

AS-SJSU Transportation Solutions Fall 2018 Student Commute Survey Report

1 Survey

Transportation Solutions (TS) completed its eighteenth annual survey administered at the end of fall semester. This was TS's sixteenth online survey and it was administered by SurveyMonkey.

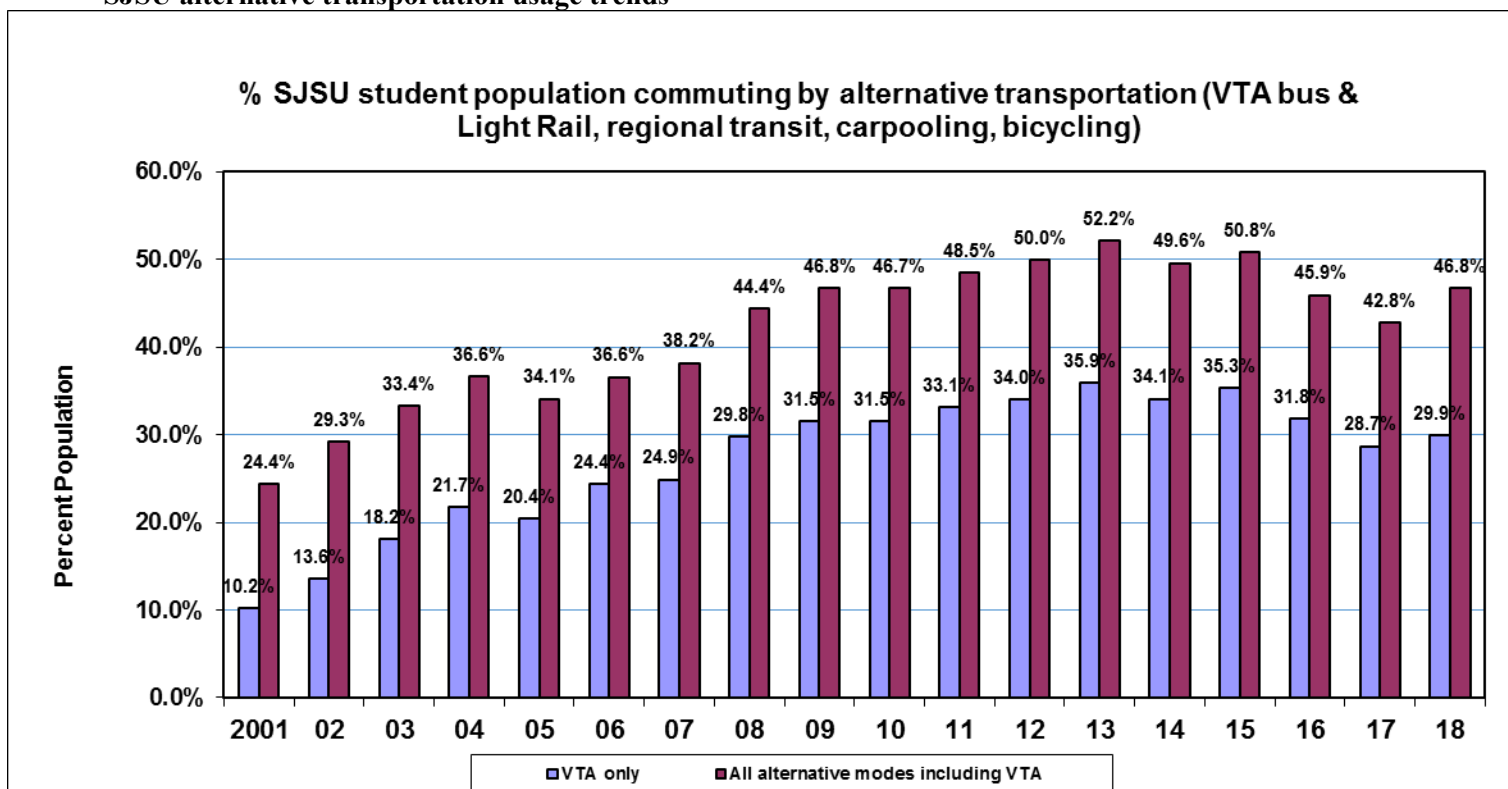
The survey was carried out from November 1st through 15th. The survey's link was sent to 33,972 students (Regular enrollment, Open University, Special Sessions, etc.); 4,342 participated at a response rate of 12.8%.

The survey instrument was the same as previous years and the results have proved the TS effectiveness in reducing reliance on single occupant vehicles.

