Powerpoint

Project Report

Introduction

The domain of our project focuses on the topic of Transportation; mainly, the topic of how we can get people outside of their UCLA bubble and get them to places for cultural engagement and service events. To gain some insights on how we can better craft a design solution, we needed to do user research. By employing several methods including literature review, competitors analysis as well as structured interviews, we were able to gain takeaways about concrete design opportunities.

Research Methodologies

The first research method we decided to focus on was the Competitor analysis.

For this step of the user research process, we decided to do an assessment of competitors and the current problem whereby we try to join the Facebook group and do some observations on potential user behaviors, try taking the bus in LA as well as analyze the routes, and lastly, create user story for a current traveling UCLA student.

The next research method we used was a Literature review which involved reviewing articles about, Transportation in LA and Transportation for college students.

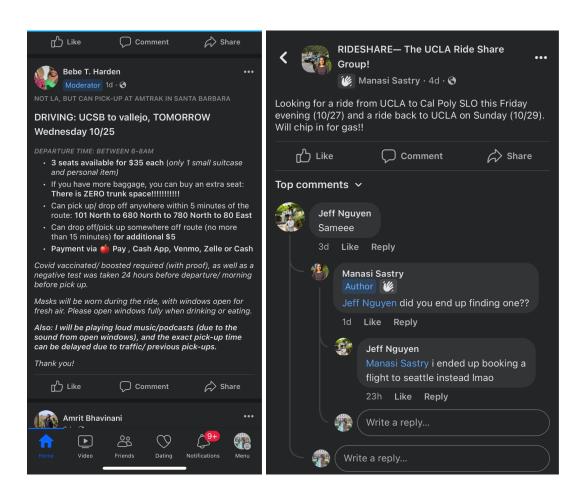
Through this, we were able to get insights on the current state of the LA public transport as well as any key opportunities we can employ in our own design.

Another research method we performed was structured interviews. We asked a set of predetermined questions to 3 volunteering participants for 5 minutes each. We aimed to get one student with a car, one without a car, and optionally, if someone on the carpool Facebook page is happy to talk to us about their experiences. These structured interviews will allow us to gain qualitative data about some things that we might have not been aware of in relation to considerations and empathy.

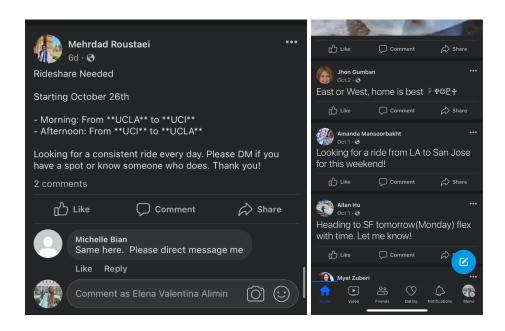
Context, Issues, and Actors at Play

Competitive Analysis

<u>Current UCLA Facebook Rideshare Forums</u>



The screenshots above show a formal posting of someone charging for extra seats, with an emphasis on trunk space, as well as personal driver preferences. The second screenshot also shows an additional consideration where someone may change their minds last minute, and there is no accountability for backing out. In addition, this also highlights how the Facebook group doesn't have active moderators or guarantees that matches riders with drivers.

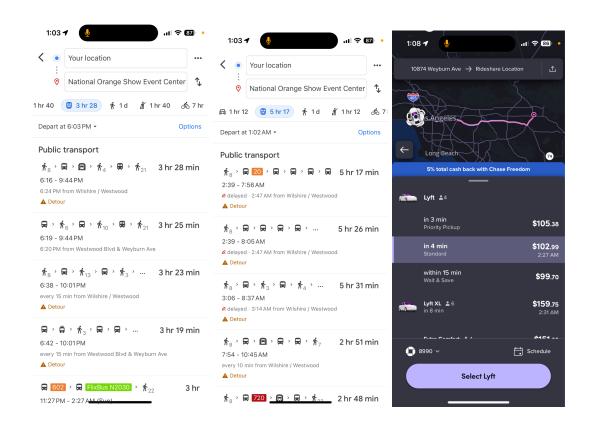


This is an example of a pain point in the ridesharing process, wherein there are users who are looking for regular scheduled rides, for instance with commuting students. On the right, there are further examples of how the postings can be unformatted and lack some key information. For instance, it is unclear if the rideshares are a paid commitment or if the people making requests are even students or not. There is also an issue with possible spam bots making posts, as well as a lack of safety regulations. Furthermore, there is also no indication whether or not the request has any

success of acquiring a rideshare (perhaps through private direct message) or not, leading to potential overlap in other users reaching out.

However, a key benefit to the Facebook rideshare system is a low barrier to entry and a large exposure, although they could benefit from further administrative assistance that our solution can offer.

Structural LA Public Transportation System Issues - Carpooler Side



These are just a few examples that highlight the problem of transportation in Los Angeles and its surrounding areas. To get to an event that is not too far from Los Angeles, people going alone would have to spend either an outrageous amount of

money and/or time. This is yet another pain point that we have to explore and consider when designing our solution.

