

Enhancing Campus Mobility with Autonomous Transit Solutions

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BACKGROUND

In collaboration with **UC San Diego**, **Beep**, and **TESIAC**, our team aims to explore solutions for improving first/last mile connections in the UCSD campus transportation network.

Through comprehensive market analysis and user research, we aim to develop a final proposal document containing **potential shuttle routes** in the La Jolla area and **key user insights and analytics**.

This project is designed to **enhance mobility access for students** by introducing Beep's autonomous zero-emission shuttles on campus.

OBJECTIVES

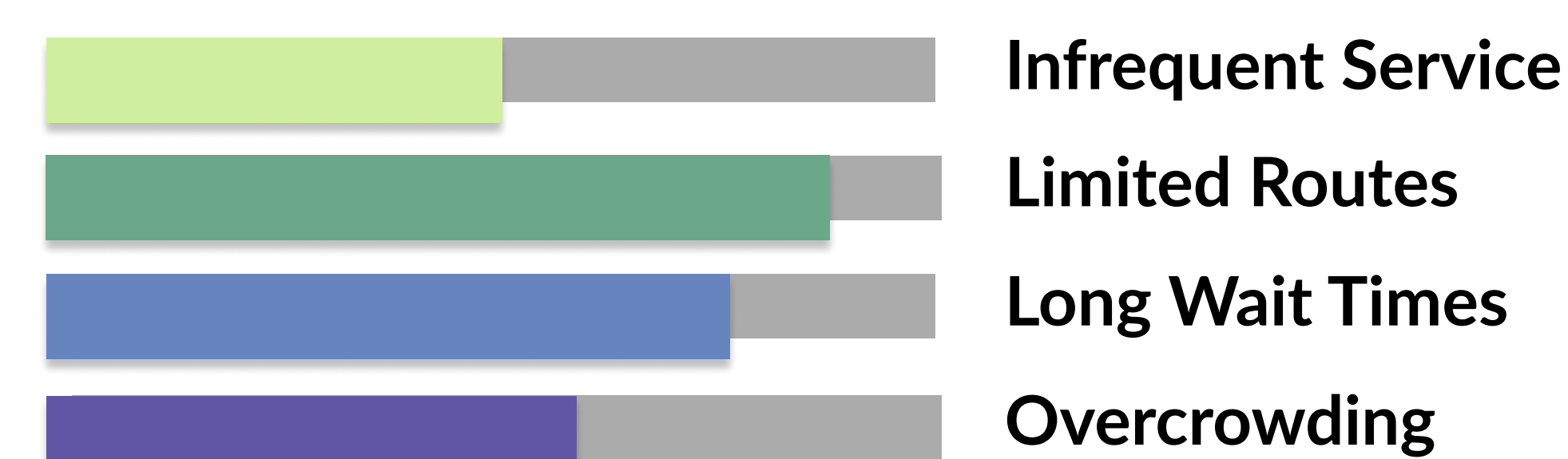
Our final deliverable will be a **mobility planning document** that includes potential service areas, technology recommendations, and identifies potential local partnerships to support the effort moving forward, which highlights:

- **Recommended routes/service types**
 - Informed by a student survey of potential riders
 - Identifies specific pickup and dropoff Points
- **Vehicles to support the program**
 - Service times & trip frequency
- **Economic factors**
- **Key stakeholders to support the program**
 - UCSD Transportation Department
 - Existing transportation network & locating any gaps

