

SJSU Transportation Solutions Fall 2006 Student Commute Survey Report

1 Survey results

Transportation Solutions (TS) conducted its sixth annual survey at the end of fall 2006 semester. This was TS's fourth online survey using zoomerang.com. The survey provided significant results that prove this program's effectiveness in reducing reliance on single occupant vehicles and meeting the modal shift targets.

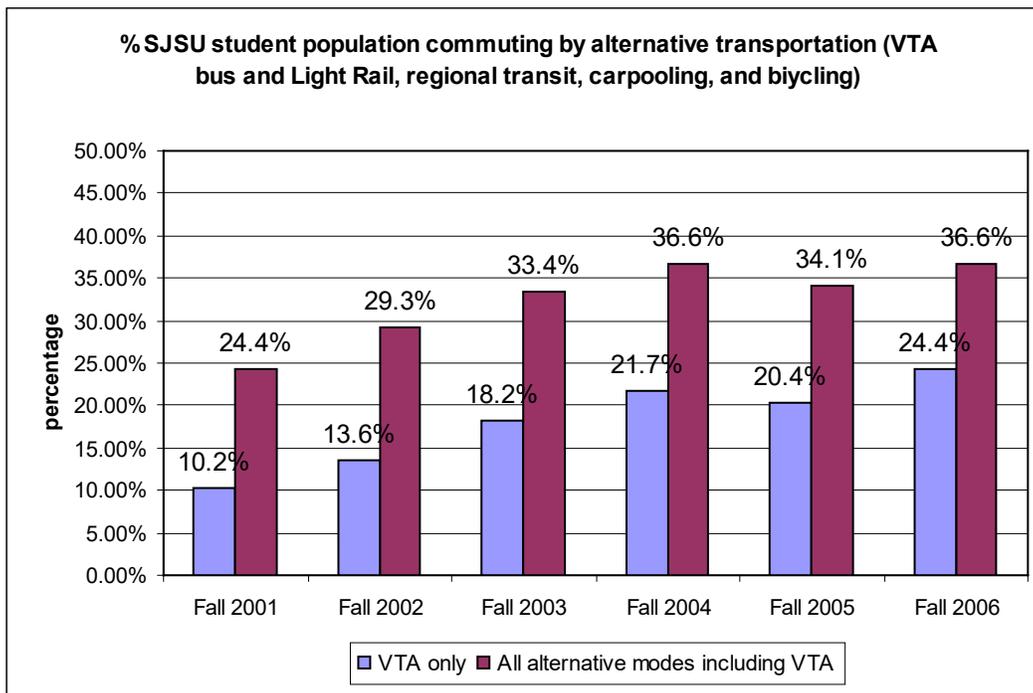
The survey instrument was the same as the one used in the Fall 2005 commute survey without the four parking related questions. The survey questionnaire was approved by the TS grant source, the Bay Area Air Quality Management District's Transportation Fund For Clean Air (TFCA Regional Funds) prior to its launch.

The survey was carried out from November 1 through November 17, 2006. The survey questionair was placed on the web and an email with the survey's link was sent to 23,450 people. The response rate was 18%, that is, 4,323 people took the survey.