Literature Review

With the help of Perplexity AI:

https://www.perplexity.ai/search/What-do-articles-HmaC1MrFTuGhr3ldQrxypg?s=c

Articles about transportation in LA suggest that the current state of public transit in the city is inadequate and in need of improvement. The transportation system is described as underdeveloped, failing, and one of the worst in the world (Inoue). The lack of development in public transit can be attributed to various factors, including the ways in which the city has been landscaped to prioritize drivers and conservative billionaires with stakes in the automobile industry investing to kill public transit (Inoue). The current transportation spending in California is also criticized for not matching its climate promises, with the bulk of the transportation dollars being spent to maintain and expand car-centric roads and freeways (Times Editorial Board).

The underdeveloped and failing transportation system is detrimental to the city in how it helps grow the divide between the haves and the have-nots, making it difficult for those who cannot afford a license or a car to access anything they need in their day-to-day life that would help their upward mobility (Inoue). However, there are non-car options available to residents, yet only about 15% of Los Angeles residents walk, bike, or use public transit (itdp.org). Transit agencies across California are grappling with a decline in revenue and the end of federal funding that has been a fiscal cliff (Kamal).

Structured Interviews

Interview Questions:

1. How do you typically commute to and from campus and off-campus destinations?

2. Can you share any specific challenges or difficulties you've encountered with

transportation in Los Angeles?

3. What tools or resources do you use to find out about cultural and community

engagement events?

4. Have you ever had to miss out on a cultural or community engagement event

due to transportation-related issues?

5. Can you describe any successful experiences you've had related to

transportation to a cultural engagement or community service event in Los

Angeles?

6. Would you be interested in a carpool application specifically designed for UCLA

students to facilitate transportation for community service and cultural

engagement events? Why or why not?

Interviewee backgrounds:

Interviewee #1: Damon Lau

Background: Damon Lau is a 4th year Communications major living on the hill. He is

involved in UCLA's Hong Kong club, REACH, and Communications Club and is a

campus ambassador for Tinder and Samsung. Damon has been part of Facebook's

UCLA RideShare program but ended his engagement in the group after being scammed

by a Facebook user.

Interviewee #2: Brooklyn Burgess

Background: Brooklyn is a 3rd year Biology student living in a university apartment. She is a facilitator for a nonprofit organization, a representative for NSLI for Youth Alumni, and a volunteer for a hospital in Santa Monica.

Interviewee #3: My-Thuan Ha-Hoang

Background: My-Thuan is a 3rd year MIMB student living on the hill. She is currently involved in VSA and is part of ASUCLA's catering services.

Stakeholders and insights

Competitive Analysis (User stories)

<u>Structural LA Public Transportation System Issues - Carpooler Side</u>

Example of Person A user journey: Person A is an outgoing freshman at UCLA that loves music and would like to experience a music festival that is located in San Bernardino. She would like to find reliable transportation to take her to and from the festival location, but she sees that the only affordable option of public transportation will take her 4 hours longer than getting an Uber/Lyft, however she does not have the financial viability to spend \$100 on the rideshare herself. As a result, she decides that it's not worth her time and money, and decides not to go.

This is an example of the varying changes in public transportation options for transport from Westwood to San Bernardino, which is where a large music festival (Escape Halloween) is being held. Many UCLA students attend festivals that are miles away

from UCLA for entertainment, such as Escape Halloween and have the issue of arranging rideshares given the distance. These examples highlight a key issue in having to transfer lines at least 5 times, which is further exacerbated at odd hours (from 3 hours, leading to 5 hours). This also highlights a safety issue, in which if a student chooses to take this route alone, they may risk not arriving to their destination in time. In contrast, the other option would be Lyft/Uber, which is not only unreliable during odd hours, but also extremely expensive at >\$100 which touches on the issue of affordability on a college student level.

Expense of gas & limited carpooling options - Driver side

Person B User Story: Person B is a student who owns a car and volunteers in a soup kitchen in Downtown LA every weekend. They make trips from Westwood and back alone, but find that gas prices have been rising up to ~\$6/gallon (10/28/2023, Source: GasBuddy). Seeing that this is a regular trip, Person B is looking for other students interested in volunteering and is willing to pay a small price to come with them on their ride. Person B does not mind charging a lower fee, because they will be making the trip to Downtown LA every weekend anyways. They would prefer if it was other UCLA students who carpool with them, given numerous safety considerations.

Competitive Landscape for similar platforms

Platform/Application	Description	Category

Lyft/Uber Share	Ride share on existing	Transportation
	players, wherein the costs	
	of Uber-ing may be	
	lowered down for small	
	groups of people.	
Facebook Rideshare	Members can post at any	Transportation
Group	time and gain large	
	visibility instantaneously,	
	however there is a lack of	
	moderation and safety	
	protocols for accountability.	
	protocolo for decodinadinty.	
UCLA student organization	While scattered, many of	Event Discoverability
newsletters, Academic	these events are	
Listservs, Daily Bruin	aggregated into different	
social media, other	e-mails sent out to different	
	e-mails sent out to unierent	
separate accounts	groups of people who may	
separate accounts		
separate accounts	groups of people who may	
separate accounts	groups of people who may be interested, however	
separate accounts	groups of people who may be interested, however may not have the best	
separate accounts	groups of people who may be interested, however may not have the best reach as not everyone	
separate accounts	groups of people who may be interested, however may not have the best reach as not everyone knows about each	

Waze Carpool	Waze, a map application	Transportation
	offers riders to join Waze	
	community to choose the	
	people they want to ride	
	with based on detailed	
	profiles, star ratings, and	
	filters like gender and	
	co-workers.	

