

# SJSU Associated Students Transportation Solutions Fall 2021 Commute Survey Report



## **AS-SJSU Transportation Solutions Fall 2021 Student Commute Survey Report**

### **1 Introduction**

Associated Students Transportation Solutions (TS) conducted its twentieth annual commute survey. The survey was conducted using the Qualtrics Experience Management software and was carried out from November 1<sup>st</sup> to November 15<sup>th</sup>, 2021. The survey was distributed via email and was sent to 38,007 students including regular session, special session, and open university. A total of 3,054 SJSU students responded to the survey, indicating a response rate of 8%.

The survey was conducted during a transitional semester, as SJSU moved from primarily remote classes due to the Covid-19 Pandemic, to 60% in-person and hybrid courses with 40% remaining fully online. During the Fall 2021 semester, 70.96% of students were enrolled in at least one hybrid or in-person course, 4.88% were enrolled in all in-person courses, and 24.16% were fully online. Thus, the student population on campus on any given day varied.

Pre-Pandemic, all matriculated students were eligible to receive a VTA SmartPass, a university transit pass that provided unlimited rides on all non-express VTA buses and light rail lines. During Fall 2020, the eligibility parameters changed to exclude students living outside the VTA service area (Santa Clara County). In Fall 2021, as the university increased in-person learning, these restrictions were loosened. Students living outside Santa Clara County could obtain a SmartPass if enrolled for in-person or hybrid classes. Students living in Santa Clara County, including students living in on-campus housing, were also eligible for a SmartPass regardless of their class format.

This survey attempted to capture and analyze student commute behaviors, highlighting significant changes from previous commute surveys when possible.

#### **1.1 Survey Design**

The online survey was built around the Fall 2020 annual commute survey design, with the exception of the trip leg question. This question caused significant confusion among respondents, and generated many difficult to interpret or invalid responses. Instead for this survey, when a respondent indicated that they take public transportation, the respondent was asked to indicate how they arrived to the public transportation stop they began at, and how they arrived to campus from the public transportation stop they ended at. Additionally, if a respondent

indicated that they ride VTA light rail, Caltrain, BART, ACE, or Amtrak they were asked to select the station they boarded from.

Students were also asked to indicate all the VTA routes they take to campus, rather than selecting only one route that directly serves SJSU. This change was made because a student can take multiple routes to campus, and some may require a transfer, meaning a student could be commuting using routes that do not directly serve SJSU, but are still part of their commute. This is something past surveys did not take into account.

Another major change was the introduction of transportation questions for students living on campus. Historically, since those students live on campus, they were not viewed as commuters. However, it was important to gather information about their travel behaviors to help improve our programs and services, as these students are users and can contribute to the parking and traffic congestion around campus.

Additionally, respondents who stated that they drove or carpooled to campus were asked a series of questions related to parking, including their parking location and the length of time it took to find parking. All respondents were asked to answer several background questions, including their place of residence, how many people they typically carpool with, whether they drive or ride in a carpool, and reasons why they do not use public transportation or active transportation.

In previous years, our tables compared the previous year to the current year, with our graphs showing 10 year trends. For 2021, our tables also include figures from 2019. This is due to 2020 being an extremely atypical year. The choice was made to compare 2021 to both the previous year, and to 2019 in order to make the statistics more illustrative of the impact the Pandemic has had.

## **2. Analysis**

The following section discusses the results of the online survey.

### **2.1 Mode Split**

Table 1 below illustrates the commute mode used by respondents for their journey to campus, and includes respondents who did not commute to campus in Fall 2021. Due to the transition back to in-person classes, commute totals for all modes are increasing compared to Fall 2020, though they are still below Fall 2019 levels. Of 3,054 survey respondents, 2,220 said that they commuted to campus.

Due to rounding, numbers do not add up to exactly 100%. Individuals were only counted under their commute mode. The most used mode is drive alone, at 34.4%, not commuting at all

(students living on campus and students only taking online classes) is second at 27.3%, and VTA is third at 14.3%. Total public transportation use is 19.7% of students.

*Table 1 Commute Mode Usage Rate From 2019 to 2021*

Commute Mode	2021 % of All Respondents (n=3,054)	2020 % of All Respondents (n=3,669)	2019 % of All Respondents (n=3,735)	% Change 2020 - 2021	% Change 2019 - 2021
Amtrak Capitol Corridor	0.1%	0.0%	0.1%	N/A	0.0%
Altamont Corridor Express (ACE)	0.5%	0.2%	1.6%	150.0%	-68.75%
BART	2.9%	0.8%	2.7%	262.5%	7.4%
Baywheel/ Other Bikeshare	0.1%	0.5%	0.6%	-80.0%	-83.3%
Bicycle	1.3%	0.6%	2.5%	116.7%	-52.0%
Caltrain	1.1%	0.6%	1.9%	83.3%	-42.1%
Carpool/Vanpool	3.6%	1.5%	4.0%	140%	-10.0%
Dropped Off/Picked-Up	6.0%	2.0%	3.5%	200%	71.4%
Drive Alone	34.4%	12.8%	35.4%	168.8%	-2.8%
E-scooter Sharing Service (e.g. Lime, Bird, etc.)	0.1%	0.2%	N/A	-50.0%	N/A
Highway 17 Express	0.6%	0.1%	0.8%	500.0%	-25.0%
Rideshare (Lyft/Uber/Taxi)	0.9%	0.2%	0.7%	350.0%	28.6%
Motorcycle/Moped	0.1%	0.1%	0.5%	0.0%	-80.0%
Other Transit Provider (e.g. AC Transit, SamTrans, Muni, etc.)	0.1%	0.2%	N/A	50.0%	N/A
Paratransit (e.g.	0.1%	0.1%	0.3%	0.0%	-66.7%

VTA Access, Uber WAV)					
Personal Mobility Device (e.g. skateboard, scooters, etc.)	0.7%	0.4%	1.3%	40.0%	-82.5%
SJSU Park & Ride Shuttle	0.3%	0.8%	5.8%	50.0%	-94.8%
VTA	14.3%	6.0%	29.3%	86.0%	-59.1%
Walk	4.9%	3.0%	9.3%	44.1%	-82.6%
Did Not Commute to Campus	27.3%	69.9%	N/A	-65.0%	N/A

Figure 1 below shows the commute mode reported for the commuter's journey to campus, summarizing the 2021 portion of Table 1.

