San Jose State University - Associated Students Transportation Solutions Fall 2001 Student Commute Survey

Phase 1 Final Report

April 2002

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#### Background

Transportation Solutions (TS), a department of the Associated Students (AS) conducted the first student commute survey in the Fall of 2001 at San Jose State University (SJSU) to obtain information that allows TS staff to monitor the trends of student commute patterns. Currently there are major plans underway in downtown San Jose and around the University that will seriously impact the already difficult parking conditions for students. The survey provided data on the number of days students commute each week, primary commute mode, one-way commute distance and commute time, and pertinent demographics.

The survey information will also be used to assess the AS Transit Access Program (TAP) between San Jose State University and Santa Clara Valley Transportation Authority (VTA). The TAP was set up in 1994 in order to promote student use of transit as an alternative to driving to the campus. The fee for the program is part of each student's registration fees paid each semester. Students receive a sticker, which is placed on their Tower Card (student I.D.). By showing this to drivers when boarding VTA buses and light rail, SJSU students are allowed to travel free throughout the VTA system for the duration of the sticker which is one-half year.

#### Methodology

The survey was conducted by randomly sampling classes offered at the university in Fall 2001. The AS Transportation Solutions designed the survey questionnaire and the Office of Institutional Planning and Academic Resources at SJSU constructed the form and printed 1,000 surveys in bubble-scan format. The same office provided the list of classes that were included in the sample. The TS administered the survey in the selected classrooms during the week of November 12-18, 2001. The 20-question survey instrument was passed out to all the students at the beginning of each of the selected classes. The 893 completed surveys were then scanned and tabulated.

The Summary of Key Results is followed by the tables and analysis that discuss the results of the survey. Table numbers generally correspond to the same numbered question in the survey.

#### **Summary of Key Results**

- 71% of all students come to SJSU at least 4 days per week.
- 49% of students drive alone to campus and 11% drive to an SJSU Park & Ride lot. Juniors, at 26%, and seniors, at 44%, drive alone the most. 15% walk to campus as they live on or near the campus. VTA is used by about 9% of students, with 5% using light rail and 4% using the bus. Carpooling with other students or getting dropped off at the university accounted for just under 10% of all trips.

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- Females are using VTA more than males by margin of 59% to 41%. Seniors make up the highest percentage of VTA riders (39%), followed by juniors (29%), with the remaining 30% divided very evenly among freshmen, sophomores, and graduate students.
- Sophomores do the most carpooling with other students (11%), almost double the carpooling rate seen for each of the other class levels.
- 78% of the students with a Tower Card stated that they have a Transit Access (AS/VTA) sticker on the card. About 20% stated that they do not have the sticker, with 2% not knowing what the sticker is. About 41% of students in the survey have used the Tower Card with sticker to ride on the VTA system. Freshmen have used the pass the least (31%). Graduate students were the most likely to have made a trip using the pass at 55%
- Most students have a car available to get to the campus about 83% of students always have access to car and nearly 10% more sometimes have access. About half of transit commuters have a car available all the time. One in five VTA users never has a car available.
- Nearly two-thirds of the students (63%) were unaware of the TS program. Overall, about 80% of each class level learned about TS from three main sources: a brochure, a friend/classmate, or a mailed letter. Most (34%) learned about TS from the letter mailed to them at the beginning of the semester. The next highest method of learning about TS was through reading a brochure, at just under 27% of the respondents. The Spartan Daily was not a major source for discovering the program. Just 8% of students found out about it this way.
- The majority of students (59%) commute 10 miles or less one-way. This means that many could take transit for their journey and not add a great amount of time to their commute when the time needed to park and walk to campus is factored in. For those who primarily use VTA, 62% of all commutes are between 6 and 15 miles.

#### Results

#### 1. In a typical week, how many days do you come to the SJSU campus?

Table 1			
Days/week	Survey Count	Survey %	
1	12	1.4	
2	128	14.5	
3	115	13.0	
4	268	30.3	
5	280	31.7	
6	38	4.3	
7	43	4.9	
Total	884	100.0	

Total may not equal 100% due to rounding.