<u>Literature Review (Solutions that have been implemented)</u>

The lack of development in public transit in LA can be attributed to various factors, including the following:

- The ways in which the city has been landscaped to prioritize drivers: The city has been designed to prioritize cars, which has led to a lack of investment in public transit (Inoue).
- Conservative billionaires with stakes in the automobile industry investing to kill
 public transit: There are powerful interests that have worked to undermine public
 transit in LA, including conservative billionaires with stakes in the automobile
 industry (Inoue).
- 3. Short-sighted investment in freeway infrastructure as the future: The demise of LA's original public transit system known as the red cars was driven by a few

- different factors, but a big one was short-sighted investment in freeway infrastructure as the future (Reddit.com).
- 4. Cheap cars and gas: Fuel prices have fallen substantially since peaking in 2012, and households in the SCAG region, especially lower-income households, have dramatically increased their levels of vehicle ownership (Reddit.com).
- 5. The sheer vastness in size of LA: LA is a poorly planned city, and unfortunately, it may never get to a NY or Chicago type transit because of something called "the last mile" problem (Reddit.com).
- 6. Money, land-rights, NIMBY's, and other issues: Problems like money, land-rights, NIMBY's, and other issues also hinder improving transit systems (Reddit.com).

The lack of development in public transit is detrimental to the city in how it helps grow the divide between the haves and the have-nots, making it difficult for those who cannot afford a license or a car to access anything they need in their day-to-day life that would help their upward mobility (Inoue). However, there are non-car options available to residents, yet only about 15% of Los Angeles residents walk, bike, or use public transit (Elkind). Despite the challenges, there are suggestions for improvement, such as increasing safety, cleanliness, and comfort measures to make people more willing to ride public transit (Inoue). California should be spending the bulk of its transportation funding to remake the urban landscape so people have real choices in how they get around (Manville et al.). The COVID-19 pandemic has amplified the importance of equity-driven transport policies, and the higher sustained ridership on Metro compared to pre-pandemic levels is a positive sign (itdp.org).

The "last mile problem" refers to the challenge of getting commuters to and from their final destination from a transit stop or station. It is the distance a commuter needs to travel from a transit stop to their destination, or vice versa (Remix.com). The problem arises when a potential rider is further than a "comfortable distance" to the necessary fixed-route stop (Stanion). The "first mile" refers to the distance a commuter needs to travel from their origin to a transit stop or station (Remix.com).

The last mile problem is a significant obstacle in developing more efficient and equitable public transportation (Remix.com). It is a persistent issue that transit and transportation planners face in moving populations a mile or two (Descant). In Los Angeles, the last mile problem is a big obstacle in developing more efficient and equitable public transportation (Remix.com).

Cities are tackling the last mile problem by exploring solutions to increasingly complex public transportation challenges (Remix.com). Seattle, for example, has worked to resolve the first and last mile issue by offering on-demand ridesharing services (Remix.com). Commuters can download an app to request transportation from various service locations to a nearby station stop or transit hub (Remix.com). In Wake County, North Carolina, transit agencies have effectively eliminated 72% of their possible customer pool due to the last mile problem (Stanion).

To address the last mile problem, LA Metro has launched its own Lyft-like service called micro-transit (Carino). The vehicles can be hailed by riders at street corners who need to get to transit hubs or destinations not served by buses and trains (Carino). LA Metro also has a unique program to improve access around transit stations and stops called the First/Last Mile Program (Metro.net). The program aims to make it easier to

travel in Los Angeles by improving the safety of public streets and sidewalks around Metro transit areas (Metro.net). The program includes plans for new transit projects, plans for existing stations, and other external projects that support the First/Last Mile goals (Metro.net).

<u>Structured Interviews (Responses and Takeaways)</u>

Interviewee #1: Damon Lau

- "For on campus activities, I usually just walk to my destination. For the most part, most of my off-campus activities are within walking distance so I also just walk to those, but if an event is outside of Westwood, I usually just take the bus."
- 2. "Before UCLA provided all students with TAP cards, I thought that transportation was really expensive. Most of my friends are car-less so we would have to Uber around everywhere so I love having my TAP card because I don't spend any money on transportation anymore. With that being said, the bus is really slow and unreliable."
- 3. "For my Hong Kong club, they post a weekly newsletter that tells members about all the upcoming events. I also follow Instagram accounts of different organizations and they usually post events there. I'm not really involved in off-campus activities so I wouldn't know where to look, but I've also never really seen off-campus events advertised.
- 4. "I've missed so many events because of transportation issues. If an event is far away, I usually am able to carpool with a friend, but if all the seats are taken, I'll just miss the event because Ubers are expensive and I don't feel comfortable riding the bus at night."

- 5. "Recently, I had to go to Santa Monica for a REACH event. The organizers of the event made a RideShare group in GroupMe that was really efficient. People would ask for a ride or volunteer space in their car."
- 6. "I would be so interested! Facebook's UCLA RideShare group is full of scammers so it would be nice to have a real rideshare program for only UCLA students."