### 2021 Commute Mode to Campus

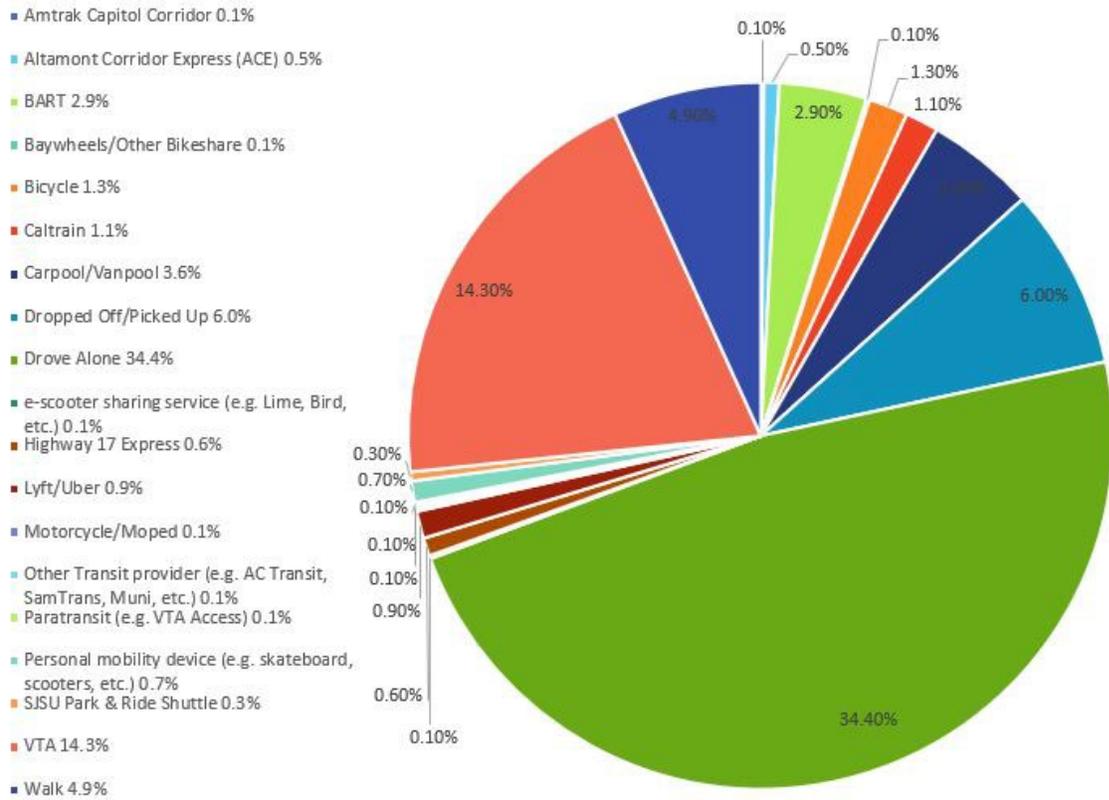


Figure 1 Commute Mode to Campus

## 2.2 Public Transportation

28.3% of commuting respondents reported riding public transportation as the main segment of their journey. VTA is the most utilized mode for public transit commuters, at 72.6%. BART is the second most utilized, at 14.3%, followed by Caltrain at 5.3%. Table 2 shows the usage rates for public transit.

Services Type	Self-Reported Transit Riders	Percent of Total Commuters (n=2,220)
All Transit Services - Unique Riders	620	28.0%
VTA	458	20.6%
Regional Transit Service	156	7.0%
Other Transit provider (e.g. AC Transit, SamTrans, Muni, etc.)	6	0.3%

*Table 2 Public Transit Usage Rates*

Service	Riders	Percentage of Transit Riders (n=620)
VTA	456	73.5%
Altamont Corridor Express (ACE)	16	2.6%
Highway 17 Express	17	2.7%
Caltrain	33	5.3%
BART	90	14.5%
Amtrak Capitol Corridor	3	0.5%
Other Transit provider (e.g., AC Transit, SamTrans, Muni, etc.)	3	0.5%
Paratransit (e.g. VTA Access)	2	0.3%

Figure 2 below shows the transport mode that public transportation riders used to get to campus from the public transportation station nearest campus. Of the 619 public transit riders who answered this question, walking was the most common mode at 67.3%, followed by the VTA Rapid 500 bus at 17.3%.

Figure 3 below shows both the overall public transportation ridership to SJSU, and the VTA ridership to SJSU, with the ridership trend over the past 10 years.

### 2021 Means of Getting to Campus from Public Transit Stops

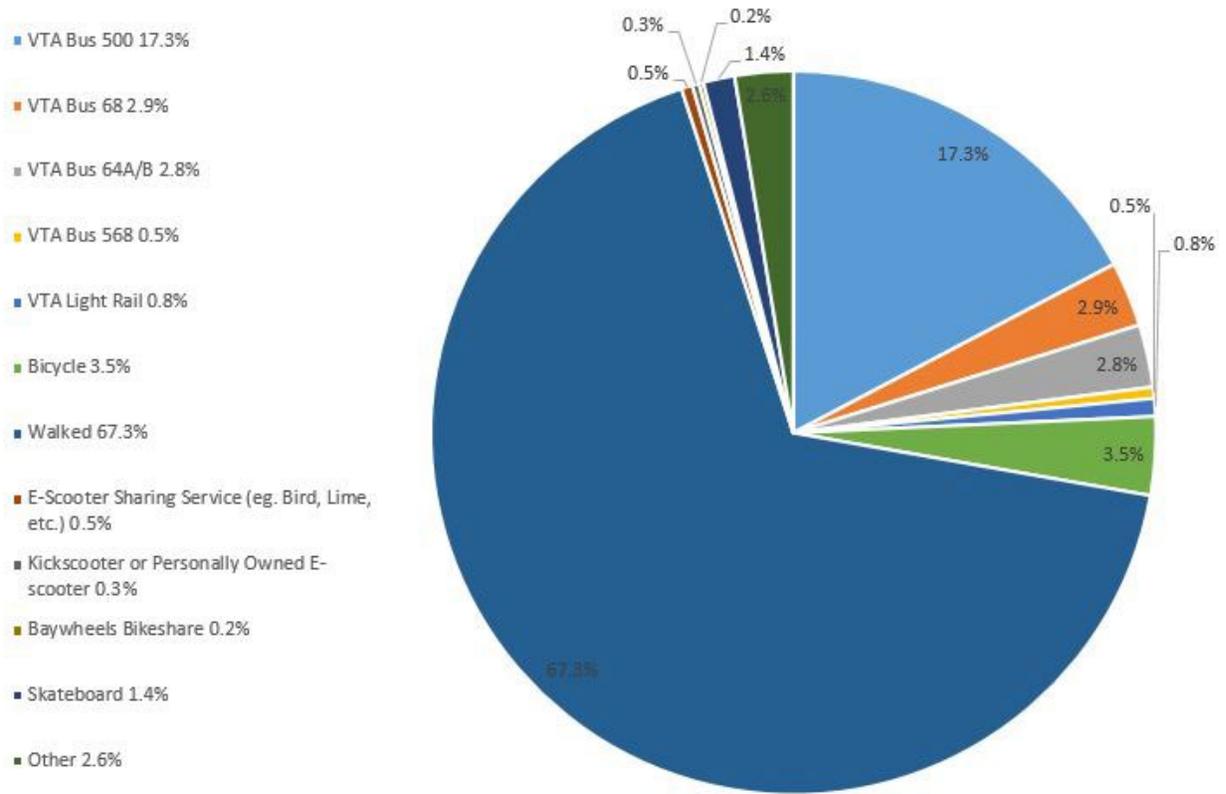


Figure 2 Means of Getting to Campus from Public Transit Stops



*Figure 3 Total Alternative Transportation and VTA Use*

## 2.3 VTA Ridership

Table 4 shows the percentage of VTA trips taken by each sub-mode (bus and light rail), and Table 5 shows the percentage of trips via each VTA bus route and light rail line taken to commute to campus.

About two-thirds of all VTA trips were taken by bus, and about a third of trips were taken by light rail. The three most utilized routes/lines by VTA riders were the 22 and 522 corridors (25.3%), Blue Line light rail (9.1%%), and the 23 and 523 corridors (13%). Since riders could select multiple VTA lines and may have been using multiple lines in one commute, these numbers include more responses than there were respondents riding VTA. We cannot say what percentage of riders took light rail or the bus alone, as many light-rail riders also rode the bus.