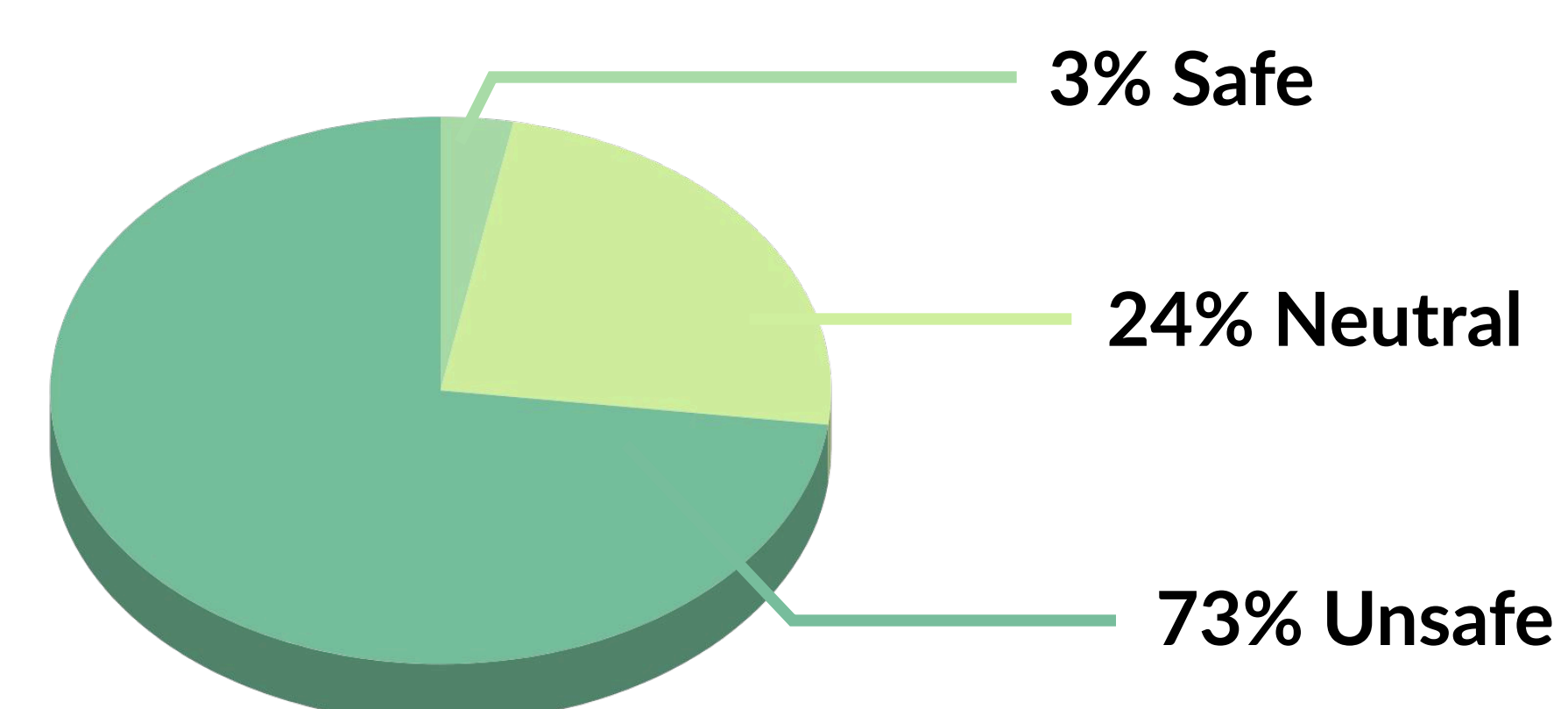
OUTCOMES & DELIVERABLES

USER RESEARCH ANALYTICS

Main Concerns with MTS



Do students feel safe using the MTS after dark?



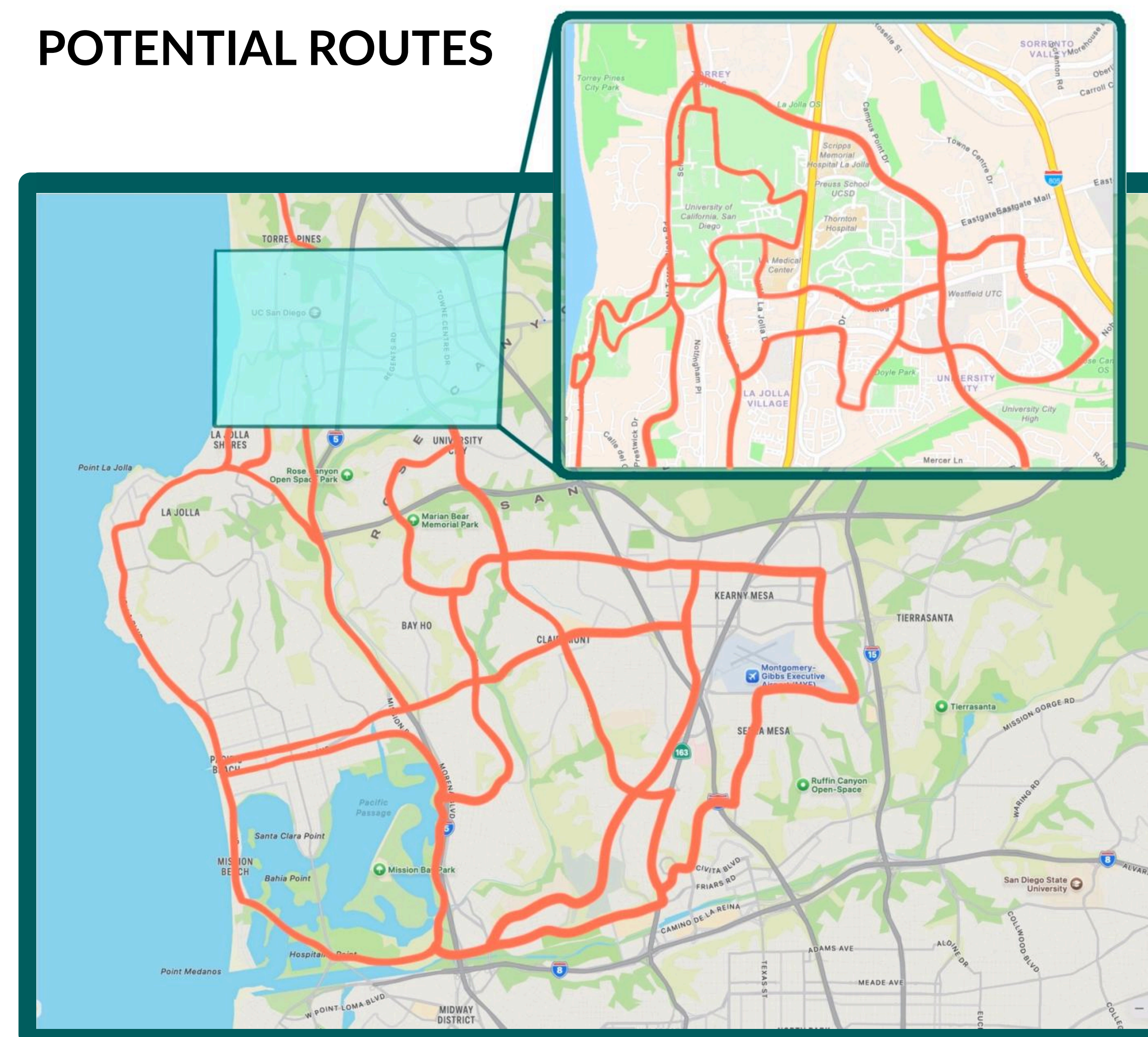
We recommend that UCSD partner with Beep to launch an **on-demand autonomous shuttle** with **operational hours focused after 9 PM**.