1.1 Analysis

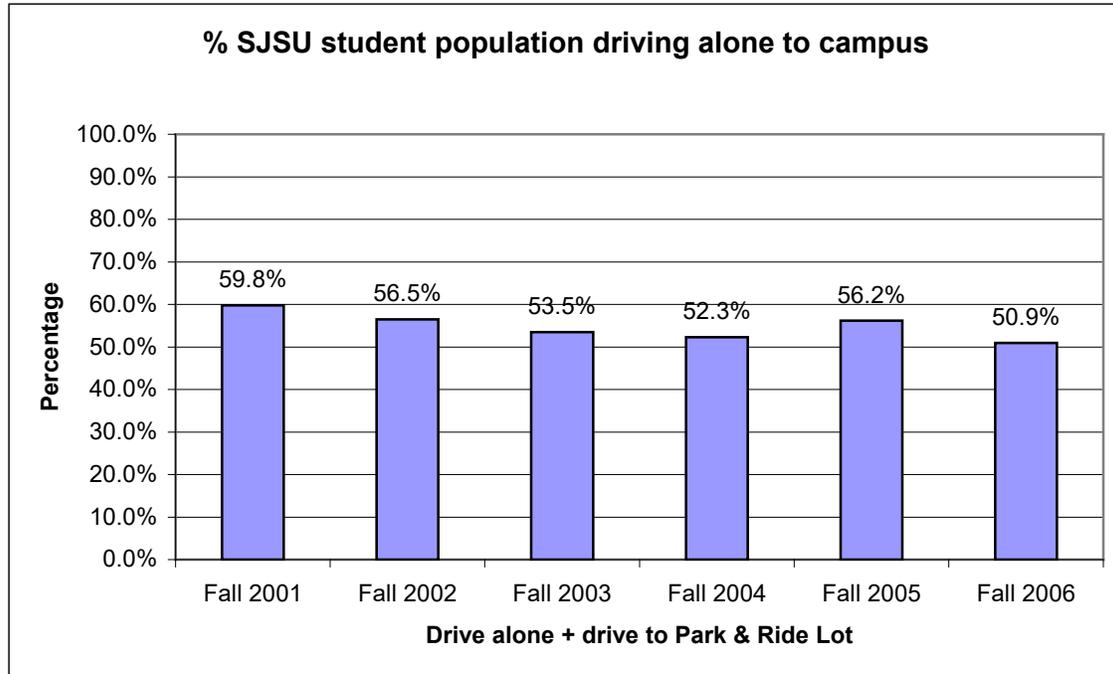
This survey produced consistencies in all response ratios in comparison with the previous years' results. The most important result was the number of solo-drivers decreasing by 5.6% (from 56.2% in 2005 down to 50.9% in 2006) which translates into 1,680 fewer cars coming to campus. The local transit (VTA) ridership to campus increased by 4% (from 20.4% in 2005 up to 24.4% in 2006 and 2.7% increase from 2004). This translates into 1,200 new riders, recovering the dip in 2005 as the following graph shows:

Alternative Transportation Usage Graph



Regional transit include: Caltrain, BART, Highway 17 Express, Altamont Commuter Express (ACE) train, and Amtrak Capitol Corridor. Also, the chart below shows the decrease in drive-alone rate to campus among SJSU students since fall 2001.

Drive-alone Graph



The total transit users (local and regional) make up 28.6% or 8,580 people. Some of the other significant findings are as follows:

- Average frequency of travel to the campus: 3.6 days per week, from the results of Question 4
- One-way trip distance (home to campus): 15.7 miles (average), from the results of Question 9. The TS GIS technician also calculated this average to be 14.3 miles using the student address data. This was done by running the student population address data through the GIS Network Analyst. It should be noted that the Network Analyst finds the shortest path between the student residence and SJSU.
- Number of days per week using transit/carpool/alternative commute mode: 3.7 days/week, from the result of q4xq5
- Mode of travel when not using transit:

The responses from Questions 5 provide the percentages for all the commute modes. Based on this, of the 30,000 students:

- 50.9% or 15,270 drive-alone,
- 6.5% or 1,950 carpool,
- 1.6% or 480 bike,
- 11.5% or 3,450 walk
- 0.9% or 270 use other modes

- e) Mode of travel prior to use of SJSU-Associated Students services: The results of questions 17 and 18, mode of transportation before and after using TS services, show TS effectiveness with 10.1% decrease in drive-alone rate.
- f) Net reduction in vehicle trips to campus (based upon prior travel mode):

$$\text{Population } 30,000 \times 10.1\% \text{ drop in drive-alone} = 3,030 \text{ cars} \times 2 \text{ trips/day} = 6,060 \text{ trips/day}$$

Other important results include:

- 41% of the new students use alternative transportation to campus. (q2xq5).
- 28% of the people who always have access to a car and 73% of the people who sometimes have access to a car choose to take alternative transportation to campus (q3xq5).

The following table provides the detailed results and analysis of the findings for each survey question:

1.2 Table of Results

San Jose State University Transportation Survey Fall 2006
 Response Status: 4,323 Completes and Partialals
 Filter: No filter applied

Fall 2006 Fall 2005
 To 1 decimal point

1. Enter contact information for prize notification:		
4137 Responses		

2. Is this your first semester at SJSU?			Fall 2006	Fall 2005
Yes	1462	34%	33.8%	36.4%
No	2861	66%	66.2%	63.6%
Total	4323	100%	100.0%	100.0%

3. Do you have a car available for getting to San Jose State University (SJSU)?			Fall 2006	Fall 2005
A. Always	3300	76%	76.3%	79.7%
B. Sometimes	507	12%	11.7%	10.9%
C. Never	516	12%	11.9%	9.4%
Total	4323	100%	100.0%	100.0%

