



Austin Light Rail
Frequently Asked Questions:
Ridership Estimates

Date:
April 28, 2023

Transforming Transit Together

Introduction



Ridership estimates are one component in a large set of criteria considered for a proposed light rail project in terms of performance and competitiveness for federal funding. Ridership on light rail project options was estimated using the STOPS (Simplified Trips-on-Project Software) model that was developed by the Federal Transit Administration (FTA). The STOPS model was developed by FTA to provide a consistent way to assess ridership potential that could be applied to projects across the country. STOPS model results are used by FTA to compare and evaluate transit projects that are competing for grant funding under the New Starts Capital Investment Grants program.

The STOPS model is publicly available from FTA. The Austin Transit Partnership has set up a [data portal](#) that will enable interested stakeholders to see and access the datasets that are used in analysis.

The following information illustrates ATP's estimates for ridership for each option, by station, based on currently modeling data as of February 2023. Modeling will be updated as new datasets are available and in coordination with FTA.



Frequently Asked Questions

Question 1: What are the inputs into the STOPS model? How is ridership calculated?

Key inputs into the model include population and employment density, data on local origins and destinations, and assumptions on how the light rail would operate. In general, the STOPS model assesses trips to be taken across the region and considers whether transit would be used based on the comparative speed of the trip, parking costs, and other factors.

Datasets provided by Capital Area Metropolitan Planning Organization (CAMPO), CapMetro, and FTA used for ridership modeling include:

- Current Census (CAMPO) population and employment estimates
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- Current Census Transportation Planning Program (CTPP) & American Community Survey (ACS) Data for socio-economic characteristics (household data, vehicle ownership, etc.)
- Current Traffic Analysis Zone (TAZ) geography (CAMPO)
- Current and 2040 congested travel times (CAMPO)
- Current and 2040 bus network (CapMetro)
- Current bus route ridership (CapMetro)
- Current bus stop boardings (CapMetro)
- Current Onboard Origin-Destination Surveys (CapMetro)
- STOPS software, version 2.5 (FTA)

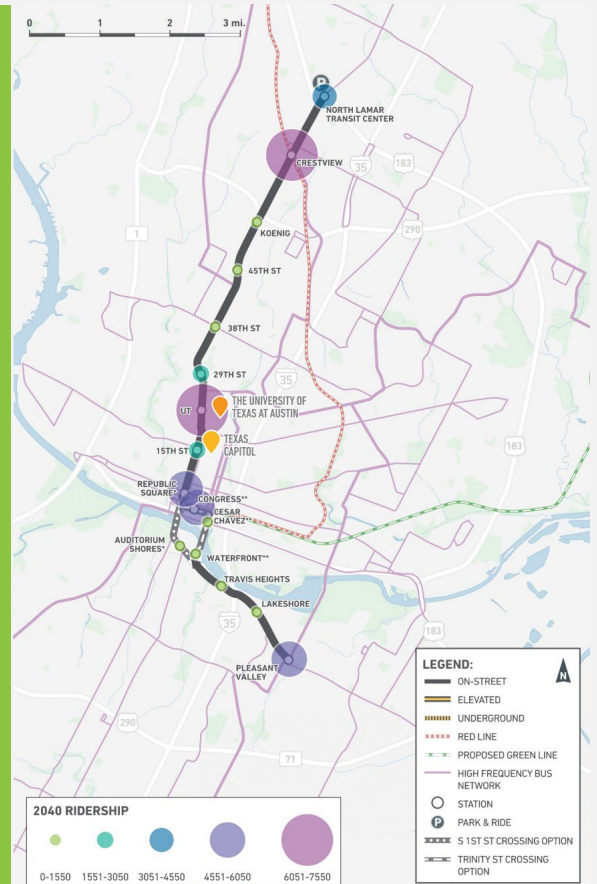
The airport is considered a special travel market. The model assesses potential employment at the airport but does not necessarily “see” the trips related to travelers and special events. Based on experience in other cities, we anticipate that airport employees; special event and non-local traveler traffic; and our trips from home to the airport would make up the total airport demand. We do not have a detailed estimate of the ridership magnitude at this time. We will coordinate with the airport to determine how their expansion project would inform subsequent ridership analysis.

