



The Future of Urban Mobility

REFUELING GUESTS

ID 3051

Hannah Fralick
Ella Hoogs
Sophia Kim
Nolan Helmuth



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

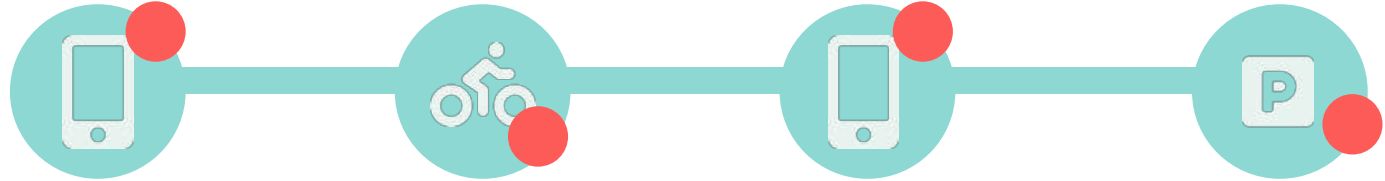
**Internal
Combustion
Vehicles**



**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.

Urban Mobility Persona Journey Map	Preparation Phase 1	Travel Phase 2	Charge Phase 3	Destination Phase 4
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Sporadic Sally
Tasks and Emotions

Shares her car with her parents and asks to drive it to an event.

Event is far and she looks for charging station when low
Pain

Finds a charging station near a cute coffee shop and vibes
Gain

Drops the car back at home and gets a ride back to campus

Sally's Feeling



Working Will
Tasks and Emotions

Unplugs his Tesla in the morning to drive it to work.

Takes a phone call in the car and commutes 40 minutes into the city to work.
Gets to drive in HOV lane
Gain

Takes phone calls in his car for an hour until the car is charged.
Had some extra errands to run but not enough charge so he pulls into a garage.
Gain Pain

Gets home and parks car in garage and sets app to charge car at midnight

Will's Feeling



Cautious Casey
Tasks and Emotions

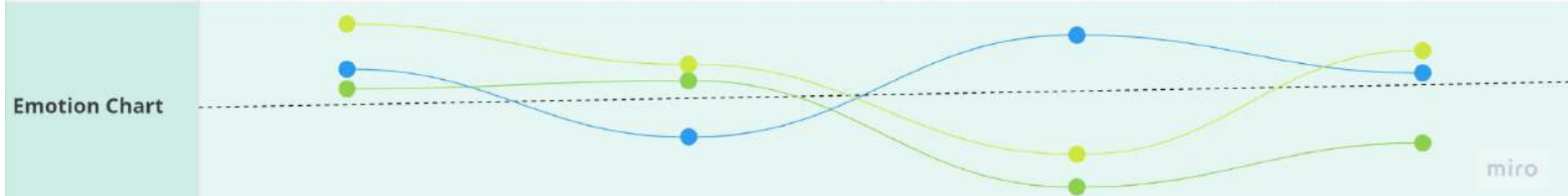
Make sure she has enough power to run her errands
Has trouble navigating apps to find charging
Pain

Uses app to find nearby charging stations
Runs her kids around to different school activities.

Pulls into three parking garages before finding a compatible charger
Runs quick errands during charge
Pain

