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Youth Cruz Free: Fare Free Bus and Ridership Behavior among Santa Cruz County Teens

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16. Abstract

Since the beginning of the twenty-first century, young people have become a considerable share of public transit users. However, younger representatives of this age group still face many barriers to access transit infrastructure and benefit from its service. This study examines a Youth Cruz Free program launched by the Santa Cruz METRO in March 2023, allowing kids and teenagers of school age to use the service for free. The researchers were interested in understanding how the program has changed the travel behavior of teenagers, whether it encourages adolescents to use the service after they turn 18, and what factors influence their overall ridership of Santa Cruz METRO. To reach both current high school students and recent graduates, the researchers completed two rounds of surveys distributed among high schools in Santa Cruz County. The surveys asked about adolescents' sociodemographics, the availability of different modes of transportation, school attendance, and other variables that might change patterns in their mobility and encourage/discourage transit adoption. After completing multiple statistical tests, the researchers identified the factors impacting teenagers' travel behavior. Hispanic/Latinx students were found to ride the METRO more frequently than White students. Students with a driver's license and students with higher numbers of household vehicles are less likely to use public transportation. Perceptions of safety also correlate significantly with youth ridership. Surprisingly, variables such as gender, job frequency, and the walking distance from the bus stop were not significantly related to bus use frequency. While additional research could aim to better target all riders, including communities of color and those in rural areas, the findings support the growing literature on youth ridership and fare free programs. The results suggest perceptions of safety are worth addressing at a systemic level, and that public transit becomes less desirable once individuals have access to personal vehicles and licenses.

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Youth Cruz Free: Fare Free Bus and Ridership Behavior among Santa Cruz County Teens

A National Center for Sustainable Transportation Research Report

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Executive Summary

The COVID-19 pandemic was a great shock to the public transportation sector. The trend of already declining ridership worsened, and agencies have recovered to varying degrees in the years following the pandemic. To respond to the rising crisis, multiple transport agencies around the US started implementing different programs to encourage people to adopt public transport. Some agencies introduced fare-free pilot programs for youth allowing children and teenagers under 18 years old to use transit services for free.

One of the pilot programs, Youth Cruz Free, was launched in Santa Cruz County by Santa Cruz METRO agency in March 2023.

Youth Cruz Free allows all school-age children and teenagers in Santa Cruz County, California to ride local buses for free. The program started as a one-year pilot but after its great success and a 536% increase in youth ridership it was extended until April 2026. Using this program as a case study, this research examines the program's role in teens' travel behavior. This study explores what factors encourage or discourage public transport adoption by high school students and whether Youth Cruz is a factor in bus use.

To address these questions, this study implemented two rounds of online surveys distributed to students through Santa Cruz high schools. The results presented here center on the first survey, conducted in the Spring of 2024. The survey included multiple blocks of questions asking high school students about their sociodemographic status, the availability of different modes of transportation, school attendance, participation in activities, and other variables that might change their travel behavior or that may change as a result of increased transit use with the Youth Cruz program.

Key Findings

- The relationship between licensure of youth of licensure age and METRO usage frequency was significant. Over 50% of those without licenses rode the METRO weekly, and large percentages of those with licenses chose not to use it or use it only infrequently.
- The ethnicity of White/Caucasian and Hispanic/Latinx is significantly related to their bus usage frequency. Of the youth that rode the bus more than 5 times per week, Hispanic youth ridership was 14 percentage points higher than that of White youth. There were also a little over twice as many White responses as there were Hispanic.

- The average number of vehicles per household was significant with METRO usage; as vehicles per household rose, ridership decreased.
- The walking distance measured in minutes to the nearest bus stop was not significantly related to METRO ridership. There are mixed results with respect to long it takes teens to walk to the nearest bus stop and whether bus use changed during the pilot. Other factors are likely more important than walking distance.
- The perception of bus stop safety significantly relates to METRO ridership at the. A total of 63% of those with positive perceptions rode the bus weekly, with 26% of respondents using the bus more than 5 times per week. Among those with negative perceptions only 33% used the bus on a weekly basis or more frequently.
- The relationship between METRO ridership and the perception youth have of **safety onboard** the METRO is significant. A total of 56% of individuals with negative perceptions and 40% of neutral/unsure individuals chose not to ride when METRO was available, and 62% of those with positive perceptions of safety rode weekly.
- There was high bus use among teens even before the pilot; with 49% reporting they rode the bus before and during Youth Cruz. Another 31% of the sample increased their use of the bus during the program. The remaining 20% of the sample is made up of students who had low levels of bus use before and during the pilot program, or who reduced their use even with the program.
- Those who use the bus at higher frequencies were more likely to report that the pilot program increased their use—the program likely made it easier for existing bus riding teens to use the bus even more, contributing to greater mobility and activity participation.

But the other variables that were important predictors of bus use, or that had a strong relationship to bus use are important for future consideration; changing fares and bus availability might not be enough to have a large impact on youth travel behavior. The safety perceptions were also important predictors as well as ethnicity and other travel factors such as household vehicles.

Introduction

This study is motivated by the need to understand the benefits of providing subsidized public transit for youth and the circumstances in which youth are able to take advantage of it. This paper examines a specific case study in Santa Cruz, California, and provides insights about the use of free transit, and more specifically, free transit for young people.

As of 2022, the U.S. transportation sector has become the greatest direct emitter of emissions. This primarily results from the gasoline and diesel-fueled vehicles that dominate 94% of the nation's transport (US EPA, 2015). Transitioning away from car dependency is necessary to reduce emissions, and public transportation is one key alternative to private vehicles. The 2020 COVID-19 pandemic forced ridership to fall to 20% of pre-pandemic levels and has now recovered to 79% of previous levels (APTA, 2024). Additionally, the American Public Transportation Association recorded that 22% of the nation's bus riders are under 25. Fare-free programs have emerged, aiming to increase youth ridership and meet other mobility goals. Youth riders make up the next generation of potential public transit riders and have been a target demographic in recent transportation research.

There have been many efforts by researchers and politicians to better understand and implement fare-free youth transit.

Many fare-free and youth transit pilot programs across the U.S. have proven successful, including, but not limited to, Universal Access student programs, San Francisco Bay's American Canyon Transit and Miami-Dade County's free transit pilots, and Boston's reduced fare program (Williams & Petrait, 1993; McDonald et al., 2006; Patel et al., 2020; Thistle & Paget-Seekins, 2017). However, in these studies, youth report that cost, reliability, safety, and accessibility are barriers to usage. Mobility and access insecurity often target certain population demographics and can lead to further socioeconomic inequalities and reduced educational and extracurricular opportunities. This topic has also made its way into the political arena: California's 2022 Assembly Bill 1919 would have established a five-year Youth Transit Pass Pilot Program for California students to ride public transportation free of charge. However, Governor Newsom vetoed it, believing that it would strain the state's budget which had not previously accounted for such costs (Office Of The Governor, 2022). Further research on fare-free programs that assess the current barriers and incentives of public transportation will only support future political actions to make transportation more equitable and sustainable.

In the interest of attracting more riders, Santa Cruz Metropolitan Transit District (Santa Cruz METRO), the sole transit agency within Santa Cruz County, California implemented a pilot program for one year to provide free rides to anyone under 18. Per the 2022 American Community Survey five-year estimate, there are approximately 50,000 individuals under the age of 18 living in Santa Cruz, and 13,207 individuals enrolled in grades 9-12 in the

county of Santa Cruz. Before the completion of the pilot, they decided to extend the program to become ongoing free transit for youth. This was likely due to the program's incredible success, as they reported a 536% increase in transit use among youth since the pilot began (Santa Cruz METRO, 2024). Using this pilot as a case study, this study evaluates travel behavior among high school-age teenagers in Santa Cruz. Original survey data was collected through two surveys administered between the spring and summer of 2024 and the fall and winter 2024. This study investigates the following research questions: Has the pilot program increased youth ridership in Santa Cruz? If so, what individual factors are associated with increased usage? We conducted a literature review to supplement our research and critically analyze the current literature on youth transit and free and reduced transit. The outcomes of this study will provide Santa Cruz METRO with a direct understanding of the impacts of the pilot program and will be useful for transit agencies and policymakers considering larger-scale free transit for youth and other groups.

Background

Why study teenagers' travel behavior?

The travel behavior of teenagers is not a common topic of research in the public transport sector. Studies in this field usually focus on analyzing the travel patterns of an average transit user, an adult with a standard work schedule, rather than examining other age groups and their travel behavior (Marzoughi, 2011). However, due to generational shifts, young people's share in public transit users has significantly expanded since the beginning of the 21st century. The United States National Household Travel Survey data found that, compared to earlier generations, those under 34 have reduced individual private vehicle trips by 15% and ridden 40% more miles on public transportation (Davis et al., 2012). Individuals under 25 make up 22% of bus ridership (APTA, 2024). The travel behavior of young people demands deeper exploration not only due to the increase in the number of young people using transit but also because of the different travel patterns youth represent. As Marzoughi (2011) explains, travel hours (standard work hours versus school hours), travel destinations (work versus school), etc. significantly contribute to the difference between the average transit user experience and youth. Thus, the patterns of young people traveling, the barriers they face, and the knowledge of how they choose the mode of transportation can give a deeper understanding of how efficiently public transit operates. It will also shed light on how public transit and independent mobility provide opportunities for young people to get around and participate in extracurricular activities, jobs, internships, lead an active lifestyle, and explore the area they live in.

Independence of Traveling Youth

In 2003, K. J. Clifton analyzed data from the 1995 Nationwide Personal Transportation Survey to investigate the level of independence of teenagers' travels to outside-of-school activities. The whole data set (95,360 individuals) was reduced to 8,568 individuals (adolescents 13-18 years old), and out of more than 35,000 trips completed by this age group, only 4,344 were sorted as after-school trips (first trips made directly after school). Only these trips were considered for the study since, according to the author, they will mostly reflect the level of independence in adolescents' mobility studied in this paper. The analysis concludes that all ages from 13 to 18 highly rely on privately owned vehicles (POV), 54% in total. However, there is an interesting correlation between the age of respondents and POV usage. As adolescents become older, their reliance on cars increases. It also correlates with the increasing number of these trips as teenagers reach driving age. For instance, 13-year-olds made 33.2% of after-school trips by POV, while 18-year-olds committed 72.4%. From 13 to 18 years old, teenagers become more independent due to their access to the car. Among all licensed teenagers, 54% choose the POV option over all others to get to their activities. Other modes of transportation show a stable decline as the age rises. Thus, POV availability increases the level of independence

for licensed teenagers. However, adolescents who can't access the car due to different social, economic, or simply age factors still experience limited mobility.

In another study, a survey conducted in Connecticut among undergraduate students asking about their travel experience as teenagers found that 71% of respondents usually traveled in a family car either driving alone or with their parents (Auguste et al., 2020). Respondents who lived in less dense areas generally reported more about the lack of transit infrastructure and high reliance on their family car. The share of students whose primary mode of transportation was public transport accounted only for 14%. Another North American study used a similar method of distributing the survey among first-year undergraduate students at the University of Toronto asking them about their high school travel experience (Marzoughi, 2011).

How do teenagers make a choice: the barriers they meet

Multiple studies conclude that one of the key barriers to teenagers choosing transit services over private vehicles is the lack of necessary infrastructure and frequency of service in suburban and rural areas. Marzoughi's (2011) research in Toronto and the Greater Toronto Area (GTA) showed that at the age of 17 years old, 90.5% of GTA youth residents get their driving licenses while in Toronto the share of licensed 17-year-olds accounts only for 47.5%. In the greater Toronto area suburbs, youth indicated "infrequent service, poor placement of stops, and lack of coordination between transit authorities" (Marzoughi, 2011). The study in Connecticut confirms that participants from less dense areas and/or lower income households report more issues regarding public transit accessibility and active transportation infrastructure (Auguste et al., 2020).

Safety is another key concern to youth in a number of countries, according to a Canadian knowledge synthesis of youth and public transit. Marzoughi's (2011) study found that Canadian youth fear safety at bus stops, especially when they lack facilities. A 2013 study found that American youth fear assault on public transportation, and another study of Black male youth in Philadelphia states that they unsafe after dark (Wiebe 2013; Wiebe 2014). Among women at Swedish universities, 61.6% reported being sexually harassed or assaulted while using public transportation, with young riders being most at risk (Ceccato et al., 2020)

One more frequently mentioned barrier for youth to adopt public transport is the cost of the service. For instance, in the Mazoughi (2011) study, the concern of the expense of riding public transit was among the top three worries expressed by the respondents. Similar concerns were expressed by Australian teenagers who could not afford public transit and, as a result, regularly failed to attend school (*Free Public Transport Needed for Students*, 2016). Another study conducted among eighth and ninth grade students in Baltimore concludes that there is a correlation between transit affordability and accessibility and school attendance: more sophisticated commutes result in an increase in missed school days (Stein & Grigg, 2019). Undoubtedly, there are many other factors

that can determine teenagers' choice in traveling and place barriers to transit adoption. However, the factors discussed above seem crucial and most frequently identified among multiple studies.