VTA Mode	Number	Percentage (n=1,124)
Bus	911	81%
Light Rail	213	19%

*Table 4 VTA Sub-Mode Usage Across All Legs of Journeys Using VTA*

Line	Riders	Percentage (n=1,124)
Rapid 500	33	2.9%
Rapid 522	142	12.6%
Rapid 523	59	5.2%
Rapid 568	7	0.6%
22	143	12.7%
23	88	7.8%
25	16	1.4%
26	7	0.6%
57	9	0.8%
60	10	0.9%
61	9	0.8%
64A	28	2.5%
64B	47	4.2%

66	73	6.5%
68	37	3.3%
70	10	0.9%
72	82	7.3%
73	63	5.6%
77	5	0.4%
20	2	0.2%
21	2	0.2%
27	2	0.2%
31	0	0.0%
37	1	0.1%
39	2	0.2%
40	2	0.2%
42	2	0.2%
44	1	0.1%
47	4	0.4%
51	2	0.2%
51H	1	0.1%
52	0	0.0%
53	0	0.0%
55	1	0.1%
56	4	0.4%
59	2	0.2%
71	5	0.4%
83	1	0.1%
84	0	0.0%

85	0	0.0%
86	0	0.0%
87	1	0.1%
89	2	0.2%
Express 101	2	0.2%
Express 102	1	0.1%
Express 103	0	0.0%
Express 104	0	0.0%
Express 168	3	0.3%
GreenLine	85	7.6%
Blue Line	102	9.1%
Orange Line	26	2.3%

*Table 5 VTA Route Usage*

## 2.4 BART

Most BART riders live in Alameda County, especially in southern Alameda County. Notably, few BART riders are in San Francisco, suggesting that either people are not switching from Caltrain to BART with the opening of Berryessa Station, or they were not riding transit in the first place. Table 6 below shows the county of origin for BART riders, while Table 7 shows the station where they began riding BART.

County	Riders	Percentage (n=90)
Alameda	76	84%
Contra Costa	7	7.8%
San Francisco	3	3.3%
San Mateo	1	1.1%
Santa Clara	1	1.1%
Unknown	2	2.2%

*Table 6 BART by County*

<b>BART</b>	<b>Riders</b>	<b>Percent (n=90)</b>
12th St/Oakland City Center	0	0.0%
16th St Mission	0	0.0%
19th St/Oakland	1	1.1%
24th St Mission	0	0.0%
Ashby	2	2.3%
Bay Fair	3	3.4%
Castro Valley	0	0.0%
Coliseum	1	1.1%
Downtown Berkeley	0	0.0%
Dublin/Pleasanton	8	9.1%
Fremont	17	19.3%
Fruitvale	2	2.3%
Hayward	6	6.8%
Lake Merritt	1	1.1%
MacArthur	0	0.0%
North Berkeley	0	0.0%
Oakland International Airport	0	0.0%
Rockridge	0	0.0%
San Leandro	3	3.4%
South Hayward	0	0.0%
Union City	23	26.1%
Warm Springs/South Fremont	5	5.7%
West Dublin/Pleasanton	3	3.4%
West Oakland	1	1.1%
Antioch	0	0.0%

Concord	0	0.0%
El Cerrito del Norte	4	4.5%
El Cerrito Plaza	1	1.1%
Lafayette	0	0.0%
North Concord/Martinez	0	0.0%
Orinda	0	0.0%
Pittsburg Center	0	0.0%
Pittsburg/Bay Point	0	0.0%
Pleasant Hill/Contra Costa Centre	0	0.0%
Richmond	1	1.1%
Walnut Creek	1	1.1%
Balboa Park	0	0.0%
Civic Center/UN Plaza	2	2.3%
Embarcadero	0	0.0%
Glen Park	0	0.0%
Montgomery St	0	0.0%
Powell St	1	1.1%
Colma	0	0.0%
Daly City	0	0.0%
Millbrae	0	0.0%
San Bruno	0	0.0%
San Francisco International Airport	0	0.0%
South San Francisco	1	1.1%
Milpitas	1	1.1%

*Table 7 BART by Station*

## 2.5 Caltrain

Most Caltrain riders come from San Mateo or Santa Clara counties, though it is difficult to derive a trend with the small sample size. However, it does seem that Caltrain riders are centralized in southern San Mateo County and northwestern Santa Clara County. Table 8 below shows the county of origin for Caltrain riders, while Table 9 shows the station where they began riding Caltrain.

County	Riders	Percentage (n=33)
San Francisco	6	18%
San Mateo	12	36%
Santa Clara	11	33%
Unknown	4	12%

*Table 8 Caltrain by County*

Station	Riders	Percentage (n=33)
4th and King	3	9%
22nd St	1	3%
Bayshore	2	6%
South San Francisco	1	3%
San Bruno	1	3%
Millbrae	1	3%
Burlingame	0	0%
San Mateo	1	3%
Hayward Park	0	0%
Hillsdale	4	12%
Belmont	1	3%
San Carlos	0	0%
Redwood City	3	9%
Menlo Park	0	0%

Palo Alto	1	3%
California Ave	1	3%
San Antonio	2	6%
Mountain View	2	6%
Sunnyvale	3	9%
Lawrence	1	3%
Santa Clara	0	0%
College Park	0	0%
Tamien	0	0%
Capitol	1	3%
Blossom Hill	0	0%
Morgan Hill	0	0%
San Martin	0	0%
Gilroy	0	0%
Unknown	4	12%

