

Fort Collins Travel Diary Study Report of Results 2022





polco.us • 2955 Valmont Rd., Suite 300 • Boulder, CO 80301

EXECUTIVE SUMMARY
Survey Background1
Survey Results1
SURVEY BACKGROUND
TRAVEL MODE
Overall Mode Use
Overall Mode Share6
Telecommuting
Commute Mode Use11
Commute Mode Share
Mode Share for College Students
Overall Mode Share by Day Type
Overall Mode Share by Children in Households
Overall Mode Share by Region
TRIP CHARACTERISTICS
Overall Trip Characteristics
Most Common Modes used for School and Work
Commute Trip Characteristics
AUTOMOBILE TRIP CHARACTERISTICS
TRANSIT USE
Car/Vanpooling
BIKING CHARACTERISTICS
PEDESTRIAN CHARACTERISTICS
MOTIVATION TO USE ALTERNATIVE MODES
Modal Groups
APPENDIX A: RESPONSES TO THE HOUSEHOLD SURVEY
APPENDIX B: OVERALL MODE SHARE BY RESPONDENT AND HOUSEHOLD CHARACTERISTICS
APPENDIX C: COMMUTE MODE SHARE BY RESPONDENT AND HOUSEHOLD CHARACTERISTICS
Appendix D: Study Methodology
APPENDIX E: SURVEY MATERIALS

Tables and Figures

Figure 1: Proportion of People Using Mode at Least Once During Diary Day	5
Figure 2: Trip Mode Share for All Trips	6
Figure 3: Mode Share for All Miles Traveled	7
Figure 4: Frequency of Telecommuting, if Employed	8
Figure 5: Most Common Commute (all working adults in household)	8
Table 1: Regional and National Telecommuting (2021 ACS)	9
Figure 6: Proportion of those who Worked on the Trip Diary Day who Telecommuted	9
Figure 7: Trip Mode Share for All Non-Work Trips by those who Telecommuted for Work on their Diary Day	10
Figure 8: Mode Share for All Non-Work Miles Traveled by those who Telecommuted on their Diary Day	10
Figure 9: Proportion Using Mode at Least Once During Commute (All Segments of Commute) (excludes those telecommuting/not leaving home to work)	11
Figure 10: Proportion Using Mode at Least Once During Commute (Longest Segment) (excludes those telecommuting/not leaving home to work)	12
Figure 11: Trip Mode Share for All Commute Trip Segments (excludes those telecommuting/not leaving home to work)	13
Table 2: Average Number of Trips taken in a Day by Commuters (excludes those telecommuting/not leaving hom to work)	
Figure 12: Mode Share for All Miles Traveled for Commute Trip Segments (excludes those telecommuting/not leaving home to work)	14
Figure 13: Trip Mode Share for the Longest Commute Trip Segment (excludes those telecommuting/not leaving home to work)	15
Figure 14: Mode Share for Miles Traveled on the Longest Segment of the Commute Trip (excludes those	
telecommuting/not leaving home to work) (excludes telecommuting)	
Figure 15: Trip Mode Share for All Trips by College Students	
Figure 16: Mode Share for All Miles Traveled by College Students	
Figure 17: Frequency of Telecommuting, if a Student	
Table 3: Trip Mode by Weekend or Weekday	
Table 4: Trip Mode by Children in Household	
Table 5: Trip Mode by Region (2022)	
Table 6: Trip Mode by Region (2017)	
Table 7: Trip Characteristics by Mode (2022)	
Table 8: Trip Characteristics by Mode (2017)	
Table 9: Trip Characteristics by Purpose (2022)	22
	22
Table 11: Most Frequently Used Travel Mode for Children to get to School (2022)	
Table 12: Most Frequently Used Travel Mode for Children to get to School (2017)	
Table 13: Most Frequently Used Travel Mode for Adults to get to Work or School (2022)	
Table 14: Most Frequently Used Travel Mode for Adults to get to Work or School (2017)	
Table 15: Commute Trip Characteristics by Mode (All Segments of Commute, 2022)	
Table 16: Commute Trip Characteristics by Mode (All Segments of Commute, 2017)	
Table 17: Commute Trip Characteristics by Purpose (All Segments of Commute, 2022)	
Table 18: Commute Trip Characteristics by Purpose (All Segments of Commute, 2017)	
Table 19: Work Location (2022)	
Table 20: Work Location (2017)	
Table 21: All Vehicle Trip Characteristics by Purpose (2022)	
Table 22: All Vehicle Trip Characteristics by Purpose (2017)	28

Table 23: SOV Trip Characteristics by Purpose (2022)	
Table 24: SOV Trip Characteristics by Purpose (2017)	29
Table 25: MOV Trip Characteristics by Purpose (2022)	30
Table 26: MOV Trip Characteristics by Purpose (2017)	30
Figure 18: Respondent has Vehicle Permits/Memberships	31
Figure 19: Vehicle Availability	
Table 27: Household Vehicle Types	32
Table 28: Household Vehicle Types (2022)	32
Table 29: Household Vehicle Fuel Sources (2022)	32
Table 30: Household Vehicle Year (2022)	33
Table 31: Transit Trip Characteristics by Purpose (2022)	34
Table 32: Transit Trip Characteristics by Purpose (2017)	
Figure 20: Transit Use to get to Work/School in Past month	35
Figure 21: Transit Use to get to Other Places in Past month	35
Figure 22: Car/vanpooled to get to Work/School in Past month	36
Figure 23: Car/vanpooled to get to Other Places in Past month	36
Figure 24: Bike Availability	37
Table 33: Bike Trip Characteristics by Purpose (2022)	37
Table 34: Bike Trip Characteristics by Purpose (2017)	37
Figure 25: Biking to get to Work/School in Past month	38
Figure 26: Biking to get to Other Places in Past month	38
Figure 27: Biking for Exercise/Fun in Past month	38
Figure 28: Respondent has Bike Membership	39
Table 35: Pedestrian Trip Characteristics by Purpose (2022)	
Table 36: Pedestrian Trip Characteristics by Purpose (2017)	40
Figure 29: Walking to get to Work/School in Past month	41
Figure 30: Walking to get to Other Places in Past month	41
Figure 31: Walking for Exercise/Fun in Past month	41
Figure 32: Ever Took Bus, Biked or Walked in Past Month	42
Figure 33: Primary Reason for Use of Alternative Modes	
Table 37: Modal Use by Modal Groups (2022)	44
Table 38 Modal Group Demographic and Household Characteristics (2022)	
Table 39: Question 1. In the past month, about how often did you:	46
Table 40: Question 2. If you used a commute mode besides driving alone in the past year (e.g., bike, bus, walk, vanpool, carpool), what were your primary reasons for doing so? (Check up to 3 for each)	46
Table 41: Question 3. Which of the following do you have? (Check all that apply)	47
Table 42: Question 4. Are you employed and/or do you attend school?	
Table 43: Question 5. Which location is your primary workplace closest to?	47
Table 44: Question 7. In a typical month, how often do you telecommute instead of traveling into work/school (i stay at home for the work/school day and use technology to work/attend)?	i.e.,
Table 45: Question 8. Did you telecommute on the day you completed the travel diary?	48
Table 46: Question 9. Please check the one choice below that best describes the kind of residence in which you live.	
Table 47: Question 10. Do you rent or own your residence?	
Table 48: Question 11A. How many vehicles does your household regularly use? (Cars, SUVs, vans, minivans, pickup trucks)	
Table 49: Question 11A with Household Size	

Table 50: Question 11B. How many vehicles does your household regularly use? (Motorcycles/scooters)	49
Table 51: Question 11C. Please provide details for these vehicles. (Vehicle Type) If you have fewer than 4, only four those you have. If you have more than 4, choose the 4 you use most often.	
Table 52: Question 11D. Please provide details for these vehicles. (Fuel Type) If you have fewer than 4, only fill those you have. If you have more than 4, choose the 4 you use most often.	
Table 53: Question 11E. Please provide details for these vehicles. (Year) If you have fewer than 4, only fill out the you have. If you have more than 4, choose the 4 you use most often.	
Table 54: Question 12A. How many usable bicycles and tricycles does your household have? (Regular bicycles/tricycles)	50
Table 55: Question 12A with Household Size	
Table 56: Question 12B. How many usable bicycles and tricycles does your household have? (Electric-assisted bicycles/tricycles)	
Table 57: Question 13. How many household members are in each of the following age categories? (Please incluyourself)	
Table 58: Question 14. For all children in your household who go to a K-12 school, please check their most frequently used travel mode to get to school. (If no children live in your household, or none attend K-12 school, please go to question #15)	
Table 59: Question 15. For household members who are 18 or older (and those 16-17 who are not in a K-12	
school), please check their most frequently used travel mode to work or school	
Table 60: Question 16. About how much was your TOTAL 2021 income before taxes for your household?	
Table 61: Question 17. How many years have you lived in Fort Collins?	
Table 62: Question 18. Which category contains your age?	
Table 63: Question 19. Are you, or any household members, students at Colorado State University or Front Ran Community College?	
Table 64: Question 20. How much education have you completed?	53
Table 65: Question 21. Which category best describes your ethnicity?	53
Table 66: Question 22. Which categories best describes your race? (Choose all that apply)	53
Table 67: Question 23. What is your gender?	53
Table 68: Mode Share of All Miles Travelled by Use of Alternative Modes in Past Month	55
Table 69: Mode Share of All Trips by Use of Alternative Modes in Past Month	56
Table 70: Mode Share of All Miles Travelled by Work Characteristics in Past Month	57
Table 71: Mode Share of All Trips by Work Characteristics in Past Month	58
Table 72: Proportion of All Miles by Mode by Vehicles Available	59
Table 73: Mode Share of All Trips by Vehicles Available	
Table 74: Mode Share of All Miles Travelled by Respondent Characteristics	61
Table 75: Mode Share of All Trips by Respondent Characteristics	62
Table 76: Mode Share of All Miles Travelled by Household Member Characteristics	63
Table 77: Mode Share of All Trips by Household Member Characteristics	64
Table 78: Mode Share of All Miles Travelled by Household Characteristics	65
Table 79: Mode Share of All Trips by Household Characteristics	66
Table 80: Mode Share of All Miles Travelled by Area of Fort Collins	67
Table 81: Mode Share of All Trips by Area	68
Table 82: Mode Share of All Miles Travelled by Day of Travel	69
Table 83: Mode Share of All Trips by Household Characteristics	
Table 84: Mode Share of All Commute Miles Travelled by Use of Alternative Modes in Past Month	71
Table 85: Mode Share of All Commute Trips by Use of Alternative Modes in Past Month	72
Table 86: Mode Share of All Commute Miles Travelled by Work Characteristics in Past Month	72
Table 87: Mode Share of All Commute Trips by Work Characteristics in Past Month	73

Table 88: Proportion of All Commute Miles by Mode by Vehicles Available	73
Table 89: Mode Share of All Commute Trips by Vehicles Available	74
Table 90: Mode Share of All Commute Miles Travelled by Respondent Characteristics	74
Table 91: Mode Share of All Commute Trips by Respondent Characteristics	75
Table 92: Mode Share of All Commute Miles Travelled by Household Member Characteristics	
Table 93: Mode Share of All Commute Trips by Household Member Characteristics	76
Table 94: Mode Share of All Commute Miles Travelled by Household Characteristics	76
Table 95: Mode Share of All Commute Trips by Household Characteristics	77
Table 96: Mode Share of All Commute Miles Travelled by Area of Fort Collins	
Table 97: Mode Share of All Commute Trips by Area	78
Table 98: Mode Share of All Miles Travelled by Day of Travel	78
Table 99: Mode Share of All Trips by Household Characteristics	79
Figure 34: Map of Study Area	
Table 100: Sampling Scheme by Region and Contact Type	82
Table 101: Sampling Scheme by Contact Type and Mailing Day	82
Table 102: Response by Day Diary Completed	
Table 103: 2022 Weighting Results	84

Executive Summary

Survey Background

On behalf of the City, National Research Center at Polco conducted the baseline iteration of the Fort Collins Travel Diary Study in 2017. The City contracted with Polco in 2022 to repeat the study to understand current travel patterns and how they changed from 2017 to 2022.

Residential addresses in the Fort Collins Growth Management Area (GMA) were selected via stratified random sampling and invitations were mailed to 7,500 households to solicit participation in the study. Respondents were asked to complete two tasks: fill out a short Household Survey about individual and household characteristics and complete a one-day Trip Diary in which they tracked all their trips for a 24-hour period (noting start and end locations and times, distance, travel mode and purpose).

A total of 957 residents completed at least one of these tasks for a response rate of 13% (921 completed both). The margin of error for items where all participants (900 or more) answered the question or completed the Travel Diary is $\pm 3\%$. The margin of error in 2017 was $\pm 4\%$ (573 respondents). When comparing the two years (for items answered by all respondents), differences of $\pm 6\%$ or more are statistically significant. When considering the results for subgroups such as commuters or students the margins of error increase.

Survey Results

Fort Collins residents stayed a little closer to home in 2022.

Overall, the average trip length was 4.4 miles per trip and people traveled 21 miles on average on the trip diary day. This was down from 5.4 miles per trip, and 24.2 average miles per day in 2017.

The COVID-19 pandemic significantly changed some travel patterns.

Telecommuting increased substantially from 2017 to 2022; from 4% of adults to 26% of adults saying it was their most common commute mode. School bus use fell, largely replaced with driving trips.



Sources: Household Survey Questions 15 and 14

Additionally, in 2022, 40% of employees who worked on their diary day said they worked from home on that day, compared to 17% in 2017.

Most trips and trip miles were traveled in a personal vehicle.

Single-occupancy vehicles (SOVs) were used for the majority of trips (56%) taken on the diary day and this accounted for 62% of the total miles traveled. This was a decrease from 2017.

The proportion of trips made driving with other people in their vehicles (multi-occupancy vehicles, MOVs) was statistically similar between years as was the proportion of trips using other modes (foot, bike, bus, motorcycle or ride-share).



Source: Trip Diary

Commute trips were more reliant on SOV.

While the proportion of employed people working from home increased (from 17% of those who worked on their diary day in 2017 to 40% in 2022), for those who travelled to work, SOVs were used for about two-thirds of the commute trips taken on the diary day in both years. The proportion of commute trips by various modes was similar between years, but the proportion of commute miles traveled by other modes increased (note that as most trips by "other" modes tended to be for short distances, much of this increase in percent of miles between years is due to one commuter's use of the Bustang to go to Denver).



College students used SOVs for 44% of their trips and 56% of the miles they traveled and used "other" modes (foot, bike, bus, motorcycle or ride-share) for 37% of trips and 13% of all miles traveled. This was not statistically different between the years.



Transit usage was small proportion of all trips.

Overall, 4% of respondents used transit on their diary day. Approximately 2% of trips were made by transit and transit trips accounted for 3% of miles traveled. This was similar to 2017, but the proportion of respondents who said they used transit at least once a month dropped from 2017 to 2022, even though all buses were made free. This is likely due to the COVID-19 pandemic which increased the number of companies offering work from home opportunities and also increased perceived safety risks for public transportation.

About half of respondents had biked recently.

Biking accounted for about 9% of all commute trips and 15% of all trips on the diary. When asked about biking in the month prior to participating in the study, 55% of respondents said they had biked at least once. Only 18% of households have no bikes available.

Most people walked, but not to get to work.

More than 8 in 10 respondents had walked in the 30 days prior to the study and 26% walked on their diary day, but walking accounted for only 13% of all trips and 3% of all miles traveled and 5% of all commute trips and less than 1% of all miles traveled for a commute to or from work.

2022

Survey Background

The City of Fort Collins contracted with Polco in 2017 and again in 2022 to conduct a trip diary study to better understand the modal share and trip-making behavior of residents. The information gained from this project will be used to assist transportation planning and evaluation.

This report outlines the results of the 2022 study and highlights changes in modal shares compared to 2017. For this study, residents were asked to maintain a diary of all their trips for a full 24-hour period (noting details about the distance, purpose and mode) and to complete a survey to provide further details about the demographic and household characteristics that likely influence travel choices. A copy of the Household Survey and Trip Diary can be found in *Appendix E: Survey Materials*.

All households in the Fort Collins Growth Management Area (GMA, see map on page 81) were eligible for participation in the study. A total of 7,500 household addresses were randomly selected to be contacted by mail and invited to participate in the study. The 7,500 selected households were sent a postcard introduction the study asking them to be on the lookout for the paper materials (letter, instructions, Household Survey, Travel Diary and postage-paid return envelope) which were mailed one week later. A subset of this group (500) that were identified as likely having Spanish speakers in the household were mailed both English and Spanish versions of the paper materials. The initial postcard had an error related to the date the diary should be completed, so a reminder postcard was also sent to clarify the date and direct respondents to the correct instructions in the survey packet.

A total of 957 residents participated in the 2022 study for an overall response rate of 13%. This was up from an overall response rate of 7% in 2017 – that lower response rate was largely driven by the inclusion of a smartphone app in 2017. About 1/3 of the households selected in 2017 were sent an invitation to download the app (with the option to download PDFs of the paper materials or call and have them mailed). While it was thought the app may be a more convenient way to complete the study, only about 2% of those receiving app invitations in 2017 were willing to download the app to complete the study.

Survey results were weighted so that respondent age, gender, race and housing tenure (rent versus own) and region were represented in the proportions reflective of the entire population. The margin of error is plus or minus three percentage points around any given percent for all results (N=957). More information about the survey methodology can be found in *Appendix D: Study Methodology*.

