

AS-SJSU Transportation Solutions Fall 2017 Student Commute Survey Report

1 Survey

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

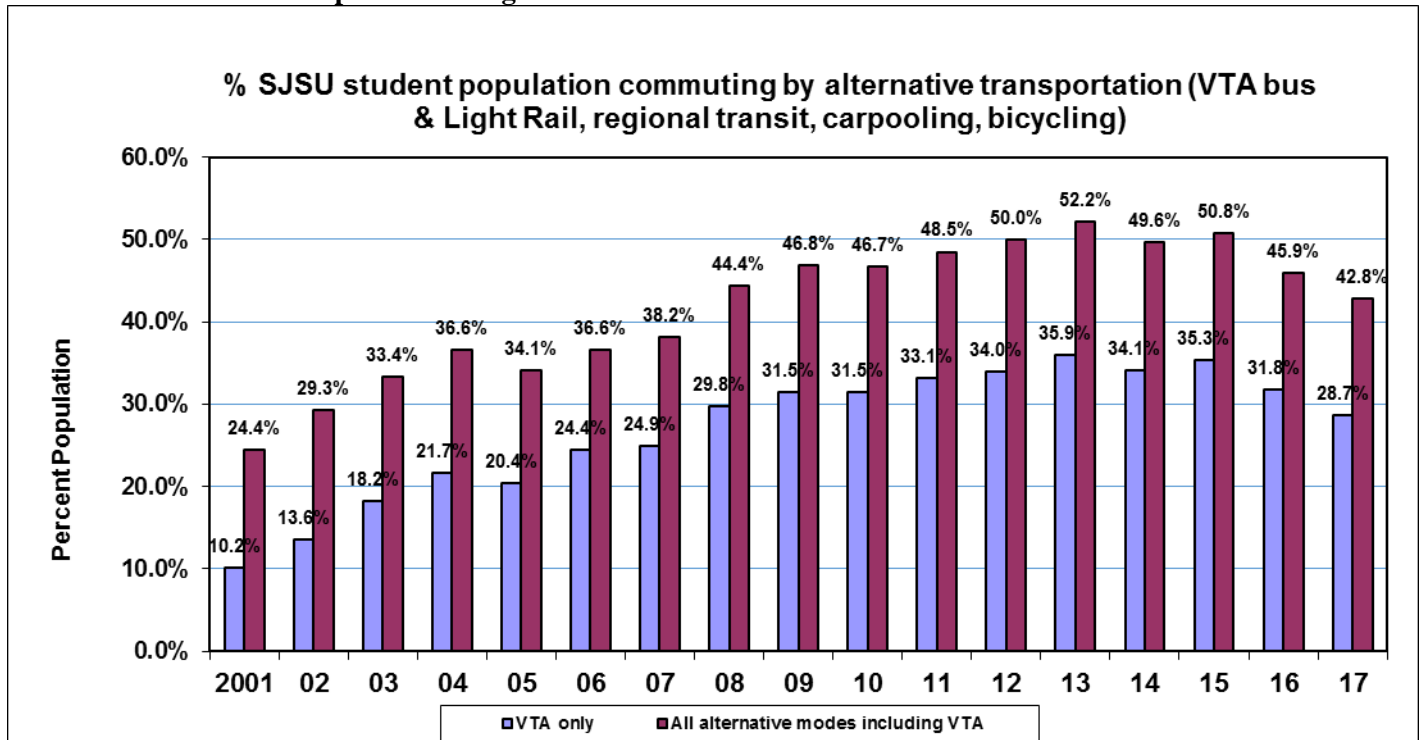
The survey was carried out from November 1st through 15th. The survey’s link was sent to 34,721 students (Regular enrollment, Open University, Special Sessions, etc.); 3,920 participated at a response rate of 11.3%.

