

Waymo Teen Early Riders:

Investigating the unique ways in which teenagers use Waymo's TaaS service

**Longitudinal Mixed
Methods Ethnographic
study**



Helping Waymo product team gain more insight into attitude, sentiment and behavior of teenage Waymo users and identify short term and long-term opportunities for Waymo to provide value to households with 1 or more teenagers.

Background

- Waymo Early Rider Program (ERP) was launched in Chandler, AZ, Mid 2017
- ERP was a private program that let vetted members of the public (age 18-65) hail its self-driving cars in the Phoenix area.
- Waymo ERP program ridership data showed that 18-year-old riders were amongst some of Waymo's early power users.
- The product and marketing stakeholders were curious and wanted to extend the age limitation to 16+ and learn more about the behavior, sentiment, TaaS usecases, and decision-making processes for teens (16-18). They also wanted to gain more insight into how Waymo can provide value to teens and their parents.



“What are some of the TaaS usecases for teens, how are they using Waymo today and how can Waymo be positioned and perceived as teens top mobility choice?”

- Waymo Head of Product

Study Goals

1. Gain insight into the overall usage behavior of 16-18 years old teenage users of Waymo ERP
2. Understand TaaS and Waymo usecases and decision making process for both teens and parents
3. Gain insight into potentials for behavioral or attitudinal shifts regarding car ownership or driving after using a Autonomous TaaS.
4. To understand segment specific needs for features and capabilities

