for a total of ten one-way driving trips) but would choose to telework five days per week in the future (for a total of zero one-way driving trips), that would equal ten trips saved per week.[5]

Table 13 presents the number of trips that would be saved if employees were able to make their preferred travel mode changes. We have included the equivalent saving in miles per week and hours per week, based on survey data.

Table 13: Trips, Hours, and Miles Saved

	Round Trips Saved		Miles per week	Hours per week
	Round Trips per Week	Round Trips per Day		
Total Trips	14,945	2,989	367,847	19,987

Source. Work Where You Live employee survey, 2021
Note: State Executive Branch O'ahu employee population (10,479).

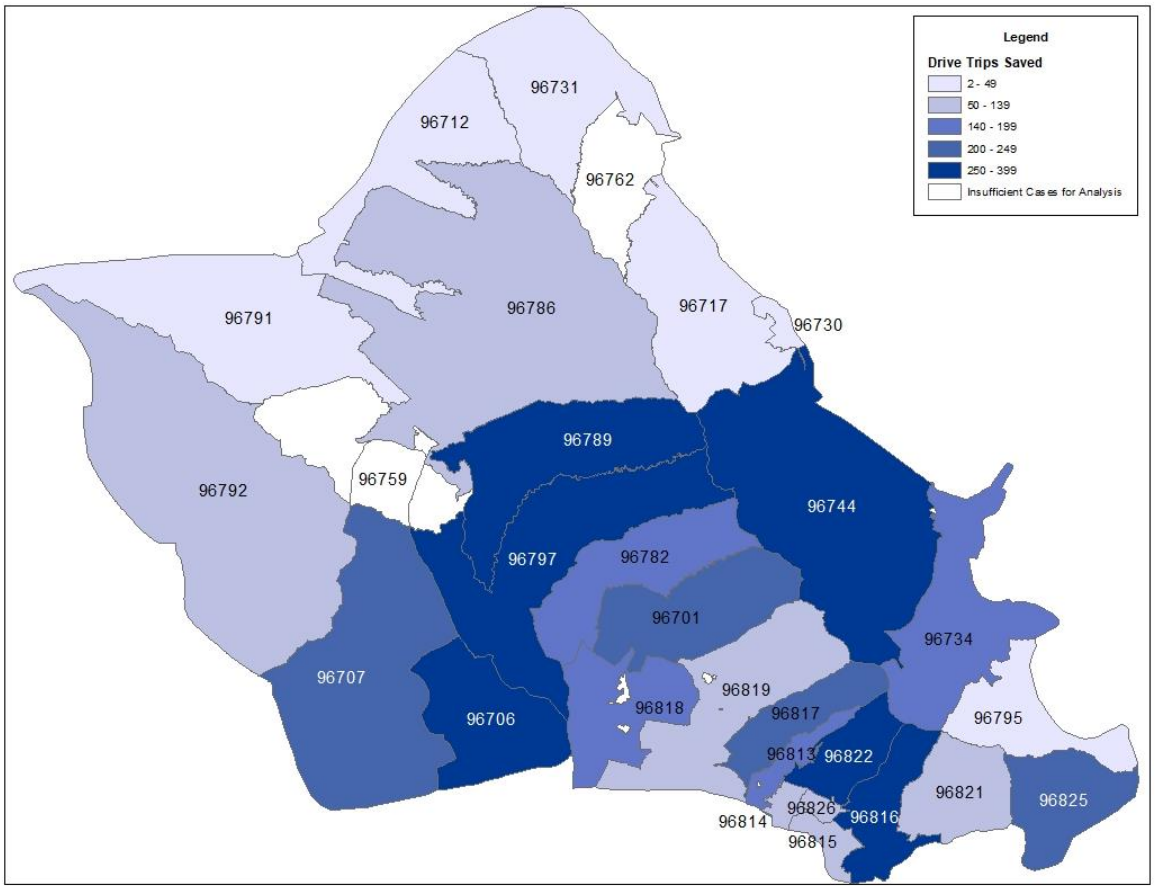
In the present study, if all State employees were granted their preferences concerning the number of days they would like to telework in the future, 14,945 driving trips would be saved per week. That is equivalent to 2,989 round trips per day. Based on their pre-pandemic distance and time to work, State Executive Branch employees would save almost 20,000 hours per week in traffic, most during peak hours. That would reduce single-occupancy vehicular traffic by 367,847 miles per week, or 73,569 miles per day.

[5] This definition does not consider the effect of multiple trips per day. That survey question asked subjects to record only the mode used on the longest leg of their daily trip.

Characteristics

Although not identical, round trips saved each week (Figure 18) were distributed across the Island in a manner similar to the rate of teleworkers per thousand commuters.

Figure 18: Map of Round Trips Saved per Week by O‘ahu Zip Code



Source. Work Where You Live employee survey, 2021

Before the COVID-19 pandemic, driving commuters were concentrated in the Kaneohe area and the Primary Urban Center (PUC). Trips saved by former driving commuters who would elect to work from home in the future were primarily concentrated in the Kaneohe, Central O‘ahu, and ‘Ewa regions. The most significant decreases in driving trips from pre-COVID to preferred future travel mode were observed in the Kāne‘ohe and Kaimukī areas.

Trips saved are, by definition, generated by personnel who chose to drive alone prior to the pandemic but would prefer to telework in the future. As would be expected based on the future telework preferences of supervisors versus non-supervisors, more trips are saved by non-supervisory personnel. Similarly, it was State employees with previous telework experience who accounted for the majority of trips saved since they were more likely to choose to work from home in lieu of driving alone to work. For the overwhelming majority of employees contributing to trips saved, their pre-COVID commute occurred during peak times in both the morning and afternoon. Finally, the majority of trips saved are saved by those employees who stated that more than 60 percent of their jobs could be accomplished from home. Detailed data regarding trips saved can be found in Appendix Tables E-6 and E-7.

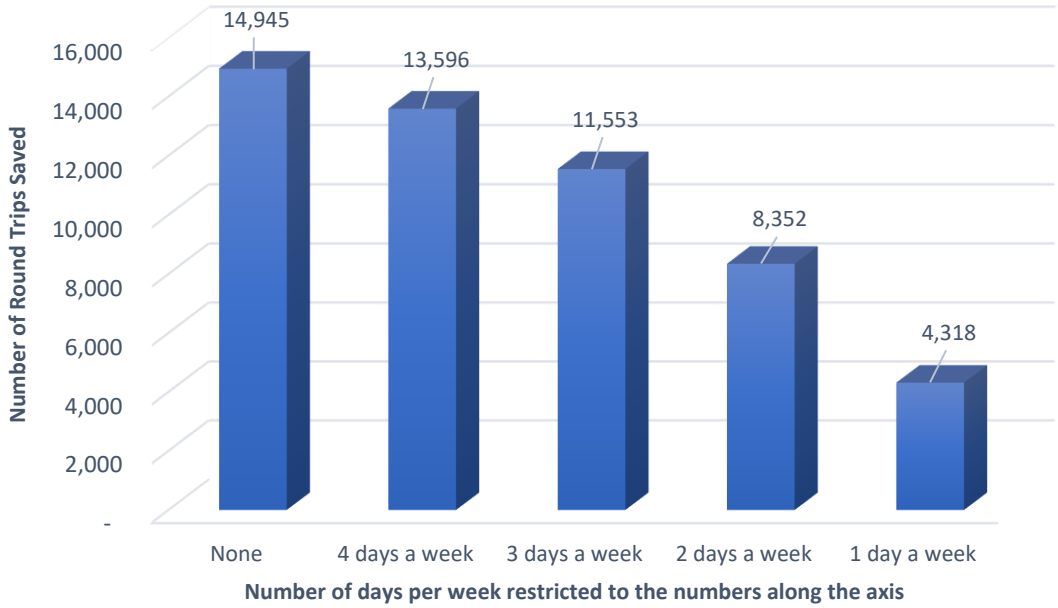
IMPACT OF RESTRICTING NUMBER OF DAYS PER WEEK

One of the research questions suggested for the transit mode objective was, "What might be the impact of limiting the number of days telework was available?" This section deals with that issue.

While one-third of State employees preferred to work from home five days per week, that option might not be available to them. Policy at the State level or at the departmental/agency level, may limit the number of days per week employees are allowed to work from home. When employees interested in future telework were asked what they would do if their desired number of telework days were not available, nearly all of them (91.6%) reported that they would be willing to settle for fewer telework days.

If employees were only allowed a maximum of four telework days per week, the number of trips saved would decrease from 14,945 to 13,596 (Figure 19). Incremental decreases in days allowed would reduce trips saving at an incremental rate. For example, if only one day per week of telework were permitted, the number of trips saved would be 4,318, a 71 percent decrease.

Figure 19: Expected Impact of Restrictions on Trips Saved



Source. Work Where You Live employee survey, 2021

Allowing employees to telework in the future has the potential to impact a variety of transportation-related issues. For example, drive-alone trips that occurred before but would be eliminated by telework will reduce traffic congestion during peak commute times (Appendix Table E-6). It will also eliminate the need for some office and parking spaces and contribute to employee morale and job satisfaction. Remember, we are talking about a 28.5 percent reduction in commuter trips per week based on a survey population of 10,479 Executive Branch employees of the State of Hawai‘i.

They represent about 2.1 percent of the County's 500,034 commuters.[6] If you scale that up to the County Commuter population the results would produce trip saving at just over 710,000 round trips per week. That estimate cannot be justified by our survey of such a small and restricted part of the total commuter group, but it does illustrate the scaling issue presented by trying to estimate the impact of telework on traffic congestion based on State employees only.

[6] Based on U.S. Census, American Community Survey, 2019 5-year estimates.

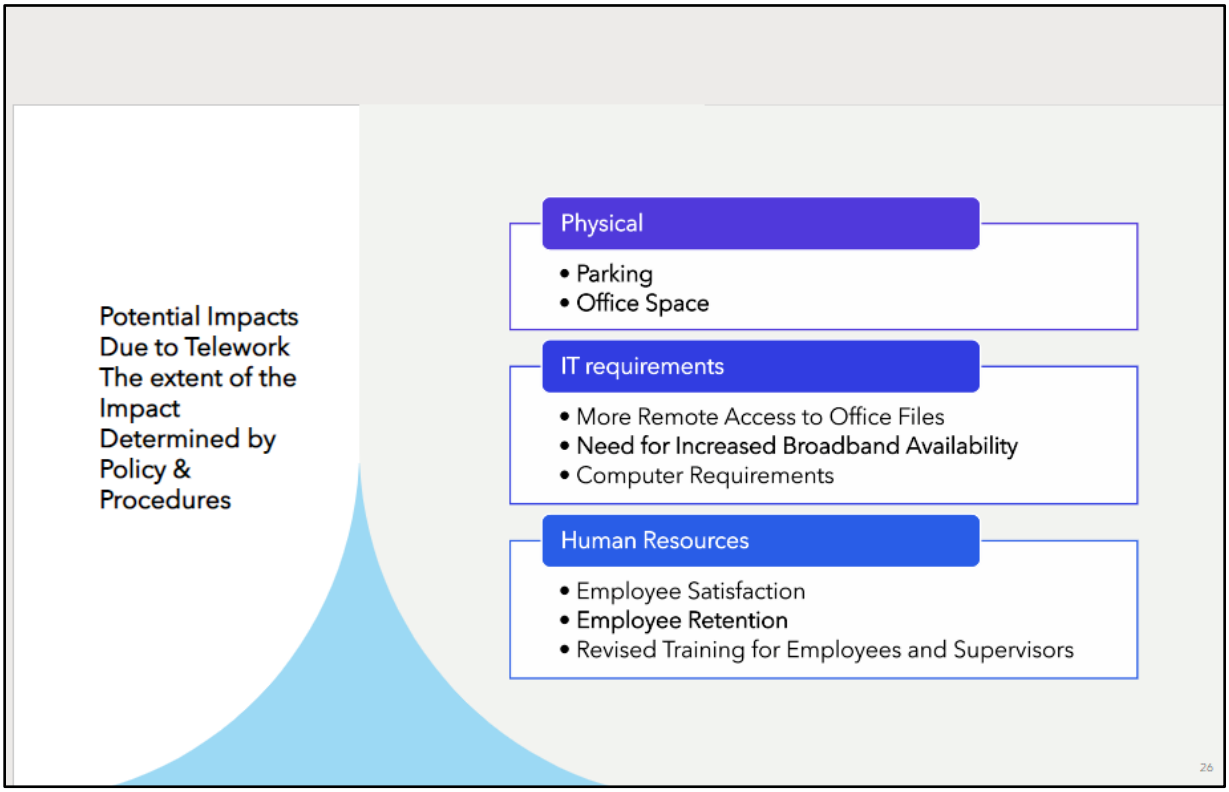
NON-TRAFFIC IMPACTS OF TELEWORK CHANGES

The shift in preferred travel mode from predominantly single drivers before the pandemic to a combination of telework and driving to work in the future will have implications beyond reducing traffic congestion.

Drive-alone trips eliminated by telework can contribute to office efficiency by reducing the need for office and parking spaces and other office expenses. In addition, teleworking can contribute to better employee recruitment and retention by improving employee morale and boosting job satisfaction.

The open-ended survey items generally supported the findings of our best practices research as well. Survey respondents agreed that many of the intended and non-intended potential impacts of telework are likely to occur if State employees were given their preferred number of telework days in the future.

Figure 20: Non-Traffic Impacts of Telework Choice



Similarly, the downside impacts of telework were supported by the survey results and best practices research. Increasing telework days will generate a need to expand and improve communications and technology, develop procedures to facilitate efficient operations, and integrate them with existing systems.

APPENDIX

APPENDIX A – SURVEY INSTRUMENT AND METHODS

Survey Methods

Separate survey samples were developed for the State of Hawai'i Executive Branch Departments under the jurisdiction of the Department of Human Resources Development (DHRD), the Department of Education (DOE), and the City and County of Honolulu. Two survey instruments were developed, one for the State Executive Branch employees supported by DHRD, and a separate survey for employees of the City and County of Honolulu. This report covers survey responses for State employees only. A separate report was prepared for the City and County of Honolulu, and the data from DOE respondents was delivered to the DOE for analysis.

Survey Population

Based on the 2020 Report on State of Hawai'i Executive Branch Workforce Profile to the Thirty-First State Legislature 2021 Regular Session submitted December 2020, which provides the workforce demographic data as of June 30, 2020, there were a total of 14,646 employees in the personnel system administered by DHRD. Of those, 11,117 had State email addresses with the Hawaii.gov extension and were sent a link to the survey. The emails included employees that do not work on O'ahu but did not include the State of Hawai'i Library employees since their email addresses do not have the Hawaii.gov extension. There was an overall response rate of 42%.

Only the 3,986 survey responses from O'ahu employees were used for the WWYL analysis. According to DHRD there are 10,479 employees on O'ahu. Therefore, the response rate for O'ahu employees is 38%

The Survey Instrument

After discussion with the client and project team, an initial draft of the survey instrument was produced by the Redhill Group. They designed an instrument that was suited to online administration and would cover the content specified in the original project description. The initial draft was then reviewed by the WWYL Steering Committee. Over several weeks, the Steering Committee, the staff at SMS and Redhill Group worked diligently to perfect a survey instrument that would work for survey recipients and supply the information needs of all parties. The survey was then pre-tested by SMS and some changes were made before a final draft was produced and approved. A Copy of the State WWYL Survey for 2021 is attached as Appendix I.

Data Collection and Quality Control

Once the email lists were prepared and survey instrument was approved, the project was ready for mailing. One week prior to the initial email, an email was sent out to State Executive Branch employees by the Governor's Office describing the survey project and encouraging participation. On June 6, 2021, emails with a link to the survey were sent out. Reminder emails were sent six days after the survey emailing. Response was quick and data collection was terminated on June 15, 2021.

The survey population prepared by the State included all employees who had State email addresses (11,117 surveys emailed.). A small number of those that responded (368) work on the neighbor islands. Those responses were not included in the analysis[7]. In the end, 3,986 surveys were completed by O‘ahu employees. The sample error estimate, an indicator of precision and reliability, was calculated to be plus-or-minus 1.5 percentage points at the 95 percent confidence level.

