



# waze

outsmarting traffic, together.

# company research



# company research



# waze



The waze app was first developed and popularized by Waze Mobile, an Israeli company in 2009 and then sold four years later to Google.



**Tagline:** Outsmarting Traffic, Together



Waze is all about contributing to the '**common good**' out there on the road.



**Mission:** Waze helps people create local driving **communities** that work together to improve the quality of everyone's daily driving. They do this by giving other users in the area a 'heads-up' about what's to come.

# company research

## Background

- More than **50 million** monthly active Waze users passively and actively contribute real-time road data within the app.
- Waze has more than **185 countries** mapped and **42 voices and languages**
- Waze creates value for drivers by giving them the most accurate information available for mapping and navigation that they could not have access without the crowd-sourced information.
- Waze is beginning to partner with local governments to help them manage traffic patterns and city planning by providing more robust user data, which may improve conditions for drivers overall.

# company research

## Benefits/Goals

### Benefits

- ★ Situational awareness
- ★ Two way driver communication
- ★ Infrastructure planning
- ★ Bridging connections with other partners
- ★ Streamlining data inputs

### Goals

- ★ Outsmart, avoid and end traffic
- ★ Grow and engage the Waze community

# company research

# Usability Issues

- ★ Road safety issue: potential to distract drivers with a flurry of icons and notifications and put them at greater risk of an accident.
  - ★ Cluttered map: big icons, traffic lines, hard to read
  - ★ Pop up ads while driving
  
- ★ Favorites menu requires multiple touches to find address.  
It needs to be listed out for easy and quick access.

# user research



# user research

# Target Demographic

- ★ **Primary users:** The Driver
- ★ **Secondary users:** The Reporter /  
The Good  
Samaritan

# Richard Johnson

The Driver  
USER PERSONA

**AGE** 25

**OCCUPATION** Software Specialist

**STATUS** Single

**LOCATION** Atlanta, GA

**TIER** Beer/brewery enthusiast

**ARCHETYPE** Adventurer

Tech Savvy

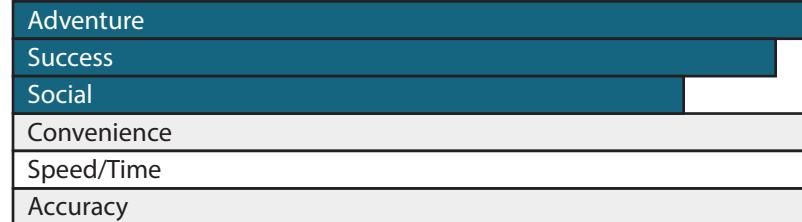
Adventurous

Social

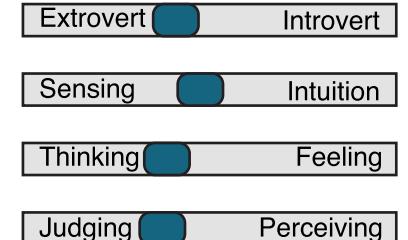


*"I use Waze, because it shows me a lot of alternative routes and backroads that avoid traffic on my way to and from work."*

## MOTIVATIONS



## PERSONALITY



## GOALS

 (The objectives this person hopes to achieve)

- More audio/voice directions
- One touch and go - favorite routes listed out
- Less clutter of icons on GPS navigation

## FRUSTRATIONS

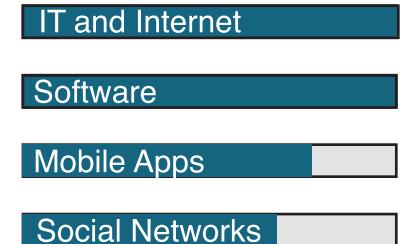
 (The pain points they'd like to avoid)

- Pop ups/ads that distract him from the road
- Icons/clutter getting in the way of the road directions
- Missing a turn or exit because of mobile app distractions

## BIO

When Richard is not at work, he's usually trying out new breweries and restaurants in town, staying active outdoors, or shooting some hoops at a local park with his buddies. Richard is always on the go and likes to be social. Because of this, he is always going to new places and using his phone to navigate. He gets frustrated when there are distractions on his phone that interrupt his navigation. He expects his driving experience to be efficient and quick in order to get where he needs to be on time and safe.

## TECHNOLOGY



## BRANDS



# Amy Gibbs

The Reporter  
USER PERSONA

**AGE** 29

**OCCUPATION** Interior Designer

**STATUS** Single

**LOCATION** Austin, Texas

**TIER** Fitness Enthusiast

**ARCHETYPE** Yogi

Kind

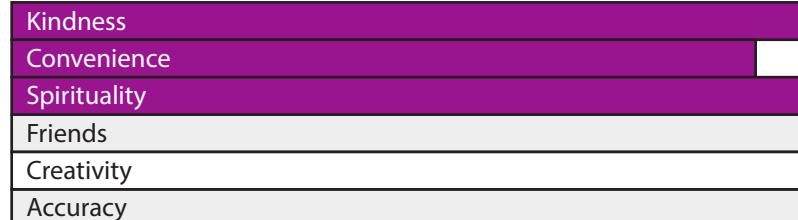
Spiritual

Reserved



*"Waze is a great way of helping other people. Think about how many peoples' days are affected negatively by traffic and accidents. I make traffic reports on Waze to help others. I hope they'd do the same for me!"*

## MOTIVATIONS



## GOALS (The objectives this person hopes to achieve)

- Decrease the amount of accidents and traffic by reports
- Make a cleaner app design that's easily readable
- Make reporting traffic easier and not a dangerous task

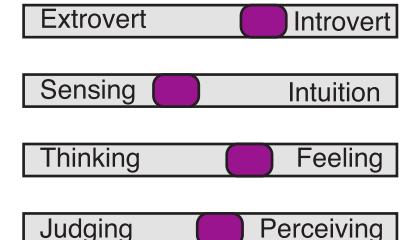
## FRUSTRATIONS (The pain points they'd like to avoid)

- Pop ups and icons cluttering up the navigation
- Report button getting in the way of the map screen
- When people never make reports on Waze

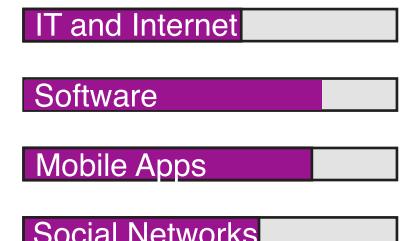
## BIO

When Amy is not designing for her interior design studio, she's usually staying active in her community by volunteering and teaching yoga classes at the yoga studio near her house. Amy is always trying to help others and is known to be a very good friend. Because of this, she is always sending out traffic and road reports on her Waze app. She gets frustrated when people don't report an accident they see and by the cluttered design of the app. She expects her driving experience to be easy, unstressful and safe.

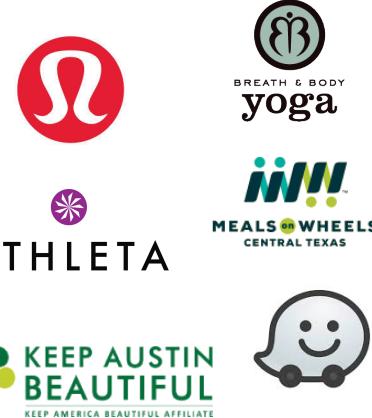
## PERSONALITY



## TECHNOLOGY



## BRANDS



# user research

## Need/Problem Statements

The Waze app **needs** a less distracting traffic and hazard alert system. Too many users are being distracted on the road by pop ups such as police reports, “road work ahead” and traffic hazards when navigating to their destinations. The Waze app has more than 20,000 monthly active users as of March 2017, with a demographic of male and female drivers.

The current mobile **experience** could be less distracting and therefore less dangerous on the road. Users gets upset when they are on their way to a destination and ads or road hazards pop up on their mobile devices, getting in the way of their Waze route. They also get upset when they miss an exit or make a wrong turn because of these pop ups and/or cluttered icons scattered across the map screen.