4. In a typical week, how many days do you come to SJSU?			Fall 2006	Fall 2005
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A. One day a week	317	7%	7.3%	6.5%
B. Two days a week	812	19%	18.8%	19.2%
C. Three days a week	614	14%	14.2%	13.7%
D. Four days a week	1445	33%	33.4%	33.6%
E. Five days a week	806	19%	18.6%	20.3%
F. Six days a week	122	3%	2.8%	2.2%
G. Seven days a week	207	5%	4.8%	4.5%
Total	4323	100%	100.0%	100.0%
Average frequency of travel to the campus	3.6 days/week			
Average frequency of alternative commute mode to campus (q4xq5)	3.6 days/week			

5. In a typical week, which transportation mode do you mostly use to come to SJSU? (Mark only one mode you use in the longest part of your trip to campus)			Fall 2006	Fall 2005	Fall 2004
A. ACE train	8	0%	0.2%	0.2%	0.1%
B. Amtrak/Capitol Corridor/Thruway Bus	4	0%	0.1%	0.1%	0.3%
C. BART + connecting mode (e.g. VTA Bus 180)	36	1%	0.8%	0.7%	0.5%
D. Bicycle	70	2%	1.6%	1.4%	1.3%
E. Bus (VTA)	442	10%	10.2%	9.2%	11.6%
F. Light Rail (VTA)	580	13%	13.4%	10.5%	9.6%
G. Caltrain	107	2%	2.5%	1.9%	2.3%
H. Carpool with other SJSU students or employees	173	4%	4.0%	5.1%	5.9%
I. I get dropped off	109	3%	2.5%	2.7%	3.6%
J. Drive alone	2045	47%	47.3%	52.0%	47.4%
K. Drive to Park & Ride Lot and take SJSU Shuttle	154	4%	3.6%	4.2%	4.9%
L. Highway 17 Express bus	55	1%	1.3%	1.5%	1.4%
M. Monterey Salinas Transit bus line 55	5	0%	0.1%		
N. Motorcycle	32	1%	0.7%	0.6%	0.6%
O. Outreach (VTA)	7	0%	0.2%	0.2%	0.2%
P. Skateboard/roller blade/scooter	9	0%	0.2%	0.0%	0.2%
Q. Walk, (live on/near campus)	487	11%	11.3%	9.6%	10.2%
Total	4323	100%	100.0%	100.0%	100.0%

6. If you selected VTA Bus in Question 5, please pick the Bus route you mostly use. If not, go to the next Question.			Fall 2006	Fall 2005
22	74	14%	14.1%	12.7%
23	48	9%	9.2%	9.5%
63	13	2%	2.5%	2.6%
64	10	2%	1.9%	3.4%
65	18	3%	3.4%	4.4%
66	20	4%	3.8%	4.4%
68	10	2%	1.9%	3.0%
72	25	5%	4.8%	5.6%

73	28	5%	5.3%	4.8%
81	49	9%	9.4%	10.1%
82	9	2%	1.7%	2.2%
85	15	3%	2.9%	1.8%
180	100	19%	19.1%	17.5%
304	1	0%	0.2%	0.2%
305	1	0%	0.2%	0.0%
522	94	18%	17.9%	16.1%
DASH	9	2%	1.7%	2.0%
Total	524	100%	100.0%	100.0%

7. Your trip to SJSU normally starts from:			Fall 2006	Fall 2005
A. Home/dorm/current residence/friend or relative's house	3729	86%	86.3%	85.4%
B. Work	530	12%	12.3%	13.0%
C. Other location	64	1%	1.5%	1.7%
Total	4323	100%	100.0%	100.0%

8. Where do you go after leaving the University?			Fall 2006	Fall 2005
A. Home/dorm/current residence/friend or relative's house	3616	84%	83.6%	82.7%
B. Work	571	13%	13.2%	14.2%
C. Other location	136	3%	3.1%	3.2%
Total	4323	100%	100.0%	100.0%

9. How far is your daily one-way trip to SJSU?			Fall 2006	Fall 2005
less than 0.5 mile	415	10%	9.6%	7.4%
0.5 to 1 mile	176	4%	4.1%	2.7%
1 to 2 miles	108	2%	2.5%	2.7%
2 to 5 miles	389	9%	9.0%	8.5%
5 to 10 miles	933	22%	21.6%	22.8%
10 to 15 miles	784	18%	18.1%	18.4%
15 to 20 miles	381	9%	8.8%	9.3%
20 to 25 miles	267	6%	6.2%	6.0%
25 to 30 miles	196	5%	4.5%	4.9%
30 to 35 miles	172	4%	4.0%	4.4%
35 to 40 miles	123	3%	2.8%	3.2%
40 to 45 miles	88	2%	2.0%	2.1%
45 to 50 miles	76	2%	1.8%	2.1%
50 to 55 miles	70	2%	1.6%	1.6%
55 to 60 miles	61	1%	1.4%	1.3%
60 to 70 miles	37	1%	0.9%	1.0%
70 to 80 miles	18	0%	0.4%	0.6%
80 to 90 miles	7	0%	0.2%	0.3%

over 90 miles	22	1%	0.5%	0.8%
Total	4323	100%	100.0%	100.0%
Average one-way trip distance	15.7 miles			

