CAMPUS TRAVEL EXPERIENCE

Group 6
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HMW improve campus travel?

NEEDS + SIGNIFICANCE

Reliability

Although the primary mode of transportation is walking, there is still a proportionate amount of students who use the bus to get to campus. The AC Transit is unreliable due to the inconsistent and inaccurate arrival times. Transit apps need to be more consistent with arrival times, especially for students who live farther away from campus.

Clear pathways

Despite prior scheduling and Berkeley Time to compensate for the arrival time of the desired location, crowds on particular parts of campus seem to lengthen the amount of time getting to class.

Conveniency

Many users had a familiar route to get to campus and did not divert from it. However, others had challenges when facing uphills due to no other bus stops being of nearby reach. Conveniency would enable people to find campus travel more user-friendly rather than having inhibiting factors from arriving at their desired location.

SECONDARY RESEARCH

We wanted to determine the scope of our problem of campus travel by viewing other studies done focused on students walking to and within campus. In a 2016 report by University of California, Berkeley, they surveyed multiple students and identified their demographics in relation to transportation using reports from 2011, 2012, and 2014 University of California Undergraduate Experience Survey (UCEUS) results.

The majority of the students (68%) reported living less than one mile from campus. The majority of the students reported walking or using other means of transportation such as biking, rollerblading, skateboarding, etc. (77%) to campus. Only 11% of students took public transportation to campus, 59% used the AC Transit, 25% took BART, and 16% rode Bear Transit.

RESEARCH GOALS

Efficiency

To understand how students travel to and within campus, we must understand whether any discomfort stemmed from inefficiency.

Mode

A large part of campus travel has to do with how Berkeley students get to campus and how they travel within campus. Researching the method of travel can help us identify whether or not certain types of individuals have fewer reported issues with campus travel.

Issues

Many students have raised issues with campus travel; we needed to conduct research to identify specific pain points, which could later help drive campus-travel improvement efforts.

DISCUSSION GUIDE

Introductions

✏️ Introduce a little about yourself
(name/year/major, Where are you from?)

✏️ Ask them to introduce a little about themselves
(name/year/major, Where are you from? What do you do?)

✏️ Make small talk
(How are you? How is your day?)

Warm-up

✏️ What classes did you have? Where was it?

✏️ Are there certain buildings you dislike having classes in? Why?

✏️ How far do you live from campus? How long does it take? How do you get to campus?

Getting into the knitty-gritty

✏️ Do you rely on certain apps - Google Maps, Transit app - to help you get to class on time? Can you give me an example of how you use them or the typical day of usage?

✏️ What are some of the bugs that prevent you from getting to class on time or from place to place - flyering on Sproul, large crowds, etc.?

✏️ Do you have a specific route when getting to and from classes? Why? What's your route? (Story time)

✏️ How often do you feel the need to Uber/Lyft to class?

✏️ Does Berkeley Time influence your departure? Explain.

Wrap-up

✏️ Give them a chance to ask any questions

✏️ Thank them for their time and explain what happens next.

INTERVIEWS

ℹ️

Kamya

Tanvee

Tiffany

Kang

QUALITATIVE METHOD

To understand campus travel with a higher volume of people, we immersed ourselves into the campus travelers' environment. We chose to observe people in three locations:

Sproul

✏️ The Sproul Plaza zone has high foot traffic. Because of UCPD enforced "wheel hours" bicyclists and skateboarders cannot bike or skate through Sproul Plaza from HOUR to HOUR; this rule seems to allow for a higher volume of pedestrians.

✏️ Students who wheel bikes or carry skateboards/Boosted Boards through Sproul Plaza begin riding them once they pass Sather Gate.

✏️ Students who walk through Sproul mostly avoid people who hand out flyers, or minimize interaction with them. Generally, Sproul's traffic never becomes overly congested with crowds.

Moffitt Library (outside, near Memorial Glade)

✏️ This zone had more people who utilized wheeled transport. This primarily seems to come from the wider roads and more widely spread apart pedestrian traffic.

Northside (Hearst Avenue)

✏️ Wheeled travelers either speed down Hearst Ave towards Downtown Berkeley, or walk their "vehicle" towards the North Gate. Bikers going up Hearst Ave towards the hills; people with Booster Boards; and people with skateboards walk. Here, bikers/board-riders also travel into the Northside residential area.

✏️ People who walk from the North Gate to Soda or Jacobs Hall, have a short but very steep uphill climb; we observed many people become winded.

QUANTITATIVE METHOD

Using Google Form as our survey platform, we gathered 41 responses / participants to collect further quantitative data on our research. Here are some of the important data gathered:

Themes + Findings

Where do you live?