# user research

# Solutions

The **current solution** that will keep users safe while driving and using the app is to redesign these alerts and pop ups in a way that will cause less of a distraction or accident.

The UX Design Department will create a quick and easy **experience** that not only saves the user time in traffic or on the road, but also from car accidents.

# formative testing



# formative testing

# Competitive Analysis

Competitors	Brief info, text is readable	Clean/modern Web design	Clear mission statement	Usability, User Reviews	Responsive Mobile design	Easy to navigate through	Content is clear/organized
<b>Apple Maps</b>	Yes	Yes, very clear and simple	yes	Very easy, clear info	yes	yes	yes
<b>Google Maps</b>	Yes	Yes	no	some frustrations, no zoom no history	yes	Sort of , not as easy as apple maps	yes
<b>Mapquest</b>	Yes	Yes	yes	Terrible reviews about the new update	yes	yes	yes
<b>Maps.me</b>	Yes	Yes	no	Great reviews about offline use but can't even find the creative circus...	yes	Kinda cluttered design, needs contrast	Eh not really
<b>HERE WeGo</b>	Too much info. Needs less text and simpler design	somewhat	yes	Users say it crashes, some like it	yes	Too many steps	Somewhat busy

# formative testing

## SWOT Analysis



### Strengths

Available on smartphones,  
easy to use, advanced GPS  
technologies

### Weaknesses

Uses a lot of battery, only  
works with data or internet

Product expansions,  
partnerships

Safety and security risks

### Opportunities

### Threats

# formative testing

## Project Goal



The goal of this project is to design a less cluttered mobile experience for Waze users that will prove less distracting, safe and easy to understand.

# formative testing

## Deliverables/Tasks

- ★ **Easier access to favorites menu** - listed out instead of in folder - will allow for quicker access and a one touch and go process
- ★ **Redesign icons** - make the large icons smaller and less distracting on the map screen and get rid of unnecessary report icon options
- ★ **Move buttons and main icons towards the edges of the screen** - not in the way of the map - less distracting and quicker to navigate
- ★ **Get rid of pop ups and advertisements while driving** - decrease distraction and the possibility of a car accident or missing a turn/exit

# General Thoughts of Existing Waze App



“It works... kinda. It’s better than Google maps”  
– Ben Shapiro, 21

“I only use it when I’m in traffic or on long road trips. **Too many icons**, can’t figure out what goes on the screen. Instead of icons it should just say police near by”  
– Jake Shapiro, 21

“I don’t self report. It takes me a different route every day to work” – Emily Shapiro, 23

**I really like it when I travel**, started using it more than Google maps around town also. Even though it makes me mad that I can’t enter a destination as I drive, I understand the safety of the design. – Brian Kahn, 50

Love it. Love how it knows everything from other users reporting certain things such as objects in the road, etc. – Charlsey Smith, 22

So far, it’s been very helpful during high traffic events such as Mardi Gras. It also has helped with getting around interstate construction! – Margot Beerman, 24

“Awesome app, used wayyy too much data. **I only use it if I’m hitting heavy traffic** while using google map.”  
– Carlee Harrod, 25

“I love it but **it kills my battery!!** Main complaint” – Turner Waddell, 22

“I like it but don’t use it much because I fear it **uses too much data**”  
– Trey Finlay, 49

**I use it everywhere I go!** Saves me from speeding tickets, potholes, traffic, etc!  
– Jared Kornbluth, 32

# General Thoughts of Existing Waze App

“Used waze for about 2 months a year ago enjoyed it for the most part detailed traffic info, collected info for your profile to help make finding places easier etc... but didn't give me the ease and accessibility to search around the map, zoom in on different areas and see everything there. Then get information on different places store hours, website, reviews. Only when you know exactly what place your searching for did waze do this. Ultimately I ended up switching back to Google Maps which has just as good info on traffic and multiple options to get you where you need to go. (to be fair it's been about a year from using the Waze app I'm sure they have made updates too.)”

– Bryan Kellert, 28

Love it. Saves me from getting caught in unexpected traffic. However, I don't need an announcement about every car abandoned on the shoulder of the road. – Janet Walker, 36

Love it when it tells me where the popo are hiding  
– Chiyeung Lau, 30

Totally WAZE user. Like the real time accuracy. Dislike how it eats up my phone juice and must keep it plugged in to car USB when using.  
– Teri Henley, 50

I love it because users report what's happening and can even tell details about why there's really bad traffic or if there's a speed trap up ahead. I know in some cities it even tells you where the hidden speed cameras are. I also like that I can look for gas stations based on proximity, fuel type, and price. The two things I don't like are that it doesn't tell you which way you're facing when you begin your trip so you can end up going the wrong direction at first. The other thing is that when I look up, for example Starbucks, it will show you solo Starbucks locations or ones within a Target with no differentiation. – Julia Pierce, 24

I prefer Google maps. I love being able to look up places and read their reviews/information before clicking "navigate." I also love having alternate routes and traffic (also provided by Waze) but don't want the pointless announcements all the time about cars, etc. i also experienced more awkward routes with Waze (like taking me two blocks down just to turn on the same street). Just my experience.  
– Claire Whorton, 27

# Qualitative Waze User Takeaways

-  Didn't give me the ease and accessibility to search around the map, zoom in on different areas and see everything there. Then get information on different places store hours, website, reviews.
-  I don't need an announcement about every car abandoned on the shoulder
-  Love it when it tells me where the popo are hiding
-  Like the real time accuracy. Dislike how it eats up my phone juice
-  it doesn't tell you which way you're facing when you begin your trip so you can end up going the wrong direction at first.
-  I prefer Google maps. I love being able to look up places and read their reviews/information before clicking "navigate."
-  Don't want the pointless announcements all the time about cars.
-  I experienced more awkward routes.
-  Too many icons.
-  I really like it when I travel and for events like Mardi Gras.
-  It also has helped with getting around interstate construction!
-  Uses wayyy too much data. I only use it if I'm hitting heavy traffic
-  It kills my battery!!
-  Uses too much data"
-  I use it everywhere I go! It saves me from speeding tickets, potholes, traffic