From the survey we see that more than 60% of students come to the campus four or five days per week. Table 1 shows the distribution by the number of days per week. Of those that come to campus at least 5 days a week, 42% drive alone and walk to the campus, while 11% drive to the SJSU Park & Ride lots. Many students live close by and walk (22%). VTA is selected by just over 8% of these 5 or more day commuters.

Over 9% of students come to the campus six or seven days per week. In this group of students that comes to SJSU more than 5 days per week, most (43%) walk to the campus as their primary commute mode. The results indicate that these are students who live close to the campus and frequently come to use the library or other SJSU resources. Freshmen and sophomores, at about 20% each, are more likely to come to the campus at least six days per week. Graduate students are the least likely to come to the campus this many days. Male students are also almost twice as likely than female students to come to the campus six or seven days per week. On the other hand, 24% of male students in the survey come to the campus 3 or fewer days per week, whereas 34% females commute to campus 3 or fewer days.

For students that come to campus less often - 3 days or less - the drive alone rate increases. The majority (53%) drive alone. Driving to SJSU Park & Ride lots seems not to be affected by the number of days a student commute as it continues to be about 11% of students. VTA use shows a little more use by this group of commuters with 8% picking it as their primary commute mode. Walking to campus drops to about 7% of commuters.

# 2. In a typical week, what mode of transportation do you MOST OFTEN use to commute to SJSU? (Mark only ONE mode used for the longest part of the trip.)

	Survey Count	Survey %
ACE train	2	0.2
Amtrak / Capitol Corridor / ThruBus	1	0.1
BART + other means (e.g., Bus 180)	11	1.2
Bus (VTA)	35	4.0
Light rail (VTA)	44	5.0
Caltrain	9	1.0
Highway 17 Express	9	1.0
Drive alone	434	49.0
Drive to SJSU Park & Ride Lot	96	10.8
I get dropped off	29	3.3
Carpool with other students	56	6.3
Motorcycle	2	0.2
Outreach (VTA)	0	0.0
Bicycle	20	2.3
Skateboard / roller blade / scooter	1	0.1
Walk (live on/near campus)	130	14.7
Other	6	0.7
Total	885	100.0

Table 2

Total may not equal 100% due to rounding.

Table 2 shows the primary mode choice for students commuting to the SJSU campus. Most students choose to drive, with 60% either driving and walking to the campus or driving to an SJSU Park & Ride lot. Walking accounts for just under 15% of the commute trips. With the campus located in downtown San Jose, an area well served by VTA, transit use - bus and rail - stands at about 13%. Getting a ride or carpooling with other students are the modes selected by nearly 10% of student commuters. There is very little use of Caltrain; only 1% of students use it as their primary commute mode. These results compare favorably with the results for Santa Clara County as reported in RIDES for Bay Area Commuters' *Commute Profile 2001.* For the county as a whole, RIDES found the drive-alone rate, including motorcycles, was 78%. Transit accounts for only 3% of commute trips in Santa Clara County, whereas carpool use (17%) is higher overall than for the student population.

It must be noted that the RIDES survey is residence-based, not work/school location

based. That is, the data are collected, analyzed, and summarized based on where the respondent lives. Furthermore, the survey is targeted at working adults rather than students. The commute profile of a student most likely differs considerably from that of someone who works at least 35 hours per week. Students do not necessarily commute every week day, often only coming to campus on days that they have classes. Students' class schedules may vary from day to day, which may influence their commute mode choice. Students also generally comprise a small age range compared to full time workers. As a result, comparisons between the RIDES' Santa Clara County data and the results of the Transportation Solutions survey are interesting but the different methodologies must be kept in mind at all times.

The nearest comparison to RIDES' results is the commute mode of students who come to the campus 5 days per week. The drive alone rate was 45% with 12% driving to the SJSU Park & Ride lots. This creates a combined total fo 57%, still much lower than the county average of 78%. A major difference is the number of people who walk to work. For students, the figure is 17% while for the whole county it is a much smaller 2%. VTA bus and light rail use is much higher in the student population, with 9% of 5 day commuters using those modes versus 2% countywide.