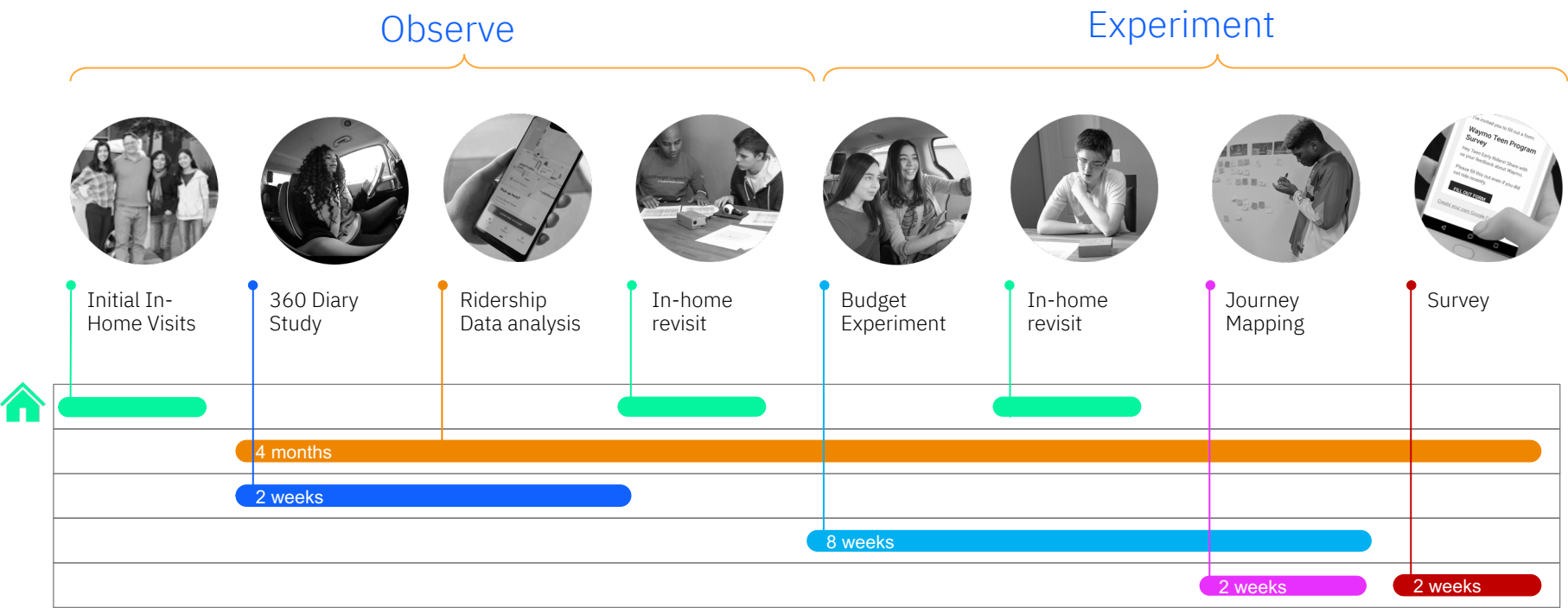
Participants

7 Households: 9 Teens between the ages of 16 and 18.
Only 1 teen Held a Driver's License at the time of study



Research Design

A longitudinal (4 months) Mixed Methods, Multimodal Ethnographic research approach was used to better observe this user group's behavior and needs from both the perspective of teens and parents over time.



Research Design

Observe



Initial In-Home Interviews:

Onboarded Households and learned about current behavior and sentiment, as well as their expectations and plans for using Waymo



360 Diary Study:

Gained a better understanding of Teens notable experiences, needs, concerns and contexts in which Waymo was valued as a superior mobility solution for teens



Ridership Data analysis

Analyzed the ridership data, footage and ride feedback of 1300 teen rides

Analyzed behavioral data (destination types, usage peaks etc.) as well as ride ratings + feedback.



In-home revisit (pre-experiment)

Captured their perspective on paying for Waymo vs other methods or car ownership.

Learned about expected TaaS budgets and current decision making process



Budget Experiment

Limited teen rides to only 10 rides per week for 8 weeks.

Observed and explored how ridership behavior was changed when teen was on a budget



In-home revisit (Post-experiment)

Gained deeper insight into why and how teens behavior and perception changed during the experiment

Explored what they expected from a paid TaaS service, and how they made decisions when on budget



Journey Mapping

I noticed that some teens did not share their opinion openly when parents were present

So we decided to hold mini teen focus groups and learn about teens own sentiment and expectations.



Survey

Surveyed 21 Teens and 29 Parents who used Waymo in order to validate and prioritize our initial feature list

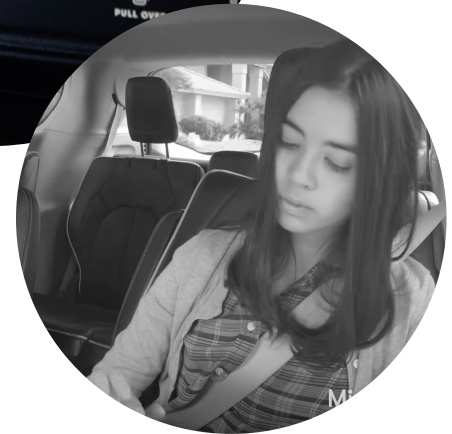
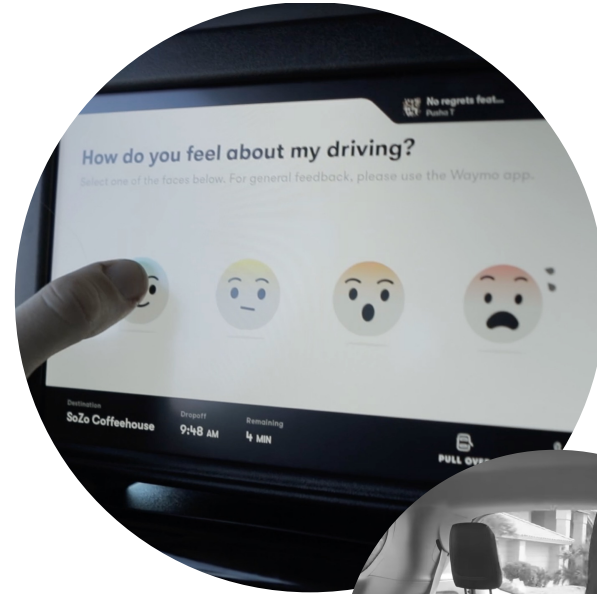
Validated teen household profiles and product Positioning strategy