The survey data were weighted to represent 10,479 employees based on the demographics in the 2020 Report on State of Hawai’i Executive Branch Workforce Profile to the Thirty-First State Legislature 2021 Regular Session submitted December 2020.

The response rate was relatively high at 38.0 percent. That included 1,138 supervisors and 2,856 non-supervisory employees; 3,263 people with telework experience during the pandemic and 723 persons who experienced no telework during the pandemic. The respondent group was distributed by age, gender, years of service to the state, and bargaining unit in a similar manner as the large group of employees. That relationship was made perfect by the weighting procedure. Overall, the results of the survey are representative of the target group (State Executive Branch employees with working e-mail addresses located in the City and County of Honolulu).

[7] The excluded survey results were delivered to the State to be used in their analysis of non-O‘ahu teleworkers.

Survey Instrument (Red numbers are percent of respondents choosing this response, note there may have been some small changes during analysis.)

WWYL State Final

Intro

Thank you for participating in this confidential survey. Please click the NEXT button below to start survey.

"Prepared by the City & County of Honolulu Department of Transportation Services and the State of Hawaii Office of Planning, in cooperation with the Oahu Metropolitan Planning Organization and the United States Department of Transportation."

*This question is required.

DepartmentEmployed

1. Please indicate your department.

Department of... *

Accounting & General Services	4.6
Agriculture	1.1
Attorney General	5.0
Budget & Finance	2.4
Business, Economic Development & Tourism	3.3
Commerce & Consumer Affairs	6.4
Defense	1.9
Education	20.3
Hawaiian Home Lands	1.1
Health	18.4
Human Resources Development	1.2
Human Services	14.6
Labor & Industrial Relations	3.1
Land & Natural Resources	4.4
Office of the Governor	0.4
Office of the Lieutenant Governor	0
Public Safety	2.3
Taxation	2.4
Transportation	7.2

2. Which level of the DOE are you employed? *

State level	57.7
Complex level	9.8
School level	32.5

3. Which Division are you employed? *

Administration	12.7
Airports	15.5
Harbors	13.9
Highways	57.9

Years Worked

4. How many years have you worked for State Government? [Check only one] *

Less than one year	3.8
1 to 4 years	20.5
5 to 9 years	19.6
10 to 14 years	13.1
15 to 19 years	12.9
20 to 24 years	11.9
25 to 29 years	8.1
30 or more years	10.1

BargainingUnit

5. Are you a member of a bargaining unit? [Check only one] *

Yes	79.1
No	20.9

BUType

6. What bargaining unit do you belong to? Please select one response in the dropdown menu below. *

BU 1, UPW, blue collar, non-supervisory	0.5
BU 2, HGEA, blue collar, supervisory	0.3
BU 3, HGEA, white collar, non-supervisory	33.6
BU 4, HGEA, white collar, supervisory	2.5
BU 6, HGEA, education officers	8.3
BU 9, HGEA, registered professional nurses	2.2
BU 10, UPW, institutional, health, and correctional workers	0.4
BU 11, HFFA, firefighters	0.1
BU 13, HGEA, white collar, professional or scientific employees	51.8
BU 14, HGEA, State law enforcement officers	0.4

ZipCodeHome

7. What is your Zip Code at home? *

Zip code	Percent	Zip code	Percent
96701	5.2	96793	.0
96704	.0	96795	.8
96706	5.9	96796	.0
96707	4.7	96797	6.4
96709	.0	96806	.0
96712	.3	96809	.0
96717	.2	96810	.0
96720	.0	96812	.0
96730	.1	96813	4.9
96731	.2	96814	2.6
96732	.0	96815	2.1
96734	4.0	96816	7.4
96741	.0	96817	5.7
96744	8.3	96818	4.3
96746	.0	96819	3.3
96761	.0	96821	2.5
96762	.1	96822	6.0
96764	.0	96823	.1
96769	.0	96824	.0
96782	4.4	96825	4.4
96786	1.4	96826	3.2
96789	7.4	96828	.0
96791	.5	96837	.0
96792	2.9	96839	.1
		99999	.2

ZipCodeWork

8. What is your Zip Code at your worksite? *

Zip code	Percent	Zip code	Percent
96701	1.9	96804	.2
96706	.7	96805	.0
96707	9.7	96809	.2
96709	.1	96810	.1
96712	.0	96811	.1
96717	.0	96812	.1
96730	.0	96813	44.2
96731	.1	96814	1.7
96734	1.4	96815	.8
96744	3.4	96816	9.2
96762	.1	96817	8.8
96782	5.2	96818	.5
96786	.8	96819	5.2
96789	.4	96820	.0
96791	.1	96821	.5
96792	1.2	96822	.6
96795	.1	96823	.0
96797	1.7	96825	.2
96801	.1	96826	.3
96803	.0	96827	.0
		96850	.0
		96853	.0

Supervise

9. How many people do you directly supervise? [Check only one] *

None, or self only 69.0
1 to 5 people 17.4
6 to 10 people 5.6
11 to 19 people 3.1
20 to 35 people 1.4
More than 35 people 3.5

WorkFromHome

10. Between March 1, 2020 and March 31, 2021, did you telework (i.e. at home) for more than a day or two with the approval of your supervisor? [Check only one] *

Yes 82.4
No, never 17.6

DaysWorkHome

11. About how many days did you telework from home between March 1, 2020 and March 31, 2021? [Check only one] *

Fewer than 20 days (1 month) 16.2
21 to 60 days (1+ to 3 months) 13.5
61 to 120 days (3+ to 6 months) 13.6
121 to180 days (6+ to 9 months) 12.6
181 to 240 days (9+ to 12 months) 19.7
The whole time, 241 to 260 days (12+ to 13 months) 24.4

PercentWorkHome

12. What percent of your job do you think can be done teleworking at home? [Check only one] *

None, 0% of my job can be done working at home 5.5
1% to 20% of my job can be done at home 9.3
21% to 40% of my job 8.3
41% to 60% of my job 12.1
61% to 80% of my job 17.7
81% to 100% of my job 47.1

WorkSchedule

13. BEFORE the COVID-19 pandemic, what was your work schedule? [Check only one] *

Regular work week, 5-days, 8 hours a day 95.1
Some other schedule 4.9

TripToWork

14. BEFORE the COVID-19 pandemic, how long did your trip to work take on a typical day? [Check only one] *

Less than 15 minutes	13.5
15-30 minutes	32.5
31-45 minutes	24.2
46-60 minutes	17.6
61-90 minutes	8.8
91-120 minutes	2.6
Over two hours	0.8

MilesToWork

15. BEFORE the COVID-19 pandemic, how many miles did you travel on your trip from home to work? Please estimate if you are not sure. [Check only one] *

Less than 1 mile	3.5
1-2 miles	9.1
3-4 miles	11.7
5-7 miles	15.8
8-10 miles	12.0
11-15 miles	20.0
16-20 miles	13.0
21-30 miles	11.1
Over 30 miles	3.7

TimeLeaveHome

16. BEFORE the COVID-19 pandemic, between what times did you usually leave home to go to work? [Check only one] *

3:00 am to 5:59 am	17.1
6:00am to 8:59 am	80.8
9:00 am to 2:59 pm	0.8
3:00 pm to 6:59 pm	0.8
7:00 pm to 2:59 am	0.4

TimeLeaveWork

17. BEFORE the COVID-19 pandemic, between what times did you usually leave work to go home? [Check only one] *

3:00 am to 5:59 am	6.9
6:00am to 8:59 am	4.5
9:00 am to 2:59 pm	1.4
3:00 pm to 6:59 pm	85.0
7:00 pm to 2:59 am	2.2

CommuteToWork

18. BEFORE the COVID-19 pandemic, in a typical 5-day work week, how many days per week did you use each of the following ways to commute to work? If you used more than one travel method per day, select the method you used for the longest distance. (Enter the number of days you used each transportation method. The total of all the boxes must equal 5.) *

Travel Method	0 Days	1 Day	2 Days	3 Days	4 Days	5 Days
No travel, worked from home	88.0%	2.2%	4.0%	1.6%	1.6%	2.4%
Rode a bicycle	90.0%	2.5%	.9%	1.1%	.6%	4.9%
Other	81.5%	1.3%	2.1%	1.0%	.6%	13.5%
Walked to work	77.1%	2.2%	2.2%	1.9%	.3%	16.3%
In a carpool, vanpool, or HandiVan	51.9%	3.0%	3.2%	4.2%	3.2%	34.5%
Rode TheBus	54.3%	1.7%	2.5%	3.7%	2.7%	35.1%
Drove alone	3.1%	1.5%	2.0%	1.9%	1.4%	90.1%

StopsToWork

19. BEFORE the COVID-19 pandemic, in a typical 5-day work week how many days per week did you make any of the following stops ON YOUR WAY TO WORK? (Enter the number of days you made each stop during the work week.)

Type of Stops	0 Days	1 Day	2 Days	3 Days	4 Days	5 Days	6-7 Days
Drop-off/pick up another person	42.8%	4.1%	3.6%	4.8%	1.5%	43.3%	0.0%
Buy food (coffee, breakfast, dinner)	29.9%	20.3%	15.2%	13.9%	3.4%	17.1%	0.0%
Exercise (gym, jog, etc.)	80.4%	2.9%	4.4%	5.3%	1.6%	5.1%	.3%
Other: _____	86.1%	4.3%	2.9%	1.4%	.5%	4.8%	0.0%
Buy goods (groceries, clothes, gas)	40.2%	34.2%	13.8%	8.4%	1.2%	2.3%	0.0%
Other errands (post office, library, etc.)	62.0%	23.3%	9.4%	3.7%	.4%	1.3%	0.0%
Buy services (dry cleaner, banking, pet care)	80.5%	12.6%	4.3%	1.8%	.2%	.7%	0.0%

StopsToHome

20. BEFORE the COVID-19 pandemic, in a typical 5-day work week, how many days per week did you make any of the following stops ON YOUR WAY HOME FROM WORK? (Enter the number of days you made each stop during the work week.)

Type of Stops	0 Days	1 Day	2 Days	3 Days	4 Days	5 Days	6-7 Days
Drop-off/pick up another person	43.1%	5.9%	5.5%	5.6%	2.1%	37.7%	.1%
Exercise (gym, jog, etc.)	55.1%	7.7%	13.4%	12.2%	3.1%	8.5%	.1%
Buy food (coffee, breakfast, dinner)	20.1%	29.1%	24.5%	14.5%	3.9%	7.9%	0.0%
Buy goods (groceries, clothes, gas)	11.0%	37.9%	29.0%	16.7%	2.2%	3.2%	0.0%
Other errands (post office, library, etc.)	31.5%	43.0%	15.6%	5.9%	.9%	3.2%	0.0%
Buy services (dry cleaner, banking, pet care)	50.1%	35.1%	9.4%	3.2%	.4%	1.9%	0.0%
Other: _____	74.8%	9.9%	5.8%	3.7%	1.4%	4.4%	.1%

TeleCommuteToWork

21. Between March 1, 2020 and March 31, 2021, during a week that you teleworked, how many days per week did you use each of the following ways to commute? If you used more than one travel method per day, select the method you used for the longest distance. (Enter the number of days you used each transportation method. The total of all the boxes must equal 5.) *

Travel Method	0 Days	1 Day	2 Days	3 Days	4 Days	5 Days
Drove alone	11.9%	18.3%	20.3%	18.4%	5.1%	26.0%
In a carpool, vanpool, or HandiVan	71.3%	5.9%	7.5%	5.8%	2.0%	7.4%
Rode TheBus	81.3%	3.3%	2.3%	5.0%	1.2%	6.9%
Other	82.2%	3.6%	4.6%	3.5%	1.3%	4.9%
Walked to work	89.1%	2.4%	2.0%	1.5%	1.8%	3.1%
Rode a bicycle	94.1%	2.6%	1.0%	.6%	.8%	1.0%

FutureModeOfTravel

22. In the future, how many days per week would be your preferred methods of travel to work? If you use more than one travel method per day, select the method you will use for the longest distance. (Enter the number of days you prefer to use each transportation method. The total of all the boxes must equal 5.) *

Travel Method	0 Days	1 Day	2 Days	3 Days	4 Days	5 Days
Drive alone	6.5%	15.2%	20.0%	12.7%	3.3%	42.3%
No travel, work from home	5.7%	4.5%	16.2%	24.6%	17.8%	31.3%
Ride TheBus	65.8%	6.4%	6.5%	3.4%	1.7%	16.2%
In a carpool, vanpool, or HandiVan	59.1%	8.2%	7.1%	8.2%	2.0%	15.5%
Other	81.9%	3.3%	3.7%	2.7%	.3%	8.1%
Walk to work	77.5%	5.0%	5.3%	3.4%	1.0%	7.8%
Ride a bicycle	84.4%	5.8%	4.8%	1.5%	.3%	3.1%

OfferedFewerDays

23. In the future, working from home may require a signed telework agreement with your employer. If telework becomes an option for you, it is possible that the number of days you will be permitted to telework will be fewer than you indicated in the previous question. If you were offered fewer days would you still want to telework or would you decide to commute to the office every day? [Check only one] *

I would telework the fewer number of days	91.5
I would commute to my worksite everyday	0.9
Not sure what I would choose	7.6

InternetProvider

24. Who is your internet provider at home? [Check only one] *

Hawaiian Telcom	24.5
Spectrum	71.5
A cellular provider	1.5
Other	1.3
No internet service at home	1.2

ComputerAtHome

25. When teleworking, is/was the computer/tablet/smartphone you work on at home provided by your employer or your own personal computer? [Check only one] *

Machine was provided by employer	69.2
My personal or family's computer/tablet/smartphone	30.4
No computer/tablet/smartphone at home	0.4

HHSize

26. Including yourself, how many people currently live in your household? [Check only one] *

One	11.5
Two	28.0
Three	23.3
Four	20.2
Five or more	17.0

Under18

27. How many are children under 18 years old? [Check only one] *

None	59.4
One	19.4
Two	15.2
Three to five	5.8
Six or more	0.2

ChildCare

28. During the COVID-19 pandemic, did you have additional daytime childcare responsibilities? (for example, helping with virtual learning, daycare, etc.) [Check only one] *

Yes	58.0
No	42.0

AdultCare

29. During the COVID-19 pandemic, did you have additional daytime care responsibilities for an adult(s)? [Check only one] *

Yes	15.0
No	85.0

AdultsTeleworking

30. Not counting yourself, how many adults (18+) were usually teleworking/attending school virtually at the same time you were working? [Check only one] *

None	45.6
One	35.2
Two	12.4
Three	4.7
Four	1.5
Five or more	0.5

StudentsVirtualSchool

31. How many students (under 18 years old) are/were attending school virtually at your home? [Check only one] *

0	62.8
1	19.5
2	13.6
3 or more	4.1

TeleworkExperience1

32. Based on your telework experience, was each of the following better at home or at your worksite? *

	Much better at home	Better at Home	Home and Worksite are the same	Better at Worksite	Much better at worksite	Not Applicable
Access to non-computer equipment (eg. copy machine)	3.8%	1.5%	21.9%	36.2%	32.7%	3.8%
Access to databases on the State network	5.1%	2.0%	59.1%	16.3%	15.0%	2.5%
Access to work-related files on State network	5.3%	2.1%	59.7%	17.2%	14.6%	1.2%
Physical arrangement of my workspace	24.1%	13.4%	31.7%	17.6%	12.8%	.4%
Computer equipment	11.7%	6.2%	53.7%	16.5%	11.4%	.5%
Access to software	7.1%	2.7%	65.5%	12.3%	10.9%	1.6%
Internet speed	14.7%	8.8%	52.9%	12.8%	10.4%	.5%
Ability to track work status	13.3%	7.1%	61.5%	8.2%	8.3%	1.6%
My work schedule	44.6%	18.8%	26.5%	4.4%	5.1%	.7%