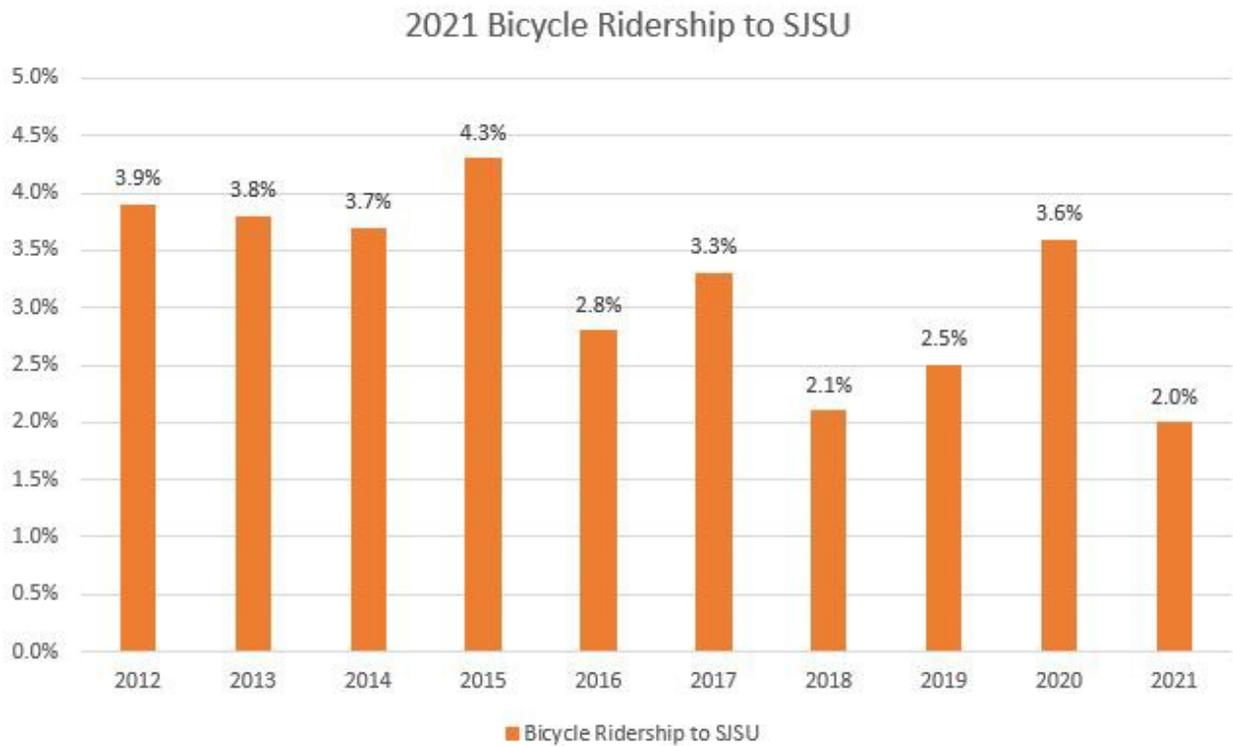
*Table 9 Caltrain by Station*

## 2.6 Bicycles

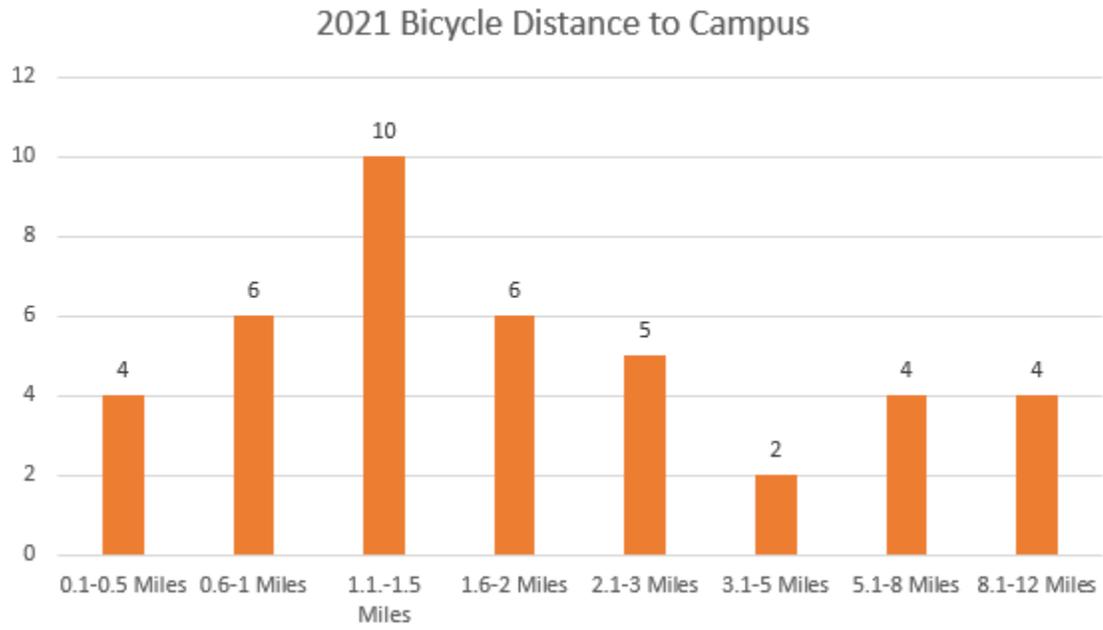
1.8% of respondents who commuted rode their own bicycle to SJSU, bikeshare users included .2%, making total bike ridership 2%. Bikeshare rates were not measured separately from bicycle rates until 2019.

In 2018 and 2019, e-scooters and e-bikes were measured together under the same category, so some e-scooter ridership is counted below in these two years. In 2020, we began counting bikeshare and e-scooters as separate categories, while e-bikes were counted under the main bicycle category.

Figure 4 below shows the bicycle rate to SJSU over the past 10 years, including bicycle, e bikes, and bikeshare categories. Figure 5 below shows the distances respondents rode to campus.



*Figure 4 Bicycle Rate*



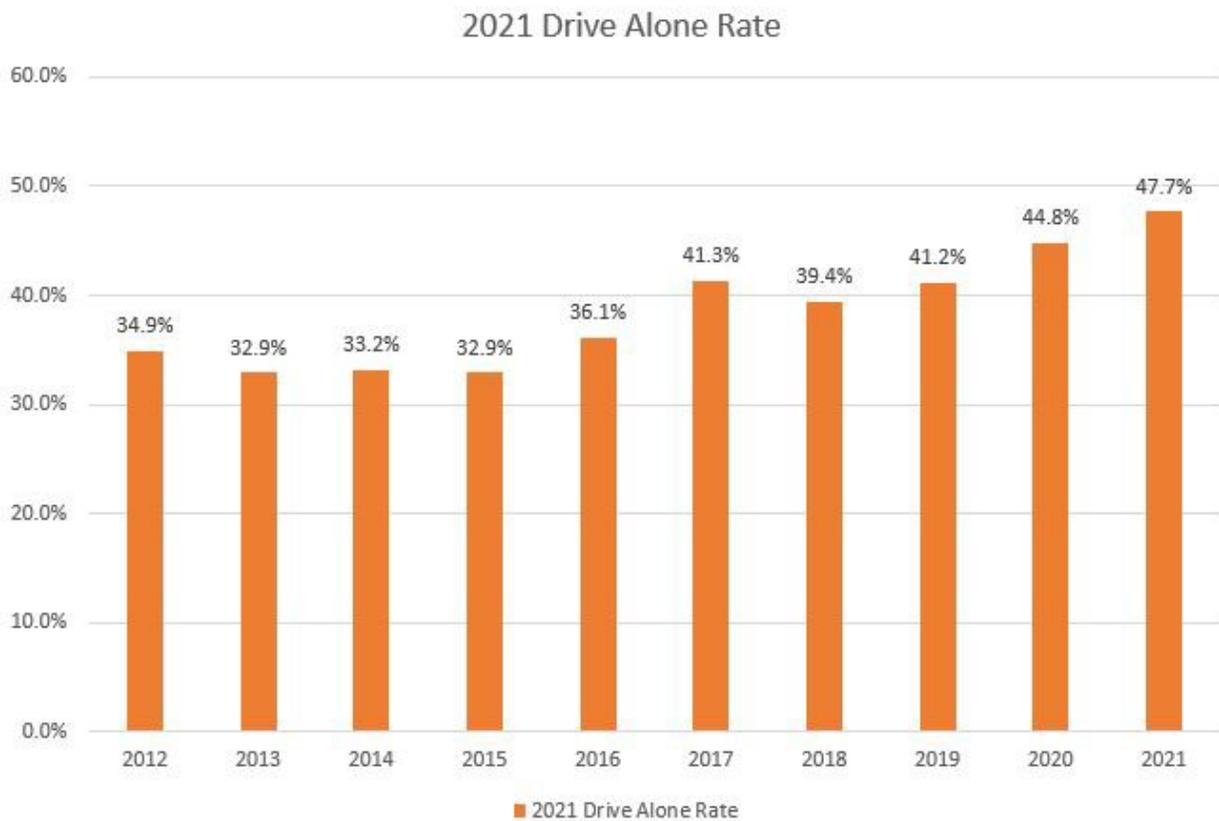
*Figure 5 Bicycle Distance to Campus*

## 2.7 Drive Alone

47.7% of respondents who commuted drove alone to SJSU. This excludes the students who indicated they did not commute to campus. Figure 6 below shows the drive alone rate to SJSU over the past 10 years.