Interviewee #2: Brooklyn Burgess

- "I usually walk or take the Bruinbus to class but for anything outside of Westwood, I'll just drive my car."
- 2. "Having a car in LA is so expensive. I'm paying an arm and a leg to have my car with me because I need it to get to work. I would take the bus, but my commute would be 40 minutes long and that's just not worth it for me. Also, some of my shifts end past midnight and I don't think it would be safe to ride the bus at such late hours."
- 3. "In the organizations that I'm involved in, we usually advertise events through social media, mainly Instagram. I think most organizations communicate this way."
- "I've actually never really had an issue with transportation because I have my car.
 I would be screwed, though, if my car were to ever break down."
- 5. For my Chicano Studies class last year, our class had to go to Venice Beach to perform a ritual with the local community for Day of the Dead. Our TA for the class created a list of drivers and seat fillers to make sure that everyone could make it to the event."

6. "Yes, I would be interested in a carpool app! I feel comfortable driving UCLA students, I would just want there to be a thorough background check to ensure that users of the app are actually UCLA students."

Interviewee #3: My-Thuan Ha-Hoang

- "I use my scooter to get to campus and around Westwood. When I have an activity outside of Westwood, I usually get a ride from a friend or get an Uber."
- 2. "Transportation in LA is really expensive. I don't like taking the bus so I have to Uber everywhere when none of my friends can drive me and it really adds up."
- 3. I mainly use Instagram to see what events are coming up for my clubs and organizations. I also check my emails, Facebook, and GroupMe."
- 4. I've missed many events because of transportation issues. If none of my friends with cars want to go to an off-campus event that I want to go to, I just skip it because it's not worth it to Uber.
- 5. VSA does a good job of organizing rides for us for events held at off-campus locations. We mainly use GroupMe to figure out rides and it's really effective.
- 6. Yes! I feel like transportation is an issue that all UCLA students struggle with so an app to help solve this problem would be really helpful!

Analysis

In summary, all three interviewees face transportation issues and express interest in a UCLA student-focused carpooling app to help solve these issues. The three interviewees all rely on a mix of walking, public transportation, and personal vehicles to get to their on-campus and off-campus activities, and find that the cost, convenience,

and reliability of these transportation options highly impacts their willingness to participate in certain activities/events. They agree that an app that provides reliable and convenient transportation would resonate with their transportation needs.

Key Takeaways

Competitive Analysis

From the competitive analysis and user stories, we can see that safety, time, money are some concepts that are really emphasized. As such, these are concepts that we can integrate into our design solution. By building an app where UCLA students can communicate with each other and find carpools addresses the safety issue of travelling with strangers on other carpools and public transport. In addition to carpools, UCLA students can also find other people to go to certain events with. Some possible features we could implement to broaden our horizons of community and going out of the UCLA bubble are:

- Calendar Feature -> people can post event that they have "extra seats" to
 - Filter idea -> sort seats for events/cars/transport/carpool groups
 - Events that are happening in the area -> Calendar/list view
- Cultural Events how do people figure out where they want to go
 - Official venues -> e.g. Walt Disney Theatre posting their events
 - Feed/Board social idea -> people can post their events

In terms of time and money, carpooling and finding people to go to events with will mitigate these issues. Carpooling will save people time compared to travelling in public transport and travelling together in carpools/rideshare apps will definitely save users money.

Literature Review

Although Los Angeles is aware of it's current public transport issues and are spending efforts trying to improve it, there are other aspects of community public transport we can focus on. One of the things we takeaway from this part of the research is that instead of relying on public transport like the metro lines and bus routes, we can create a design solution where people can also rely on other people in their community through things like carpooling and group travel. This would mitigate the reliance of people on the flawed public transport system and take people places they would normally not be able to go to with public transportation.

Structured Interviews

A sense of community is really emphasized through the interview responses and we can definitely tell that users are looking for opportunities where they can find cost-effective, convenient, and reliable transportation. We can incorporate this in our design solution by building community friendly solutions that guarantee transportation reliability.

To tackle the problem of convenience and reliability, we can make sure that people who offer up carpools and people who are looking for carpools go through multiple steps of verification and confirmation to ensure that their intent is reliable. This

would allow other users to trust the process and seamlessly have transportation to the places they want to go to without worry.

Bibliography

Achaparro. (2023, June 27). First/last mile. LA Metro.

https://www.metro.net/about/first-last/

Austin Stanion 5 min read Published on: July 9, & Stanion, A. (2023, March 9). Public transit's first-mile/last-mile problem. TransLoc.

https://transloc.com/blog/eliminating-public-transits-first-mile-last-mile-problem/

Cp&dr. (1BC, November 30). Los Angeles Metro tackles first mile, last mile problem. dr.com. https://www.cp-dr.com/articles/node-3748

Descant, S. (2021, July 16). *Transit partnerships take on first/last-mile problem*. GovTech.

https://www.govtech.com/transportation/transit-partnerships-take-on-first-last-mile-problem.html

Elkind, E. (2022, June 21). From rail to roads and back again: The rebirth of I.a.'s public transit. PBS SoCal.

https://www.pbssocal.org/shows/lost-la/from-rail-to-roads-and-back-again-the-rebir th-of-l-a-s-public-transit

How cities can solve the first and last mile problem. Remix Blog. (n.d.).

https://www.remix.com/blog/solving-the-first-and-last-mile-problem

Inoue, Y. (2021, March 9). Why L.A. public transit is the worst, and what we can do to improve it. Los Angeles Loyolan.

https://www.laloyolan.com/opinion/why-l-a-public-transit-is-the-worst-and-what-we-can-do-to-improve/article_cc42a382-ddb5-5ae8-8fc6-8af2282689fd.html

Kamal, S. (2023, April 5). Why California public transit is at a pivotal moment.