A quick look at drive alone commuters, including motorcycles, shows:

- Males and females drive alone at about the same rate, 51% to 49%, respectively.
- Students who are employed part time drive alone more than those who are employed full time or not employed. 47% of drive alones are employed part time while 22% work full time and 31% are not employed.
- Juniors, at 26%, and seniors, at 44%, drive alone the most. 14% of drive alones are graduate students, with freshmen and sophomore both under 10%.
- Drive alone rates increase by age. Those aged 21 and under hover around a 40% drive alone rate. Those who are older than that all have drive alone rates above 50% with the 41-49 age group the highest at 67%.
- No major difference in drive alone rates was noted by ethnicity. Every ethnic group reported about 40-50% who drive alone. Though American Indian had 75% driving alone, this percentage was based on only 4 survey respondents. The next highest percentage was Filipinos at 54%. Pacific Islander was the lowest with 40% driving alone.

A similar look at VTA use reveals that:

- Females are using VTA more than males by margin of 59% to 41%.
- Students who work part time or are not employed use VTA more than students who work full time. 48% work part time, 42% are not employed, and 10% work full time.
- Seniors make up the highest percentage of VTA riders (39%), followed by juniors (29%), with the remaining 30% divided very evenly among freshmen, sophomores, and graduate

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students.

Asian Americans, at 24%, and Pacific Islanders, at 20%, use VTA much more often than other ethnic groups. Only 9% of African Americans, 11% of Caucasians, and 6% of Hispanics use VTA as their primary mode.

The survey showed another notable difference between male and female students in their primary commute mode. Female students are much more likely to be dropped off than men, with 6% reporting being dropped off as their primary mode and under 1% of male students mentioning that.

Differences among class levels are significant. The differences seem to be related to availability of a car. Since freshmen and sophomores have a car available less often than upper level students (see the discussion with Table 9), they more often use a non-automobile-based commute mode.

Roughly 10% more freshmen and sophomores walk to campus than do juniors, seniors, and graduate student, while their drive alone rate is about 15% lower. It should be noted that freshmen and sophomores are more likely to live on campus. Graduate students have the highest drive alone rate at 57%. This could simply be the result of owning a car but might also be due to the fact that a portion of graduate students directly comes from or go to jobs. Because of tight time commitments, some commute modes are not viable choices. Further, graduate student classes are often held in the evening, when less public transportation choices are available.

Sophomores do the most carpooling with other students (11%), almost double the carpooling rate seen for each of the other class levels. SJSU Park and Ride lots are used about equally among all levels, with about 11% of each class commuting this way.

Mode selection also varied by employment status. Just over two-thirds (68%) of those who are employed full time drive alone as their primary mode choice. This compares to 48% for those employed part time and 42% for those who are not employed. Students who do not work (17%) or work part time (15%) are almost twice as likely to walk to campus than full-time workers (8%). Among all three employment categories, carpooling is the mode of choice for about 6% of student commutes. Not one full-time student in the survey responded that their primary commute mode is VTA bus, though 6% stated they use light rail as their primary mode. None by bus may reflect students who drive to work and then come directly to SJSU after work in their cars. Bus use is higher for students employed part time (6%) and non working students (4%) though still comprising only a small percentage of overall commute mode distribution.

#### 3. During a typical week, how many days do you use the commute mode you

#### marked in Question 2 to come to SJSU?

Table 3a			
	Survey Count	Survey %	
1	24	2.7	
2	158	17.9	
3	119	13.4	
4	275	31.1	
5	241	27.2	
6	30	3.4	
7	38	4.3	
Total	885	100.0	

Table 3a shows the basic results of Question 3 in the survey. This table is for reference only. What is important in the analysis is: for what percentage of the days they travel to SJSU do they use their primary commute mode. This is shown in Table 3b.

Percentage of total number days during a typical week students travel to SJSU
that they use the primary commute mode named in Table 2.

Table 3b		
	Days	
Days per	primary	
week	commute	
coming to	mode is	
SJSU	used (%)	
1	100.0	
2	96.1	
3	80.9	
4	91.0	
5	82.7	
6	68.4	
7	86.0	

For the most part, students stick with one commute mode. Table 3b shows the percentage of days students use their primary commute mode (Question 2 on the survey) in relation to the total number of days they typically come to the campus each week. The average for all seven days is 86%. Students who come to SJSU three or five days a week are more likely to use more than one mode of travel during the week. It is not clear from the data why students who commute four days a week tend to stay with one mode. Statistically, one would expect that as the number of days a student comes to the campus increases, so would the number of opportunities to commute by a second or third mode. That is, if you come to the university one day a week, your primary commute mode will be used 100% of the time (one day, one mode). If you come two days, you could have two mode choices. This is why the percentage for four days a week is curious. It will be interesting to see whether this number holds when the follow-up survey is conducted in Fall 2002.

