



# The Future of Urban Mobility

## REFUELING GUESTS

ID 3051

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# Outline

- Prompt
- Data Collection
- Notable Data
- Persona & Needs Interpretation
- Key Findings
- Our Concept Narrative





# What is Urban Mobility?

*“The definition of urban mobility refers to all aspects of movement in urban settings. It can include modes of transport, such as walking, cycling, and public transit, as well as the spatial arrangement of these modes in a built environment.”*



**“From liminal to memorable space, what does  
the urban mobility space of the future look like?”**



# Walking in the Shoes of our Customers

Who currently uses Urban Mobility Centers and what for?

| Stakeholders                    | Activities                       | Artifacts          |
|---------------------------------|----------------------------------|--------------------|
| Commuters                       | Fueling/Charging/Rewards         | Pumps/Chargers     |
| Short & Long-Distance Travelers | Getting Snacks                   | Convenience aisles |
| Regulars & One-Time Visitors    | Going to the Bathroom            | Drink Fridges      |
| Car & Bike Enthusiasts          | Drug Deals                       | Privacy Doors      |
| Owners/Workers                  | Conversations w Locals/Travelers | Outdoor Seating    |
| Suppliers                       | Daily Coffee/Sandwich Stop       | Fast Food Counter  |



Preparation

Travel

Charge

Destination

**Internal  
Combustion  
Vehicles**



**Electric  
Vehicles**



**Rideshare  
Scooter/Bikes**



**Marta**



**2030** The US wants 50% of vehicles sold  
to be Electric Vehicles

**2035** The EU is mandating ALL vehicles  
sold to be zero emissions

Whether people are completely on board or not, the world is moving towards removing carbon emission cars on the road. It is up to us to begin easing this transition for people and shape what the future of transportation looks like. Gas stations will not be needed anymore so what will replace them?



# > 80%

of electric vehicle charging is done at home.

With California's electrical grid stress and more to come, it would save drivers to avoid home installation and connect with their neighbors simultaneously. Gas stations may soon fall into disrepair and could serve a new purpose.





# EV User Personas



**SPORADIC SALLY**

Not bogged down with payments; likes to exercise. Her needs change by the month. Uses her parents PEV