Estimated Ridership by Station

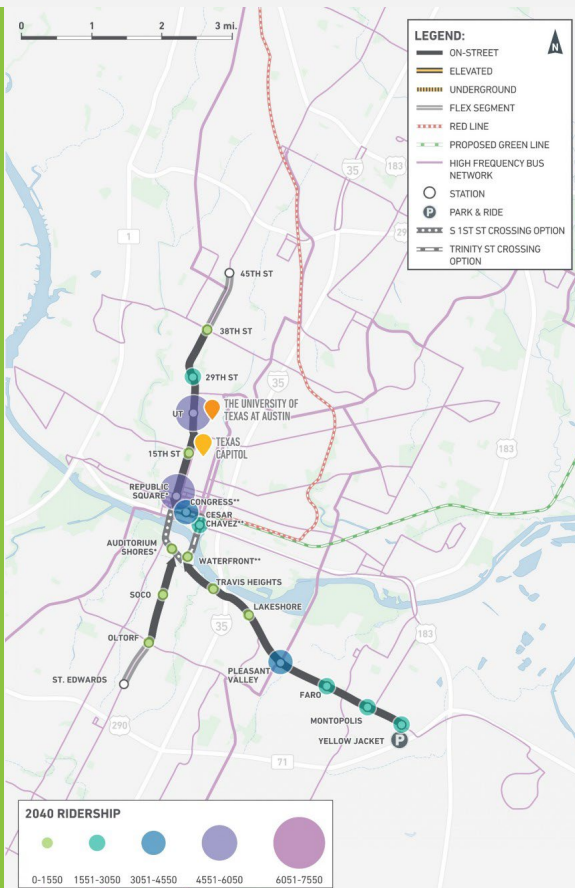
For Five Light Rail Options Under Consideration

See next page for additional light rail options under consideration

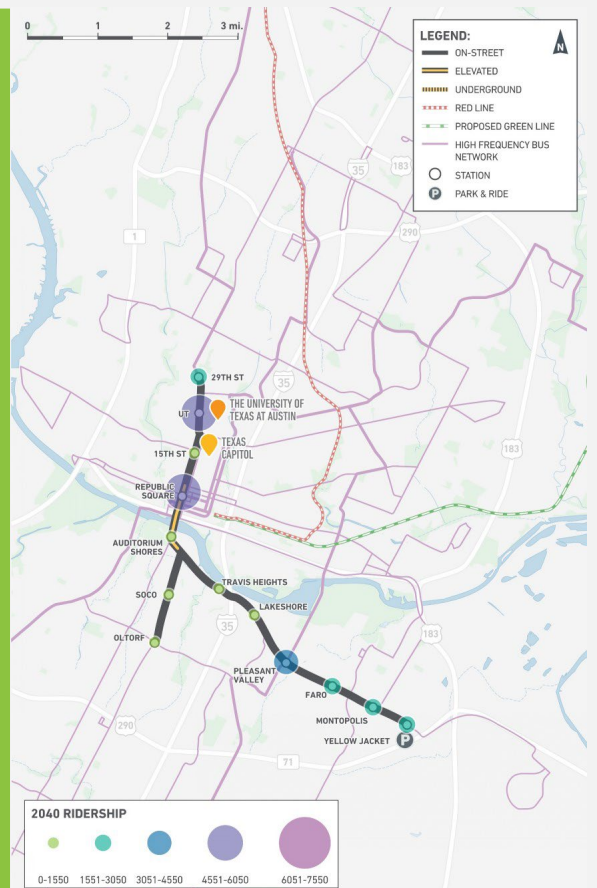
On-Street: NLTC to Pleasant Valley



On-Street: 38th to Oltorf to Yellow Jacket



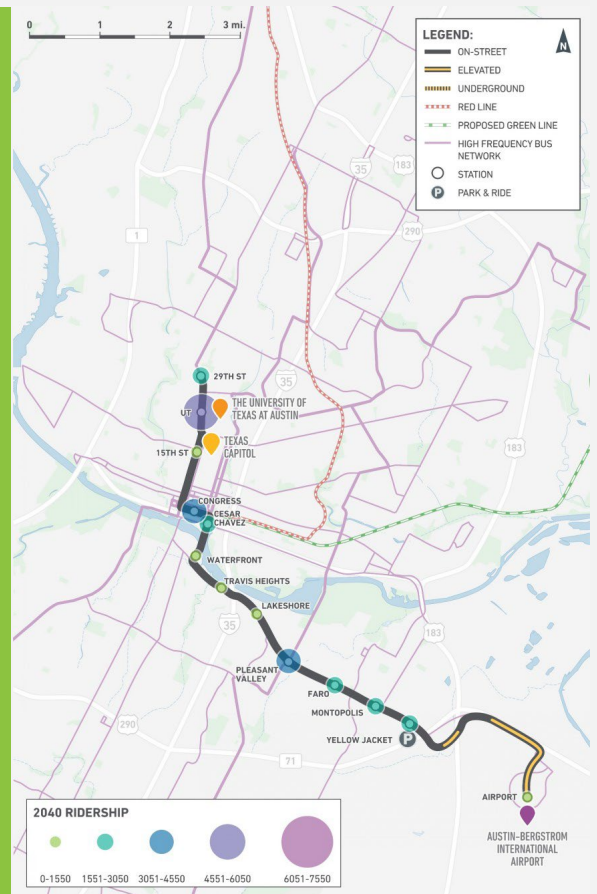
Partial Elevated: 29th to Oltorf to Yellow Jacket