FINAL PROPOSAL DOCUMENT



Our **final proposal document** going over our full research progress! Check it out for a better look and explanation of **data, routes and hotspots!**

POTENTIAL ROUTES



POTENTIAL HOT SPOTS



Convoy
Sixth College
La Jolla Village Square
UTC
and more...!

LEARNING OUTCOMES

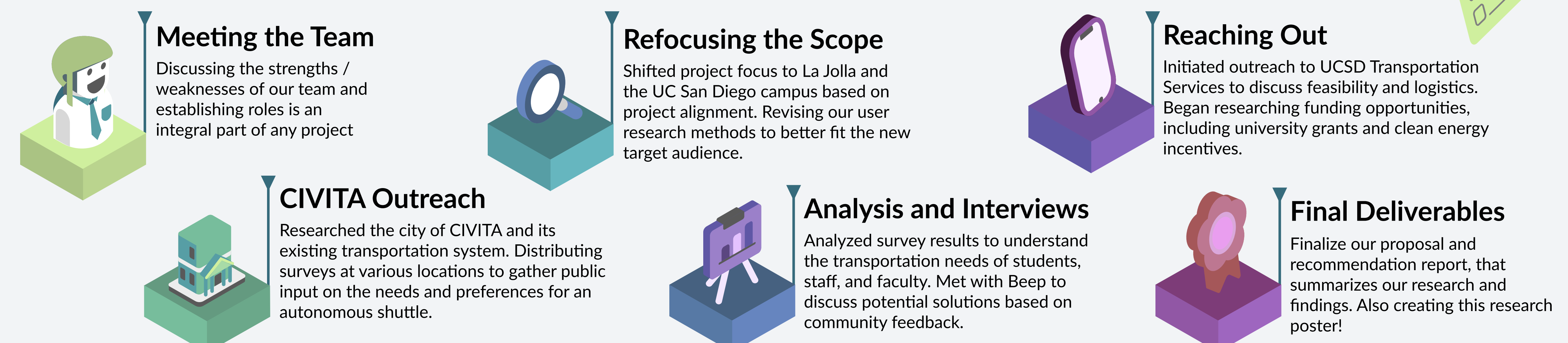
- Customer discovery & market research
- Data analysis and evaluation,
- Working alongside Stakeholders
- Evaluating individual components of a problem together (logistics, financial, desirability etc.)
- Adapting to challenges and problem solving

NEXT STEPS

With a plan in place, our next steps will be to discuss the actual **implementation** of Beep's autonomous vehicles as **night shuttles catered towards students**. This will involve:

- Meeting with UCSD Administration
- Developing accompanying mobile app
- Coordinating with UCSD Transportation Services

PROJECT JOURNEY & MILESTONES



Learn more about this **i4X project**