

CapMetro

**Customer Satisfaction
Advisory Committee**

October 2024



CapMetro Bikeshare Expansion Plan

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CapMetro Bikeshare Expansion Plan

Develops a 10-year Strategic Framework for Bikeshare expansion based upon:

Market Study

- Membership Trends
- Future Growth and Development
- SWOT Analysis

Community Engagement

- Engagement Process
- Survey Results
- Open House Highlights

Operations/Finance

- Growth Assumptions
- Staffing Needs
- Operating Costs and Revenue

Performance Metrics

- System and Station Performance Metrics
- Attainment Metrics

Community Engagement Overview

Phase I (Jan – Apr 2024)

- Understand community priorities
- Build stakeholder awareness
- Collect feedback

Engagement Methods:

- Survey
 - 1000+ Responses
 - Distributed at community events, via listservs, and through social media.
- Small Group Discussions

Phase II (May – Jun 2024)

- Deeply understand community priorities
- Refined engagement strategies from Phase I

Engagement Methods:

- Community Group Ride
- Open House
 - In-person after group ride.
 - Virtual option available.
- 600+ Responses

Community Connectors

- Community members of diverse backgrounds, selected to help CapMetro connect to specific networks.
- Identified and attended community events.
 - Reached diverse communities.
 - Provided consistent contact with interest groups.

Community Engagement: What We Heard

There should definitely be bike docks near major bus or transit stops. I also think there should be more near parks, swimming pools, and major shopping areas or grocery stores.

I love [CapMetro Bikeshare] and have used it for years. Thanks for your service to the community.

I would use [CapMetro Bikeshare] to go to the park, shopping, pool, library, coffee shops, etc..

Everyone would love to see charging implemented at the stations; there's nothing worse than a (all too often) dead bike.

I would use [CapMetro Bikeshare] every day if there was a stop at my high school and at MLK Jr. Station.

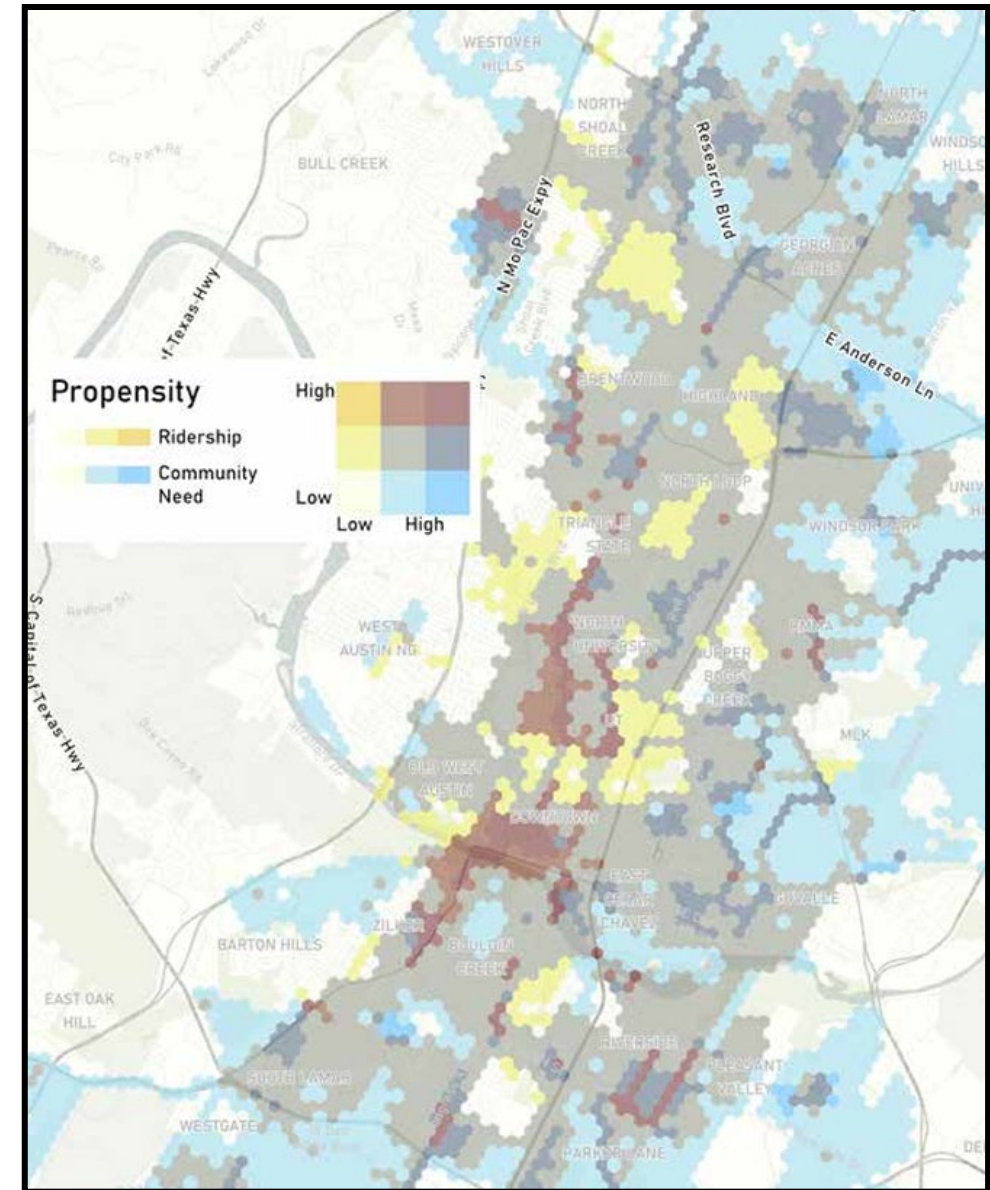
Market Study

Identifies how Bikeshare is used today and ways it could better serve the community.

- Socio-Demographics
- Membership Trends
- Trip Behavior and Travel Patterns
- Station Performance
- Future Growth and Development
- Geographic Demand for Bikeshare

A key result of the study was the propensity analyses, which identified potential areas of high Bikeshare ridership and high public need for Bikeshare services.