l able 4				
	VTA %	Transit %	Carpool %	Survey %
Walk / Skateboard / Roller blade / Scooter	57	50	13	37.6
Bicycle	1	2	0	1.3
Bus / light rail / train	7	8	0	6.4
I get dropped off / carpool	3	7	36	13.4
Drive alone	32	34	45	38.9
Ferry	0	0	0	0.0
Motorcycle	0	0	0	0.0
Other	0	0	7	2.5
Total	100	100	100	100.0

# 4. If you marked bus, rail, or carpool in Question 2, how do you MOST OFTEN get to your transit stop, train station, or carpool location?

Tabla 1

Totals may not equal 100% due to rounding.

Question 2 on the survey asked students to name the mode they use most often to commute to SJSU. Just over 22% of students use transit or carpool. Table 4 shows what mode these students use to get to place where they boarded the bus or train, or made their carpool connection. Each column of Table 4 shows the breakdown based on VTA only, all transit, carpool, and survey total. Most students using VTA walk or drive. All transit users are similar as about half walk while 34% drive themselves. For carpoolers, 45% drive alone which for many will mean they are the carpool drivers. Because the number of survey respondents who use these modes to commute to campus is small, analysis of variations in the results by gender and class level is not statistically useful.

#### 5. What other modes do you use to commute to SJSU?

Table 5			
	Survey Count	Survey %	
ACE train	3	0.8	
Amtrak / Capitol Corridor / ThruBus	2	0.6	
BART + other means (e.g., Bus 180)	5	1.4	
Bus (VTA)	50	13.8	
Light rail (VTA)	26	7.2	
Caltrain	8	2.2	
Highway 17 Express	4	1.1	
Drive alone and walk to campus	104	28.7	
Drive to SJSU Park & Ride Lot	37	10.2	
I get dropped off	64	17.6	
Carpool with other students	67	18.5	
Motorcycle	6	1.7	
Outreach (VTA)	0	0.0	
Bicycle	10	2.8	
Skateboard / roller blade / scooter	5	1.4	
Walk (live on/near campus)	22	6.1	
Other	4	1.1	
Total Respondents	363		
Total Responses	417		

Percentages based on number of respondents. Multiple responses were allowed.

The survey asked students to name up to two other commute modes they use come to the campus. Table 5 presents the "raw" results of Question 5 in the survey. About 41% of respondents stated that they use at least one other mode - different from the mode they stated in response to Question 2 - to commute. It should be noted that because students use their primary mode most of the time (Table 3b), these other modes are only used, on average, 14% of the time.

Of these other selected modes, driving alone to campus is the preferred choice at 29%, followed by carpooling with students (19%) and getting dropped off (18%). Male and female students equally choose driving alone or carpooling as a secondary mode, whereas female students are over two times more likely than males to get dropped off. Male students also choose driving to the SJSU Park & Ride lots almost twice as much as their female counterparts.

By combining the categories of VTA bus, VTA light rail, and BART plus another means (most likely VTA Line 180), we can create a group that displays the use of transit in downtown San Jose. Note that a respondent could mention more than one mode and therefore, some transit modes can overlap. Examples: A person could have stated that he uses VTA buses as a primary commute mode and VTA light rail as a secondary mode. Or, a person could have stated that he uses both VTA buses and VTA light rail as secondary modes. Excluding those who use VTA buses some days and light rail others, and vice versa, about 7% of students use VTA as a secondary commute mode some days.

By combining the results of Question 2 - Primary commute mode, Question 5 - Other commute mode, and Question 9 - Car availability, the percentage of students who rely mostly or completely on transit to commute to campus can be estimated. Just over 2% of people in the survey who said they <u>never</u> have a car available use VTA buses or light rail, or BART with VTA as their primary commute mode. Of these, about half or 1.2% of all students, are completely VTA dependent.