The body of the report includes graphs and tables summarizing results related to mode share and travel behavior. Detailed results for each question on the Household Survey can be found in *Appendix A: Responses to the Household* Survey. Detailed comparisons of mode share by respondent, household and geographic characteristics can be found in *Appendix B: Overall Mode Share by Respondent and Household Characteristics* and *Appendix C: Commute Mode Share by Respondent and Household Characteristics*.

In some tables, the percentages may not sum to 100%, this is either because the question asked the respondent to "choose all that apply" or for a question that asked the respondent to "choose one" it is due to the customary practice of rounding values to the nearest whole number.

Travel Mode

Overall Mode Use

Of the people completing the Trip Diary, 4% did not travel on their diary day (compared to 11% in 2017). These households are excluded from mode share calculations as they had no trips or mileage to report.

About three-quarters of respondents who traveled somewhere had at least one trip on their diary day where they drove alone in a car, pickup truck, SUV, minivan or van (single-occupancy vehicle, SOV). About one-third (33%) of respondents drove with someone else in a car, pickup truck, SUV, minivan or van as a driver or passenger (multiple-occupancy vehicle, MOV), with adults or with children. Many people also walked (26%) or biked (15%) on their diary day and a few used public transit (4%). Almost no one reported using a commercial truck, ride-hailing apps or a school bus.



Figure 1: Proportion of People Using Mode at Least Once During Diary Day

Source: Trip Diary; Proportions sum to more than 100% as respondents could use multiple modes during the day. No respondents reported using a commercial truck or a bike from a bike share.

Overall Mode Share

While about three-quarters of all respondents drove in an SOV at least once on their diary day (Figure 1), the proportion of trips made by SOV was lower. Of all the trips taken, about 56% were in vehicles with no passengers. About 12% of trips taken were in vehicles with only adult passengers and another 8% were in vehicles with children (some of these trips include other adults as well, but most trips were children-only as passengers).

Walking, jogging or running accounted for 13% of all trips taken while biking made up about 9% of all trips. Transit was used for about 2% of the trips, but very few were taken on a motorbike (0.1%) or by hailing a ride (0.3%).

Compared to the most recent National Household Travel Survey (NHTS), conducted in 2017 by the United States Department of Transportation (USDOT)¹, there were fewer trips by SOV/MOV (77%) and more by bike (9%) than the 2017 national average, which was 82.6% of trips by SOV/MOV, 2.5% by transit and 10.5% walking and 4.4% by other modes (2017 NHTS, USDOT).

The average number of trips taken in a day was 4.5, with a mode of 2, a minimum of 0 and a maximum of 17. A trip for the purpose of the diary is a one-way trip with no stops (e.g., going directly to work is one trip, but if a person stops for coffee and then goes to work it is considered two trips).



Figure 2: Trip Mode Share for All Trips

Source: Trip Diary; Proportion of all trips recorded from all Diary entries. No respondents (or fewer than 0.1%) reported using a commercial truck, ride-hailing, a bike/scooter share, school bus or other mode in 2022. Those modes are excluded from this chart.

¹ 2017: Report: Summary of Travel Trends: 2017 National Household Travel Survey (NHTS Publications: https://nhts.ornl.gov/publications)

Longer trips are more likely to be taken by car and so the proportion of miles traveled in an SOV is higher than the proportion of trips traveled in a SOV.

Of all the miles traveled, about 66% were in vehicles with no passengers, down from 72% in 2017. About 22% of miles traveled were in vehicles with a passenger; 8% drove at least one child and 14% were in vehicles with no children. Biking trips covered 7% of the miles traveled, 3% of the miles were on foot and 3% were on a bus.

Fort Collins had slightly more miles traveled by SOV/MOV (88%) than the 2017 national average, which was 78.1% of miles by SOV/MOV, 2.4% by transit and 19.4% by other modes (2017 NHTS, USDOT).



Figure 3: Mode Share for All Miles Traveled

Source: Trip Diary; Proportion of all miles traveled from all Diary entries. No respondents (or fewer than 0.1%) reported using a commercial truck, ride-hailing, a bike/scooter share, school bus or other mode in 2022. Those modes are excluded from this chart.

Telecommuting

In the Household Survey 54% of the employed respondents indicated that they telecommuted at least once a month and 17% said they telecommuted every workday. This was up from 2017 when 33% have ever telecommuted and 6% did so daily. Asked how each employed adult in the household most commonly got to work or school, 26% of adults most commonly telecommuted in 2022, compared to 4% in 2017.



Source: Household Survey Question 7.

*In 2017 the question asked how often you "ever" telecommute, this was changed to "in a typical month" in 2022.



For household members who are 18 or older (and those 16-17 who are not in a K-12 school), please check their most frequently used travel mode to work or school.



Source: Household Survey Question 15

The US Census American Community Survey (ACS) includes a set of questions about how Americans get to work. In the ACS, for each adult (16 or older) in the household the Census respondent is asked if the adult works, and for those who work they are asked "How did this person usually get to work LAST WEEK?" They are given a list of modes that includes "worked from home."

In the 2021 ACS 1-year estimates, 25% of employed people in Fort Collins said that they typically worked from home in the prior week. This is similar to the Household Survey results; 26% of those who worked or went to school indicated from that they most commonly worked from home as a commute mode (see Figure 5 on page 8).

	Percent who "usually" telecommuted last week			
Fort Collins, CO	24.9%			
Larimer County	24.2%			
Colorado	23.7%			
All of USA	17.9%			
Denver, CO	32.3%			
Boulder, CO	42.6%			

|--|

Source: 2021 US Census American Community Survey, Table B08006 (1-year estimate)

Respondents were also asked if they had telecommuted on the day they completed the Trip Diary. While 150 respondents to the Household Survey said they had telecommuted on their diary day, 14 of these also recorded a trip to work on the diary. It may be that those 14 worked partly from home, but still went into work (even though the description of telecommuting specifically noted that it referred to working from home *instead of* traveling to work). Assuming the other 136 did telecommute from home for the full day (no trips to work), teleworkers accounted for 40% of those who worked (either at home or at work) on their diary day (N=340). In 2017 this was 41 of 238 workers or 17%.





Source: Household Survey Question 7 and Trip Diary

Of the 136 telecommuters (worked only at home), 96 did not leave the house on their diary day, so had no trips. Of those who did leave, the remaining had more trips and miles driving with children than the general population or commuters.



Figure 7: Trip Mode Share for All Non-Work Trips by those who Telecommuted for Work on their Diary Day

Source: Trip Diary and Household Survey; Proportion of all trips recorded from all Diary entries. No telecommuters reported using a commercial truck, a bike from a bike share, a school bus, motorcycle, ride-hailing service or other mode.



Figure 8: Mode Share for All Non-Work Miles Traveled by those who Telecommuted on their Diary Day

Source: Trip Diary and Household Survey; Proportion of all trips recorded from all Diary entries. No telecommuters reported using a commercial truck, a bike from a bike share, a school bus, motorcycle, ride-hailing service or other mode.

Commute Mode Use

As discussed above, in 2022 40% of employees who worked on their diary day, worked from home and 60% went in to work. This was an increase from 17% of workers working from home on their diary day in 2017. Those who telecommuted on their workday are excluded from commute mode share calculations as they had no commute trips or commute mileage to report. The discussion below details the mode share for those employees who traveled to work on their diary day.

Commute trips are all the trips where a respondent went from home to work or from work to home. These do not include trips made mid-shift at work where a respondent leaves from work and returns to work. Additionally, trips are not counted as part of a commute if a respondent goes from home to another activity and then later in the day continues on to work or goes from work to an activity and then later on goes home. However, if a respondent stops briefly (less than 20 minutes) on the way from home to work or work to home (to drop off a child, get coffee, etc.) all segments of the journey to work are counted as part of the commute. This is presented below in two charts, first showing the proportion of all segments traveled for a commute and second for only the longest segment traveled for a commute journey.

About three-quarters of commuters travelled at least one of their commute segments by SOV (77%) and 76% drove alone for the longest segment(s) to or from work. Biking was the most popular commute mode after SOV, with about 16% using a bike for at least part of their commute, while 8% drove a child and 2% drove with an adult (MOV no child). About 4% used transit and 6% walked for all or part of their commute. This was similar to 2017.

Compared to the national average from the US Census², more Fort Collins residents biked and slightly fewer used SOV for the longest proportion of their commute.





² American Community Survey; Table S0801 Commuting Characteristics By Sex. Excluding those who worked at home, for the 2018 ACS 1-Year Estimate, 81% said they drove alone for their commute, 10% carpooled, 5% used public transit, 3% walked, 1% biked and 1% used other means. (Note, 5% had worked from home.)





For those who did not telecommute, SOV was the mode used on the most commute trip segments (Figure 11) and for the most commute miles (Figure 12). Biking was second most common for the number of commute trips (14%) and claimed 8% of the commute miles. MOV accounted for 9% of commute trips and 5% of commute miles. Transit was used for about 3% of trips but covered about 9% of the miles (largely due to one Bustang commuter who travelled to and from Denver). About 5% of commute trips (or trip segments) were on foot, but they covered less than 1% of the miles traveled.

Fort Collins had fewer transit and more bike commute trips than the 2017 national average, which was 87.5% of trips by SOV/MOV (down from 89.4% in 2009), 6.9% by transit (up from 5.1% in 2009) and 2.9% walking and 2.7% by other modes.

The average number of all trips taken in a day by those who went to work was 5, with a mode of 2, a minimum of 0 and a maximum of 14. The average was similar to the general population, but the mode was lower. The average number of commute trips was 1.8.³





Table 2: Average Number of Trips taken in a Day by Commuters
(excludes those telecommuting/not leaving home to work)

	Number of Commuters in Study	Mean	Mode	Minimum	Maximum
2017	223	5.0	4	2	14
2022	369	4.3	2	2	12

³ Intuitively we expect people to have at least two commute trips in a day (to work and back home) but in the study typology, trips are not counted as part of a commute if the respondent goes from home to another place and then more than 20 minutes later continues on to work or goes from work to another place and then more than 20 minutes later continues on to home.





As discussed above, when a person makes short stops on their commute each segment is considered part of their work journey, and in Figure 11 and Figure 12 each segment was counted as a trip. This is because the segments each have a different purpose and may have different modes. While this should be an accurate account of miles by mode, it may inflate the number of "trips" by mode (if you stopped 3 places on the way to work, it is 4 trips). As such, is it also interesting to consider the mode of the primary (longest) segment of the work commute. The tables below show the mode shares for trips and miles for only the longest segments of the commute. Because many commutes are direct to work, the results are mostly similar to those that include all commute segments of the commute trip.

Including only the longest segment reduces the proportion of MOV trips with children, which suggests that the trip segment from home to school/daycare (or wherever the children are dropped off) is shorter than the next segment from school/daycare to work.



Figure 13: Trip Mode Share for the Longest Commute Trip Segment (excludes those telecommuting/not leaving home to work)



Figure 14: Mode Share for Miles Traveled on the Longest Segment of the Commute Trip (excludes those telecommuting/not leaving home to work) (excludes telecommuting)

Source: Trip Diary; Proportion of all trips recorded from all Diary entries. No respondents reported using a commercial truck or a bike from a bike share and the few school bus and motorcycle trips represented 0.1% or less of all trips.

A total of 118 of the respondents said they were attending school full or part time and 87 identified themselves as students at Colorado State University (CSU) or Front Range Community College. Diary trip data shows that students were less likely than the general population to travel alone in cars (about 40% of trips and 60% of miles). They recorded more trips by bike and on foot than the general population and covered more miles by these modes as well.



Source: Trip Diary and Household Survey; Proportion of all trips recorded from all Diary entries. No students reported using a commercial truck, a bike from a bike share, a school bus, motorcycle or ride-hailing service.



Figure 16: Mode Share for All Miles Traveled by College Students

Source: Trip Diary and Household Survey; Proportion of all trips recorded from all Diary entries. No students reported using a commercial truck, a bike from a bike share, a school bus, motorcycle or ride-hailing service.

Most students telecommuted at least some of the time, with only 27% of students never attending classes from home. Most who telecommuted for school did so a few times a week.

How often, if ever, do you telecommute for school all day instead of traveling to school (i.e., stay at home and use computers, Internet, or phones to attend school)?					
-	Every school	day 🔲 1-4 times a week	1-3 times a month	Never	
2022	20%	38%	14%	27%	

Figure 17: Frequency of Telecommuting, if a Student

Source: 2022 Household Survey (not asked in2017)

Overall Mode Share by Day Type

Whether travel took place on a weekend or weekday had more of an impact on mode share in 2022 than it had in 2017. In 2022, respondents were more likely to travel by SOV on the weekend than they had been in 2017 and more likely to travel by SOV on the weekend compared to the weekday.

	20	2022		17
	weekend	weekday	weekend	weekday
SOV	67%	52%	63%	61%
Foot	10%	14%	12%	12%
MOV (only adults)	7%	13%	15%	8%
Bike	3%	10%	6%	7%
MOV (with children)	11%	8%	3%	9%
Transit	1%	1%	0%	2%
Motorbike, scooter	0%	1%	0%	0%
Other	0%	0%	1%	1%

Source: Trip Diary

Overall Mode Share by Children in Households

As in 2017, in 2022 having children in the household influenced travel choices, with a greater proportion of trips made in a MOV with children by those with children in the household and a smaller proportion of trips made by SOV, MOV with adults only, walking or biking.

		2022		2017		
	Children	ı (<16) in household	Children (<16) in household			
	None	None One or more		One or more		
SOV	56%	53%	62%	56%		
Foot	14%	7%	12%	8%		
MOV (only adults)	14%	4%	12%	5%		
Bike	11%	4%	9%	4%		
MOV (with children)	3%	33%	1%	27%		
Transit	2%	0%	2%	1%		
Motorbike, scooter	1%	0%	0%	0%		
Other	0%	0%	1%	0%		

Table 4: Trip Mode by Children in Household

Source: Trip Diary.

Overall Mode Share by Region

Regions 1 and 3, the northwest and central-west areas of Fort Collins, had the lowest mode share for SOVs. Regions 2 and 3 had the highest proportion of walkers. Multi-occupancy vehicles (MOV) were most common in Regions 3 and 5.

		Fort Collins Region							
	1	2	3	4	5	6	GMA		
SOV	48%	60%	43%	56%	59%	66%	64%		
Foot	19%	18%	10%	12%	5%	10%	10%		
MOV (only adults)	13%	10%	14%	11%	21%	9%	12%		
MOV (with children)	6%	6%	20%	10%	8%	3%	6%		
Bike	5%	6%	12%	9%	4%	11%	7%		
Transit	5%	0%	0%	2%	2%	1%	0%		
Motorbike, scooter	3%	0%	0%	0%	0%	0%	1%		
Other	0%	0%	0%	0%	0%	0%	0%		

Table 5:	I rip Niode by	y Region (2022)

Table 6: Trip Mode by Region (2017)									
		Fort Collins Region							
	1	2	3	4	5	6			
SOV	51%	61%	60%	67%	64%	69%			
Foot	17%	9%	10%	12%	7%	8%			
MOV (only adults)	8%	11%	12%	7%	5%	10%			
MOV (with children)	6%	5%	7%	9%	20%	10%			
Bike	13%	11%	7%	2%	3%	1%			
Transit	3%	2%	2%	2%	0%	0%			
Motorbike, scooter	0%	0%	0%	0%	1%	0%			
Other	2%	0%	0%	0%	0%	1%			

Source: Trip Diary. See Appendix D: Study Methodology for full map of regions.



Trip Characteristics

Overall Trip Characteristics

Overall, the average trip length was 4.4 miles per trip and people traveled 21 miles on average on the trip diary day. This was down from 5.4 miles per trip, and 24.2 average miles per day in 2017. This was lower than the 2017 national average of 10.5 miles per trip and 40.0 miles per day (2017 NHTS, USDOT).

SOV was the most frequently used travel mode (75% in 2022) and this proportion increased compared to 67% of trips in 2017. However, the average miles per person driven by SOV fell from 24.6 to 17.6 miles per day for those travelling by SOV and from 16.5 to 12.3 miles as an overall average. MOV trips with children were generally shorter than those with adults (10.6 miles per trip made on average compared to 15.8).

All modes	SOV	MOV with children	MOV adult only	Transit	Bike	Foot
-	75%	15%	18%	4%	14%	26%
4.6	2.6	0.4	0.6	0.1	0.4	0.6
4.8	3.5	2.6	3.1	1.9	3.0	2.4
19.6	12.3	1.5	2.7	1.1	1.2	0.6
21.0	17.6	10.6	15.8	31.5	9.3	2.3
4.4	5.1	4.1	5.1	16.5	3.1	1.0
14.5	13.0	11.4	13.4	32.6	18.6	18.7
	All modes - 4.6 4.8 19.6 21.0 4.4	All modes SOV - 75% 4.6 2.6 4.8 3.5 19.6 12.3 21.0 17.6 4.4 5.1	All modes MOV with children - 75% 15% 4.6 2.6 0.4 4.8 3.5 2.6 19.6 12.3 1.5 21.0 17.6 10.6 4.4 5.1 4.1	All modes MOV SOV MOV with children MOV adult only - 75% 15% 18% 4.6 2.6 0.4 0.6 4.8 3.5 2.6 3.1 19.6 12.3 1.5 2.7 21.0 17.6 10.6 15.8 4.4 5.1 4.1 5.1	All modes MOV SOV MOV with children MOV adult only Transit - 75% 15% 18% 4% 4.6 2.6 0.4 0.6 0.1 4.8 3.5 2.6 3.1 1.9 19.6 12.3 1.5 2.7 1.1 21.0 17.6 10.6 15.8 31.5 4.4 5.1 4.1 5.1 16.5	All modes MOV SOV MOV with children MOV adult only Transit Bike - 75% 15% 18% 4% 14% 4.6 2.6 0.4 0.6 0.1 0.4 4.8 3.5 2.6 3.1 1.9 3.0 19.6 12.3 1.5 2.7 1.1 1.2 21.0 17.6 10.6 15.8 31.5 9.3 4.4 5.1 4.1 5.1 16.5 3.1

|--|

Source: 2022 Trip Diary. Use of commercial truck, bike/scooter share, school bus, ride-hailing and motorcycle trips represented less than 1% of the trips and miles all together.

