How Do Students Get Around In Davis?
A Third Year Davis Honors Challenge Seminar

By UCD students Athena Chuang
Crystal Castaneda
Patricia Forman
Maria Nozzolino
Mariah Talso

This study and report was performed by UCD students Athena Chuang, Crystal Castaneda, Patricia Forman, Maria Nozzolino, and Mariah Talso, with technical assistance from Student Affairs Research and Information; report text is entirely that of the students.

Abstract
We conducted a random survey of non-freshman undergraduate students via email to determine their use of transportation--- mode of transportation used, frequency of use and purpose. We collected and analyzed this data to primarily determine how students use their cars, how they get to and from campus, how they get to different locations within Davis for different purposes and finally how this differs among on and off-campus students. Our purpose in conducting this survey, and focusing on the use of cars among students in relation to where they live, was to determine the viability of an on-campus apartment complex that does not offer parking.

Introduction
A recent article in the California Aggie reported that at 9:45am on March 1, at Drew Circle and Cowell Blvd, the buses already carried a standing-room-only crowd and were unable to accommodate all the waiting passengers, causing many students to be left behind. Apparently, after the construction of the Allegre and Oak apartment complexes in South Davis there was an increase of passengers and visible strain put on the Unitrans service. To alleviate the congestion, the W-line service was extended, but nearly a year and a half later the issue of overcrowding still persists, as more and more students choose to ride Unitrans to get to campus.

Meanwhile, on any given weekday by 9:45am attendant assisted parking at the Memorial Union parking structure is already under way. Students who opt to drive to campus vie for any available parking space---- following other students walking to their cars or being forced to leave their car with an attendant. Even exiting the parking structure is a difficult task as tight spaces and signs prohibiting left turns slow drivers down. This is a common scenario not only at the MU, but in lots 10, 25 and 47 as well.

Those who choose not to ride Unitrans or drive to campus rely on their bikes, roller blades or skateboards as their primary mode of transportation. At 9:45am the bike circles and crosswalks are teeming with students rushing to get to their 10 o’clock class. As the day progresses, the bike circles and crosswalks become increasingly more crowded.
HOW DO STUDENTS GET AROUND IN DAVIS?

SURVEY RESULTS

As noted, the random survey we conducted asked a variety of broad questions. These questions are the first step in providing an overall, if narrow, sense of the huge issue of transportation among students. Answers available to students varied by the type of question asked. But in general answers were either qualitative—selecting an answer from a list of categorical choices—-or they were quantitative—selecting a percentage corresponding to the frequency of use of a particular mode of transportation. If answers were left blank on qualitative questions that dealt with mode of transportation used, we used the option “drive” as the preference. If respondents indicated more than one response for either qualitative or quantitative questions, we tossed a coin to decide between responses. The survey questions we focused on were:

Q: “Do you have a car in Davis?”
An overwhelming 68% responded yes and 32% said no.

Q: “How often do you drive to campus for class?”
65% responded that they drive between 0 and 24% of the time, while 21% responded that they drive between 95 and 100% of the time.

Q: “How often do you ride a bike/skate/walk to campus for class?”
55% responded that they bike/skate or walk between 0 and 24% while 21% did the same 95-100% of the time.

Q: “How often do you ride Unitrans to get to class?”
Almost half to those asked, 48% responded that they rode Unitrans between 0 and 24% and nearly a quarter, 23%, said between 95 and 100%.

We realize that a student’s choice of transportation is not unchanging. Other factors play a role in the mode of transportation chosen. To get a better sense of how these factors shape a student’s decision we asked the following questions …

Q: “When you go to downtown Davis for errands/entertainment/shopping, how often do you drive?”
32% responded that they drove 0-24% of the time and almost half, 45%, drove between 95 and 100% of the time.

Q: “What transportation do you use the most when it rains?”
Surprisingly, there was not a huge difference here between those that drove, 32% of respondents, and those who rode the bus, 46% of respondents. But those that said bike were only 15% of respondents.

Q: “If you have a job/internship/extracurricular activity, how do you get there?”
55% responded that they drove while 20% responded that they rode the bus.

Q: “How do you get to late afternoon/evening activities?”
While 43% responded that they drove, nearly a quarter either rode the bus or rode their bikes, 23% and 22% respectively.
Cross Tabulations

In conjunction with Steve Chatman and the Office of Student Affairs Research and Information, we were able to analyze various relationships from the survey data we collected. We used the data analyzer SPSS to cross-tabulate results from our random survey and thus establish relationships between two or more variables. The significant relationships we focused on primarily deal with the distance students live from campus and the various modes of transportation they use.