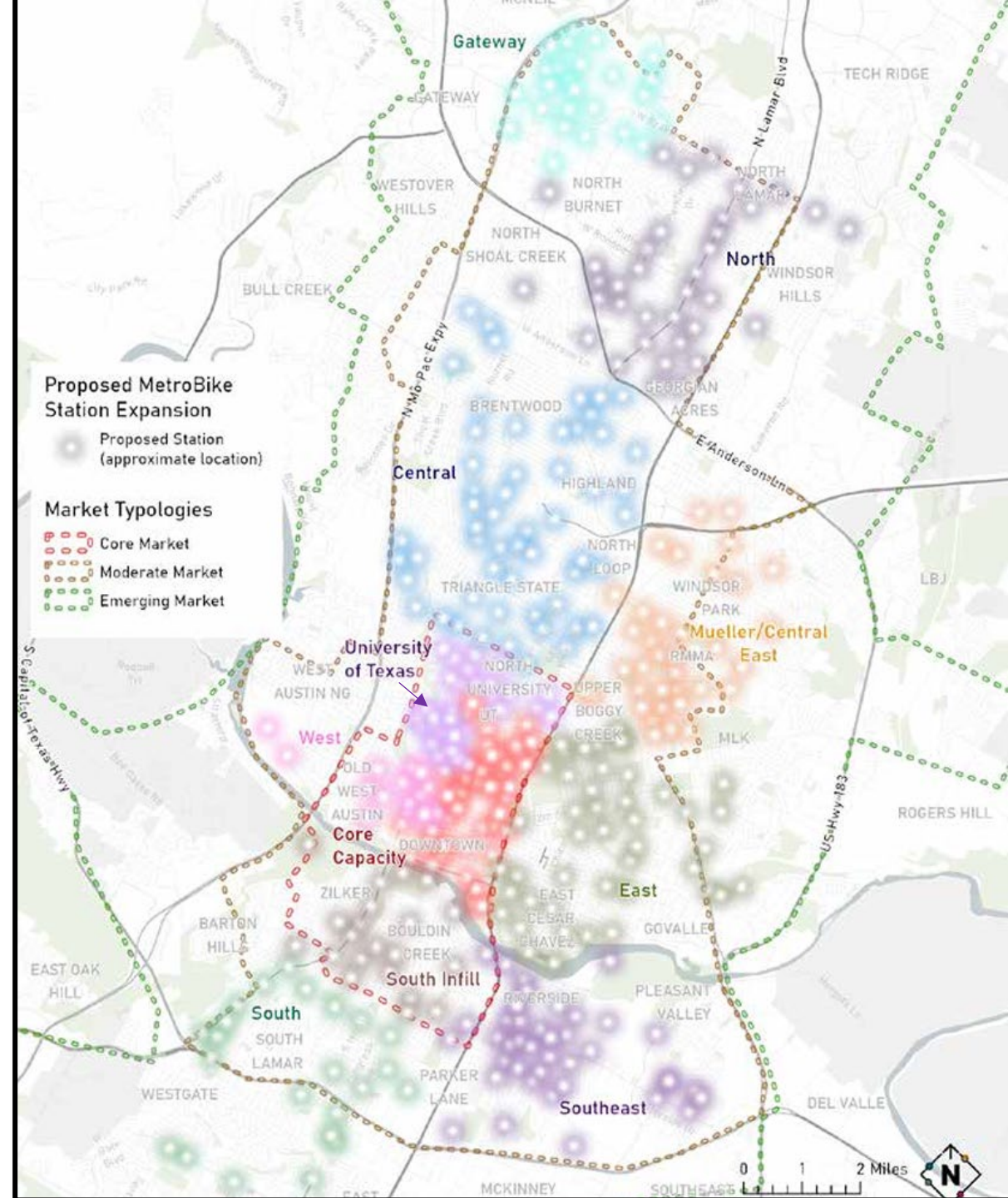
Combined Ridership and Public Need Propensity



Market Typologies

Represent areas of Bikeshare demand and usage profiles.

- **Core Market:**
 - High existing bike usage
 - High population and job density
- **Moderate Market**
 - Clusters of dense development
 - Often lacks street connectivity
- **Emerging Market**
 - Low population and job density
 - Auto-oriented land use



Expansion Guidelines

- **Minimum Distance and Clustering Standards**
 - Based on market typologies
 - Ensures high performance of system and station
- **Station Capacity Adjustment Guidelines**
 - Defines when adjustments are appropriate to meet current or planned demand or address operational issues
- **Station Placement Standards**
 - Ensure accessibility and safety for all
 - Facilitates smooth operations
 - Varies across market typologies



Operations/Finance

Bikeshare growth requires more:

- Staffing
 - Mechanics
 - Support Specialists
 - Field Technicians
- Operations (non-revenue) Vehicles:
 - Rebalancing Vans
 - Light-Duty Trucks
 - Lift Truck & Forklift
- Operating Facility Space



Key Performance Metrics

- **System Performance Metrics:**
 - Trips per Bike per Day
 - System Downtime
 - Direct Revenue
- **Stations Performance Metrics:**
 - Total Station Ridership
 - Station Downtime
 - Station Revenue
- **Attainment Metrics help CapMetro staff determine the success of CapMetro Bikeshare as defined by the plan's guiding principals.**

Table 21: Attainment Metrics

METRIC	PURPOSE	DATA SOURCES	CALCULATION	OWNER	FREQUENCY
A. CapMetro Bikeshare connects people where they want to go					
Access to transit	Measure of access to transit connections	CapMetro transit stop and station data	Percent of CapMetro Bikeshare stations within a quarter mile of a transit stop or station	Planning	Annual
Access to jobs	Measure of connectivity to destinations of interest	Longitudinal Employer-Household Dynamics (LEHD) Data	Number of jobs within a quarter mile of a CapMetro Bikeshare station	Planning (publicly available source)	Annual
Access to households	Measure of a system and station accessibility	American Community Survey (ACS) Data	Number of households within a quarter mile of a CapMetro Bikeshare station	Planning (publicly available source)	Annual
B. CapMetro Bikeshare is a tool to reduce inequities in transportation					
Rider demographics	Measure of system equity	Sign-up survey (currently source does not exist)	Percent of users that are minority or low-income based on sign-up survey	Planning (survey data)	Annual
Trips in equity focused areas	Measure of system equity	American Community Survey (ACS) Data	Trips originating or ending in block groups that are majority minority populations or have a poverty rate greater than 30 percent (30%)	Planning	Annual
Discount pass holders	Measure of system equity	User data	Percentage of riders under discounted pass programs (Student passes)	Bikeshare Operations	Annual
C. CapMetro Bikeshare provides an accessible and affordable transportation option					
Average cost per trip	Measure of system affordability	Raw trip data	Annual revenue generated from trips divided by annual rides.	Bikeshare Operations	Annual
Ridership among older adults	Measure of system accessibility	Sign-up survey (currently source does not exist)	Percentage of users that are over 55 years of age.	Planning (survey data)	Annual
Crash Incidents	Measure of system safety	Incident reports	Crashes per 10,000 rides per year	Bikeshare Operations	Annual
Membership Turnover	Measure of system sustainability and reach	Membership records	Percentage of existing registered users who fail to renew once their membership expires	Bikeshare Operations	Annual