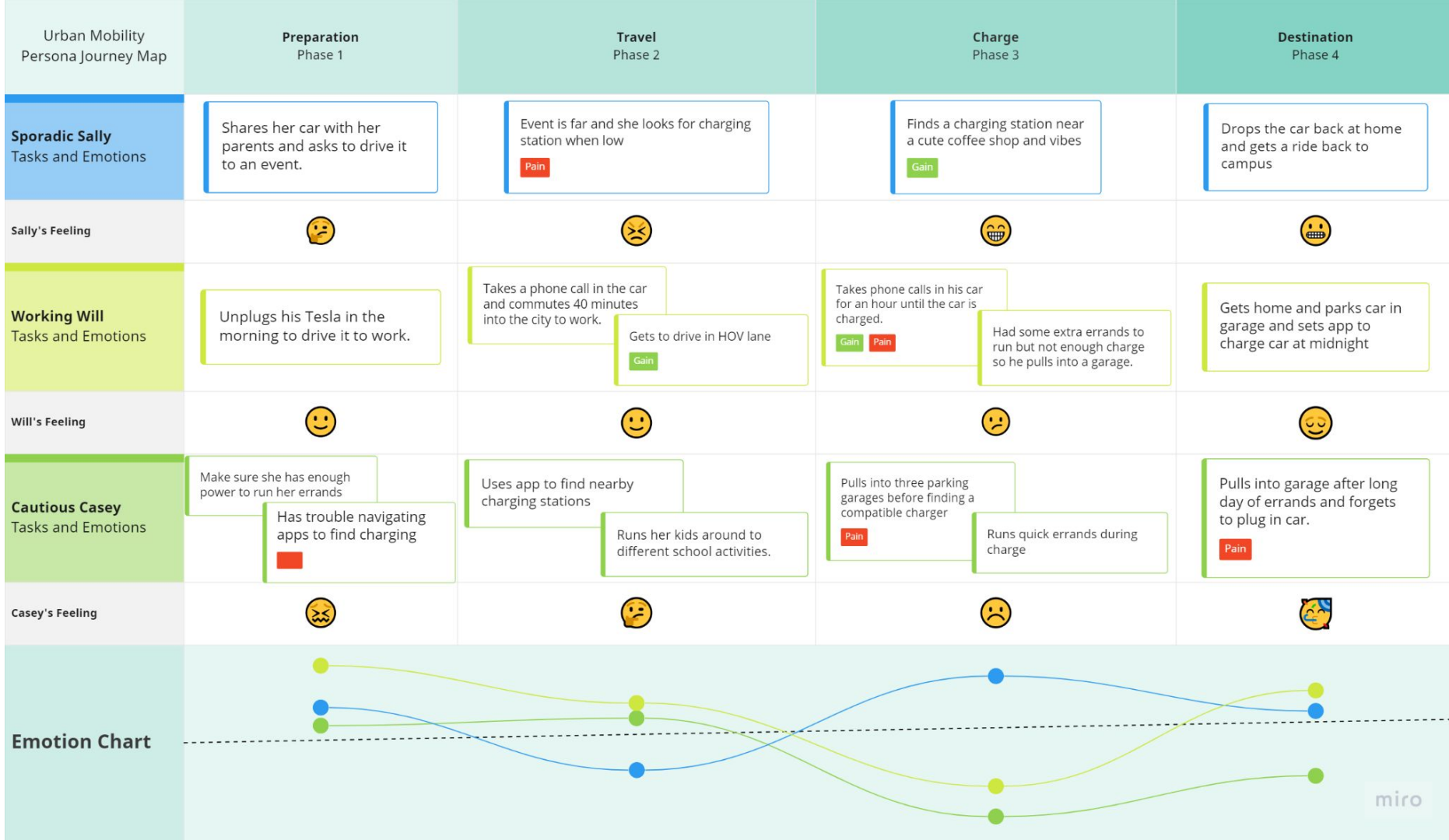
**WORKING WILL**

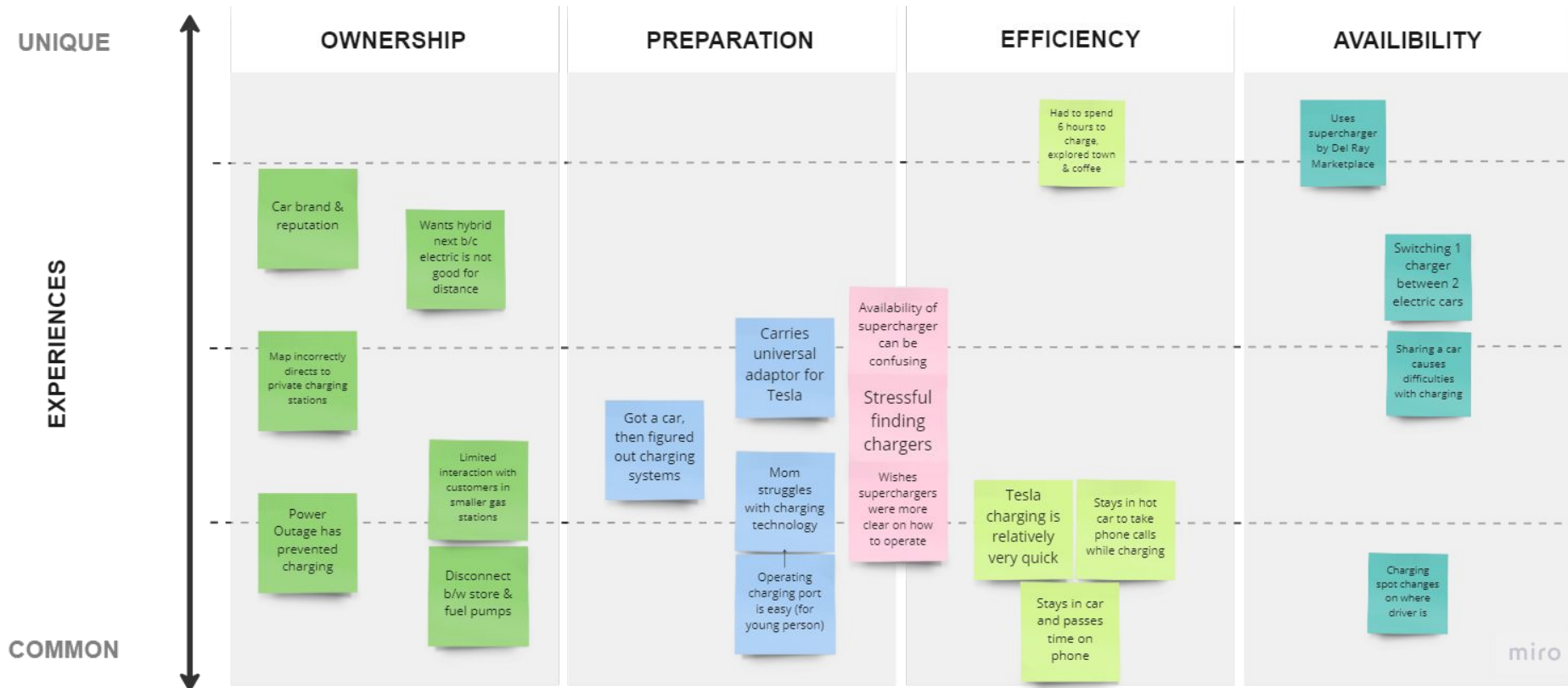
Will is a corporate man with a love for fancy cars and being at the forefront of new technology. Owns a PEV.