1.1 Analysis

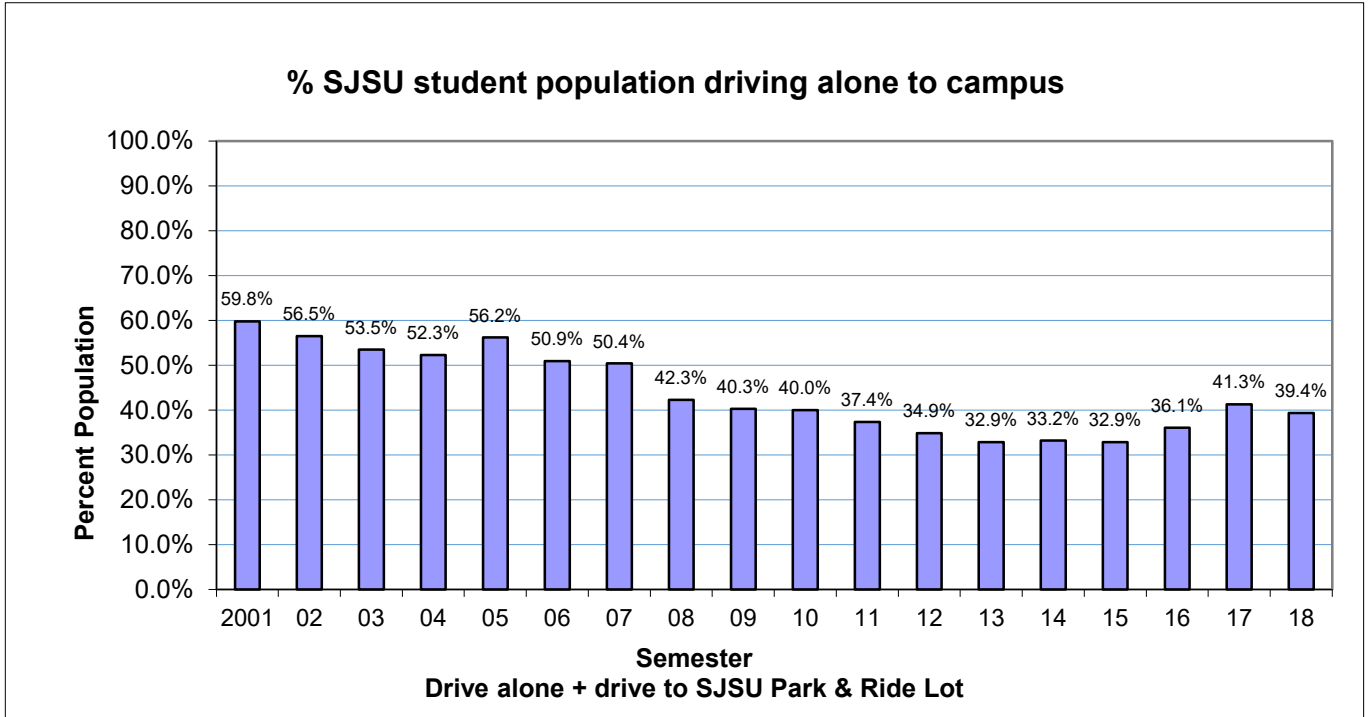
This survey produced consistencies in all response ratios compared with the previous years' results. The overall alternative transportation usage was at 46.8%. Extrapolated over the population of 33,972, the total alternative transportation users were estimated at 15,891. The Santa Clara Valley Transportation Authority (VTA) ridership to campus was at 29.9% or 10,163 riders. The rate for walk/ skateboard/ manual scooter was at 13.0% (4,428).