What can be done? The existing programs

Asking youth directly about their experiences with transit and including them in the policy arena may be a beneficial method to influence youth ridership. For example, a 2018 study in Portland Oregon sought to understand what communication messaging and advertisements about non-car transit translated positively to youth. They found that teens were best reached through their parents and guardians, and then by the city's transit app, social media ads, ads near bus stops, and youth radio stations. Further, Generation Z targeted safety text-messages seemed inauthentic, and youth transit riders felt that they were contrary to their lived experiences. They then suggested that advertisements tap into positive associations with emotions and concepts like autonomy to best influence users (Shafer & Macary, 2018). During a time when ridership is low, understanding from youth themselves what methods positively influence their transit decisions is essential to improve policies and programs and their relevance.

Another study focused on middle and high school students from Rockaway, Queens, a very inaccessible district with one of the nation's highest commute times. Researchers found that student riders' needs are not addressed by the Metropolitan Transportation Authority's (MTA) Bus Network Redesign project's public engagement process. They proposed changing their co-design practices to address this group through "targeted participation, aggregation and bargaining, and advice and consultation with public officials" (Sivashankar and Hajosy, 2021). Given that these students made up a significant proportion of bus riders in the area, researchers argued their voices should be heard. Specific mechanisms to achieve these goals include implementing open, targeted recruitment, facilitating environments for students to meet and advocate for themselves, and empowering public voices by letting them consult with MTA officials. While including youth in decision making processes is not common, it could prove to be beneficial and ultimately give youth a deeper understanding of local policy and public transit.

Methods

This study examines how the “Youth Cruz Free" fare free transit pilot program influenced ridership behavior among the population of high school aged teens in Santa Cruz County, across various seasons in 2023 and 2024, using survey data collected in the summer of 2024 and fall of 2024. We aimed to understand the change in bus ridership behavior based on self-reported behavior / revealed preference mode use and activity questions. The surveys were comprised of questions that measure sociodemographic characteristics, driver’s licensure status, travel-related attitudes, bus use, activity levels, school attendance, and neighborhood environment.

Survey Content

The key sections of the survey are as follows:

- *School, County Residence Status, and Preliminary Bus Riding*
- *Spring 2024 Mode Use Frequency and Activity Participation*
    - Questions explicitly asked what modes of transportation were used in spring of 2024 to get to or come from non-school activities and school
- *Comparison to Spring 2023 Mode Use Frequency and Activity Participation:*
    - "Think back to last school year, Fall 2022 - Spring 2023 when you were about one grade lower than the one you just completed. Compared to spring 2024, how often did you use the Metro bus during each of these seasons? - I did not use the bus at all"
- *Built Environment and Neighborhood characteristics; sentiments about neighborhood safety and walkability*
- *METRO Use, Perception and Attitudes, Bus Safety, and Comparison to other Modes*
- *Demographics*

The content of the second survey varied slightly from the first to decrease question confusion and increase survey completion, but the content was largely the same as the first survey. A birth month question as well as an additional section addressing where high school seniors plan to end up (whether that be a local college, college out of town / out of state, trade school, work a job in town / out of town, or not sure) was added to the second survey. Additionally, surveys could be taken in either English or Spanish to account for the large Hispanic population in Santa Cruz County.

Data Collection and Sample

Given that the target population is nearly 13,000 high school-aged teenagers, our main method of survey recruitment was communication with the schools at the district level. We also posted survey recruitment materials online and on social media with help from Santa Cruz METRO and a local community-based organization, Central California Alliance for Health, to advertise the survey to the target population and garner interest. Surveys were also advertised via posters with Quick Response (QR) codes and short Uniform Resource Locators (URLs) at public places such as laundromats, coffee shops, and grocery stores throughout the county. Both surveys were administered on Qualtrics, the online survey platform, and could be taken on a mobile phone or computer. The first survey was active from May 29, 2024, until August 15, 2024. This initial survey aimed to understand the short-term effects of the program. The second was active from November 27, 2024, until December 31, 2024, with the program well into its second year. Response data was periodically downloaded from Qualtrics for processing while the surveys were active. Respondents were incentivized with potential monetary compensation; each participant was included in a raffle to win a small monetary prize.

We were successful in reaching two out of the five districts to assist with this effort: Santa Cruz City High Schools and Pajaro Valley Unified School District. The majority of responses are from individuals attending high school in the Santa Cruz City district. As for the demographics of the two school districts, Pajaro Valley Joint Unified School District has a total population of 109,597. Of those, 68,312 are Hispanic/Latino while 41,285 are not. 54,133 are considered White, though the census allows respondents to distinguish White as their race and Hispanic and Latino as an ethnicity, separately. Therefore, some of those who indicated they were Hispanic and Latino may have also labeled themselves as White. Additionally, of the 64,288 in the Santa Cruz City High School District (6-12), 44,023 are White. 13,426 are Hispanic or Latino while 50,862 are not (U.S. Census Bureau, 2022). It is important to acknowledge demographics because part of the research compares the two.

Data Preparation

The sample size from the first survey included 490 responses. The results presented here are drawn on the first survey. We filtered by age, completeness, speed, and consistency. After cleaning the data, we were left with 394 usable observations from the first survey.

We transferred the raw data into Google Sheets. We first filtered by age and excluded all responses from those not born between 2005-2010, corresponding to a current age range of 14 to 18. We also manually removed responses that didn't respond to any questions after the birth year question in the survey.

Next, we filtered for speeding. To assess speeding, we used the timestamp information for each survey in combination with Qualtric's "progress" variable, which ranks each response between zero and 100 depending on how much of the survey was completed by

each respondent. We categorized survey responses into groups: those that answered 0-24%, 25-49%, 50-69%, 70-99%, and 100% of the survey. For each survey completion category, we found the median and standard deviation for the time each respondent took to submit the survey. We then flagged cases for review or deletion if it appeared respondents were speeding through their survey, by finding cases whose response time was less than one standard deviation below the median time it took all respondents within each particular completion category.

These data processing and preparation steps resulted in usable sample of 394 cases. In our analysis, smaller samples are used due to item non-response. Sample size is noted for each result presented below.

Analysis

To effectively analyze the data and better understand what impacts the ridership behavior of high school aged youth, we interpreted various aspects of the data. We are interested in seeing if there is a correlation between bus ridership and licensure, gender, perceived safety, distance to nearest bus station, and if the participant had a job. Many of these responses were combined into new categories to account for low response rates and to not skew the statistical assessment. These questions were chosen to be analyzed because they relate to perceived barriers of public transit ridership by youth.

One area of interest was understanding what variables relate to bus usage in Santa Cruz, and we used the survey question asking about METRO bus usage frequency as our dependent variable. This question asked “This Spring 2024 (March-May) how often did you use any of the following transportation options to get anywhere within Santa Cruz County? Select all that apply.” The columns indicated the frequency of usage, and the rows indicated the transportation method. Figure 1 is a visual of the question.

	Not available (2)	Available but I did not use it (1)	Less than once a month (3)	1-3 times a month (4)	1-2 times a week (5)	3-4 times a week (6)	5 or more times a week (7)
Car - drive alone (1)	○	○	○	○	○	○	○
Car - dropped off by someone else (2)	○	○	○	○	○	○	○
Carpool - with friend(s) or sibling(s) (3)	○	○	○	○	○	○	○
Santa Cruz Metro bus (8)	○	○	○	○	○	○	○
School bus (9)	○	○	○	○	○	○	○
Walk (4)	○	○	○	○	○	○	○

Figure 1. Visual of METRO usage frequency question.

We combined the response options of "Less than once a month" and "1-3 times a month" into "Less than once per week" due to minimal responses in both categories. We chose to focus on how gender, race, licensure, employment, walking distance to the nearest bus stop, and safety related to bus use frequency.

In our evaluation of how bus use relates to our independent variables of interest, we recoded independent variables with low numbers of respondents selecting some answer options. These are noted for each results below, but in general we combined response items that were closest in value and aimed to retain as much variation in the data as possible—i.e. not combine adjacent categories if both had sufficient numbers of respondents.

Results

METRO Bus Use Before and During the Pilot

We asked respondents about METRO use before and during the pilot period. The pilot started on March 1, 2023, so if any survey respondents indicate use of the bus after this time period, we include them as during-pilot users. Anything indicating bus use before March 1, 2023 is the pre-pilot period. We asked the following questions to determine how ridership behavior may have changed between the pre-pilot and pilot periods. We asked the following questions: “Did you ever ride a Metro bus before they became free for anyone under 18?” and “Have you ridden a Metro bus between March 2023 - now?”. From those questions, we determined the amount of respondents that did not ride the bus in either period, rode in both periods, rode only after the pilot started, and rode only before the pilot. From these types of responses, we define a variable of basic change in ridership, and call these response types as “Change” or “No Change”. Those who changed either stopped riding after the pilot (Change – negative) or started riding after the pilot (Change – positive). The table below shows the count of responses for each type. Almost half of respondents (49%) rode in both time periods, however, the next largest group are those who rode the bus only after March 1, 2023. Our survey may overrepresent those who fall into these two categories given our specific interest in Youth Cruz Free or having personally benefitted from it.

Table 1. Change in Bus Use after Pilot Implementation.

	n	**%**
Change - Positive	86	31%
Change - Negative	33	12%
No Change - Always Rode	136	49%
No Change - Never Rode	25	9%
Total	280	100%

Table 2. Crosstabs with Change in Bus Use.

p-value = 0.084, n = 145	Change - Positive		Change - Negative		No Change - Always Rode		No Change - Never Rode	
Time to Walk to Closest Bus Stop								
Less than 5 minutes	15	31%	5	29%	20	30%	3	23%
5-10 minutes	21	43%	8	47%	24	36%	7	54%
11-15 minutes	8	16%	0	0%	10	15%	2	15%
More than 15 minutes	5	10%	4	24%	12	18%	1	8%
Total	49	100%	17	100%	66	100%	13	100%

p-value = 0.255, n = 150	Change - Positive		Change - Negative		No Change - Always Rode		No Change - Never Rode	
Parental Education Attainment								
Less than High School Diploma	10	20%	1	5%	18	28%	4	29%
Completed High School / GED	6	12%	0	0%	7	11%	1	7%
Some College or Associate's Degree	10	20%	2	10%	11	17%	2	14%
Bachelor's Degree(s)	14	27%	6	30%	15	23%	2	14%
Graduate or Professional Degree	11	22%	11	55%	14	22%	5	36%
Total	51	100%	20	100%	65	100%	14	100%

p-value = 0.566, n = 121	Change - Positive		Change - Negative		No Change - Always Rode		No Change - Never Rode	
Driver's License (for those eligible)								
Yes	3	30%	14	28%	8	38%	5	13%
No	7	70%	34	68%	12	57%	34	85%
Prefer not to Answer	0	0%	2	4%	1	5%	1	3%
Total	10	100%	50	100%	21	100%	40	100%

p-value = 0.646, n = 149	Change - Positive		Change - Negative		No Change - Always Rode		No Change - Never Rode	
Gender								
Male	20	40%	6	30%	20	31%	3	21%
Non Male	28	56%	14	70%	44	68%	11	79%
Prefer not to answer	2	4%	0	0%	1	2%	0	0%
Total	50	100%	20	100%	65	100%	14	100%

While most of the relationships between these variables and types of ridership change in are not statistically significant, they are still a useful insight into trends among certain bus users. Non-male respondents are overrepresented in each category of bus ridership change. When examining respondents change in bus ridership by driver's licensure status, we see that the majority of respondents within each category of bus ridership are those without a license, and the largest proportion of respondents without a license are those who have never ridden the bus. For another relevant variable, the self-reported time it takes to walk to the nearest bus stop, most respondents indicated that it takes 15 minutes or less, and five to ten minutes was the most common timing given by respondents, including those who stopped riding after the pilot began and those who did not ride in either time period.