10. How long is your daily one-way trip to campus?			Fall 2006	Fall 2005
less than 5 minutes	352	8%	8.1%	7.2%
5 to 10 minutes	349	8%	8.1%	7.8%
10 to 15 minutes	567	13%	13.1%	13.8%
15 to 20 minutes	683	16%	15.8%	18.5%
20 to 30 minutes	788	18%	18.2%	17.7%
30 to 40 minutes	508	12%	11.8%	11.8%
40 to 50 minutes	363	8%	8.4%	9.0%
50 to 60 minutes	257	6%	5.9%	5.1%
1 hr. to 1 hr. 15 mins.	213	5%	4.9%	4.3%
1 hr. 15 mins. to 1 hr. 30 mins.	101	2%	2.3%	2.0%
1 hr. 30 mins. to 1 hr. 45 mins.	51	1%	1.2%	1.2%
1 hr. 45 mins. to 2 hrs.	37	1%	0.9%	0.6%
2 hrs. to 2 hr. 30 mins.	23	1%	0.5%	0.5%
2 hrs. 30 mins. to 3 hrs.	10	0%	0.2%	0.3%
over 3 hrs.	21	0%	0.5%	0.3%
Total	4323	100%	100.0%	100.0%
Average	29 minutes			

11. If you come to the University by carpooling, bus or train (in Question 3), how do you get to your bus stop, train station or carpool location? <i>If not, skip to Question 13.</i>			Fall 2006	Fall 2005
A. Walk/skateboard/roller blade/scooter	523	40%	39.8%	36.9%
B. Bicycle	45	3%	3.4%	3.4%
C. Bus/light rail/train/ferry	83	6%	6.3%	6.2%
D. Carpool	76	6%	5.8%	6.6%
E. I get dropped off	92	7%	7.0%	9.1%
F. Drive alone	492	37%	37.5%	37.6%
G. Motorcycle	2	0%	0.2%	0.3%
Total	1313	100%	100.0%	100.0%

12. How far do you travel to this bus stop, train station or carpool pick-up location (miles)?			Fall 2006	Fall 2005
0 to 0.25 mile	440	31%	30.6%	32.0%
0.25 to 0.5 mile	202	14%	14.0%	14.9%
0.5 to 0.75 mile	94	7%	6.5%	6.0%
0.75 to 1 mile	147	10%	10.2%	9.4%
1 mile to 1.5 miles	123	9%	8.5%	6.6%
1.5 miles to 2 miles	89	6%	6.2%	5.2%
2 miles to 2.5 miles	52	4%	3.6%	3.8%
2.5 miles to 3 miles	30	2%	2.1%	3.5%
3 to 4 miles	50	3%	3.5%	3.2%
4 to 5 miles	49	3%	3.4%	4.1%

5 to 6 miles	33	2%	2.3%	1.5%
6 to 8 miles	29	2%	2.0%	2.5%
8 to 10 miles	39	3%	2.7%	2.1%
Over 10 miles	63	4%	4.4%	5.1%
Total	1440	100%	100.0%	100.0%
Average Distance	1.8 miles			

13. Do you know about "Spare the Air Days"?			Fall 2006	Fall 2005
Yes	3060	71%	70.8%	59.9%
No	1263	29%	29.2%	40.1%
Total	4323	100%	100.0%	100.0%

14. If yes, do you use bus, rail, bicycle or carpool to campus because of an announced "Spare the Air Day"?			Fall 2006	Fall 2005
Yes	934	28%	28.4%	23.9%
No	2350	72%	71.6%	76.1%
Total	3284	100%	100.0%	100.0%

15. How did you first learn about the Transportation Solutions (TS) or any of the TS services? TS provides AS Eco Pass Sticker (VTA bus/light rail pass), trip planning, carpool matching, Bicycle Enclosure and TS website.			Fall 2006	Fall 2005
A. Website	284	7%	6.6%	6.1%
B. Student Orientation	935	22%	21.6%	19.9%
C. Campus fair or tabling event	83	2%	1.9%	1.5%
D. Email	421	10%	9.7%	12.3%
E. Friend/classmate/colleague	573	13%	13.3%	11.9%
F. I was mailed a letter + brochure	1496	35%	34.6%	32.9%
G. Poster/sign/brochure	49	1%	1.1%	1.6%
H. Spartan Daily	22	1%	0.5%	0.5%
I. I don't know of Eco Pass Sticker or TS	460	11%	10.6%	13.5%
Total	4323	100%	100.0%	100.0%