CalMatters. https://calmatters.org/politics/capitol/2023/04/public-transit-california/

La, L. (2023, June 13). *Is destination in sight for California public transit?*. CalMatters.

https://calmatters.org/newsletters/whatmatters/2023/06/california-transit-budget/

La Metro wants to launch its own lyft-like service to solve the first mile/last mile

problem. LAist - NPR News for Southern California - 89.3 FM. (2018, January 24).

https://www.kpcc.org/show/airtalk/2017-09-19/la-metro-wants-to-launch-its-own-lyf

t-like-service-to-solve-the-first-mile-last-mile-problem

Los Angeles Times. (2023, October 10). *Editorial: California's transportation*spending doesn't match its climate promises. Los Angeles Times.

https://www.latimes.com/opinion/story/2023-10-10/editorial-californias-transportation-spending-doesnt-match-its-climate-promises

Manville, M., Taylor, B. D., & Blumenberg, E. (n.d.). Falling Transit Ridership: California and Southern California.

https://scag.ca.gov/sites/main/files/file-attachments/its_scag_transit_ridership.pdf.

Mcmurray, J., & Beam, A. (2023, June 9). *Car-dependent California seeks to follow New York's lead and save public transit*. AP News.

https://apnews.com/article/california-public-transit-9002a8b3e0270db28587835a8 5c2ccb0

Not everyone in Los Angeles drives - institute for transportation and development policy. Institute for Transportation and Development Policy - Promoting sustainable and equitable transportation worldwide. (2020, June 30). https://www.itdp.org/2020/06/23/not-everyone-in-los-angeles-drives/

Why doesn't la have decent public transit? Reddit. (n.d.).

https://www.reddit.com/r/AskLosAngeles/comments/tumrq5/why_doesnt_la_have_decent_public_transit/

Appendix

Topic Ideas:

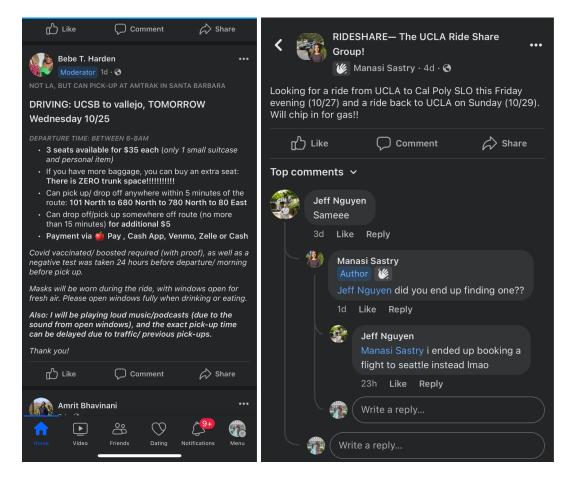
Transportation – how to get to people to places for cultural engagement/service

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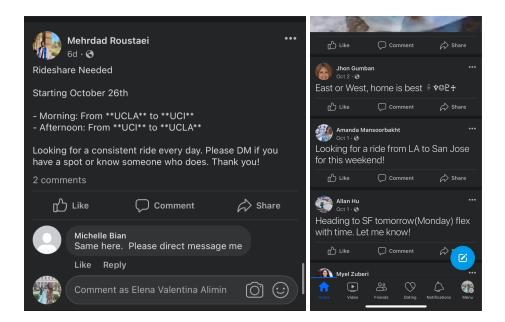
Cultural Events - how do people figure out where they want to go

Competitor Analysis

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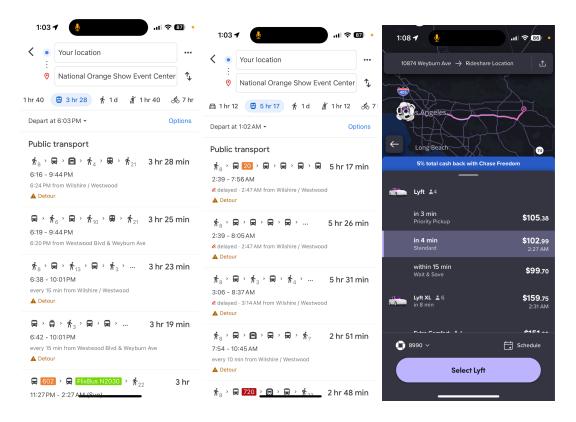
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Example of Person A user journey: Person A is an outgoing freshman at UCLA that loves music and would like to experience a music festival that is located in San Bernardino. She would like to find reliable transportation to take her to and from the festival location, but she sees that the only affordable option of public transportation will take her 4 hours longer than getting an Uber/Lyft, however she does not have the financial viability to spend \$100 on the rideshare herself. As a result, she decides that it's not worth her time and money, and decides not to go.