# Quantitative data



**2** people complained about there being too many unnecessary announcements

**4** people said it eats up phone data/battery

**6** people said they use it for traffic reasons

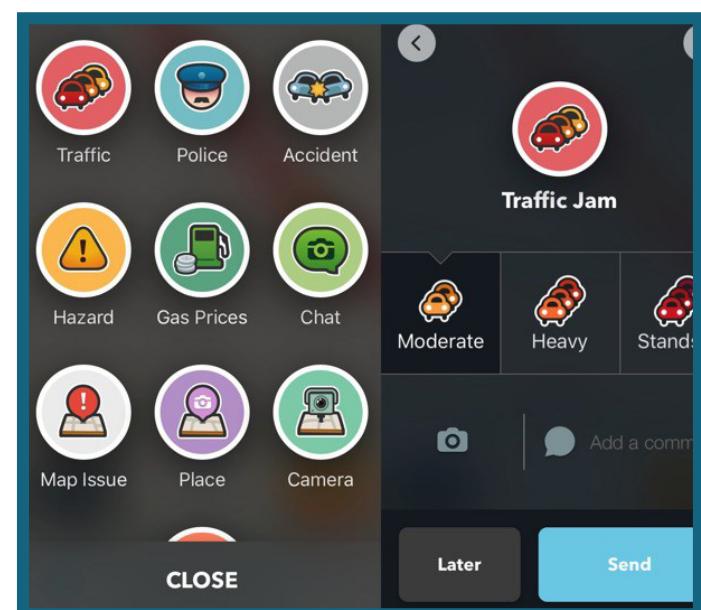
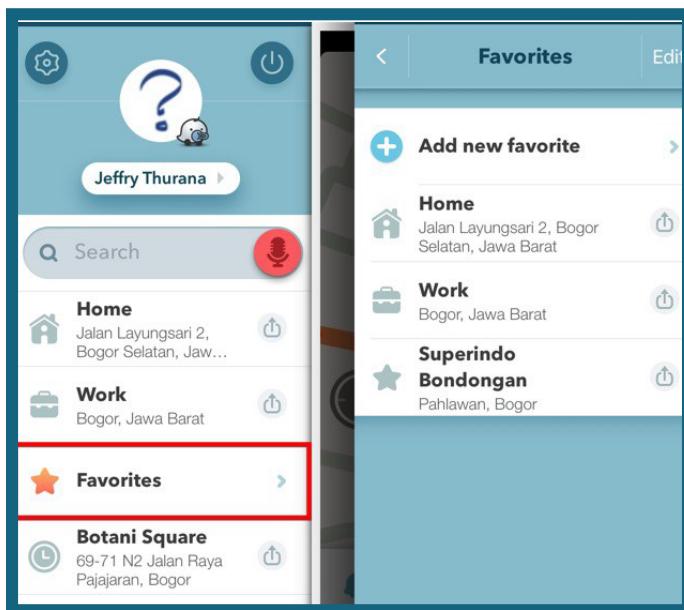
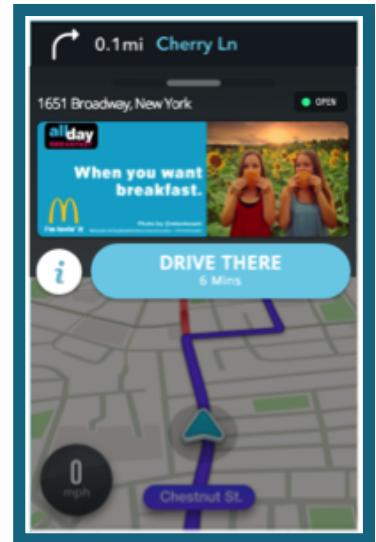
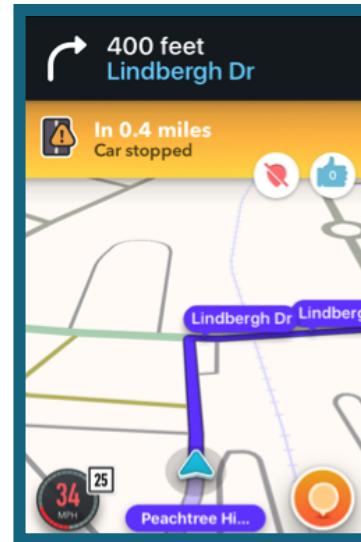
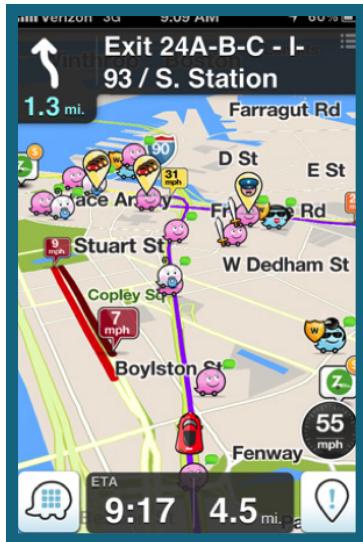
**5** people liked the send a report feature

**3** people preferred Google Maps over Waze

**2** people complained about too many icons

**1** person disliked the awkward routes it took them

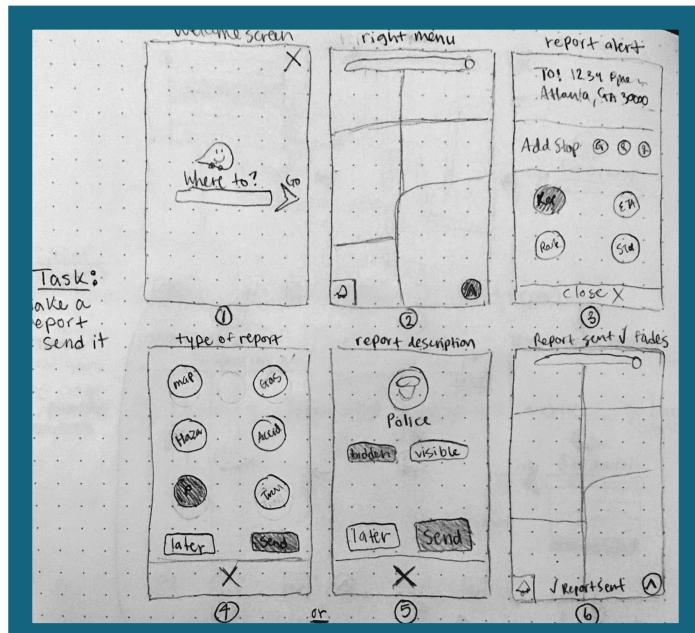
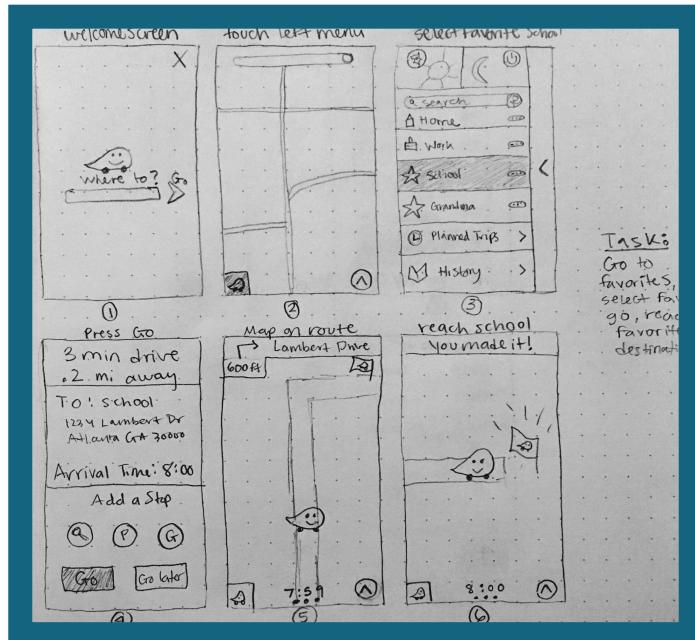
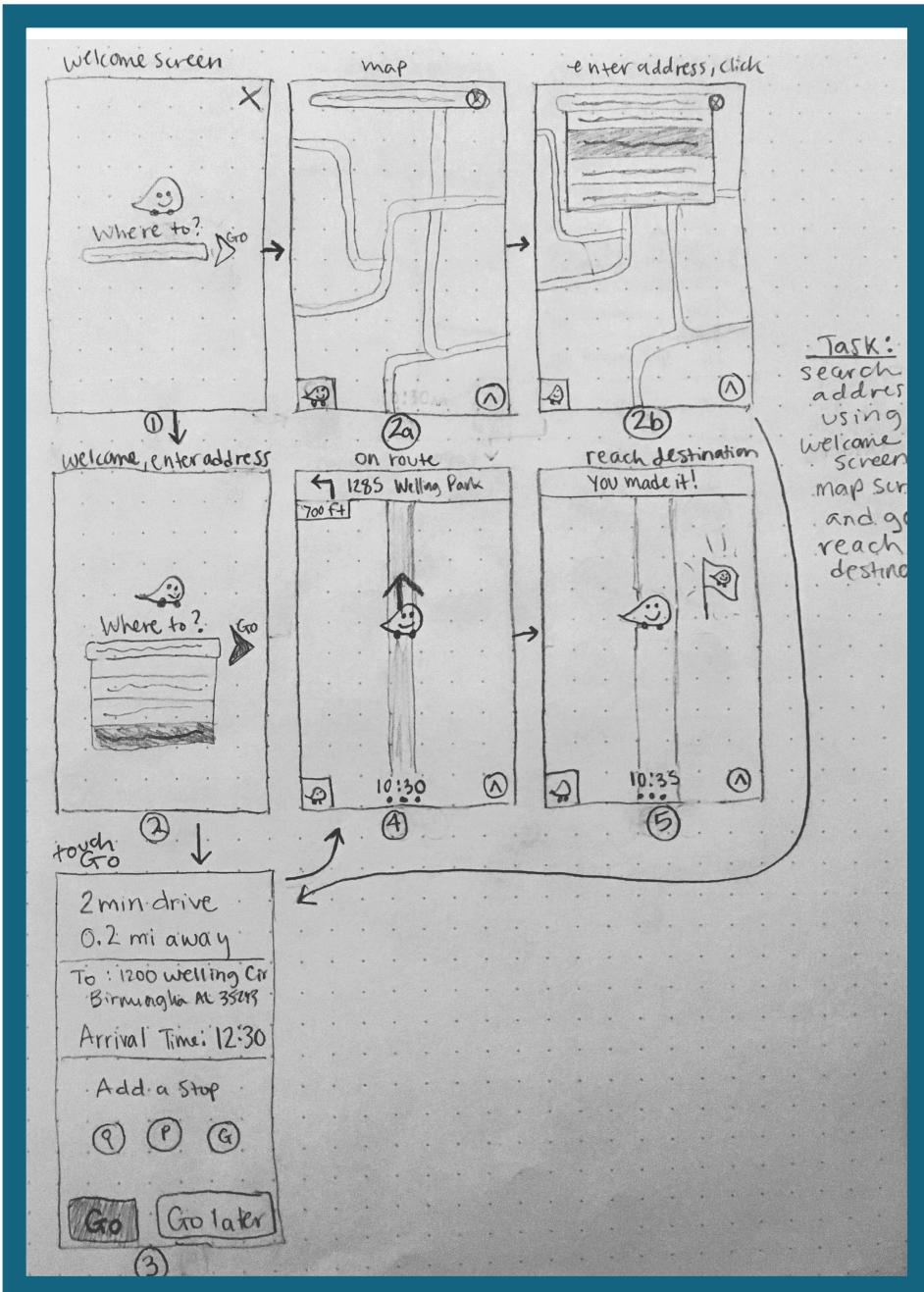
# UX Problems/Issues