Up until 2019, the drive alone rate included all respondents, including housing and students who were fully remote who selected drive alone as their commute mode. In 2019, the housing students were excluded from the survey, and were not included in the drive alone rate.

In 2020 and 2021, the housing and fully remote students were excluded from the commute related questions, and were not included in the drive alone rate.



*Figure 6 Drive Alone Rate*

## 2.8 Commute Distance and Frequency

The average commute distance traveled by respondents to campus was approximately 19.96 miles (n=2,168). Below, Table 10 lists the average distance traveled in each journey (all segments of their trip) by each mode. Distance traveled by car (including drive alone, ride share, carpool, and drop off) continued the significant increase it saw in 2020. For those who were dropped off at a portion of their journey, the average distance dropped to something much closer to Fall 2019 conditions.

Distance traveled on VTA services saw a slight increase. Regional Transportation modes were split. Altamont Corridor Express was about the same, the Highway 17 Express saw an increase, and Caltrain and BART saw significant decreases.

In 2020's Commute Survey Report, Transportation Solutions hypothesized that the increase in distance traveled on BART seen in Fall 2020 was most likely the result of the opening of the Berryessa BART station in San Jose. The decrease in average BART commute distance calls this conclusion into question. This could have been caused by the small Fall 2020 sample size, or by commuters using stations closer to San Jose than in Fall 2020.

Commute Mode	2021 Average One-Way Commute Distance (mi) (n=2,168)	2020 Average One-Way Commute Distance (mi) (n=1,150)	2019 Average One-Way Commute Distance (mi) (n=3,735)	% Change 2020-2021	% Change 2019-2021
Altamont Corridor Express (ACE)	50.3	49.8	49	1.0%	2.7%
Amtrak	124.3	N/A	N/A	N/A	N/A
BART	28.62	37.3	30.2	-23.3%	-5.3%
Baywheels bike share/Other Bikeshare Service	1.8	1.9	2.7	-5.3%	-33.3%
Bicycles	3	2.2	2.8	36.4%	7.1%
Caltrain	27.1	30.9	34.6	-12.3%	-21.7%
Carpool/Vanpool	19.9	32.1	20.5	-38.0%	-2.9%
Dropped Off/Picked Up	13.3	21.6	11.1	-38.4%	19.8%
Drive Alone	24	21.7	18	10.6%	33.3%

e-scooter sharing service (e.g., Lime, Bird, etc.)	0.8	1.9	2.7	-57.9%	-70.4%
Highway 17 Express	32.24	29	34.6	11.2%	-6.8%
Ride Share/Taxi	6.3	14.4	9.5	-56.3%	-33.7%
Motorcycle/Moped	6.5	10	14.1	-35.0%	-53.9%
Other Transit provider (e.g., AC Transit, SamTrans, Muni, etc.)	12.5	13.3	N/A	-6.0%	N/A
Paratransit (e.g. VTA Access, Uber WAV)	29.1	1.7	N/A	1611.8%	N/A
Personal mobility device (e.g., skateboard, scooters, etc.)	1.1	1.7	2.6	-35.3%	-57.7%
SJSU Park & Ride Shuttle	4.3	1.9	N/A	126.3%	N/A
VTA Bus	6	5.3	8.4	13.2%	-28.6%
VTA Light Rail	6	6.3	11.3	-4.8%	-46.9%
VTA	6	5.8	9.85	3.5%	-39.1%
Walk	2	0.7	2.2	185.7%	-9.1%
All Transportation Modes	19.96	14.93	15.89	33.7%	25.6%

*Table 10 Average One-Way Commute Distance of All Transportation Mode*

The average commute frequency of this survey respondents was 1.63 days/week, and it was estimated that on average, commuters traveled to campus 24.45 days out of the 16 weeks of the Fall semester. This is lower than the figure for Fall 2020, likely because in 2020 most students were remote learning, and those who commuted to campus were performing tasks that could not be completed remotely. By comparison, in Fall 2021 the campus was reopening to in person classes, but the majority of students were taking both remote and in person classes, reducing the average commute days per week. Table 11 shows the average commute frequency for all transportation modes.

Commute Mode	Average Commute Frequency (days/week) Fall Survey	Average Commute Frequency (days/week) Fall Survey	Average Commute Frequency (days/week) Fall	Estimated # of Days Commuted In Fall 2021	Estimated # of Days Commuted In Fall 2020	Estimated # of Days Commuted In Fall 2019 Semester
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	2021	2020	Survey 2019	Semester	Semester	
Altamont Corridor Express (ACE)	1.74	2.50	3.40	26.10	38	51
Amtrak	1.50	0.00	3.60	22.50	0	54
BART	1.83	2.35	3.70	27.45	35	56
Baywheels bike share/Other Bikeshare Service	2.67	2.93	4.20	40.05	44	63
Bicycles	2.11	2.12	4.10	31.65	32	62
Caltrain	1.61	1.70	3.50	24.15	26	53
Carpool/Vanpool	1.80	2.21	3.70	27.00	33	56
Dropped Off/Picked-Up	1.73	1.04	4.00	25.95	16	60
Drive Alone	1.78	1.61	3.50	26.70	24	53
e-scooter sharing service (e.g., Lime, Bird, etc.)	2.88	1.68	4.20	43.20	25	63
Highway 17 Express	1.77	3.50	3.40	26.55	53	51
Lyft/Uber	1.83	2.03	3.50	27.45	31	53
Motorcycle/Moped	2.17	0.75	3.70	32.55	11	56
Other Transit provider (e.g., AC Transit, SamTrans, Muni, etc.)	1.83	1.80	N/A	27.45	27	N/A
Personal mobility device (e.g., skateboard, scooters, etc.)	2.06	2.09	4.90	30.90	31	74
SJSU Park & Ride	1.55	1.11	3.70	23.25	17	56

Shuttle						
VTA Bus	1.97	2.37	4.10	29.55	36	62
VTA Light Rail	1.97	2.12	3.90	29.55	32	59
Walk	1.92	2.19	4.40	28.80	33	66
All Transportation Modes	1.63	2.01	3.96	24.45	30	59

*Table 11 Average Commute Frequency of All Transportation Modes*

## 2.9 Reasons for Not Taking Transit

Students who reported not taking transit were asked to respond why through an open ended question. 1,288 wrote a response, and these responses were categorized into 23 distinct reasons. Some students wrote in multiple reasons, with a total of 1,589 reasons being counted during categorization, so the percentages for each reason add up to more than 100%. Figure 7 below shows the 23 distinct reasons given for not riding transit.