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Facebook Rideshare Group	Members can post at any time and gain large visibility instantaneously, however there is a lack of moderation and safety protocols for accountability.	Transportation
UCLA student organization newsletters, Academic Listservs, Daily Bruin social media, other separate accounts	While scattered, many of these events are aggregated into different e-mails sent out to different groups of people who may be interested, however may not have the best reach as not everyone knows about each respective information chain.	Event Discoverability
Waze Carpool	Waze, a map application offers riders to join Waze community to choose the people they want to ride with based on detailed profiles, star ratings, and	Transportation

filters like gender and co-workers.	

Literature Review

Literature Review (1) -

From Perplexity AI:

https://www.perplexity.ai/search/What-do-articles-HmaC1MrFTuGhr3ldQrxypg?s=c

Articles about transportation in LA suggest that the current state of public transit in the city is inadequate and in need of improvement[1][2][4][6]. The transportation system is described as underdeveloped, failing, and one of the worst in the world[1]. The lack of development in public transit can be attributed to various factors, including the ways in

which the city has been landscaped to prioritize drivers and conservative billionaires with stakes in the automobile industry investing to kill public transit[1]. The current transportation spending in California is also criticized for not matching its climate promises, with the bulk of the transportation dollars being spent to maintain and expand car-centric roads and freeways[2].

The underdeveloped and failing transportation system is detrimental to the city in how it helps grow the divide between the haves and the have-nots, making it difficult for those who cannot afford a license or a car to access anything they need in their day-to-day life that would help their upward mobility[1]. However, there are non-car options available to residents, yet only about 15% of Los Angeles residents walk, bike, or use public transit[4]. Transit agencies across California are grappling with a decline in revenue and the end of federal funding that has been a fiscal cliff[3][6].

Despite the challenges, there are suggestions for improvement, such as increasing safety, cleanliness, and comfort measures to make people more willing to ride public transit[1]. California should be spending the bulk of its transportation funding to remake the urban landscape so people have real choices in how they get around[2]. The COVID-19 pandemic has amplified the importance of equity-driven transport policies, and the higher sustained ridership on Metro compared to pre-pandemic levels is a positive sign[4].

Citations:

- [1]https://www.laloyolan.com/opinion/why-l-a-public-transit-is-the-worst-and-what-we-can-do-to-improve/article cc42a382-ddb5-5ae8-8fc6-8af2282689fd.html
- [2]https://www.latimes.com/opinion/story/2023-10-10/editorial-californias-transportation-spending-doesnt-match-its-climate-promises
- [3]https://calmatters.org/politics/capitol/2023/04/public-transit-california/
- [4]https://www.itdp.org/2020/06/23/not-everyone-in-los-angeles-drives/
- [5]https://calmatters.org/newsletters/whatmatters/2023/06/california-transit-budget/
- [6]https://apnews.com/article/california-public-transit-9002a8b3e0270db285878 35a85c2ccb0

The lack of development in public transit in LA can be attributed to various factors, including the following:

- 1. The ways in which the city has been landscaped to prioritize drivers: The city has been designed to prioritize cars, which has led to a lack of investment in public transit[1].
- 2. Conservative billionaires with stakes in the automobile industry investing to kill public transit: There are powerful interests that have worked to undermine public

- transit in LA, including conservative billionaires with stakes in the automobile industry[1].
- 3. Short-sighted investment in freeway infrastructure as the future: The demise of LA's original public transit system known as the red cars was driven by a few different factors, but a big one was short-sighted investment in freeway infrastructure as the future[3].
- 4. Cheap cars and gas: Fuel prices have fallen substantially since peaking in 2012, and households in the SCAG region, especially lower-income households, have dramatically increased their levels of vehicle ownership[3].
- 5. The sheer vastness in size of LA: LA is a poorly planned city, and unfortunately, it may never get to a NY or Chicago type transit because of something called "the last mile" problem[3].
- 6. Money, land-rights, NIMBY's, and other issues: Problems like money, land-rights, NIMBY's, and other issues also hinder improving transit systems[3].

The lack of development in public transit is detrimental to the city in how it helps grow the divide between the haves and the have-nots, making it difficult for those who cannot afford a license or a car to access anything they need in their day-to-day life that would help their upward mobility[1]. However, there are non-car options available to residents, yet only about 15% of Los Angeles residents walk, bike, or use public transit[4]. Despite the challenges, there are suggestions for improvement, such as increasing safety, cleanliness, and comfort measures to make people more willing to ride public transit[1]. California should be spending the bulk of its transportation funding to remake the urban landscape so people have real choices in how they get around[2].