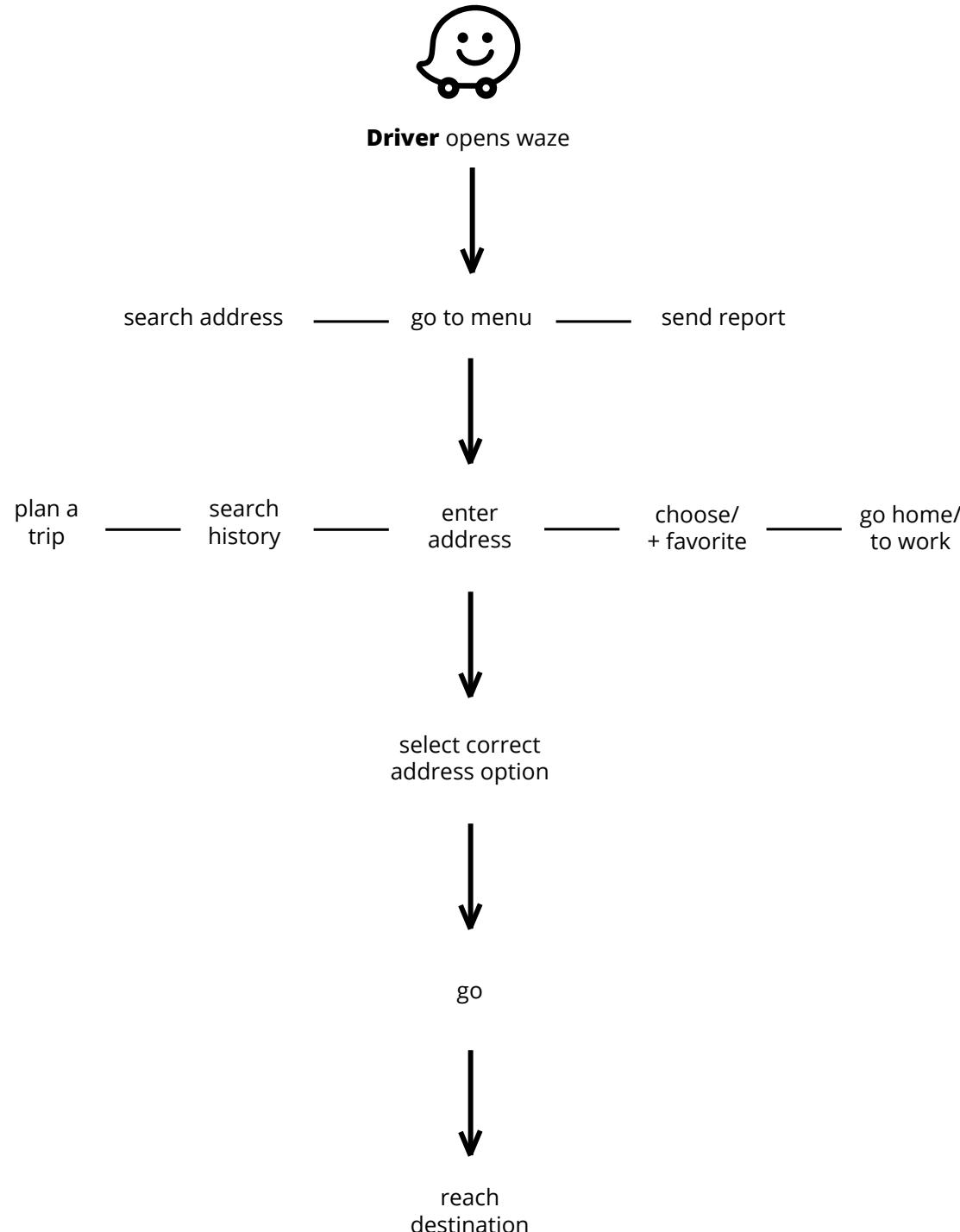
# design phase



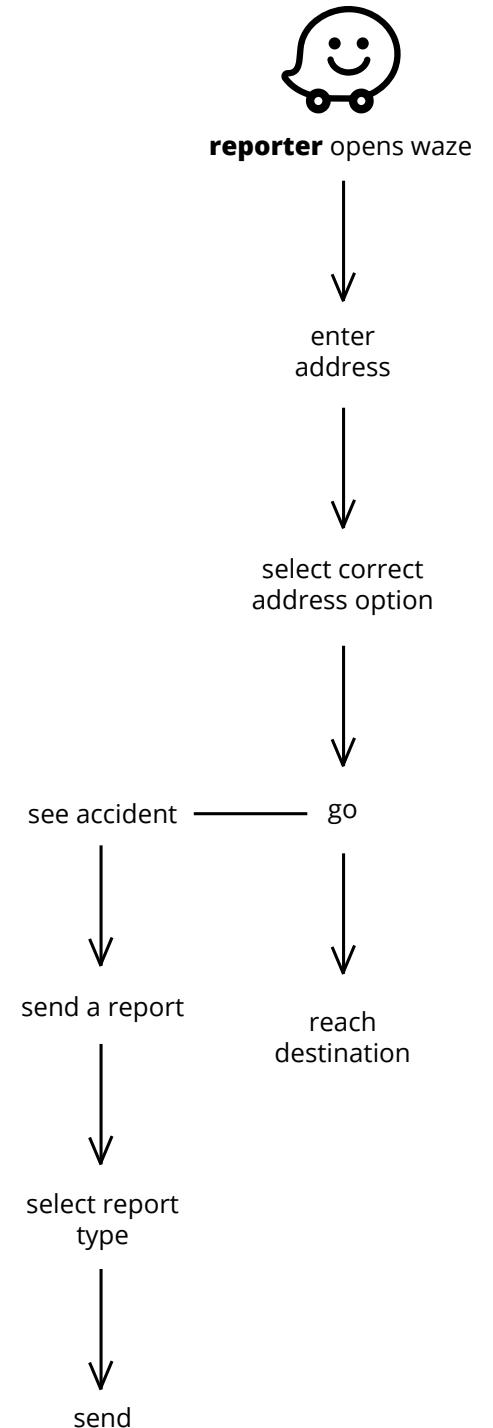
# Wireframe Sketches



# Workflow: Driver



# Workflow: Reporter

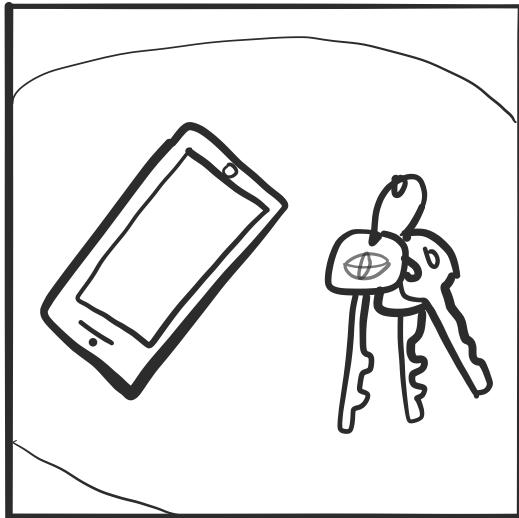


# formative testing

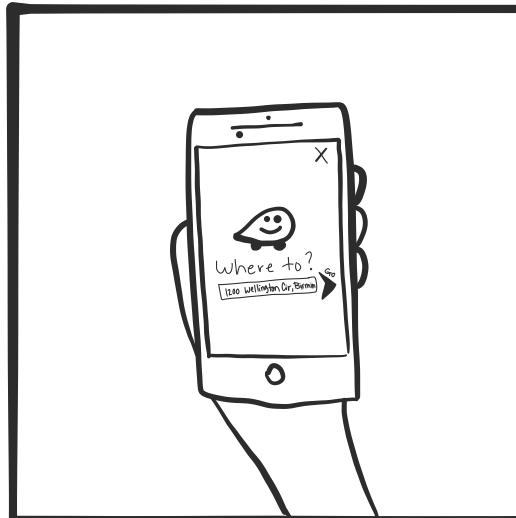
## User Goals

- ★ Get where I need to be, safely, quickly and easily without distractions with the help of Waze.
- ★ Make a report quickly and easily enough so that I won't get distracted or into an accident.
- ★ Search for my favorite destinations quickly without having to go to several separate menus/screens.

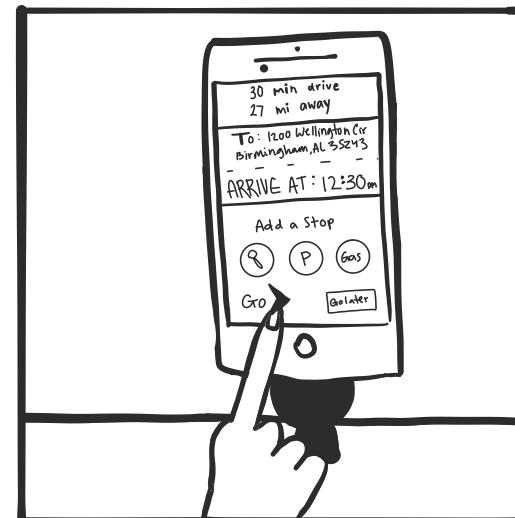
# Storyboard: Driver



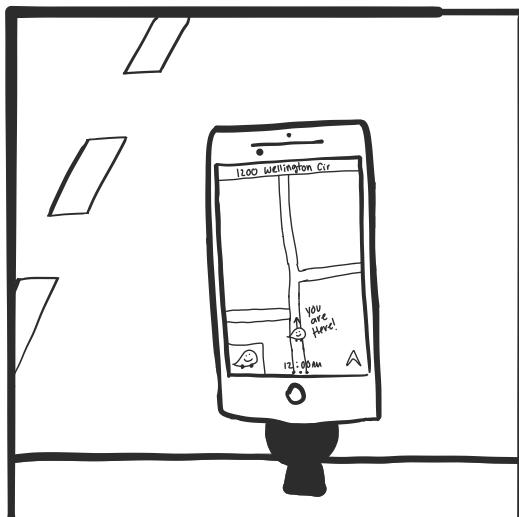