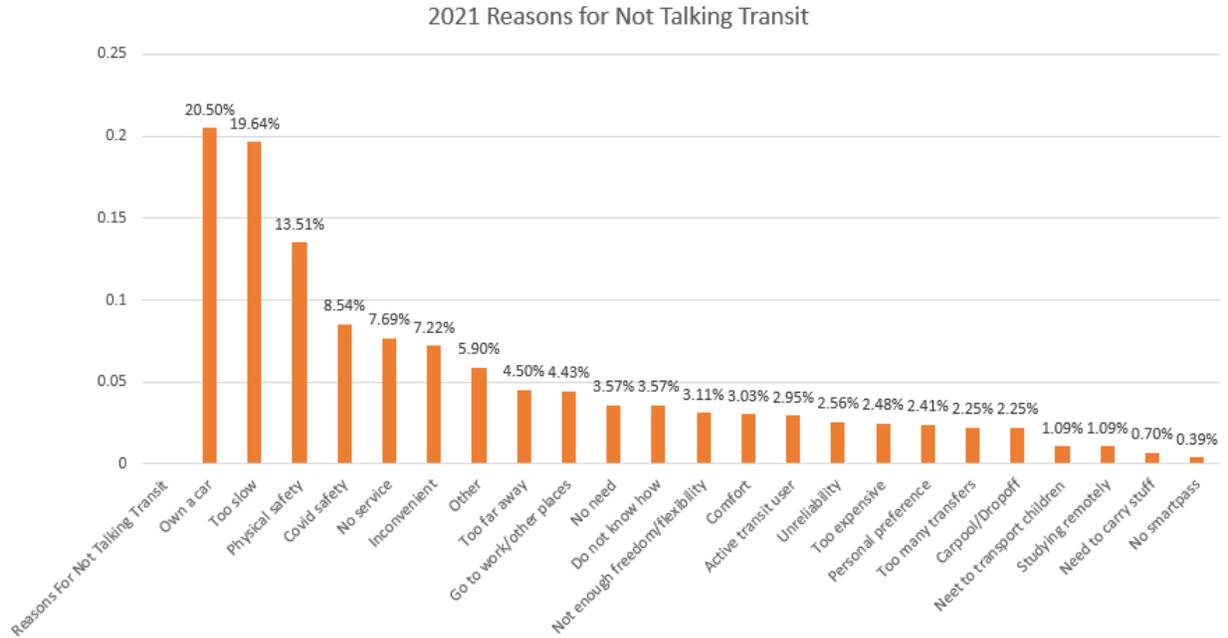


Figure 7 Reasons For Not Taking Transit

## 2.10 TS Effectiveness

Overall trip reduction among new and continuing student commuters:

Total transit (28.3%) plus half of carpool (2.46%) = 30.76%.

Commuters who “always have access to a car”, 23% and 75.4% who “sometimes have access to a car” chose not to drive alone to campus. VTA ridership among those who “always have access to a car” was 3.7%, and 29% among those who “sometimes have access to car” was 29%. VTA ridership among new students who were commuting to campus was 24.2%.

By looking at students who respond that they used either transit services or carpool/vanpool as their commute mode and comparing this to whether they owned cars, we observe that 15% always had access to a vehicle for getting to SJSU; and 29% sometimes had access to a vehicle for getting to SJSU. Overall, 54.1% of respondents always had access to a vehicle for getting to SJSU, and 22.41% of respondents sometimes had access to a vehicle for getting to SJSU.

Therefore, 511 respondents (23% of 2,220 commuters) always had access to a car to get to SJSU, but chose to commute by transit instead. The 2,220 commuters comprise 72.7% of the 3,054 survey respondents, and 72.7% extrapolated over the entire 38,007 Fall 2020 student population would give us 27,631 commuters. If 23% of them always have access to a car but choose not to drive, that is 6,355 students. The total number of automobile trips per day reduced would be 12,710 (6,355 x 2 one way trips).

### 3 Background Information of Survey Respondents

All online survey respondents were asked to provide a variety of background data, such as age, gender identity, class level, instruction mode (whether they had classes entirely online, entirely in-person, or a hybrid of the two), and zip code they resided in.

Category	Percentage (n=3,054)
Online and In-Person	71.00%
Online only	24.17%
In-Person only	4.83%

*Table 12 Respondent's Fall 2021 Instruction Mode*

Survey respondents were primarily upperclassmen (i.e., Juniors and Seniors) and graduate students, with each group comprising a quarter of all recorded responses. All together, these groups totaled about 70% of all survey takers. 26% of respondents were lower classmen, with about 50% more Freshmen than Sophomores.

Class Level	Percentage of Total Respondents (n=3,054)
Freshman	15.82%
Sophomore	10.64%
Junior	23.58%
Senior	23.87%
Second Baccalaureate	0.26%
Credential	1.54%
Master's or Higher	23.80%
Open University/Continuing Education/Extended Studies/International Gateways	0.49%

*Table 13 Survey Respondents Academic Standing*

#### 3.1 Gender Highlights

The strongest gender-related correlation we saw was that women were 15% more likely to use some form of car-based transit than men. 69.4% of women reported driving, carpooling, being dropped off, or using rideshare services, compared to 54.3% of men. This indicated that women were less likely to ride public transportation, or to use alternative transportation modes. This was a nationwide trend, not an SJSU trend, as women were consistently less willing to ride transit, bicycles, or walk alone due to safety concerns. 23.1% of all female commuters utilized VTA for a portion of their journey, compared to 27.4% of men. The sample size for Gender Queer/GNC, Trans Man and Woman, 'Prefer not to say, and 'Other' is too small to draw conclusions from. Table 14 below shows the commute mode chosen by gender.

Gender	Percentage of Total Respondents (n=3,054)
Women	58.7%
Men	37.3%
Gender Queer/Non-Gender Conforming	1.8%
Transwoman	0.1%
Transmen	0.2%
Prefer not to say	1.6%
Other	0.3%

Commute Mode	Percentage of Women (n=1275)	Percentage of Men (n=870)	Percentage of Gender Queer/Non-Gender Conforming (n=35)	Percentage of Trans Women (n=3)	Percentage of Trans Men (n=4)	Percentage of 'Prefer Not to Say' (n=26)	Percentage of 'Other' (n=7)
Altamont Corridor Express (ACE)	0.9%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
BART	3.5%	4.6%	8.6%	33.3%	0.0%	0.0%	14.3%
Baywheel	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%

s Bike share							
Bicycle	0.9%	2.8%	5.7%	0.0%	0.0%	11.5%	0.0%
Caltrain	1.5%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Carpool/ Vanpool	5.3%	4.6%	2.9%	0.0%	0.0%	3.9%	0.0%
Dropped Off/Picke d-Up	10.3%	5.3%	8.6%	0.0%	25.0%	3.9%	28.6%
Drive Alone	50.0%	43.9%	40.0%	0.0%	25.0%	50.0%	28.6%
E-scooter sharing service (e.g. Lime, Bird, etc.)	0.1%	0.2%	2.9%	0.0%	0.0%	0.0%	0.0%
Highway 17 Express	0.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Taxi	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Lyft	0.4%	0.5%	2.9%	0.0%	0.0%	0.0%	0.0%
Uber	0.6%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Uber WAV (Wheels air Accessibl e Vehicle)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Transit provider (e.g., AC Transit, SamTrans , Muni, etc.)	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Paratransit (e.g. VTA Access)	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Personal mobility device (e.g. skateboard, scooters, etc.)	0.4%	1.5%	2.9%	0.0%	0.0%	3.9%	0.0%
SJSU Park & Ride Shuttle	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Motorcycle/Moped	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Bikeshare service	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
VTA	17.3%	25.3%	20.0%	66.7%	0.0%	23.1%	14.3%
Walk	7.0%	6.3%	5.7%	0.0%	50.0%	3.9%	14.3%

Table 14 Commute Mode by Gender

## **3.2 Housing Students**

In 2021, the commute survey was expanded to include travel behavior questions aimed particularly at students who were living in on-campus housing. We wanted to gain a more complete picture of how these students travel around Santa Clara County, and of their utilization of different commute modes.