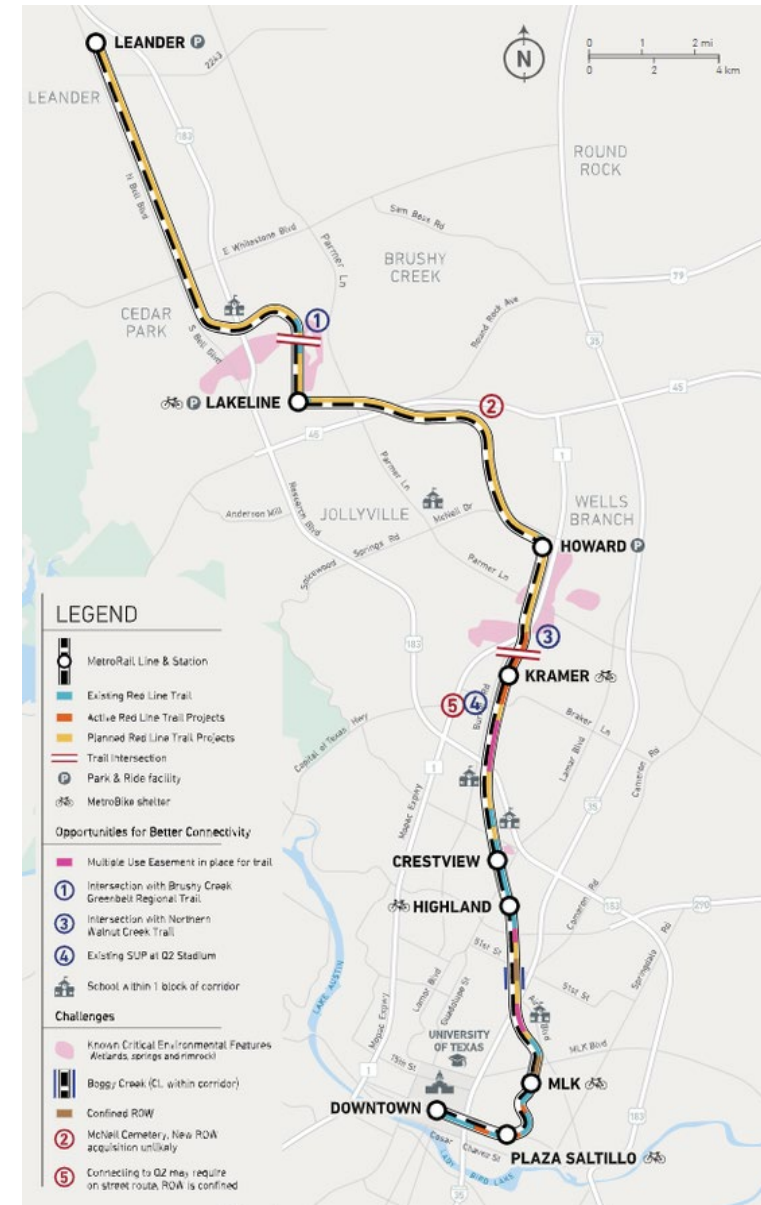


Red Line Trail Study

Jordan McGee, Senior Transportation Planner

Red Line Trail Concept

- Continuous trail network that generally follows CapMetro's 32-mile Red Line commuter rail corridor
- Vision for an All Ages and Abilities regional urban trail with strong transit accessibility and connections to nearby trails and bike routes



Red Line Trail History



Photo Source: Red Line Parkway Initiative

- CapMetro has conducted previous studies and coordinated with the City of Austin and the Red Line Parkway Initiative (RLPI)

2004 – All Systems Go Long-Range Transit Plan authorized a "starter urban commuter rail" with "hike and bike trails along some existing railroad right of way"

2007 – Rails with Trails Feasibility Study developed concepts for candidate projects and potential alignments

2010 – Rails with Trails Safety Guidelines developed design standards for trails along federally operated rail

2019 – CapMetro Board of Directors provided agency direction to work with RLPI to create a Red Line Parkway Plan

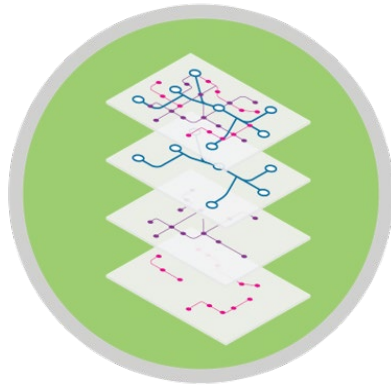
Limitations



- Narrow available space within railroad right-of-way and rapid development along the rail
- Double-tracking needs for increasing service frequency and reliability
- Safety regulations due to freight and commuter rail
- Environmental challenges

Red Line Trail Study

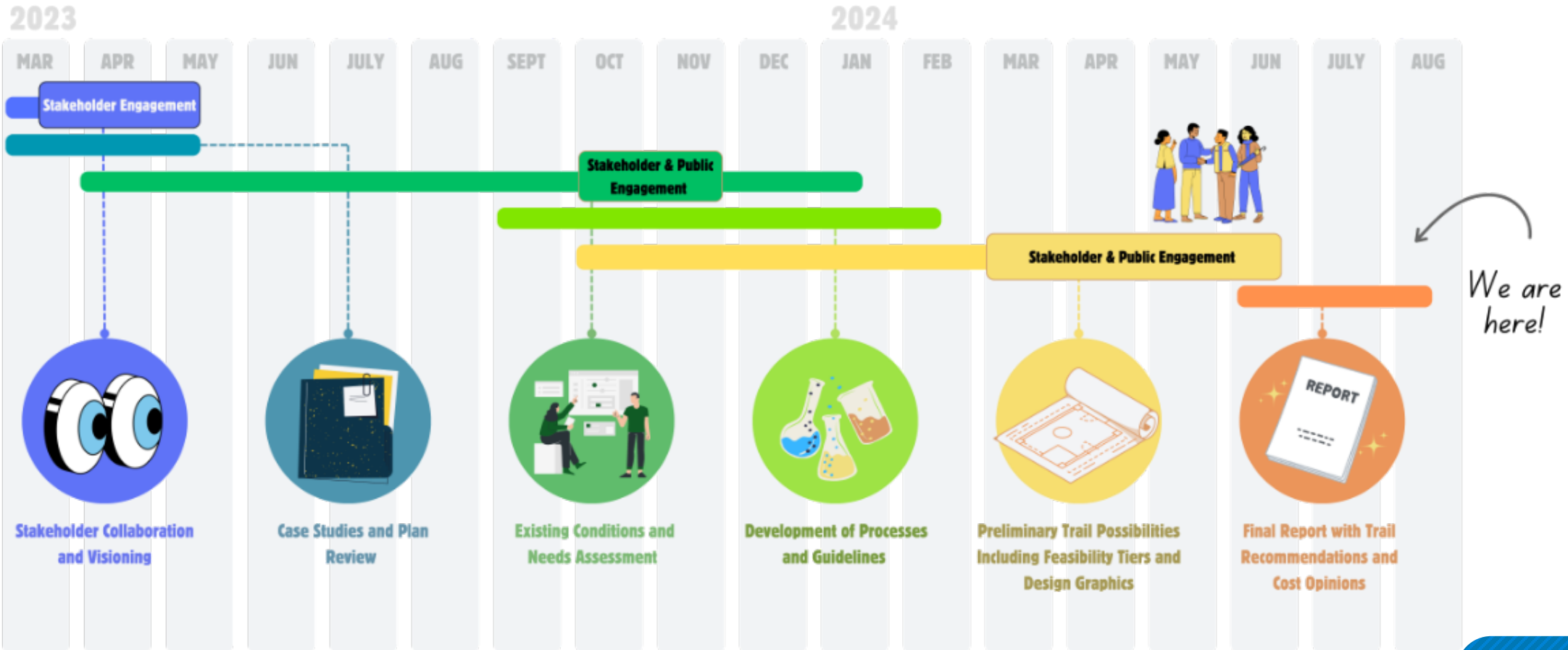
- The goal is to identify feasible opportunities and recommendations for locating the Red Line Trail within CapMetro's Rail Right-of-Way
- The study is a planning level feasibility analysis that *does not* include detailed design, engineering or construction



Milestones

Red Line Trail Study

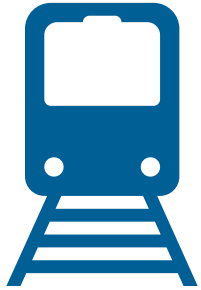
The goal of the Red Line Trail Study is to identify feasible opportunities and recommendations for a trail within CapMetro's Rail Right-of-Way. The vision is a continuous trail network that generally follows the 32-mile commuter rail through Austin, Cedar Park, and Leander.