Trip Characteristic	All modes	SOV	MOV with children	MOV adult only	Transit	Bike	Foot
Proportion of those who traveled on diary day who used mode at least once	-	67%	12%	16%	4%	11%	20%
Average number of trips per person	4.7	2.6	0.3	0.4	0.1	0.3	0.5
Average number of trips per person, if used mode	5.2	3.9	2.9	2.4	1.9	2.8	2.6
Average miles per person	24.2	16.5	1.4	3.3	0.3	1.0	0.4
Average miles per person, if used mode	28.3	24.6	11.7	19.8	7.7	8.5	1.9
Average miles per trip	5.4	6.3	4.0	8.3	4.1	3.0	0.7
Average trip duration (minutes)	16.4	16.8	13.3	18.8	16.5	17.9	13.8

Table 8: Trip Characteristics by Mode (2017)

Source: 2017 Trip Diary. No respondents reported using a commercial truck or a bike from a bike share and the few school bus, ride-hailing and motorcycle trips represented 0.3% or less than of all trips and 0.2% or less of all miles.

Going home remained the most common trip purpose as people leave home for a variety of purposes, but almost all return home by the end of the diary day. The other common trip purposes were going to work, social recreation, and shopping and social recreation. Lengths of trip varied by purpose; with the shortest trips for getting to school.

Trip purpose	Proportion of trips	Average miles per trip	Average trip duration (minutes)
All purposes	100%	4.4	14.4
go home	34%	4.5	14.2
go to work	12%	5.5	15.5
go to school	1%	2.4	12.8
drive passenger	6%	5.2	13.4
change travel mode	2%	8.7	19.6
other work/business	4%	6.7	15.7
personal business	9%	4.0	12.0
social/recreation	15%	3.8	19.2
eat a meal	6%	3.5	11.1
shopping	11%	4.4	14.4
other	0%		

Source: 2022 Trip Diary.

Table 10: Trip Characteristics by Purpose (2017)

Trip purpose	Proportion of trips	Average miles per trip	Average trip duration (minutes)
All purposes	100%	5.4	16.5
go home	32%	5.2	17.3
go to work	12%	5.8	17.0
go to school	2%	1.9	11.2
drive passenger	4%	5.1	14.9
change travel mode	2%	2.0	11.6
other work/business	7%	7.6	18.4
personal business	12%	8.6	19.4
social/recreation	10%	3.9	16.6
eat a meal	6%	3.4	13.6
shopping	11%	3.6	12.1
other	2%	6.3	22.4

Source: 2017 Trip Diary.

Most Common Modes used for School and Work

In the Household Survey, respondents were asked how all of their household members typically travel to school, if they go to school. For children, 57% were driven alone or with other children in 2022 compared to 40% in 2017. While school bus usage dropped from 24% of children in 2017 to 8% in 2022.

For all children in your household who go to a K-12 school, please check their most frequently used travel mode to get to school. (If no children live in your household, or none attend K-12 school, please skip this question)	All Children	Child 1	Child 2	Child 3	Child 4
Walk	12%	9%	0%	29%	12%
Bicycle	6%	11%	18%	0%	6%
School bus	8%	11%	25%	41%	8%
Public bus	2%	1%	0%	0%	2%
Driven alone (passenger)	36%	23%	32%	17%	36%
Driven with other children	21%	31%	16%	13%	21%
Drive themselves	9%	11%	7%	0%	9%
Drive themselves + others	5%	1%	0%	0%	5%
Total	100%	100%	100%	100%	100%

Table 11: Most Frequently Used Travel Mode for Children to get to School (2022)

Source: 2022 Household Survey

Table 12: Most Frequently Used Travel Mode for Children to get to School (2017)

For all children in your household who go to a K-12 school, please check their most frequently used travel mode to get to school. (If no children live in your household, or none attend K-12 school, please skip this question)	All Children	Child 1	Child 2	Child 3	Child 4
Walk	14%	15%	18%	5%	0%
Bicycle	9%	11%	11%	0%	0%
School bus	24%	30%	21%	5%	0%
Public bus	4%	1%	2%	28%	0%
Driven alone (passenger)	22%	22%	23%	23%	0%
Driven with other children	18%	14%	22%	20%	100%
Drive themselves	7%	7%	3%	19%	0%
Drive themselves + others	1%	1%	0%	0%	0%
Total	100%	100%	100%	100%	100%

Source: 2017 Household Survey

For adults, telecommuting increased from 4% to 25% of adults saying it was the most common mode. Driving alone dropped from 62% to 56% and driving with others dropped from 10% to 3%. Biking, walking, and taking the bus collectively dropped from being the most common commute mode for 26% to being most common for about 16%.

Table 13: Most Frequently Used Travel Mode for Adults to get to Work or School (2022)									
For household members who are 18 or older (and those 16-17 who are not in a K-12 school), please check their most frequently used travel mode to work or school.	All adults	You (1)	Adult 2	Adult 3	Adult 4				
Telecommute/work from home	25%	30%	11%	17%	25%				
Walk	3%	3%	9%	35%	3%				
Bicycle	11%	6%	14%	0%	11%				
Take bus	2%	1%	4%	15%	2%				
Drive alone	56%	51%	50%	23%	56%				
Drive with adult from household	2%	4%	9%	9%	2%				
Drive with adult NOT from household	0%	2%	3%	0%	0%				
Drive with children from household	1%	2%	0%	0%	1%				
Total	100%	100%	100%	100%	100%				

Source: 2022 Household Survey

Table 14: Most Frequently Used Travel Mode for Adults to get to Work or School (2017)

For household members who are 18 or older (and those 16-17 who are not in a K-12 school), please check their most frequently used travel mode to work or school.	All adults	You (1)	Adult 2	Adult 3	Adult 4
Telecommute/work from home	4%	4%	6%	0%	0%
Walk	6%	5%	6%	12%	1%
Bicycle	14%	17%	11%	13%	5%
Take bus	4%	3%	4%	5%	8%
Drive alone	62%	65%	62%	54%	31%
Drive with adult from household	7%	3%	6%	15%	55%
Drive with adult NOT from household	1%	0%	1%	0%	0%
Drive with children from household	2%	3%	2%	1%	0%
Total	100%	100%	100%	100%	100%

Source: 2017 Household Survey

Commute Trip Characteristics

Most commuters had one trip to work and one back home from work, with a daily average of 2.1 trips. Those who commuted with other adults had more than two trips on average, consistent with commuters traveling by MOV picking up other adults (as the segments would be counted as two trips in the trip typology).

Overall, the average commute trip distance was 6.5 miles per trip, which was similar to 2017 and lower than the 2017 national average of 12.2 miles per commute trip (2017 NHTS, USDOT).

The average distance per commute trip was 6.5 miles and the average commuter traveled 13.7 miles on their diary day. The most common purposes were to go to work (47%) and to go home (39%). Stops along the way were most commonly to drive a passenger (pick up or drop off) or to change travel mode.

The average miles per commute by transit increased significantly from 2017 to 2022, largely related to one commuter using the Bustang to go from Fort Collins to Union Station in Denver in 2022.

Trip Characteristic	All modes	SOV	MOV with children	MOV adults only	Transit	Bike	Foot
Proportion of those who commuted on diary day who used mode	-	77%	8%	2%	4%	16%	6%
Average number of trips per commuter	2.1	1.4	0.1	0	0.1	0.3	0.1
Average number of trips per commuter, if used mode	2.1	1.9	1.8	1.9	1.6	1.9	1.8
Average miles per commuter	13.7	9.4	0.4	0.2	2.6	1.0	0.1
Average miles per commuter, if used mode	13.7	12.3	4.7	8.3	24.1	6.4	0.8
Average miles per commute trip	6.5	6.6	2.6	4.4	38.8	3.4	0.4
Average commute trip duration (minutes)	16.9	15.2	8.1	14.8	64.6	21.0	10.0
Average commute speed (mph)	19.0	21.8	19.1	18.6	31.1	9.0	2.4

Table 15: Commute Trip Characteristics by Mode (All Segments of Commute, 2022)

Source: Trip Diary

Table 16: Commute Trip Characteristics by Mode (All Segments of Commute, 2017)

Trip Characteristic	All modes	SOV	MOV with children	MOV adults only	Transit	Bike	Foot
			ciniaren	Ully			
Proportion of those who commuted on diary day who used mode	-	77%	8%	3%	5%	15%	5%
Average number of trips per commuter	2.0	1.4	0.1	0.1	0.1	0.2	0.1
Average number of trips per commuter, if used mode	2.0	1.8	1.6	2.7	1.2	1.5	1.7
Average miles per commuter	12.2	9.9	0.5	0.8	0.2	0.6	0.1
Average miles per commuter, if used mode	12.2	12.9	6.5	24.1	4.6	4.2	1.7
Average miles per commute trip	6.3	7.3	4.2	8.9	3.7	2.7	1.0
Average commute trip duration (minutes)	17.7	18.6	13.6	19.4	12.9	15.1	17.3
Average commute speed (mph)	18.3	20.2	18.5	22.9	22.8	9.5	3.6

Source: Trip Diary

Trip Purpose	Proportion of trips	Average miles per trip	Average trip duration (minutes)
All	100%	6.4	16.7
go home	39%	6.6	17.4
go to work	47%	5.9	16.2
go to school	0%		
drive passenger	4%	5.7	13.4
change travel mode	4%	17.1	31.2
other work/business	0%	1.3	10.0
personal business	2%	4.7	12.4
social/recreation	0%	2.6	7.7
eat a meal	1%	2.0	7.0
shopping	3%	3.1	6.2
other	0%		

Table 17: Commute Trip Characteristics by Purpose (All Segments of Commute, 2022)

Source: Trip Diary

Table 18: Commute Trip Characteristics by Purpose (All Segments of Commute, 2017)

Trip Purpose	Proportion of trips	Average miles per trip	Average trip duration (minutes)
All	100%	6.3	17.7
go home	35%	6.6	19.5
go to work	50%	6.8	18.0
go to school	1%	5.5	10.0
drive passenger	6%	6.2	14.4
change travel mode	3%	1.5	11.2
other work/business	0.2%	3.3	15.2
personal business	3%	1.9	8.9
social/recreation	0.2%	8.4	13.0
eat a meal	0.2%	1.3	5.2
shopping	2%	2.0	11.4
other	0.2%	3.1	12.0

Source: Trip Diary

Most of the respondents who were employed lived and worked in Fort Collins (78% worked outside the home and 8% at worked at home). Loveland and the Denver Metro Region were the most common work locations outside of Fort Collins.

Which location is your primary workplace closest to?	All Employed	Commuted on diary day	Did not commute on diary day
Fort Collins	78%	84%	71%
I work from my home	8%	0%	17%
Loveland	8%	12%	4%
Denver metro area	5%	2%	8%
Other city	2%	2%	3%
Greeley	1%	1%	0%
Windsor	0%	0%	0%
Boulder	0%	0%	0%
Longmont	0%	0%	0%

Table 19: Work Location (2022)

Source: 2022 Household Survey

Table 20: Work Location (2017)							
Which location is your primary workplace closest to?	All Employed	Commuted on diary day	Did not commute on diary day				
Fort Collins	78%	81%	75%				
I work from my home	6%	0%	11%				
Loveland	6%	10%	2%				
Denver metro area	2%	2%	3%				
Other city	2%	2%	3%				
Greeley	3%	3%	4%				
Windsor	1%	1%	1%				
Boulder	1%	1%	1%				
Longmont	1%	1%	1%				

Source: 2017 Household Survey

Automobile Trip Characteristics

Going home was the most common trip purpose reported as almost everyone returned home at least once during their diary day. Driving to take care of personal business (10%), shop (13%) or to go to work were next most common (12%) trip purposes. Lengths of trip varied by purpose; with the shortest trips for getting to school.

	Proportion of vehicle trips	Average miles per trip	Average trip duration (minutes)	Average number of people	Average number of adults	Average number of children
All	100%	4.9	12.9	1.4	1.3	1.3
go home	35%	4.8	12.8	1.4	1.2	1.3
go to work	12%	6.8	15.2	1.1	1.1	1.1
go to school*	1%	3.9	13.6	1.1	1.1	
drive passenger	8%	5.4	13.7	1.9	1.2	1.4
change travel mode*	1%	2.5	10.3	1.1	1.0	1.0
other work/business	5%	7.6	16.3	1.2	1.2	1.1
personal business	10%	4.4	12.3	1.3	1.2	1.1
social/recreation	10%	5.5	14.0	1.6	1.5	1.3
eat a meal	6%	3.8	11.1	1.6	1.5	1.4
shopping	13%	3.2	9.7	1.4	1.3	1.2

Source: 2017 Trip Diary; *These purposes had 22 or fewer trips, use caution in interpreting this data.

Table 22: All Vehicle Trip Characteristics by Purpose (2017)

	Proportion of vehicle trips	Average miles per trip	Average trip duration (minutes)	Average number of people	Average number of adults	Average number of children
All	100%	6.3	16.7	1.5	1.3	1.5
go home	31%	6.3	17.0	1.4	1.2	1.5
go to work	12%	6.8	17.8	1.1	1.1	1.2
go to school*	1%	2.5	10.3	1.6	1.4	1.0
drive passenger	6%	5.1	14.9	2.0	1.3	1.5
change travel mode*	0%	7.0	16.5	1.5	1.5	
other work/business	7%	9.2	20.7	1.2	1.1	1.0
personal business	14%	9.4	20.2	1.5	1.3	1.4
social/recreation	8%	4.8	13.9	1.5	1.4	1.4
eat a meal	6%	4.0	14.4	2.4	1.9	1.9
shopping	13%	3.7	12.1	1.4	1.3	1.3

Source: 2022 Trip Diary; *These purposes had 10 or fewer trips, use caution in interpreting this data.

	Proportion of SOV trips	Average miles per trip	Average trip duration (minutes)	Average number of people	Average number of adults	Average number of children	
All	100%	5.1	13.0	1.1	1.1	1.4	
go home	36%	5.0	13.0	1.1	1.1	1.4	
go to work	15%	7.0	15.6	1.1	1.1	1.0	
go to school*	1%	3.7	11.8	1.0	1.0		
drive passenger	4%	5.4	13.9	1.1	1.1	1.6	
change travel mode*	1%	2.7	10.3	1.0	1.0		
other work/business	6%	7.4	15.8	1.1	1.1	1.0	
personal business	11%	4.7	12.6	1.1	1.1	1.1	
social/recreation	8%	5.2	13.3	1.2	1.2	1.3	
eat a meal	6%	3.1	10.2	1.3	1.3	1.6	
shopping	13%	3.2	10.0	1.1	1.1	1.3	

Table 23: SOV Trip Characteristics by Purpose (2022)

Source: 2022 Trip Diary; *These purposes had 20 or fewer trips, use caution in interpreting this data.

Table 24: SOV Tri	p Characteristics b	v Purpose	(2017)
		,	(====;;

	Proportion of SOV trips	Average miles per trip	Average trip duration (minutes)	Average number of people	Average number of adults	Average number of children
All	100%	6.3	16.9	1.2	1.2	2.1
go home	31%	6.4	17.5	1.1	1.1	2.3
go to work	14%	6.8	17.7	1.0	1.0	1.0
go to school*	0.3%	2.8	9.6	1.2	1.2	
drive passenger	3%	4.3	13.0	1.3	1.2	2.0
change travel mode*	0.3%	7.9	18.8	1.4	1.4	
other work/business	8.2%	9.6	21.0	1.1	1.1	
personal business	14%	8.3	19.4	1.2	1.2	1.4
social/recreation	7.8%	4.4	13.5	1.3	1.2	1.6
eat a meal	5.1%	4.4	14.2	2.4	1.8	2.1
shopping	14%	3.6	11.7	1.2	1.2	2.7

Source: 2017 Trip Diary; *These purposes had 10 or fewer trips, use caution in interpreting this data.

Trip Purpose	Proportion of MOV trips	Average miles per trip	Average trip duration (minutes)	Average number of people	Average number of adults	Average number of children
All	100%	4.7	12.6	2.2	1.7	1.3
go home	32%	4.4	12.2	2.3	1.7	1.3
go to work*	3%	3.5	10.8	2.1	1.7	1.1
go to school*	0.3%	5.2	20.0	2.0	2.0	
drive passenger	18%	5.3	13.6	2.4	1.3	1.4
change travel mode*	0.2%	0.5		2.0	1.0	1.0
other work/business*	3%	9.0	18.5	2.0	1.9	1.1
personal business	10%	3.4	11.4	2.0	1.8	1.1
social/recreation	13%	6.1	15.2	2.3	2.0	1.3
eat a meal	8%	5.1	12.8	2.2	2.0	1.4
shopping	13%	3.0	9.0	2.1	1.8	1.1

Table 25: MOV Trip Characteristics by Purpose (2022)

Source: 2022 Trip Diary; *These purposes had 26 or fewer trips, use caution in interpreting this data.