16. Have you ever used any of the Transportation Solutions (TS) services, including the AS Eco Pass Sticker?			Fall 2006	Fall 2005
Yes	2317	54%	53.6%	47.6%
No	2006	46%	46.4%	52.4%
Total	4323	100%	100.0%	100.0%

17. If yes to Question 16, how did you get to the University before using TS services or AS Eco Pass? If not, skip to Question 20.			Fall 2006	Fall 2005
A. Bicycle	39	2%	1.7%	2.5%
B. Carpooled with students/employees	84	4%	3.6%	4.1%

C. I got dropped off	228	10%	9.7%	10.4%
D. I drove alone (including to SJSU Park & Ride and motorcycle)	797	34%	33.7%	34.2%
E. I was taking VTA bus/light rail before attending SJSU	317	13%	13.4%	12.9%
F. Regional train/bus (including Caltrain, Hwy 17 Express, ACE, Amtrak)	75	3%	3.2%	3.2%
G. I lived on/near campus so I walked	366	15%	15.5%	13.3%
H. This was a new commute for me	456	19%	19.3%	19.5%
Total	2362	100%	100.0%	100.0%

18. If yes to Question 16, how do/did you commute to the University after using TS services or AS Eco Pass?			Fall 2006	Fall 2005
A. Bicycle	54	2%	2.3%	2.8%
B. Carpool	51	2%	2.2%	3.5%
C. I get dropped off	73	3%	3.2%	3.9%
D. Drive alone (including to SJSU Park & Ride and motorcycle)	524	23%	22.7%	25.7%
E. VTA bus/light rail	1151	50%	49.8%	47.5%
F. Regional train/bus (including Caltrain, Hwy 17 Express, ACE, Amtrak)	109	5%	4.7%	4.6%
G. I live on/near campus so I walk	347	15%	15.0%	12.0%
Total	2309	100%	100.0%	100.0%

19. If you use bus or light rail, or carpool to campus, select the THE THREE MOST IMPORTANT reasons for doing so (Mark no more than 3).		
A. Have no other way	461	23%
B. Ability to use Tower Card + AS Eco Pass Sticker	1019	52%
C. Because of a Spare the Air Announcements	75	4%
D. Allows someone else to use the car	152	8%
E. Avoid traffic and parking hassles	1183	60%
F. Avoid paying for parking	1031	52%
G. Avoid paying for gas	771	39%
H. Good for the environment	430	22%
I. Saves time	183	9%
J. I can read or study	347	18%
Other, Please Specify	93	5%

20. What is your employment status?			Fall 2006	Fall 2005
A. Employed full-time	892	21%	20.6%	21.2%
B. Employed part-time	2020	47%	46.7%	46.8%
C. Not employed	1411	33%	32.6%	32.0%
Total	4323	100%	100.0%	100.0%

21. If you're employed, where do you work?			Fall 2006	Fall 2005
A. On campus	346	12%	11.8%	8.8%
B. Within walking distance of campus (e.g. Downtown San Jose)	122	4%	4.1%	3.8%
C. Off campus (e.g. outside of Downtown San Jose)	2472	84%	84.1%	87.4%
Total	2940	100%	100.0%	100.0%

22. What is your class level:			Fall 2006	Fall 2005
A. Freshman (Generally 1st year)	499	12%	11.5%	11.8%
B. Sophomore (Generally 2nd year)	331	8%	7.7%	8.7%
C. Junior (Generally 3rd year or newly transferred student)	1111	26%	25.7%	30.1%
D. Senior (4 or more years)	1087	25%	25.1%	22.3%
E. Second Baccalaureate	94	2%	2.2%	2.3%
F. Credential	133	3%	3.1%	3.6%
G. Master's or higher	992	23%	22.9%	20.1%
H. Open University/continuing education/extended studies/SAL	68	2%	1.6%	1.0%
I. Non student - employee	8	0%	0.2%	0.1%
Total	4323	100%	100.0%	100.0%

23. If you don't take transit (bus, Light Rail, train), what are the reasons? select THE THREE PRIMARY reasons.		
A. Service too slow/not fast enough	1848	67%
B. Require transfers	842	30%
C. There is no service near me or no service at the times I commute to campus	1171	42%
D. Concerns about personal safety	780	28%
E. Concerns about cleanliness, or general comfort	693	25%
F. Service is not reliable (transit not running on time)	729	26%
G. Transit is too expensive	205	7%
H. I don't know about the transit options or how to use transit	564	20%