TeleworkExperience2

33. Based on your telework experience, was each of the following better at home or at your worksite? *

	Much better at home	Better at Home	Home and Worksite are the same	Better at Worksite	Much better at worksite	Not applicable
Social interaction with coworkers	6.2%	3.7%	31.4%	36.3%	20.4%	2.0%
Ability to collaborate or partner with coworkers	8.8%	4.8%	54.8%	19.8%	10.7%	1.2%
Ability to mentor or be mentored	7.2%	3.6%	50.8%	19.3%	10.1%	9.0%
Access to supervisors	7.0%	3.6%	67.3%	13.1%	8.2%	.8%
Productivity	31.5%	19.4%	34.6%	7.3%	6.8%	.3%
Access to training	10.1%	5.2%	65.7%	8.3%	6.3%	4.4%
Ability to focus with minimal interruptions	39.3%	21.2%	26.1%	7.2%	6.0%	.2%
Noise level	36.4%	20.0%	28.6%	8.9%	5.7%	.4%
Work/Life balance	49.3%	23.3%	17.7%	4.8%	4.3%	.6%
Flexible work hours	49.4%	20.6%	23.5%	1.2%	2.0%	3.4%
Commute time	81.2%	10.9%	4.0%	.7%	1.1%	2.1%

NoTeleworkExperience1

34. Do you think each of the following would be better working at home or at your worksite? *

	Much better at home	Better at home	Home and worksite would be the same	Better at worksite	Much better at worksite	Not applicable
Access to non-computer equipment (eg, copy machine)	1.5%	1.5%	13.4%	26.0%	55.2%	2.4%
Access to work-related files on the State network	3.5%	1.9%	26.5%	21.6%	43.3%	3.1%
Access to databases on the State network	3.3%	2.6%	27.9%	20.2%	42.7%	3.3%
Physical arrangement of my workspace	10.5%	5.5%	21.3%	18.9%	41.1%	2.7%
Access to software	3.8%	2.3%	31.3%	19.8%	39.1%	3.8%
Computer equipment	7.5%	3.2%	28.9%	19.2%	38.7%	2.4%
Ability to track work status	5.1%	3.3%	33.3%	16.2%	37.2%	4.9%
Internet speed	8.0%	5.8%	33.1%	16.1%	33.8%	3.2%
My work schedule:	15.8%	8.9%	26.8%	13.1%	31.0%	4.4%

NoTeleworkExperience2

35. Do you think each of the following would be better working at home or at your worksite? *

	Much better at home	Better at home	Home and worksite would be the same	Better at worksite	Much better at worksite	Not applicable
Social interaction with coworkers	2.1%	1.6%	18.1%	31.9%	43.1%	3.3%
Ability to collaborate or partner with coworkers	2.2%	2.3%	27.9%	24.4%	40.9%	2.4%
Ability to mentor or be mentored	2.3%	1.7%	24.4%	27.1%	38.5%	6.0%
Access to supervisors	2.2%	1.4%	37.2%	20.6%	35.6%	3.0%
Productivity	12.2%	7.7%	29.5%	15.8%	32.9%	1.8%
Access to training	5.2%	3.3%	38.8%	18.5%	31.0%	3.2%
Ability to focus with minimal interruptions	15.9%	14.4%	23.6%	15.6%	28.0%	2.5%
Noise level	19.8%	14.9%	25.5%	12.5%	23.6%	3.6%
Work/Life balance	22.3%	15.8%	28.2%	11.4%	18.6%	3.6%
Flexible work hours	28.1%	16.7%	23.8%	6.8%	15.3%	9.2%
Commute time	52.5%	15.1%	10.0%	4.2%	11.6%	6.5%

TeleworkSatisfaction

36. Overall, how satisfied are you with your telework experience? [Check only one] *

Very satisfied 67.7
Satisfied 19.7
Neutral 8.4
Dissatisfied 2.9
Very Dissatisfied 1.3

InterestedTeleworking

37. All things considered, how interested would you be in teleworking from home in the near future? [Check only one] *

Very interested 70.8
Somewhat interested 11.9
Neutral 7.0
Somewhat uninterested 3.3
Not at all interested 7.0

PercentSupervise

38. You indicated earlier that you directly supervise other people. Please answer the following 6 questions as a supervisor. What percent of the work done by the employees that you directly supervise can be done as telework? [Check only one] *

0% none, all the work needs to be done at the worksite 9.0
1% to 20% of the work 13.4
21% to 40% of the work 10.7
41% to 60% of the work 12.4
61% to 80% of the work 15.9
81% to 99% of the work 26.1
100% All of the work 12.4

Employees Supervised

39. Between March 1, 2020 and March 31, 2021, about how many employees that you directly supervised did at least some telework? [Check only one] *

None, or self only 13.9
1 to 5 people 54.2
6 to 10 people 15.2
11 to 19 people 7.5
20 to 35 people 3.6
More than 35 people 5.6

PercentEmployeesTelework

40. Between March 1, 2020 and March 31, 2021, about what percent of the time did your employees telework? [Check only one] *

1% to 20% of the time	14.7
21% to 40% of the time	13.6
41% to 60% of the time	21.0
61% to 80% of the time	17.5
81% to 100% of the time	33.1

TeleworkingEmployees

41. Based on your experience supervising telework employees, was each of the following better when they worked at home or better at the workplace? *

	Much better working from home	A little better working from home	About the same	A little better at the worksite	Much better at the worksite
Collaboration among staff	9.8%	7.0%	41.7%	22.3%	19.2%
Monitoring productivity	9.4%	6.4%	46.9%	18.2%	19.0%
Training Staff	6.7%	5.8%	44.5%	23.9%	19.0%
Mentoring staff	8.2%	5.8%	40.8%	26.8%	18.4%
Motivating staff	12.7%	10.8%	43.2%	17.0%	16.3%
Providing guidance for staff advancement	7.4%	6.6%	51.3%	18.6%	16.0%
Staff productivity	14.9%	14.2%	39.7%	15.1%	16.0%
Managing work schedules	14.4%	11.2%	48.7%	11.4%	14.3%
Facilitating meetings	12.1%	9.2%	51.3%	14.5%	12.9%
Employee morale	25.9%	19.4%	31.8%	12.4%	10.4%

NoTeleworkingEmployees

42. Do you think each of the following would be better with employees at home or at the worksite? *

	Much better working from home	A little better working from home	About the same	A little better at the worksite	Much better at the worksite
Monitoring productivity	2.8%	2.3%	29.3%	17.7%	47.9%
Collaboration among staff	3.7%	3.3%	26.5%	18.6%	47.9%
Staff productivity	5.6%	4.7%	25.6%	16.3%	47.9%
Mentoring staff	4.7%	1.4%	23.7%	23.3%	47.0%
Motivating staff	4.2%	6.0%	29.3%	15.8%	44.7%
Training Staff	2.3%	2.8%	25.1%	25.6%	44.2%
Providing guidance for staff advancement	2.3%	1.9%	31.6%	20.9%	43.3%
Managing work schedules	6.0%	7.0%	36.3%	11.2%	39.5%
Facilitating meetings	5.1%	3.7%	39.1%	13.0%	39.1%
Employee morale	10.2%	11.6%	28.8%	13.5%	35.8%

MeasureStaffProductivity

43. How did you monitor staff productivity when they teleworked?

(See Appendix)

InterestedEmployeeTelework

44. All things considered, how interested would you be in having your employees work from home (teleworking)? [Check only one] *

Very interested	48.2
Somewhat interested	17.0
Neutral	11.4
Somewhat uninterested	7.7
Not at all interested	15.7

AllowEmployeeTelework

45. In a typical 5-day work week, how many days per week would you prefer to ALLOW YOUR EMPLOYEES to work from home using telework? [Check only one] *

5 days, all the time	22.9
4 days	21.9
3 days	30.3
2 days	20.8
1 day ONLY	4.2

Gender

46. The next few questions are for classification purposes only... What is your gender? *

Male	29.9
Female	64.7
Non-binary	0.4
Prefer not to answer	5.1

Age

47. What is your age? *

18 to 24	0.8
25 to 34	10.9
35 to 44	19.4
45 to 54	28.1
55 to 64	28.1
65 to 69	5.2
70 or older	1.8
Prefer not to answer	5.6

HHIncome

48. In 2020 what was your estimated household income? *

Less than $10,000	0.2
$10,000 to $14,999	0.3
$15,000 to $24,999	0.8
$25,000 to $34,999	3.7
$35,000 to $49,999	7.7
$50,000 to $74,999	15.7
$75,000 to $99,999	14.0
$100,000 to $124,999	14.1
$125,000 to $149,999	9.8
$150,000 to $199,999	10.7
$200,000 or more	5.7
Prefer not to answer	17.2

TeleworkComments

49. In the space below please feel free to write any comments related to teleworking.

(See Appendix)

Thank You!

Thank you for taking this survey. Your response is very important.

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APPENDIX B: DATA TABULATIONS , SECTION 1

Table B-1: Telework Experience by State Department

		Telework Experience					
		No Telework		Telework Experience		Total	
		Count	Row %	Count	Row %	Count	Row %
State Department	Business, Economic Development & Tourism	10	5.4%	183	94.6%	193	100.0%
	Human Resources Development	4	6.1%	59	93.9%	63	100.0%
	DOT Administration	13	6.4%	191	93.6%	204	100.0%
	Commerce & Consumer Affairs	26	7.3%	325	92.7%	350	100.0%
	Land & Natural Resources	53	8.4%	576	91.6%	629	100.0%
	Attorney General	70	14.1%	428	85.9%	499	100.0%
	Hawaiian Home Lands	15	15.0%	86	85.0%	101	100.0%
	Human Services	257	18.1%	1,161	81.9%	1,418	100.0%
	Accounting & General Services	97	18.2%	437	81.8%	535	100.0%
	Health	361	18.7%	1,568	81.3%	1,929	100.0%
	DOT Harbors	246	24.9%	743	75.1%	989	100.0%
	Budget & Finance	67	26.0%	191	74.0%	258	100.0%
	Agriculture	65	30.0%	153	70.0%	218	100.0%
	Administrative Offices	11	30.4%	26	69.6%	37	100.0%
	Defense	87	31.1%	192	68.9%	279	100.0%
	Labor & Industrial Relations	118	36.5%	205	63.5%	324	100.0%
	DOT Highways	93	37.0%	159	63.0%	252	100.0%
	Taxation	121	46.2%	141	53.8%	262	100.0%
	Public Safety	930	54.4%	781	45.6%	1,711	100.0%
	DOT Airports	126	55.3%	102	44.7%	227	100.0%
	Total	2,772	26.5%	7,707	73.5%	10,479	100.0%

Note: State Executive Branch O‘ahu employee population (10,479).

Table B-2: Days Teleworked per Week During the Pandemic

About how many days did you telework from home between March 1, 2020 and March 31, 2021? [Check only one]		Telework Experience			
		Telework Experience		Total	
		Count	Row %	Count	Row %
Days per Week	Fewer than 20 days (1 month)	1,371	100.0%	1,371	100.0%
	21 to 60 days (1+ to 3 months)	1,132	100.0%	1,132	100.0%
	61 to 120 days (3+ to 6 months)	1,096	100.0%	1,096	100.0%
	121 to180 days (6+ to 9 months)	1,006	100.0%	1,006	100.0%
	181 to 240 days (9+ to 12 months)	1,417	100.0%	1,417	100.0%
	The whole time, 241 to 260 days (12+ to 13 months)	1,683	100.0%	1,683	100.0%
	Total	7,707	100.0%	7,707	100.0%

Note: State Executive Branch O‘ahu employee population (10,479).

Table B-3: Work-Related Characteristics of Telework and Non-Teleworking State Employees

B-2: Work-Related Characteristics for Teleworkers and Non-Teleworkers

Between March 1, 2020 and March 31, 2021, did you telework (i.e., work from home) for more than a day or two, with the approval of your supervisor?		Between March 1, 2020 and March 31, 2021, did you telework (i e at					
		Has Telework		No Telework		Total	
		Count	Col %	Count	Col %	Count	Col %
Supervisor / Non-supervisor	Non-supervisor	5,607	72.8%	1,913	69.0%	7,521	71.8%
	Supervisor	2,099	27.2%	859	31.0%	2,958	28.2%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
Are you a member of a bargaining unit?	Yes	5,842	75.8%	2,099	75.7%	7,940	75.8%
	No	1,865	24.2%	674	24.3%	2,539	24.2%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
Who is your internet provider at home?	Hawaiian Telcom	1,948	25.3%	537	19.4%	2,485	23.7%
	Spectrum	5,517	71.6%	2,033	73.3%	7,550	72.0%
	Acellular provider	90	1.2%	57	2.0%	147	1.4%
	Other	101	1.3%	80	2.9%	181	1.7%
	No internet service at home	51	.7%	66	2.4%	116	1.1%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
When teleworking, was the computer you work on at home provided by your employer or your own personal computer?	Computer/tablet/smartphone is provided by employer	5,002	64.9%	*not asked*		5,002	64.9%
	My personal or family's computer/tablet/smartphone	2,678	34.7%			2,678	34.7%
	No computer/tablet/smartphone at	27	.3%			27	.3%
	Total	7,707	100.0%			7,707	100.0%
BEFORE the COVID-19 pandemic, what was your work schedule?	Regular work week, 5-days, 8 hours	7,339	95.2%	2,494	90.0%	9,832	93.8%
	Some other schedule	368	4.8%	279	10.0%	647	6.2%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
Years worked for the State.	Less than one year	532	6.9%	560	20.2%	1,092	10.4%
	1 to 4 years	1,934	25.1%	495	17.8%	2,429	23.2%
	5 to 9 years	1,653	21.4%	376	13.6%	2,029	19.4%
	10 to 14 years	1,013	13.1%	351	12.6%	1,364	13.0%
	15 to 19 years	912	11.8%	293	10.6%	1,206	11.5%
	20 to 24 years	654	8.5%	244	8.8%	899	8.6%
	25 to 29 years	551	7.1%	171	6.2%	722	6.9%
	30 or more years	457	5.9%	283	10.2%	740	7.1%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%

Asked of all employees.

Note: State Executive Branch O'ahu employee population (10,479).

Table B-4: Demographic Characteristics for Teleworkers and Non-Teleworkers

B-3: Demographic Characteristics for Teleworkers and Non-Teleworkers

Between March 1, 2020 and March 31, 2021, did you telework (i.e., work from home) for more than a day or two, with the approval of your supervisor?		Between March 1, 2020 and March 31, 2021, did you telework (i.e. at					
		Has Telework		No Telework		Total	
		Count	Column N %	Count	Column N %	Count	Column N %
The next few questions are for classification purposes only What is your gender?	Male	2,981	38.7%	1,215	43.8%	4,196	40.0%
	Female	4,254	55.2%	1,383	49.9%	5,637	53.8%
	Non-binary	26	.3%	2	.1%	28	.3%
	Prefer not to answer	446	5.8%	172	6.2%	618	5.9%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
Age	Less than 25	178	2.3%	32	1.2%	210	2.0%
	25 to 29	1,205	15.6%	374	13.5%	1,579	15.1%
	30 to 39	1,613	20.9%	444	16.0%	2,058	19.6%
	40 to 49	1,971	25.6%	764	27.6%	2,735	26.1%
	50 to 59	2,129	27.6%	861	31.1%	2,991	28.5%
	60 to 69	402	5.2%	201	7.3%	603	5.8%
	70 or older.	208	2.7%	95	3.4%	303	2.9%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
Including yourself, how many people currently live in your household?	One	882	11.4%	357	12.9%	1,239	11.8%
	Two	2,282	29.6%	760	27.4%	3,041	29.0%
	Three	1,866	24.2%	637	23.0%	2,503	23.9%
	Four	1,500	19.5%	524	18.9%	2,024	19.3%
	Five or more	1,177	15.3%	494	17.8%	1,671	15.9%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
How many are children under 18 years old?	None	4,184	61.3%	1,520	62.9%	5,705	61.7%
	One	1,298	19.0%	396	16.4%	1,694	18.3%
	Two	981	14.4%	341	14.1%	1,322	14.3%
	Three to five	351	5.1%	156	6.4%	506	5.5%
	Six or more	11	.2%	2	.1%	13	.1%
	Total	6,824	100.0%	2,415	100.0%	9,240	100.0%
During the pandemic, did you have extra childcare responsibility?	Yes	1,657	62.8%	474	52.9%	2,131	60.3%
	No	983	37.2%	421	47.1%	1,404	39.7%
	Total	2,640	100.0%	895	100.0%	3,535	100.0%
Not counting yourself, how many adults (18+) were usually teleworking or attending school virtually at the same time you were working?	None	3,207	47.0%	*not asked*		3,207	47.0%
	One	2,316	33.9%			2,316	33.9%
	Two	820	12.0%			820	12.0%
	Three	367	5.4%			367	5.4%
	Four	88	1.3%			88	1.3%
	Five or more	27	.4%			27	.4%
	Total	6,824	100.0%			6,824	100.0%
During the pandemic, did you have extra care responsibility for an adult?	Yes	970	14.2%	376	15.6%	1,346	14.6%
	No	5,855	85.8%	2,039	84.4%	7,894	85.4%
	Total	6,824	100.0%	2,415	100.0%	9,240	100.0%
How many students (under 18) were attending school virtually at your home? [Check only one]	0	2,940	65.2%	*not asked*		2,940	65.2%
	1	810	18.0%			810	18.0%
	2	565	12.5%			565	12.5%
	3 or more	194	4.3%			194	4.3%
	Total	4,509	100.0%			4,509	100.0%

Asked of all employees.