Table 26: MOV Tri	Characteristics b	v Purpose (2017)

Trip Purpose	Proportion of MOV trips	Average miles per trip	Average trip duration (minutes)	Average number of people	Average number of adults	Average number of children
All	100%	6.3	16.2	2.3	1.7	1.4
go home	34%	6.0	15.4	2.3	1.6	1.5
go to work*	3%	6.3	20.4	2.4	1.9	1.2
go to school*	1%	2.1	11.2	2.0	1.5	1.0
drive passenger	16%	5.6	16.1	2.4	1.4	1.4
change travel mode*	0.2%	2.6	10.0	2.0	2.0	
other work/business*	2%	3.9	16.9	2.0	1.9	1.0
personal business	12%	13.8	23.7	2.5	1.8	1.4
social/recreation	9%	6.0	15.0	2.3	1.9	1.4
eat a meal	10%	3.2	14.8	2.5	2.0	1.6
shopping	11%	4.4	13.9	2.2	1.6	1.2

Source: 2017 Trip Diary; *These purposes had 20 or fewer trips, use caution in interpreting this data.
Vehicle Availability and Parking Passes

About 1 in 10 respondents had a parking permit at CSU or downtown. Those with a parking pass who commuted to work on their diary day were most likely to drive alone (78% SOV). They commuted an average of 5.4 miles per trip, which was similar to SOV commuters overall.



Source: Household Survey

The average number of vehicles per adult in the household was 1.0 (1.2 in 2017), with about threequarters of households owing one vehicle per adult (up from 49% of households in 2017) and 17% having more than one car per person (down from 2017). Only 2% of households had no vehicles. Cars were the most common vehicle type (53%) and vehicles generally used gas (94%) and most were 2010 models or newer (61%).

The average number of vehicles per household was 1.9 (in 2017 and 2022) which was similar to the national average of 1.9 (2017 NHTS, USDOT).



About half of the vehicles owned by surveyed households were a regular car, with an additional one-third being a larger vehicle like an SUV, van or minivan. Twelve percent of the vehicles were pickup trucks, and about 3% were motorcycles or scooters. While the vast majority of these vehicles used regular gas to operate, 2% used diesel gasoline, 4% were hybrids and 1% were electric vehicles. Three in 10 vehicles were manufactured in 2016 or later, while 2 in 10 were made in 2004 or earlier (18+ years old), and another 2 in 10 were older than 13-17 years old.

All vehicles	2022	2017
Car	50%	53%
SUV/van/minivan	34%	32%
Pickup truck	12%	13%
Motorcycle/scooter	3%	2%
Gas	94%	94%
Hybrid	4%	5%
Diesel	2%	1%
Electric	1%	1%
2018-2022	19%	-
2016-2017	11%	9%
2013-2015	18%	19%
2010-2014	14%	12%
2005-2009	22%	21%
2004 or older	17%	39%

Table 27: Household	Vehicle	Types
---------------------	---------	-------

Source: Household Survey; If you have fewer than 4, only fill out those you have. If you have more than 4, choose the 4 you use most often.

Please provide details for these vehicles: Vehicle Type	All vehicles	Vehicle 1 (your vehicle)	Vehicle 2	Vehicle 3	Vehicle 4
Car	53%	57%	51%	43%	59%
SUV/van/minivan	32%	36%	29%	30%	10%
Pickup truck	13%	8%	18%	20%	16%
Motorcycle/scooter	2%	0%	2%	8%	15%

Table 28: Household Vehicle Types (2022)

Source: Household Survey; If you have fewer than 4, only fill out those you have. If you have more than 4, choose the 4 you use most often.

Please provide details for these vehicles: Fuel Type	All vehicles	Vehicle 1 (your vehicle)	Vehicle 2	Vehicle 3	Vehicle 4
Gas	94%	89%	90%	94%	97%
Hybrid	4%	7%	6%	0%	0%
Diesel	2%	2%	3%	5%	3%
Electric	1%	2%	1%	1%	1%

Source: Household Survey; If you have fewer than 4, only fill out those you have. If you have more than 4, choose the 4 you use most often.

Please provide details for these vehicles: Year	All vehicles	Vehicle 1 (your vehicle)	Vehicle 2	Vehicle 3	Vehicle 4
2018-2022	19%	20%	18%	19%	4%
2016-2017	11%	12%	9%	7%	12%
2013-2015	18%	19%	19%	9%	1%
2010-2014	14%	12%	19%	14%	21%
2005-2009	22%	24%	16%	23%	43%
2004 or older	17%	14%	19%	28%	18%

Table 30: Household Vehicle Year (2022)

Source: Household Survey; If you have fewer than 4, only fill out those you have. If you have more than 4, choose the 4 you use most often.

Transit Use

Overall, 4% of respondents used transit on their diary day. Approximately 2% of trips were made by transit and transit trips accounted for 3% of miles traveled.

As might be expected, the most common trip purpose of a transit trip (besides "going home") was to "change travel mode" (indicating that a respondent would be walking, biking, or driving once they got off the bus). Going to work was the other most common non-home purpose.

	Proportion of bus trips	Average miles per trip	Average trip duration (minutes)
All	100%	16.5	32.6
go home*	30%	25.8	57.3
go to work*	3%	2.1	10.0
go to school*	18%	2.0	12.0
drive passenger*	0%	1.0	3.0
change travel mode	38%	22.1	37.6
other work/business*	0%	•	
personal business*	2%	3.6	12.4
social/recreation*	7%	1.0	4.0
eat a meal*	0%	1.5	8.0
Shopping*	2%	1.1	5.0

Source: 2022 Trip Diary; *These purposes had 20 or fewer trips, use caution in interpreting this data.

	Proportion of bus trips	Average miles per trip	Average trip duration (minutes)
All	100%	4.1	16.5
go home*	20%	2.3	30.7
go to work*	16%	5.7	21.5
go to school*	18%	4.0	11.7
drive passenger*	0%		
change travel mode	24%	2.2	11.1
other work/business*	0%	62.6	75.0
personal business*	9%	10.4	20.0
social/recreation*	7%	1.7	11.1
eat a meal*	2%	1.1	35.0
Shopping*	7%	2.0	15.0

Table 32: Transit Trip Characteristics by Purpose (2017)

Source: 2017 Trip Diary; *These purposes had 10 or fewer trips, use caution in interpreting this data.

0%

Source: Household Survey

20%

While Fort Collins has made efforts to support transit by making all buses free, transit use still dropped from 2017 to 2022 with more people saying they never use it for any reason (87% in 2022 compared to 77% in 2017). This is likely due to the COVID-19 pandemic which increased the number of companies offering work from home opportunities and also increased perceived safety risks for public transportation.





60%

80%

40%

100%

Car/Vanpooling

About one-third of respondents said they car/vanpooled at least once in the past month either to get to work/school or to get other places.



60%

80%

40%



100%

Biking Characteristics

On average, households had one bike per person but this varied widely, 18% of households had no bikes and 32% had more than one bike per person. Those who used a bike on their diary day (15%) of respondents who traveled), most commonly used their bikes to go to work or for social/recreation reasons.



Figure 24: Bike Availability

Source: Household Survey

Table 33: Bike Trip Ch	aracteristics by Purpose (2022)

	Proportion of bike trips	Average miles per trip	Average trip duration (minutes)
All	100%	3.1	18.6
go home	40%	3.0	18.3
go to work	20%	3.2	20.6
go to school*	3%	1.3	11.9
drive passenger*	1%	2.3	5.5
other work/business*	2%	2.3	17.6
personal business*	5%	0.8	6.8
social/recreation	21%	3.9	23.5
eat a meal*	3%	5.2	8.6
Shopping*	5%	1.9	16.8

Source: 2022 Trip Diary; *These purposes had 20 or fewer trips, use caution in interpreting this data.

Table 34: Bike Trip Characteristics by Purpose (2017)					
	Proportion of bike trips	Average miles per trip	Average trip duration (minutes)		
All	100%	3.0	18.2		
go home	39%	2.6	18.0		
go to work	20%	2.8	14.3		
go to school	5%	1.7	13.0		
change travel mode*	3%	0.6	10.5		
other work/business	7%	2.0	13.9		
personal business*	5%	1.5	13.9		
social/recreation	13%	7.6	35.0		
eat a meal*	4%	1.6	11.2		
Shopping*	4%	2.3	12.3		

Source: 2017 Trip Diary; *These purposes had 10 or fewer trips, use caution in interpreting this data.

Overall, 55% of respondents said they had biked for some reason at least once in the past 30 days (compared to 52% in 2017). Most commonly they biked for exercise or fun or to go to places other than work. One-quarter of respondents said they had biked to work or school at least once in the past 30 days, and 15% did so on their diary day.



Only one percent of respondents had a Bike Share membership, and no one had a Bike Cage membership.

Which of the following do you have?								
50%								
25% -	2022	2017	2022	2017				
	2022	2017	-	-				
	0%	0%	1%	1%				
0% +								
	Bike Cage membership (CSU or City)			er membership (SPIN) embership (Zagster)				

Figure 28: Respondent has Bike Membership

Source: Household Survey

Pedestrian Characteristics

Social/recreation was the most common purpose for walking (21% of walking trips), but 20% of walking trips were to go to work.

	Proportion of pedestrian trips	Average miles per trip	Average trip duration (minutes)
All	100%	1.0	18.7
go home	40%	0.8	16.3
go to work	20%	0.6	9.3
go to school*	2%	1.0	24.7
change travel mode	0%	0.4	8.5
other work/business*	2%	0.4	10.3
personal business*	5%	0.4	10.1
social/recreation	21%	1.4	25.1
eat a meal	3%	0.3	13.0
Shopping	5%	0.7	12.2

Table 35: Pedestrian	Trip Characteristics by Pur	pose (2022)
	The characteristics by Full	

Source: 2022 Trip Diary; *These purposes had 20 or fewer trips, use caution in interpreting this data.

	Proportion of pedestrian trips	Average miles per trip	Average trip duration (minutes)
All	100%	0.7	13.4
go home	30%	0.9	15.9
go to work	7%	0.6	12.4
go to school	5%	0.7	10.4
change travel mode	7%	0.7	11.1
other work/business	8%	0.3	7.6
personal business	5%	0.4	10.1
social/recreation	26%	0.9	16.0
eat a meal	5%	0.3	9.6
Shopping*	3%	0.4	10.8

Table 36: Pedestrian Trip Characteristics by Purpose (2017)

Source: 2017 Trip Diary; *These purposes had 10 or fewer trips, use caution in interpreting this data.

Overall, 86% of respondents said they had walked somewhere at least once in the past 30 days, most commonly for exercise fun. This was up from 68% in 2017.



Figure 29: Walking to get to Work/School in Past month

2022

Motivation to Use Alternative Modes

Those completing the household survey were asked if they had walked, biked or used transit in the last 30 days. These results were reported in earlier sections of the report but are shown all together in Figure 32 below. Close to 9 in 10 respondents reported having walked in the last 30 days, while just over half had biked. Just over 1 in 10 had taken the MAX or a bus and about one-third had carpooled.

Close to 9 in 10 respondents had biked or walked for fun or exercise in the previous 30 days, but about 6 in 10 also reported having biked, walked or used transit as a mode of transportation to get to a destination in the last 30 days. About one-third had biked, walked or used transit to get to or from work or school.



Figure 32: Ever Took Bus, Biked or Walked in Past Month

Source: Household Survey, Car/vanpooled was not included in 2017; in 2017 MAX and bus were considered separately.

Respondents were asked what motivates them to make trips by modes other than driving alone; the top reason was to increase physical activity or for health reasons. About half were interested in saving money or avoiding parking hassles and 59% were thinking of air quality or the environment.



Figure 33: Primary Reason for Use of Alternative Modes

Source: Household Survey

Modal Groups

Appendices B and C provide detailed breakdowns of mode share (both of trips and of miles) by demographic and household characteristics. This section provides a summary of those results through a cluster analysis. This analysis compares respondents by their modal use and groups respondents with similar mode shares for trips. The largest group was those who mostly traveled by SOV and the smallest group was those who were mostly used transit.

· · · · · · · · · · · · · · · · · · ·								
Modal Groups	Mostly SOV	Mostly MOV	Mostly transit	Mostly bike	Mostly walk	Did not leave house		
Number of respondents	480	191	19	102	71			
Proportion of respondents	56%	22%	2%	12%	8%	4%		
SOV as percent of trips	91%	22%	4%	6%	21%]		
MOV as percent of trips	4%	70%	6%	5%	2%			
Transit as percent of trips	0%	0%	45%	0%	1%	No trips.		
Biking as percent of trips	0%	1%	0%	80%	3%			
Walking as percent of trips	4%	6%	46%	9%	74%	1		

Table 37: Modal Use b	v Modal Groups	(2022)
	,	1-0/

Source: Trip Diary

Each group's defining demographic and household characteristics are highlighted on the following page. Statistically significant differences by characteristics are noted in the table with the capital letters. Shading highlights the modal groups with the highest or lowest proportions or respondents with the characteristic. Some items shaded are not statistically significant but may be indicative of a difference (it is likely that there is a difference but the numbers of respondents in each modal group are too small to provide the statistical power to show significance).

Those using *mostly MOV* were more likely to have children, not be employed and to live in a detached (single-family) home.

People in the *mostly transit* group were more likely to be college students, renters, and live in attached housing.

People who *mostly biked* were more likely to work in Fort Collins, have lived in Fort Collins for a shorter time and be in the 18 to 34 age bracket.

People who *mostly walked* were more likely to work in Fort Collins but were average in most other characteristics.

Those who *did not leave the house* were more likely to have older adults in the household, be older and have a lower annual household income.

Those who traveled *mostly by SOV* did not differ as strongly from other groups but were more likely to be older than those who walk or bike and less likely than them to have a bike.

	Mostly SOV	Mostly MOV	Mostly transit	Mostly bike	Mostly walk	Did not leave house
	(A)	(B)	(C)	(D)	(E)	(F)
Has parking permit	9%	8%	9%	6%	14%	5%
Employed	80% F	70% F	93% F	86% B F	88% B F	36%
Has hybrid or electric car	10%	14%	3%	17%	11%	18%
Works in Fort Collins	56% F	47% F	50%	66% B F	72% B F	18%
Telecommutes for work at least sometimes	55%	56%	43%	52%	47%	80%
Telecommutes for school at least sometimes	75% C	76% C		83% C		100% C
Lives in a detached home	66% C	77% C D E	15%	57% C	56% C	64% C
Has less than one car per adult (16+)	12%	20%	80% A B D E F	27% A	23%	33%
Has less than bike one per person in household	37% D E	30%	28%	19%	16%	54% D E
Has a college student in household	13%	15% E	44% A B E	24% E	0%	15%
Is a college student	9%	13% E	39% A B E F	16% E	0%	9%
Children (<16) in household	13%	30% A C D E F	0%	5%	15%	1%
Older Adults (65+) in household	22%	27% D E	10%	12%	9%	63% A B C D E
Race is white only	95% C D	90% C D	64%	79%	100% C D	87% C
Lived in Fort Collins 5 years or less	34%	33%	79% A B F	54% A B F	49% F	12%
6-19 years	28%	37%	14%	30%	39%	36%
20 years or more	39% D E	29%	7%	15%	13%	53% C D E
Aged 18 to 34	45%	39%	77% B	72% A B	63% A B	
35 to 54	28%	34%	8%	18%	21%	18%
55+	27% D	27% D	15%	9%	16%	82% A B C D E
Income Less than \$50,000	25%	23%	44% E	39% E	13%	51% A B E
\$50,000 to \$99,999	38%	32%	44%	33%	42%	27%
\$100,000 or more	37%	46%	12%	28%	45%	22%

Source: Trip Diary and Household Survey. For each significant pair, an upper-case letters denoting significance is shown in the category with the larger column proportion. The letters denote the column from which the category with the larger column proportion is significantly different. Significance Tests are based on two-sided tests and the significance level is 0.05.

Appendix A: Responses to the Household Survey

The following tables show the complete set of responses for each question on the Household Survey.