1. The driver grabs keys and phone on the way out the door.



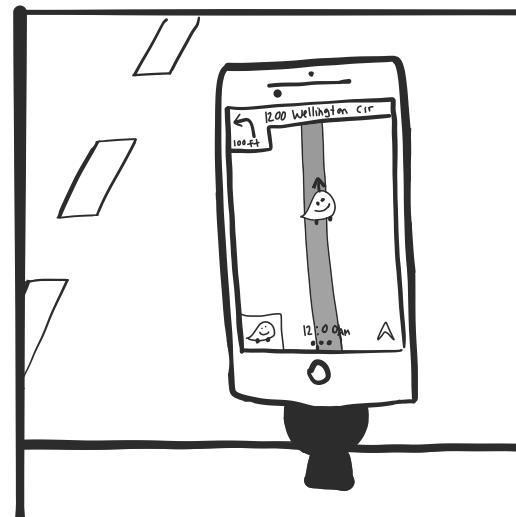
2. The driver opens the Waze app, types in an address and presses go.



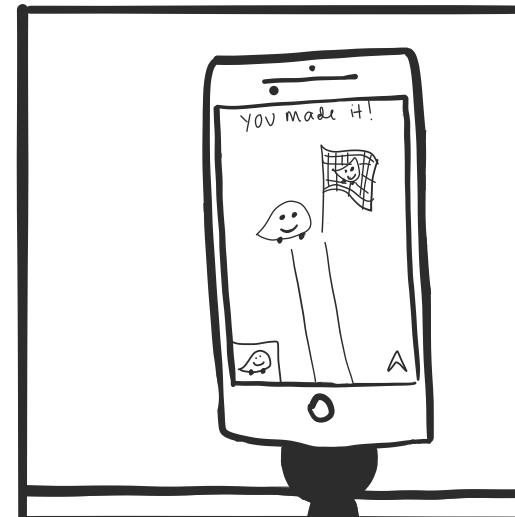
3. The driver quickly scans the trip info to double check and presses go.



4. The driver is directed to the map screen.



5. The driver begins to drive to the set location.



5. The driver is notified when reaching the address/destination.

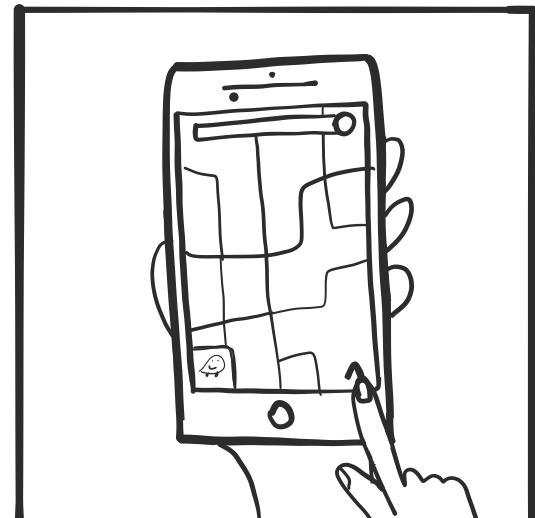
# Storyboard: Reporter



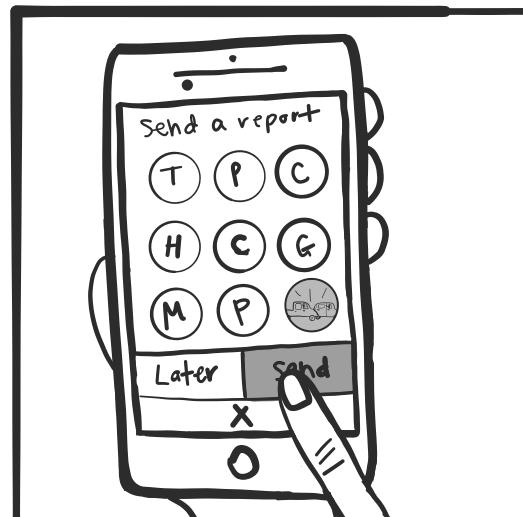
1. The reporter/the good samaritan witnesses a car crash nearby.