Note: State Executive Branch O'ahu employee population (10,479).

Table B-5: Travel to Work Characteristics for Teleworkers and Non-Teleworkers

B-4: Travel to Work Characteristics for Teleworkers and Non-Teleworkers

Between March 1, 2020 and March 31, 2021, did you telework (i.e., work from home) for more than a day or two, with the approval of your supervisor?		Between March 1, 2020 and March 31, 2021, did you telework (i.e. at					
		Has Telework		No Telework		Total	
		Count	Column N %	Count	Column N %	Count	Column N %
BEFORE the COVID-19 pandemic, how many miles did you travel on your trip from home to work? Please estimate if you are not sure.	Less than 1 mile	213	2.8%	70	2.5%	283	2.7%
	1-2 miles	583	7.6%	223	8.1%	806	7.7%
	3-4 miles	887	11.5%	358	12.9%	1,245	11.9%
	5-7 miles	1,220	15.8%	416	15.0%	1,637	15.6%
	8-10 miles	873	11.3%	396	14.3%	1,268	12.1%
	11-15 miles	1,566	20.3%	493	17.8%	2,059	19.6%
	16-20 miles	1,114	14.5%	366	13.2%	1,480	14.1%
	21-30 miles	970	12.6%	372	13.4%	1,341	12.8%
	Over 30 miles	281	3.7%	78	2.8%	360	3.4%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
BEFORE the COVID-19 pandemic, how long did your trip to work take on a typical day?	Less than 15 minutes	762	9.9%	453	16.3%	1,215	11.6%
	15-30 minutes	2,438	31.6%	1,043	37.6%	3,481	33.2%
	31-45 minutes	2,027	26.3%	615	22.2%	2,641	25.2%
	46-60 minutes	1,448	18.8%	423	15.2%	1,871	17.9%
	61-90 minutes	787	10.2%	172	6.2%	959	9.2%
	91-120 minutes	184	2.4%	63	2.3%	246	2.3%
	Over two hours	61	.8%	3	.1%	65	.6%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%
BEFORE the COVID-19 pandemic, in a typical 5-day work week, how many days per week did work from home?	0	766	84.3%	346	97.6%	1,112	88.0%
	1	26	2.9%	0	0.0%	26	2.1%
	2	45	4.9%	0	0.0%	45	3.5%
	3	21	2.3%	1	.2%	21	1.7%
	4	30	3.3%	0	0.0%	30	2.4%
	5	21	2.3%	8	2.1%	29	2.3%
	Total	909	100.0%	354	100.0%	1,263	100.0%
BEFORE the COVID-19 pandemic, in a typical 5-day work week, how many days per week did you drive to work alone?	0	171	3.0%	60	3.3%	231	3.0%
	1	127	2.2%	17	.9%	144	1.9%
	2	105	1.8%	16	.9%	121	1.6%
	3	136	2.4%	30	1.7%	167	2.2%
	4	87	1.5%	2	.1%	89	1.2%
	5	5,130	89.1%	1,697	93.1%	6,827	90.1%
	Total	5,756	100.0%	1,822	100.0%	7,578	100.0%
What percent of your job do you think can be done teleworking at home?	None, 0% of my job can be done working at home	73	.9%	912	32.9%	985	9.4%
	1% to 20% of my job can be done at home	483	6.3%	462	16.7%	946	9.0%
	21% to 40% of my job	568	7.4%	305	11.0%	873	8.3%
	41% to 60% of my job	902	11.7%	317	11.4%	1,219	11.6%
	61% to 80% of my job	1,481	19.2%	310	11.2%	1,791	17.1%
	81% to 100% of my job	4,200	54.5%	465	16.8%	4,665	44.5%
	Total	7,707	100.0%	2,772	100.0%	10,479	100.0%

Asked of all employees.

Note: State Executive Branch O'ahu employee population (10,479).

Table B-6: Regression Results, Telework Experience on 20 Characteristics

Regression Model 1: Telework Experience by elected Variables, Principal Components Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523a	0.273	0.272	0.376

Predictors: (Constant), What percent of your job can be done from home?, Distance to Work, Adult care responsibility, Regular Work Schedule, Has internet Provider, Childcare responsibility, Household Income, Number of Stops per Week on a Usual Trip to Work., Age, RegKids, BEFORE the COVID-19 pandemic, how long did your trip to work take on a typical day?

Coefficients[a]

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.013	.042		.303	.762		
Age	7.683E-05	.000	.002	.242	.809	.844	1.185
Distance to Work	-.001	.001	-.013	-1.137	.255	.535	1.869
Regular Work Schedule	.114	.016	.062	7.337	.000	.966	1.035
Has internet Provider	.129	.035	.031	3.636	.000	.982	1.018
RegKids	-.024	.005	-.056	-4.969	.000	.546	1.830
Childcare responsibility	.043	.012	.039	3.492	.000	.556	1.799
Before the pandemic, how long was your trip to work on a typical day (in minutes)?	.010	.004	.029	2.507	.012	.531	1.882
Number of Stops per Week on a Usual Trip to Work.	.018	.003	.050	5.750	.000	.926	1.080
Adult care responsibility	.008	.011	.006	.706	.480	.971	1.030
Household Income	5.985E-07	.000	.081	9.386	.000	.926	1.080
What percent of your job can be done from home?	.007	.000	.496	56.225	0.000	.894	1.118

a. Dependent Variable: Telework Experience

APPENDIX C: DATA TABULATIONS, SECTION 2

Table C-1. Telework Evaluation among State Employees by Satisfaction with Telework

Table C1 Telework Evaluation among State Employees by Satisfaction with Telework.

Based on your telework experience, were each of the following better at home or better at your worksite?		Satisfaction with Telework Experience											
		Very dissatisfied			Neutral			Very satisfied			Total		
		Count	Column N %	Mean	Count	Column N %	Mean	Count	Column N %	Mean	Count	Column N %	Mean
Commute time	Problem	96	27.3%		38	6.0%		24	.4%		158	2.1%	
	Same	65	18.5%		57	9.0%		225	3.3%		347	4.5%	
	Advantage	191	54.3%		539	85.1%		6,472	96.3%		7,202	93.5%	
	Total	352	100.0%	63.52	633	100.0%	89.57	6721	100.0%	97.96	7707	100.0%	95.70
Work/life balance	Problem	195	55.4%		162	25.5%		300	4.5%		657	8.5%	
	Same	73	20.8%		282	44.6%		982	14.6%		1,337	17.3%	
	Advantage	84	23.8%		190	29.9%		5,440	80.9%		5,713	74.1%	
	Total	352	100.0%	34.21	633	100.0%	52.21	6721	100.0%	88.23	7707	100.0%	82.80
Flexible work hours	Problem	122	34.7%		58	9.1%		38	.6%		218	2.8%	
	Same	142	40.2%		289	45.7%		1,585	23.6%		2,016	26.2%	
	Advantage	88	25.0%		286	45.2%		5,098	75.8%		5,472	71.0%	
	Total	352	100.0%	45.16	633	100.0%	68.01	6721	100.0%	87.64	7707	100.0%	84.09
My work schedule	Problem	214	62.0%		238	37.9%		196	2.9%		648	8.5%	
	Same	60	17.5%		252	40.1%		1,621	24.2%		1,933	25.2%	
	Advantage	71	20.5%		139	22.0%		4,868	72.8%		5,077	66.3%	
	Total	345	100.0%	29.25	629	100.0%	42.08	6684	100.0%	84.95	7659	100.0%	78.91
Ability to focus, fewer interruptions	Problem	227	64.5%		285	45.0%		533	7.9%		1,044	13.6%	
	Same	59	16.6%		210	33.2%		1,856	27.6%		2,124	27.6%	
	Advantage	67	18.9%		138	21.8%		4,333	64.5%		4,538	58.9%	
	Total	352	100.0%	27.23	633	100.0%	38.41	6721	100.0%	78.27	7707	100.0%	72.66
Noise level	Problem	196	55.8%		190	30.0%		656	9.8%		1,042	13.5%	
	Same	71	20.2%		270	42.6%		1,929	28.7%		2,270	29.5%	
	Advantage	84	24.0%		174	27.5%		4,136	61.5%		4,395	57.0%	
	Total	352	100.0%	34.11	633	100.0%	48.76	6721	100.0%	75.89	7707	100.0%	71.75
Productivity	Problem	259	73.5%		365	57.6%		454	6.8%		1,078	14.0%	
	Same	69	19.6%		172	27.2%		2,480	36.9%		2,721	35.3%	
	Advantage	24	6.9%		96	15.2%		3,787	56.3%		3,908	50.7%	
	Total	352	100.0%	16.67	633	100.0%	28.78	6721	100.0%	74.79	7707	100.0%	68.36
Physical arrangement of workspace	Problem	307	88.3%		469	74.5%		1,535	22.9%		2,311	30.1%	
	Same	21	6.1%		129	20.5%		2,112	31.5%		2,262	29.5%	
	Advantage	19	5.6%		31	5.0%		3,055	45.6%		3,106	40.4%	
	Total	347	100.0%	8.63	629	100.0%	15.25	6702	100.0%	61.34	7679	100.0%	55.18
Access to training	Problem	246	70.0%		287	45.3%		601	8.9%		1,134	14.7%	
	Same	90	25.4%		322	50.8%		4,928	73.3%		5,340	69.3%	
	Advantage	16	4.6%		25	3.9%		1,193	17.7%		1,233	16.0%	
	Total	352	100.0%	17.28	633	100.0%	29.27	6721	100.0%	54.40	7707	100.0%	50.64
Access to supervisors	Problem	264	75.0%		355	56.0%		1,065	15.8%		1,683	21.8%	
	Same	86	24.3%		276	43.6%		4,835	71.9%		5,197	67.4%	
	Advantage	2	.7%		2	.4%		822	12.2%		826	10.7%	
	Total	352	100.0%	12.82	633	100.0%	22.19	6721	100.0%	48.19	7707	100.0%	44.44
Access to software	Problem	292	85.2%		453	72.4%		1,272	19.2%		2,018	26.6%	
	Same	48	14.1%		171	27.3%		4,485	67.7%		4,704	62.0%	
	Advantage	2	.7%		2	.3%		867	13.1%		871	11.5%	
	Total	343	100.0%	7.73	626	100.0%	13.94	6624	100.0%	46.94	7593	100.0%	42.45
Tracking work status	Problem	283	82.8%		389	64.8%		617	9.3%		1,289	17.0%	
	Same	41	11.9%		195	32.5%		4,429	66.8%		4,665	61.6%	
	Advantage	18	5.2%		16	2.7%		1,583	23.9%		1,618	21.4%	
	Total	341	100.0%	11.21	601	100.0%	18.98	6628	100.0%	57.29	7571	100.0%	52.17
Access to databases	Problem	293	85.2%		512	81.4%		1,912	29.3%		2,717	36.3%	
	Same	48	14.1%		117	18.6%		4,049	62.1%		4,215	56.3%	
	Advantage	2	.7%		0	0.0%		557	8.5%		559	7.5%	
	Total	343	100.0%	7.77	629	100.0%	9.30	6518	100.0%	39.61	7491	100.0%	35.60
Access to work-related files	Problem	316	91.4%		523	83.2%		1,798	27.2%		2,636	34.8%	
	Same	30	8.6%		105	16.8%		4,206	63.6%		4,341	57.3%	
	Advantage	0	0.0%		0	0.0%		605	9.2%		605	8.0%	
	Total	345	100.0%	4.32	628	100.0%	8.38	6610	100.0%	40.98	7583	100.0%	36.61
Ability to mentor or be mentored	Problem	293	83.3%		418	66.0%		1,641	24.4%		2,352	30.5%	
	Same	59	16.7%		203	32.0%		4,240	63.1%		4,501	58.4%	
	Advantage	0	0.0%		13	2.0%		841	12.5%		854	11.1%	
	Total	352	100.0%	8.34	633	100.0%	18.04	6721	100.0%	44.05	7707	100.0%	40.28
Collaboration with coworkers	Problem	308	87.4%		477	75.3%		1,552	23.1%		2,337	30.3%	
	Same	42	11.9%		132	20.8%		4,122	61.3%		4,296	55.7%	
	Advantage	2	.6%		25	3.9%		1,047	15.6%		1,074	13.9%	
	Total	352	100.0%	6.61	633	100.0%	14.26	6721	100.0%	46.25	7707	100.0%	41.81
Computer equipment	Problem	254	73.6%		451	71.4%		1,456	21.7%		2,161	28.2%	
	Same	69	19.8%		146	23.1%		3,703	55.3%		3,917	51.1%	
	Advantage	22	6.5%		35	5.5%		1,537	23.0%		1,595	20.8%	
	Total	345	100.0%	16.43	631	100.0%	17.04	6696	100.0%	50.61	7672	100.0%	46.31
Internet speed	Problem	230	66.6%		339	54.2%		1,109	16.5%		1,678	21.9%	
	Same	67	19.3%		244	39.0%		3,695	55.1%		4,006	52.2%	
	Advantage	49	14.0%		42	6.8%		1,898	28.3%		1,989	25.9%	
	Total	345	100.0%	23.71	625	100.0%	26.27	6701	100.0%	55.89	7672	100.0%	52.03
Access to non-computer equipment	Problem	327	94.7%		580	93.7%		4,281	66.5%		5,188	70.1%	
	Same	18	5.3%		37	6.0%		1,702	26.4%		1,757	23.7%	
	Advantage	0	0.0%		2	.3%		459	7.1%		461	6.2%	
	Total	345	100.0%	2.66	619	100.0%	3.30	6442	100.0%	20.33	7406	100.0%	18.08
Social interaction with coworkers	Problem	311	88.4%		540	85.3%		3,422	50.9%		4,273	55.4%	
	Same	39	11.0%		89	14.1%		2,526	37.6%		2,654	34.4%	
	Advantage	2	.6%		4	.7%		774	11.5%		780	10.1%	
	Total	352	100.0%	6.06	633	100.0%	7.70	6721	100.0%	30.30	7707	100.0%	27.34

All items asked of all employees with and without telework experience, supervisors and non-supervisors, between 03/20/20 and 03/31/21; only teleworkers were asked satisfaction question.

Note: State Executive Branch O'ahu employee population (10,479).