		Never	1-3 times total	1-4 times a week	5+ times a week	Total
Bike to work/school	Number	648	65	93	51	858
	Percent	76%	8%	11%	6%	100%
Bike to get other places	Number	555	167	97	38	858
	Percent	65%	20%	11%	4%	100%
Bike just for exercise/fun	Number	449	259	115	35	858
	Percent	52%	30%	13%	4%	100%
Walk to work/school	Number	734	56	39	28	858
	Percent	86%	7%	5%	3%	100%
Walk to get other places	Number	423	215	145	74	858
	Percent	49%	25%	17%	9%	100%
Walk just for exercise/fun	Number	155	153	294	256	858
	Percent	18%	18%	34%	30%	100%
Take Bus/MAX to work/school	Number	771	50	28	8	858
	Percent	90%	6%	3%	1%	100%
Take Bus/MAX to get other	Number	804	42	5	6	858
places	Percent	94%	5%	1%	1%	100%
Car/Vanpool to work/school	Number	778	49	29	1	858
	Percent	91%	6%	3%	0%	100%
Car/Vanpool to get other	Number	598	171	71	18	858
places	Percent	70%	20%	8%	2%	100%

Table 40: Question 2. If you used a commute mode besides driving alone in the past year (e.g., bike, bus, walk, vanpool, carpool), what were your primary reasons for doing so? (Check up to 3 for each)

	Walk/Bike/Bus		Car/Va	r/Vanpool	
	Number	Percent	Number	Percent	
Save money	233	47%	121	50%	
Save time	98	20%	71	29%	
Avoid parking hassles	250	50%	140	58%	
Improve air quality / environmental reasons	293	59%	103	43%	
Increase physical activity / health reasons	383	77%	7	3%	
Save wear and tear on personal vehicle	115	23%	60	25%	
Don't have a personal vehicle	38	8%	12	5%	
Other	39	8%	27	11%	
Total	497	100%	242	100%	

	Number	Percent
Bike Cage membership (CSU or City)	3	0%
E-Bike, E-Scooter membership (SPIN)	22	2%
Car Share membership (ZipCar)	3	0%
Ride Share membership (Uber/Lyft)	129	14%
CSU parking permit	55	6%
Downtown (City) parking permit	31	3%
answered Q3	930	100%

Table 41: Question 3. Which of the following do you have? (Check all that apply)

Table 42: Question 4. Are you employed and/or do you attend school?

		No	Yes, part-time	Yes, full-time	Total
Work	Number	192	157	510	859
	Percent	22%	18%	59%	100%
School	Number	741	30	88	859
	Percent	86%	4%	10%	100%

	Number	Percent
Fort Collins	502	77%
Boulder	0	0%
Denver metro area	33	5%
Greeley	3	1%
Other city	14	2%
Longmont	0	0%
Loveland	52	8%
Windsor	2	0%
I work from my home	60	9%
Total	650	100%

Table 43: Question 5. Which location is your primary workplace closest to?

 Table 44: Question 7. In a typical month, how often do you telecommute instead of traveling into work/school (i.e., stay at home for the work/school day and use technology to work/attend)?

		Every work (or school) day	1-4 times a week	1-3 times total	Never	Total
Number of telecommute for work days in a typical month	Number	112	154	93	299	658
	Percent	17%	23%	14%	46%	100%
Number of telecommute for school	Number	23	44	16	46	130
days in a typical month	Percent	18%	34%	13%	35%	100%

2022

	Number	Percent
Yes	150	23%
No	508	77%
Total	657	100%

Table 45: Question 8. Did you telecommute on the day you completed the travel diary?

Table 46: Question 9. Please check the one choice below that best describes the kind of residence in which you live.

	Number	Percent
Single-family house detached from any other houses	553	65%
Attached home (e.g., duplex, triplex or townhome)	111	13%
Building with apartments or condominiums	177	21%
Mobile home	10	1%
Group quarters (e.g., dormitory, nursing home)	3	0%
Other	1	0%
Total	856	100%

Table 47: Question 10. Do you rent or own your residence?						
	Number	Percent				

	Number	Percent
Rent	369	43%
Own	483	57%
Total	852	100%

Table 48: Question 11A. How many vehicles does your household regularly use? (Cars, SUVs, vans, minivans, pickup trucks)

	Number	Percent
None	17	2%
One	243	28%
Тwo	454	53%
Three or more	142	17%
Total	856	100%

Table 49: Question 11A with Household Size

	Number of vehicles pe	er adult in household	Number of vehicles pe	r person in household	
	Number	Percent	Number	Percent	
None	17	2%	17	2%	
Less than one	144	17%	249	29%	
One	633	74%	539	63%	
More than one	60	7%	49	6%	
Total	853	100%	853	100%	

	Number	Percent
None	793	93%
One or more	63	7%
Total	855	100%

Table 50: Question 11B. How many vehicles does your household regularly use? (Motorcycles/scooters)

Table 51: Question 11C. Please provide details for these vehicles. (Vehicle Type) If you have fewer than 4, onlyfill out those you have. If you have more than 4, choose the 4 you use most often.

	1 (your	vehicle)	2 (other vehicle)		3 (other vehicle)		4 (other vehicle)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Car	466	55%	275	46%	82	45%	20	38%
SUV/van/minivan	307	37%	218	36%	27	15%	18	34%
Pickup truck	67	8%	108	18%	30	16%	4	7%
Motorcycle/scooter	0	0%	2	0%	45	24%	11	21%
Total	840	100%	603	100%	183	100%	53	100%

Table 52: Question 11D. Please provide details for these vehicles. (Fuel Type) If you have fewer than 4, only fill
out those you have. If you have more than 4, choose the 4 you use most often.

	1 (your vehicle)		2 (other vehicle)		3 (other vehicle)		4 (other vehicle)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Electric	19	2%	7	1%	2	1%	0	1%
Hybrid	56	7%	33	6%	0	0%	0	0%
Gas	740	89%	534	90%	164	94%	51	97%
Diesel	13	2%	17	3%	9	5%	2	3%
Total	827	100%	592	100%	175	100%	53	100%

Table 53: Question 11E. Please provide details for these vehicles. (Year) If you have fewer than 4, only fill outthose you have. If you have more than 4, choose the 4 you use most often.

	1 (your vehicle)		2 (other vehicle)		3 (other vehicle)		4 (other vehicle)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2018-2022	159	20%	103	19%	25	16%	2	4%
2016-2017	97	12%	48	9%	11	7%	5	12%
2013-2015	152	19%	108	19%	15	10%	0	1%
2010-2014	94	12%	98	18%	21	14%	8	21%
2005-2009	183	23%	94	17%	36	24%	17	43%
2004 or older	102	13%	103	19%	45	29%	7	18%
Total	787	100%	554	100%	153	100%	38	100%

	Number	Percent
None	123	15%
One	156	19%
Тwo	226	28%
Three or more	311	38%
Total	816	100%

Table 54: Question 12A. How many usable bicycles and tricycles does your household have? (Regular bicycles/tricycles)

Table 55: Question 12A with Household Size

	Number of bikes per person in household				
	Number	Percent			
None	123	15%			
Less than one	138	17%			
One	323	40%			
More than one	229	28%			
Total	814	100%			

Table 56: Question 12B. How many usable bicycles and tricycles does your household have? (Electric-assisted bicycles/tricycles)

	Number	Percent					
None	762	94%					
One or more	47	6%					
Total	809	100%					

Table 57: Question 13. How many household members are in each of the following age categories? (Please include yourself)

	Number of people in household		Children (<16) in household		Adults (16-64) in household		Older Adults (65+) in household	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
None	0	0%	727	85%	147	17%	666	78%
One	182	21%	67	8%	172	20%	93	11%
Two	423	49%	51	6%	401	47%	97	11%
Three or more	253	30%	14	2%	139	16%	3	0%
Total	859	100%	859	100%	859	100%	859	100%

	Chi	ld 1	Child 2		Child 3		Child 4	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Walk	16	12%	5	9%	0	0%	1	29%
Bicycle	8	6%	6	11%	2	18%	0	0%
Scooter/skateboard	0	0%	1	1%	0	0%	0	0%
School bus	10	8%	7	11%	3	25%	1	41%
Public bus	3	2%	1	1%	0	0%	0	0%
Driven alone (passenger)	45	36%	14	23%	4	32%	1	17%
Driven with other children	26	21%	18	31%	2	16%	0	13%
Drive themselves	11	9%	7	11%	1	7%	0	0%
Drive themselves + others	6	5%	1	1%	0	0%	0	0%
Total	125	100%	59	100%	11	100%	3	100%

Table 58: Question 14. For all children in your household who go to a K-12 school, please check their most frequently used travel mode to get to school. (If no children live in your household, or none attend K-12 school, please go to question #15)

Table 59: Question 15. For household members who are 18 or older (and those 16-17 who are not in a K-12school), please check their most frequently used travel mode to work or school.

	You	(1)	Adu	ılt 2	Adu	lt 3	Adu	lt 4
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Telecommute/work from home	156	25%	144	30%	10	11%	5	17%
Walk	20	3%	16	3%	8	9%	12	35%
Bicycle	65	11%	30	6%	14	14%	0	0%
Take bus	10	2%	6	1%	4	4%	5	15%
Drive alone	350	56%	244	51%	49	50%	8	23%
Drive with adult from household	13	2%	17	4%	9	9%	3	9%
Drive with adult NOT from household	1	0%	10	2%	2	3%	0	0%
Drive with children from household	5	1%	9	2%	0	0%	0	0%
Drive with children NOT from household	3	0%	0	0%	0	0%	0	0%
Total	624	100%	477	100%	98	100%	33	100%

	Number	Percent
Less than \$15,000	50	6%
\$15,000 to \$24,999	34	4%
\$25,000 to \$34,999	65	8%
\$35,000 to \$49,999	62	8%
\$50,000 to \$74,999	134	17%
\$75,000 to \$99,999	151	19%
\$100,000 to \$149,999	180	23%
\$150,000 or more	123	15%
Prefer not to answer	0	0%
Total	800	100%

Table 60: Question 16. About how much was your TOTAL 2021 income before taxes for your household?

Table 61: Question 17. How many years have you lived in Fort Collins?

	Number	Percent
1 year or less	101	12%
2-5 years	211	25%
6-10 years	159	19%
11-19 years	100	12%
20 years or more	265	32%
Total	836	100%

Table 62: Question 18. Which category contains your age?

	Number	Percent
18-24	78	9%
25-34	314	37%
35-44	127	15%
45-54	105	12%
55-64	64	8%
65-74	93	11%
75 +	65	8%
Total	844	100%

Table 63: Question 19. Are you, or any household members, students at Colorado State University or Front Range Community College?

	Respondent	is a student	Student in household		
	Number	Percent	Number	Percent	
No	757	90%	724	86%	
Yes	87	10%	120	14%	
Total	844	100%	844	100%	

	Number	Percent
Less than high school graduate	1	0%
High school diploma/GED	57	7%
Some college or associate's degree	122	14%
Bachelor's degree or higher	673	79%
Total	854	100%

Table 64: Question	20 How much e	ducation have ve	ou completed?
Table 04. Question	20. now much e	uulalion nave yl	u completeu:

Table 65: Question 21. Which category best describes your ethnicity?

	Number	Percent
Hispanic/Latinx	28	3%
Non-Hispanic/Latinx	781	95%
Prefer to self-identify	13	2%
Total	822	100%

Table 66: Question 22. Which categories best describes your race? (Choose all that apply)								
	Number							
African American/Black	7	1%						
American Indian/Alaska native	10	1%						
Native Hawaiian/Pacific Islander	1	0%						
White	806	96%						
Asian	57	7%						
Other	4	0%						
Total	843	100%						

Table 67: Question 23. What is your gender?

	Number	Percent
Female	431	51%
Male	409	48%
Identify in another way	5	1%
Total	845	100%

Appendix B: Overall Mode Share by Respondent and Household Characteristics

In this appendix the MOV (multiple-occupancy vehicle) includes adults and/or children as passengers.

To simplify the tables, mode share comparisons for "motorbike/scooter" and "school bus" are only included in tables in this appendix when there are significant differences. As very few people used these modes, the mode shares were very small and significant differences could not be detected due to these low numbers of responses.

Significance Tests: For each significant pair, an upper-case letters denoting significance is shown in the category with the larger column proportion. The letters denotes the column from which the category with the larger column proportion is significantly different. Significance Tests are based on two-sided tests and the significance level is 0.05. Categories are not used in comparisons when a column proportion is equal to zero or one.

0.3%

0.1%

0.0%

SOV

Foot

Transit

scooter Commercial

Motorbike,

truck-SOV Ride hailing

MOV (only adults) MOV (with children) Bike

	y reason in nonth	Walk for an past n	iy reason in nonth	-	for any reason month	Car/Vanpool for any reason Ever telecomm in past month for work			
Ever	Never	Ever	Never	Ever	Never	Ever	Never	Ever	Never
(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
61.8%	67.6% A	62.8%	74.6% A	52.9%	65.9% A	57.6%	67.3% A	63.9%	70.0% A
13.7%	15.6% A	14.6%	13.6%	9.1%	15.3% A	17.3% B	13.3%	12.5%	11.3%
7.3%	9.2% A	8.0%	8.6%	3.3%	8.8% A	6.9%	8.6% A	8.3% B	5.4%
12.1% B	0.1%	7.6% B	2.3%	8.0% B	6.8%	6.5%	7.1%	6.5%	8.1% A
3.8% B	2.2%	3.5% B	0.5%	2.7%	3.1%	2.9%	3.2%	4.1% B	2.7%
0.9%	5.3% A	3.2%	0.0%	23.0% B	0.0%	8.1% B	0.4%	4.7% B	2.0%

0.0%

0.1%

0.0%

0.4%

В

0.3%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.3%

А

0.2%

0.1%

0.9%

В

0.0%

0.0%

0.2%

0.1%

0.0%

0.1%

0.0%

0.2%

А

0.0%

0.0%

0.1%

		Bike for any reason in past month		ny reason in month	Take Bus/MAX for any reason in past month		· · ·	for any reason month		commute work		
	Ever Never		Ever Never		Ever	Never	Ever	Never	Ever	Never	Ever	Never
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)		
SOV	50.2%	61.8% A	53.0%	73.2% A	47.8%	56.2% A	52.0%	56.5% A	53.5%	57.6% A		
Foot	14.1% B	11.5%	14.2% B	2.9%	17.8% B	12.2%	14.9% B	12.1%	15.2%	13.1%		
MOV (only adults)	10.0%	14.9% A	12.3%	10.0%	6.9%	12.9% A	12.0%	12.0%	12.0% B	9.0%		
Bike	16.0% B	0.0%	9.9% B	5.2%	11.2%	9.1%	10.9% B	8.6%	9.6%	9.2%		
MOV (with children)	7.8%	9.2%	8.5%	7.3%	4.0%	9.2% A	5.9%	9.7% A	8.4%	7.4%		
Transit	0.9%	2.4% A	1.7%	0.0%	10.2% B	0.0%	3.0% B	0.8%	1.0%	2.7% A		
Motorbike, scooter	0.9%	0.0%	0.5%	1.2%	2.1% B	0.3%	1.2% B	0.2%	0.3%	0.9% A		
Ride hailing	0.0%	0.1%	0.0%	0.2% A	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%		
Commercial truck-SOV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%		

Table 69: Mode Share of All Trips by Use of Alternative Modes in Past Month

	Has downtown or	CSU parking permit	Employed (ful	ll or part-time)	City where respondent v	works, if employed
	Yes	No	Yes	No	Fort Collins	Other
	(A)	(B)	(A)	(B)	(A)	(B)
SOV	73.0% B	64.9%	66.7% B	55.7%	64.6%	66.1% A
MOV (only adults)	5.1%	14.9% A	12.0%	23.6% A	12.4%	15.6% A
MOV (with children)	10.5% B	7.9%	6.9%	12.8% A	7.8%	8.2%
Bike	5.8%	6.5%	7.3% B	5.4%	10.2% B	3.7%
Foot	4.1% B	2.9%	3.4% B	1.9%	3.6% B	2.5%
Transit	1.3%	2.7% A	3.4% B	0.4%	1.0%	3.8% A
Motorbike, scooter	0.2%	0.1%	0.2%	0.1%	0.3% B	0.0%
Commercial truck-SOV	0.0%	0.1%	0.1%	0.0%	0.2%	0.0%
Ride hailing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 70: Mode Share of All Miles Travelled by Work Characteristics in Past Month

	Has downtown or	CSU parking permit	Employed (fu	ll or part-time)	City where respondent we	orks, if employed
	Yes	No	Yes	No	Fort Collins	Other
	(A)	(B)	(A)	(B)	(A)	(B)
SOV	61.3% B	55.0%	55.2%	54.5%	54.9%	56.5%
Foot	17.2% B	12.4%	14.1% B	8.4%	14.4% B	10.8%
MOV (only adults)	4.7%	12.8% A	10.9%	16.7% A	10.4%	14.1% A
Bike	5.1%	9.5% A	9.7%	8.3%	10.7% B	7.0%
MOV (with children)	9.7%	8.3%	7.9%	10.7% A	7.3%	9.9% A
Transit	0.9%	1.6%	1.7%	0.8%	1.5%	1.4%
Motorbike, scooter	1.1%	0.5%	0.5%	0.6%	0.7% B	0.3%
Ride hailing	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Commercial truck-SOV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 71: Mode Share of All Trips by Work Characteristics in Past Month

	Number of vehicles p	er adult in household	Number of bikes per	person in household	Electric or hybrid vehicle in household	
	Less than one per adult (16+)	One or more per adult (16+)	Less than one per person in household	One or more per person in household	Yes	No
	(A)	(B)	(A)	(B)	(A)	(B)
SOV	42.4%	69.1% A	72.7% B	60.7%	67.0%	65.3%
MOV (only adults)	19.9% B	13.4%	10.8%	16.0% A	14.5%	14.2%
MOV (with children)	4.9%	8.7% A	9.2% B	7.6%	8.0%	8.0%
Bike	11.7% B	5.8%	3.5%	8.4% A	7.3%	6.4%
Foot	6.1% B	2.4%	2.3%	3.5% A	2.9%	3.0%
Transit	14.4% B	0.3%	1.4%	3.4% A	0.2%	2.9% A
Motorbike, scooter	0.1%	0.2%	0.0%	0.2%	0.0%	0.2%
Commercial truck- SOV	0.5%	0.0%	0.0%	0.1%	0.0%	0.1%
Ride hailing	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 72: Proportion of All Miles by Mode by Vehicles Available