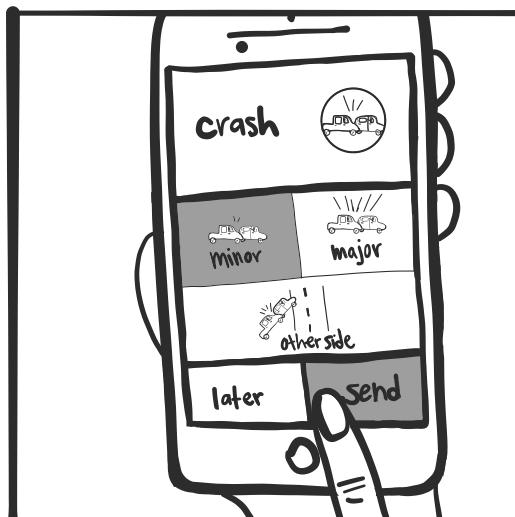
2. The reporter opens the Waze app and closes the intro welcome screen.



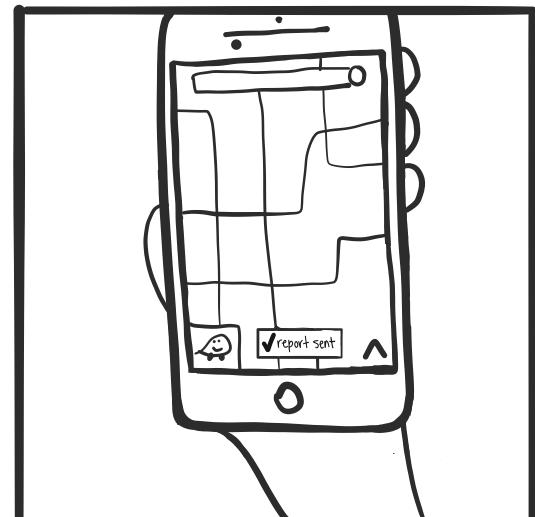
3. The reporter selects the right menu to report the crash.



4. The reporter selects which kind of report and taps the send button.



5. The reporter selects the crash level and taps send to conclude the report.



5. The reporter is notified on the home screen navigation that the report was sent successfully.

# Rebranding



Logo

waze



Logomark



Color



Process:  
C=46 M=100 Y=0 K=0

RGB:  
R=155 G=20 B=145

Hexidecimal:  
#9B1491



Process:  
C=62 M=100 Y=23 K=9

RGB:  
R=119 G=20 B=112

Hexidecimal:  
#771470

## Concept / Idea

- saving time – hour glass
- arrows – direction, routes
- purple – delicacy/preciousness - time goes by quickly, therefore time is precious.

# Full Color Compositions



## Driver

The screenshots show the Waze app's driver interface across five stages:

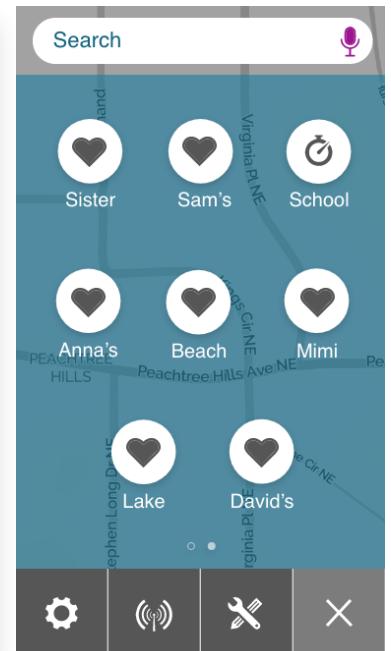
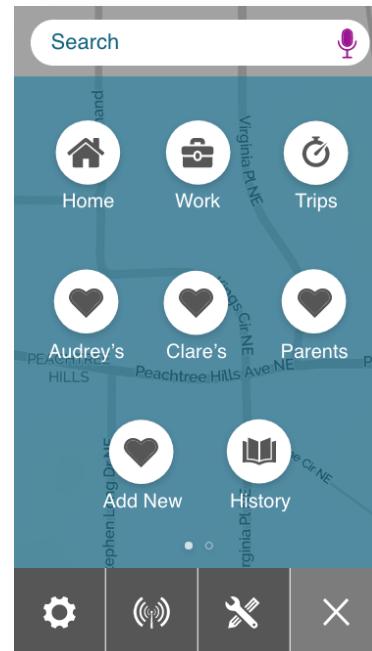
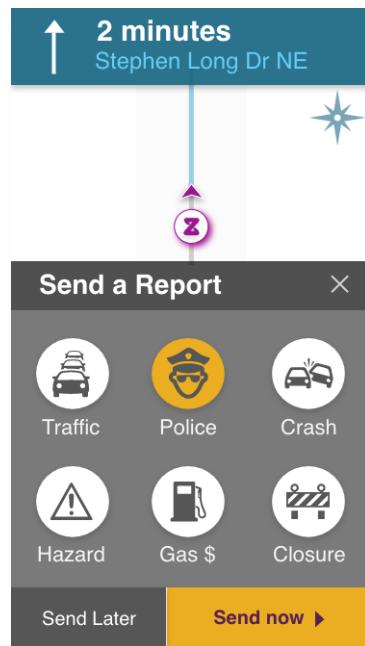
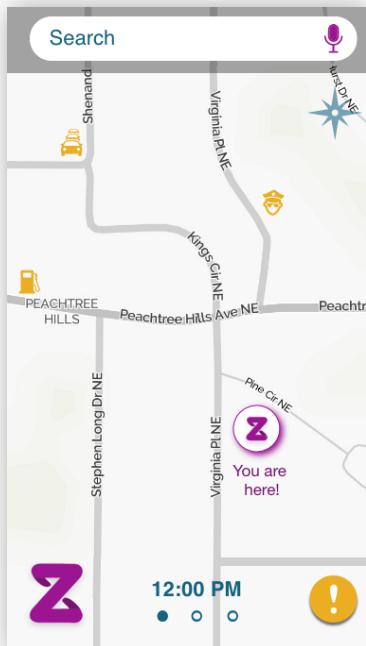
- Search Screen:** Shows a search bar with "1200 Wellington Circle" and a list of nearby locations: "1233 Wellington Court" (25 min away), "1200 Wellington Circle, Vestavia Hills, AL, United States" (30 min away), "1233 Wellington Pkwy, Alpharetta, GA, United States" (140 min away), and "1233 Wellington Road, Atlanta, GA, United States" (60 min away). Below is a keyboard and a "Search" button.
- Home Screen:** Shows a map with icons for "Home", "Work", "Trips", and "Audrey's", "Clare's", "Parents". Buttons for "Add New", "History", and navigation controls are at the bottom.
- Map View:** A map showing the route to "1200 Wellington Circle" via "Stephen Long Dr NE". The route is highlighted in blue, and the arrival time is "12:00 PM". A yellow exclamation mark icon is visible.
- Arrival Confirmation:** A message "You have arrived!" is displayed above the map. The address "1200 Wellington Circle" is shown with a purple arrival marker. The arrival time is now "12:30 PM".
- Summary Screen:** A summary of the trip: "30 minute drive" and "25 miles away" to "1200 Wellington Pkwy, Vestavia Hills, Alabama". It shows the arrival time "Arrive at: 12:30pm" and buttons for "Add a Stop", "Route", "Send ETA", "Stop", "Go Later", and "Go now ►".