Table C-2. Telework Evaluation among State Employees by Interest in Teleworking in the Future

Table C2: Telework Evaluation among State Employees by Interest in Teleworking in the Future

Based on your telework experience, were each of the following better at home or better at your worksite?		Interested in Teleworking in the Future											
		Not at all interested			Neutral			Very interested			Total		
		Count	Column N %	Mean	Count	Column N %	Mean	Count	Column N %	Mean	Count	Column N %	Mean
Commute time	Problem	390	34.0%		106	13.3%		80	.9%		576	5.5%	
	Same	232	20.2%		178	22.3%		391	4.6%		801	7.6%	
	Advantage	527	45.9%		515	64.5%		8,060	94.5%		9,102	86.9%	
	Total	1149	100.0%	55.96	798	100.0%	75.60	8531	100.0%	96.77	10479	100.0%	90.68
Work/life balance	Problem	750	65.3%		259	32.5%		416	4.9%		1,426	13.6%	
	Same	294	25.6%		398	49.8%		1,448	17.0%		2,140	20.4%	
	Advantage	105	9.1%		141	17.7%		6,667	78.1%		6,913	66.0%	
	Total	1149	100.0%	21.94	798	100.0%	42.61	8531	100.0%	86.63	10479	100.0%	76.18
Flexible work hours	Problem	476	41.4%		176	22.1%		135	1.6%		787	7.5%	
	Same	472	41.1%		393	49.2%		2,060	24.1%		2,926	27.9%	
	Advantage	201	17.5%		229	28.7%		6,336	74.3%		6,766	64.6%	
	Total	1149	100.0%	38.01	798	100.0%	53.31	8531	100.0%	86.35	10479	100.0%	78.53
My work schedule	Problem	877	81.0%		358	49.3%		475	5.7%		1,709	16.7%	
	Same	136	12.6%		306	42.2%		2,165	25.7%		2,607	25.5%	
	Advantage	69	6.4%		62	8.5%		5,770	68.6%		5,901	57.8%	
	Total	1082	100.0%	12.68	726	100.0%	29.63	8410	100.0%	81.48	10218	100.0%	70.51
Ability to focus, fewer interruptions	Problem	908	79.0%		406	50.8%		785	9.2%		2,099	20.0%	
	Same	175	15.3%		257	32.2%		2,521	29.6%		2,954	28.2%	
	Advantage	66	5.7%		135	17.0%		5,225	61.2%		5,426	51.8%	
	Total	1149	100.0%	13.36	798	100.0%	33.07	8531	100.0%	76.02	10479	100.0%	65.88
Noise level	Problem	741	64.5%		328	41.1%		831	9.7%		1,900	18.1%	
	Same	326	28.3%		255	31.9%		2,507	29.4%		3,088	29.5%	
	Advantage	83	7.2%		216	27.0%		5,193	60.9%		5,491	52.4%	
	Total	1149	100.0%	21.34	798	100.0%	42.99	8531	100.0%	75.56	10479	100.0%	67.13
Productivity	Problem	1,011	87.9%		525	65.7%		739	8.7%		2,275	21.7%	
	Same	122	10.6%		221	27.6%		3,343	39.2%		3,686	35.2%	
	Advantage	17	1.4%		53	6.6%		4,449	52.2%		4,519	43.1%	
	Total	1149	100.0%	6.75	798	100.0%	20.45	8531	100.0%	71.74	10479	100.0%	60.71
Physical arrangement of workspace	Problem	1,051	95.7%		587	78.6%		2,069	24.5%		3,707	36.1%	
	Same	25	2.3%		142	19.0%		2,788	33.1%		2,955	28.7%	
	Advantage	23	2.0%		18	2.4%		3,576	42.4%		3,616	35.2%	
	Total	1099	100.0%	3.19	746	100.0%	11.89	8433	100.0%	58.94	10279	100.0%	49.56
Access to training	Problem	936	81.4%		494	61.9%		1,098	12.9%		2,529	24.1%	
	Same	204	17.8%		285	35.7%		5,915	69.3%		6,404	61.1%	
	Advantage	9	.8%		19	2.3%		1,518	17.8%		1,546	14.8%	
	Total	1149	100.0%	9.68	798	100.0%	20.21	8531	100.0%	52.46	10479	100.0%	45.31
Access to supervisors	Problem	962	83.7%		504	63.1%		1,670	19.6%		3,136	29.9%	
	Same	182	15.8%		278	34.9%		5,881	68.9%		6,341	60.5%	
	Advantage	5	.4%		16	2.0%		981	11.5%		1,002	9.6%	
	Total	1149	100.0%	8.35	798	100.0%	19.47	8531	100.0%	45.96	10479	100.0%	39.82
Access to software	Problem	1,012	92.5%		595	77.4%		1,981	23.8%		3,588	35.2%	
	Same	74	6.8%		158	20.5%		5,254	63.1%		5,486	53.9%	
	Advantage	8	.7%		16	2.1%		1,085	13.0%		1,109	10.9%	
	Total	1093	100.0%	4.08	769	100.0%	12.35	8320	100.0%	44.61	10183	100.0%	37.82
Tracking work status	Problem	969	89.3%		536	73.4%		1,084	13.1%		2,589	25.6%	
	Same	99	9.2%		193	26.4%		5,281	63.6%		5,573	55.1%	
	Advantage	16	1.5%		2	.2%		1,934	23.3%		1,952	19.3%	
	Total	1085	100.0%	6.09	730	100.0%	13.42	8299	100.0%	55.12	10114	100.0%	46.85
Access to databases	Problem	1,028	93.6%		639	83.0%		2,735	33.2%		4,402	43.6%	
	Same	66	6.0%		128	16.6%		4,726	57.4%		4,919	48.7%	
	Advantage	5	.4%		3	.4%		766	9.3%		774	7.7%	
	Total	1099	100.0%	3.43	770	100.0%	8.73	8227	100.0%	38.03	10096	100.0%	32.03
Access to work-related files	Problem	1,020	92.6%		625	81.8%		2,706	32.6%		4,351	42.8%	
	Same	76	6.9%		139	18.2%		4,763	57.4%		4,978	49.0%	
	Advantage	5	.4%		0	0.0%		829	10.0%		834	8.2%	
	Total	1101	100.0%	3.91	764	100.0%	9.09	8298	100.0%	38.69	10163	100.0%	32.70
Ability to mentor or be mentored	Problem	987	85.9%		586	73.3%		2,491	29.2%		4,064	38.8%	
	Same	155	13.5%		213	26.7%		5,035	59.0%		5,403	51.6%	
	Advantage	7	.6%		0	0.0%		1,005	11.8%		1,012	9.7%	
	Total	1149	100.0%	7.35	798	100.0%	13.33	8531	100.0%	41.29	10479	100.0%	35.44
Collaboration with coworkers	Problem	1,066	92.7%		662	82.9%		2,299	26.9%		4,026	38.4%	
	Same	72	6.2%		137	17.1%		5,028	58.9%		5,236	50.0%	
	Advantage	12	1.0%		0	0.0%		1,205	14.1%		1,217	11.6%	
	Total	1149	100.0%	4.16	798	100.0%	8.56	8531	100.0%	43.59	10479	100.0%	36.60
Computer equipment	Problem	978	88.4%		576	74.8%		2,031	24.1%		3,584	34.8%	
	Same	79	7.1%		142	18.5%		4,482	53.2%		4,703	45.6%	
	Advantage	49	4.5%		51	6.6%		1,918	22.7%		2,018	19.6%	
	Total	1106	100.0%	8.02	769	100.0%	15.90	8431	100.0%	49.33	10306	100.0%	42.40
Internet speed	Problem	876	80.6%		491	64.1%		1,511	17.9%		2,878	28.0%	
	Same	154	14.2%		196	25.6%		4,519	53.6%		4,870	47.4%	
	Advantage	57	5.2%		79	10.3%		2,400	28.5%		2,536	24.7%	
	Total	1087	100.0%	12.29	766	100.0%	23.10	8430	100.0%	55.28	10283	100.0%	48.34
Access to non-computer equipment	Problem	1,076	97.5%		719	94.2%		5,444	66.5%		7,239	72.0%	
	Same	23	2.1%		42	5.5%		2,154	26.3%		2,219	22.1%	
	Advantage	5	.4%		2	.2%		587	7.2%		593	5.9%	
	Total	1104	100.0%	1.47	762	100.0%	3.00	8185	100.0%	20.33	10051	100.0%	16.94
Social interaction with coworkers	Problem	1,066	92.7%		677	84.8%		4,530	53.1%		6,273	59.9%	
	Same	77	6.7%		115	14.4%		3,081	36.1%		3,273	31.2%	
	Advantage	7	.6%		7	.8%		920	10.8%		934	8.9%	
	Total	1149	100.0%	3.92	798	100.0%	8.00	8531	100.0%	28.85	10479	100.0%	24.52

Evaluation items were asked of all employees with and without telework experience, supervisors and non-supervisors, between March 1, 2020 and March 31, 2021.

Note: State Executive Branch O'ahu employee population (10,479).

Table C-3. Telework Evaluation among State Employees who Chose Telework in the Future

Table C-3: Telework Evaluation among State Employees who Chose Telework for the Future, All Item Sets.

		Preferred Travel Mode in the Future					
		Chose no Telework		Chose some telework		Total	
		Count	col %	Count	col %	Count	col %
Commute time	Problem	567	13.4%	9	.1%	576	5.5%
	Same	622	14.7%	179	2.9%	801	7.6%
	Advantage	3,051	71.9%	6,051	97.0%	9,102	86.9%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Work/life balance	Problem	1,172	27.6%	253	4.1%	1,426	13.6%
	Same	1,272	30.0%	869	13.9%	2,140	20.4%
	Advantage	1,796	42.4%	5,117	82.0%	6,913	66.0%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Flexible work hours	Problem	759	17.9%	28	.4%	787	7.5%
	Same	1,507	35.5%	1,419	22.7%	2,926	27.9%
	Advantage	1,974	46.6%	4,792	76.8%	6,766	64.6%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
My work schedule	Problem	1,555	38.7%	155	2.5%	1,709	16.7%
	Same	1,132	28.2%	1,475	23.8%	2,607	25.5%
	Advantage	1,329	33.1%	4,571	73.7%	5,901	57.8%
	Total	4016	100.0%	6201	100.0%	10218	100.0%
Ablity to focus, fewer interruptions	Problem	1,651	38.9%	448	7.2%	2,099	20.0%
	Same	1,192	28.1%	1,761	28.2%	2,954	28.2%
	Advantage	1,397	32.9%	4,030	64.6%	5,426	51.8%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Noise level	Problem	1,367	32.2%	533	8.5%	1,900	18.1%
	Same	1,286	30.3%	1,802	28.9%	3,088	29.5%
	Advantage	1,587	37.4%	3,904	62.6%	5,491	52.4%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Productivity	Problem	1,923	45.4%	352	5.6%	2,275	21.7%
	Same	1,361	32.1%	2,324	37.3%	3,686	35.2%
	Advantage	956	22.5%	3,563	57.1%	4,519	43.1%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Physical arrangement of workspace	Problem	2,410	59.5%	1,297	20.8%	3,707	36.1%
	Same	863	21.3%	2,092	33.6%	2,955	28.7%
	Advantage	779	19.2%	2,837	45.6%	3,616	35.2%
	Total	4052	100.0%	6227	100.0%	10279	100.0%
Access to training	Problem	1,941	45.8%	588	9.4%	2,529	24.1%
	Same	1,946	45.9%	4,458	71.5%	6,404	61.1%
	Advantage	353	8.3%	1,193	19.1%	1,546	14.8%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Access to supervisors	Problem	2,070	48.8%	1,065	17.1%	3,136	29.9%
	Same	1,944	45.8%	4,397	70.5%	6,341	60.5%
	Advantage	226	5.3%	776	12.4%	1,002	9.6%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Access to software	Problem	2,371	58.8%	1,218	19.8%	3,588	35.2%
	Same	1,424	35.3%	4,062	66.1%	5,486	53.9%
	Advantage	240	6.0%	868	14.1%	1,109	10.9%
	Total	4035	100.0%	6148	100.0%	10183	100.0%
Tracking work status	Problem	2,054	51.7%	535	8.7%	2,589	25.6%
	Same	1,513	38.1%	4,060	66.1%	5,573	55.1%
	Advantage	407	10.3%	1,545	25.2%	1,952	19.3%
	Total	3974	100.0%	6140	100.0%	10114	100.0%
Access to databases	Problem	2,645	65.8%	1,758	28.9%	4,402	43.6%
	Same	1,184	29.4%	3,735	61.5%	4,919	48.7%
	Advantage	193	4.8%	581	9.6%	774	7.7%
	Total	4022	100.0%	6074	100.0%	10096	100.0%
Access to work-related files	Problem	2,631	65.5%	1,721	28.0%	4,351	42.8%
	Same	1,188	29.6%	3,791	61.7%	4,978	49.0%
	Advantage	198	4.9%	636	10.3%	834	8.2%
	Total	4016	100.0%	6147	100.0%	10163	100.0%
Ability to mentor or be mentored	Problem	2,350	55.4%	1,714	27.5%	4,064	38.8%
	Same	1,706	40.2%	3,697	59.3%	5,403	51.6%
	Advantage	184	4.3%	828	13.3%	1,012	9.7%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Collaboration with coworkers	Problem	2,531	59.7%	1,495	24.0%	4,026	38.4%
	Same	1,485	35.0%	3,751	60.1%	5,236	50.0%
	Advantage	225	5.3%	992	15.9%	1,217	11.6%
	Total	4240	100.0%	6239	100.0%	10479	100.0%
Computer equipment	Problem	2,322	56.8%	1,262	20.3%	3,584	34.8%
	Same	1,189	29.1%	3,514	56.5%	4,703	45.6%
	Advantage	578	14.1%	1,441	23.2%	2,018	19.6%
	Total	4089	100.0%	6217	100.0%	10306	100.0%
Internet speed	Problem	1,918	47.2%	960	15.4%	2,878	28.0%
	Same	1,430	35.2%	3,439	55.3%	4,870	47.4%
	Advantage	715	17.6%	1,821	29.3%	2,536	24.7%
	Total	4063	100.0%	6220	100.0%	10283	100.0%
Access to non-computer equipment	Problem	3,337	82.8%	3,902	64.8%	7,239	72.0%
	Same	515	12.8%	1,704	28.3%	2,219	22.1%
	Advantage	180	4.5%	414	6.9%	593	5.9%
	Total	4032	100.0%	6019	100.0%	10051	100.0%
Social interaction with coworkers	Problem	3,038	71.6%	3,235	51.9%	6,273	59.9%
	Same	974	23.0%	2,299	36.8%	3,273	31.2%
	Advantage	229	5.4%	705	11.3%	934	8.9%
	Total	4240	100.0%	6239	100.0%	10479	100.0%

Note: State Executive Branch O'ahu employee population (10,479).

Table C-4. Results of Regression Analysis of Satisfaction with Telework

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.719[a]	.516	.513	15.11958	1.988

a. Predictors: (Constant), Social interaction with coworkers, Commute time, Internet speed, Noise level, Access to databases, Access to non-computer equipment, Work/life balance, Access to training, My work schedule, Access to supervisors, Computer equipment, Physical arrangement of workspace, Ability to mentor or be mentored, Ablity to focus, fewer interruptions, Access to software, Tracking work status, Collaboration with coworkers, Productivity, Access to work-related files

b. Dependent Variable: Satisfaction with Telework Experience

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	33.977	1.637		20.758	.000		
Commute time	.145	.018	.112	7.907	.000	.817	1.224
Work/life balance	.098	.011	.142	8.621	.000	.602	1.660
My work schedule	.107	.012	.161	9.140	.000	.528	1.893
Ablity to focus, fewer interruptions	.052	.012	.085	4.355	.000	.433	2.308
Noise level	-.008	.010	-.013	-.773	.439	.566	1.766
Productivity	.102	.012	.168	8.358	.000	.406	2.463
Physical arrangement of workspace	.028	.009	.053	3.031	.002	.526	1.902
Access to training	.015	.014	.019	1.104	.270	.550	1.820
Access to supervisors	.046	.014	.059	3.231	.001	.492	2.033
Access to software	.049	.015	.065	3.384	.001	.448	2.234
Tracking work status	.043	.014	.060	3.107	.002	.446	2.244
Access to databases	.014	.015	.019	.957	.339	.418	2.392
Access to work-related files	.071	.015	.095	4.723	.000	.402	2.488
Ability to mentor or be mentored	.019	.013	.027	1.513	.130	.497	2.011
Collaboration with coworkers	.019	.013	.028	1.414	.158	.419	2.388
Computer equipment	.015	.011	.024	1.377	.168	.534	1.871
Internet speed	.008	.010	.013	.786	.432	.621	1.610
Access to non-computer equipment	-.030	.011	-.040	-2.604	.009	.701	1.427
Social interaction with coworkers	-.049	.011	-.074	-4.431	.000	.581	1.720

a. Dependent Variable: Satisfaction with Telework Experience

Table C-5. Results of Regression Analysis of Interest in Telework in the Future

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.775[a]	.600	.598	18.27112	1.952

a. Predictors: (Constant), Social interaction with coworkers, Commute time, Access to non-computer equipment, Noise level, Access to databases, Internet speed, Work/life balance, Access to training, Physical arrangement of workspace, Access to supervisors, Computer equipment, Ability to mentor or be mentored, My work schedule, Access to software, Ablity to focus, fewer interruptions, Tracking work status, Collaboration with coworkers, Access to work-related files, Productivity

b. Dependent Variable: Interest in Telework in the Future

Coefficients[a]