	Number of vehicles p	er adult in household	Number of bikes per	person in household	Electric or hybrid vehicle in household	
	Less than one per adult (16+)	One or more per adult (16+)	Less than one per person in household	One or more per person in household	Yes	No
	(A)	(B)	(A)	(B)	(A)	(B)
SOV	38.5%	59.2% A	62.1% B	51.3%	48.6%	56.7% A
Foot	17.9% B	11.6%	9.9%	14.3% A	15.9% B	12.4%
MOV (only adults)	16.8% B	11.0%	10.8%	12.9%	17.1% B	11.2%
Bike	13.4% B	8.4%	6.3%	11.0% A	10.9%	8.8%
MOV (with children)	7.4%	8.6%	8.4%	8.5%	7.1%	8.6%
Transit	5.0% B	0.7%	2.4% B	1.2%	0.3%	1.7% A
Motorbike, scooter	0.6%	0.5%	0.0%	0.8%	0.0%	0.6%
Ride hailing	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
Commercial truck- SOV	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 73: Mode Share of All Trips by Vehicles Available

	Ger	der	Re	spondent ag	ge	Ra	ace	Educatio	on level
	Female	Male	18 to 34	35 to 54	55+	Non-white	White only	Some college or less	Bachelor's or more
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	(A)	(B)
SOV	66.9% B	61.5%	56.9%	71.3% A C	64.9% A	38.2%	67.6% A	60.2%	64.4% A
MOV (only adults)	15.0%	14.1%	17.0% B	8.1%	19.9% A B	2.9%	15.1% A	13.2%	14.7%
MOV (with children)	9.5% B	5.5%	2.5%	14.7% A C	7.9% A	8.7%	8.0%	16.4% B	7.6%
Bike	5.4%	9.0% A	11.9% B C	2.8%	5.0% B	14.6% B	5.8%	4.9%	7.1% A
Foot	2.1%	4.4% A	4.5% B C	2.6% C	1.8%	7.9% B	2.6%	2.3%	3.1%
Transit	1.0%	5.1% A	6.6% B C	0.3%	0.5%	27.7% B	0.6%	1.0%	2.9% A
Motorbike, scooter	0.0%	0.3% A	0.3% B C	0.1%	0.0%	0.0%	0.2%	2.0% B	0.0%
Commercial truck-SOV	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%
Ride hailing	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 74: Mode Share of All Miles Travelled by Respondent Characteristics

	Gen	Gender		Respondent age			ace	Education level	
	Female	Female Male		18 to 34 35 to 54		Non-white	White only	Some college or less	Bachelor's or more
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	(A)	(B)
SOV	56.7% B	53.2%	48.2%	59.5% A	63.2% A	38.9%	57.1% A	42.5%	55.9% A
Foot	11.1%	15.5% A	16.8% B C	10.8%	8.1%	15.9%	12.6%	8.9%	13.2%
MOV (only adults)	12.5%	11.0%	13.9% B	5.6%	17.2% B	3.4%	12.8% A	14.6%	11.9%
Bike	7.5%	11.7% A	14.3% B C	5.4%	4.2%	21.9% B	7.9%	17.8% B	8.9%
MOV (with children)	10.6% B	5.8%	3.2%	18.0% A C	6.1% A	11.5% B	8.1%	8.7%	8.3%
Transit	1.3%	1.8%	2.6% B C	0.3%	1.0%	8.4% B	0.9%	1.5%	1.5%
Motorbike, scooter	0.2%	0.9% A	0.9% C	0.4%	0.0%	0.0%	0.6%	5.9% B	0.2%
Ride hailing	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Commercial truck-SOV	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 75: Mode Share of All Trips by Respondent Characteristics

	Responden	t is a student	Children (<16) in	household	Older Adults (65+) in household		
	Yes	No	One or more	None	One or more	None	
	(A)	(B)	(A)	(B)	(A)	(B)	
SOV	56.3%	64.7% A	66.2% B	64.0%	59.5%	65.6% A	
MOV (only adults)	26.4% B	13.7%	2.7%	17.0% A	20.2% B	13.1%	
MOV (with children)	4.0%	8.5% A	27.1% B	4.2%	9.9% B	7.6%	
Bike	6.3%	6.9%	1.4%	8.0% A	5.9%	7.1% A	
Foot	3.3%	3.1%	2.5%	3.2% A	3.9% B	2.9%	
Transit	2.2%	2.9%	0.0%	3.4%	0.5%	3.4% A	
Motorbike, scooter	1.6% B	0.0%	0.0%	0.2%	0.0%	0.2% A	
Commercial truck-SOV	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	
Ride hailing	0.0%	0.0%	0.1% B	0.0%	0.0%	0.0%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 76: Mode Share of All Miles Travelled by Household Member Characteristics

	Respondent	t is a student	Children (<16) in h	ousehold	Older Adults (65+) in household		
	Yes	No	One or more	None	One or more	None	
	(A)	(B)	(A)	(B)	(A)	(B)	
SOV	44.2%	56.5% A	52.8%	55.6%	61.4% B	53.7%	
Foot	16.2%	12.8%	7.4%	14.1% A	8.2%	14.1% A	
MOV (only adults)	15.3% B	11.5%	3.6%	13.8% A	15.8% B	11.2%	
Bike	13.8% B	8.6%	3.5%	10.5% A	5.4%	10.2% A	
MOV (with children)	3.9%	8.9% A	32.6% B	3.4%	8.0%	8.4%	
Transit	3.8% B	1.3%	0.0%	1.8%	1.0%	1.6%	
Motorbike, scooter	2.8% B	0.3%	0.0%	0.7%	0.1%	0.7% A	
Ride hailing	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	
Commercial truck-SOV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Table 77: Mode Share of All Trips by Household Member Characteristics

	Years	Housin	Housing type		ure	Annual household income				
	5 years or less	6-19 years	20 years or more	Detached	Attached	Own	Rent	Less than \$50,000	\$50,000 to \$99,999	\$100,000 or more
	(A)	(B)	(C)	(A)	(B)	(A)	(B)	(A)	(B)	(C)
SOV	57.3%	60.5% A	74.1% A B	64.4%	64.9%	63.1%	66.8% A	63.0%	69.0% A C	62.8%
MOV (only adults)	16.0% C	16.7% C	10.7%	15.7% B	9.9%	16.4% B	12.0%	12.8% B	8.2%	17.1% A B
MOV (with children)	5.6%	10.5% A C	8.6% A	9.9% B	4.5%	10.9% B	3.6%	8.1%	7.0%	9.7% A B
Bike	9.7% B C	7.0% C	4.4%	6.7%	7.6% A	6.1%	7.5% A	8.3% B C	6.8%	6.6%
Foot	3.4% C	4.7% A C	1.6%	2.2%	5.2% A	2.4%	4.1% A	5.1% B C	2.7%	2.8%
Transit	7.7% B C	0.4%	0.2%	0.7%	7.8% A	0.9%	5.6% A	2.0% C	6.1% A C	1.0%
Motorbike, scooter	0.3% C	0.0%	0.1%	0.2%	0.1%	0.1%	0.3% A	0.7% C	0.0%	0.0%
Commercial truck- SOV	0.0%	0.0%	0.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%
Ride hailing	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 78: Mode Share of All Miles Travelled by Household Characteristics

	Years lived in Fort Collins			Housin	g type	Ten	ure	Annual household income			
	5 years or less	or 6-19 years	20 years or more	Detached	Attached	Own	Rent	Less than \$50,000	\$50,000 to \$99,999	\$100,000 or more	
	(A)	(B)	(C)	(A)	(B)	(A)	(B)	(A)	(B)	(C)	
SOV	49.9%	49.3%	67.0% A B	56.9% B	50.9%	57.5% B	52.1%	51.9%	58.7% A C	54.0%	
Foot	16.2% C	14.3% C	8.3%	10.0%	19.1% A	11.7%	14.9% A	12.2%	14.3%	13.0%	
MOV (only adults)	10.7%	14.1% A	11.1%	12.6%	10.9%	11.0%	13.6% A	14.5% B	9.6%	11.6%	
Bike	13.1% C	10.4% C	4.1%	8.3%	11.6% A	6.6%	12.8% A	13.8% B C	8.1%	7.7%	
MOV (with children)	6.0%	11.4% A C	8.1%	11.0% B	3.6%	11.7% B	3.6%	2.4%	8.0% A	12.9% A B	
Transit	3.2% B C	0.5%	0.4%	0.5%	3.5% A	1.0%	2.3% A	3.5% B C	1.3%	0.7%	
Motorbike, scooter	0.8%	0.0%	0.8%	0.7%	0.3%	0.4%	0.7%	1.7% C	0.0%	0.0%	
Ride hailing	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	
Commercial truck- SOV	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	

Table 79: Mode Share of All Trips by Household Characteristics
			Reg	ion of Fort Collins			
	Northwest	Northeast	West Central	East Central	Southwest	Southeast	GMA
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
SOV	62.3% C E	71.1% A C D E	53.3%	63.6% C E	54.2%	75.4% A B C D E	72.9% A C D E
MOV (only adults)	13.6% F G	15.4% F G	16.3% D F G	13.3% F G	35.8% A B C D F G	10.2%	10.2%
MOV (with children)	4.7%	6.1% E	9.8% A B E	9.8% A B E	3.0%	9.7% A B E	9.3% A B E
Bike	4.3% F	3.6% F	15.6% A B D E F G	9.2% A B E F G	4.8% F	1.0%	5.5% F
Foot	3.4% E F G	3.9% E F G	4.7% D E F G	2.4%	1.1%	2.0%	2.0%
Transit	11.1% C D E F	0.0%	0.3%	1.1% C	1.0%	1.7% C	0.0%
Motorbike, scooter	0.7% G	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Commercial truck-SOV	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
Ride hailing	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 80: Mode Share of All Miles Travelled by Area of Fort Collins

			Regio	on of Fort Collins			
	Northwest	Northeast	West Central	East Central	Southwest	Southeast	GMA
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
SOV	48.2%	59.8% A C	43.3%	56.1% C	59.2% C	65.9% A C D	63.8% A C
Foot	19.1% C D E F G	18.1% C E F G	9.6%	12.5%	5.3%	10.2%	10.4%
MOV (only adults)	13.4%	10.3%	14.0%	10.9%	21.3% B D F	8.9%	12.2%
Bike	6.4% F	5.8%	20.2% A B D E F G	9.7% F	8.3% F	2.6%	6.2%
MOV (with children)	5.1%	6.0%	12.4% A B E G	8.9%	3.9%	11.3% A B	6.6%
Transit	5.1% C D F	0.0%	0.5%	1.7%	2.0%	1.1%	0.0%
Motorbike, scooter	2.6% G	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
Ride hailing	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Commercial truck-SOV	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%

Table 91. Mede Sh of All Trine by A

				Day of Week				Day	Туре
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	weekend	weekday
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(A)	(B)
SOV	77.6% C D E F G	77.4% C D E F G	62.1% D F	57.4% F	63.2% D F	52.8%	69.4% C D E F	74.7% B	62.9%
MOV (only adults)	4.1%	2.6%	15.1% A B D	11.4% A B	19.4% A B C D	29.4% A B C D E G	20.6% A B C D	10.0%	14.7% A
MOV (with children)	11.8% C D F G	9.6% C D F	7.1%	5.2%	9.7% C D F	6.2%	7.3%	10.2% B	7.6%
Bike	3.2% G	4.4% G	9.3% A B E G	12.0% A B C E F G	5.5% A G	6.7% A B G	1.0%	2.4%	7.8% A
Foot	2.1%	2.9%	5.1% A B D E G	2.9%	1.8%	4.9% A B D E G	1.6%	1.9%	3.4% A
Transit	1.1% E F	3.0% A C E F	0.6% F	10.6% A B C E F	0.2%	0.0%	0.0%	0.7%	3.4% A
Motorbike, scooter	0.0%	0.1%	0.8% A B D	0.1%	0.0%	0.0%	0.0%	0.0%	0.2% A
Commercial truck-SOV	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%
Ride hailing	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 82: Mode Share of All Miles Travelled by Day of Travel

				Day of Week				Day	Туре
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	weekend	weekday
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(A)	(B)
SOV	67.3% C D E F	61.6% C D E F	49.2%	50.8%	51.0%	44.2%	67.8% C D E F	67.5% B	51.8%
Foot	10.7%	13.7%	10.4%	16.5% A C G	12.0%	18.8% A C E G	9.0%	10.1%	14.3% A
MOV (only adults)	2.8%	3.7%	11.2% A B	10.3% A B	20.7% A B C D	24.1% A B C D	16.2% A B	7.4%	13.4% A
Bike	3.6%	7.2% G	14.2% A B F G	13.9% A B F G	9.4% A G	4.5%	1.4%	2.9%	10.1% A
MOV (with children)	13.2% D E G	10.6% D	10.8% D	5.9%	6.2%	8.2%	5.5%	10.6% B	8.1%
Transit	2.3% F	2.4% F	1.8%	1.9%	0.6%	0.1%	0.0%	1.5%	1.4%
Motorbike, scooter	0.1%	0.7%	2.4% A D	0.6%	0.0%	0.0%	0.0%	0.0%	0.7% A
Ride hailing	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
Commercial truck-SOV	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 83: Mode Share of All Trips by Household Characteristics

Appendix C: Commute Mode Share by Respondent and Household Characteristics

In this appendix the MOV (multiple-occupancy vehicle) includes adults and/or children as passengers.

To simplify the tables, mode share comparisons for "ride hailing," "motorbike/scooter" and "school bus" are only included in tables in this appendix when there are significant differences. As very few people used these modes, the mode shares were very small and significant differences could not be detected due to these low numbers of responses.

Significance Tests: For each significant pair, an upper case letters denoting significance is shown in the category with the larger column proportion. The letters denotes the column from which the category with the larger column proportion is significantly different. Significance Tests are based on two-sided tests and the significance level is 0.05. Categories are not used in comparisons when a column proportion is equal to zero or one.

		ly reason in month		ny reason in month	-	(for any reason t month	Car/Vanpool in past		Ever telecommute for work	
	Ever	Never	Ever	Never	Ever	Never	Ever Never		Ever	Never
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
SOV	76.1%	76.6%	75.1%	88.2% A	42.0%	84.1% A	57.0%	86.3% A	71.3%	79.5% A
Transit	2.7%	19.0% A	10.5%	0.0%	51.4% B	0.0%	26.1% B	0.9%	19.9% B	2.7%
Bike	14.9%	0.0%	8.5%	10.3%	2.8%	10.0% A	10.8% B	7.6%	6.3%	11.0% A
MOV (with children)	3.3%	3.3%	3.5% B	1.0%	1.2%	3.8% A	2.6%	3.7%	2.0%	4.6% A
MOV (only adults)	2.4% B	0.8%	1.9% B	0.5%	0.7%	2.0% A	2.9% B	1.1%	0.1%	1.9% A
Foot	0.5%	0.4%	0.5%	0.0%	1.9% B	0.1%	0.6%	0.3%	0.4%	0.5%

Table 84: Mode Share of All Commute Miles Travelled by Use of Alternative Modes in Past Month

		ly reason in month		ny reason in month	-	for any reason month	· · ·	for any reason month	Ever telecommute for work	
	Ever	Never	Ever	Never	Ever	Never	Ever	Never	Ever	Never
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
SOV	59.0%	81.4% A	66.1%	78.7% A	48.0%	72.2% A	55.8%	74.8% A	70.6%	66.2%
Bike	23.4%	0.0%	13.5%	18.6%	4.1%	16.5% A	20.9% B	10.3%	11.8%	16.5%
MOV (with children)	7.7%	6.0%	7.8% B	1.8%	4.0%	7.7%	5.4%	8.0%	4.6%	9.1% A
Foot	4.7%	6.8%	6.4%	0.0%	25.4% B	1.1%	9.3% B	3.3%	7.0%	4.8%
Transit	2.3%	4.9%	3.8%	0.0%	17.7% B	0.1%	6.3% B	1.5%	5.6% B	1.8%
MOV (only adults)	2.9%	1.0%	2.3%	0.9%	0.8%	2.4%	2.2%	2.1%	0.4%	1.7%

Table 85: Mode Share of All Commute Trips by Use of Alternative Modes in Past Month

 Table 86: Mode Share of All Commute Miles Travelled by Work Characteristics in Past Month

	Has downtown or	CSU parking permit	Employed (fu	ll or part-time)	City where respondent v	works, if employed
	Yes	No	Yes	No	Fort Collins	Other
	(A)	(B)	(A)	(B)	(A)	(B)
SOV	76.2%	77.8%	76.2%	96.0% A	76.3%	79.1% A
Transit	5.0%	9.1% A	9.6%	0.0%	1.1%	16.7% A
Bike	10.6%	8.2%	8.8%	0.0%	15.8% B	0.7%
MOV (with children)	7.7% B	2.7%	3.3%	4.0%	4.8% B	1.4%
MOV (only adults)	0.0%	1.8%	1.7%	0.0%	1.5%	1.8%
Foot	0.5%	0.4%	0.4%	0.0%	0.5%	0.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Has downtown or	CSU parking permit	Employed (fu	ll or part-time)	City where respondent w	orks, if employed
	Yes	No	Yes	No	Fort Collins	Other
	(A)	(B)	(A)	(B)	(A)	(B)
SOV	59.8%	69.3%	67.6%	93.7%	68.7%	67.1%
Bike	19.6%	13.4%	14.3%	0.0%	17.9% B	1.7%
MOV (with children)	12.3% B	6.2%	7.0%	6.3%	7.4%	4.8%
Foot	3.7%	5.6%	5.6%	0.0%	3.6%	11.2% A
Transit	4.5%	3.0%	3.3%	0.0%	1.2%	9.5% A
MOV (only adults)	0.0%	2.5%	2.2%	0.0%	1.1%	5.7% A