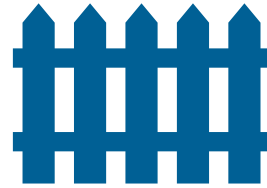


Guidelines and Processes

CapMetro Design Guidelines



Provides uniform and consistent standards for Rail-with-Trail design, construction and maintenance within CapMetro Rail ROW



Covers clearances, grade crossings, surfaces, utilities, landscaping, fencing, lighting, drainage, and access



References CapMetro, federal, and state minimum standards and general requirements

Preferred Setback

CapMetro's preferred setback minimum is 25 ft based on key safety concerns associated with freight and commuter rail, such as:

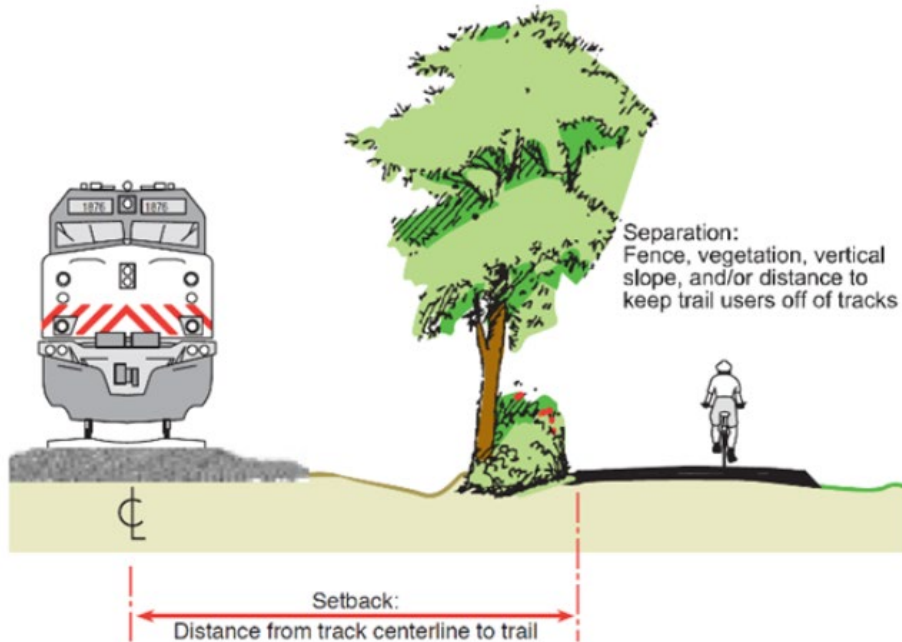


Image source: Rails-with-Trails: Best Practices and Lessons Learned (FHWA)

Dynamic design envelope of trains

Speed and frequency of trains

Rail alignment

Topography

Sightlines

Maintenance and operational needs

Method of separation between rail and trail

Regulations and requirements

Standard Operating Procedures for Trail Projects within CapMetro Rail Right of Way



Outlines critical information, responsibilities, and requirements of any external entity seeking to construct a trail within CapMetro Rail ROW



Details External Entity's roles and processes for the application, materials, and coordination

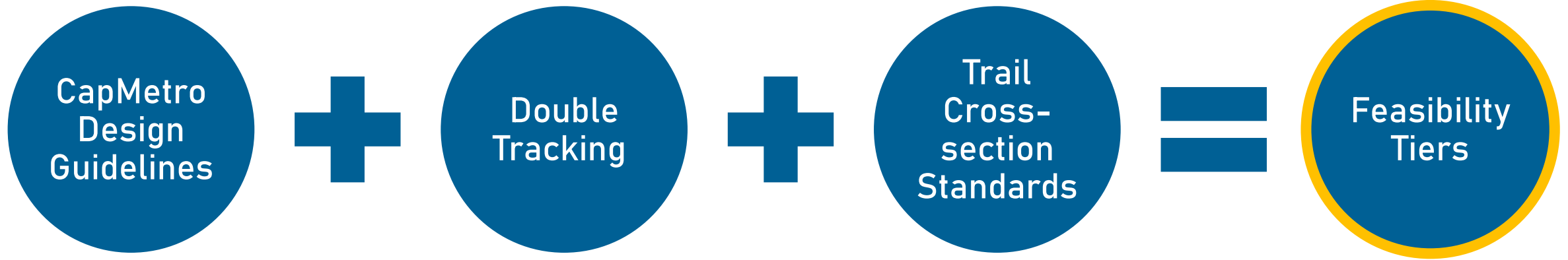


Details CapMetro's internal roles and processes for review and coordination



Alignment Possibilities

Alignment Feasibility Tier Methodology



25 ft
Preferred
setback

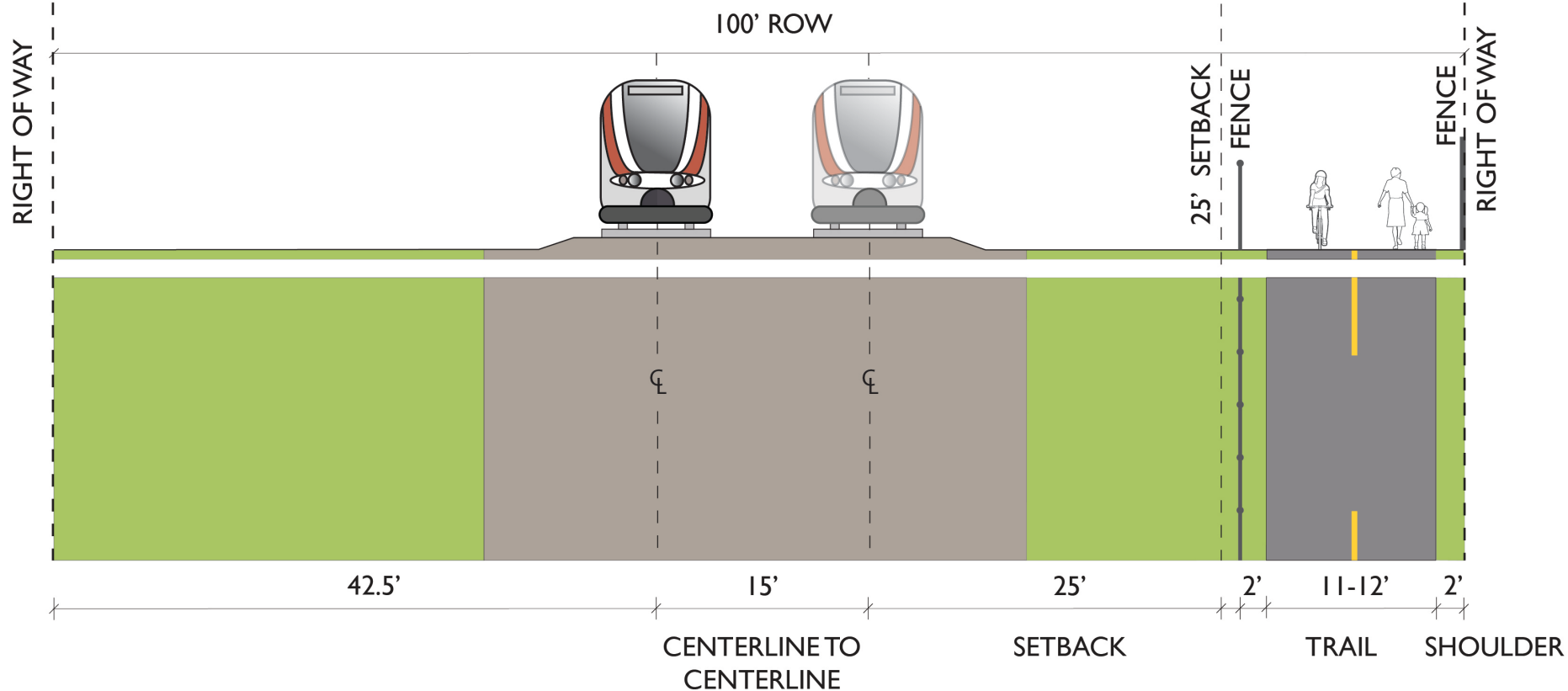
Spacing
requirements &
Prioritized areas