Captured teen and parent sentiment on fully autonomous TaaS

Top Research Findings

Top Research Findings

1. **Teens ride during the hours that other riders don't.**
2. **Teens are more forgiving, but they do churn:** Teens (16-18) are quite busy with frequent transportation needs and need a reliable mobility solution. Therefore, although teens are less bothered by weird routes or suboptimal driving behavior of Waymo, shortcomings that do limit their use-cases and make Waymo unreliable, or embarrassing do make them churn. (i.e., no trip chaining, long wait times, or holding the traffic at the mall)



Top Research Findings

3. Parents are ready to pay for Waymo instead of a car, but some teens are not welcoming that idea.

- Using Waymo was not teens decision in some cases, so to them it felt like a cheap alternative
- For some, there is more to car ownership or a ride from parents than just a mobility solution.
- Autonomy or Waymo vehicles are not very attractive to teenagers
- Teens may need many rides and when on budget parents are likely to not pay for every ride they want

4. Some teens are prone to quick behavior changes:

When required to take at least 5 rides in 2 weeks (Study requirement, some **hesitant teens started using Waymo more and didn't stop even after the study**. They just needed to get into the habit to understand the benefits.



Top Research Findings

5. When limited to 10 rides per week (on a budget), teens were hoarding their rides

- Parents were making most decision on when to ride Waymo
- Teens and parents assessed “other” options before deciding to use Waymo.

6. Parents want many parental control features, but teens are not okay with all of them

- Teens reported that they are extremely unlikely to use Waymo if parents were able to have access to in-car footage or the interior cameras

7. Teens want entertainment capabilities like Spotify, customization as well as ability to chain trips



Top Research Findings

Teen Household profiles that are more likely to adopt Waymo

Households with teen(s) who is/are **not interested in driving or is/are unable to drive for medical reasons** do not see driving as an option and are often struggling with a good alternative.

Current behavior: They use the school bus, take rides from friends or family, walk, bike, or Uber/Lyft.

Are likely to be Waymo super users if price is reasonable as a long-term and sustainable choice for all teen transportation needs

Households with **multiple teens closer in age** are more likely to be overwhelmed by schedule conflicts and less likely to purchase multiple vehicles.

Current behavior: They use alternatives such as rides from friends and family, Uber/Lyft, bike/walk.

Are more likely to use Waymo if price and reliability is competitive or better than TaaS alternatives

Households with a 16-18 **teen(s) and working parents** are limited to parents work schedule and heavily depend on alternatives.

Current behavior: They utilize all alternatives while encouraging teen(s) to obtain a driver's license As soon as possible.

more likely to use Waymo rather than car ownership If introduced to them during early teen years (14-16) prior to the “anticipation” for car ownership or driving.

Top 5 Recommendations

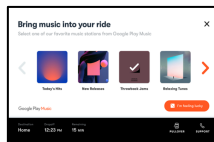
1. Parental Control Features such as Pick up and drop off times and locations or alerts when rides are stuck or pulled over
2. Trip Chaining
3. In car entertainment features such as YouTube music and Spotify
4. Personalization features so that teens can identify their Waymo rides
5. Designated Pick up and drop off spots for top teen destinations

Business Outcomes

Insights Gained:

- **Current behavior, needs and perceptions of teens and parents** as well as existing **mobility gaps** where Waymo has the potential to fit in.
- **Potential Product positioning and PR strategies** to target this segment and making Waymo teens' first choice without parents driving the decision
- **Teen and parent preferences and priorities for features and capabilities** that can contribute to a more delightful experience

Actions Taken:



1. **In car entertainment:** YouTube, Spotify, Google Music, Apple Music
2. **Partnerships with top teen destinations** (i.e. designated pickup and drop off spots at schools, discounted rides, etc.)
3. **Personalization features:** that allow riders to choose a unique personalized ID and color scheme to be shown on their car's dashboard
4. **Trip Chaining:** a multi-stop feature that allows riders to plan trips that may include multiple destinations with varying times between each stop.