Table 87: Mode Share of All Commute Trips by Work Characteristics in Past Month

Table 88: Proportion of All Commute Miles by Mode by Vehicles Available

	Number of vehicles pe	er adult in household	Number of bikes per	person in household		brid vehicle in ehold
	Less than one per adult (16+)	One or more per adult (16+)	Less than one per person in household	One or more per person in household	Yes	No
	(A)	(B)	(A)	(B)	(A)	(B)
SOV	42.9%	86.0% A	92.2% B	68.3%	77.4%	77.7%
Transit	42.2% B	0.1%	0.0%	14.0%	1.1%	9.6% A
Bike	6.5%	9.3% A	4.1%	11.0% A	14.2% B	7.8%
MOV (with children)	0.3%	4.2% A	3.4%	3.6%	0.6%	3.3% A
MOV (only adults)	6.5% B	0.4%	0.4%	2.4% A	6.2% B	1.2%
Foot	1.6% B	0.1%	0.0%	0.6%	0.4%	0.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Number of vehicles pe	er adult in household	Number of bikes per	person in household	Electric or hybrid vehicle ir household		
	Less than one per adult (16+)	One or more per adult (16+)	Less than one per person in household	One or more per person in household	Yes	No	
	(A) (E		(A)	(B)	(A)	(B)	
SOV	38.8%	75.0% A	85.7% B	57.4%	63.5%	69.0%	
Bike	11.4%	14.9%	6.9%	18.4% A	25.3% B	12.4%	
MOV (with children)	1.7%	8.4% A	6.8%	7.5%	1.1%	7.7% A	
Foot	23.0% B	1.2%	0.0%	8.6%	6.0%	5.3%	
Transit	15.9% B	0.1%	0.0%	5.1%	1.3%	3.5%	
MOV (only adults)	9.3% B	0.3%	0.6%	3.0% A	2.9%	2.1%	

Table 89: Mode Share of All Commute Trips by Vehicles Available

Table 90: Mode Share of All Commute Miles Travelled by Respondent Characteristics

	Ger	nder	Re	espondent ag	ge	Ra	ace	Educatio	on level
	Female	Male	18 to 34	35 to 54	55+	Non-white	White only	Some college or less	Bachelor's or more
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	(A)	(B)
SOV	83.3% B	69.9%	63.7%	91.3% A C	81.2% A	33.7%	84.3% A	88.3% B	75.0%
Transit	2.5%	16.1% A	17.7% B C	0.9%	1.6%	56.4% B	1.7%	0.0%	10.5%
Bike	5.9%	10.7% A	12.7% B	2.8%	10.9% B	6.4%	8.6%	0.1%	9.4% A
MOV (with children)	4.6% B	2.3%	2.8%	4.4% A	2.6%	2.8%	3.1%	2.1%	3.5%
MOV (only adults)	3.4% B	0.4%	2.5% B	0.4%	3.4% B	0.0%	1.9%	7.7% B	1.3%
Foot	0.3%	0.6%	0.7%	0.2%	0.2%	0.7%	0.4%	1.9% B	0.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Gen	der	Re	spondent ag	e	Ra	ace	Educatio	on level
	Female	Male	18 to 34	35 to 54	55+	Non-white	White only	Some college or less	Bachelor's or more
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	(A)	(B)
SOV	72.4% B	62.9%	61.7%	76.3% A	74.0%	30.8%	72.5% A	71.1%	67.4%
Bike	10.6%	17.1% A	18.2% B	7.6%	10.4%	18.3%	13.6%	0.6%	15.2% A
MOV (with children)	7.8%	6.6%	5.6%	10.8% A	4.3%	14.3% B	6.0%	9.3%	6.9%
Foot	3.6%	7.7% A	7.4%	3.0%	3.9%	18.3% B	3.9%	12.6% B	5.1%
Transit	1.4%	5.3% A	4.5%	1.3%	3.2%	18.3% B	1.5%	0.0%	3.5%
MOV (only adults)	4.0% B	0.4%	2.5%	1.0%	4.3%	0.0%	2.5%	6.4% B	1.9%

Table 91: Mode Share of All Commute Trips by Respondent Characteristics

Table 92: Mode Share of All Commute Miles Travelled by Household Member Characteristics

	Respondent	is a student	Children (<16) in	household	Older Adults (65+) i	n household
	Yes	No	One or more	None	One or more	None
	(A)	(B)	(A)	(B)	(A)	(B)
SOV	68.8%	76.4% A	85.3% B	73.8%	81.7% B	75.8%
Transit	2.3%	10.4% A	0.0%	12.2%	0.6%	10.2% A
Bike	9.9%	8.9%	0.6%	10.8% A	5.5%	8.9%
MOV (with children)	19.1% B	2.7%	11.2% B	1.3%	5.6% B	3.2%
MOV (only adults)	0.0%	1.1%	2.8% B	1.5%	6.6% B	1.4%
Foot	0.0%	0.5%	0.1%	0.5%	0.0%	0.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Respondent	is a student	Children (<16) in h	ousehold	Older Adults (65+) in h	ousehold
	Yes	No	One or more	None	One or more	None
	(A)	(B)	(A) (B)		(A)	(B)
SOV	48.9%	69.8% A	67.9%	67.7%	79.0%	66.9%
Bike	26.5% B	13.4%	1.7%	16.9% A	5.4%	14.8%
MOV (with children)	21.2% B	5.9%	27.4% B	2.7%	8.0%	7.0%
Foot	0.0%	6.3%	0.8%	6.6% A	0.0%	6.0%
Transit	3.3%	3.4%	0.0%	4.0%	1.3%	3.5%
MOV (only adults)	0.0%	1.2%	2.2%	2.1%	6.3% B	1.9%

Table 93: Mode Share of All Commute Trips by Household Member Characteristics

 Table 94: Mode Share of All Commute Miles Travelled by Household Characteristics

	Years	s lived in For	t Collins	Housir	ng type	Ter	nure	Anı	nual household inc	ome
	5 years or less	6-19 years	20 years or more	Detached	Attached	Own	Rent	Less than \$50,000	\$50,000 to \$99,999	\$100,000 or more
	(A)	(B)	(C)	(A)	(B)	(A)	(B)	(A)	(B)	(C)
SOV	65.1%	85.3% A	87.6% A	82.2% B	65.9%	78.2% B	74.9%	86.2% B C	69.1%	80.8% B
Transit	19.2% B C	1.3% C	0.2%	2.4%	22.2% A	3.5%	14.2% A	0.0%	18.2% C	4.3%
Bike	13.3% B C	3.3%	7.0% B	8.5%	8.8%	9.6% B	7.7%	7.1%	8.1%	8.8%
MOV (with children)	2.0%	4.9% A	4.1% A	3.8% B	2.6%	5.6% B	1.7%	0.5%	3.8% A	4.1% A
MOV (only adults)	0.0%	4.6% C	1.0%	2.7% B	0.1%	2.5% B	1.2%	6.2% B C	0.2%	1.7% B
Foot	0.5%	0.6%	0.1%	0.4%	0.5%	0.6%	0.3%	0.0%	0.7%	0.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Years	lived in For	t Collins	Housin	ig type	Ten	nure	Anı	nual household inco	ome
	5 years or less	6-19 years	20 years or more	Detached	Attached	Own	Rent	Less than \$50,000	\$50,000 to \$99,999	\$100,000 or more
	(A)	(B)	(C)	(A)	(B)	(A)	(B)	(A)	(B)	(C)
SOV	56.5%	72.1% A	81.3% A	68.4%	66.4%	66.0%	69.6%	68.0%	66.1%	69.5%
Bike	24.2% B C	5.7%	9.4%	14.1%	14.3%	14.0%	13.9%	22.3% B C	12.3%	11.5%
MOV (with children)	5.5%	10.0%	6.0%	8.6% B	4.7%	9.9% B	4.3%	0.2%	7.1% A	10.6% A
Foot	8.3% C	4.9%	1.9%	3.6%	8.7% A	5.4%	5.8%	2.1%	8.8% A	3.9%
Transit	5.6% C	1.7%	0.5%	2.0%	5.5% A	2.4%	4.2%	0.0%	5.0%	3.3%
MOV (only adults)	0.0%	5.6% C	1.0%	3.3% B	0.3%	2.2%	2.1%	7.4% B C	0.7%	1.1%

Table 95: Mode Share of All Commute Trips by Household Characteristics

Table 96: Mode Share of All Commute Miles Travelled b	v Area of Fort Collins
Tuble 50. Mode Share of All commute miles mavelied b	

		Region of Fort Collins							
	Northwest	Northeast	West Central	East Central	Southwest	Southeast	GMA		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)		
SOV	55.0%	93.8%	64.9%	88.7%	89.6%	90.8%	79.2%		
		A C D G	A	ACG	AC	A C G	A C		
Transit	35.1% C F	0.0%	0.8%	0.0%	0.0%	6.6% C	0.0%		
Bike	7.6% B	1.8%	22.3% A B D	4.2%	10.4% B	0.0%	17.7% A B D		
MOV (with children)	1.1%	0.6%	7.4% A B F G	6.6% A B F G	0.0%	1.6%	1.1%		
MOV (only adults)	0.1%	3.7% A D F	4.4% A D F	0.3%	0.0%	0.5%	2.0% A D		
Foot	1.1%	0.1%	0.2%	0.3%	0.0%	0.5%	0.0%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

		Region of Fort Collins								
	Northwest	Northeast	West Central	East Central	Southwest	Southeast	GMA			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)			
SOV	41.3%	81.4% A C	51.2%	81.5% A C	91.0% A C	81.1% A C	68.0% A			
Bike	19.2% D	8.6%	26.5% B D	6.1%	9.0%	0.0%	28.6% B D			
MOV (with children)	1.8%	3.2%	13.8% A G	9.1%	0.0%	5.2%	1.5%			
Foot	20.1% B C D	3.5%	1.9%	3.0%	0.0%	7.4%	0.0%			
Transit	16.3% C F	0.0%	1.3%	0.0%	0.0%	4.8%	0.0%			
MOV (only adults)	1.2%	3.3%	5.3%	0.3%	0.0%	1.5%	1.8%			

Table 97: Mode Share of All Commute Trips by Area

Table 98: Mode Share of All Miles Travelled by Day of Travel

				Day of Week				Day	Туре
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	weekend	weekday
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(A)	(B)
SOV	87.4% B D	81.3% D	83.2% D	57.5%	86.9% D	85.6% D	99.5% B C D F	88.1% B	73.6%
Transit	0.0%	9.2% C	0.0%	27.9% B C	0.0%	0.0%	0.0%	0.0%	12.9%
Bike	6.6%	6.7%	8.9%	12.6% A B E	7.4%	2.0%	0.5%	6.2%	9.4% A
MOV (with children)	5.7% B D	1.1%	6.8% B D	1.4%	0.0%	0.0%	0.0%	5.4% B	2.0%
MOV (only adults)	0.2%	0.3%	1.0%	0.0%	5.6% A B C	12.3% A B C	0.0%	0.2%	1.6% A
Foot	0.0%	1.5% A	0.0%	0.6%	0.1%	0.0%	0.0%	0.0%	0.6% A
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

				Day of Week				Day Type	
	Sunday	Sunday Monday		Wednesday	Thursday	Friday	Saturday	weekend	weekday
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(A)	(B)
SOV	76.8% B D	58.0%	68.5%	55.7%	74.9% D	80.5%	97.0%	77.9% B	63.2%
Bike	5.7%	15.5%	14.4%	23.7% A	16.3%	10.8%	3.0%	5.6%	18.2% A
MOV (with children)	14.9% B D	2.4%	15.5% B D	3.1%	0.0%	0.0%	0.0%	14.0% B	4.3%
Foot	1.6%	15.2% A C E	0.2%	10.2% A C E	0.5%	0.0%	0.0%	1.5%	7.3% A
Transit	0.0%	8.5% C	0.2%	7.4% C	0.0%	0.0%	0.0%	0.0%	4.7%
MOV (only adults)	1.1%	0.4%	1.2%	0.0%	8.3% A B	8.7%	0.0%	1.0%	2.3%

Table 99: Mode Share of All Trips by Household Characteristics

Developing the Survey and Diary

The City of Fort Collins contracted with Polco to collect travel behavior data from residents of Fort Collins through a method that NRC designed and has implemented in Boulder, CO and introduced in Fort Collins in 2017. This data is collected by recruiting residents to complete a two-page Household Survey that provides background data on the resident and their household and a Trip Diary for one day. The 2022 survey and diary were based on the 2017 materials, with small changes to the Household Survey to reflect some changes in the transportation context in Fort Collins (e.g., Fort Collins made all buses free, and discontinued the sale of bus passes) and little change to the Trip Diary (to ensure comparability). A copy of the Household Survey and Trip Diary can be found in *Appendix D: Study Methodology*.

In 2017 an app was available as an alternative to the Household Survey and Trip Diary; the app included the Household Survey questions along with the ability to use the phone's GIS to track all trips takes in a day and then annotate each trip with the purpose and mode replacing the tracking that could be done on the paper diary. This app was not offered in 2022 for two primary reasons: (1) Response rates from those who were invited to use the app were very low in 2017 (much lower than those offered the paper version) and (2) the app was not kept up to date in the intervening years and the cost to update and use the app to meet requirements for iOS and Google Play was prohibitive.

Selecting Survey Recipients

"Sampling" refers to the method by which survey recipients are chosen. The "sample" refers to all those who were given a chance to participate in the survey. Ideally, the chosen survey recipients should be representative of all eligible survey recipients. Randomly selecting survey recipients ensures that this will occur.

For the 2022 study, 7,500 residents were randomly selected from within the Fort Collins Growth Management Area (GMA, see map on following page) and stratified by Fort Collins' six regions (delineated in red on map on following page).

A list of all addresses based on the United States Postal Service delivery sequence file was purchased and used for this selection. The addresses were geocoded (mapped to a specific latitude and longitude) and compared to the boundaries of the GMA and of the Fort Collins regions. Additionally, the City provided a list of likely Spanish speaking households (culled from research for a County health survey) that could be targeted to receive mailings in both English and Spanish.



- 1. 7,000 received an initial postcard informing them about the study. This was followed a week later by a mailed packet of the of the paper materials in English (cover letter, instructions, Household Survey and Trip Diary). The postcard and cover letter also included a note in Spanish indicating that Spanish versions of the materials could requested by phoning the City of Fort Collins (with the appropriate number provided).
- 2. 500 received an initial postcard informing them about the study. The postcard was followed a week later by a mailed packet of the of the paper materials in both English and Spanish (cover letter, instructions, Household Survey and Trip Diary).

Systematic sampling is a procedure whereby a complete list of all possible addresses is culled, selecting every Nth one until the appropriate number of households is sampled. This procedure was used to select from within the following areas to meet targets set for each sampling area.

Area	Number of Recipients	Returned with Undeliverable Address	Eligible to Participate	Completed Survey and or Diary	Response Rate
1 Northwest	1,287	65	1,222	107	8.8%
2 Northeast	999	34	965	124	12.8%
3 West Central	1,382	29	1,353	181	13.4%
4 East Central	1,680	22	1,658	201	12.1%
5 Southwest	316	33	283	54	19.1%
6 Southeast	1186	70	1,116	173	15.5%
N/A GMA	650	13	637	117	18.4%
Total	7,500	266	7,234	957	13.2%

Table 100: Sampling Scheme by Region and Contact Type

To meet the need to have the mailing arrive on different days within the week (with the instruction to complete the Trip Diary the next day or as soon as possible) addresses were also systematically assigned to a mailing day as follows:

Table 101: Sampling Scheme by Contact Type and Mailing Day

	Friday	Monday	Tuesday	Wednesday	Thursday	Total
Paper Survey	1,500	1,500	1,500	1,500	1,500	7,500
Postcards and Paper F	Packets maile	d between April	14 and 27, 201	7.		

Response Rates

Invitations were mailed each weekday with the instruction to complete the diary and survey on the next day or as soon as possible. The goal would be to have the diary completions spread evenly across the week (14% per day); actual proportions ranged from 11% to 16% (see Table 102).

Day of Week	Number completed	Of response with a known day	Of all
Sunday	131	15%	14%
Monday	144	17%	16%
Tuesday	107	12%	12%
Wednesday	137	16%	15%
Thursday	146	17%	16%
Friday	105	12%	11%
Saturday	101	12%	11%
Known total	871	100%	
Unknown	54		6%
Total	925		100%

Table 102: Response by Day Diary Completed

Confidence Intervals

The 95% confidence interval (or "margin of error") quantifies the "sampling error" or precision of the estimates made from the survey results. A 95% confidence interval can be calculated for any sample size, and indicates that in 95 of 100 surveys conducted like this one, for a particular item, a result would be found that is within a certain range if everyone in the population of interest was surveyed. The practical difficulties of conducting any resident survey may introduce other sources of error in addition to sampling error. Despite the best efforts to boost participation and ensure potential inclusion of all households, some selected households will decline participation in the survey (referred to as non-response error) and some eligible households may be unintentionally excluded from the listed sources for the sample (referred to as coverage error). Coverage error is very low for this survey, as the USPS delivery sequence file is used to select addresses, which has nearly complete coverage of all households.