## Reporter

The screenshots show the Waze app's reporter interface across five stages:

- Map View:** A map showing the location "1200 Wellington Circle" with a purple reporter marker. The arrival time is "12:00 PM". A yellow exclamation mark icon is visible.
- Home Screen:** Shows a map with icons for "Home", "Work", "Trips", and "Audrey's", "Clare's", "Parents". Buttons for "Add New", "History", and navigation controls are at the bottom.
- Search Screen:** Shows a search bar with "1200 Wellington Circle" and a list of nearby locations: "1233 Wellington Court" (25 min away), "1200 Wellington Circle, Vestavia Hills, AL, United States" (30 min away), "1233 Wellington Pkwy, Alpharetta, GA, United States" (140 min away), and "1233 Wellington Road, Atlanta, GA, United States" (60 min away). Below is a keyboard and a "Search" button.
- Report Submission:** A message "3 minutes" and "Stephen Long Dr NE" is displayed above the map. A "Send a Report" button is visible. The arrival time is "12:00 PM".
- Summary Screen:** A summary of the trip: "200 feet" and "Report sent" to "Stephen Long Dr NE". It shows the arrival time "12:00 PM" and buttons for "Send a Report", "Traffic", "Police", "Crash", "Hazard", "Gas \$", "Closure", "Send Later", and "Send now ►".

# Extra Screens



## Report icons

- less distracting
- smaller, one color
- only necessary reports

## Favorites menu

- quick access
- swiping affect

# Walkthrough



# summative testing



# Prototype Testing Results



## Negative Results:

**4** people were unsure how to send a report = **iconography**

**5** people were unsure of the meanings of the icons at the bottom of the main menu screen  
= **icon differentiation**

**2** people mentioned the white map background being too close in color to the gray colored roads  
= **contrast**

**2** person did not know what the two small dots would do on the main menu screen = **iconography**

**2** people thought the map needed more detail to show type of roads, surrounding places, etc.  
= **detail**

**1** person wanted to see what the alternative routes were after searching an address  
= **detail**

**2** people did not know the logo at the bottom of the map screen was the main menu button  
= **iconography**

# Prototype Testing Results



## Positive Results:

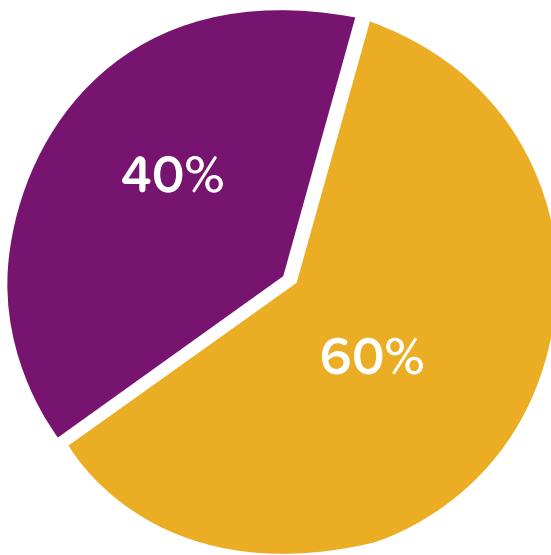
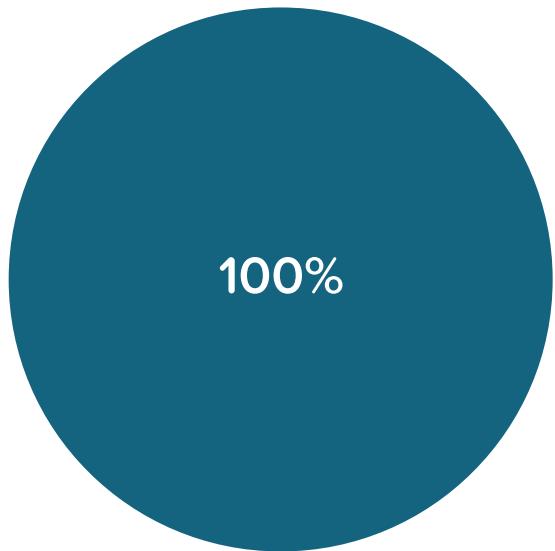
**5** people liked the friendly design and simple/easy user interface

**1** person liked how the favorites menu was laid out in icons instead of a list, easy and quick access while driving

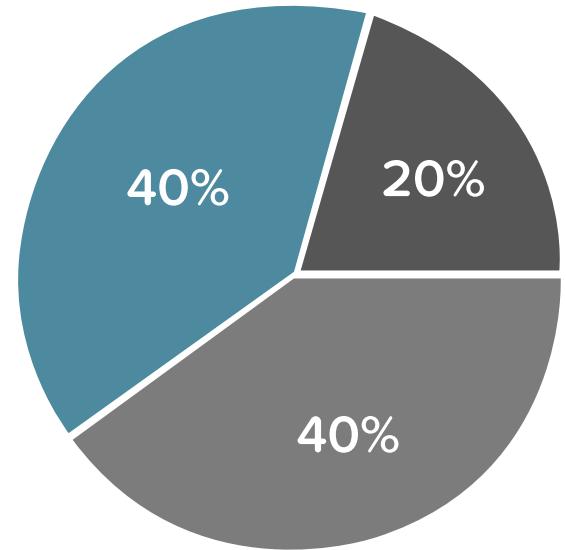
**5** people liked the colors and the logo

**1** person liked the big size of the logo icon on the map - easy to see where you are

# Survey Results



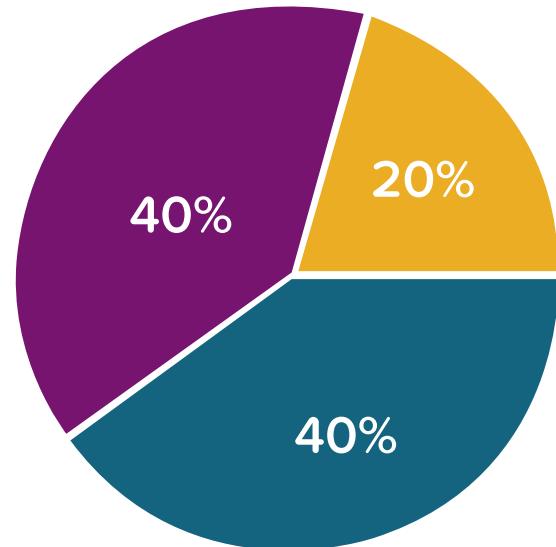
- I am a male
- I am a female



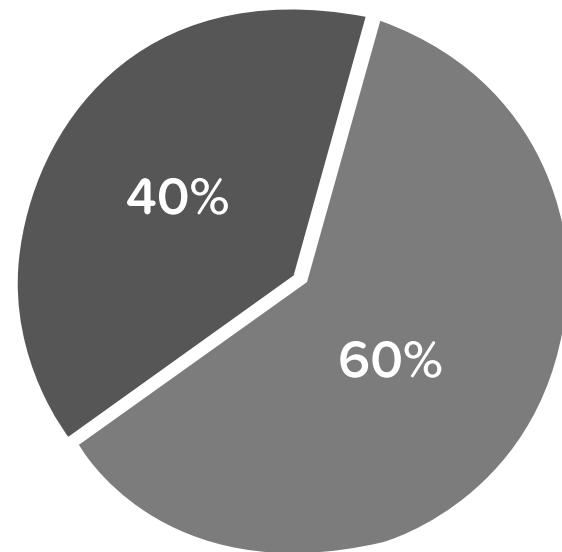
- I own a car
- I am white
- I live in the US
- I use a GPS when I drive
- If this app was real, I'd use it