SJSU alternative transportation usage trends

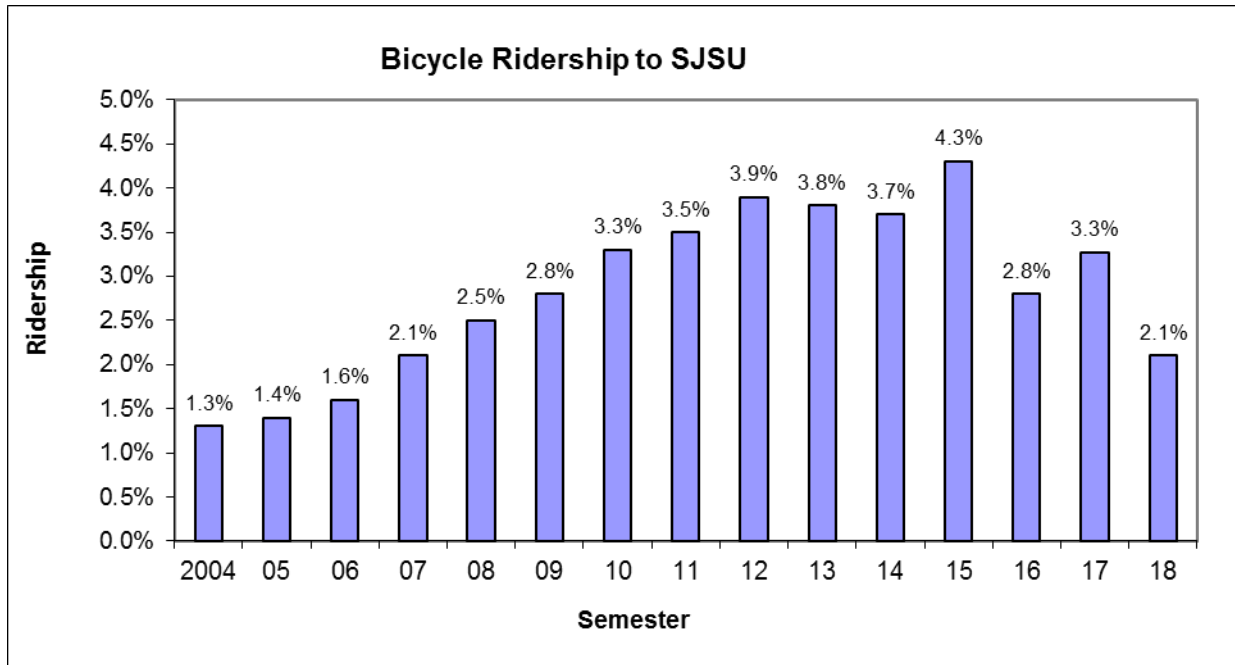


(Regional transit include: Caltrain, BART, Highway 17 Express, Altamont Corridor Express (ACE) train, Amtrak Capitol Corridor and Monterey-Salinas Transit).

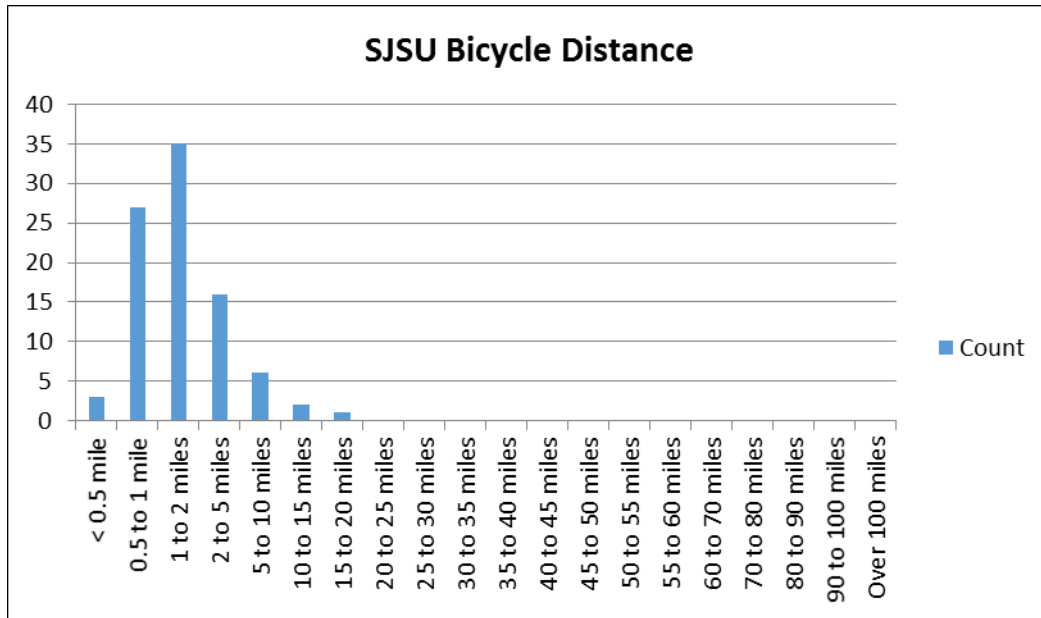
The total transit users including VTA (29.9%) and regional transit (6.8%) made up 36.8% of the population or 12,487 riders. The solo-driving to campus decreased 1.9%, from 41.3% in 2017 to 39.4% in 2018. The chart below shows the history of drive-alone rate to campus among SJSU students since fall 2001.