City of Austin
16' wide trail
Cedar Park
& Leander
12' wide trail

Feasibility Tiers

Tier 1: Compatible with Double Tracking

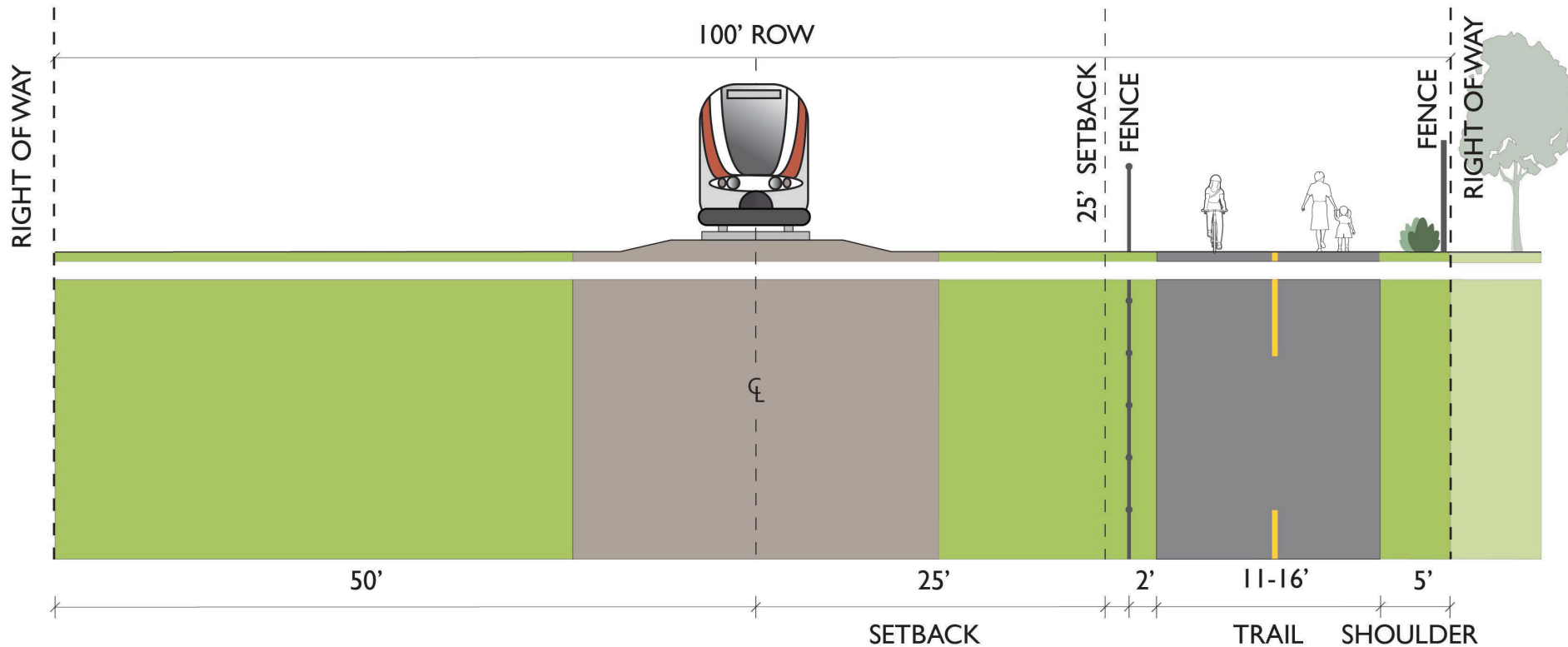
- Works with 25 ft setback preferred minimum
- Compatible with existing or future double tracking *
- Not eliminated by geological/physical constraints in available data



Feasibility Tiers

Tier 2: Meets CapMetro Preferred Setback

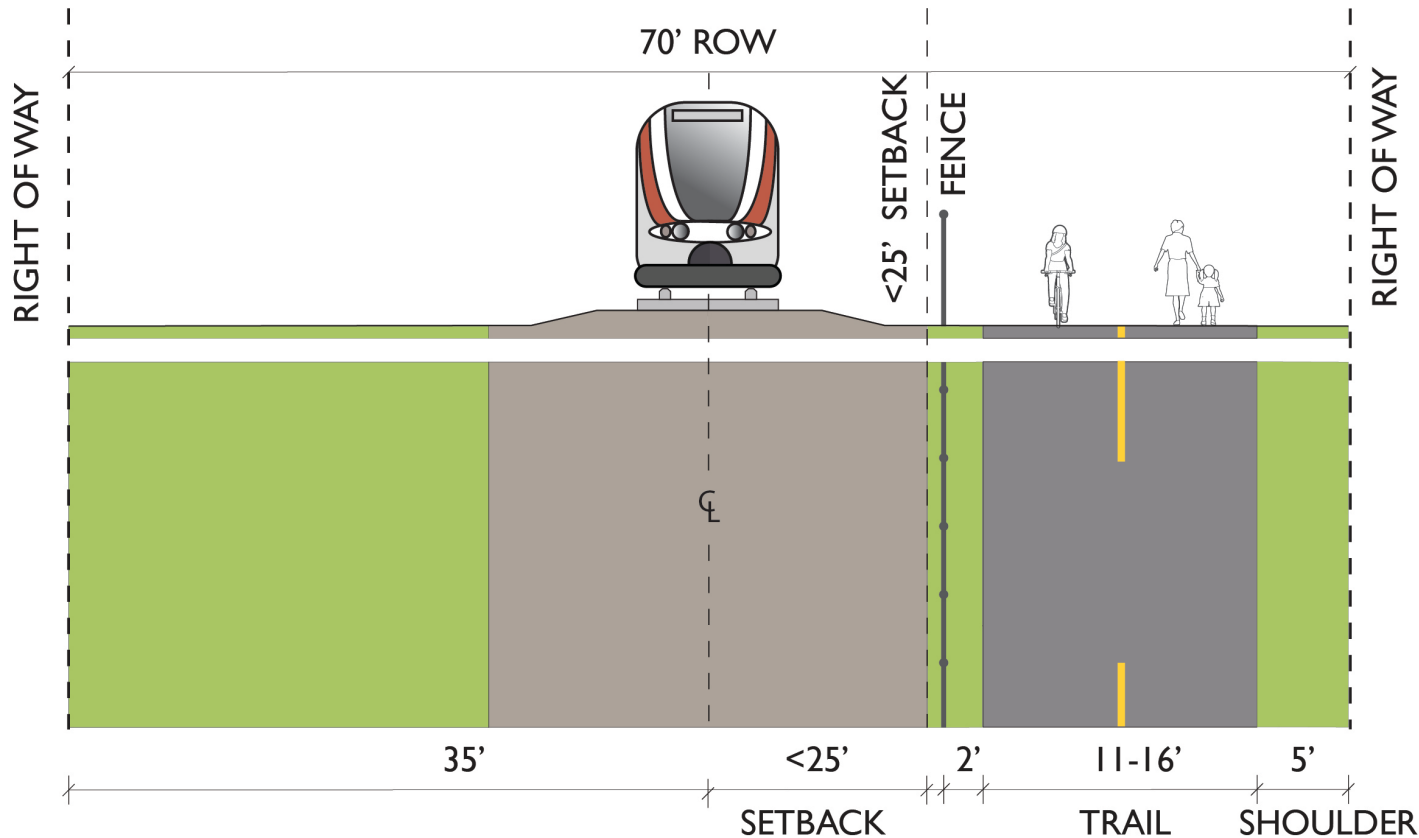
- Works with 25 ft setback minimum
- Compatible with double tracking projects with near-term *prioritization* along the Red Line corridor but not future double tracking projects along the entire corridor.