Those who rode before the pilot but did not ride after the pilot ("Change – negative") have the highest proportion of parents with a graduate/professional degree and also have the lowest proportion of parents who have less than a high school diploma. Those who did not ride before or after the pilot ("No Change – Never Rode") have the second highest proportion of parents with a graduate/professional degree but also have the highest proportion of parents with less than a high school diploma. The proportions of varying parental educational levels are more similar across "No Change – Always Rode" and "Change – Positive", though those who rode before and after the pilot have a higher proportion of parents with less than a high school diploma than those who started riding after the pilot started.

METRO Bus Use in Spring 2024

We also asked respondents to indicate their frequency of METRO bus use in Spring 2024. Twenty-eight percent did not ride the bus in that season, and 72% indicated that they used the bus at least once in the Spring 2024 season. Of those who rode the bus at least once, there is a fairly even distribution of ridership frequency ranging from less than once a month all the way to five or more times a week. Additionally, of the 28% who did not ride, the majority said it was available, but they did not use it whereas there are some who indicated that it was not available to them.

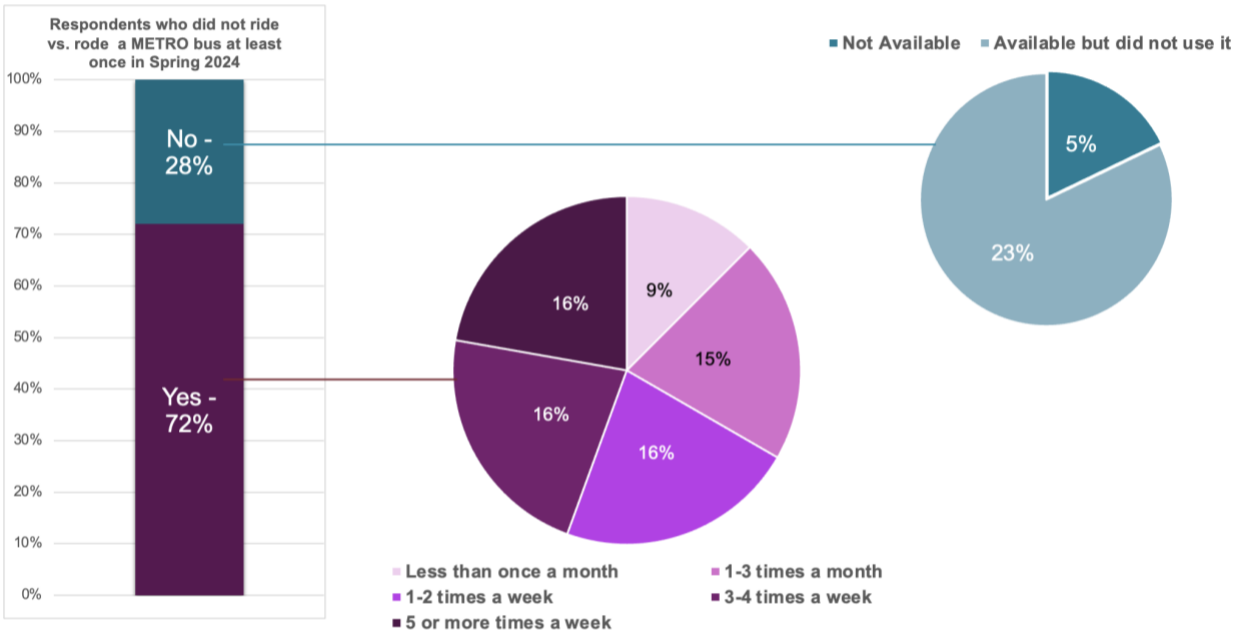

Figure 2. Spring 2024 METRO Use Frequency Proportions.

The analysis presented below includes cross-tabulations of bus frequency as it relates to a subset of variables thought to be important factors in bus use. We conduct Chi-square tests of independence, to evaluate statistical associations between bus use and gender, ethnicity, licensure status, perceived safety, vehicle availability, and employment status. We treated walking distance to the nearest METRO stop and number of household vehicles as continuous variables and conducted an analysis of variance to evaluate their relationship to bus use.

Influence of Fare Free Option to Increase Bus Use

We asked respondents their level of agreement with the statement "now that it's free, I ride the bus more often." Looking at this question along with respondents' frequency of Spring ridership, we find that there is a significant positive relationship between agreement and ridership frequency at a p-value of 0.018.

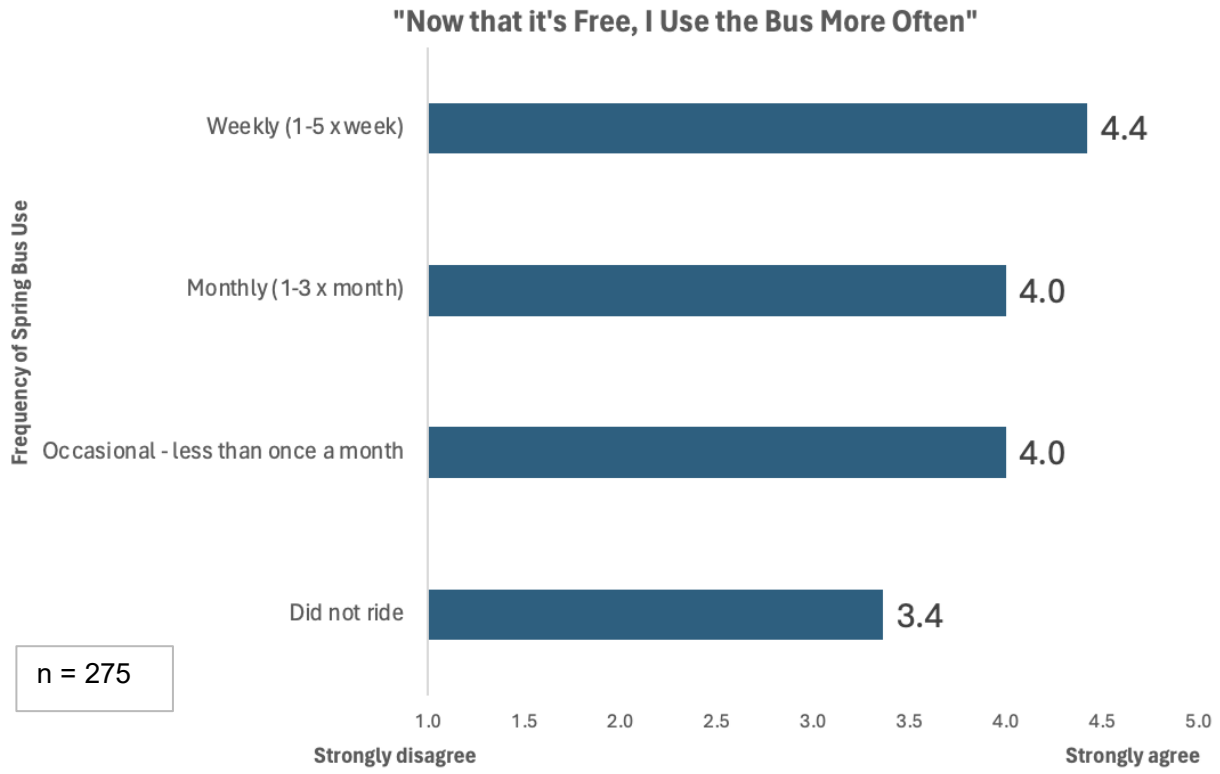

Figure 3. Graph of average agreement among respondents of different spring 2024 bus frequency groups.

Weekly riders on average had the highest level of agreement with the statement (4.4), followed by both monthly and occasional riders who indicated an average agreement of 4.0. Those who did not ride during the spring also indicate some level of agreement above neutral. This can be explained by the fact that despite not riding in the spring, they may have ridden in other seasons after the pilot went into effect. Of those who used the METRO only after the pilot (positive change), their average agreement with this statement was also 4.4.

School Attendance

One outcome we were interested in was school attendance, and we (along with other scholars before us) hypothesized that the introduction of fare free transit for youth would improve school attendance. In our survey, we asked, “In a typical school week this spring (March - May), how many days did you go to your school location?” Of the 253 responses, 240 indicated they attended five or more days each week. Because 95% stated they attend school daily, there was not enough variation in the variable to continue analyzing it with bus ridership data. We do not take this to mean that this is generalizable to the broader population of high school students in the Santa Cruz area, nor do we interpret it to mean

that the program does not benefit students or improve school attendance for some students in the Santa Cruz area.

Gender

To assess the relationship between gender and bus use we drew on question 8.2, which asked about gender. Respondents could select as many as applied. Therefore, we combined responses into male and not male due to low numbers of responses in some identities. This categorization was based off the assumption that men feel safest in public. Studies reveal that women in the United States have transit related security needs and often are fearful in certain transit environments, which can be a barrier of usage (Loukaitou-Sideris, 2014). This was another reason for creating the no-male category, so we could analyze if being non-male had any correlation with transit use.

As stated in Table 3,149 individuals responded to the survey question about **gender**. We excluded those who chose not to answer. The statistical analysis between gender and frequency of METRO usage in Santa Cruz was not significant at our chosen significance level of 0.1. The p-value was 0.722, and thus insignificant.

Table 3. Relationship between gender and frequency of ridership on the Santa Cruz METRO

	5+ times a week		3-4 times a week		1-2 times a week		Less than once per week		Available but I did not use it		Not available		Total Count	Total %
Male	11	23%	7	15%	6	13%	13	27%	9	19%	2	4%	48	100%
Non male	16	16%	14	14%	15	15%	20	20%	28	29%	5	5%	98	100%
Prefer not to answer	0	0%	1	33%	1	33%	1	33%	0	0%	0	0%	3	100%
p-value = 0.722, n = 149														

Race and Ethnicity

Respondent **ethnicity** is significantly related to their bus usage frequency. Hispanic/Latinx students ride the METRO more frequently than White students in Santa Cruz. Of the 150 respondents to the question regarding **ethnicity**, the majority were White and Hispanic/Latinx. Therefore, we excluded the other categories from the statistical analysis. Santa Cruz County is predominantly White and Hispanic/Latinx. Census data states that of the 268,571 individuals that live in Santa Cruz County, 149,686 are considered White alone and 91,923 are Hispanic or Latino (U.S. Census Bureau, 2022). The Watsonville service area in Pajaro Valley is rural, predominantly Hispanic (62% of their district), and their residents were more likely to feel burdened by completing this survey due to recent potential displacement or housing/food insecurity following a catastrophic flooding in the winter of 2022-2023. Alternatively, Santa Cruz City is urban and 68% of their district is

White. Therefore, it is understandable that we predominantly received responses from those populations. The p-value was 0.065; thus, the null hypothesis that ethnicity and ridership frequency are unrelated can be rejected.

Of youth that rode more than five times per week, Hispanic and Latinx students' ridership was proportionately 14% greater than White youth. If ridership were to be combined weekly, 54% of Hispanic and 40% of White respondents ride the METRO on a weekly basis. Of those who knew it was available but did not use it, 28% were White and 12% were Latinx. Very few indicated it was unavailable, none of whom were Hispanic. Table 4 visualizes these statistics, as well as the responses from other ethnicities that we omitted from the statistical analysis.

Given the **racial** demographics of Santa Cruz County, we expected a relationship between ethnicity and ridership. White and Hispanic folks make up the two largest ethnic demographics in the county, though they predominantly live in different cities (U.S. Census Bureau, 2022). Hispanic and Latinx students recorded riding the bus more frequently than White youth did. It is important to note that there were only 33 Hispanic and Latinx respondents and 72 White respondents. With more responses from Hispanic populations, there may be a more drastic difference in the results. Additionally, this question was one of the last on the survey, indicating that the majority of youth completing the entire survey were White individuals.

Table 4. Relationship between ethnicity and frequency of ridership on the Santa Cruz METRO.