Citations:

- [1]https://www.laloyolan.com/opinion/why-l-a-public-transit-is-the-worst-and-what-we-can-do-to-improve/article_cc42a382-ddb5-5ae8-8fc6-8af2282689fd.html
- [2]https://scag.ca.gov/sites/main/files/file-attachments/its scag transit ridership.p df
- [3]https://www.reddit.com/r/AskLosAngeles/comments/tumrq5/why_doesnt_la_ha_ve_decent_public_transit/
- [4]https://www.pbssocal.org/shows/lost-la/from-rail-to-roads-and-back-again-the-rebirth-of-l-a-s-public-transit
- [5]https://www.latimes.com/opinion/story/2023-10-10/editorial-californias-trans portation-spending-doesnt-match-its-climate-promises
- [6] https://calmatters.org/politics/capitol/2023/04/public-transit-california/

The "last mile problem" refers to the challenge of getting commuters to and from their final destination from a transit stop or station[1][4]. It is the distance a commuter needs to

travel from a transit stop to their destination, or vice versa[1]. The problem arises when a potential rider is further than a "comfortable distance" to the necessary fixed-route stop[4]. The "first mile" refers to the distance a commuter needs to travel from their origin to a transit stop or station[1].

The last mile problem is a significant obstacle in developing more efficient and equitable public transportation[1]. It is a persistent issue that transit and transportation planners face in moving populations a mile or two[2]. In Los Angeles, the last mile problem is a big obstacle in developing more efficient and equitable public transportation[1].

Cities are tackling the last mile problem by exploring solutions to increasingly complex public transportation challenges[1]. Seattle, for example, has worked to resolve the first and last mile issue by offering on-demand ridesharing services[1]. Commuters can download an app to request transportation from various service locations to a nearby station stop or transit hub[1]. In Wake County, North Carolina, transit agencies have effectively eliminated 72% of their possible customer pool due to the last mile problem[4].

To address the last mile problem, LA Metro has launched its own Lyft-like service called micro-transit[6]. The vehicles can be hailed by riders at street corners who need to get to transit hubs or destinations not served by buses and trains[6]. LA Metro also has a unique program to improve access around transit stations and stops called the First/Last Mile Program[3]. The program aims to make it easier to travel in Los Angeles by improving the safety of public streets and sidewalks around Metro transit areas[3]. The program includes plans for new transit projects, plans for existing stations, and other external projects that support the First/Last Mile goals[3].

Citations:

- [1] https://www.remix.com/blog/solving-the-first-and-last-mile-problem
- [2]https://www.govtech.com/transportation/transit-partnerships-take-on-first-las t-mile-problem.html
- [3] https://www.metro.net/about/first-last/
- [4]https://transloc.com/blog/eliminating-public-transits-first-mile-last-mile-proble m/
- [5] https://www.cp-dr.com/articles/node-3748
- [6]https://www.kpcc.org/show/airtalk/2017-09-19/la-metro-wants-to-launch-its-own-lyft-like-service-to-solve-the-first-mile-last-mile-problem

Article: From Rail to Roads and Back Again: The Rebirth of L.A.'s Public Transit

https://www.pbssocal.org/shows/lost-la/from-rail-to-roads-and-back-again-the-rebirth-of-l-a-s-public-transit

19th Century to 1961: From Streetcar Paradise to Automobile Dominance

- Los Angeles was home to the first streetcar trolley system
- Henry Huntington: one of the original real estate developers in the city
 - o Built first electric-powered streetcar lines at end of nineteenth century
 - Became the Yellow and Red Cars (Pacific Electric System)
 - Over one thousand miles of tracks
 - Meant to encourage the growth of single-family homes
 - Enabled new residents of LA to live far from the city center and take trains to work and other services
- Automoblie dominated LA, "disruptive technology"
 - LA built on flat land, pleasant weather
 - Automobile sales increased across the country
 - o Adopted en masse in 1920s, time of enormous population growth
- Streetcars versus cars
 - Streetcars:
 - Slow, less desirable
 - Got stalled in car traffic
 - Lost ridership, money
 - Voters refused to rescue
 - Red Car stopped service in 1961
 - Buses replaced streetcar lines
 - Dominant form of transit

1961-1979: Sprawl, Traffic and Early Rail Boosters

- Far-flung development across LA caused by cars
 - Complex, disorganized travel patterns
 - Businesses spread out to where employees lived
 - Lower land costs
 - Easier parking, vehicle access
 - Exacerbated racial inequality
 - Low-income African American and Latino residents had to travel longer distances to dispersed job centers

- Often by slow-moving, crowded buses
- Streetcar system created foundation for region's auto-oriented sprawl
 - Driven by real estate interests instead of well-planned urban spaces
- Traffic and air quality worsened throughout 1950s and 1960s
- Many Angelenos opposed to Pacific Electric system dying
 - Downtown businesses lobbied to get new rail network
 - Feared downtown would become hollowed-out economic wasteland
 - Competition with suburban job centers

Assignment 4: Understanding the problem space for your main project, Due Nov 5

For this assignment you are meant to explore the domain of your project. This will involve reading relevant literature, and spending time or 'conducting fieldwork' at relevant sites on campus. You can think of this phase as involving both pre-research and qualitative research. You should be learning about the domain space and related issues, identifying and interviewing key stakeholders and soliciting their insights and understandings. This is a process of discovery, surfacing expected and unexpected insights.

Key methods for this assignment involve: literature review, ethnographic fieldwork and direct observations, structured and unstructured interviews, focus groups, object-based techniques and co-design activities.