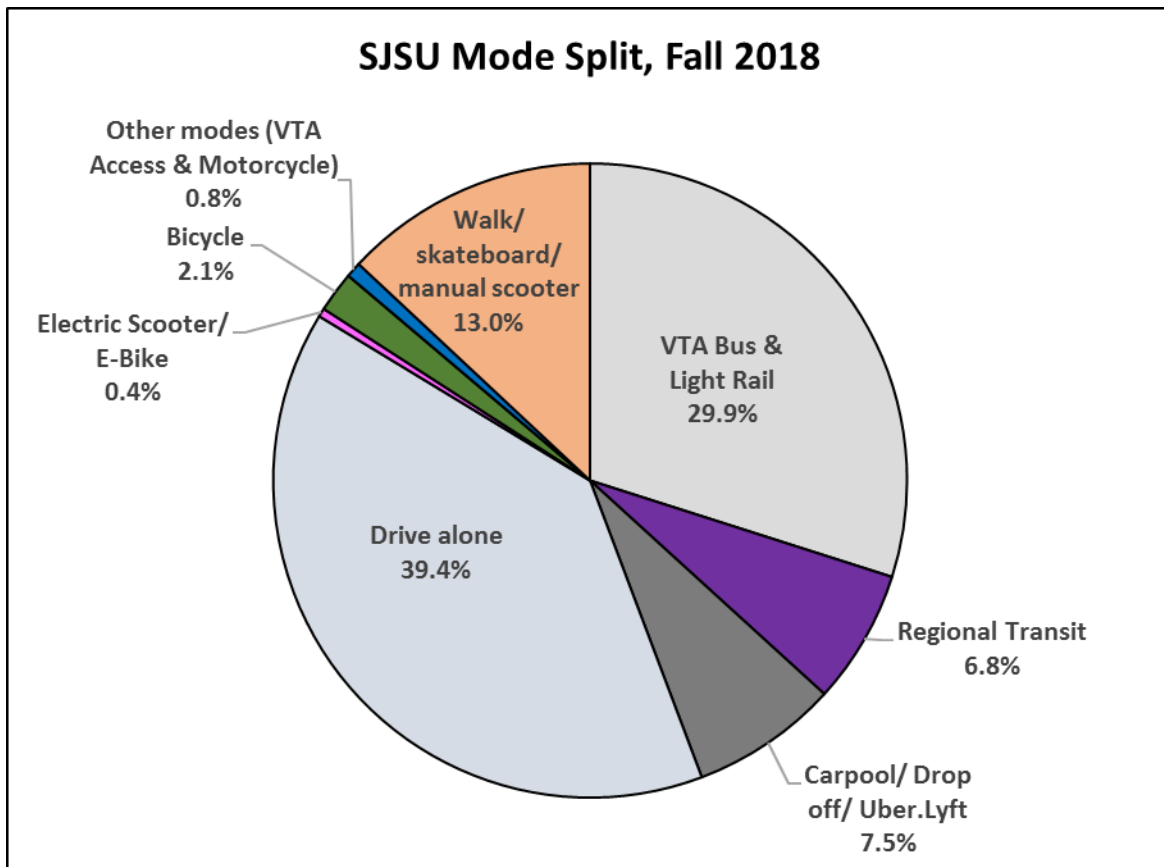
In 2018, 2.1% of the population or about 704 biked to campus. The following chart shows the history of bike ridership to campus.



The average biking distance to SJSU was 2.4 miles (Q5xQ9).



The following chart shows the commuter mode split to SJSU:



Other significant findings are as follows:

- a) Average frequency of travel to/from campus was 3.96 days per week, from the results of Question 4
- b) Average one-way trip distance (home to campus) was 14.3 miles, from the results of Question 9. Average time of commute was 34.8 minutes (Question 10). The following tables list the average one-way trip distance for each type of commuter mode (Q5xQ9).

Transportation Mode	Average one-way distance (mile)
Altamont Corridor Express (ACE)	49.7
Amtrak Capitol Corridor	44.4
BART	29.0
Caltrain	31.8
Hwy 17 Express	34.8
Monterey-Salinas Transit Bus 55	58.3
VTA Bus	9.4
VTA Light Rail	11.4
Carpool	21.2
Drop off	12.4
Uber/ Lyft	6.2
Bicycle	2.4
Electric Scooter/ E-Bike	1.7

- c) Average Drive-alone and Drive to Park & Ride distances are as follows:

Transportation Mode	Average one-way distance (mile)
Drive-alone	19.2
Drive to SJSU Park & Ride	14.9

- d) Average walking, skateboard/ manual scooter distance:

Transportation Mode	Average one-way distance (mile)
Walk	0.7
Skateboard/ Manual scooter	1.7

- e) Other

Transportation Mode	Average one-way distance (mile)
Motorcycle	16.5
VTA Access	10.7

f) The overall average frequency of travel using alternative transportation was 3.96 days/week. The following table shows the average alternative transportation days per week and per year (Estimated 42 weeks) by mode (Q5xQ4).