	5 + times a week		3-4 times a week		1-2 times a week		Less than once per week		Available but I did not use it		Not available		Total Count	Total %
White / Caucasian	12	16%	11	15%	7	9%	16	22%	21	28%	7	9%	74	100%
Hispanic / Latinx	10	30%	3	9%	5	15%	11	33%	4	12%	0	0%	33	100%
Asian / Pacific Islander	1	17%	0	0%	1	17%	1	17%	3	50%	0	0%	6	100%
Black / African American	1	20%	1	20%	0	0%	0	0%	3	60%	0	0%	5	100%
Mixed Ethnicities	3	13%	6	25%	7	29%	4	17%	4	17%	0	0%	24	100%
Native American / Alaskan Native	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	1	100%
Other	0	0%	0	0%	1	33%	0	0%	2	67%	0	0%	3	100%
Prefer not to answer	0	0%	0	0%	1	25%	2	50%	1	25%	0	0%	4	100%
p-value = **0.065**, n = 150														

Licensure

We categorized responses from those who were born between 2005-2007 as “Of License Age” and 2008-2010 as “Below License Age.” This would be useful later to find the proportion of those of license age who have actually acquired a license. For those born in 2008, we could only roughly determine their licensure eligibility by comparing birth year to their self-reported licensure status in question 8.4 "do you have a driver’s license?" Therefore, we decided against including those born in 2008 in the “of license age” group because there was no way to distinguish if they were 15 or 16 when completing the survey because responses did not include birth month, just year. In the second survey, as mentioned previously, birth month was included as a question.

The relationship between **licensure** of youth of licensure age and METRO usage frequency was considered significant at 0.089, with a total respondent count of 123. Only four respondents indicated they would prefer not to share if they had a license, so they were excluded from this graph. Those without a license represent the majority proportion of weekly METRO riders, while those with a license have the greatest percentage of respondents in the “available but did not use” category. They also had larger proportions of ridership of “less than once per week.” Therefore, as made visible in Figure 4, students without licenses ride the METRO more frequently than those with licenses who appear to prioritize other modes of transportation. Nearly half of those with licenses chose not to ride the METRO when it was available to them. Among those without a license, 53% rode METRO every week.

This result corroborates the literature that licensure affects the ridership of public transportation. It is likely that when youth gain their license, they are no longer reliant solely on other modes of transportation and, if personal/household vehicles are available, will drive themselves.

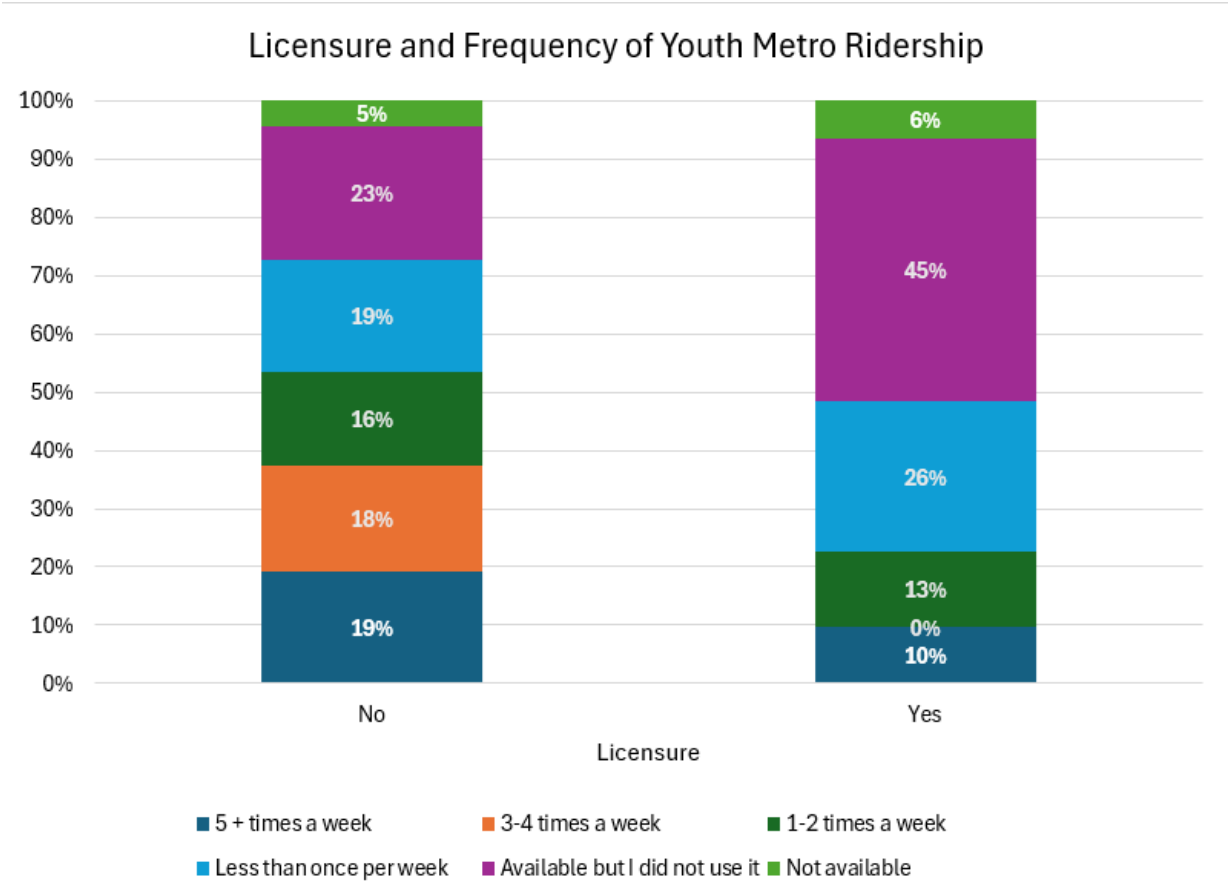

Figure 4. Graph of relationship between licensure and frequency of ridership on the Santa Cruz METRO.

Job Frequency

We hypothesized that those who **worked frequently** would ride the METRO less frequently than those without a job. This is because high school students who may need to get from school to work on time may face barriers experienced by public transit users such as unreliability and taking longer to arrive at their destination. We also consider that those who work have money to pay for fuel for their vehicles. There was no relationship, however, between the two variables.

Respondent job frequencies were combined into the following categories: “Less than once per week,” “1-2 times a week,” and “3+ times a week.” The relationship between youth **job frequency** and Santa Cruz METRO ridership frequency is **insignificant** with a p-value of 0.609. There were 227 respondents for the job frequency survey question. Those who worked more than three times a week had the greatest proportion of riders who rode the METRO more than give times per week. They also, however, make up the greatest proportion of respondents who stated the METRO was unavailable. Combined, those who worked weekly make up over half of the proportion of riders who rode the METRO weekly.

Those who worked less than once per week and those who did not work at all had very evenly split responses across time. Figure 5 depicts these distributions.

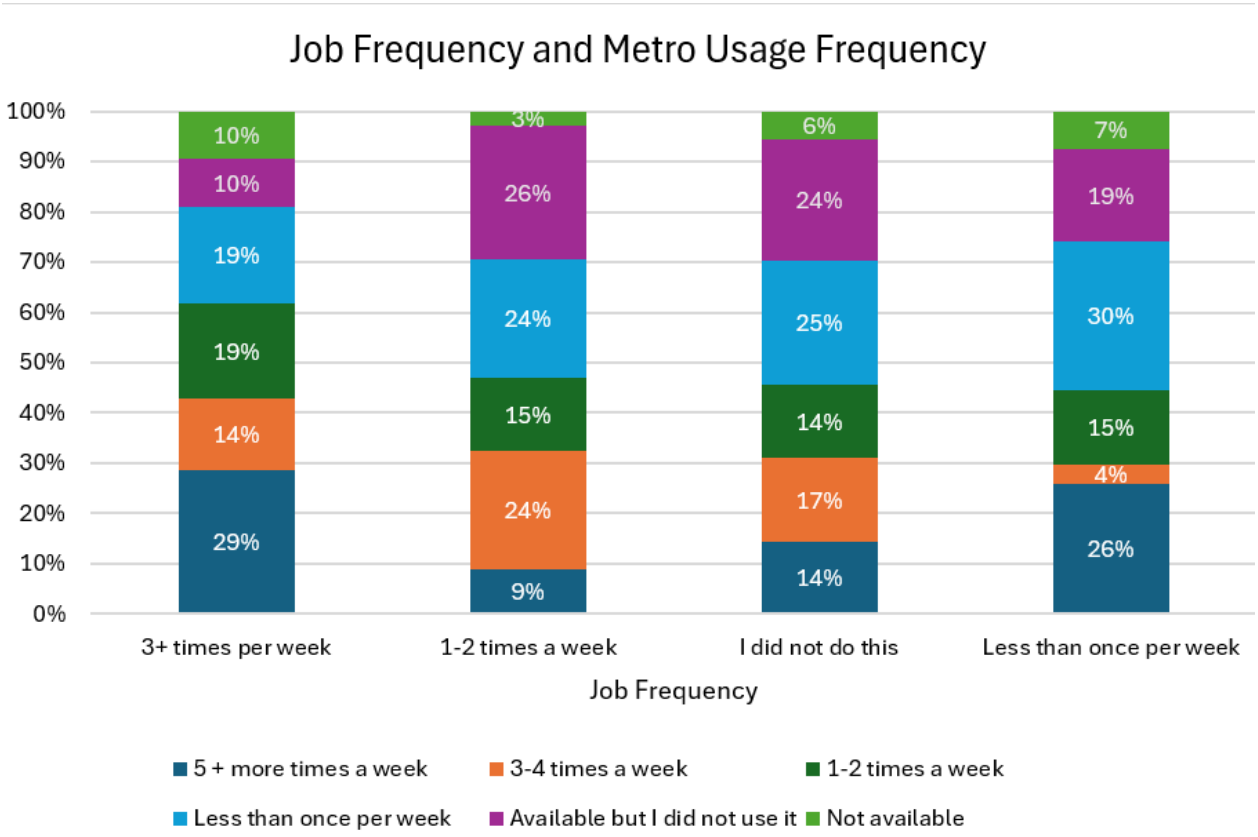

Figure 5. Graph of the relationship between the job frequency and frequency of ridership on the Santa Cruz METRO.

Household Vehicles

The average **number of household vehicles** did have a significant relationship with METRO usage. The p-value was 0.068 and there were 133 respondents. Household vehicles are defined as the number of functioning vehicles a household owns or leases and uses for personal use—our survey did not ask if the vehicles were available to the student. As the number of vehicles per household increased, so did the likelihood that a respondent would choose an alternative mode of transport over the bus. The averages associated with weekly ridership were below 2.5 vehicles per house. The greatest number of vehicles per household related to those who did not have access to METRO.

Those with more cars per household often chose not to ride or used other transportation because METRO was unavailable. Those who rode METRO at least five times per week had an average of 2.1 household vehicles, those riding three to four times per week had an average of 2.2 household vehicles, and those riding one to two times per week averaged

2.4 household vehicles. Those who rode less than once per week had an average of 2.7, and those who considered it available but chose other modes had an average of 2.5 vehicles. The highest average of household vehicles was 3.1 for homes in which public transportation was not available. Figure 6 visualizes this relationship. It should be noted, however, that when the "Not Available" frequency is excluded from the analysis, this correlation is no longer significant ($p = 0.141$. Only seven individuals responded for this frequency option. Additional research may be necessary to investigate if availability has a significant impact on ridership.

The results of the **household vehicle** findings align with the hypothesis that those with more vehicles per household would use METRO less frequently than those with fewer vehicles. The highest average of vehicles corresponded to those who stated METRO was unavailable. This could be due to families living too far from public transportation systems and therefore investing in more vehicles per household. It could represent another factor that renders METRO unavailable. This also aligns with the idea that when given the option, users will (likely) drive in a personal car rather than take public transit.