Feasibility Tiers

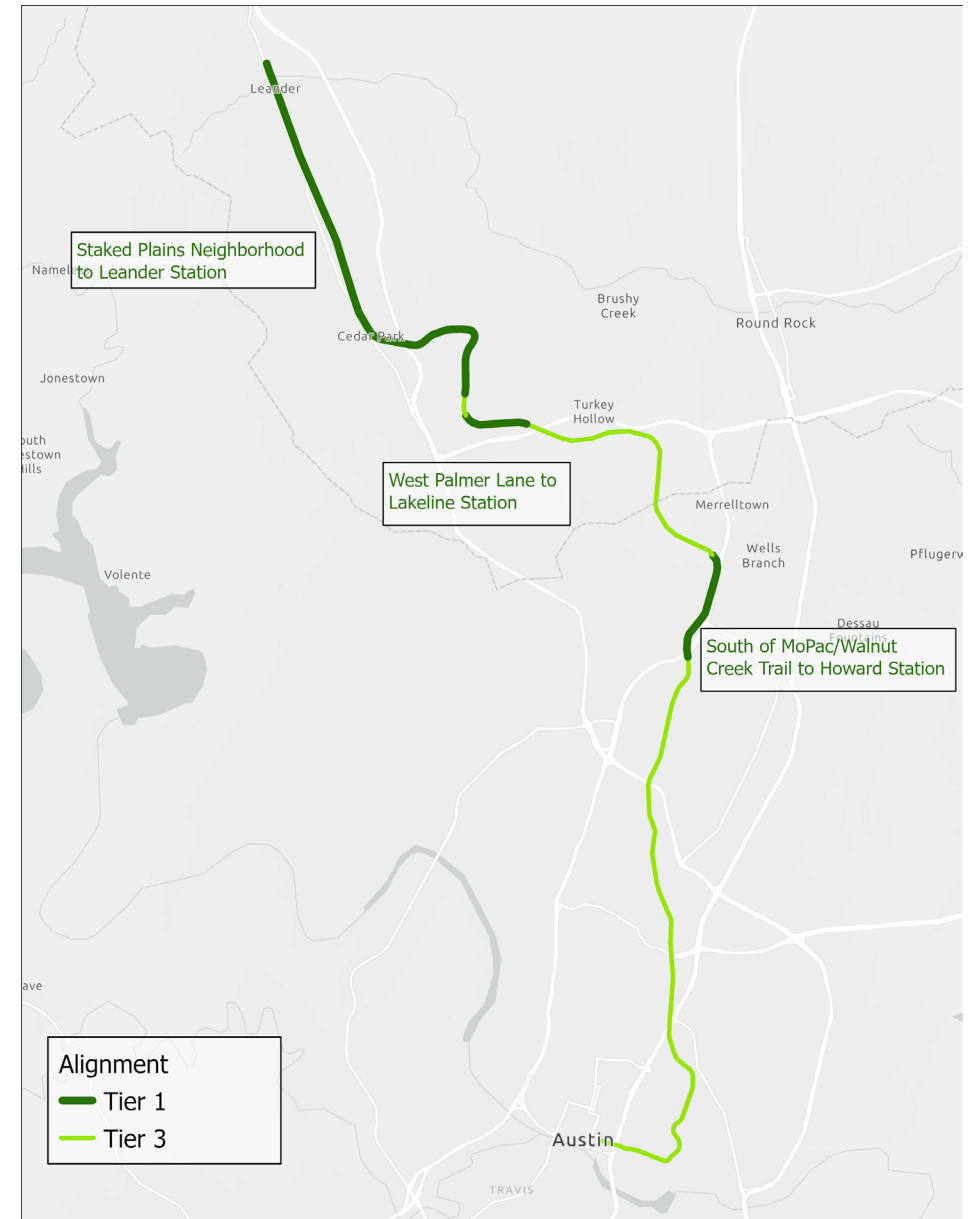
Tier 3: Requires Further Coordination with CapMetro

- Cannot meet CapMetro preferred 25 ft setback with a 11-to-16-wide trail
- May be physically feasible
- Trail construction would require close coordination with CapMetro to determine if feasible, subject to SOP



Feasibility Analysis Summary

Feasibility Tier & Status	Total Length (Miles)	Percent of Study Corridor
Tier 1	13.1	40%
Tier 2	0	0%
Tier 3	19.4	60%
TOTAL	32.5	100%



Challenges

- Narrow available space within railroad right-of-way
- Rapid development along the rail
- Safety regulations due to freight and commuter rail
- Environmental challenges



