



Assignment #1: Needfinding

Team 2: Alice Zheng, Yuetong Wang, Liang Zhang



Introduction



Yuetong Wang



Alice Zheng



Liang Zhang

Tech Oriented

Design Oriented



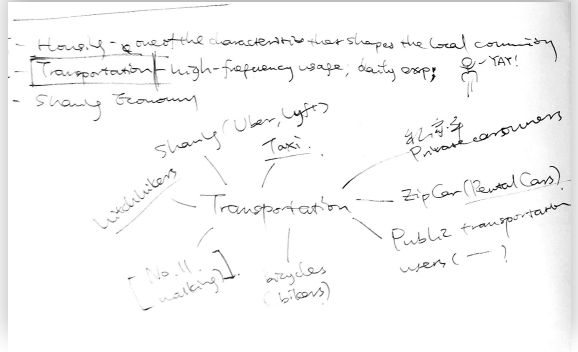
Transportation



Needfinding Methodology

Brainstorming Problem Domain

- 外来人群/移民
- frequently travelling
- safety
- equality in education
- dom exp. & housing exp. ← T ←
- Interacts w people from diff backgrounds T
 - within
- Commuting exp. T ←
- Resources (reasonable use) (Natural resources)
- Delivery & Sharing economy T ←
- Investment & Personal Finance -
- People x Nature -
- Leisure Time T
- Food. -



Transportation



Interviews & Results


Chrissie



- Moved to Palo Alto in 1980s
- Drive 60 - 90 minutes to work
- Recently retired

Some questions we asked:

- Why retire early?
- Worst experience in commuting?
- What's different in transportation behavior before and after retirement?

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- Why retire early?

“It takes too long to commute everyday after the company moved to Berkeley”

- Worst experience in commuting?

“If an accident happens after I get onto the high way, I will have to wait. A 40 min drive will become 90 min”

- What’s different in transportation behavior before and after retirement?

“My schedule is now pretty flexible.” “I try to avoid rush hours.”

“I’m thinking about sharing one car with my husband.”



Russell



- Grew up in Palo Alto
- Bike to school before college
- Use cars frequently in college

Some questions we asked:

- How your transportation choice changed as you grow up?
- What do you and dislike about the transportation system here?
- Describe the worst experience you had with public transportation?

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- How your transportation choice changed as you grow up?

“I start to rely on driving a lot in college”

- What do you like and dislike about the transportation system here?

“Bilking blvd” “stop sign and roundabout” “hard to find parking”

- Describe the worst experience you had with public transportation?

“(Bart) took twice as long because it was low power or something.. I mean WTF?!”



James



- Live in New York
- Drive to school since 16
- Intern in downtown Palo Alto

Some questions we asked:

- How do you get to work everyday?
- Worst experience with public transportation here?
- Some special things noticed will taking public transportation?

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- How do you get to work everyday?

“I time myself everyday when I walk to work”

“It is essential for me that I can walk to work”

- Worst experience with public transportation here?

“It was about 11:50 pm and I realized there is no way to get back from SF”

- Some special things noticed will taking public transportation?

“Some people would just by youth pass. They won't kick you off the train”



Ben



- Bike to work
- Owns a car
- Don't use public transportation

Some questions we asked:

- Why you looked so interested when we mentioned Zipcar?
- Why you don't like to take public transportation?

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- Why you looked so interested when we mentioned Zipcar?

“It takes so much effort to drive to home depot and park there and drive their truck to do the work and return the truck and drive back.”

- Why you don't like to take public transportation?

“If you are a few minutes late, you will have to wait for an hour”

“It is much more flexible to drive yourself”



Kyu



- Extreme User
- Use wheelchair to get around
- Student at Stanford

Some questions we asked:

- Other than your wheelchair, what other modes of transportation do you use?
- Have you encountered any inconvenience in terms of your transportation experience?

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- Other than your wheelchair, what other modes of transportation do you use?

“My friends will drive”

“Bart” “Uber” “Caltrain”

- Have you encountered any inconvenience in terms of your transportation experience?

“I had to go up again and wait for the next bart to take me to the next station and try again.”



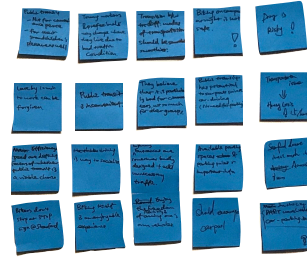
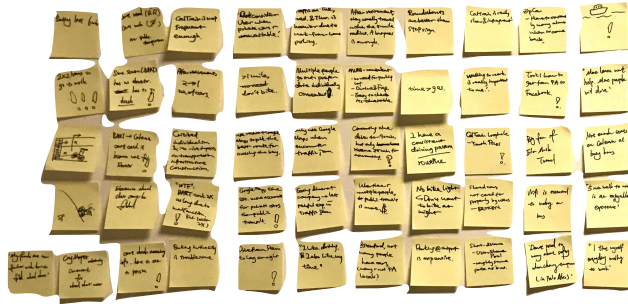
Analysis



Empathy Map

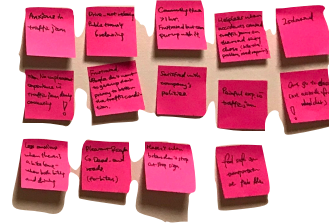


Say



Think

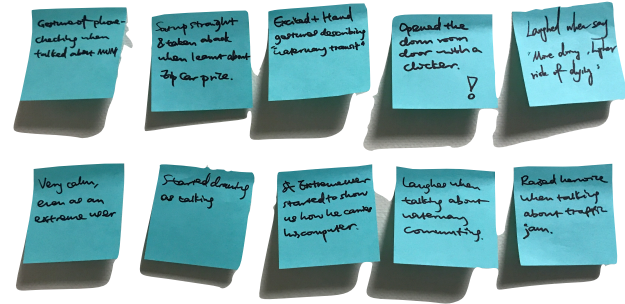
Do

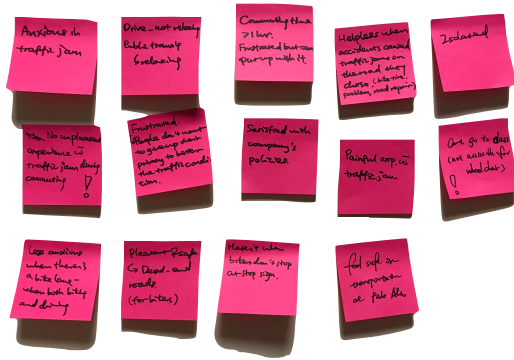


Feel



- Started drawing as talking
- Very calm, even as an extreme user
- Raised voice when talking about traffic jam
- Hand gesture when suggesting “waterway transit”
- Sit up straight when discussing ZipCar Price
- Gesture of checking phone when talking about muni
- Laughed when saying “more driving, higher risk of dying”





- Satisfied with companies' policies
- Anxious in traffic jam
- Driving is not as relaxing as public transportation
- Less anxious when there is a bike lane
- Hate it when bikers' don't stop at stop sign
- Helpless when accidents happen on freeway
- Feel safe on any transportation in Palo Alto



“Needs” & “Insights” Assessment



People need a fast and comfortable way at a reasonable price to commute to work

People want to spend time on transportation in a meaningful way

People need a way to quickly find available parking at reasonable price

People need to feel safe and protected while biking

People need to have access to more accurate info regarding transportation

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Quick Summary & Thank You