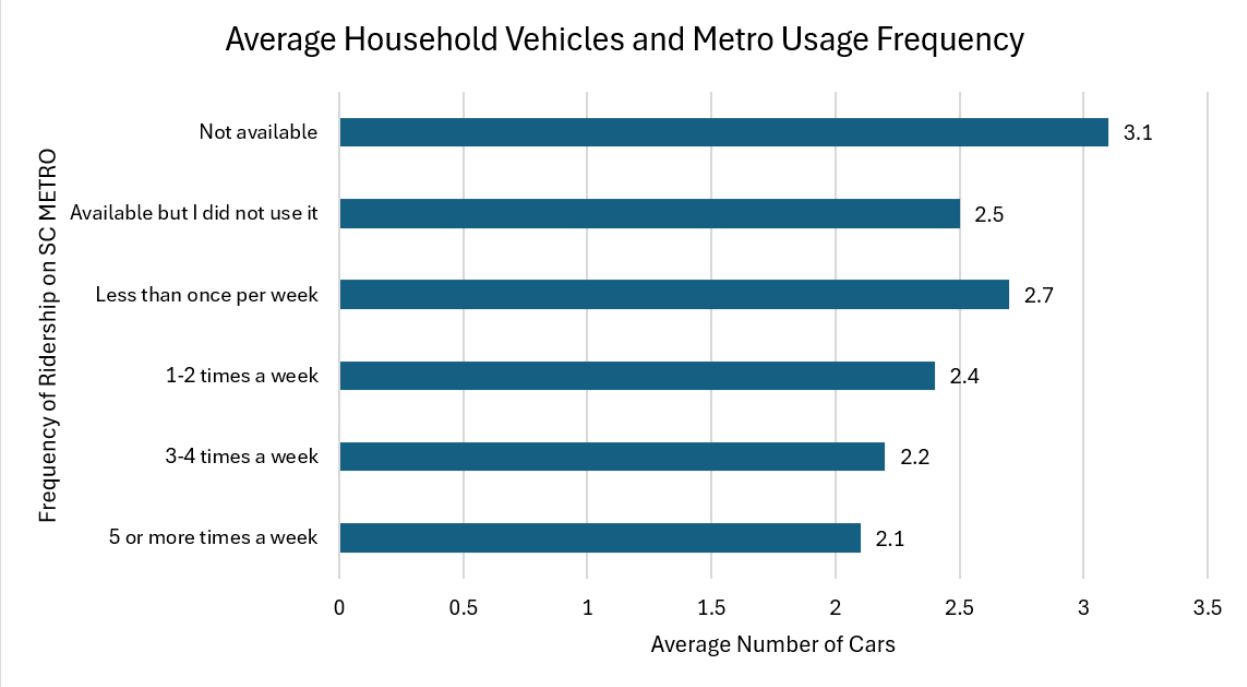

Figure 6. Graph of the relationship between average household vehicles and frequency of ridership on the Santa Cruz METRO.

Perceptions of Safety

Responses to the question asking about respondent perception of safety onboard and at the bus stop were fewest at the positive and negative extremes of the spectrum. Therefore, we combined "Bad" with "Very Bad" and "Good" with "Very Good". Responses of "Neutral/ Unsure" remained in their own category.

In regard to **safety**, the perception of **bus stop** safety did relate to METRO ridership significantly. Their relationship is significant at 0.005 according to our 154 responses. Those who ride the bus frequently tend to have good and very good perceptions of bus stop safety. Those with positive perceptions also made up the smallest proportion of riders who chose not to ride when it was available. Those with bad and very bad perceptions of bus stop safety also ride the bus frequently, though there is also a large proportion of those who hold unfavorable perceptions of stop safety and choose not to ride. Lastly, the portion of respondents who have neutral/unsure perceptions is well-represented across all ride frequency typologies. There is a fair amount of those who ride weekly, though proportionately less than those with good perceptions and similarly to those with negative perceptions. Infrequent ridership is common among this neutral group, however, and there is a high proportion of those who do not ride at all. These respondents make up the largest proportion of those who choose not to ride even when they identify the bus as an available mode of transport.

Figure 8 reveals that 63% of those with good/very good perceptions ride the METRO weekly, with 26% riding more than five times per week. Those with positive views of the METRO also made up the smallest percentage of those who chose not to use it when it was available. Forty percent of those with bad/very bad perceptions rode it weekly, while 33% chose not to ride and it was unavailable to 17%. Thirty-four percent of those with neutral and unsure perceptions rode the bus weekly, making them the least frequent riders. Thirty-two percent, however, indicated it was available but chose not to ride it, and 29% rode it less than once per week.

We hypothesized that the perception of **safety at bus stops** would relate to how frequently youth rode the bus. It is expected that those with good and very good perceptions would continue to ride when available. It is also understandable that those with negative perceptions may ride frequently because they have many experiences to base their opinions on. There was an equal split between those who rode and those who chose not to, and that may be due to their necessity to ride public transportation. It is interesting, however, that 33.3% of respondents who indicated that they had negative perceptions chose not to ride, which could be because of past experiences or adopted perceptions from others. Understandably, those with unsure or neutral feelings about safety ride the bus the least. Frequent riders would likely form an opinion based on their experiences.

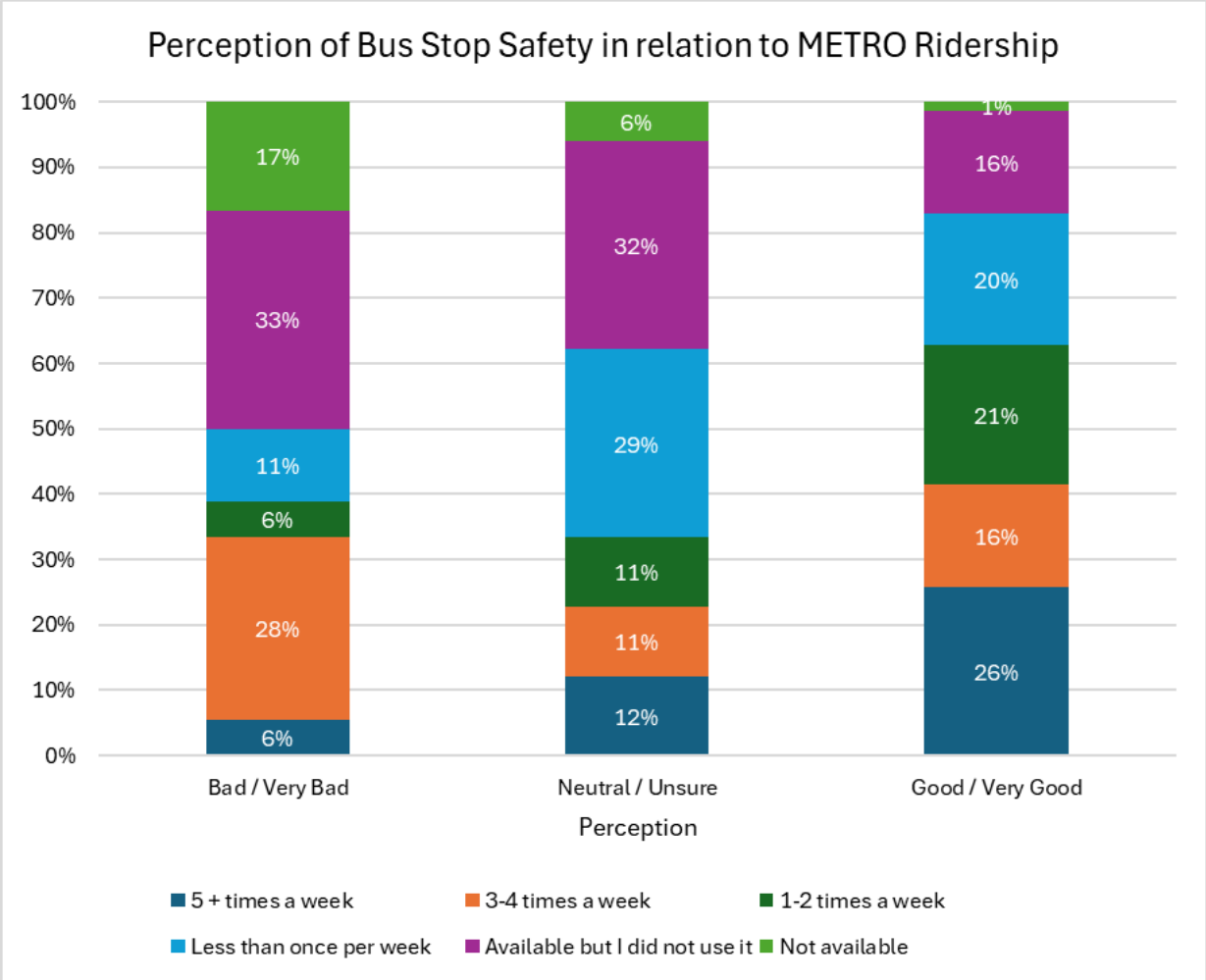

Figure 7. Graph of the relationship between the perception of bus stop safety and frequency of ridership on the Santa Cruz METRO.

The relationship between METRO ridership and the perception youth have of **safety onboard** the METRO is significant as represented by a p-value of 0.0005. There were 153 respondents in this data set. Those who ride the bus frequently tend to have good and very good perceptions of vehicle safety. Those who have bad and very bad perceptions of bus safety proportionally ride the bus less than those with good and very good perceptions. They also make up a much greater proportion of the sample that know the bus is available but do not use it. Lastly, the portion of respondents who have neutral/unsure perceptions ride the METRO less weekly, proportionally, than either of the other two categories. They make up around 40% of those who said that the bus was available but did not use it, and the majority of the responses indicated that the bus was not available. Therefore, those with good experiences tend to ride the bus more frequently, those with bad experiences tend to use different modes of transportation even when they know the METRO is available, and those with a neutral or unsure opinion tend to ride it infrequently or not at all. Their

lack of public transit usage may be due to negative preconceptions rather than lived experiences.

As is apparent in Figure 8, 62% of those with good/very good perceptions ride the METRO weekly, and, again, make up the smallest percentage of those who chose not to use it when it was available. Of those with bad/very bad perceptions 33% rode it weekly, while **56%** chose not to ride when it was available. Twenty-seven percent of those with neutral and unsure perceptions rode the bus weekly, making them the least frequent riders. Forty percent, however, indicated it was available but chose not to ride it.

We expected **safety on the bus** to be significantly related to METRO ridership. Safety is a deterrent to public transportation, and that appears to be consistent with this data. Fifty percent of those with negative perceptions chose not to ride when available likely due to past negative experiences they or someone they know had. Additionally, those with neutral and unsure perceptions have very high proportions of avoiding using the METRO. Therefore, they may not have perceptions from their own experience, though may be avoiding use due to the experiences of others around them.

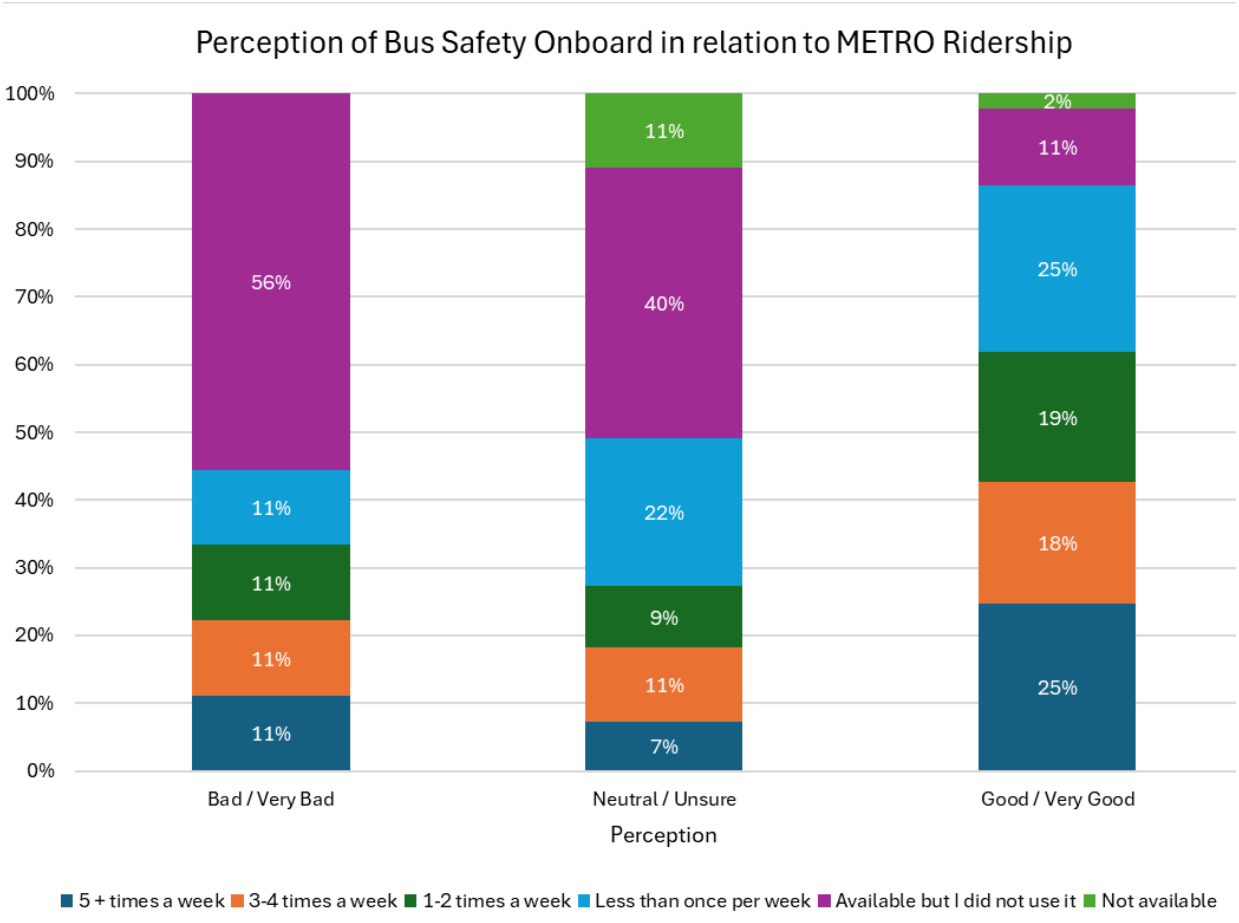

Figure 8. Graph of the relationship between the perception of bus safety onboard and frequency of ridership on the Santa Cruz METRO.