Model 3	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	24.258	1.263		19.204	.000		
Commute time	.154	.016	.124	9.909	.000	.708	1.412
Work/life balance	.172	.012	.211	14.136	.000	.498	2.009
My work schedule	.158	.013	.202	12.517	.000	.422	2.369
Ablity to focus, fewer interruptions	.047	.013	.063	3.634	.000	.364	2.751
Noise level	.015	.011	.020	1.381	.167	.501	1.994
Productivity	.120	.014	.160	8.831	.000	.337	2.972
Physical arrangement of workspace	.008	.011	.012	.777	.437	.476	2.101
Access to training	.056	.015	.057	3.821	.000	.493	2.029
Access to supervisors	.046	.016	.046	2.906	.004	.442	2.263
Access to software	.049	.016	.051	3.117	.002	.406	2.460
Tracking work status	.040	.015	.045	2.642	.008	.389	2.572
Access to databases	.026	.017	.027	1.565	.118	.377	2.655
Access to work-related files	.029	.017	.030	1.721	.085	.368	2.718
Ability to mentor or be mentored	-.002	.014	-.003	-.173	.863	.451	2.216
Collaboration with coworkers	.030	.015	.034	2.027	.043	.383	2.612
Computer equipment	-.004	.013	-.004	-.294	.768	.477	2.096
Internet speed	.014	.011	.018	1.261	.207	.556	1.800
Access to non-computer equipment	-.051	.013	-.049	-3.939	.000	.701	1.427
Social interaction with coworkers	-.056	.012	-.063	-4.519	.000	.566	1.768

a. Dependent Variable: Interest in Telework in the Future

APPENDIX D: STOPS ON THE WAY TO AND FROM WORK

Table D-1a. Pre-COVID Stops on the Way to Work by Telework Experience

		Telework Experience During the COVID-19 Pandemic					
		Has Telework Experience		No Telework Experience		Total	
		Count	Col %	Count	Col %	Count	Col %
Number of Stops per Week on a Usual Trip to Work.	0	7,086	45.1%	2,089	50.2%	9,175	46.2%
	1	5,185	33.0%	1,150	27.6%	6,336	31.9%
	2	1,675	10.7%	401	9.6%	2,076	10.4%
	3	989	6.3%	252	6.1%	1,241	6.2%
	4	362	2.3%	185	4.4%	547	2.8%
	5	307	2.0%	62	1.5%	368	1.9%
	6	87	.6%	16	.4%	103	.5%
	7	15	.1%	8	.2%	23	.1%
	Total	15,706	100.0%	4,163	100.0%	19,869	100.0%
Drop-off/pick up another person - ON YOUR WAY TO WORK	0	2,673	44.9%	625	51.0%	3,298	45.9%
	1	246	4.1%	55	4.5%	301	4.2%
	2	176	3.0%	49	4.0%	226	3.1%
	3	318	5.3%	36	3.0%	354	4.9%
	4	87	1.5%	8	.6%	94	1.3%
	5	2,457	41.2%	452	36.9%	2,908	40.5%
	6	0	0.0%	0	0.0%	0	0.0%
	Total	5,956	100.0%	1,225	100.0%	7,182	100.0%
Buy goods (grocery, clothes, gas) - ON YOUR WAY TO WORK	0	2,571	42.9%	532	33.3%	3,104	40.9%
	1	1,962	32.7%	448	28.1%	2,410	31.7%
	2	727	12.1%	335	21.0%	1,062	14.0%
	3	511	8.5%	207	13.0%	718	9.5%
	4	78	1.3%	23	1.5%	101	1.3%
	5	145	2.4%	51	3.2%	196	2.6%
	6	0	0.0%	0	0.0%	0	0.0%
	Total	5,994	100.0%	1,597	100.0%	7,591	100.0%
Buy services (dry cleaner, banking, pet care) - ON YOUR WAY TO WORK	0	2,936	82.8%	599	72.9%	3,536	81.0%
	1	406	11.5%	119	14.5%	525	12.0%
	2	144	4.1%	49	6.0%	193	4.4%
	3	46	1.3%	49	5.9%	95	2.2%
	4	2	.1%	2	.2%	4	.1%
	5	10	.3%	4	.5%	14	.3%
	6	0	0.0%	0	0.0%	0	0.0%
	Total	3,544	100.0%	822	100.0%	4,366	100.0%

Note: State Executive Branch O'ahu employee population (10,479).

Table D-1b. Pre-COVID Stops on the Way to Work by Telework Experience

		Telework Experience During the COVID-19 Pandemic					
		Has Telework Experience		No Telework Experience		Total	
		Count	Col %	Count	Col %	Count	Col %
Buy food (coffee, breakfast, dinner) - ON YOUR WAY TO WORK	0	2,171	30.2%	421	25.7%	2,592	29.4%
	1	1,527	21.3%	321	19.6%	1,848	21.0%
	2	1,204	16.8%	196	12.0%	1,400	15.9%
	3	895	12.5%	271	16.5%	1,166	13.2%
	4	199	2.8%	69	4.2%	268	3.0%
	5	1,187	16.5%	358	21.9%	1,545	17.5%
	6	0	0.0%	0	0.0%	0	0.0%
	Total	7,183	100.0%	1,636	100.0%	8,819	100.0%
Other errands (post office, library, etc) - ON YOUR WAY TO WORK	0	2,779	63.5%	543	50.8%	3,322	61.0%
	1	1,011	23.1%	320	29.9%	1,331	24.5%
	2	365	8.3%	136	12.7%	501	9.2%
	3	148	3.4%	33	3.1%	181	3.3%
	4	19	.4%	0	0.0%	19	.4%
	5	51	1.2%	37	3.5%	88	1.6%
	6	0	0.0%	0	0.0%	0	0.0%
	Total	4,373	100.0%	1,068	100.0%	5,441	100.0%
Exercise (gym, jog, etc) - ON YOUR WAY TO WORK	0	2,939	79.4%	643	82.0%	3,583	79.8%
	1	135	3.6%	6	.7%	141	3.1%
	2	188	5.1%	36	4.6%	224	5.0%
	3	132	3.6%	41	5.2%	173	3.8%
	4	65	1.8%	12	1.5%	77	1.7%
	5	244	6.6%	47	6.0%	290	6.5%
	6	0	0.0%	0	0.0%	0	0.0%
	Total	3,704	100.0%	785	100.0%	4,488	100.0%
Other - ON YOUR WAY TO WORK	0	3,014	87.6%	675	82.9%	3,689	86.7%
	1	78	2.3%	28	3.5%	106	2.5%
	2	110	3.2%	50	6.2%	160	3.8%
	3	59	1.7%	3	.3%	62	1.5%
	4	37	1.1%	0	0.0%	37	.9%
	5	144	4.2%	58	7.1%	202	4.8%
	6	0	0.0%	0	0.0%	0	0.0%
	Total	3,442	100.0%	814	100.0%	4,256	100.0%

Asked of all employees. Reported for all weekly trips and all types of stops.

Note: State Executive Branch O'ahu employee population (10,479).

Table D-2a. Pre-COVID Stops on the Way Home From Work by Telework Experience

		Telework Experience During the COVID-19 Pandemic					
		Has Telework Experience		No Telework Experience		Total	
		Count	Col %	Count	Col %	Count	Col %
Number of Stops per Week on a Usual Trip to Home	0	3,517	22.4%	1,286	30.9%	4,804	24.2%
	1	4,001	25.5%	1,072	25.7%	5,073	25.5%
	2	3,148	20.0%	637	15.3%	3,786	19.1%
	3	2,417	15.4%	511	12.3%	2,928	14.7%
	4	1,552	9.9%	361	8.7%	1,913	9.6%
	5	778	5.0%	188	4.5%	966	4.9%
	6	247	1.6%	104	2.5%	351	1.8%
	7	45	.3%	4	.1%	49	.2%
	Total	15,706	100.0%	4,163	100.0%	19,869	100.0%
Drop-off/pick up another person - ON YOUR WAY HOME	0	2,576	43.1%	662	48.8%	3,238	44.2%
	1	333	5.6%	114	8.4%	447	6.1%
	2	332	5.5%	67	4.9%	398	5.4%
	3	347	5.8%	92	6.8%	438	6.0%
	4	125	2.1%	13	1.0%	138	1.9%
	5	2,252	37.7%	408	30.1%	2,660	36.3%
	6	11	.2%	2	.1%	13	.1%
	Total	5,975	100.0%	1,357	100.0%	7,333	100.0%
Buy goods (grocery, clothes, gas) - ON YOUR WAY HOME	0	1,128	10.5%	347	13.1%	1,476	11.0%
	1	4,245	39.4%	833	31.5%	5,077	37.8%
	2	3,137	29.1%	710	26.9%	3,847	28.7%
	3	1,772	16.4%	475	18.0%	2,248	16.7%
	4	164	1.5%	132	5.0%	296	2.2%
	5	326	3.0%	147	5.6%	474	3.5%
	6	2	.0%	0	0.0%	2	.0%
	Total	10,775	100.0%	2,645	100.0%	13,420	100.0%
Buy services (dry cleaner, banking, pet care) - ON YOUR WAY HOME	0	2,469	50.2%	634	50.0%	3,103	50.2%
	1	1,753	35.7%	360	28.4%	2,113	34.2%
	2	431	8.8%	176	13.9%	607	9.8%
	3	151	3.1%	66	5.2%	217	3.5%
	4	9	.2%	2	.2%	11	.2%
	5	99	2.0%	29	2.3%	128	2.1%
	6	2	.0%	0	0.0%	2	.0%
	9	2	.0%	0	0.0%	2	.0%
	Total	4,916	100.0%	1,267	100.0%	6,183	100.0%

Note: State Executive Branch Oʻahu employee population (10,479).

Table D-2b. Pre-COVID Stops on the Way Home From Work by Telework Experience

		Telework Experience During the COVID-19 Pandemic					
		Experience		Experience		Total	
		Count	Col %	Count	Col %	Count	Col %
Buy food (coffee, breakfast, dinner) - ON YOUR WAY HOME	0	1,738	21.3%	432	22.2%	2,171	21.5%
	1	2,358	28.9%	479	24.6%	2,837	28.1%
	2	2,085	25.5%	462	23.7%	2,547	25.2%
	3	1,095	13.4%	251	12.9%	1,346	13.3%
	4	257	3.1%	94	4.8%	351	3.5%
	5	628	7.7%	229	11.8%	858	8.5%
	Total	8,161	100.0%	1,947	100.0%	10,108	100.0%
Other errands (post office, library, etc) - ON YOUR WAY HOME	0	2,038	31.2%	568	32.7%	2,606	31.5%
	1	2,904	44.4%	689	39.6%	3,592	43.4%
	2	943	14.4%	248	14.3%	1,191	14.4%
	3	398	6.1%	122	7.0%	520	6.3%
	4	60	.9%	8	.5%	68	.8%
	5	191	2.9%	102	5.9%	293	3.5%
	Total	6,534	100.0%	1,737	100.0%	8,271	100.0%
Exercise (gym, jog, etc) - ON YOUR WAY HOME	0	2,599	53.7%	707	61.7%	3,306	55.2%
	1	459	9.5%	32	2.8%	490	8.2%
	2	668	13.8%	124	10.8%	792	13.2%
	3	560	11.6%	142	12.4%	702	11.7%
	4	124	2.6%	38	3.3%	163	2.7%
	5	429	8.9%	99	8.6%	527	8.8%
	6	0	0.0%	6	.5%	6	.1%
	7	2	.0%	0	0.0%	2	.0%
	Total	4,841	100.0%	1,147	100.0%	5,988	100.0%
Other - ON YOUR WAY HOME	0	2,788	77.3%	733	81.2%	3,520	78.1%
	1	371	10.3%	45	5.0%	416	9.2%
	2	173	4.8%	71	7.8%	243	5.4%
	3	102	2.8%	13	1.4%	115	2.6%
	4	61	1.7%	15	1.6%	76	1.7%
	5	107	3.0%	27	3.0%	134	3.0%
	6	2	.1%	0	0.0%	2	.0%
	10	2	.1%	0	0.0%	2	.0%
	Total	3,605	100.0%	903	100.0%	4,508	100.0%

Asked of all employees. Reported for all weekly trips and all types of stops.

Note: State Executive Branch Oʻahu employee population (10,479).

APPENDIX E: FUTURE TELEWORK

Table E-1. Choice of Telework in the Future by Department

E1: Choice of Telework for the Future by Department.

In the Furure, in a typical 5-day workweek, would you prefer to Work from Home instead of Commuting to Work?		Preferred Travel Mode in the Future					
		Chose no Telework		Chose some telework		Total	
		Count	Row %	Count	Row %	Count	Row %
State Department	Commerce & Consumer Affairs	82	23.5%	268	76.5%	350	100.0%
	Governor, Lt. Governors' Offices	10	27.3%	27	72.7%	37	100.0%
	Land & Natural Resources	174	27.6%	456	72.4%	629	100.0%
	Business, Economic Development & Tourism	58	30.1%	135	69.9%	193	100.0%
	Transportation	524	31.3%	1,149	68.7%	1,672	100.0%
	Health	632	32.7%	1,298	67.3%	1,929	100.0%
	Accounting & General Services	195	36.4%	340	63.6%	535	100.0%
	Human Resources Development	23	37.2%	40	62.8%	63	100.0%
	Human Services	568	40.0%	851	60.0%	1,418	100.0%
	Labor & Industrial Relations	131	40.4%	193	59.6%	324	100.0%
	Hawaiian Home Lands	42	41.8%	59	58.2%	101	100.0%
	Budget & Finance	108	42.0%	149	58.0%	258	100.0%
	Attorney General	229	45.9%	270	54.1%	499	100.0%
	Agriculture	103	47.4%	115	52.6%	218	100.0%
	Defense	135	48.2%	145	51.8%	279	100.0%
	Taxation	141	53.9%	121	46.1%	262	100.0%
	Public Safety	1,086	63.4%	626	36.6%	1,711	100.0%

Asked of all employees.

Note: State Executive Branch O'ahu employee population (10,479).

Table E-2. Distribution of Trips to Work Before the Pandemic by Prefer Future Telework

BEFORE the COVID-19 pandemic, how many days per week did you use each of the following ways to commute to work?		Preferred Travel Mode in the Future					
		Chose no Telework		Chose some telework		Total	
		Count	Col %	Count	Col %	Count	Col %
No travel, worked from home	zero days a week	4,215	99.4%	6,112	98.0%	10,328	98.6%
	one day a week	6	.2%	20	.3%	26	.3%
	two days a week	9	.2%	36	.6%	45	.4%
	three days a week	1	.0%	21	.3%	21	.2%
	four days a week	0	0.0%	30	.5%	30	.3%
	five days a week	9	.2%	20	.3%	29	.3%
Drove alone	zero days a week	949	22.4%	1,308	21.0%	2,257	21.5%
	one day a week	20	.5%	145	2.3%	165	1.6%
	two days a week	37	.9%	100	1.6%	137	1.3%
	three days a week	78	1.8%	98	1.6%	176	1.7%
	four days a week	25	.6%	72	1.2%	97	.9%
	five days a week	3,132	73.9%	4,516	72.4%	7,648	73.0%
Carpooled	zero days a week	3,806	89.8%	5,553	89.0%	9,360	89.3%
	one day a week	12	.3%	52	.8%	64	.6%
	two days a week	34	.8%	51	.8%	85	.8%
	three days a week	21	.5%	47	.8%	68	.7%
	four days a week	14	.3%	85	1.4%	99	.9%
	five days a week	353	8.3%	451	7.2%	804	7.7%
Rode TheBus	zero days a week	3,832	90.4%	5,625	90.2%	9,457	90.2%
	one day a week	5	.1%	43	.7%	48	.5%
	two days a week	17	.4%	30	.5%	47	.4%
	three days a week	25	.6%	44	.7%	70	.7%
	four days a week	18	.4%	62	1.0%	80	.8%
	five days a week	343	8.1%	435	7.0%	778	7.4%
Rode a bicycle	zero days a week	4,184	98.7%	6,137	98.4%	10,321	98.5%
	one day a week	8	.2%	26	.4%	34	.3%
	two days a week	19	.4%	7	.1%	26	.2%
	three days a week	8	.2%	6	.1%	14	.1%
	four days a week	0	0.0%	11	.2%	11	.1%
	five days a week	22	.5%	52	.8%	74	.7%
Walked	zero days a week	4,124	97.3%	6,020	96.5%	10,144	96.8%
	one day a week	8	.2%	15	.2%	23	.2%
	two days a week	11	.3%	31	.5%	43	.4%
	three days a week	4	.1%	9	.2%	14	.1%
	four days a week	3	.1%	1	.0%	4	.0%
	five days a week	89	2.1%	163	2.6%	252	2.4%
Other	zero days a week	4,130	97.4%	6,118	98.1%	10,248	97.8%
	one day a week	4	.1%	15	.2%	19	.2%
	two days a week	11	.3%	10	.2%	21	.2%
	three days a week	2	.0%	10	.2%	12	.1%
	four days a week	0	0.0%	6	.1%	6	.1%
	five days a week	94	2.2%	79	1.3%	173	1.7%

Asked of all employees.