Similarly, nearly 3% of survey respondents who said they <u>sometimes</u> have a car available use VTA buses or light rail, or BART with VTA as their primary commute mode. Of these, about 58% carpool, get dropped off, or drive as a secondary mode some of the days they commute to SJSU. This leaves 42% of this group, or 1.1% of student commuters somewhat VTA dependent.

Table 6			
	Survey Count	Survey %	
Yes	837	94.2	
No	52	5.8	
Total	889	100.0	

#### 6. Do you have a Tower Card (Student ID)?

Almost all students have a Tower Card. Those who stated that they do not have a Tower Card are mainly enrolled at continuing education/open university students (55%) and graduate students (16%).

#### 7. Do you have the current Transit Access (AS/VTA) sticker on your Tower Card?

Table 7a			
	Survey Count	Survey %	
Yes	655	73.8	
No	191	21.5	
I don't know what this is	23	2.6	
Not applicable	19	2.1	
Total	888	100.0	

Table 7a shows the results for all respondents to survey question, "Do you have the current Transit Access (AS/VTA) sticker on your Tower Card?" These results represent all survey respondents and include those who stated in Table 6 that they do not have a Tower Card.

#### Do you have the current Transit Access (AS/VTA) sticker on your Tower Card? [Table based only on those who answered "Yes" in Table 6.]

Table 7b			
	Survey Count	Survey %	
Yes	654	78.2	
No	165	19.7	
I don't know what this is	16	1.9	
Not applicable	1	0.1	
Total	836	100.0	

Total may not equal 100% due to rounding.

After excluding from the analysis those 52 respondents in Table 6 who do not have Tower Card, 78% of the students with a Tower Card stated that they have a Transit Access (AS/VTA) sticker on the card. About 20% stated that they do not have the sticker, with 2% not knowing what the sticker is. There is very little difference among class level or gender, with the exception of continuing education/open university students where half (2 respondents) stated they possess the sticker - they are not supposed to have one.

#### 8. Have you ever used your Tower Card with the sticker for trips on VTA buses

#### and/or light rail?

Table 8a			
	Survey Count	Survey %	
Yes	359	40.5	
No	495	55.9	
Not applicable	32	3.6	
Total	886	100.0	

As seen in Table 8a, about 41% of students in the survey have used the Tower Card with sticker to ride on the VTA system. A more detailed analysis of the results shows that as students move through class levels, each year they become more likely to have used the bus pass on VTA. Freshmen have used the pass the least (31%). Graduate students were the most likely to have made a trip using the pass at 55%. Two interpretations of the data come to mind. First, the increase each year could be the cumulative effect of students having used the sticker "sometime while at SJSU." Obviously the longer a student has been attending, the more likely a student will have used the sticker for travel. It could also be interpreted from this data that as students use the VTA system more each year through their academic years, they become more accustomed to riding on the system and its benefits; as a result, transit could become a long-term commute choice after they have finished college.

Have you ever used your Tower Card with the sticker for trips on VTA buses and/or light rail? [Table based only on those who answered "Yes" in Table 7a.]

	Survey Count	Survey %
Yes	329	50.5
No	322	49.4
Not applicable	1	0.2
Total	652	100.0

Total may not equal 100% due to rounding.

When responses are analyzed for only those students who stated they have a Tower Card with sticker, the percentage of those who make trips rose 10% as shown in Table 8b. This increase is also reflected in the percentage of use by class level, which rises to 38% for freshman and to greater than 66% for graduate students. There is no measurable difference between female and male students as almost exactly 50% of each has used the pass on VTA. The percentage of those who responded, "Not applicable" in Table 8a is reduced to near zero.

	Survey Count	Survey	VTA %	Other Transit %
Always	732	82.8	52.6	51.6
Sometimes	85	9.6	26.9	19.4
Never	67	7.6	20.5	29.0
Total	884	100.0	100.0	100.0

Table A

#### 9. Do you have a car available for getting to SJSU?

Most students have a car available to get to the campus. Table 9 shows that about 83% of students always have access to car and nearly 10% more sometimes have access. Again, looking at the results by gender, differences are minimal. As would be expected, freshmen have the lowest access to cars. Just over 64% of them always have a car available, with 17% never having access to a car for their trip to SJSU. On the other hand, seniors are most likely to always have access to a car (87%) with only 4% never having access to a car.