Pulls into garage after long day of errands and forgets to plug in car.
Pain

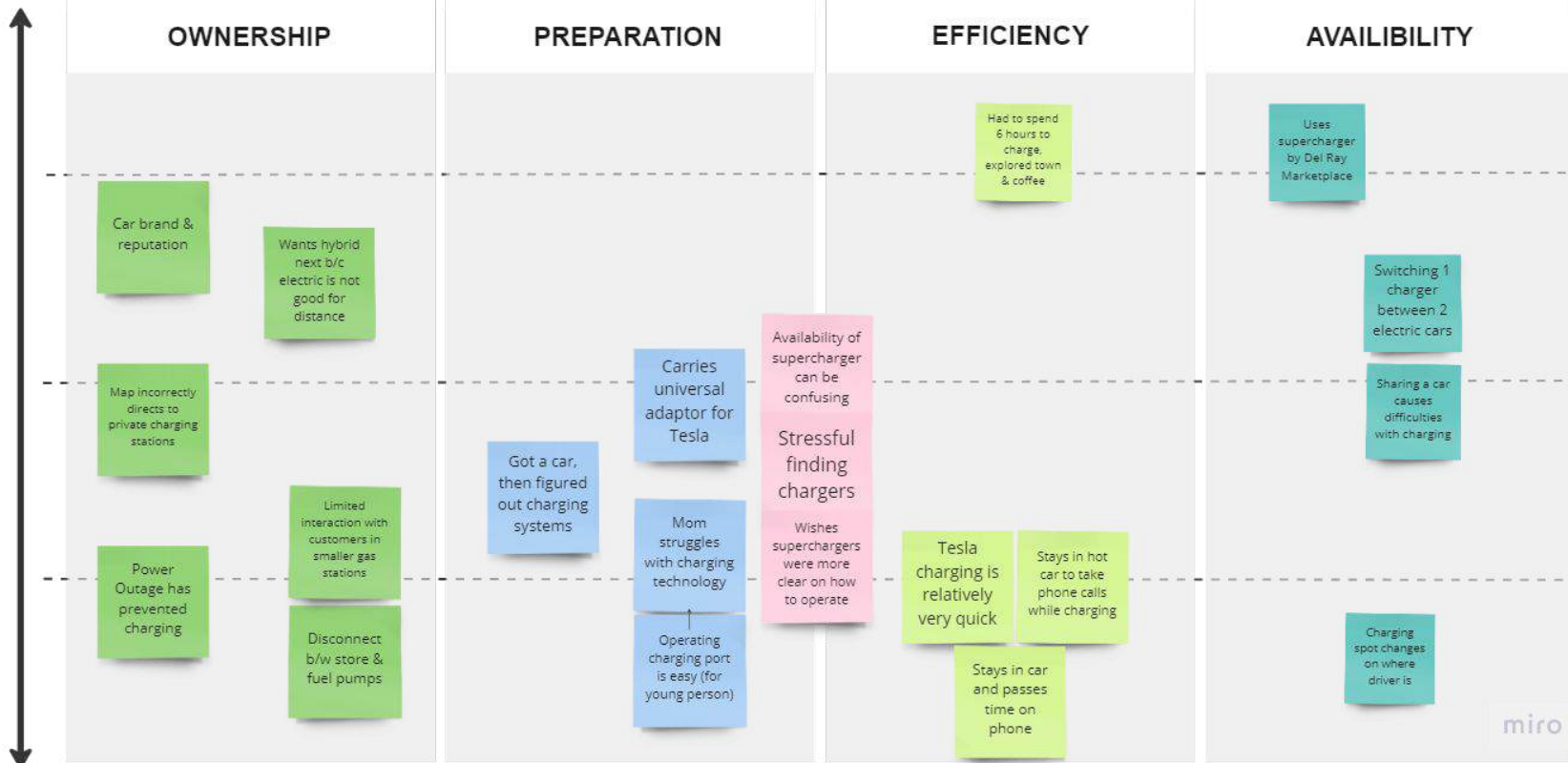
Casey's Feeling



UNIQUE

EXPERIENCES