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

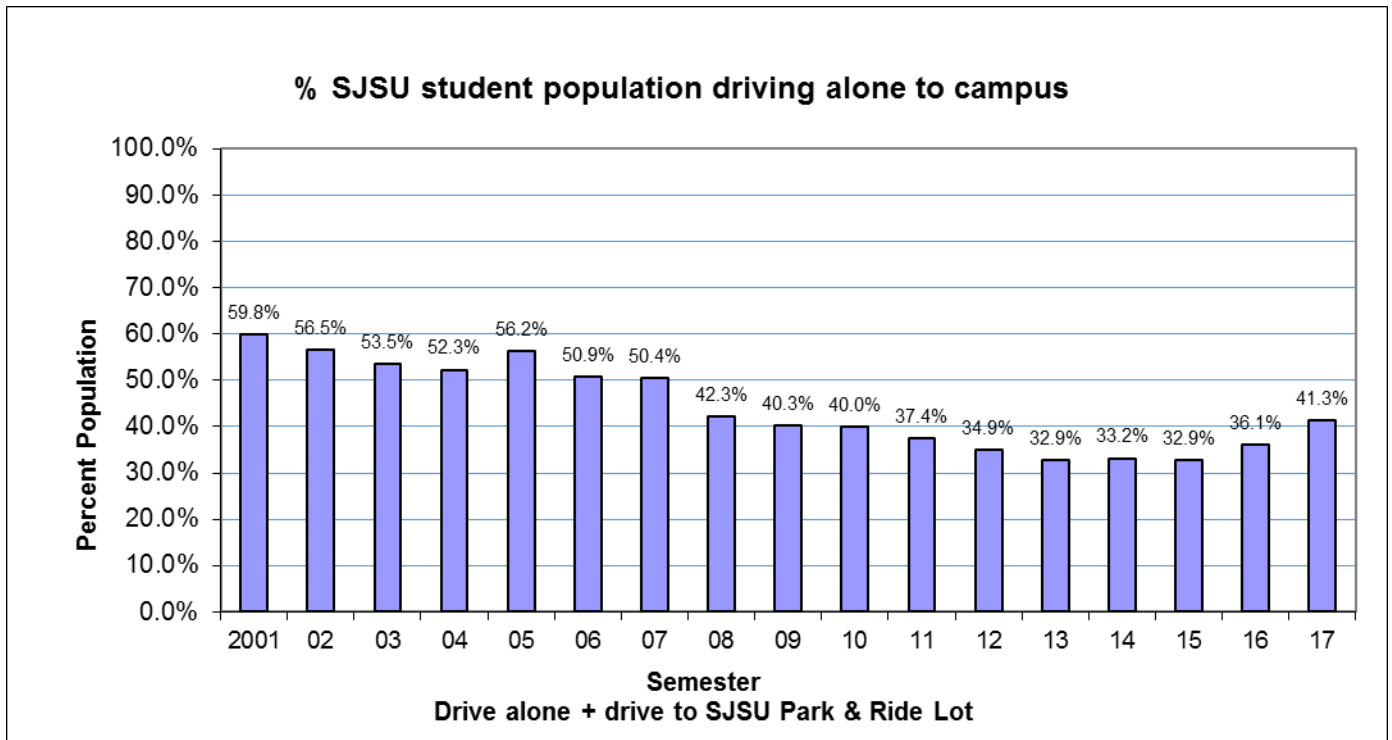
This survey produced consistencies in all response ratios compared with the previous years’ results. The overall alternative transportation usage was at 42.8%. Extrapolated over the population of 34,721, the total alternative transportation users were estimated at 14,854. The Santa Clara Valley Transportation Authority (VTA) ridership to campus was at 28.7% or 9,961 riders in 2017. The rate for walk/skateboard/scooter was at 14.7% (5,104).