Note: State Executive Branch Oʻahu employee population (10,479).

Table E-3. Distribution of Trips to Work During the Pandemic by Prefer Future Telework

During the COVID-19 pandemic, how many days per week did you use each of the following ways to commute to work?		Preferred Travel Mode in the Future					
		Chose no Telework		Chose some telework		Total	
		Count	Col %	Count	Col %	Count	Col %
No travel, worked from home	zero days a week	3,037	71.6%	1,300	20.8%	4,337	41.4%
	one day a week	96	2.3%	238	3.8%	334	3.2%
	two days a week	200	4.7%	856	13.7%	1,056	10.1%
	three days a week	127	3.0%	934	15.0%	1,060	10.1%
	four days a week	134	3.2%	817	13.1%	950	9.1%
	five days a week	647	15.3%	2,094	33.6%	2,741	26.2%
Drove alone	zero days a week	2,927	69.0%	3,455	55.4%	6,382	60.9%
	one day a week	140	3.3%	724	11.6%	865	8.3%
	two days a week	120	2.8%	830	13.3%	950	9.1%
	three days a week	176	4.2%	711	11.4%	887	8.5%
	four days a week	79	1.9%	195	3.1%	274	2.6%
	five days a week	797	18.8%	323	5.2%	1,120	10.7%
Carpooled	zero days a week	4,059	95.7%	6,001	96.2%	10,060	96.0%
	one day a week	8	.2%	75	1.2%	84	.8%
	two days a week	46	1.1%	65	1.0%	111	1.1%
	three days a week	40	.9%	56	.9%	96	.9%
	four days a week	11	.2%	14	.2%	24	.2%
	five days a week	76	1.8%	28	.4%	104	1.0%
Rode TheBus	zero days a week	4,108	96.9%	6,093	97.7%	10,200	97.3%
	one day a week	12	.3%	40	.6%	52	.5%
	two days a week	9	.2%	25	.4%	34	.3%
	three days a week	20	.5%	52	.8%	72	.7%
	four days a week	13	.3%	10	.2%	23	.2%
	five days a week	78	1.8%	19	.3%	97	.9%
Rode a bicycle	zero days a week	4,218	99.5%	6,164	98.8%	10,382	99.1%
	one day a week	10	.2%	37	.6%	47	.4%
	two days a week	0	0.0%	19	.3%	19	.2%
	three days a week	2	.0%	7	.1%	9	.1%
	four days a week	6	.1%	8	.1%	14	.1%
	five days a week	5	.1%	4	.1%	8	.1%
Walked	zero days a week	4,188	98.8%	6,159	98.7%	10,346	98.7%
	one day a week	3	.1%	27	.4%	29	.3%
	two days a week	7	.2%	23	.4%	30	.3%
	three days a week	8	.2%	4	.1%	12	.1%
	four days a week	6	.1%	14	.2%	20	.2%
	five days a week	30	.7%	12	.2%	41	.4%
Other	zero days a week	4,165	98.2%	6,133	98.3%	10,297	98.3%
	one day a week	5	.1%	29	.5%	34	.3%
	two days a week	24	.6%	28	.4%	52	.5%
	three days a week	14	.3%	24	.4%	38	.4%
	four days a week	11	.3%	3	.0%	14	.1%
	five days a week	21	.5%	23	.4%	43	.4%

Asked of all employees.

Note: State Executive Branch O'ahu employee population (10,479).

Table E-4a. Evaluation Items by Prefer Future Telework

		Preferred Travel Mode in the Future					
		Chose no Telework		Chose some telework		Total	
		Count	Col %	Count	Col %	Count	Col %
Interest in Telework in the Future	not at all interested	252	16.7%	4	.2%	256	6.4%
	somehwat uninterested	109	7.2%	7	.3%	116	2.9%
	neutral	232	15.4%	36	1.5%	268	6.7%
	somewhat interested	248	16.4%	197	7.9%	445	11.2%
	very interested	667	44.2%	2,234	90.2%	2,901	72.8%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
My work schedule	Problem	515	35.2%	63	2.6%	578	14.7%
	Same	422	28.8%	609	24.7%	1,031	26.2%
	Advantage	527	36.0%	1,792	72.7%	2,319	59.0%
	Total	1,464	100.0%	2,464	100.0%	3,928	100.0%
Work/life balance	Problem	386	25.6%	104	4.2%	490	12.3%
	Same	440	29.2%	348	14.0%	788	19.8%
	Advantage	682	45.2%	2,026	81.8%	2,708	67.9%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
Productivity	Problem	637	42.2%	147	5.9%	784	19.7%
	Same	476	31.6%	898	36.2%	1,374	34.5%
	Advantage	395	26.2%	1,433	57.8%	1,828	45.9%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
Social interaction with coworkers	Problem	1,065	70.6%	1,318	53.2%	2,383	59.8%
	Same	359	23.8%	895	36.1%	1,254	31.5%
	Advantage	84	5.6%	265	10.7%	349	8.8%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
Collaboration with coworkers	Problem	851	56.4%	592	23.9%	1,443	36.2%
	Same	570	37.8%	1,500	60.5%	2,070	51.9%
	Advantage	87	5.8%	386	15.6%	473	11.9%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
Access to supervisors	Problem	686	45.5%	389	15.7%	1,075	27.0%
	Same	747	49.5%	1,789	72.2%	2,536	63.6%
	Advantage	75	5.0%	300	12.1%	375	9.4%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
Access to software	Problem	780	53.4%	407	16.6%	1,187	30.4%
	Same	594	40.7%	1,745	71.4%	2,339	59.9%
	Advantage	87	6.0%	293	12.0%	380	9.7%
	Total	1,461	100.0%	2,445	100.0%	3,906	100.0%
Access to non-computer equipment	Problem	1,227	84.4%	1,639	68.7%	2,866	74.7%
	Same	170	11.7%	605	25.4%	775	20.2%
	Advantage	56	3.9%	142	6.0%	198	5.2%
	Total	1,453	100.0%	2,386	100.0%	3,839	100.0%

Note: State Executive Branch Oʻahu employee population (10,479).

Table E-4b. Characteristics by Prefer Future Telework

		Preferred Travel Mode in the Future					
		Chose no Telework		Chose some telework		Total	
		Count	Col %	Count	Col %	Count	Col %
Age	18-24	13	.9%	29	1.2%	42	1.1%
	25-34	110	7.3%	380	15.3%	490	12.3%
	35-44	211	14.0%	576	23.2%	787	19.7%
	45-54	416	27.6%	722	29.1%	1,138	28.5%
	55-64	581	38.5%	616	24.9%	1,197	30.0%
	65-69	119	7.9%	118	4.8%	237	5.9%
	70 or older	58	3.8%	37	1.5%	95	2.4%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
How many are children under 18 years old?	None	849	65.5%	1,281	57.8%	2,130	60.6%
	One	199	15.4%	463	20.9%	662	18.8%
	Two	169	13.0%	357	16.1%	526	15.0%
	Three to five	75	5.8%	114	5.1%	189	5.4%
	Six or more	4	.3%	3	.1%	7	.2%
	Total	1,296	100.0%	2,218	100.0%	3,514	100.0%
Had additional daytime childcare responsibilities during the pandemic?	Yes	264	59.1%	563	60.1%	827	59.8%
	No	183	40.9%	374	39.9%	557	40.2%
	Total	447	100.0%	937	100.0%	1,384	100.0%
Number of Stops per Week on a Usual Trip to Work.	.00	690	45.8%	1,121	45.2%	1,811	45.4%
	1.00	494	32.8%	815	32.9%	1,309	32.8%
	2.00	166	11.0%	278	11.2%	444	11.1%
	3.00	89	5.9%	142	5.7%	231	5.8%
	4.00	40	2.7%	64	2.6%	104	2.6%
	5.00	24	1.6%	39	1.6%	63	1.6%
	6.00	4	.3%	15	.6%	19	.5%
	7.00	1	.1%	4	.2%	5	.1%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
BEFORE the COVID-19 pandemic, how long did your trip to work take on a typical day?	Less than 15 minutes	221	14.7%	232	9.4%	453	11.4%
	15-30 minutes	574	38.1%	726	29.3%	1,300	32.6%
	31-45 minutes	373	24.7%	627	25.3%	1,000	25.1%
	46-60 minutes	216	14.3%	528	21.3%	744	18.7%
	61-90 minutes	95	6.3%	263	10.6%	358	9.0%
	91-120 minutes	23	1.5%	77	3.1%	100	2.5%
	Over two hours	6	.4%	25	1.0%	31	.8%
	Total	1,508	100.0%	2,478	100.0%	3,986	100.0%
Drop-off/pick up another person - ON YOUR WAY TO WORK	.00	211	47.0%	387	38.7%	598	41.3%
	1.00	15	3.3%	45	4.5%	60	4.1%
	2.00	17	3.8%	38	3.8%	55	3.8%
	3.00	13	2.9%	57	5.7%	70	4.8%
	4.00	4	.9%	19	1.9%	23	1.6%
	5.00	189	42.1%	453	45.3%	642	44.3%
	Total	449	100.0%	999	100.0%	1,448	100.0%
Supervisor / Non-supervisor	Non-supervisor	1,034	68.6%	1,822	73.5%	2,856	71.7%
	Supervisor	474	31.4%	656	26.5%	1,130	28.3%

Asked of all employees.

Note: State Executive Branch O'ahu employee population (10,479).

Table E-5. Regression Results, Interest in Future Telework by Telework Experience

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.584[a]	.341	.338	.39386

a. Predictors: (Constant), Supervisor / Non-supervisor, RegKids, Telework Experience, Access to non-computer equipment, BEFORE the COVID-19 pandemic, how long did your trip to work take on a typical day?, Number of Stops per Week on a Usual Trip to Work., Age, Work/life balance, Social interaction with coworkers, Access to software, What percent of your job can be done from home?, Access to supervisors, My work schedule, Productivity, Interest in Telework in the Future

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.052	.041		-1.280	.201		
	Interest in Telework in the Future	.004	.000	.248	11.725	.000	.394	2.537
	My work schedule	.001	.000	.091	4.415	.000	.414	2.416
	What percent of your job can be done from home?	.003	.000	.155	8.308	.000	.504	1.984
	Work/life balance	.000	.000	.032	1.709	.087	.506	1.975
	Telework Experience	.122	.019	.097	6.364	.000	.756	1.322
	Productivity	.001	.000	.048	2.303	.021	.411	2.431
	Social interaction with coworkers	-.001	.000	-.042	-2.577	.010	.664	1.506
	Access to supervisors	.000	.000	.012	.676	.499	.554	1.805
	Access to software	.001	.000	.035	1.956	.051	.561	1.782
	Access to non-computer equipment	.000	.000	-.008	-.549	.583	.753	1.327
	RegKids	-.008	.006	-.017	-1.221	.222	.907	1.103
	Age (combined for weighting only)	-.036	.005	-.092	-6.508	.000	.886	1.129
	Number of Stops per Week on a Usual Trip to Work.	.000	.005	-.001	-.087	.931	.953	1.049
	BEFORE the COVID-19 pandemic, how long did your trip to work take on a typical day? [Check only one]	.013	.005	.035	2.562	.010	.932	1.073
	Supervisor / Non-supervisor	.001	.014	.001	.054	.957	.967	1.034

a. Dependent Variable: Preferred Travel Mode in the Future

Table E-6. Trips Saved by Personnel and Trip Characteristics

		Trip Savers					
		Saved a drive-alone trip		Saved no drive alone trips		Total	
		Count	Col %	Count	Col %	Count	Col %
Supervisor or Not	Supervisor	1,243	28.6%	1,715	28.0%	2,958	28.2%
	Non-Supervisor	3,103	71.4%	4,418	72.0%	7,521	71.8%
	Total	4,346	100.0%	6,133	100.0%	10,479	100.0%
BEFORE the COVID-19 pandemic, between what times did you usually leave home to go to work?	3:00 am to 5:59 am	783	18.0%	1,309	21.3%	2,092	20.0%
	6:00am to 8:59 am	**3,512**	**80.8%**	**4,573**	**74.6%**	**8,085**	**77.2%**
	9:00 am to 2:59 pm	22	.5%	111	1.8%	133	1.3%
	3:00 pm to 6:59 pm	24	.5%	61	1.0%	85	.8%
	7:00 pm to 2:59 am	6	.1%	78	1.3%	84	.8%
	Total	4,346	100.0%	6,133	100.0%	10,479	100.0%
BEFORE the COVID-19 pandemic, between what times did you usually leave work to go home?	3:00 am to 5:59 am	263	6.1%	512	8.3%	775	7.4%
	6:00am to 8:59 am	135	3.1%	451	7.4%	586	5.6%
	9:00 am to 2:59 pm	57	1.3%	252	4.1%	309	3.0%
	3:00 pm to 6:59 pm	**3,806**	**87.6%**	**4,758**	**77.6%**	**8,565**	**81.7%**
	7:00 pm to 2:59 am	84	1.9%	159	2.6%	244	2.3%
	Total	4,346	100.0%	6,133	100.0%	10,479	100.0%
Telework Experience or Not	Yes	3,920	90.2%	3,787	61.7%	7,707	73.5%
	No, never	426	9.8%	2,346	38.3%	2,772	26.5%
	Total	4,346	100.0%	6,133	100.0%	10,479	100.0%
What percent of your job do you think can be done teleworking at home?	None, 0% of my job can be done working at home	21	.5%	964	15.7%	985	9.4%
	1% to 20% of my job can be done at home	114	2.6%	831	13.6%	946	9.0%
	21% to 40% of my job	281	6.5%	593	9.7%	873	8.3%
	41% to 60% of my job	489	11.2%	730	11.9%	1,219	11.6%
	61% to 80% of my job	877	20.2%	914	14.9%	1,791	17.1%
	81% to 100% of my job	2,564	59.0%	2,101	34.3%	4,665	44.5%
	More than 60%	**3,441**	**79.2%**	**3,015**	**49.2%**	**6,456**	**61.6%**
	Total	4,346	100.0%	6,133	100.0%	10,479	100.0%

Note: State Executive Branch O'ahu employee population (10,479).