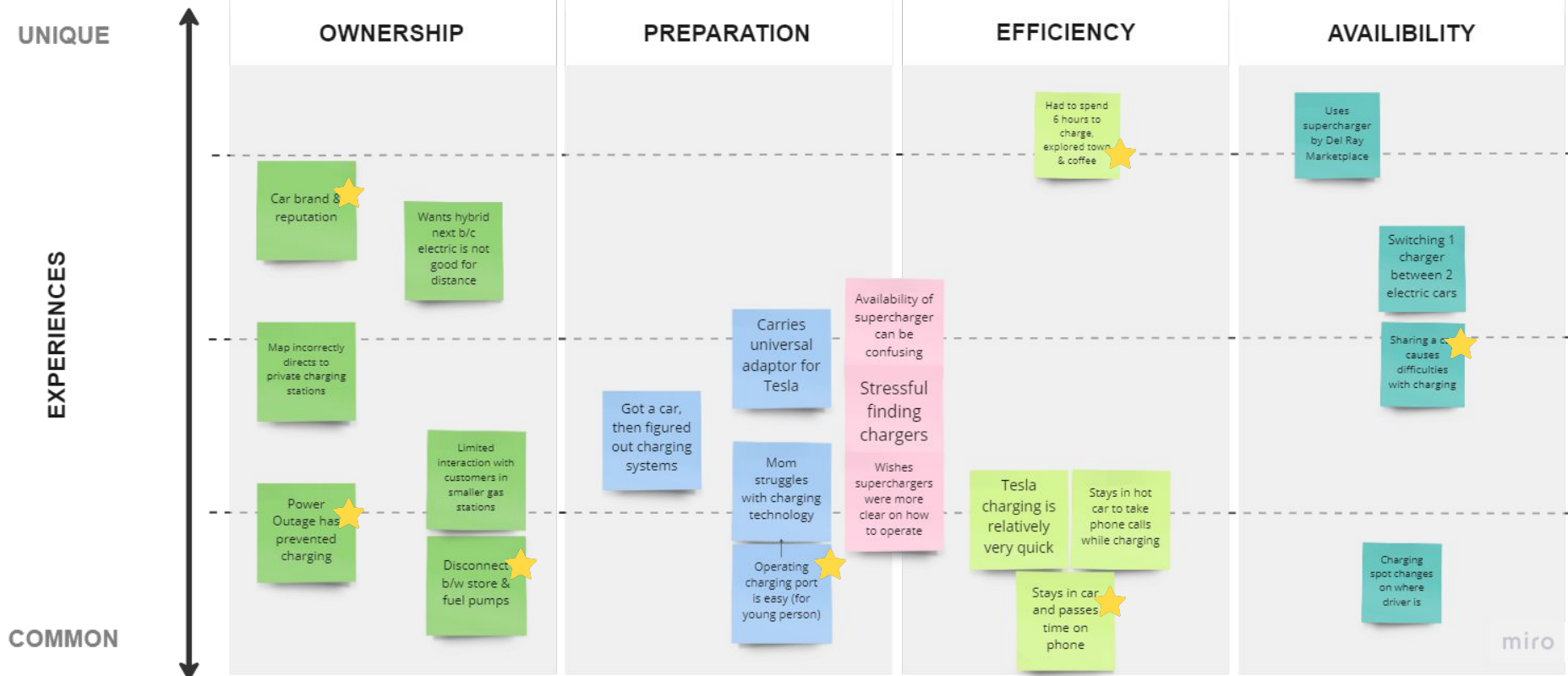


**CAUTIOUS CASEY**

Plans work needs & family trips carefully and can get held up by new technology. Owns a PEV.









## Ownership

Disconnect between store and fuel pumps

Brand Reputation



## Preparation

Technological struggle between young & older users

Understanding charging systems



## Efficiency

Time vs. Productivity

What can we do while charging?



## Availability

Difficulties with charging resources

Charging Locations

# Key Findings



## Ownership

Individuals looking to own electric vehicles place value on the brand, but are prone to **abandonment** after a few years due to range and even power outages. **Communal experiences feel disconnected** between fuel pumps and convenience stores, or isolated public chargers.



## Efficiency

Commonly, EV owners **sit in their unpowered car** on their phone while charging in public, itching to connect with their community meaningfully. Spending hours exploring a town takes time but worth it when the opportunity arises.



## Preparation

EV owners buy the car first then **figure out charging later**, which re-implements the gas station experience they hoped to **escape, often making the situation even more stressful**. They install chargers at home, make do with a few public charging methods, and Tesla owners learned to carry an adapter with them.



## Availability

Sharing chargers at home, supercharger difficulties, and loyalty to public chargers are among a list of **availability complications**. Scooters are encountered by chance, and American public transport is typically underutilized.

## Bucket of Influence

### Ownership

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Community

Generational context  
(out of scope)