SJSU alternative transportation usage trends

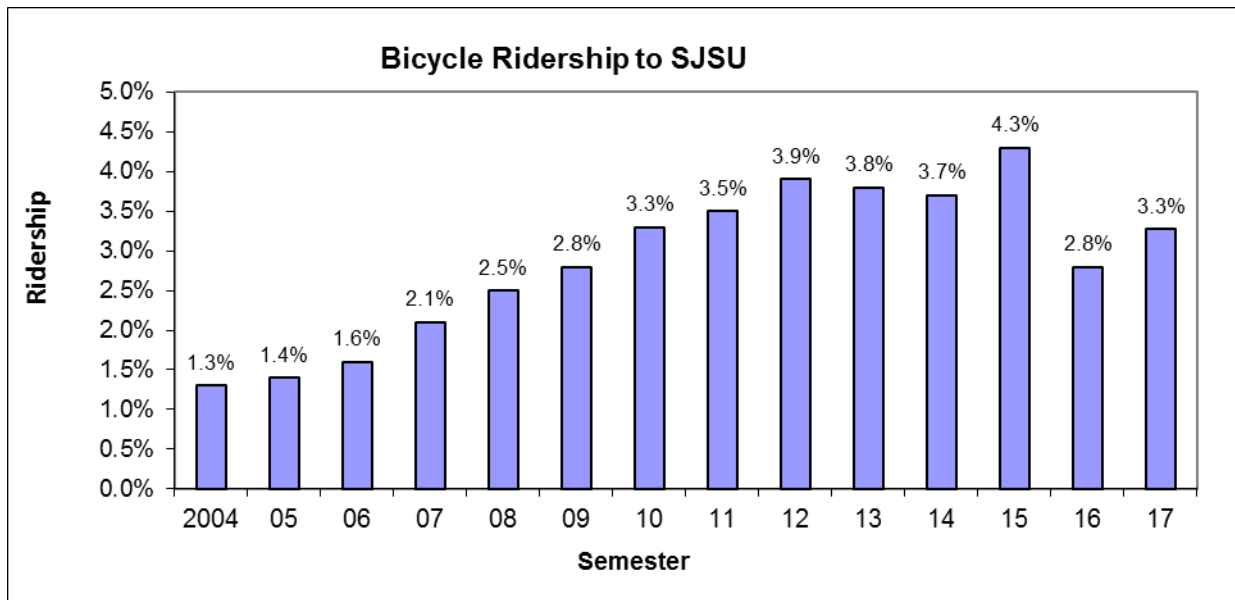


(Regional transit include: Caltrain, BART, Highway 17 Express, Altamont Corridor Express (ACE) train, Amtrak Capitol Corridor and Monterey-Salinas Transit).

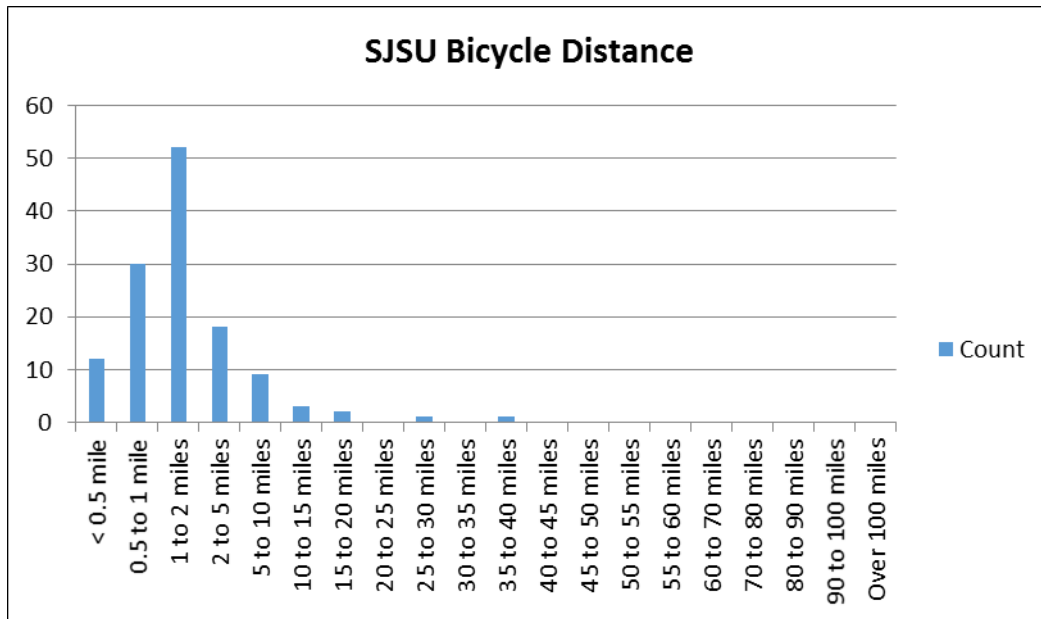
The total transit users including VTA (28.7%) and regional transit (4.1%) made up 32.8% of the population or 11,395 riders. The solo-driving to campus increased 5.2% from 36.1% in 2016 to 41.3% in 2017. The chart below shows the history of drive-alone rate to campus among SJSU students since fall 2001.



