

# Austin Light Rail Phase 1

Final Environmental Impact Statement

## Chapter 2: Alternatives Considered

# Contents

---

Chapter 2 Alternatives Considered.....	2-1
2.1 Introduction .....	2-1
2.2 No Build Alternative .....	2-2
2.2.1 Public Transit Operations and Projects .....	2-2
2.2.2 Roadway Projects .....	2-6
2.3 Preferred Alternative .....	2-6
2.3.1 Light Rail System Components .....	2-8
2.3.2 Description of Preferred Alternative .....	2-11
2.3.3 Operating Characteristics .....	2-21
2.4 Estimated Project Cost and Schedule .....	2-21

# Figures

---

Figure 2-1: Proposed CapMetro Rapid Routes, Proposed CapMetro Rail Green Line, and Existing CapMetro Rail Red Line .....	2-5
Figure 2-2: Preferred Alternative .....	2-7
Figure 2-3: Light Rail Vehicle Conceptual Rendering .....	2-8
Figure 2-4: Center and Side Platform Station Configurations .....	2-9
Figure 2-5: Examples of Light Rail Power and Communications Equipment .....	2-10
Figure 2-6: Project Components in the North Section .....	2-13
Figure 2-7: Project Components in the Downtown Section .....	2-16
Figure 2-8: Project Components in the South Section .....	2-17
Figure 2-9: Project Components in the East Section .....	2-19
Figure 2-10: Center-Running Bicycle and Pedestrian Lanes .....	2-20

# Tables

---

Table 2-1: No Build Alternative Transit Projects in CAMPO's 2045 Regional Transportation Plan, Adopted 2020 .....	2-4
---	-----

## Chapter 2 Alternatives Considered

NEPA requires that a reasonable range of alternatives be evaluated in an EIS, in comparison to a No Build Alternative. Alternatives that meet a Project's purpose and need and are technically and economically feasible are advanced for detailed analysis in an EIS. Prior planning studies and their results can be used to narrow the range of alternatives. The No Build Alternative is used as a benchmark to compare the effects of the alternatives in a horizon year where travel demand, and population and employment growth can be reasonably forecasted. The No Build Alternative includes transportation improvements that are planned and programmed in the region, apart from the Project.

### 2.1 Introduction

The Project consists of constructing and operating a 9.8-mile light rail system in Austin including an OMF and associated light rail equipment storage functions. FTA and ATP evaluated and compared a Build Alternative, including six Design Options, and the No Build Alternative, and identified a Preferred Alternative in the DEIS published January 10, 2025. This combined FEIS/ROD evaluates the same Preferred Alternative and reflects modifications to the Project as a result of public comment, as well as advancement of design since the DEIS. The format of this FEIS/ROD mirrors the organization of the DEIS to preserve and maintain a record of decision-making. Descriptions of design refinements and decisions made since publication of the DEIS are reflected in Section 2.3.2 and **Appendix C**.

A Transportation System Management Alternative and Bus Rapid Transit (BRT) Alternative were evaluated by CapMetro in the alternatives analysis and Planning and Environmental Linkages (PEL) studies for the Orange and Blue Line corridors in 2020. The Transportation System Management Alternative assumed 10-minute frequency, higher-capacity vehicles (likely 60-foot, articulated, three-door buses), transit signal priority at intersections between Cesar Chavez Street and East Martin Luther King Jr. Boulevard, and consolidated stops with enhanced amenities similar to today's CapMetro Rapid stations but without level boarding or off-board fare payment, and with estimated one-third-mile stop spacing. To obtain frequencies shorter than 10 minutes, additional infrastructure and property acquisition would be required within the right-of-way. Travel time on buses under the Transportation System Management Alternative were found to be generally twice as long compared to the guideway options (light rail and BRT), and the system would support only about one-third of the ridership on the guideway options. The Transportation System Management Alternative would not provide the mobility benefits needed to accommodate the expected growth in the region and would not meet the Project goals and objectives.

During public engagement for the PEL studies, CapMetro recorded broad support for building dedicated guideways in the corridors (more than 90 percent of survey responses), with a majority supporting light rail instead of bus rapid transit. BRT was defined as higher frequency service and included several higher-level bus rapid transit amenities including off-board ticketing, multi-point vehicle access, articulated vehicles, and a dedicated guideway. Less than 20 percent of survey responses favored bus rapid transit over light rail. The combination of bus rapid transit capacity limitations and public preference resulted in the selection of light rail as the preferred mode. While bus rapid transit on dedicated guideway could support the projected horizon year ridership, the distance between buses (headways) would be only a few minutes, and the system would operate at maximum capacity with no room for future growth. Light rail would be reliable, safe, affordable, and time-competitive and would provide for increases in ridership an estimated 10 to 20 years beyond the horizon year.