Transportation Mode	Average Commute Days per Week	Average Days per Year
Altamont Corridor Express (ACE)	3.3	139
Amtrak Capitol Corridor	3.1	130
BART	3.9	164
Caltrain	3.7	155
Hwy 17 Express	3.4	143
Monterey-Salinas Transit Bus 55	3.7	155
VTA Bus	4.2	176
VTA Light Rail	3.9	164
Carpool	3.7	155
Drop off	3.9	164
Uber/ Lyft	4.1	172
Bicycle	4.1	172
Electric Scooter/ E-Bike	3.9	164

g) Average Drive-alone and Drive to SJSU Park & Ride days are as follows:

Drive-alone	3.6	151
Drive to SJSU Park & Ride	3.9	164
Average	3.8	158

h) Average walking, skateboard/scooter days:

Walk	5.0	210
Skateboard/ Manual Scooter	4.8	202

i) Other

Motorcycle	3.7	155
VTA Access	4.6	193

j) Mode of travel when not using transit: The responses from Question 5 provide the percentages for all the commute modes. Based on the 33,972 enrollment, the numbers for non-transit commuters are extrapolated:

- Drive-alone plus Drive to SJSU Park & Ride was at 39.4% or 13,387
- Carpool, drop off and Uber/ Lyft at 7.5% or 2,551
- Bike was at 2.1% or 704,
- Walk/ skateboard/ manual scooter at 13.0% or 4,428
- Other modes at 0.8% or 266

- k) Mode of travel prior to use of Transportation Solutions services - The results of questions 17 and 18, mode of transportation before and after using TS services are as follows:

Q17 & Q18	Before	After	Net Change (After - Before)
A. Bicycle	3.4%	3.6%	+0.2%
B. Electric scooter/ E-Bike	1.0%	1.0%	0.0%
C. Carpool	3.5%	2.4%	-1.1%
D. I get dropped off	15.9%	4.0%	-11.9%
E. Uber/ Lyft	3.4%	1.1%	-2.3%
F. Drive alone (including to SJSU Park & Ride and motorcycle)	18.3%	14.3%	-4.0%
G. VTA bus / light rail/ Access	29.7%	51.9%	+22.2%
H. Regional train/ bus (including Caltrain, Hwy 17 Express, ACE, Amtrak, MST)	4.8%	6.4%	+1.6%
I. I live on/ near campus, walk/ skateboard/ manual scooter	19.9%	15.3%	-4.6%

- l) Net reduction in vehicle trips to campus (based upon prior travel mode):
 The TS effectiveness in reducing drive-alone rate in 2018 was 4.0%.
 Calculations: Population 33,972 x 4.0% decrease in drive-alone = 1,359 cars x 2 trips/day = 2,718 trips/day
- m) 20.0% (3,006) of the alternative transportation users drove-alone to an initial transit stop or carpool pick up site (Question 11). Calculations: 20.0% x {Total transit riders (36.8%) + Total carpoolers (7.5%)} x 33,972 = 3,006
- n) The average one-way distance to initial transit stop or carpool site (Q11xQ12):

Partial trips to transit or carpool stop	Partial trip, average one-way distance (mile)
A. Walk/ skateboard/ manual scooter	0.5
B. Bicycle	1.3
C. Bus/ light rail/ train/ ferry	2.5
D. Carpool	2.7
E. Drop off	2.6
F. Uber/ Lyft	2.9
G. Drive alone	3.9
H. Electric scooter/ E-bike	0.6
I. Motorcycle	0.0

Also other important results include:

- 53.5% of the new students use alternative transportation in their commute to campus (Q2xQ5). VTA ridership among new students was at 34.6%.

- 28.0% of the commuters who “always have access to a car” and 78.8% who “sometimes have access to a car” chose to take alternative transportation to campus (Q3xQ5). VTA ridership among “always have access to a car” was 50.0%, and among “sometimes have access to car” was 51.3%.

The following tables provide the detailed results and analysis of the findings for each survey question.