9.56% of survey respondents lived in on campus housing. These students utilized a large variety of travel methods, with the dominant one being cars (including ride share, being driven by friends or family, and having their own car), then walking, and VTA.

The majority of these students rode VTA once or twice a week, or less frequently. Students in housing felt that they could access most services they needed by riding VTA. However, roughly one third did not feel that the walk to those bus stops was safe. A slightly larger proportion felt like the walk to VTA stops were too far.

Figure 8 below shows the most common travel modes for housing students. Figure 9 below shows how often housing students ride VTA. Figure 10 below shows what proportion of housing students felt walking to VTA is safe. Figure 11 below shows what proportion of housing students felt VTA stops were too far away from them.

### 2021 Housing Student Most Common Travel Mode

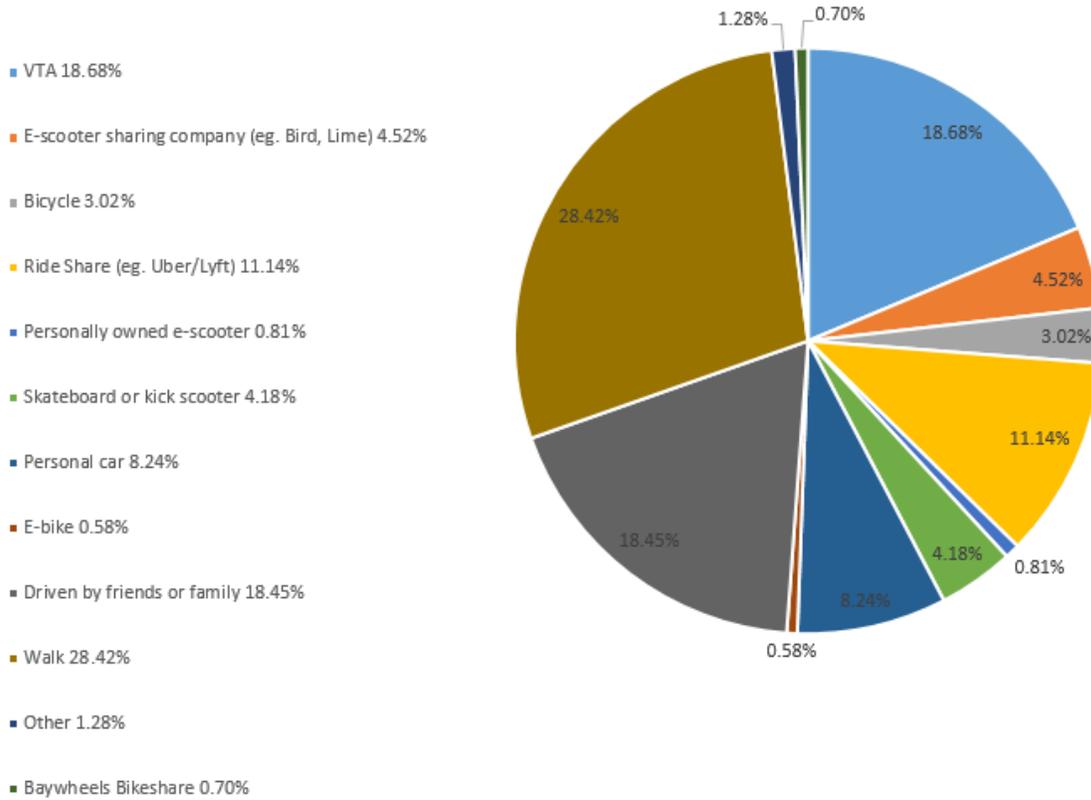


Figure 8 Housing Student Most Common Travel Mode

### 2021 How Often Do You Ride VTA?

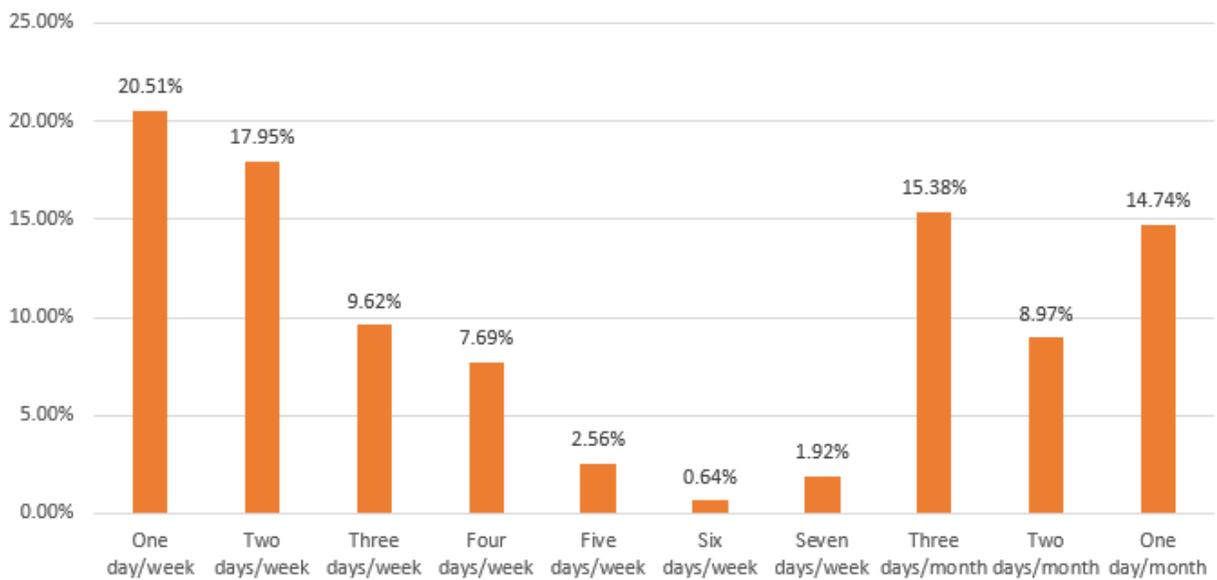


Figure 9 Housing Student How Often Do You Ride VTA?