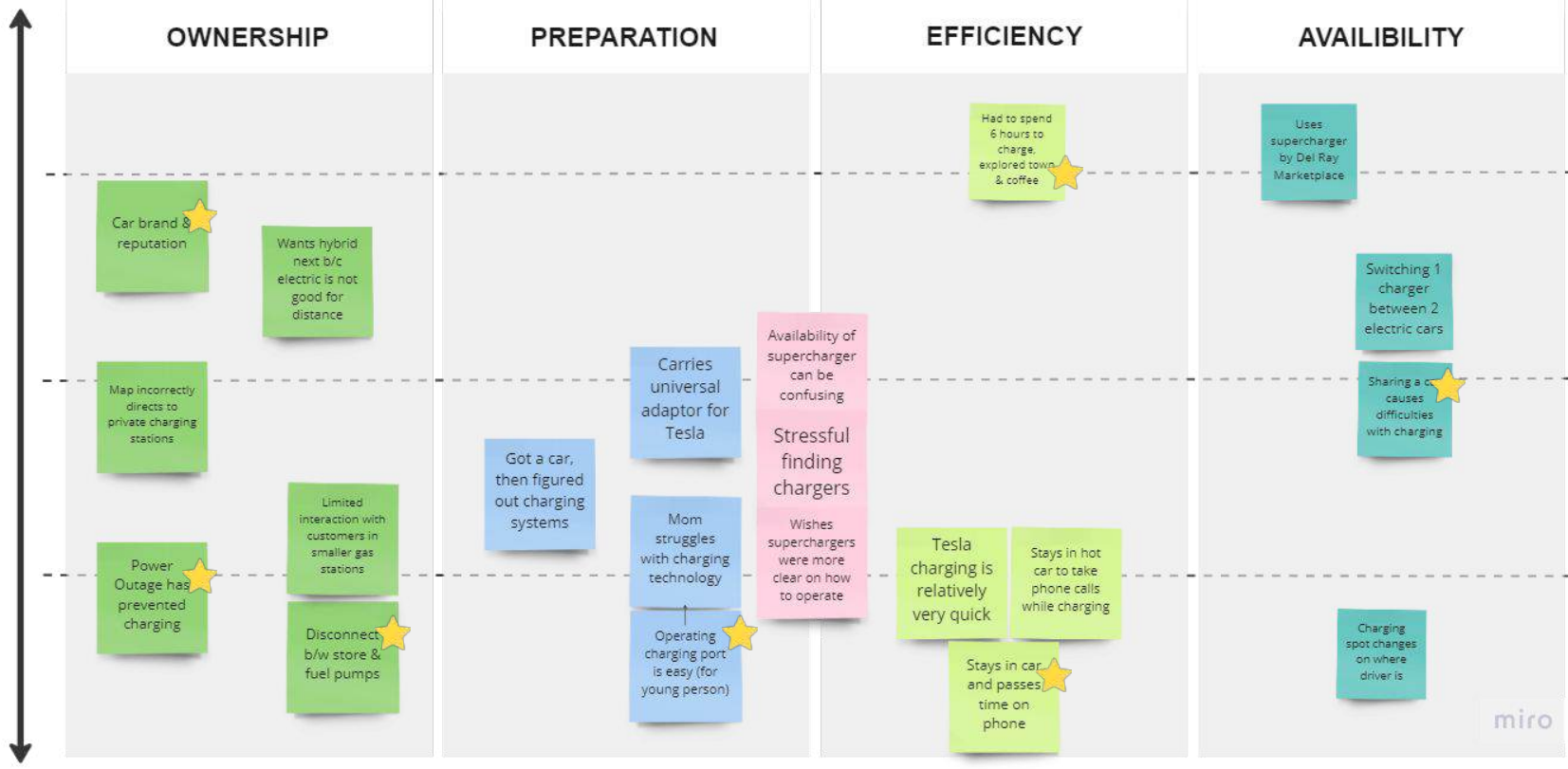
COMMON



UNIQUE

EXPERIENCES

COMMON





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

Community

Generational context
(out of scope)