- I am 18-24 years old
- I am 25-34 years old
- I am 55+ years old

# Survey Results

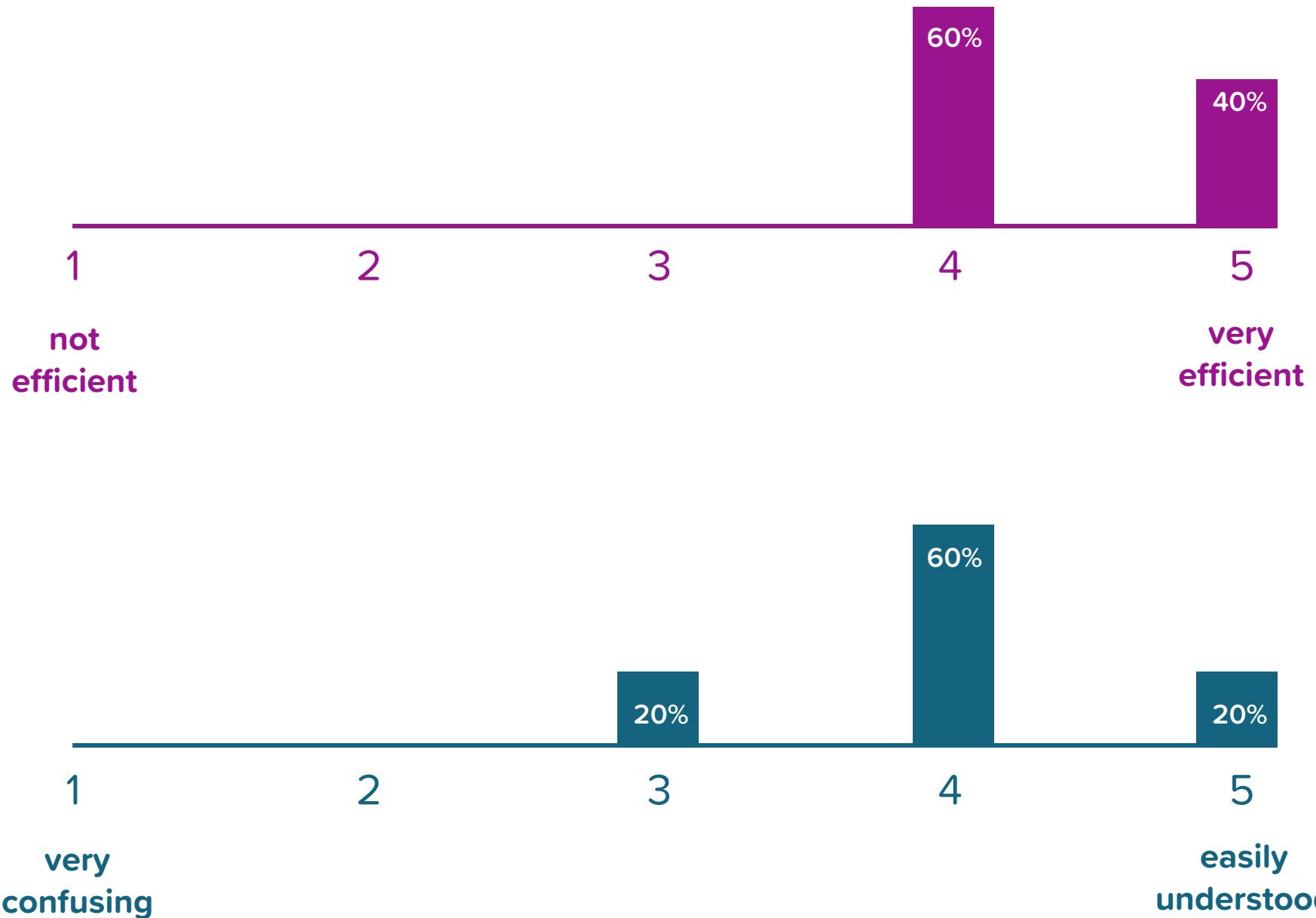


- I use Google Maps
- I use Waze
- I use Apple Maps
- Mapquest
- Other

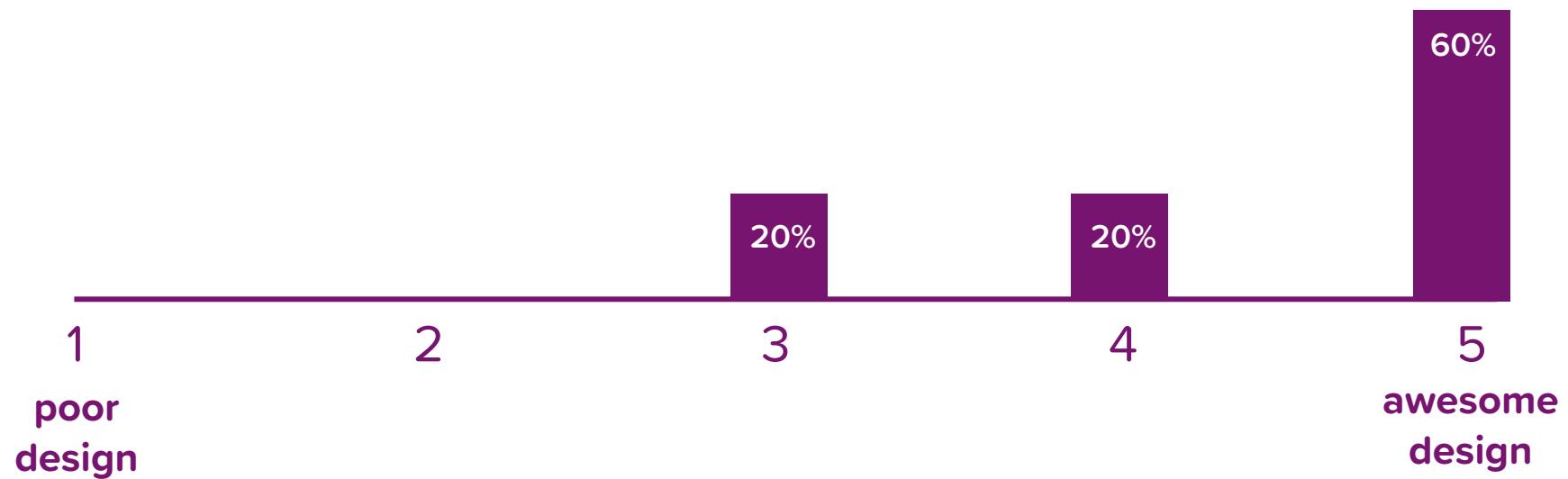


- I'm not a regular Waze user
- I'm a regular Waze user

# Survey Results



# Survey Results



*“The Waze app I just saw was...”*



*“simple and easy to use.  
The map itself was difficult to read.”*

*“simpler than the others”*

*“Waze...”* 😐

*“really good”*

*“simple and easy to use”*

“What would you change about the app?”



“introduce a map that is more clear”

“iconography”

“make the map screen a less harder white so it’s easier to see the blue and gray navigation lines.”

“note the menu clearer”

“the menu button is kind of confusing.  
Maybe use three lines as the menu icon”

# conclusion



# conclusion

# Changes, Next Steps

From testing users and getting feedback, I found that..

- ★ My app design was friendly, inviting, simple and easy to use.
- ★ Many users don't use Waze because of data and battery usage.
- ★ The hamburger menu should be used since it's universally recognized.
- ★ People would use my app in real life!
- ★ The map screen needs more contrast against the roads.
- ★ Add more detail to the map screen without getting cluttery.
- ★ There was confusion when sending a report and identifying buttons due to iconography issues.
- ★ My app design fixed the issue of icon clutter.
- ★ Design a screen that shows the alternative routes.



thank you