One-sheet

Project summarize and value adds:

This project combines and analyzes all available train and bus data within the LA Metro System, including their arrivals and departures. The end goal is to improve the efficiency and accessibility of the LA Metro by presenting the data in a condensed manner that is easy to understand. This project also looks to be an educational tool for policymakers to make LA Metro more accessible to underrepresented areas.

Public Accessibility: Making current and historical rider transit data available to the public.

Predictive Analysis: Using current and historical transit data, forecasting delays and ridership trends.

Equity & Accessibility: Improving transit access to disadvantaged communities by identifying underserved areas.

Reduced Cost Operations: Reducing operations costs by showing more effective transit routes

Environmental Impact: Helping reduce carbon by showing more effective and less timely routes.

Stakeholders

Data Science Team: Creating the data visualizations and providing the predictive analysis.

The General Public: Commuters being able to see real-time data more effectively.

Transportation & City Officials: Using the data for urban planning and policy-making decisions.

Accessibility Groups: Making transportation more accessible in Los Angeles County by seeing the underrepresented areas and advocating for those areas.

Project 6 Month Roadmap:

Month 1: Collecting, cleaning, and analyzing data from LA Metro APIs

Month 2: Collecting, cleaning, and analyzing data from LA Metro APIs continued

Month 3: Creation of the first draft of the dashboard and other visualizations

Month 4: Stakeholder feedback

Month 5**:** Testing of visualizations and pilot launch with additional feedback

Month 6: Final review of all work, publishing of the visualizations

Tools used for visualization

- **Tableau/Power BI**: For the dashboard creation.
- **Python** (**Pandas, Matplotlib, Seaborn)**: For creating a wide range of plots and statistical graphics.
- **GIS Mapping Tools (ArcGIS, QGIS)**: For Geospatial Analysis.

Additional tasks TBD