Preparation

Physical Artifacts

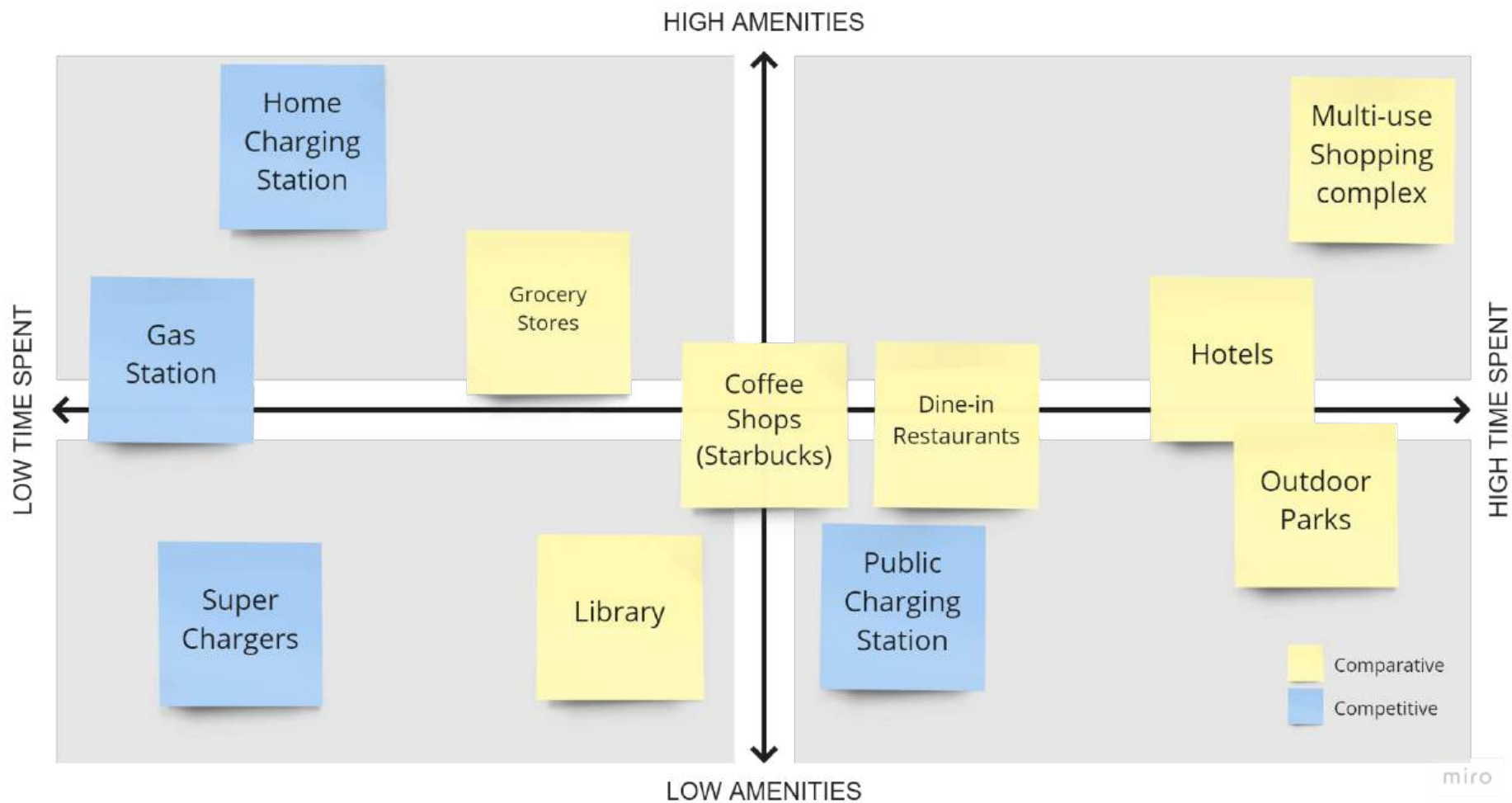
Efficiency

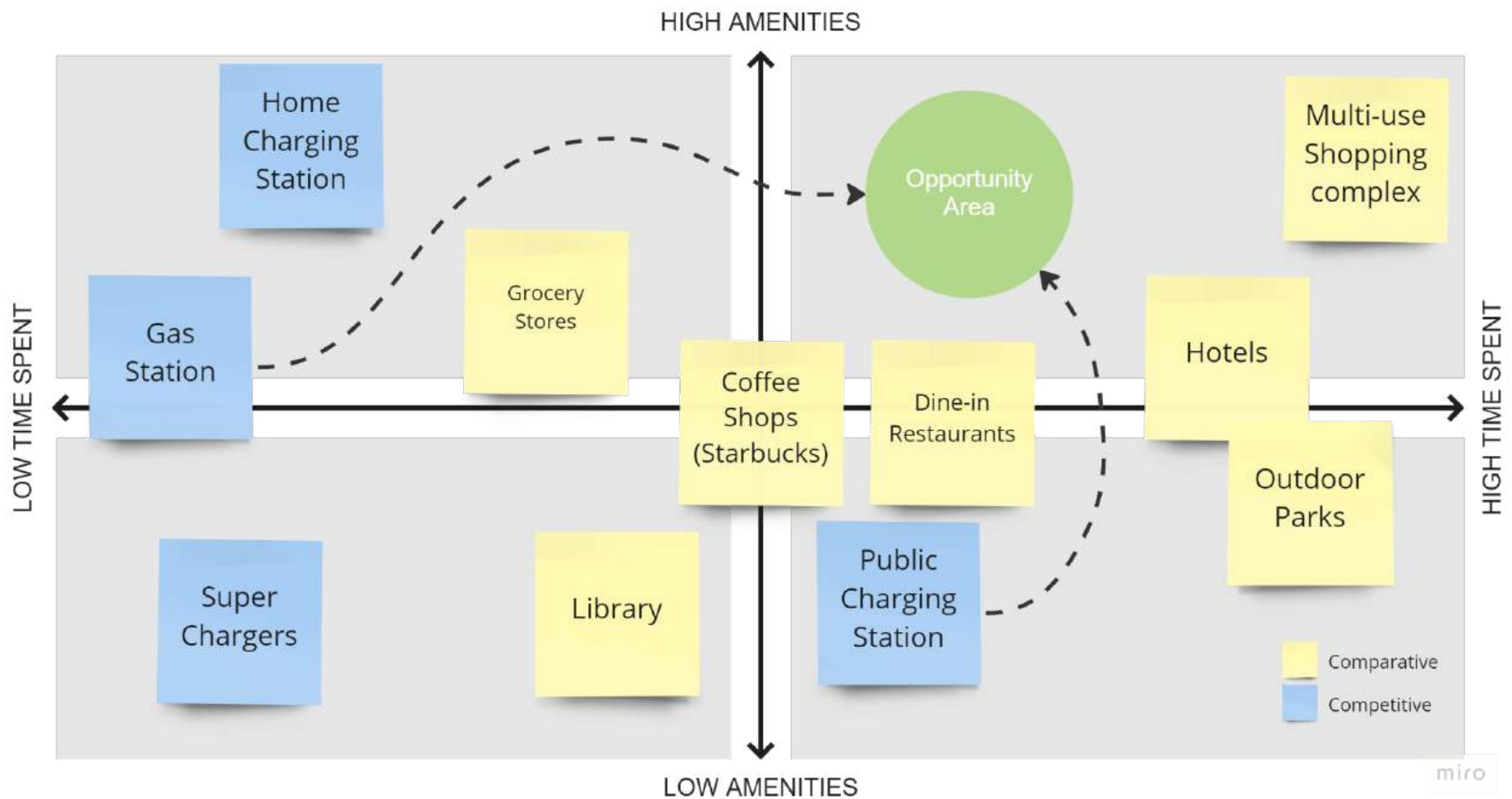
Time Well Spent

Availability

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%20combustion%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%20combustion%20engine%20(ICE)%20vehicle.)

<https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/14/fact-sheet-president-bidens-economic-plan-drives-america%E2%80%99s-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>