### Preparation

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Physical Artifacts

### Efficiency

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Time Well Spent

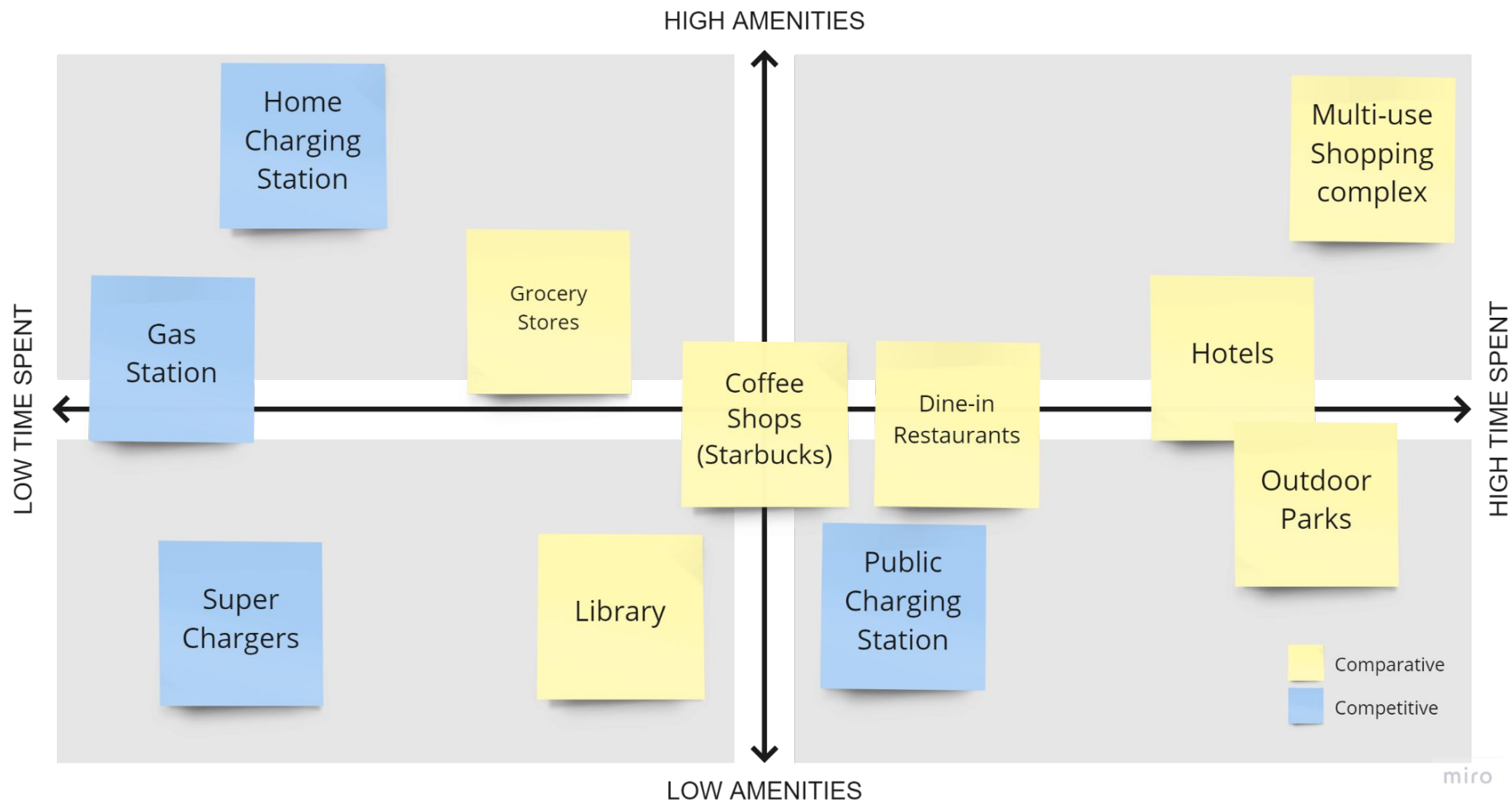
### Availability

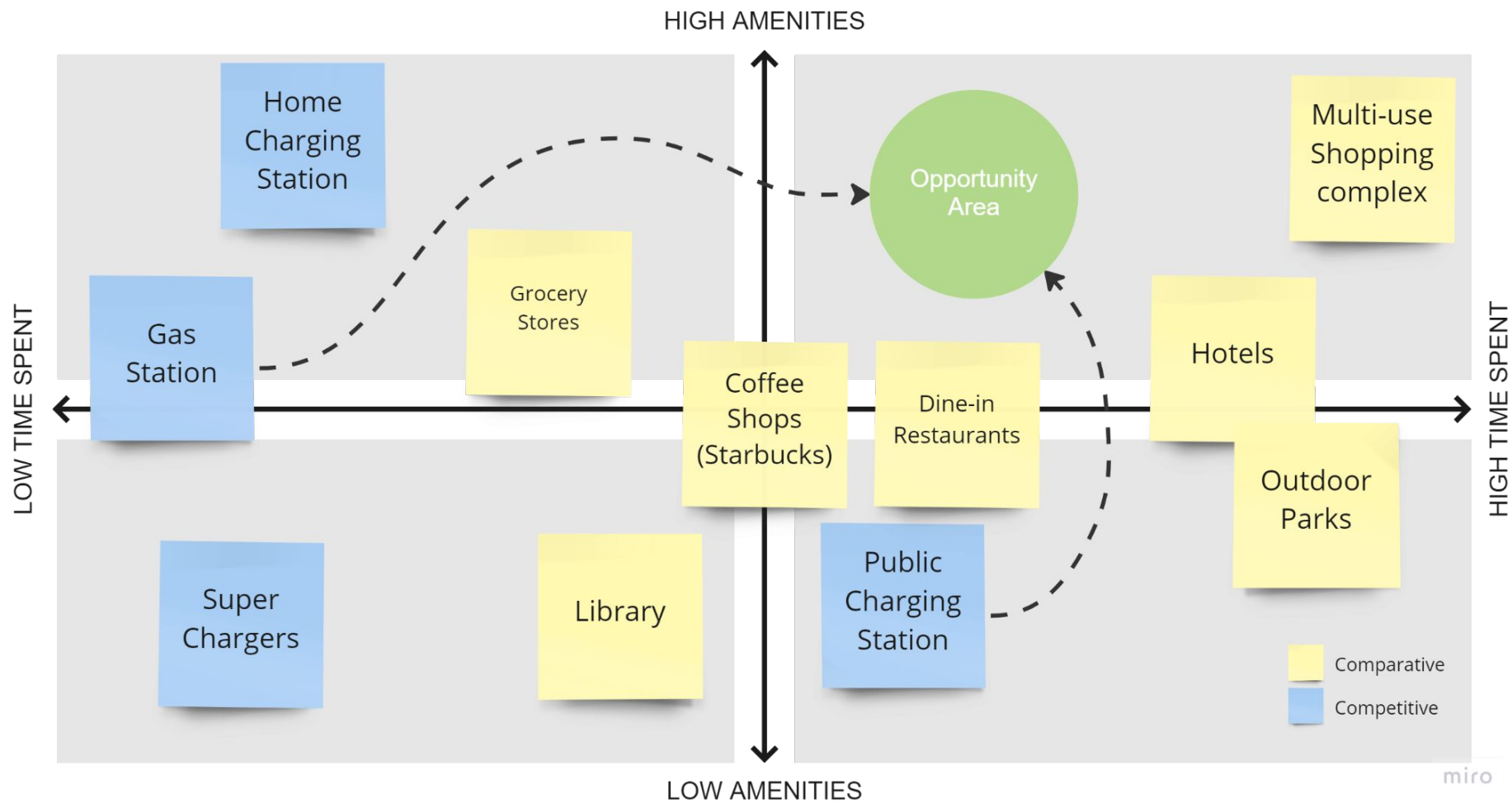
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Infrastructure

Too large to control  
(out of scope)







# Aspirational Journey Map



Recharge your car. Recharge your body.



# Resources

[https://www.greenbiz.com/article/defining-moment-zero-emission-transport#:~:text=Tipping%20point%3F-.EU%20poised%20to%20mandate%20zero%20Emissions%20vehicles%20by%202035.cars%20and%20vans%20by%202035.&text=In%20late%202020%2C%20California%20and.combustion%20engine%20\(ICE\)%20vehicle.](https://www.greenbiz.com/article/defining-moment-zero-emission-transport#:~:text=Tipping%20point%3F-.EU%20poised%20to%20mandate%20zero%20Emissions%20vehicles%20by%202035.cars%20and%20vans%20by%202035.&text=In%20late%202020%2C%20California%20and.combustion%20engine%20(ICE)%20vehicle.)

<https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/14/fact-sheet-president-bidens-economic-plan-drives-america's-electric-vehicle-manufacturing-boom/#:~:text=The%20President%20united%20automakers%20and.%2C%20EV%20chargers%2C%20and%20batteries.>

<https://www.acbconsultingservices.com/construction-management-for-transportation/what-is-urban-mobility-and-why-is-it-important-to-build-better-cities/>

<https://avt.inl.gov/sites/default/files/pdf/arra/PluggedInSummaryReport.pdf>