Most students lived on Southside (51.2%). There was an equal proportion of students who either lived in Downtown Berkeley (17.1%) or at/near Frat Row (including Clark Kerr) (17.1%). Only a small portion of students lived on Northside (7.3%) or commuted to campus (7.3%).

Approximate time walking to campus ~ specific campus location

Most students took around 5 to 15 minutes walking to campus (73.2%), the majority taking 5 to 10 minutes walking to campus (48.8%). We found a correlation between those who took around 5 to 10 minutes from campus and those who had classes or buildings to go to in Southside (80.5%).

Campus transportation

Similar with the 2016 survey, we found the majority of students to use walking as their mode of transportation (92.7%). The second largest group used the bus (AC Transit, Campus shuttle) to get to campus/class (51.2%).

Travel apps ~ usage

We found that practically all the students used an app to aid them in their campus travels - 92.7% using Google Maps and 39% using the Transit app. There was a high percentage of students who rely on the apps (73.2%), rating 3 or above out of 5, whereas only 26.8% found little to no usage of travel apps, rating 2 or below out of 5.

Bugs

We asked for students to identify the bugs that intercepted their campus travels. Of the many noted, the majority found crowds (including those on Sproul due to flyering) and bus schedules to be the cause of their campus/class arrival delay (~75%). Other bugs mentioned included walking uphill, construction, back-to-back classes, and poorly-timed traffic lights.
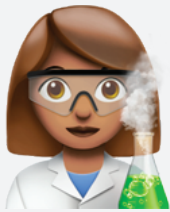
Berkeley Time influence

A majority of students found Berkeley Time influence their departure from home to campus or class to class (90.3%). Although this proves the importance of Berkeley Time, there was no identification of whether of those who voted 3 or above out of 5 used Berkeley Time as a way to get to class early or

STORYBOARD

This is Sophie. She's a third-year MCB student. On Mondays, she starts her morning off with an 8:00AM lecture in Li Ka Shing.
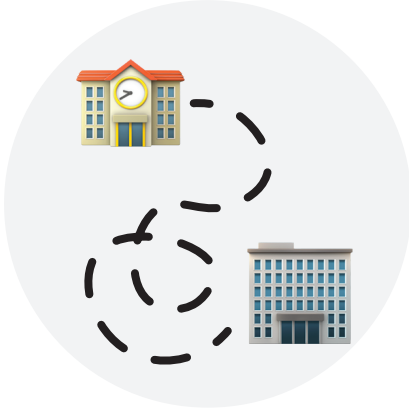
Because Sophie lives on Southside, she needs to leave at 7:30AM to ensure she has enough time to get to class. To ensure her arrival time to class, she needs to wake up even earlier!
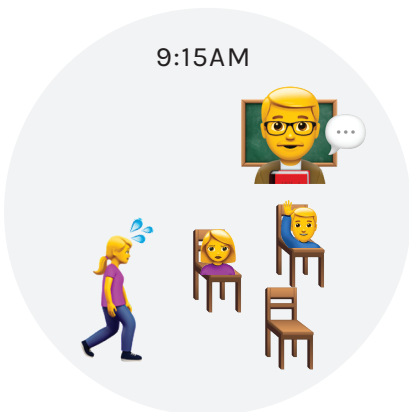
Due to her far distance away from Li Ka Shing, she usually takes the AC Transit. However, despite waking up early, the bus tends to arrive either too early or too late. The bus listings are often inaccurate, so Sophie often ends up walking to the distant lecture hall.
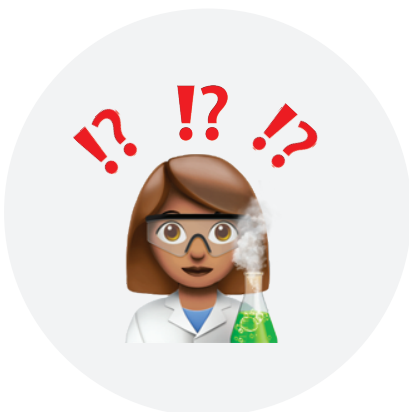
Once her class at Li Ka Shing ends at 9:00AM, Sophie needs to attend her Sociology lecture in Barrows! By 9:06AM, she has barely reached the Campanile!

9:15AM

Sophie walks quickly, but still arrives to Barrows only until after Berkeley Time. She arrives late and drenched in sweat. Once she arrives, her professor has already begun lecturing so Sophie quietly yet troublingly finds a seat.

How can Sophie attend her lectures, and get around campus comfortably?