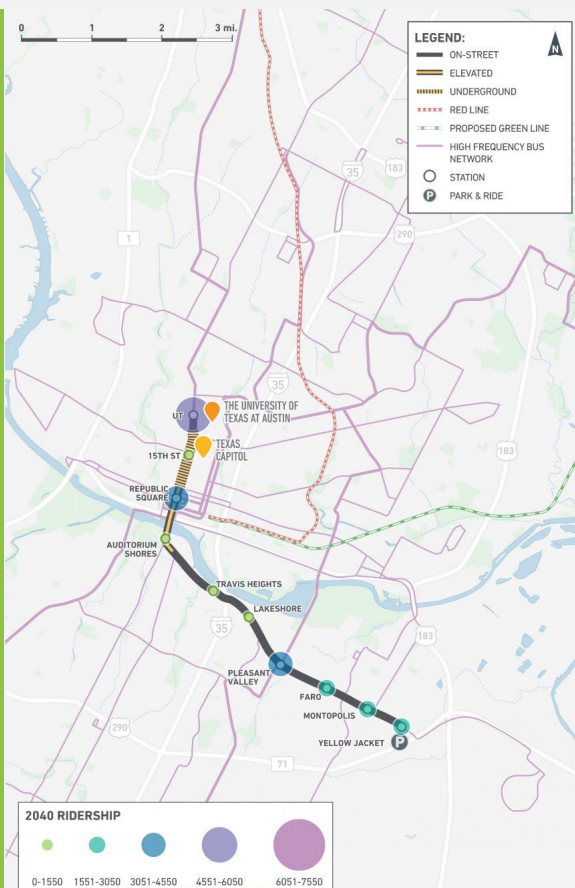
Estimated Ridership by Station

For Five Light Rail Options Under Consideration

On-Street: 29th to the Airport



Partial Underground: UT to Yellow Jacket



Key Takeaways

- Light rail ridership values represent the estimated average weekday daily trips in the year 2040.
- The FTA, as a potential funding partner, considers ridership when evaluating the federal grant process.
- Each option is expected to meet the minimum conditions to be eligible for New Starts funding based on FTA's current evaluation process.

Frequently Asked Questions

Question 2: Why would ridership vary for a station across the options?

Ridership may vary across the options because the connections between destinations may change. Key factors that affect ridership at a particular station may include the number of transfers to bus or Red Line and the type of connections that are made along the line to work, shopping, education or other destinations. Stations that are end-of-line stations in some options will have much higher ridership than a typical station along the corridor. This is because end-of-line stations may attract riders from a larger capture area.



ESTIMATED 2040 PROJECT TRIPS:



0-1550



1551-3050



3051-4550



4551-6050



6051-7550



Frequently Asked Questions

Question 3: How do you know if the data inputs reflect our reality, since Austin is growing and changing so quickly?

For the federal funding process, FTA requires that we use certain recognized data sources such as the Metropolitan Planning Organization (e.g., CAMPO) forecasts for future population and employment, and current U.S. census data. We recognize that Austin is unique and changing rapidly, so we are conducting additional analysis of market conditions to augment our understanding of future land uses. It is expected that this information will support higher development projections. Current development forecasts may be low as they may not consider all of the development already underway. Since 2045 data will be available in the coming months, we anticipate additional development, population, and employment to be reported and potentially reflect higher ridership.

Some of the data inputs represent planning assumptions since it is too early to understand the specific conditions. For example, we make assumptions about future bus service connections to the separate light rail lines. CapMetro will be responsible for future service changes and will be planning for future bus service once a light rail option is selected to advance. ATP will continue to report to the public on continuing analysis throughout the design and environmental process.