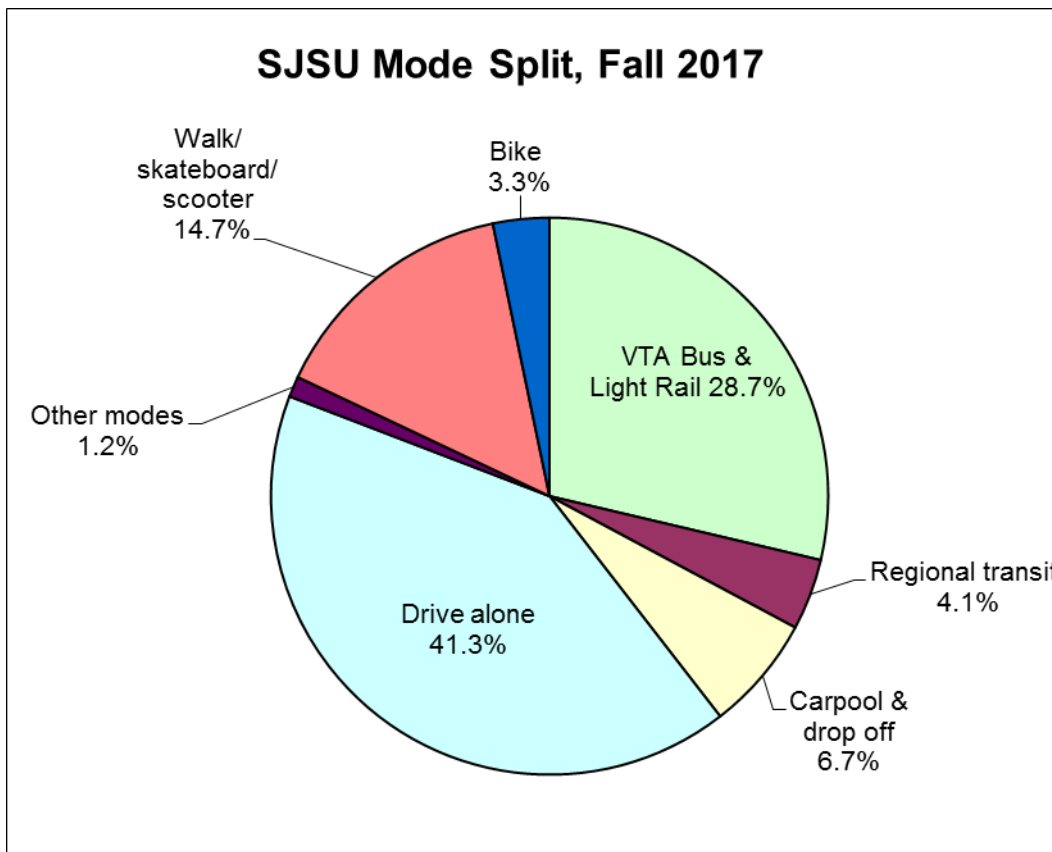
In 2017, 3.3% of the population or about 1,135 biked to campus. The following chart shows the history of bike ridership to campus.