Discussion and Conclusions

This study was motivated by the introduction of the Youth Cruz Free program that launched in Santa Cruz County, California in March of 2023. The program provides free transit to youth in the county when using Santa Cruz METRO bus service. In addition to evaluating the impact of the program, our analysis explored additional factors that influence or relate to bus use among teens in Santa Cruz County.

The data is limited in its generalizability to the whole population of Santa Cruz County teens because the majority of respondents live within or go to school in the city of Santa Cruz. Representation from other areas in the county was not robust. While we wished to recruit more students through district outreach, it was not always possible or feasible for the districts to assist. Additionally, asking youth to recall their transportation, school, and activity choices over the past season and previous time periods introduces potential for error in measurement due to recall issues. Future research should consider qualitative methods to gain deeper insights into youth transit behavior. Future studies should also include models of youth transit use, and explore variables explicitly relating to programs such as this.

Our findings indicate that this fare free transit pilot program encouraged public transit use among teenagers. The majority of respondents rode in both time periods (pre- and post-fare free pilot implementation), followed by respondents who began riding after the pilot implementation. There is also a significant positive correlation between frequency of bus use and respondent agreement that the fare free pilot increased bus use. Hispanic and Latinx survey respondents were more frequent users of METRO services than White/Caucasian respondents. Unsurprisingly, those without a driver's license were more likely to use METRO regularly, and those with licenses tended toward private vehicle use. Household vehicle availability is also negatively correlated with METRO ridership. Also unsurprisingly, favorable safety ratings at the bus stop and on the bus correlate with more regular bus use during the Youth Cruz Free period. Addressing safety concerns through enhanced security measures, improved lighting, and community engagement could further bolster transit adoption among youth.

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Data Summary

Products of Research

The data used in this study was collected through a survey of high-school students between the ages of 14-19 in Santa Cruz County, California. Survey recruitment was coordinated with the help of the school districts in Santa Cruz County and through SC METRO, as well as two community organizations in the area. The survey was administered online through the Qualtrics survey platform and downloaded in .csv format. Data processing was conducted manually in Microsoft Excel and involved identifying cases that were outside of the target age range, those that were incomplete beyond the first section and those that advanced through the survey much faster than average (based on how far they got through the survey). Cases that were outside of target age range, incomplete or completed too quickly to have sufficiently read the questions were removed from the dataset.

Data Format and Content

The data are in a single .csv file and contain the survey data collected, with all identifying information removed. The data is saved as "Youth Cruz Free Data.csv". An informational codebook file is also available with the data, and includes the variable names, relevant survey questions and possible values for each variable in the data. The publicly available dataset has 179 variables for 392 rows/cases.

Data Access and Sharing

The data will be publicly available on Dryad at https://doi.org/10.5061/dryad.612jm64fn.

Reuse and Redistribution

There are no restrictions on the use of this data.

Appendix A: Youth Cruz Free Survey Materials

Introduction and Consent

UC Davis and UC Davis Health
Consent to Participate in Research

Title of study: Youth Cruz Free: Longitudinal Study of Teenage Transit Ridership Behavior in Santa Cruz County

Investigator: Susie Pike, PhD

Introduction and Purpose

You are being invited to join a research study.
The purpose of this study is to see how often high school aged teenagers in Santa Cruz take the bus before and after the start of the Youth Cruz Free program.

If you agree to be in this research, you will be asked to complete a survey. You will be asked questions about your choices in how you get around town for school and other activities, your participation in activities, and your opinions and experiences relevant to your transportation choices, as well as some personal information like gender, race, age. We will also ask you for contact information at the end if you wish to participate in additional surveys about the same topics in summer 2024 and fall 2024. It will take about 15 to 20 minutes to complete the survey.

There is no direct benefit to you from taking part in this study. We hope that the research will be helpful to the Santa Cruz Metro to help them plan for how to better serve your transportation needs and that it will help transportation researchers understand a bit more about how young people make choices about getting to places they need and want to go.

The risks of this research are minimal. Some of the questions might make you feel uncomfortable or upset. You do not have to answer any of the questions you do not want to answer.

Confidentiality

As with all research, there is a chance that confidentiality could be compromised; however, we are taking precautions to minimize this risk. Your responses to the survey questions will include information that identifies you such as age, gender, or grade level. This identifiable information will be handled as confidentially as possible. However, individuals from UC Davis who oversee research may access your data during audits or other monitoring activities.

To minimize the risks of breach of confidentiality, we will password protect raw data and limit access to study records on university computer servers, as well as remove any name or contact information from the responses you provide.

Compensation

To thank you for participating in this study, you will be entered into a drawing for one of ten $25 Visa gift cards. Everyone can be entered in the drawing regardless of participation. If you do not want to participate but want to be included in the drawing, please email me at baffolter@ucdavis.edu. To receive this reward, please provide your contact information, either your email or phone number.

Rights

Taking part in research is completely voluntary. You are free to decline to take part in the project. You can decline to answer any questions and you can stop taking part in the survey at any time. Whether or not you choose to take part, or answer any question, or stop taking part, there will be no penalty to you or loss of benefits to which you are otherwise entitled.

Questions

If you have any questions about this research, please feel free to contact the investigator at scpike@ucdavis.edu.

If you have any questions about your rights or treatment as a research participant in this study, please contact the UC Davis, Institutional Review Board by phone: 916-703-9158 or by email: HS-IRBEducation@ucdavis.edu.

If you agree to take part in the research, please click "next" to indicate your consent to participate in this research and continue with the survey.

Screening Questions

In this section, we'd like to know about your eligibility for Youth Cruz Free, both last year AND this year.

1. What year were you born? (Options: 1924 – 2024)

   Keep: 2005 – 2010

   Drop: 2004 and below (20 and over, outside the scope of our target demographic)

2. Do you **currently** live somewhere in Santa Cruz County?

   ☐$_1$ Yes ☐$_2$ No

3. **Last year,** did you live somewhere in Santa Cruz County?

   ☐$_1$ Yes ☐$_2$ No

4. Which of the following best describes your current grade level in school? If your school year just finished, please answer with the grade you just completed. (Ask if S1 = 2005, 2006, 2007, 2008, 2009, 2010)

   ☐$_1$ high school freshman (9th)
   ☐$_2$ high school sophomore (10th)
   ☐$_3$ high school junior (11th)
   ☐$_4$ high school senior (12th)
   ☐$_5$ graduated high school last year, currently in college/technical school
   ☐$_6$ graduated high school last year and **NOT** currently in college/technical school
   ☐$_7$ graduated high school **more than one year ago**
   ☐$_8$ middle school / not yet in high school

5. Last year (Fall 2022- Summer 2023), which of the following high schools did you attend? Select all that apply.

   ☐$_1$ Scotts Valley High
   ☐$_2$ San Lorenzo Valley High
   ☐$_3$ Soquel High
   ☐$_4$ Aptos High
   ☐$_5$ Pacific Collegiate
   ☐$_6$ Georgina Bruce Kirby
   ☐$_7$ Harbor High
   ☐$_8$ Santa Cruz High
   ☐$_9$ Watsonville High
   ☐$_{10}$ Pajaro Valley High
   ☐$_{11}$ Monte Vista
   ☐$_{12}$ St. Francis High
   ☐$_{13}$ Monterey Bay Academy
   ☐$_{14}$ Homeschool

☐15 Independent Study
☐16 Alternative School: _____
☐17 Other: _____

6. Which of the following high schools do you currently attend?

☐1 Scotts Valley High
☐2 San Lorenzo Valley High
☐3 Soquel High
☐4 Aptos High
☐5 Pacific Collegiate
☐6 Georgina Bruce Kirby
☐7 Harbor High
☐8 Santa Cruz High
☐9 Watsonville High
☐10 Pajaro Valley High
☐11 Monte Vista
☐12 St. Francis High
☐13 Monterey Bay Academy
☐14 Homeschool
☐15 Independent Study
☐16 Alternative School: _____
☐17 Other: _____

7. Before taking this survey, did you know that people youth in K – 12th grade can now ride the Santa Cruz Metro buses for free?

☐1 Yes ☐2 No ☐3 Unsure

8. In your entire lifetime, have you ever ridden a Santa Cruz Metro bus?

☐1 Yes ☐2 No. ☐3 Unsure

9. Have you ever ridden the Metro ***before*** it was free?

☐1 Yes ☐2 No ☐3 Unsure

10. Have you ridden the Metro during the Youth Cruz Free time (March 2023 – present)?

☐1 Yes ☐2 No ☐3 Unsure

Section A: Your Travel Behavior

In this section and the next, we would like to know more about where you go and how you get there. Please read each question carefully. We are going to ask about both last year's and this year's travel. Your best guess is fine!

A1: Current Travel Behavior

For this section, please think about last week, if it was a typical school week for you. If it was not, please answer with your most recent typical school week in mind.

1. Last week, which **means of transportation were <u>available</u>** to you for getting to school, whether you **used them or not**? Select all that apply.

   ☐$_1$ Car - drive alone
   ☐$_2$ Car - dropped off by parent
   ☐$_3$ Carpool - with friend(s) or sibling(s)
   ☐$_4$ Walk
   ☐$_5$ Bike / Bikeshare
   ☐$_7$ Taxi/Uber/Lyft or other ride services
   ☐$_8$ Santa Cruz Metro Bus
   ☐$_9$ School bus
   ☐$_{10}$ Other (please specify): _____

2. Last week, many days did you go to your **school location**?

   ☐$_1$ None; I studied from home
   ☐$_2$ One day
   ☐$_3$ Two days
   ☐$_4$ Three days
   ☐$_5$ Four days
   ☐$_6$ Five days
   ☐$_7$ More than 5 days

3. Last week, which means of transportation **did you usually use** to get to school? Select all that apply.

   ☐$_1$ Car - drive alone
   ☐$_2$ Car - dropped off by parent
   ☐$_3$ Carpool - with friend(s) or sibling(s)
   ☐$_4$ Walk
   ☐$_5$ Bike / Bikeshare
   ☐$_7$ Taxi/Uber/Lyft or other ride services
   ☐$_8$ Santa Cruz Metro Bus
   ☐$_9$ School bus
   ☐$_{10}$ Other (please specify): _____

4. Do you feel that the seasons and weather change the way that you make choices about where to go and how to get there? If so, would you like to tell us a bit about that, and how you might do something different if the weather were warmer or colder than it was last week?

   _____

5. Was there anything different about last week compared to other weeks, in terms of the choices you had for how to get to the places you had to go? (Free response)

   _____

6. Now, we are interested in the kinds of activities that you regularly participate in. We would like to know about the number of times you went somewhere, for what purpose, and the type of transportation you used. Your best guess is fine! (*See table on next page)*

ACTIVITY TYPE	DESCRIPTION/EXAMPLE	NUMBER OF TIMES YOU DID THIS, PER DAY PLEASE ALSO WRITE THE MODE OF TRANSPORTATION YOU USED TO GET THERE EX: IF YOU DID AN EXTRACURRICULAR ACTIVITY AT YOUR SCHOOL LOCATION ON MONDAY AND GOT THERE BY CAR WRITE "1 - CAR" UNDER THE MONDAY COLUMN						
		MONDAY	**TUESDAY**	**WEDNESDAY**	**THURSDAY**	**FRIDAY**	**SATURDAY**	**SUNDAY**
School-based extracurricular activity at your school location	Meeting or practice that you attend for a club, band/choir, sports team, student government, etc.							
School-based extracurricular activity outside your school location	Sporting or club event where you were involved as a participant (ex. sports Game/ model UN/ robotics competition/ Mathathon/ choir meet/ spelling bee)							

		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Extracurricular activity not associated with your school	Rec. league sports or other activities that are extracurricular organized events/practices that are not associated with school							
Job	part time or full time job for which you receive pay							
Community Service/ Volunteer Work	Activities you do for community service or volunteering – eg: helping coach a little league team, beach cleanup, taking food to or working at a food bank, animal shelter, etc.							
Social	Anything social with friends (going to a movie, watching a game, shopping, going to a friend's house, watching a sports game, etc)							
Family gathering	Anything social with family / at a family member's house							

		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Religious Meeting or Service	church, prayer service, or gathering of religious significance							
Caretaking	When you fulfilled an obligation or responsibility to family or a close friend (dropping off/going with/picking up kids or elderly, accompanying to appointments, etc)							
Personal	Self-care activities and tasks such as doctor appointments, going to the gym,							
Other	Anything that was not mentioned or does not fit in the categories above							

7. We will now ask for some details about the **three activities of the highest frequency, by purpose**. We want to remind you that your answers are anonymous and confidential. They will not be shared with anyone who could use this information against you or who would violate your privacy rights.