The ATP Board of Directors, Austin City Council, and CapMetro Board of Directors unanimously approved the *Austin Light Rail Implementation Plan* (ATP 2023), which recommended the light rail alignment reflected in the Preferred Alternative after evaluation of different scenarios within the context of the purpose and need and the goals and objectives identified in **Chapter 1**. FTA's and ATP's alternatives development and analysis process included detailed technical and financial analyses, planning, and community outreach. Alternatives that FTA and ATP considered but eliminated from further consideration are described in **Appendix A**, along with FTA's and ATP's rationale for the advancement of the current Project. The No Build Alternative and the Preferred Alternative are described below.

## 2.2 No Build Alternative

The No Build Alternative includes the existing transportation system and committed projects within the six-county metropolitan area that are documented in the *CAMPO 2045 Regional Transportation Plan* (2045 RTP) but excludes the light rail system components of Project Connect (CAMPO 2024a). The committed projects are those with identified funding sources and are likely to be built by 2045. The transportation components of the No Build Alternative are summarized below; a detailed description is provided in **Chapter 3, Transportation** and **Appendix D**.

### 2.2.1 Public Transit Operations and Projects

CapMetro currently operates High Frequency, Local, Flyer, Limited, and Express bus services with different frequencies, stops, and hours of service to serve multiple users. CapMetro also operates the Red Line commuter rail service.

CapMetro expects to implement their Transit Plan 2035, which includes realigned service on 22 bus routes and frequency and span improvements on 12 bus routes designed to reflect shifting travel patterns and unmet demand. In addition, they expect to implement the following new and expanded public transit service, which has a reasonable likelihood of being built by 2045:

- CapMetro Express bus service between park-and-rides and major employment hubs serving suburban Austin and neighboring communities;
- CapMetro Rapid bus service featuring frequent service, limited stops, priority lanes, transit signal priority, queue jumps, and enhanced and improved bus stations;
- CapMetro Rail Green Line commuter rail operating on CapMetro's existing freight line between Downtown Austin and Elgin; and
- CapMetro Rail Red Line commuter rail improvements.

**Table 2-1** provides additional details about the CapMetro Rapid routes that are planned or currently under construction, the proposed CapMetro Rail Green Line, and the existing CapMetro Rail Red Line; these projects are shown in **Figure 2-1**. The current analysis is based upon the existing transportation system plus the committed projects included in the 2045 RTP except for the Austin Light Rail system.<sup>1</sup>

---

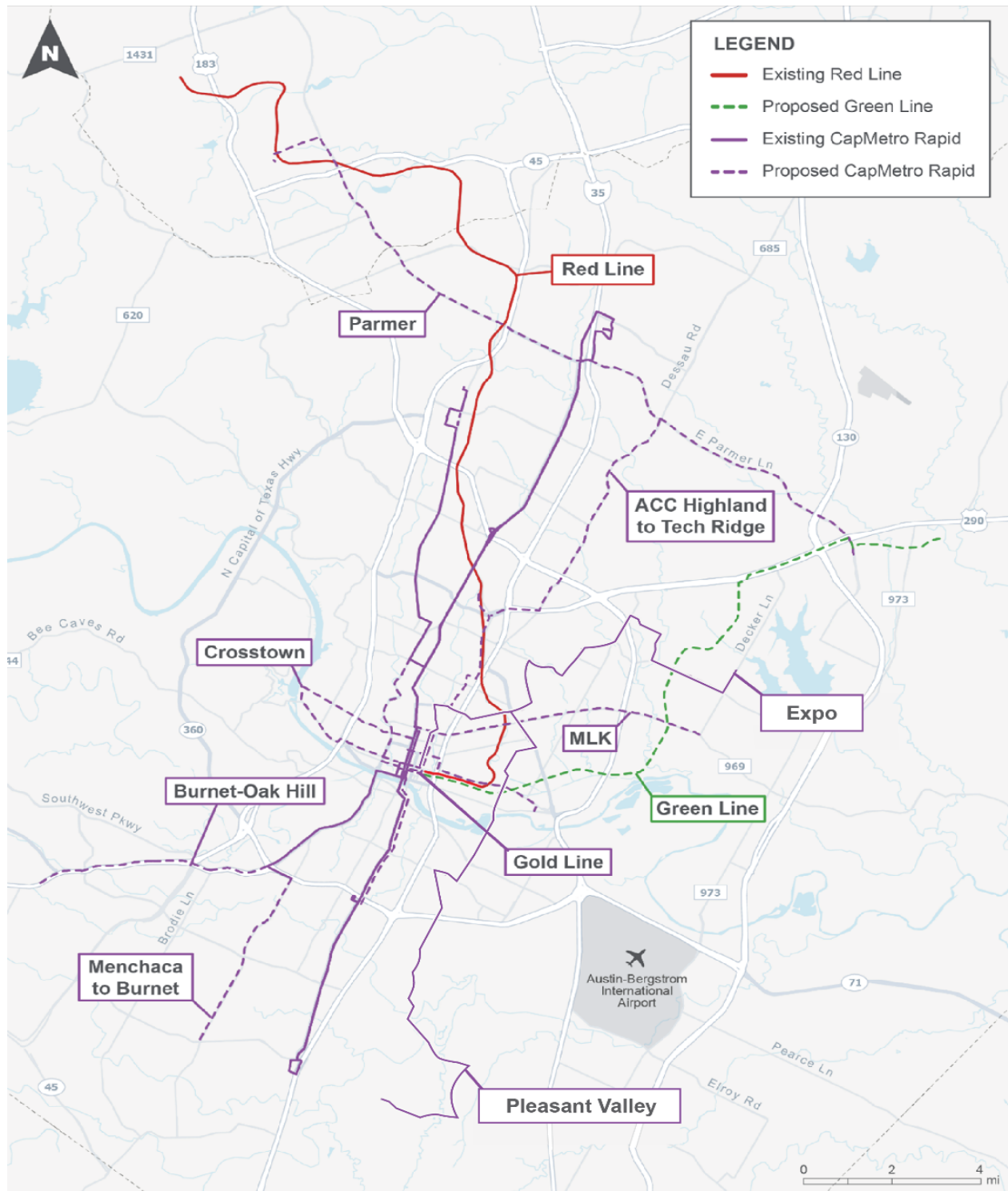
<sup>1</sup> The RTP underwent the federally mandated 5-year update in 2025 and the 2050 RTP was adopted in May 2025 after the analyses for the DEIS were complete. Use of the updated 2050 planning assumptions and RTP elements would not materially affect the results or conclusions in this FEIS, which are based on the DEIS analyses.