The average biking distance to SJSU was 2.9 miles (Q5xQ9).



The following chart shows the commute mode split to SJSU:



Other significant findings are as follows:

- a) Average frequency of travel to/from campus was 4.03 days per week, from the results of Question 4
- b) Average one-way trip distance (home to campus) was 13.0 miles, from the results of Question 9. Average time of commute was 31.4 minutes (Question 10). The following tables list the average one-way trip distance for each type of commute mode (Q5xQ9).

Transportation Mode	Average one-way distance (mile)
ACE	49.0
Amtrak Capitol Corridor	40.1
BART	32.8
Bicycle	2.9
Bus (VTA)	8.6
Light Rail (VTA)	11.4
Caltrain	30.7
Carpool	14.7
Drop off	12.1
Hwy 17 Express	37.1
Monterey-Salinas Transit Bus 55	No data

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

Transportation Mode	Average one-way distance (mile)
Drive-alone	16.5
Drive to Park & Ride	13.8

- d) Average walking, skateboard/scooter distance:

Transportation Mode	Average one-way distance (mile)
Walk	1.2
Skateboard/scooter	0.9

- e) Other

Transportation Mode	Average one-way distance (mile)
Motorcycle	13.8
VTA Access	11.0

- f) The overall average frequency of travel using alternative transportation was 4.0 days/week or estimated 157 days/year. 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
ACE	4.1	172
Amtrak Capitol Corridor	4.1	172
BART	4.2	176
Bicycle	4.5	189
Bus (VTA)	4.2	176
Light Rail (VTA)	4.0	168
Caltrain	3.7	155
Carpool	3.9	164
Drop off	3.9	164
Hwy 17 Express	3.4	143
Monterey-Salinas Transit (Bus 55)	0.0	No data
Average	4.0	168

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

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

- h) Average walking, skateboard/scooter days:

Walk	5.0	210
Skateboard/Scooter	4.8	202

- i) Other

Motorcycle	3.7	155
Access (VTA)	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 34,721 enrollment, the numbers for non-transit commuters are extrapolated:

- Drive-alone plus Drive to Park & Ride was 41.3% or 14,347
- Carpool & drop off 6.7% or 2,323
- Bike 3.3% or 1,135,
- Walk/skateboard/scooter 14.7% or 5,104

- Other modes 1.2% or 417

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	4.7%	4.2%	-0.5%
B. Carpool	4.6%	3.0%	-1.6%
C. I get dropped off	14.7%	3.9%	-10.7%
D. Drive alone (including to SJSU Park & Ride and motorcycle)	22.1%	17.8%	-4.3%
E. VTA bus/light rail	28.8%	51.6%	+22.8%
F. Regional train/bus (including Caltrain, Hwy 17 Express, ACE, Amtrak)	3.9%	4.2%	+0.3%
G. I live on/near campus so I walk/skateboard/scooter	21.2%	15.3%	-5.8%

l) Net reduction in vehicle trips to campus (based upon prior travel mode):

The TS effectiveness in reducing drive-alone rate in 2017 was 4.3%.

Calculations: Population 34,721 x 4.3% decrease in drive-alone = 1,493 cars x 2 trips/day = 2,986 trips/day

m) 20.2% (2,770) of the alternative transportation users drove-alone to an initial transit stop or carpool pick up site (Question 11). Calculations: 20.2% x {Total transit riders (32.8%) + Total carpoolers (6.7%)} x 34,721 = 2,770

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/roller blade/scooter	0.5
B. Bicycle	1.4
C. Bus/light rail/train/ferry	2.4
D. Carpool	1.9
E. Drop off	2.4
F. Drive alone	3.6
G. Motorcycle	0.1

Also other important results include:

- 43.2% of the new students use alternative transportation in their commute to campus (Q2xQ5). VTA ridership among new students was at 27.4%.
- 25.5% of the commuters who “always have access to a car” and 73.0% 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 15.0%, and among “sometimes have access to car” was 48.0%.

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