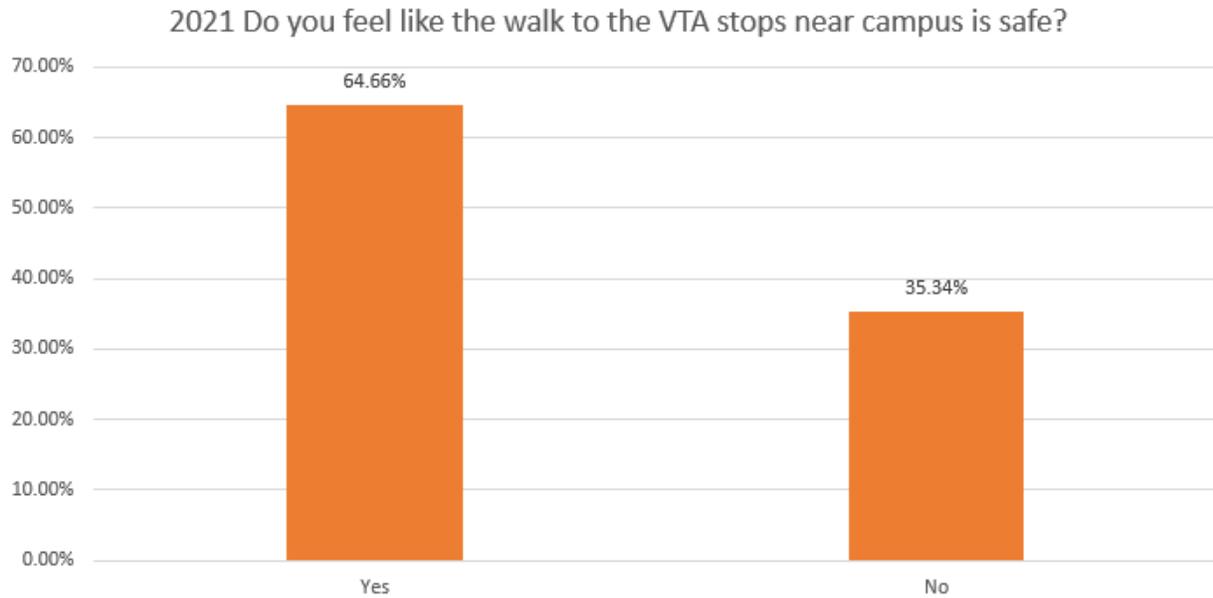


Figure 10 Housing Student VTA Stop Safety

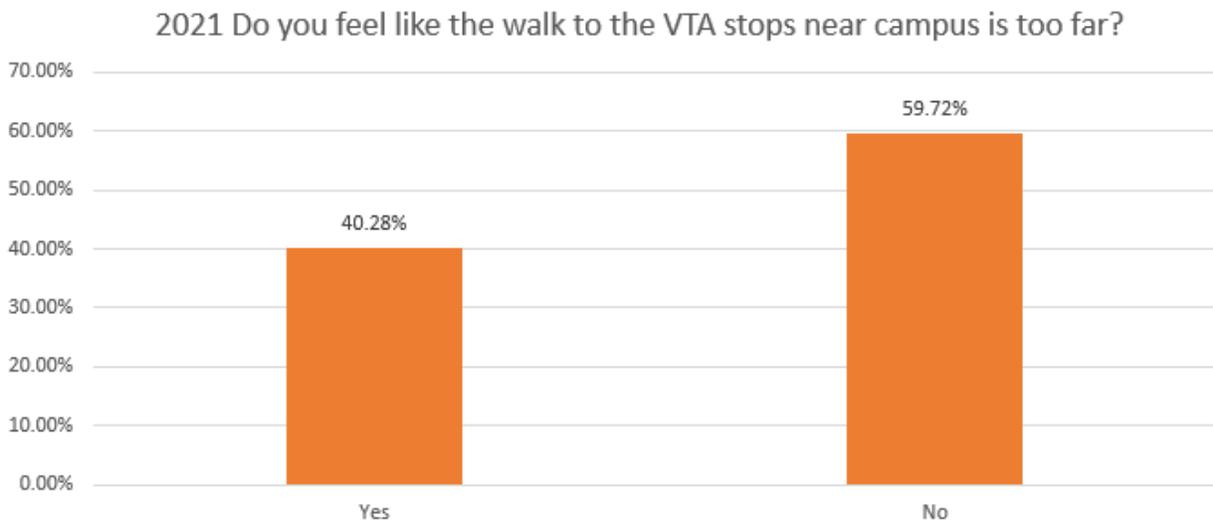


Figure 11 Housing Student VTA Stop Distance

### **3.3 Origin by ZIP Code**

The densest concentration of SJSU students was in central San Jose, followed by East San Jose. The rest of San Jose, Gilroy, northern Fremont, and Cupertino were also noteworthy clusters of students. The BART corridor was the most densely populated regional transit corridor, followed by ACE, Caltrain, and Highway 17 Express. Outside of San Jose, students were relatively spread out throughout the region. However, due to the Pandemic, many students returned to their home communities and continued their studies online, so this living pattern did not necessarily reflect living patterns during normal commute circumstances. Figure 6 below maps the locations of students by ZIP code.

### SJSU 2021 Commute Survey Respondents by ZIP Code

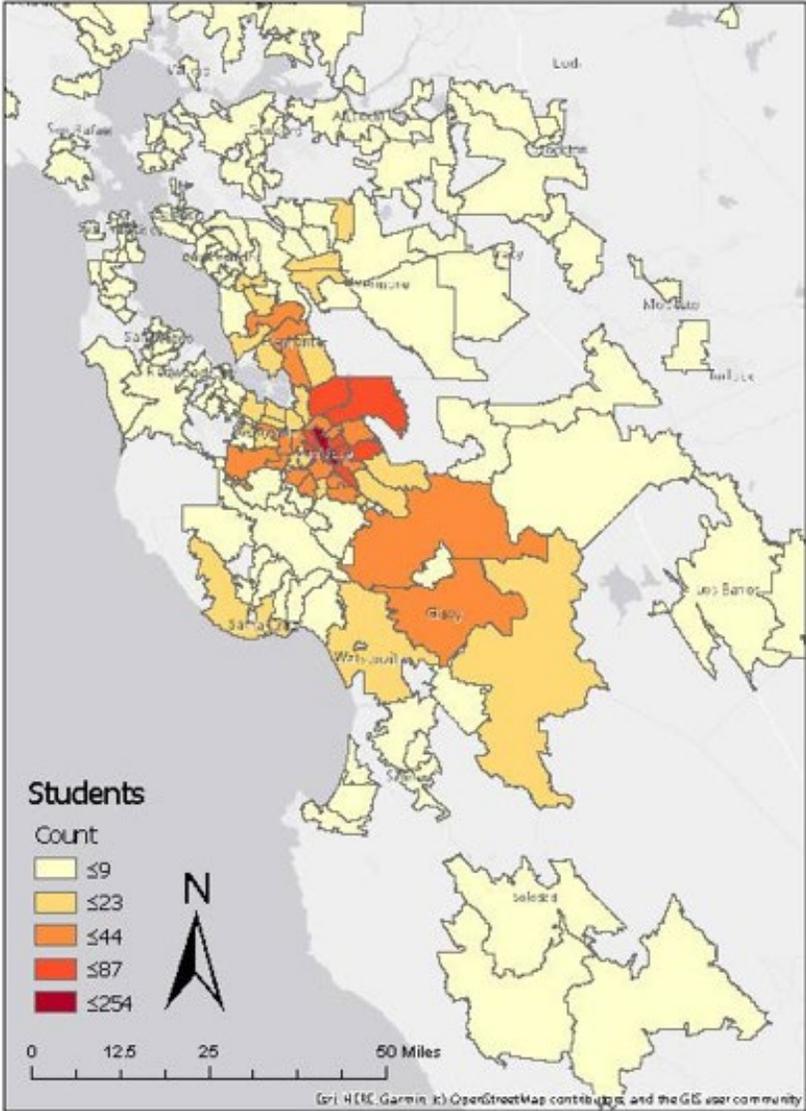


Figure 12 Students by ZIP Code