(#1 Highest Frequency Activity)

How long did your trip for (activity) take? _____ minutes.

Did this trip take you out of the county? (e.g to Monterey or Santa Clara County)

What was the **time of day** when you left for this activity?

What was the **time of day** when you returned? _____

Were you traveling with **other people**? _____

(#2 Highest Frequency Activity)

How long did your trip for (activity) take? _____ minutes.

Did this trip take you out of the county? (e.g to Monterey or Santa Clara County)

What was the **time of day** when you left for this trip?

What was the **time of day** when you left to return home? _____

Were you traveling with **other people**? _____

(#3 Highest Frequency Activity)

How long did your trip for (activity) take? _____ minutes.

Did this trip take you out of the county? (e.g to Monterey or Santa Clara County)

What was the **time of day** when you left for this trip? _____

What was the **time of day** when you left to return home? _____

Were you traveling with **other people**? _____

A2: Past Travel Behavior

Now we ask that you think back to a typical week in Spring 2022. This is a while back, so think about what you might have been doing around then, what kinds of classes you were taking, the holidays you celebrated, what teams or clubs you might have been participating in at the time to jog your memory.

1. In the **Spring Semester of 2022** (March to June), which **means of transportation were <u>available</u>** to you for getting to school, whether you **used them or not**? We are asking about main modes, that is, the mode you spend the most time on. For example, we are not asking about how you *access* transit or *walking* from the parking lot. However, if you used two modes nearly equally, count them both. For example: *if you walk halfway and carpool the rest of the way, mark both walk and carpool*.

   ☐$_1$ Car - drive alone
   ☐$_2$ Car - dropped off by parent
   ☐$_3$ Carpool - with friend(s) or sibling(s)
   ☐$_4$ Walk
   ☐$_5$ Bike / Bikeshare
   ☐$_7$ Taxi/Uber/Lyft or other ride services
   ☐$_8$ Santa Cruz Metro Bus
   ☐$_9$ School bus
   ☐$_{10}$ Other (please specify): _____

2. In Spring 2022, many days did you **go to your school location?**

   ☐$_1$ None; I studied from home
   ☐$_2$ One day
   ☐$_3$ Two days
   ☐$_4$ Three days
   ☐$_5$ Four days
   ☐$_6$ Five days
   ☐$_7$ More than 5 days

3. In Spring 2022, which **means of transportation did you usually use** to get to school? If you used more than one means of transportation, please select the one you usually used for *most of the distance*.

   ☐$_1$ Car - drive alone
   ☐$_2$ Car - dropped off by parent
   ☐$_3$ Carpool - with friend(s) or sibling(s)
   ☐$_4$ Walk
   ☐$_5$ Bike / Bikeshare
   ☐$_7$ Taxi/Uber/Lyft or other ride services
   ☐$_8$ Santa Cruz Metro Bus
   ☐$_9$ School bus
   ☐$_{10}$ Other (please specify): _____

4. Just like before when we asked about your activity last week, we are interested in the kinds of activities that you regularly participated in during the Spring of 2022. We would like to know about the number of times you went somewhere, for what purpose, and the type of transportation you used. Again, your best guess is fine!

Activity Type	**Description/Example**	**Number of Times you did this, per Day** ***Please also write the mode of transportation you used to get there*** ***ex: if you did an extracurricular activity at your school location on Monday and got there by car write "1 - car" under the Monday column***						
		Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
School-based extracurricular activity ***at*** your school location	Meeting or practice that you attend for a club, band/choir, sports team, student government, etc.							
School-based extracurricular activity ***outside*** your school location	Sporting or club event where you were involved as a participant (ex. sports Game/ model UN/ robotics competition/ Mathathon/ choir meet/ spelling bee)							

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Extracurricular activity *not* associated with your school	Rec. league sports or other activities that are extracurricular organized events/practices that are not associated with school							
Job	part time or full time job for which you receive pay							
Community Service/ Volunteer Work	Activities you do for community service or volunteering—eg: helping coach a little league team, beach cleanup, taking food to or working at a food bank, animal shelter, etc.							
Social	Anything social with friends (going to a movie, watching a game, shopping, going to a friend's house, watching a sports game, etc)							
Family gathering	Anything social with family / at a family member's house							

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Religious Meeting or Service	church, prayer service, or gathering of religious significance							
Caretaking	When you fulfilled an obligation or responsibility to family or a close friend (dropping off/going with/picking up kids or elderly, accompanying to appointments, etc)							
Personal	Self-care activities and tasks such as doctor appointments, going to the gym,							
Other	Anything that was not mentioned or does not fit in the categories above							

5. Finally, we ask that you think back to a typical week in **Spring 2023** (March – June), when Youth Cruz Free became available. That would have been around a year ago. This is a while back, so think about what you might have been doing around then, what kinds of classes you were taking, the holidays you celebrated, what teams or clubs you might have been participating in at the time to jog your memory.

Activity Type	**Description/Example**	**Number of Times you did this, per Day** ***Please also write the mode of transportation you used to get there*** ***ex: if you did an extracurricular activity at your school location on Monday and got there by car write "1 - car" under the Monday column***						
		Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
School-based extracurricular activity ***at*** your school location	Meeting or practice that you attend for a club, band/choir, sports team, student government, etc.							
School-based extracurricular activity ***outside*** your school location	Sporting or club event where you were involved as a participant (ex. sports Game/ model UN/ robotics competition/ Mathathon/ choir meet/ spelling bee)							

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Extracurricular activity *not* associated with your school	Rec. league sports or other activities that are extracurricular organized events/practices that are not associated with school							
Job	part time or full time job for which you receive pay							
Community Service/ Volunteer Work	Activities you do for community service or volunteering—eg: helping coach a little league team, beach cleanup, taking food to or working at a food bank, animal shelter, etc.							
Social	Anything social with friends (going to a movie, watching a game, shopping, going to a friend's house, watching a sports game, etc)							
Family gathering	Anything social with family / at a family member's house							

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Religious Meeting or Service	church, prayer service, or gathering of religious significance							
Caretaking	When you fulfilled an obligation or responsibility to family or a close friend (dropping off/going with/picking up kids or elderly, accompanying to appointments, etc)							
Personal	Self-care activities and tasks such as doctor appointments, going to the gym,							
Other	Anything that was not mentioned or does not fit in the categories above							

Section B: Questions about Built Environment

We'd like to learn more about **your neighborhood characteristics** and **the difficulties you may face when getting from one place to another.**

1. How many minutes would it take to walk from your home front door to the closest bus stop? Your best guess is fine.

   ☐ _____ minutes OR ☐ I have no idea

2. How many minutes does usually it take you to get to school in the morning with (USUAL MODE) once you leave your house? Your best guess is fine.

   ☐ _____ minutes

3. Do you typically encounter delays from car traffic on your way to school?

   ☐$_1$ Yes ☐$_2$ No ☐$_3$ Unsure

4. On the streets in your neighborhood, do you have any of the following?

   ☐ Sidewalks
   ☐ Tree shade
   ☐ Non-covered bus stops
   ☐ Covered bus stops
   ☐ Buses
   ☐ Bike lanes
   ☐ Storm Drains/Drainage Grates
   ☐ Painted Crosswalks
   ☐ Streetlights

5. Do you see many people biking in your neighborhood? ☐$_1$ Yes ☐$_2$ No

6. Do you often see people walking in your neighborhood? ☐$_1$ Yes ☐$_2$ No

7. How safe would you feel going for a walk for about about15 minutes the evening?

   ☐$_1$ Very Safe
   ☐$_2$ Somewhat Safe
   ☐$_3$ Not Sure
   ☐$_4$ Somewhat Unsafe
   ☐$_5$ Very Unsafe

8. Would you like to tell us more about why you chose the answer you did?

   _____

Section C: Perceptions about the Santa Cruz Metro Buses

We'd like to learn more about **your *current* opinions on buses in Santa Cruz County, and the Youth Cruz Free program.**

With respect to how it meets your current needs, **please rate** the Santa Cruz Metro bus service on each of the following attributes.

1. Which of the following routes do you typically ride?

☐ 1 – Soquel/Cabrillo/Airport
☐ 2 – Capitola/Cabrillo/Main
☐ 3A – UCSC/Capitola Mall/Live Oak
☐ 3B - UCSC/Capitola Mall/Live Oak
☐ 4 – Harvey West
☐ 18 – UCSC via Main Gate – Mission
☐ 19 – UCSC via West Gate – Lower Bay
☐ 20 – UCSC via Main Gate – Delaware / Western Corralitos
☐ UC – Combined UCSC Service
☐ 35 – Highway 9/Scotts Valley
☐ 40 – Highway 1 – Davenport
☐ 41 - Empire Grade – Bonny Doon
☐ 42 - Davenport/Bonny Doon
☐ 55 – Cabrillo
☐ 72 – Green Valley – Hospital
☐ 72W – Green Valley –
☐ 73 – Soquel/Freedom/Cabrillo
☐ 74S – PVHS/Hospital
☐ 75 – Green Valley - Wheelock
☐ 78 – Ohlone/Watsonville Hospital
☐ 79 – East Lake / Crestview
☐ UC – Combined UCSC Service

2. In March 2024, Santa Cruz Metro changed the bus schedules so that buses show up more often at certain stops/along certain routes. This is known as “headway improvement”. Have any of headway improvements influenced your choices about where and when to go places?

☐$_1$ Yes – Very
☐$_2$ Yes – somewhat
☐$_3$ Unsure
☐$_4$ No – not really
☐$_5$ No – not at all

3. Now, we would like to know your opinions even if you are not currently using the bus very much or at all.

	Very bad	Bad	Neutral/No opinion	Good	Very good
Overall rating of the bus as a means of travel	☐1	☐2	☐3	☐4	☐5
Buses *arrive at the station/stop* on time	☐1	☐2	☐3	☐4	☐5
Buses *reach my destination* on time	☐1	☐2	☐3	☐4	☐5
Hours of service (time of first bus in the morning or last bus at night)	☐1	☐2	☐3	☐4	☐5
Frequency of service (how often buses come)	☐1	☐2	☐3	☐4	☐5
On-bus amenities (WiFi, charging outlets)	☐1	☐2	☐3	☐4	☐5
Station/stop amenities (adequate shelter/shade, live location updates)	☐1	☐2	☐3	☐4	☐5
Cleanliness of bus (on the inside)	☐1	☐2	☐3	☐4	☐5
Cleanliness of stations/stops	☐1	☐2	☐3	☐4	☐5
Comfort (crowding, temperature, seating) in the bus	☐1	☐2	☐3	☐4	☐5
Comfort (crowding, temperature, seating) at stations/stops	☐1	☐2	☐3	☐4	☐5
Feeling of safety and security in *bus*	☐1	☐2	☐3	☐4	☐5
Feeling of safety and security in *stations/stops*	☐1	☐2	☐3	☐4	☐5
Cost of ticket	☐1	☐2	☐3	☐4	☐5
Ease of paying my fare	☐1	☐2	☐3	☐4	☐5
Clear, accurate information about various passes and discounts	☐1	☐2	☐3	☐4	☐5
Ability to take advantage of various passes and discounts	☐1	☐2	☐3	☐4	☐5
Parking at or near the station	☐1	☐2	☐3	☐4	☐5
Walk and bike access to the station	☐1	☐2	☐3	☐4	☐5
Other connections to the station (drop off)	☐1	☐2	☐3	☐4	☐5
Availability of taxi and rideshare at the station	☐1	☐2	☐3	☐4	☐5

4. How important are the following characteristics to you when you are traveling? Please think of your ideal travelling situation, not just of the modes you use, or just the bus.