Utility Corridors



Adjacent Roadways



Structures



Drainage

Illustration of Trail Possibilities

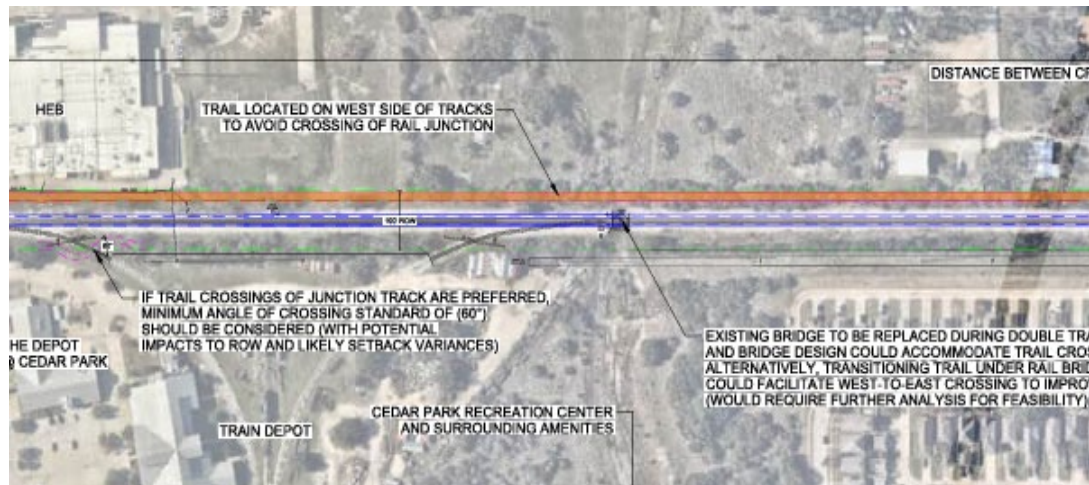
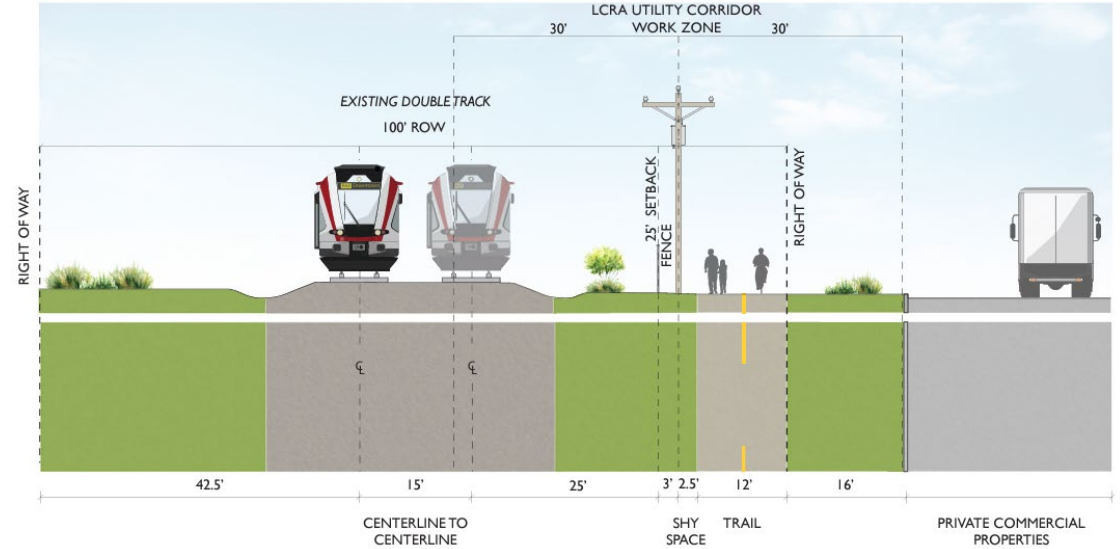
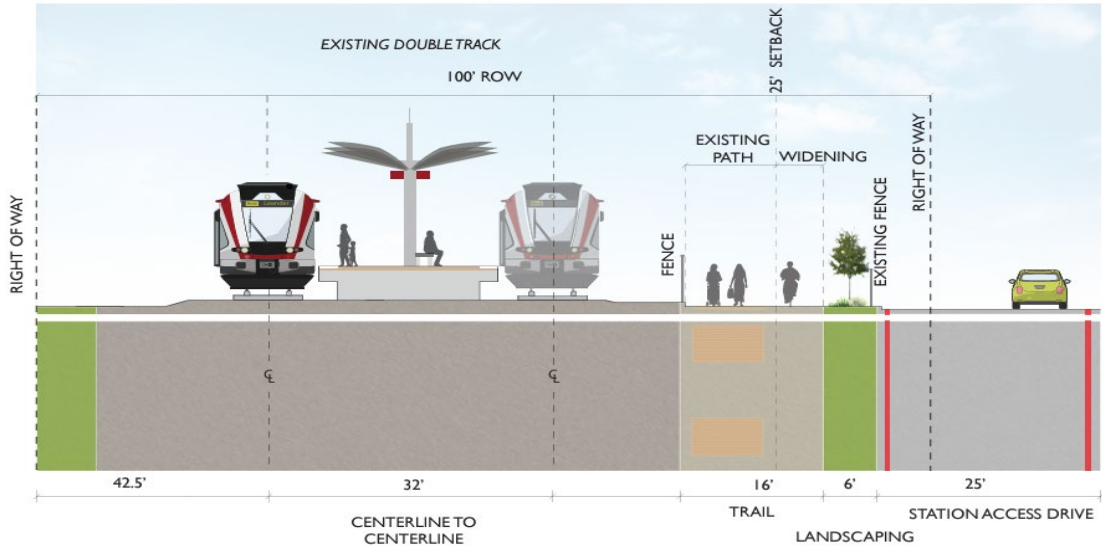
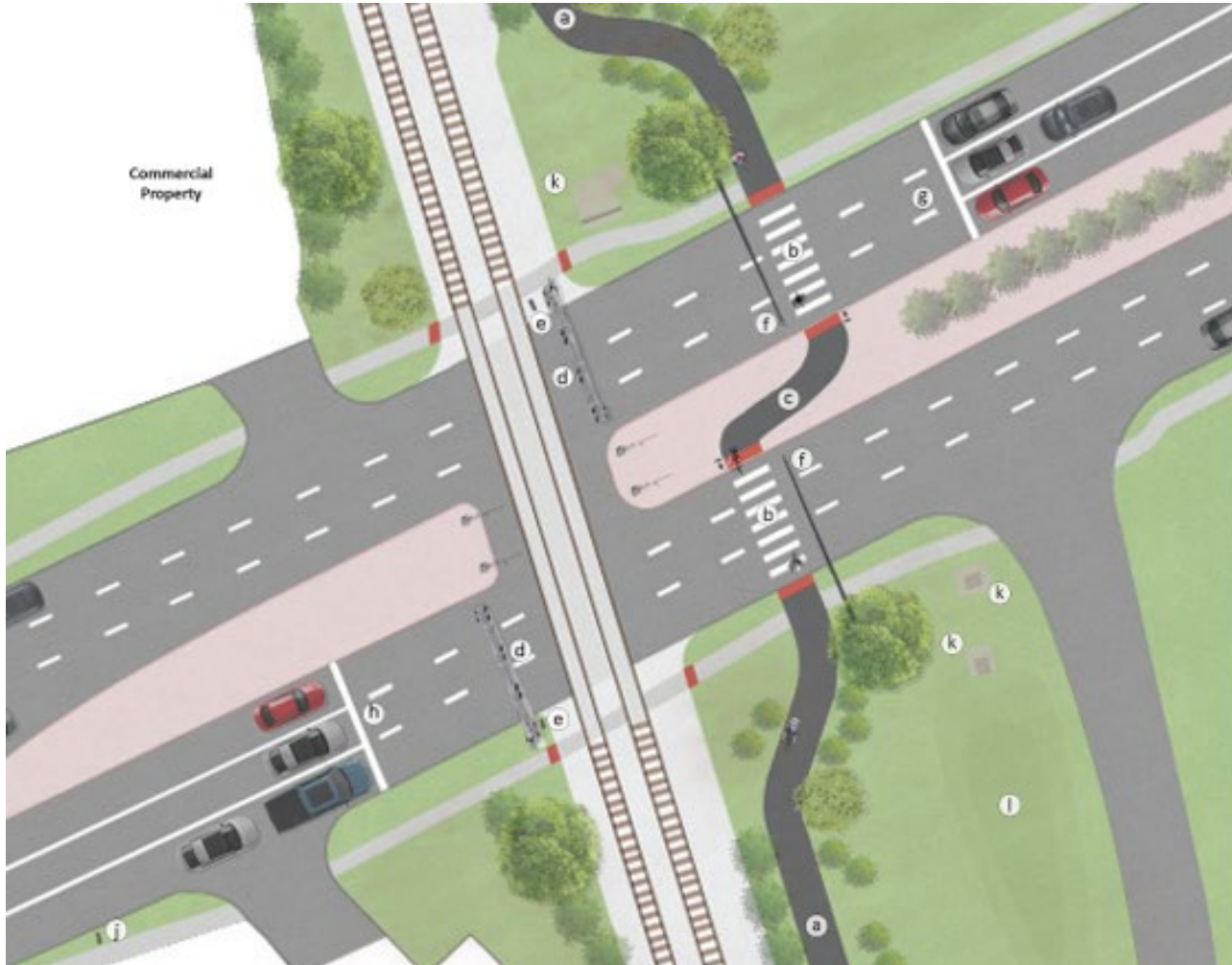
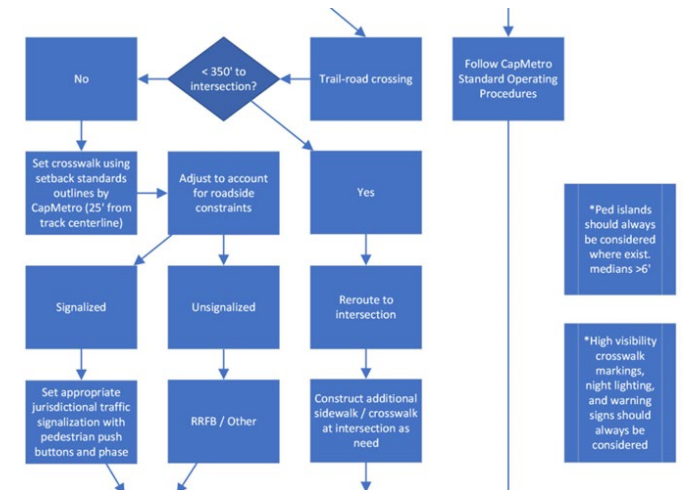