2 SYNTHESIS METHODS

AEIOU Framework
Experience of campus travels

Activity

- Heading to class, usually walking
- Listening to music
- Looking at phone
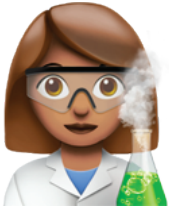- Awareness of surroundings
- Choice of clothes

Environments

- Daylight
- Within campus
- Southside to Northside
- Among all the other students
- Each department
- Crowded areas (Sproul)
- 10 mins for Berkeley Time

Interactions

- Check the time for class
- Check the way on different apps like Google Map or Transit app
- Waiting for a bus
- Walking
- Call an uber
- People flyering on sproul

Objects

- Uber/Lyft
- Personal schedule
- Transit app
- Google Maps
- Flyers on Sproul
- Cellphone
- Earphones

Users

- Students (undergrad and grad)
- Professors
- Drivers

3 Personalities

Sophie

Occupation: Student
Demographics: Female, 2nd year, MCB

Goals and needs:
- Get to class on time between classes switch-ing
- Less traffic on the way to class

Pain points:
- Locations of two class are too far from each
- Too much flyering on Sproul
- Route to class is too uphill

Personality:
- Well self-discipline
- Focus on efficiency
- Various habits

Alex

Occupation: Grad Student
Demographics: Male, 1st year, Architecture

Goals and needs:
- Well personal travelling experience through campus
- Not to be too late for class

Pain points:
- So much people on campus plaza
- Professor start class before Berkeley time

Personality:
- Chill
- Loves photography
- Open-minded

Vivian

Occupation: Student
Demographics: Female, 4th year, CS

Goals and needs:
- Reliable bus schedule
- Easier route for uphill walk

Pain points:
- Some building uber/ lyft unaccessible
- Clothing unpredictable for traveling through campus (weather, class need...)

Personality:
- Not a big fan of working out
- Loves social activities
- Exploration for a wide interests

10 KEY INSIGHTS + IMPORTANT QUOTES

Here are insights from our interviews and important quotes that led us to our findings:

Walking is the primary mode of transportation, secondary is the bus.
"It takes me 10-15 minutes to get to campus and I usually walk to most of my classes, but if I'm going to Haas, I'll take the bus."

Travel to the East side of campus is difficult.
"I really dislike having class in Pimentel because I feel like from all the directions that I possibly could walk to Pimentel from, it's always an uphill walk and it doesn't get easier, no matter how many times I do it."

People have a familiar route to campus and do not divert from it.
"I mapped [my route] on the first days of classes and I just stuck to that path."

Most students do not find the 10 minute passing period to be enough time to travel across campus.
"The 10 minute in between class period is sometimes not enough so I end up running a couple minutes late and campus is really crowded at that time."

Berkeley Time influences when people leave for class.
"I usually will leave two minutes going into Berkeley Time but I always make it on time."

Clothing influences people's mode of transportation.
"I have Ubered to Haas a couple times because it was really hot and I was wearing business professional, not because of time."

People try to avoid busy parts of campus, such as Sproul.
"I'm usually not in the middle part of Sproul but am on the sides, near the trees."
"I avoid walking on Sproul because people will be flyering so I go through Lower Sproul or the back."

Bus system can be unreliable due to inconsistent/inaccurate arrival times.
"I missed the 6 twice today. I had an hour gap between my two classes and I was studying in Esh for that hour and noticed that the 6 stop was outside but saw it just rode by."

People who live closer to campus are more relaxed when it comes to time, while those who live farther are more wary.
Southside: "To get to campus maybe 7 minutes because I'm a fast walker."
Downtown: "Since most of my classes are in the center/chem department of campus, it takes me 15-20 minutes to get there, especially going uphill."

Transit apps are primarily used to check bus schedules or to navigate unfamiliar areas of campus.
"I use Google Maps when I'm going to a building I haven't been to before/I want an estimate of how long it will take to get there."

REFLECTION

After interviewing people and analyzing the data we collected, here are the conclusions we have reached:
- People's primary mode of transportation is walking
- Common bugs that prevent people from getting to campus or class on time include crowded buses, flyering on Sproul, large crowds, and walking uphill
- Berkeley Time has a large influence on when people leave for class

Our data confirms that there is a problem with the campus travel experience and there is a need for improvement. No matter one's persona, whether they are a first-year or a fourth-year, there are issues they face that have yet to be resolved.

As the interviewers, we found that a lot of the bugs we face are quite common among our peers and everyone has their own method to deal with them, whether that be Ubering to class or avoiding the busy areas of campus. Our questions allowed our interviewees to be honest about the struggles they face, as we kept them open enough to receive a wide variety of answers. From our findings, we did not need to redefine our problem, as they reaffirmed our predictions.