Comparing car availability for the whole survey versus those who use VTA or other transit to commute to campus shows that, not surprisingly, transit commuters have less opportunity to use a car. About half of transit commuters have a car available all the time. One in five VTA users never has a car available.

# 10. How did you hear of Associated Students Transportation Solutions Program (TS)?

Table 10a	Survey	
	Count	Survey %
Have not heard of TS	556	63.3
Brochure	92	10.5
Friend / classmate / colleague	49	5.6
Mailed letter	118	13.4
Poster / signs	16	1.8
Tabling event	5	0.6
Spartan Daily	28	3.2
Website	15	1.7
Other	24	2.7
Total Respondents	879	
Total Responses	903	

#### Table 10a

Percentages based on number of respondents. Multiple responses were allowed.

Students were asked if they had heard of the Transportation Solutions Program (TS) and, if they had, how they learned about it. Table 10a presents the results for all students. Nearly two-thirds of the students (63%) were unaware of the program.

Survey	Survey	Frosh	Soph	Jr.	Sr.	Grad
Count	%	%	%	%	%	%
92	26.5	14.3	23.5	33.0	30.9	25.0
49	14.1	11.4	17.6	14.8	13.2	22.5
118	34.0	54.3	47.1	29.5	37.5	30.0
16	4.6	2.9	5.9	5.7	5.1	2.5
5	1.4	0.0	0.0	2.3	2.2	0.0
28	8.1	8.6	5.9	9.1	6.6	15.0
15	4.3	8.6	0.0	2.3	4.4	7.5
24	6.9	8.6	0.0	5.7	6.6	10.0
327						
347						
	Survey Count 92 49 118 16 5 28 15 28 15 24 <b>327</b>	Survey CountSurvey %9226.54914.111834.0164.651.4288.1154.3246.9 <b>327</b>	Survey CountSurvey %Frosh %9226.514.34914.111.411834.054.3164.62.951.40.0288.18.6154.38.6246.98.6327	Survey CountSurvey %Frosh %Soph %9226.514.323.54914.111.417.611834.054.347.1164.62.95.951.40.00.0288.18.65.9154.38.60.0246.98.60.0	Survey CountSurvey %Frosh %Soph %Jr. %9226.514.323.533.04914.111.417.614.811834.054.347.129.5164.62.95.95.751.40.00.02.3288.18.65.99.1154.38.60.02.3246.98.60.05.7	Survey CountSurvey %Frosh %Soph %Jr. %Sr. %9226.514.323.533.030.94914.111.417.614.813.211834.054.347.129.537.5164.62.95.95.75.151.40.00.02.32.2288.18.65.99.16.6154.38.60.05.76.6327

How did you hear of Associated Students Transportation Solutions Program (TS)? [Table based only on those who were aware of program.]

Table 10h

Percentages based on number of respondents. Multiple responses were allowed.

By taking the results in Table 10a and selecting only those who were aware of the program, Table 10b shows that most (34%) learned about TS from the letter mailed to them at the beginning of the semester. The next highest method of learning about TS was through reading a brochure, at just under 27% of the respondents. The Spartan Daily was not a major source for discovering the program. Just 8% of students found out about it this way.

There is a major difference between genders. Female students are much more likely to have learned about the program by way of the letter, 45% compared to men at 27%. On the other hand, male students are much more likely than female students to have learned about the program from a brochure (33% verses 24%) or the Spartan Daily (12% verses 6%). From the standpoint of class level, freshmen learned most often about TS from the letter (54%), with brochure, friend, or Spartan Daily following at 14%, 11%, and 9% respectively. Overall, about 80% of each class level learned about TS from three main sources: a brochure, a friend/classmate, or a mailed letter.

	Survey		VTA
	Count	Survey %	%
Do not commute	92	10.5	2.6
Less than 1 mile	52	5.9	2.6
1 - 5 miles	166	18.9	19.7
6 - 10 miles	208	23.7	28.9
11 - 15 miles	125	14.2	32.9
16 - 20 miles	55	6.3	3.9
Over 20 miles	181	20.6	9.2
Total	879	100.0	100.0

#### 11. Approximately how many miles is your one-way commute to SJSU?

Totals may not equal 100% due to rounding.