For this survey, with 957 responses, the 95% confidence interval is about plus or minus 3%.

Cleaning and Coding and Data Entry

Mailed surveys were returned to NRC directly via postage-paid business reply envelopes. Once received, the diaries were prepared for the analysis. Every diary was examined to ensure that it was filled out correctly with accurate trip descriptions. Corrections were made where they could be intuited (for instance, a very common mistake was to count round trips as one trip rather than two, as they have the same start and end, and are often a walk for exercise, these can be split into two trips, when recognized). Routes were also checked using google maps when they were unclear to fill in details and estimate any missing trip mileage. http://latlong.net/ was used to determine start and end locations for all trips in the verification process. The diary data were transferred to excel worksheets as they were cleaned. Three other variables were coded at this time: 1) the type of trip made (Home \leftrightarrow Work, Home \leftrightarrow Other or Non-home), 2) if the trip was a "link" in the work commute, and 3) if the trip had both origins or destinations outside Fort Collins.

Weighting and Analysis

The data from the household travel surveys were data entered into electronic datasets using a key and verify methodology. This means that the data were entered twice and the two datasets compared. Where there were discrepancies, the results were compared to the hard copy survey and keyed correctly. These plain-text datasets were then imported into SPSS®, a statistical software package, for analysis.

Using the assigned unique identifier, the household travel survey responses were matched with the Trip Diary information. Two types of datasets were created: a trip-level dataset, where every record in the dataset represented a single trip, and a person-level dataset, where every record in the dataset represented a single person.

Due to the differences in travel behavior by various socio-demographic groups, the participants' responses were statistically weighted. Using the data from the 2020 Census ACS, the results were adjusted to give more weight to the travel of those who were under represented in the sample. The Statistical Package for the Social Sciences (SPSS) a software program using mathematical algorithms was used to calculate the appropriate weights. The results of the weighting scheme are presented in the following table which displays the sociodemographic profile of the 2022 study participants using unweighted and weighted data compared to the Census data.

Characteristic	Population Norm	Unweighted Data	Weighted Data
Housing			
Rent home	46%	17%	45%
Own home	54%	83%	55%
Race and Ethnicity			
White	90%	96%	91%
Not white	10%	4%	9%
Sex			
Male	50%	40%	50%
Female	50%	60%	50%
Age			
18-34	49%	12%	48%
35-54	27%	24%	27%
55+	24%	64%	25%
Sex & Age			
Females 18-34	25%	7%	25%
Females 35-54	14%	16%	14%
Females 55+	11%	37%	11%
Males 18-34	24%	5%	24%
Males 35-54	13%	8%	13%
Males 55+	13%	27%	14%
AREA			
1	15%	11%	15%
2	11%	13%	12%
3	18%	19%	18%
4	21%	21%	20%
5	4%	6%	4%
6	15%	18%	15%
GMA	15%	12%	15%

Table 103: 2022 Weighting R	lesults
-----------------------------	---------

* 2020 American Community Survey 5-year estimates

The electronic dataset was analyzed using the SPSS. For the most part, frequency distributions and average (mean) ratings are presented in the body of the report. A complete set of frequencies for each Household Survey question is presented in *Appendix A: Responses to the Household* Survey. Chi-square or ANOVA tests of significance were applied to these breakdowns of selected survey questions. A "p-value" of 0.05 or less indicates that there is less than a 5% probability that differences observed between groups are due to chance; or in other words, a greater than 95% probability that the differences observed in the selected categories of the sample represent "real" differences among those populations. Where differences between subgroups are statistically significant, they are noted in the tables.

Further Information

The City of Fort Collins funded this research, for further information about this study please contact Dashiell Bubar-Hall <dbubar-hall@fcgov.com> at the City of Fort Collins.

Appendix E: Survey Materials

A copy of the survey materials appear on the following pages.



c/o National Research Center, Inc. 2955 Valmont Rd., Suite 300 Boulder, CO 80301-1360 303-444-7863

2022 Travel Diary Study HOUSEHOLD TRAVEL SURVEY

Please complete this survey about your household and return it with your Travel Diary. Both are essential to this study! The survey should take only a few minutes. Your answers will be kept in strict confidence and only reported in group form. *Thank you for your time and assistance!*

GENERAL TRAVEL INI	ORMATION			3.Which of the following do	o you have? (Check all that apply)
1.In the past n	nonth, about how o	ften did you:		Bike Cage membership	
Ride a bicycle				E-Bike, E-Scooter mem	• • •
to work/school O 5+ times a week O 1-4 times a week O 1-3 times total O Never	to get other places 5 + times a week 1-4 times a week 1-3 times total Never	just for exercise/ O 5+ times a wee O 1-4 times a we O 1-3 times total O Never	ek eek	 Car Share membership Ride Share membersh CSU parking permit Downtown (City) park 4.Are you employed a 	ip (Uber/Lyft)
Walk	1	1		<u>Work</u>	School
to work/school 5+ times a week 1-4 times a week 1-3 times total Never	to get other places 5+ times a week 1-4 times a week 1-3 times total Never	iust for exercise/ O 5+ times a wee O 1-4 times a we O 1-3 times total O Never	ek eek		O No O Yes, part-time O Yes, full-time estion to #9 ess, building and/or nearest cross rimary workplace, if any.
Ride MAX or other b		1		City	ninary <u>workplace</u> , it any.
to work/school	to get other places				
O 5+ times a week O 1-4 times a week	\bigcirc 5+ times a week \bigcirc 1-4 times a week			Building or address: OR Cross street 1:	
O 1-3 times total	O 1-3 times total			& Cross street 2	
O Never Carpool/Vanpool <u>to work/school</u> O 5+ times a week O 1-4 times a week O 1-3 times total O Never	 Never to get other places 5+ times a week 1-4 times a week 1-3 times total Never 				ess, building and/or nearest cross nary <u>school</u> location, if any.
	nute mode besides (ke, bus, walk, vanpo reasons for doing so <i>each)</i>	ol, carpool), wha	at F <i>for</i>	of traveling into work/s	ften do you telecommute instead chool (i.e., stay at home for the se technology to work/attend)? School O Every school day O 1-4 times a week
Save money				O 1-3 times a month	O 1-3 times a month
Save time				O Never	O Never
Avoid parking hassles					the day you completed the travel
Improve air quality / Increase physical acti				diary?	O Yes O No
Save wear and tear o	• •			HOUSEHOLD INFORMATIO	
Don't have a persona	•				ice below that best describes the nce in which you live.
Other, <i>specify</i>				O Single-family house de	tached from any other houses luplex, triplex or townhome)
<i>If you would be will</i> other follow up rese Collins, please visit t or call 970-221-670	arch related to tra he website fcgov.co	veling in Fort om/TravelSurve	<i>чу,</i>	 O Building with apartment O Mobile home O Group quarters (e.g., do O Other: 	nts or condominiums ormitory, nursing home)

10.Do you rent or own your residence?

O Rent O Own

11. How many vehicles does your household regularly use?

Cars, SUVs, vans	Motorcycles/
minivans, pickup trucks	scooters

Please provide details for these vehicles. If you have fewer than 4, only fill out those you have. If you have more than 4, choose the 4 you use most often

	Vehicle Type (check one)	Fuel Type (check one)	Year (write in)
1 (<u>your</u> main vehicle)	 Car SUV/van/minivan Pickup truck Motorcycle/scooter 	O Electric O Hybrid O Gas O Diesel	
2 (other vehicle)	 Car SUV/van/minivan Pickup truck Motorcycle/scooter 	O Electric O Hybrid O Gas O Diesel	
3 (other vehicle)	 Car SUV/van/minivan Pickup truck Motorcycle/scooter 	O Electric O Hybrid O Gas O Diesel	
4 (other vehicle)	 Car SUV/van/minivan Pickup truck Motorcycle/scooter 	O Electric O Hybrid O Gas O Diesel	

12.How many usable bicycles and tricycles does your

household have?

Electric-assisted bicycles/tricycles bicycles/tricycles

13. How many household members are in each of the following age categories? (Please include yourself)

Age category

Regular

Number in household

0 to 15 years 16 to 64 years 65 or older

14.For all children in your household who go to a K-12 school, please check their most frequently used travel mode to get to school. (If no children live in your household, or none attend K-12 school, please go to question #15)

Child's most frequent travel mode to school (check one in each column)	Child 1	Child 2	Child 3	Child 4	Child 5
Walk	0	0	0	0	0
Bicycle	0	0	0	0	0
Scooter/skateboard	0	0	0	0	0
School bus	0	0	0	0	0
Public bus	0	0	0	0	0
Driven alone (passenger)	0	0	0	0	0
Driven with other children	0	0	0	0	0
Drive themselves	0	0	0	0	0
Drive themselves + others	0	0	0	0	0

15.For household members who are 18 or older (and those 16-17 who are not in a K-12 school), please check their most frequently used travel mode to work or school.

frequently used travel mode to	work	or sci	nool.	
	You		Others	
Check one in each column	(1)	2	3	4
Telecommute/work from home	0	0	0	0
Walk	0	0	0	0
Bicycle	0	0	0	0
Take bus	0	0	0	0
Drive alone	0	0	0	0
Drive with adult from household	0	0	0	0
Drive with adult NOT from household	0	0	0	0
Drive with children from household	0	0	0	0
Drive with children NOT from household	-	0	-	Ŭ
16.About how much was your TOTAL		ncom	e befo	ore
taxes for your house				
O Less than \$15,000 O \$50,0				
O \$15,000 to \$24,999 O \$75,0				
O \$25,000 to \$34,999 O \$100			-	
O \$35,000 to \$49,999 O \$150	,000 c	or mor	re	
INDIVIDUAL INFORMATION				
17.How many years have you lived	l in Fo	rt Col	lins?	
se write "0" if less tha	n 6 m	onths)	
19.Which category contains	voura	ige?		
O 18-24 O 35-44 O 55-64	-	O 75	+	
O 25-34 O 45-54 O 65-74		075	•	
	م ام با م		+ Colo	
20.Are you, or any household members, State University or Front Range Co				
		-	nany	
You <u>Others</u> O No O None	ſ		luding	
			iuuiii	s you
O Yes, part-time O Yes, part-ti				
21.How much education have yo	u con	nplete	ed?	
${f O}$ Less than high school graduate				
O High school diploma/GED				
O Some college or associate's degree	9			
${f O}$ Bachelor's degree or higher				
22. Which category best describes	your	ethnio	city?	
O Hispanic/Latinx O Non-Hispanic/	Latinx			
O Prefer to self-identify:				
23. Which categories best descri	be voi	ur rac	e?	
24.(Choose all that ap				
	⊒ Wh	ito		
•				
	❑ Oth	er		
25.What is your gend				
O Female O Male O Ide	entify a	anoth	er wa	У
Thank you very much for taking the this survey. Please return this with the postage-paid envelope	our t	ravel		

2022 Fort Collins Trip Diary

	The informa						river, cyclist, or pedestrian. ons if you are not sure how to a	record yo	our trips.	
				O I di O Sta O Sta	ING POINT FOR D id not leave the hous arted from home arted somewhere else Starting Address:	e today e		list odom	notor vehic neter readin ginning of d	ng:
		/ / 2022 onth / date / year		(Zip:&	at end	l of day:	
#	Destination	Trip segment type (Check one)	Trip segr distance (and trave	miles)		ent purpose le one)	Trip segment travel mode (Circle one, if you have more th one split them into separate segm	ian ients)	Number of vehicle (inc children	
example	<u>Boltz Míddle Schoo</u> l <u>Boltz §</u> <u>Camelot</u>	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distar 2 Start time: <u>6</u> 55 Arrival time: 7: 05	_miles	go home go to work go to school d. drive passenger 5. change travel mode 11. other:	6. other work/business7. personal business8. social/recreation9. eat a meal10. shopping	L car, pickup truck, SUV, minivan or van (d 2. car, pickup truck, SUV, minivan or van (p 3. large commercial truck 7. motorb 4. bus (route(s):) 8. walk 5. school bus 9. bicycle 6. hail a ride (Uber, Lyft) 10. bike/sch 11. other:	oassenger) ike/scooter (your own) ooter share	1	1
1	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distar Start time:: Arrival time::	_miles	1. go home 2. go to work 3. go to school 4. drive passenger 5. change travel mode 11. other:	 6. other work/business 7. personal business 8. social/recreation 9. eat a meal 10. shopping 	1. car, pickup truck, SUV, minivan or van (d 2. car, pickup truck, SUV, minivan or van (p 3. large commercial truck 7. motorbik 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (g 6. hail a ride (Uber, Lyft) 10. bike/scool 11. other:	oassenger) ke/scooter your own) oter share		
2	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distar Start time: . Arrival time: .	nce: _miles am/pm am/pm	1. go home 2. go to work 3. go to school 4. drive passenger 5. change travel mode 11. other:	 6. other work/business 7. personal business 8. social/recreation 9. eat a meal 10. shopping 	1. car, pickup truck, SUV, minivan or van (d 2. car, pickup truck, SUV, minivan or van (p 3. large commercial truck 7. motorbik 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (g 6. hail a ride (Uber, Lyft) 10. bike/scool 11. other:	bassenger) ke/scooter your own)		
3	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distar Start time: Arrival time: .	nce: _miles am/pm am/pm	1. go home 2. go to work 3. go to school 4. drive passenger 5. change travel mode 11. other:	 6. other work/business 7. personal business 8. social/recreation 9. eat a meal 10. shopping 	1. car, pickup truck, SUV, minivan or van (d 2. car, pickup truck, SUV, minivan or van (p 3. large commercial truck 7. motorbik 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (g 6. hail a ride (Uber, Lyft) 10. bike/scool 11. other:	bassenger) ke/scooter your own)		

#	Destination	Trip segment type		Trip segn	nent purpose	Trip segment travel mode (Circle one, if you have more than	Number of people in vehicle (inc. yourself)	
"	Destination	(Check one)	and travel time	(Circ	cle one)	one split them into separate segments)	children	adults
4 _	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distance: miles Start time: :am/pm Arrival time: am/pm	1. go home 2. go to work 3. go to school 4. drive passenger 5. change travel mode 11. other:	 6. other work/business 7. personal business 8. social/recreation 9. eat a meal 10. shopping 	1. car, pickup truck, SUV, minivan or van (driver) 2. car, pickup truck, SUV, minivan or van (passenger) 3. large commercial truck 7. motorbike/scooter 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (your own) 6. hail a ride (Uber, Lyft) 10. Bike/scooter share 11. other:		
5	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distance: miles Start time: :am/pm Arrival time: am/pm	1. go home 2. go to work 3. go to school 4. drive passenger 5. change travel mode 11. other:	 6. other work/business 7. personal business 8. social/recreation 9. eat a meal 10. shopping 	1. car, pickup truck, SUV, minivan or van (driver) 2. car, pickup truck, SUV, minivan or van (passenger) 3. large commercial truck 7. motorbike/scooter 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (your own) 6. hail a ride (Uber, Lyft) 10. bike/scooter share		
6	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distance: miles Start time: :am/pm Arrival time: :am/pm	 go home go to work go to school drive passenger change travel mode 11. other: 		1. car, pickup truck, SUV, minivan or van (driver) 2. car, pickup truck, SUV, minivan or van (passenger) 3. large commercial truck 7. motorbike/scooter 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (your own) 6. hail a ride (Uber, Lyft) 10. bike/scooter share 11. other:		
7	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distance: miles Start time: :am/pm Arrival time: :am/pm	1. go home 2. go to work 3. go to school 4. drive passenger 5. change travel mode 11. other:		1. car, pickup truck, SUV, minivan or van (driver) 2. car, pickup truck, SUV, minivan or van (passenger) 3. large commercial truck 7. motorbike/scooter 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (your own) 6. hail a ride (Uber, Lyft) 10. bike/scooter share 11. other:		
8	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distance: miles Start time: :am/pm Arrival time: :am/pm	1. go home 2. go to work 3. go to school 4. drive passenger 5. change travel mode 11. other:	6. other work/business7. personal business8. social/recreation9. eat a meal10. shopping	1. car, pickup truck, SUV, minivan or van (driver) 2. car, pickup truck, SUV, minivan or van (passenger) 3. large commercial truck 7. motorbike/scooter 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (your own) 6. hail a ride (Uber, Lyft) 10. bike/scooter share 11. other:		
9	&	 One-way trip (no stops) Part of a one-way trip (with stops) record each stop as a separate trip segment Loop trip (no stops) 	Segment distance: miles Start time: :am/pm Arrival time: :am/pm	1. go home 2. go to work 3. go to school 4. drive passenger 5. change travel mode 11. other:	6. other work/business7. personal business8. social/recreation9. eat a meal10. shopping	1. car, pickup truck, SUV, minivan or van (driver) 2. car, pickup truck, SUV, minivan or van (passenger) 3. large commercial truck 7. motorbike/scooter 4. bus (route(s):) 8. walk 5. school bus 9. bicycle (your own) 6. hail a ride (Uber, Lyft) 10. bike/scooter share 11. other:		

Thank you very much for taking the time to complete this Trip Diary. **Please return this Trip Diary along with your Household Survey using the postage-paid envelope provided.** If you can't find the envelope, you can mail it to NRC, 2955 Valmont Rd., Suite 300, Boulder, CO 80301, or scan and email to traveldiary@n-r-c.com