The deliverables for this assignment involve a project report and a slide deck presentation. Describe your research techniques and process, provide a detailed description of the context, actors, and issues at play. Foreground key stakeholders and the insights you learned from interviews and conversations. Make use of photography, and other visual materials, along with text to 'tell a story' and communication your observations and design recommendations.

Structured Interviews

Interview Questions:

Q1: How do you typically commute to and from campus and off-campus destinations?

Q2: Can you share any specific challenges or difficulties you've encountered with transportation in Los Angeles?

Q3: What tools or resources do you use to find out about cultural and community engagement events?

Q4: Have you ever had to miss out on a cultural or community engagement event due to transportation-related issues?

Q5: Can you describe any successful experiences you've had related to transportation to a cultural engagement or community service event in Los Angeles?

Q6: Would you be interested in a carpool application specifically designed for UCLA students to facilitate transportation for community service and cultural engagement events? Why or why not?

Interviewee #1: Damon Lau

Background: Damon Lau is a 4th year Communications major living on the hill. He is involved in UCLA's Hong Kong club, REACH, and Communications Club and is a campus ambassador for Tinder and Samsung. Damon has been part of Facebook's UCLA RideShare program but ended his engagement in the group after being scammed by a Facebook user. Response to...

Q1: "For on campus activities, I usually just walk to my destination. For the most part, most of my off-campus activities are within walking distance so I also just walk to those, but if an event is outside of Westwood, I usually just take the bus."

Q2: "Before UCLA provided all students with TAP cards, I thought that transportation was really expensive. Most of my friends are car-less so we would have to Uber around everywhere so I love having my TAP card because I don't spend any money on transportation anymore. With that being said, the bus is really slow and unreliable."

Q3: "For my Hong Kong club, they post a weekly newsletter that tells members about all the upcoming events. I also follow Instagram accounts of different organizations and they usually post events there. I'm not really involved in off-campus activities so I wouldn't know where to look, but I've also never really seen off-campus events advertised.

Q4: "I've missed so many events because of transportation issues. If an event is far away, I usually am able to carpool with a friend, but if all the seats are taken, I'll just miss the event because Ubers are expensive and I don't feel comfortable riding the bus at night."

Q5: "Recently, I had to go to Santa Monica for a REACH event. The organizers of the event made a RideShare group in GroupMe that was really efficient. People would ask for a ride or volunteer space in their car."

Q6: "I would be so interested! Facebook['s UCLA RideShare group] is full of scammers so it would be nice to have a real rideshare program for only UCLA students."

Interviewee #2: Brooklyn Burgess

Background: Brooklyn is a 3rd year Biology student living in a university apartment. She is a facilitator for a nonprofit organization, a representative for NSLI for Youth Alumni, and a volunteer for a hospital in Santa Monica.

Response to...

Q1: "I usually walk or take the Bruinbus to class but for anything outside of Westwood, I'll just drive my car."

Q2: "Having a car in LA is so expensive. I'm paying an arm and a leg to have my car with me because I need it to get to work. I would take the bus, but my commute would be 40 minutes long and that's just not worth it for me. Also, some of my shifts end past midnight and I don't think it would be safe to ride the bus at such late hours."

Q3: "In the organizations that I'm involved in, we usually advertise events through social media, mainly Instagram. I think most organizations communicate this way."

Q4: "I've actually never really had an issue with transportation because I have my car. I would be screwed, though, if my car were to ever break down."

Q5: For my Chicano Studies class last year, our class had to go to Venice Beach to perform a ritual with the local community for Day of the Dead. Our TA for the class created a list of drivers and seat fillers to make sure that everyone could make it to the event."

Q6: "Yes, I would be interested in a carpool app! I feel comfortable driving UCLA students, I would just want there to be a thorough background check to ensure that users of the app are actually UCLA students."

Interviewee #3: My-Thuan Ha-Hoang

Background: My-Thuan is a 3rd year MIMB student living on the hill. She is currently involved in VSA and is part of ASUCLA's catering services.

Q1: "I use my scooter to get to campus and around Westwood. When I have an activity outside of Westwood, I usually get a ride from a friend or get an Uber."

Q2: "Transportation in LA is really expensive. I don't like taking the bus so I have to Uber everywhere when none of my friends can drive me and it really adds up."

Q3: I mainly use Instagram to see what events are coming up for my clubs and organizations. I also check my emails, Facebook, and GroupMe."

Q4: I've missed many events because of transportation issues. If none of my friends with cars want to go to an off-campus event that I want to go to, I just skip it because it's not worth it to Uber.

Q5: VSA does a good job of organizing rides for us for events held at off-campus locations. We mainly use GroupMe to figure out rides and it's really effective.

Q6: Yes! I feel like transportation is an issue that all UCLA students struggle with so an app to help solve this problem would be really helpful!

Analysis: In summary, all three interviewees face transportation issues and express interest in a UCLA student-focused carpooling app to help solve these issues. The three interviewees all rely on a mix of walking, public transportation, and personal vehicles to get to their on-campus and off-campus activities, and find that the cost, convenience, and reliability of these transportation options highly impacts their willingness to participate in certain activities/events. They agree that an app that provides reliable and convenient transportation would resonate with their transportation needs.