Project Connect: Light Rail Transit Insight Review

steer

Background

The Austin Transit Partnership (ATP) is currently advancing the Light Rail Implementation Plan as part of Project Connect.

Light Rail Transit (LRT) is a new approach to mobility for Austin and has significant potential to transform how people travel – whether it is for work, recreation, cultural activities or to access public services or education.
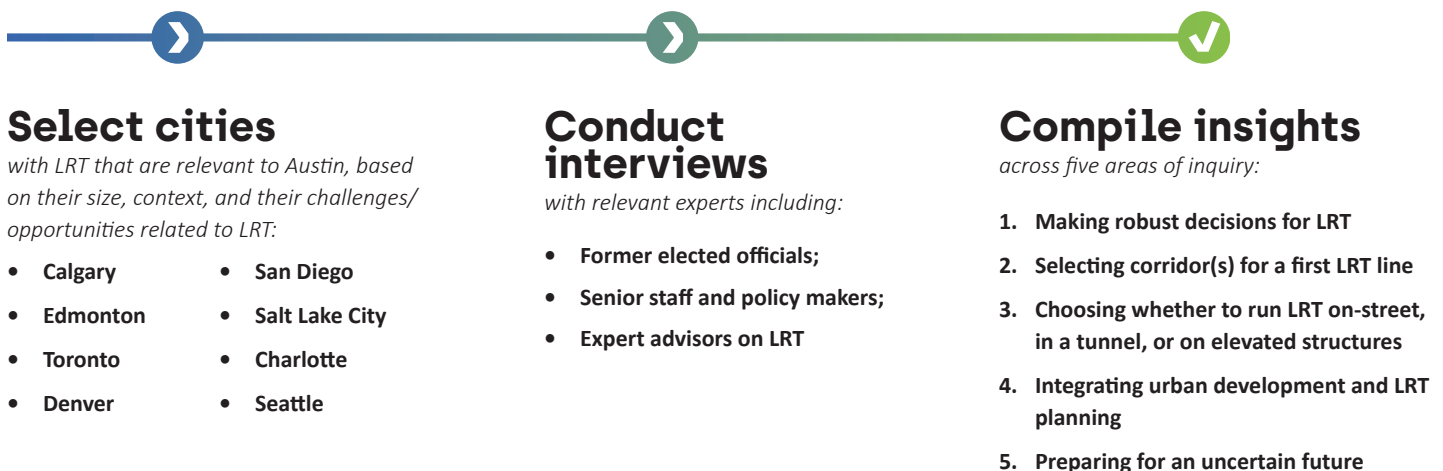
Making decisions on new LRT projects can be a challenging and complex process. While each LRT system must respond to unique traveller and community needs, there are key insights and lessons ATP can learn from peers across North America that have successfully delivered LRT.

Steer was commissioned by ATP in March 2023 to collect these insights to aid in the development of the Light Rail Implementation Plan.

Approach

The insight review followed a three step process articulated below:

Select cities
with LRT that are relevant to Austin, based on their size, context, and their challenges/opportunities related to LRT:

- Calgary
- Edmonton
- Toronto
- Denver
- San Diego
- Salt Lake City
- Charlotte
- Seattle

Conduct interviews
with relevant experts including:

- Former elected officials;
- Senior staff and policy makers;
- Expert advisors on LRT

Compile insights
across five areas of inquiry:

1. Making robust decisions for LRT
2. Selecting corridor(s) for a first LRT line
3. Choosing whether to run LRT on-street, in a tunnel, or on elevated structures
4. Integrating urban development and LRT planning
5. Preparing for an uncertain future

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Key Insights

The interview process resulted in five key insights presented to ATP for consideration during the development of the Light Rail Implementation Plan.

These insights reflect a synthesis of the interviews conducted by Steer for ATP. They were conducted independent from the technical analysis, forecasting, design, and planning work led by ATP.

How will the Insight Review Findings be Used?

These insights are intended to complement the planning and design work completed to date. They have been used to support discussions and decision-making related to the future of LRT in Austin and will be used as an ongoing reference in future stages of project planning and delivery.
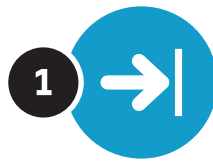
1

Outcome-oriented, not scope-oriented decision making

Decisions should be made based on desired outcomes and managing trade-offs, rather than specific scope or LRT design features. Peers that focused on end goals, rather than scope (example: focusing on ridership or serving key areas instead of focusing on specific elements of infrastructure) reported higher ridership and benefits at lower risk and/or cost.

2

Focus on 'timeless needs' when delivering a city's first LRT line

Areas and locations that cities have grown up around—such as universities or major cultural districts—are likely to drive ridership. Peers that provided LRT to these 'timeless locations' saw strong ridership over time, even with major changes in other macro-economic factors, and have seen generally stronger ridership and more rapid recovery post pandemic. These same peers noted that choosing these destinations first allowed their LRT to be expanded to serve other travel markets that may have less certain ridership in future phases.

3

On street, elevated, and underground LRT alignments all have benefits and trade-offs —no single alignment is optimal in all contexts

Many jurisdictions with on-street LRT have incorporated it into a vibrant streetscape that drives demand and economic development. While tunnels may ultimately minimize traffic impacts, they often carry higher risks of cost overrun or delay, and may have significant impacts to businesses and residents during the construction process. This insight reflects that deciding between tunnels, elevated, or on-street alignments should consider the full impacts (cost, risk, benefits, accessibility, traveler experience) during delivery and when the LRT is in service.

4

Urban development goals and policies are challenging to realize 'after the fact'

Across the continent, places that co-delivered LRT and urban development programs side by side saw more success than those that tried to deliver urban development later. This means programming, partnerships, and development models should be established alongside final LRT planning if transit oriented development is a priority. Peer practice examples include assembling lands, dividing responsibilities, and deploying partnership models before planning is finalized.

5

In resource constrained and uncertain times, focus on maximizing the viability of the first LRT line as a stand-alone project

Many cities and regions with effective LRT networks today focused on delivering a first project that could succeed, even if the broader vision was not part of the first project. These 'minimal operating segments' became the foundations of a wider network by maximizing desired outcomes and ridership per route mile or station, even if it meant less coverage than initially planned or desired. This insight suggests focusing on an efficient first project that maximizes benefits and minimizes risks by connecting to an initial set of key destinations, while providing opportunities for future expansion.