Table 11 shows grouped distances of students' one-way commutes to the SJSU campus for the entire survey and for those who use VTA as their primary commute mode. The majority of students (59%) commute 10 miles or less one-way. This means that many could take transit for their journey and not add a great amount of time to their commute when the time needed to park and walk to campus is factored in. For those who primarily use VTA, 62% of all commutes are between 6 and 15 miles. Another 20% of VTA riders commute between 1 and 5 miles. Nearly a quarter (23%) of freshmen do not commute at all. This percentage decreases steadily by class level so that graduate students who do not commute at approximately 10% each.

	Survey Count	Survey %	VTA %
Do not commute	87	9.9	0.0
1 - 10 minutes	127	14.4	3.8
11-20 minutes	287	32.6	29.1
21 - 30 minutes	147	16.7	30.4
31 - 45 minutes	99	11.3	16.5
46 - 60 minutes	69	7.8	12.7
61 - 90 minutes	43	4.9	5.1
Over 90 minutes	21	2.4	2.5
Total	880	100.0	100.0

#### 12. Approximately how many minutes is your one-way commute to SJSU?

Table 12 presents student one-way commute times, again presenting the entire survey results plus the results for those who commute primarily on VTA. This table reflects the commute distances reported in Table 11. Commute times relate directly to commute distance. Over half of the respondents (57%) have a commute to SJSU of 20 minutes or less, which corresponds to the 59% of students who commute 10 miles or less. VTA riders have longer commutes than the average student in the survey. Commutes of greater than an hour represent equal percentages when comparing VTA users to the entire survey. Women have commutes that are slightly longer than male students. Graduate students have the highest percentage of long commutes, with 11% of these students commuting over one hour one-way.

#### 13. Your employment status:

Table 13			
	Survey Count	Survey %	
Employed full time	135	15.3	
Employed part time	423	48.1	
Unemployed / do not work	322	36.6	
Total	880	100.0	

Most students work either full time or part time as seen in Table 13. The numbers of working female and male students are nearly identical. Not surprisingly, seniors and graduate students work the most. About two-thirds of each group are employed. Of all the class levels, freshmen work the least with just under 50% employed.

#### 14. Your sex:

Table 14				
	Survey Count	Survey %		
Male	445	50.6		
Female	434	49.4		
Total	879	100.0		

Tables 14 through 17 present demographic information that was collected in the survey. Gender and class level have been used throughout this report in order to evaluate any differences of student commuting, Transit Access Program use, and knowledge of Transportation Solutions based on these categories. Ethnicity and age were asked on the survey but were not used as evaluation categories. Discussion accompanies these four tables only where relevant.

#### 15. Your class level:

	Survey Count	Survey %	SJSU Enrollment
Freshman	95	10.9	18.2
Sophomore	72	8.3	8.6
Junior	233	26.8	20.2
Senior	352	40.5	30.2
Graduate	102	11.7	22.7
Continuing Education /Open University	11	1.3	n.a.
Other	5	0.6	n.a.
Total	870	100.0	100.0

Table 15

Total may not equal 100% due to rounding.

Table 15 contains both the results of the class level question on the survey and the actual distribution of students at the university by class in the Fall 2001 semester (Source: SJSU Institutional Planning & Academic Resources). As can be seen in the table, juniors and seniors were over-represented in the survey, while graduate students and freshmen were under-represented. Since results reported in other sections of this report show differences in answers among class levels, it may be useful in the future to weight the results by class level in order to account for these differences in response rates.

## 16 . Your age:

Table 16				
	Survey Count	Survey %		
17	2	0.2		
18	69	8.0		
19	70	8.1		
20	75	8.7		
21	104	12.0		
22	123	14.2		
23	88	10.2		
24	58	6.7		
25	43	5.0		
26 - 29	104	12.0		
30 - 39	86	9.9		
40 or over	43	5.0		
Total	865	100.0		

## 17 . Your ethnicity:

Table 17			
	Survey Count	Survey %	
African American / Black	32	3.8	
American Indian / Alaskan Native	4	0.5	
Asian American	262	31.3	
Asian Indian	42	5.0	
Filipino	67	8.0	
Mexican American / Hispanic / Latino	111	13.3	
Pacific Islander	15	1.8	
White / Caucasian	219	26.2	
Other	84	10.0	
Total	836	100.0	

Total may not equal 100% due to rounding.