	Not at all important	Slightly important	Somewhat important	Moderately important	Extremely important
Comfort	☐1	☐2	☐3	☐4	☐5
Timeliness	☐1	☐2	☐3	☐4	☐5
Avoiding Traffic	☐1	☐2	☐3	☐4	☐5
Flexibility	☐1	☐2	☐3	☐4	☐5
Feeling Safe	☐1	☐2	☐3	☐4	☐5
Cleanliness					
Environmental Friendliness	☐1	☐2	☐3	☐4	☐5
Total Cost	☐1	☐2	☐3	☐4	☐5
Shelter from The Weather	☐1	☐2	☐3	☐4	☐5

5. How influential was Youth Cruz Free in getting you to ride the bus?

   ☐1 Extremely ☐2 Somewhat ☐3 Unsure ☐4 Not Very Influential ☐5 Not at all influential

6. In the last year, would you say you have become more willing to use the bus as an option for getting around?

   ☐1 Yes – Very ☐2 Yes – somewhat ☐3 Unsure ☐4 No – not really ☐5 No – not at all

7. How did you first become aware of the Youth Cruz Free program?

   ☐$_1$ Santa Cruz Metro website
   ☐$_2$ Santa Cruz Metro social media pages (e.g., X / Twitter, Instagram)
   ☐$_3$ Santa Cruz Metro flyer / paper advertisement
   ☐$_4$ Heard from a friend
   ☐$_5$ Heard from an adult
   ☐$_6$ I did not know about it until now
   ☐$_7$ Other: _____

8. Have you ever used any of the following while boarding the bus to prove your eligibility to ride for free? Select all that apply.

   ☐1 Student ID
   ☐2 Drivers License / DMV - Issued ID Card
   ☐3 METRO Youth Cruz Free ID
   ☐4 Tell the bus driver what grade you're in or school you attend
   ☐5 Other: _____
   ☐6 None of the above

9. If Youth Cruz Free disappears and you must pay to ride the bus again, how likely are you to continue using the bus?

   ☐$_1$ very likely
   ☐$_2$ somewhat likely
   ☐$_3$ Unsure
   ☐$_4$ somewhat unlikely
   ☐$_5$ very unlikely

10. Please rate your agreement with each of the following statements:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
If / when I move out of Santa Cruz, I would like to use the bus system in my new place of residence	☐1	☐2	☐3	☐4	☐5
It's easy to figure out the Santa Cruz Metro bus schedules	☐1	☐2	☐3	☐4	☐5
It's easy to figure out the Santa Cruz Metro bus map	☐1	☐2	☐3	☐4	☐5
I am intimidated by other Santa Cruz Metro passengers	☐1	☐2	☐3	☐4	☐5
Learning how to use the bus requires skill	☐1	☐2	☐3	☐4	☐5
I would be comfortable taking a Santa Cruz Metro bus on my own	☐1	☐2	☐3	☐4	☐5

Section D: Your Opinions on Various Topics

We'd like to learn more about **your *current* opinions on various issues related to transportation and lifestyle**. We want your honest opinion on each topic (or your best guess, for topics you are not very familiar with) – There are no "right" or "wrong" answers!

1. Please choose the response that most closely fits your reaction to each of the following statements.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I definitely want to own a car	☐1	☐2	☐3	☐4	☐5
I like the idea of walking as a means of travel for me	☐1	☐2	☐3	☐4	☐5
Cost or convenience takes priority over environmental impacts (e.g. pollution) when I make my daily choices	☐1	☐2	☐3	☐4	☐5
The importance of exercise is overrated	☐1	☐2	☐3	☐4	☐5
I generally enjoy the act of traveling itself	☐1	☐2	☐3	☐4	☐5
I consider myself to be a sociable person	☐1	☐2	☐3	☐4	☐5
Learning how to use new technology is often frustrating for me	☐1	☐2	☐3	☐4	☐5
I like to be among the first people to have the latest technology	☐1	☐2	☐3	☐4	☐5
I am proud that I live in Santa Cruz	☐1	☐2	☐3	☐4	☐5
I like to hangout with my friends in public spaces (library, park, mall, downtown or town center, etc)	☐1	☐2	☐3	☐4	☐5

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I like the idea of having stores, restaurants, and offices mixed among the homes in my neighborhood	☐1	☐2	☐3	☐4	☐5
I'm too busy to have as much free time as I'd like	☐1	☐2	☐3	☐4	☐5
I try to use the bus as often as I can	☐1	☐2	☐3	☐4	☐5
I prefer to do one thing at a time	☐1	☐2	☐3	☐4	☐5
Family/friends play a big role in how I schedule my time	☐1	☐2	☐3	☐4	☐5
Having to wait is an annoying waste of time	☐1	☐2	☐3	☐4	☐5
My schedule makes it hard or impossible for me to use the bus	☐1	☐2	☐3	☐4	☐5
Its important to me that the bus is free for me	☐1	☐2	☐3	☐4	☐5
I was aware of the Youth Cruz Free Program before taking this survey	☐1	☐2	☐3	☐4	☐5
Traffic congestion is a major problem in the region where I live	☐1	☐2	☐3	☐4	☐5
I like driving a car	☐1	☐2	☐3	☐4	☐5
I prefer to shop online	☐1	☐2	☐3	☐4	☐5
I have the ability to get to where I need or want to go	☐1	☐2	☐3	☐4	☐5
I have the ability to carry things with me when I'm traveling	☐1	☐2	☐3	☐4	☐5
I value being able to spend travel time in useful ways	☐1	☐2	☐3	☐4	☐5

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I value being able to relax/have fun while traveling	☐1	☐2	☐3	☐4	☐5
I enjoy chatting with people on public transit or ride-hailing vehicles (e.g. Uber)	☐1	☐2	☐3	☐4	☐5
I feel safe in public spaces	☐1	☐2	☐3	☐4	☐5
I consider myself to be a sociable person	☐1	☐2	☐3	☐4	☐5
My friends and family would describe me as 'germ conscious'	☐1	☐2	☐3	☐4	☐5
I would feel comfortable riding in a shared vehicle like a bus as long as there is a seat between passengers	☐1	☐2	☐3	☐4	☐5
I care what others think of me	☐1	☐2	☐3	☐4	☐5
I am happy to follow the crowd					
I have to depend on my parents to take me where I need to go	☐1	☐2	☐3	☐4	☐5
I am fairly certain about what my next steps will be after I graduate or leave high school	☐1	☐2	☐3	☐4	☐5
Wearing a mask should be required for all passengers on public transit	☐1	☐2	☐3	☐4	☐5

Section E: Some Background about Yourself

The following background questions will help us project the responses from this small survey sample to the population as a whole. All of your responses are confidential and will be used only for statistical purposes.

1. What is your age? _____ years

2. What is your gender identity?

   ☐$_1$ Female
   ☐$_2$ Male
   ☐$_3$ Other (please specify):_____
   ☐$_4$ Decline to answer

3. Are you Hispanic or Latino/a? ☐$_1$ Yes ☐$_2$ No

4. How would you describe yourself? *Please select all that apply to you*.

   ☐$_1$ American Indian/Native American
   ☐$_2$ Asian/Pacific Islander
   ☐$_3$ Black/African American
   ☐$_4$ White/Caucasian
   ☐$_5$ Prefer not to answer
   ☐$_6$ Other (please specify): _____
   ☐$_7$ Decline to answer

5. Do you have a driver's license? ☐$_1$ Yes ☐$_2$ No ☐$_3$ Decline to answer

6. Do you currently have a job? ☐$_1$ Yes ☐$_2$ No ☐$_3$ Decline to answer

7. What is the educational background of your parents/guardians? *Please check the highest level attained for at least one parent/guardian*.

   ☐$_1$ Some grade school / some high school
   ☐$_2$ Completed high school or GED
   ☐$_3$ Some college / technical school
   ☐$_4$ Associate's degree
   ☐$_5$ Bachelor's degree(s)
   ☐$_6$ Graduate degree(s) (e.g. MS, PhD, MBA, etc.)
   ☐$_7$ Professional degree(s) (e.g. JD, MD, DDS)

Knowing more about your neighborhood and living situation will help us understand your travel choices and opinions.

1. Do you currently split your time between more than one housing situation?

   ☐$_1$ Yes ☐$_2$ No ☐$_3$ Decline to answer

2. Please provide the street names for the intersection closest to your home. You may also put the city to help us better locate the specific intersection. For example, if you live at the White House, you would say that the closest intersection is Pennsylvania Avenue and 15th Street. You would put Pennsylvania Ave as Street 1 and 15th St as Street 2.

   Household 1:
   Street 1: _____
   Street 2: _____
   City: _____

   Household 2 (if you live in more than one house):
   Street 1: _____
   Street 2: _____
   City: _____

3. In what year did you move to your current place of residence?

   Year: _____ OR ☐1 I have lived there my entire life

For the following questions, we will ask you about your household; by **"household"** we mean people who live together and share at least *some* financial resources. Non-family housemates / roommates are **not** considered.

4. Who lives with you? *Please check all that apply*. *

   ☐1 My husband / wife / partner
   ☐2 My child(ren)
   ☐3 My parent(s) or grandparent(s)
   ☐4 One or more of my siblings
   ☐5 Some other relative(s)
   ☐6 One or more roommates / housemates
   ☐7 I live alone
   ☐8 Other (please specify): _____

5. What best describes the type of residence(s) you currently live in? Select all that apply.

   ☐1 Detached (free standing) home
   ☐2 Attached home / duplex / townhouse
   ☐3 Apartment / condo building
   ☐4 Dormitory
   ☐5 Other (please specify): _____

6. **Including yourself**, how many people in your household(s) fall into each of the age groups listed below? If there is no one in a particular age group, please respond with zero ("0") for that age group.

   _____ children under 6 years old
   _____ children 6-12
   _____ children 13-17
   _____ persons 18-26
   _____ persons 27-34
   _____ persons 35-50
   _____ persons 51-65
   _____ persons 66-75
   _____ persons over the age of 75

7. Including yourself, how many people in your household(s) hold a driver's license?
   ___ people

8. Including yourself, how many **employed** people currently live in your household(s)?
   ___ people

9. Please check the category that contains your approximate 2023 **annual household income** before taxes:

   ☐$_1$ $15,000 or less
   ☐$_2$ $15,001 - $30,000
   ☐$_3$ $30,001 - $50,000
   ☐$_4$ $50,001 - $75,000
   ☐$_5$ $75,001 - $100,000
   ☐$_6$ $100,001 - $125,000
   ☐$_7$ More than $125,000
   ☐$_8$ Prefer not to answer

10. Please describe your employment situation, extracurricular activities, or other responsibilities. *Please check all that apply.*

    ☐$_1$ Working full time for pay
    ☐$_2$ Working part time for pay
    ☐$_4$ Working at two or more paying jobs
    ☐$_5$ Doing unpaid work
    ☐$_6$ Unpaid caregiver
    ☐$_9$ Looking for a job
    ☐$_{10}$ Hoping to work for pay when I am old enough
    ☐$_{11}$ Other (please specify): _____

11. How many personal vehicles (cars, trucks, vans, motorcycles) does your household own?

    ☐$_1$ None
    ☐$_2$ 1
    ☐$_3$ 2
    ☐$_4$ 3
    ☐$_5$ 4
    ☐$_6$ 5 or more

12. **Optional:** Thinking back between spring of 2022 and now, {when you were a [grade level] at [school] … } please tell us about any changes in your responses to the questions we've asked you in this section that have affected your actual use or willingness to use Santa Cruz Metro buses:
    _____

You have reached the end of this survey. To thank you for participating in this study, you will be entered into a drawing for one of 10 $25 Visa gift cards. To receive this reward, please provide your contact information, either your email or phone number. You will be sent a secure link with your card information.

Email: _____

OR

Phone number: _____

We will be doing similar follow-up surveys in the summer, so we can understand how transit ridership changes over in different seasons. Would you like to be recontacted to participate? The survey would be very similar to this one. You will have an opportunity to get another $25 Visa gift card.

☐$_1$ Yes, I am interested in follow-up surveys

☐$_2$ No, I am not interested in any follow-up surveys

Is there anything else you would like us to know, or any feedback you have regarding this survey? This question is optional.

_____

_____

_____

If you have any urgent concerns or questions, you may contact the researchers email, at scpike@ucdavis.edu.

Thank you for taking the time to help us with our research! Your input is very valuable.