First, since the proposed housing complex would be on-campus, we wanted to know if, according to the responses provided on our survey, a relationship exists between the distance students live from campus and their mode of transportation. We discovered that, among students who drive to campus 95-100% of the time, 59% live more than 4 miles away whereas among those who drive 0-24% of the time, less than 25% live more than 4 miles away. In addition, among students who live within 1 mile of campus, 93% drive only 0-24% of the time. This indicates that the further away students live from campus, the more likely they are to drive. Does this mean that students who live closer to campus are more likely to bike, skate or walk?

Well, among students who bike/skate/walk to campus 95-100% of the time, 44% live within 1 mile whereas among those who bike/skate/walk 0-24% of the time, 82% live more than 4 miles from campus. Among students who ride Unitrans to campus between 0 and 24% of the time, over 60% live within 1 mile of campus. Thus showing that students who live closer to campus are less likely to ride Unitrans. Conversely, among those who ride Unitrans between 95 and 100% of the time, under 20% live within 1 mile of campus.

It appears that a relationship does in fact exist between distance and mode of transportation. This first relationship dealt with choice of transportation to campus, but what about getting around the city of Davis? Here we focus on students who classified themselves as living on-campus. According to our results, 31% of on-campus respondents drive downtown 95-100% of the time. However, 86% of respondents indicated that they had a viable alternate to driving downtown and almost all agreed that they would be willing to use that alternate.

Had all or most students who live on-campus responded that they drive to get downtown and did not have or would not use an alternate mode of transportation, the viability of an on-campus complex without parking would be in jeopardy. However, it appears that less than half of those responding drove downtown at all and an overwhelming majority had an alternate that they would be willing to use.

If we assume that students who live closer to campus are more likely to bike, skate or walk, are they also more likely to consider living on-campus without their cars? This is the crux of the issue, for we would expect that students who are less likely to drive to campus are more likely to be favorable to the proposed complex.

We asked, “Among students who ride a bike, skate or walk to campus for class 95-100% of the time, how many are willing to live at an apartment complex without parking?” This is the crux of the issue for we would assume that students who are less likely to drive to campus are more likely to be favorable to the proposed complex. 33% of these students replied “definitely yes.”

Along similar lines, among students who ride Unitrans 95-100% of the time, how many are willing to live at an apartment complex without parking? Similar to students who bike/skate/walk 95-100% of the time, 33% of Unitrans riders responded “definitely yes.”

And finally, among students who drive to campus 95-100% of the time, how many are willing to live at an apartment complex without parking? Only 8% of these students responded “definitely yes.”
Conclusions

As you have just heard, students who live on-campus are more likely to get to their classes by walking, riding their bikes, or by skating. They rarely use Unitrans or drive. In terms of transportation to campus, this apartment complex is feasible as on-campus students can (and in fact do) live without their cars for this purpose.

Our survey results showed that nearly 68% of students have cars in Davis. But, could they live without their cars? 32% of those surveyed said they could definitely live without their car. While 33% said that they definitely could not live without their car.

Lastly, however, 18% of those surveyed responded that they would definitely live at an apartment complex without parking if it had lower rent and was on-campus. However, if you combine this to the categories, which are labeled “maybe” and “probably” the result, is that 73% of the students surveyed responded that they would consider living in the proposed apartment complex. This is compared to only 27% of students who responded that they would definitely not live in the proposed complex.

Thus, we conclude that it is possible for on-campus students to survive without their cars in Davis. Nevertheless, the question remains whether students are willing to live without their cars. From our survey results, it seems that students are split as to whether they could live without their cars. However, based on the fact that almost 75% of those surveyed responded that they would consider living in the proposed apartment complex, we feel that there is currently an adequate amount of student interest in the proposed complex. However, we would like to make a few recommendations that we feel might increase interest in the apartment complex, these include: 1. Adding a shuttle to an off-campus parking structure where students could leave their cars. 2. Would be to provide a shuttle service to local Laundromats or grocery stores. 3. Guest parking is another concern that should be taken into consideration. Therefore, based on our survey results, we feel that there is currently enough interest in the apartment complex and that it would be a wise investment. However, we feel that if the aforementioned recommendations are added to the proposal, thus providing more incentives for students to live there, then the proposed complex would definitely be not only feasible, it would survive in the Davis housing market.