Table E-7. Number of Trips Saved by Personnel and Trip Characteristics

		Trips Saved													
		0		1		2		3		4		5		Total	
		Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Supervisor or Not	Supervisor	1973	28.7%	98	32.7%	27	31.9%	322	27.5%	217	27.5%	321	25.3%	2958	28.2%
	Non-Supervisor	4894	71.3%	202	67.3%	57	68.1%	849	72.5%	572	72.5%	948	74.7%	7521	71.8%
	Total	6867	100.0%	300	100.0%	84	100.0%	1171	100.0%	789	100.0%	1268	100.0%	10479	100.0%
BEFORE the COVID-19 pandemic, between what times did you usually leave home to go to work?	3:00 am to 5:59 am	1401	20.4%	33	10.9%	12	14.1%	210	18.0%	173	22.0%	263	20.8%	2092	20.0%
	6:00am to 8:59 am	5207	75.8%	260	86.8%	73	85.9%	941	80.3%	610	77.3%	995	78.4%	8085	77.2%
	9:00 am to 2:59 pm	111	1.6%	5	1.6%	0	0.0%	10	.9%	1	.1%	6	.5%	133	1.3%
	3:00 pm to 6:59 pm	67	1.0%	2	.7%	0	0.0%	8	.7%	3	.4%	4	.3%	85	.8%
	7:00 pm to 2:59 am	81	1.2%	0	0.0%	0	0.0%	2	.1%	2	.2%	0	0.0%	84	.8%
	Total	6867	100.0%	300	100.0%	84	100.0%	1171	100.0%	789	100.0%	1268	100.0%	10479	100.0%
BEFORE the COVID-19 pandemic, between what times did you usually leave work to go home?	3:00 am to 5:59 am	557	8.1%	17	5.7%	8	9.8%	65	5.5%	41	5.1%	88	6.9%	775	7.4%
	6:00am to 8:59 am	472	6.9%	12	4.0%	2	2.9%	47	4.0%	18	2.3%	34	2.7%	586	5.6%
	9:00 am to 2:59 pm	261	3.8%	7	2.2%	0	0.0%	14	1.2%	13	1.6%	15	1.2%	309	3.0%
	3:00 pm to 6:59 pm	5404	78.7%	253	84.3%	74	87.2%	1032	88.1%	703	89.1%	1099	86.7%	8565	81.7%
	7:00 pm to 2:59 am	173	2.5%	11	3.7%	0	0.0%	13	1.1%	15	1.8%	32	2.5%	244	2.3%
	Total	6867	100.0%	300	100.0%	84	100.0%	1171	100.0%	789	100.0%	1268	100.0%	10479	100.0%
Telework Experience or Not	Yes	4369	63.6%	253	84.6%	84	99.0%	1088	92.9%	762	96.7%	1150	90.7%	7707	73.5%
	No, never	2498	36.4%	46	15.4%	1	1.0%	83	7.1%	26	3.3%	118	9.3%	2772	26.5%
	Total	6867	100.0%	300	100.0%	84	100.0%	1171	100.0%	789	100.0%	1268	100.0%	10479	100.0%
What percent of your job do you think can be done teleworking at home?	None, 0% of my job can be done working at home	964	14.0%	2	.6%	0	0.0%	16	1.4%	0	0.0%	3	.2%	985	9.4%
	1% to 20% of my job can be done at home	874	12.7%	31	10.4%	0	0.0%	20	1.7%	0	0.0%	20	1.6%	946	9.0%
	21% to 40% of my job	764	11.1%	42	13.9%	4	4.4%	32	2.8%	5	.6%	27	2.1%	873	8.3%
	41% to 60% of my job	923	13.4%	54	18.0%	7	7.9%	162	13.8%	32	4.1%	42	3.3%	1219	11.6%
	61% to 80% of my job	1076	15.7%	64	21.4%	20	23.1%	396	33.8%	172	21.8%	63	5.0%	1791	17.1%
	81% to 100% of my job	2266	33.0%	107	35.7%	55	64.6%	545	46.5%	580	73.5%	1113	87.8%	4665	44.5%
	More than 60%	*3342*	*48.7%*	*171*	*57.2%*	*74*	*87.7%*	*941*	*80.3%*	*752*	*95.3%*	*1177*	*92.8%*	*6456*	*61.6%*
	Total	6867	100.0%	300	100.0%	84	100.0%	1171	100.0%	789	100.0%	1268	100.0%	10479	100.0%

Note: State Executive Branch O'ahu employee population (10,479).

APPENDIX F: DATA FOR FIGURES

Table F-1. Home and Work District for Sankey Chart

		Home District								
		Primary Urban Center	Central Oahu	Ewa	Waianae	Northshore	Koolauloa	Koolaupoko	East Honolulu	Non-Oahu Zip Code
		Count	Count	Count	Count	Count	Count	Count	Count	Count
Work District	Primary Urban Center	8318	1851	1271	188	258	28	1731	1138	68
	Central Oahu	165	286	127	8	32	0	11	6	0
	Ewa	509	489	739	143	41	0	112	46	22
	Waianae	40	49	82	169	2	0	16	0	2
	Northshore	16	94	16	0	121	2	0	2	0
	Koolauloa	0	6	0	0	12	74	17	0	0
	Koolaupoko	259	81	3	0	0	75	758	24	18
	East Honolulu	131	11	29	0	0	0	10	130	0
	Non-Oahu Zip Code	10	1	0	0	0	0	17	4	3

Note: State Executive Branch O‘ahu employee population (10,479).

Table F-2. Before the Pandemic and Preferred Future Travel Mode for Sankey Chart

		FUTURE			
		Telework	Drive alone	Carpool	Other
BEFORE	Telework	126	103	12	13
	Drove alone	4,931	6,236	267	648
	Carpooled	685	301	566	124
	Other	1,055	399	119	1,045

Note: State Executive Branch Oʻahu employee population (10,479).

Table F-3. Data by Zip Code for Maps

Zip Code	Rate Per 1,000 Commuters	Average Days Teleworked	Total Driving Trips Pre-COVID
96701	24.4	109	3,067
96706	17.3	108	3,674
96707	22.0	139	3,168
96712	8.5		244
96717	3.3		28
96720	1.1		105
96730	12.5		46
96731	5.0		54
96734	17.1	125	2,139
96741	2.0		27
96744	30.2	121	4,865
96761	0.4		16
96782	22.2	134	2,270
96786	10.2		839
96789	24.7	105	3,881
96791	12.2		215
96792	15.8		1,413
96795	18.0		344
96797	17.6	87	3,961
96813	27.3	124	1,851
96814	34.9	105	1,296
96815	16.3	123	857
96816	30.7	119	3,756
96817	22.9	129	2,787
96818	15.3	116	2,537
96819	16.4	117	1,794
96821	27.1	119	1,548
96822	27.3	117	3,186
96825	36.3	112	2,586
96826	23.4	108	1,606

Note: State Executive Branch Oʻahu employee population (10,479).

APPENDIX G: DATA FOR SUPERVISORS AND NON-SUPERVISORS

Table G-1. Items Rated Better at Home by Supervisory Status

		Supervisory Status								
		Non-Supervisor			Supervisor			Total		
		Count	Col %	Mean	Count	Col %	Mean	Count	Col %	Mean
Commute time	Problem	351	4.7%		225	7.6%		576	5.5%	
	Same	593	7.9%		208	7.0%		801	7.6%	
	Advantage	6,577	87.4%		2,525	85.4%		9,102	86.9%	
	Total	7521	100.0%	91.39	2958	100.0%	88.87	10479	100.0%	90.68
Work/life balance	Problem	880	11.7%		546	18.5%		1,426	13.6%	
	Same	1,465	19.5%		675	22.8%		2,140	20.4%	
	Advantage	5,176	68.8%		1,737	58.7%		6,913	66.0%	
	Total	7521	100.0%	78.56	2958	100.0%	70.14	10479	100.0%	76.18
Flexible work hours	Problem	503	6.7%		284	9.6%		787	7.5%	
	Same	2,054	27.3%		872	29.5%		2,926	27.9%	
	Advantage	4,964	66.0%		1,802	60.9%		6,766	64.6%	
	Total	7521	100.0%	79.66	2958	100.0%	75.65	10479	100.0%	78.53
My work schedule	Problem	1,119	15.2%		590	20.6%		1,709	16.7%	
	Same	1,873	25.5%		735	25.6%		2,607	25.5%	
	Advantage	4,357	59.3%		1,544	53.8%		5,901	57.8%	
	Total	7348	100.0%	72.03	2869	100.0%	66.62	10218	100.0%	70.51
Ablity to focus, fewer interruptions	Problem	1,429	19.0%		670	22.7%		2,099	20.0%	
	Same	2,174	28.9%		779	26.3%		2,954	28.2%	
	Advantage	3,917	52.1%		1,509	51.0%		5,426	51.8%	
	Total	7521	100.0%	66.55	2958	100.0%	64.18	10479	100.0%	65.88
Noise level	Problem	1,224	16.3%		676	22.9%		1,900	18.1%	
	Same	2,245	29.9%		842	28.5%		3,088	29.5%	
	Advantage	4,051	53.9%		1,440	48.7%		5,491	52.4%	
	Total	7521	100.0%	68.80	2958	100.0%	62.91	10479	100.0%	67.13

Note: State Executive Branch O'ahu employee population (10,479).

Table G-2. Items Rated Better at Work by Supervisory Status

		Supervisory Status								
		Non-Supervisor			Supervisor			Total		
		Count	Col %	Mean	Count	Col %	Mean	Count	Col %	Mean
Access to non-computer equipment	Problem	5,081	70.5%		2,158	75.8%		7,239	72.0%	
	Same	1,700	23.6%		519	18.2%		2,219	22.1%	
	Advantage	424	5.9%		170	6.0%		593	5.9%	
	Total	7205	100.0%	17.68	2846	100.0%	15.07	10051	100.0%	16.94
Social interaction with coworkers	Problem	4,297	57.1%		1,976	66.8%		6,273	59.9%	
	Same	2,496	33.2%		777	26.2%		3,273	31.2%	
	Advantage	728	9.7%		206	7.0%		934	8.9%	
	Total	7521	100.0%	26.27	2958	100.0%	20.08	10479	100.0%	24.52

Note: State Executive Branch O'ahu employee population (10,479).

Table G-3. Items Rated the Same at Home and at Work by Supervisory Status

		Supervisory Status								
		Non-Supervisor			Supervisor			Total		
		Count	Col %	Mean	Count	Col %	Mean	Count	Col %	Mean
Productivity	Problem	1,498	19.9%		776	26.2%		2,275	21.7%	
	Same	2,641	35.1%		1,045	35.3%		3,686	35.2%	
	Advantage	3,381	45.0%		1,137	38.4%		4,519	43.1%	
	Total	7521	100.0%	62.52	2958	100.0%	56.11	10479	100.0%	60.71
Physical arrangement of workspace	Problem	2,383	32.3%		1,324	45.8%		3,707	36.1%	
	Same	2,203	29.8%		752	26.0%		2,955	28.7%	
	Advantage	2,802	37.9%		815	28.2%		3,616	35.2%	
	Total	7388	100.0%	52.84	2891	100.0%	41.19	10279	100.0%	49.56
Access to training	Problem	1,701	22.6%		828	28.0%		2,529	24.1%	
	Same	4,650	61.8%		1,754	59.3%		6,404	61.1%	
	Advantage	1,170	15.6%		376	12.7%		1,546	14.8%	
	Total	7521	100.0%	46.47	2958	100.0%	42.36	10479	100.0%	45.31
Access to supervisors	Problem	2,117	28.2%		1,018	34.4%		3,136	29.9%	
	Same	4,668	62.1%		1,673	56.6%		6,341	60.5%	
	Advantage	735	9.8%		267	9.0%		1,002	9.6%	
	Total	7521	100.0%	40.81	2958	100.0%	37.30	10479	100.0%	39.82
Access to software	Problem	2,421	33.1%		1,168	40.7%		3,588	35.2%	
	Same	4,058	55.5%		1,428	49.8%		5,486	53.9%	
	Advantage	836	11.4%		272	9.5%		1,109	10.9%	
	Total	7315	100.0%	39.17	2867	100.0%	34.39	10183	100.0%	37.82
Tracking work status	Problem	1,648	22.7%		941	32.8%		2,589	25.6%	
	Same	4,123	56.9%		1,450	50.6%		5,573	55.1%	
	Advantage	1,477	20.4%		475	16.6%		1,952	19.3%	
	Total	7248	100.0%	48.82	2866	100.0%	41.87	10114	100.0%	46.85
Access to databases	Problem	3,036	41.9%		1,366	47.8%		4,402	43.6%	
	Same	3,635	50.2%		1,284	45.0%		4,919	48.7%	
	Advantage	568	7.8%		206	7.2%		774	7.7%	
	Total	7239	100.0%	32.96	2856	100.0%	29.68	10096	100.0%	32.03
Access to work-related files	Problem	3,061	41.8%		1,290	45.3%		4,351	42.8%	
	Same	3,635	49.7%		1,344	47.2%		4,978	49.0%	
	Advantage	620	8.5%		214	7.5%		834	8.2%	
	Total	7316	100.0%	33.31	2847	100.0%	31.11	10163	100.0%	32.70
Ability to mentor or be mentored	Problem	2,662	35.4%		1,401	47.4%		4,064	38.8%	
	Same	4,095	54.4%		1,308	44.2%		5,403	51.6%	
	Advantage	764	10.2%		249	8.4%		1,012	9.7%	
	Total	7521	100.0%	37.38	2958	100.0%	30.52	10479	100.0%	35.44
Collaboration with coworkers	Problem	2,724	36.2%		1,302	44.0%		4,026	38.4%	
	Same	3,913	52.0%		1,323	44.7%		5,236	50.0%	
	Advantage	884	11.8%		333	11.3%		1,217	11.6%	
	Total	7521	100.0%	37.77	2958	100.0%	33.62	10479	100.0%	36.60
Computer equipment	Problem	2,419	32.6%		1,165	40.5%		3,584	34.8%	
	Same	3,480	46.9%		1,224	42.5%		4,703	45.6%	
	Advantage	1,528	20.6%		491	17.0%		2,018	19.6%	
	Total	7426	100.0%	44.00	2880	100.0%	38.29	10306	100.0%	42.40
Internet speed	Problem	1,877	25.4%		1,001	34.6%		2,878	28.0%	
	Same	3,640	49.2%		1,229	42.5%		4,870	47.4%	
	Advantage	1,875	25.4%		661	22.9%		2,536	24.7%	
	Total	7392	100.0%	49.99	2891	100.0%	44.11	10283	100.0%	48.34

Note: State Executive Branch O'ahu employee population (10,479).

Table G-4. Items Rated the Same at Home and at Work by Supervisors With and Without Employees who Teleworked

		SUPERVISED EMPLOYEES WHO TELEWORKED OR NOT					
		Supervised Employees who Teleworked		None of Supervised Employees Teleworked		Total	
		Count	Col %	Count	Col %	Count	Col %
Employee Morale	Better at home	1,099	48.9%	141	19.8%	1,240	41.9%
	Same	717	31.9%	175	24.6%	892	30.2%
	Better at work	431	19.2%	395	55.6%	827	27.9%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Monitoring productivity	Better at home	343	15.3%	64	8.9%	406	13.7%
	Same	1,080	48.1%	155	21.7%	1,235	41.7%
	Better at work	824	36.7%	493	69.3%	1,317	44.5%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Providing guidance for staff advancement	Better at home	347	15.4%	43	6.0%	390	13.2%
	Same	1,164	51.8%	180	25.3%	1,344	45.4%
	Better at work	736	32.8%	489	68.7%	1,225	41.4%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Motivating staff	Better at home	584	26.0%	77	10.9%	661	22.4%
	Same	953	42.4%	170	23.8%	1,123	38.0%
	Better at work	710	31.6%	464	65.3%	1,174	39.7%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Training Staff	Better at home	308	13.7%	56	7.9%	365	12.3%
	Same	965	42.9%	141	19.8%	1,105	37.4%
	Better at work	974	43.3%	514	72.3%	1,488	50.3%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Facilitating meetings	Better at home	488	21.7%	90	12.6%	578	19.5%
	Same	1,187	52.8%	188	26.4%	1,375	46.5%
	Better at work	572	25.5%	434	61.0%	1,006	34.0%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Managing work schedules	Better at home	619	27.5%	106	14.9%	724	24.5%
	Same	1,126	50.1%	164	23.0%	1,290	43.6%
	Better at work	502	22.4%	442	62.1%	944	31.9%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Collaboration among staff	Better at home	397	17.7%	78	10.9%	475	16.0%
	Same	976	43.4%	121	17.1%	1,097	37.1%
	Better at work	874	38.9%	513	72.0%	1,387	46.9%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Mentoring staff	Better at home	363	16.1%	73	10.2%	435	14.7%
	Same	918	40.8%	102	14.4%	1,020	34.5%
	Better at work	967	43.0%	536	75.4%	1,503	50.8%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%
Staff productivity	Better at home	668	29.7%	82	11.5%	749	25.3%
	Same	949	42.2%	113	15.9%	1,062	35.9%
	Better at work	630	28.0%	517	72.6%	1,147	38.8%
	Total	2,247	100.0%	711	100.0%	2,958	100.0%

Note: State Executive Branch O'ahu employee population (10,479).