Illustration of Safety Guidance



- (c) New pedestrian refuge island
- (d) Existing Railroad Gates and Warning Signs; Remove Warning Lights
- (e) New "Do Not Stop on Tracks" sign (R8-8)
- (f) New Pedestrian Traffic Signals actuated by pedestrian push button
- (g) New stop bar (located 70 ft. from Signal Pole/Mast Arm)
- (h) New stop bar (located 160 ft. from Signal Pole/Mast Arm)
- (i) New Trail Crossing Warning Sign (W11-15) (located 170 ft. from Signal Pole/Mast Arm)
- (j) New Trail Crossing Warning Sign (W11-15) (located 270 ft. from Signal Pole/Mast Arm)
- (k) Existing drainage structure
- (l) Existing detention pond



Community Engagement

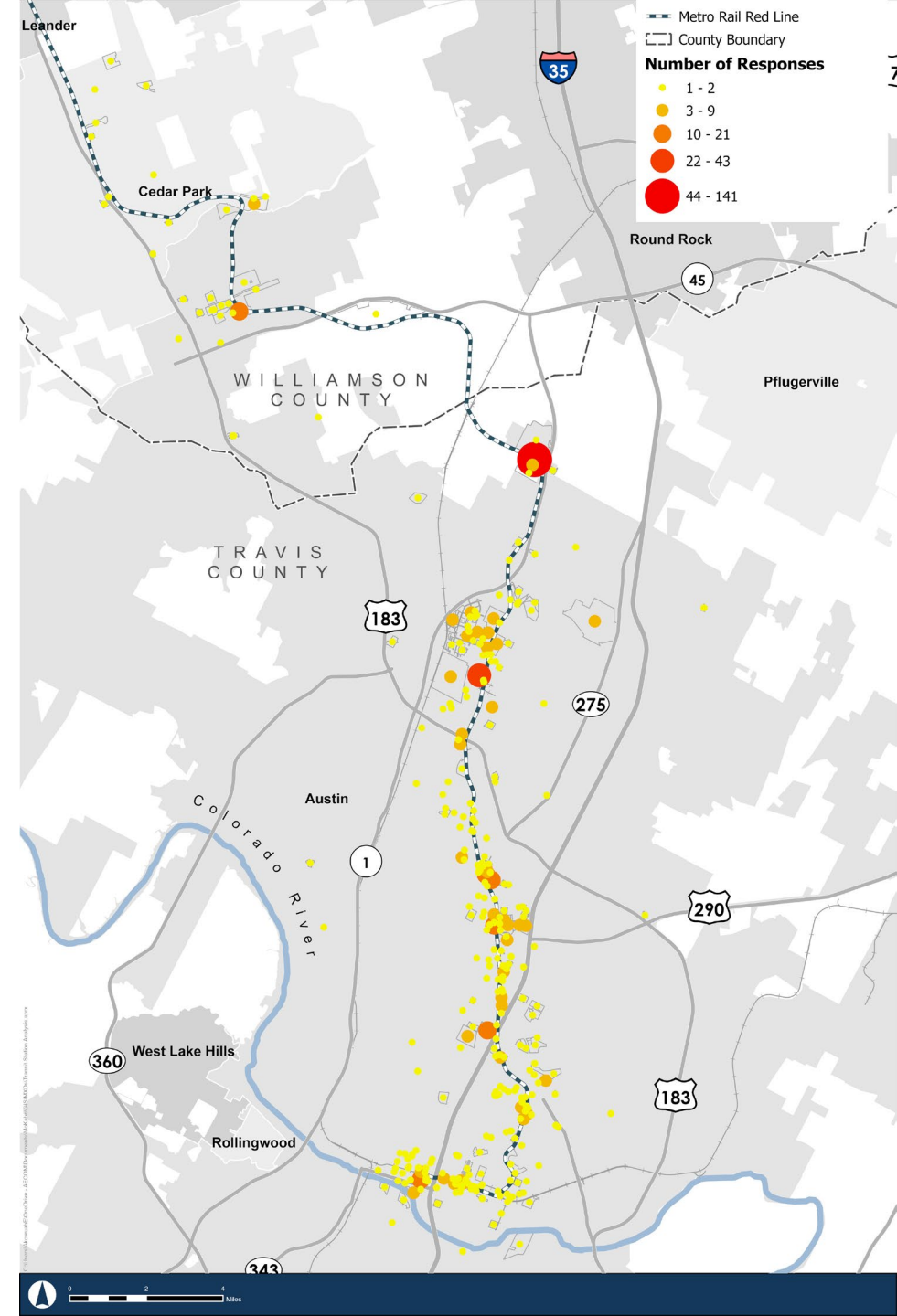
Desired Uses for future Red Line Trail:

- Recreation: 91.3%
- Exercise: 72.8%
- Connecting to Transit: 67.3%
- Commuting: 66.7%

Top Destinations along the Red Line corridor:

- Howard Station
- Q2 Stadium (McKalla Station)
- Lamar/Airport Retail
- Lakeline Station
- Austin Convention Center

Engagement was supported by RLPI through a Partnership Agreement



Implementation



The Red Line Trail Study demonstrates where the trail is feasible within the Rail ROW, and governmental jurisdictions would take next steps to implement the vision through preliminary engineering and design.



The timing and implementation phase will range by segment depending on the complexity that it presents and the funding available.



The implementation of the trail would depend on the funding available to construct the trail within each jurisdiction.



CapMetro is looking forward to the collaboration ahead to continue building out the trail.

CapMetro

Thank you!