**Table 2-1: No Build Alternative Transit Projects in CAMPO's 2045 Regional Transportation Plan, Adopted 2020**

Service	Planned Routes
CapMetro Express Bus	Downtown Austin to: <ul style="list-style-type: none"> <li>• San Marcos</li> <li>• Buda</li> <li>• Southpark Meadows</li> <li>• Georgetown</li> <li>• Round Rock</li> <li>• Howard Station</li> <li>• Elgin</li> <li>• Manor</li> </ul> <ul style="list-style-type: none"> <li>• Hutto</li> <li>• Pflugerville</li> <li>• Lockhart</li> <li>• Easton Park</li> <li>• South Mopac</li> <li>• Bastrop</li> <li>• Del Valle</li> <li>• Four Points</li> </ul>
CapMetro Rapid Bus	<ul style="list-style-type: none"> <li>• Pleasant Valley – Mueller to the Goodnight Ranch Park-and-Ride (operational as of 2025)</li> <li>• Expo Center – East Austin to Republic Square (operational as of 2025)</li> <li>• Austin Community College – Highland to Republic Square</li> <li>• Burnet – Menchaca and Oak Hill Road Rapid Extension</li> <li>• Parmer Lane – Wildhorse to Lakeline</li> <li>• Martin Luther King (MLK) – Decker to Redbud</li> <li>• Crosstown – CARTS East Bus Plaza to Redbud</li> <li>• ACC – Highland to Tech Ridge</li> </ul>
CapMetro Rail (commuter rail)	<ul style="list-style-type: none"> <li>• Proposed Green Line commuter rail service to Elgin on a 25-mile alignment with 10 stations and connections to light rail routes, CapMetro Rail, and CapMetro Rapid</li> <li>• Red Line commuter rail improvements, including a double-track segment to support expanded operations, platform extensions, and new stations</li> </ul>

Source: CAMPO 2024a.

**Figure 2-1: Proposed CapMetro Rapid Routes, Proposed CapMetro Rail Green Line, and Existing CapMetro Rail Red Line**



Source: CapMetro 2022.

### 2.2.2 Roadway Projects

The No Build Alternative assumes completion of infrastructure improvements to roadways in the region, including drainage and safety enhancements, rehabilitation improvements, and roadway widening to accommodate increases in traffic. The following roadway projects would substantially increase capacity and mobility in Austin and are relevant to the analyses in this FEIS:

- The I-35 Capital Express Central Project would add two non-tolled high-occupancy vehicle managed lanes in each direction along I-35 from U.S. Highway 290 (US 290) East to State Highway 71 (SH 71) / Ben White Boulevard. This project would lower I-35 through downtown (between Martin Luther King Jr. [MLK] Boulevard and Holly Street) and would improve east-west connections, reconstruct the I-35 bridge over Lady Bird Lake, and improve bicycle and pedestrian paths (Texas Department of Transportation [TxDOT] 2023); and
- Corridor Mobility Program projects on Airport Boulevard, Burnet Road, East Riverside Drive, East MLK Boulevard, Guadalupe Street, North Lamar Boulevard, Slaughter Lane, South Lamar Boulevard, Loop 1 South, U.S. Highway 183 (US 183) North, and William Cannon Drive would improve Austin's transportation infrastructure (City of Austin 2022a).

## 2.3 Preferred Alternative

The Project includes a 9.8-mile dedicated light rail guideway, 15 stations, 3 park-and-rides, and an OMF, as shown in **Figure 2-2**. The components of a light rail system are described in Section 2.3.1 to assist the public in understanding Project elements. Section 2.3.2 describes the key components of the Preferred Alternative for each of the four geographic sections (North, Downtown, South, and East) shown in **Figure 2-2**. **Figure 2-2** has been revised to show the Preferred Alternative, reflecting revisions made following publication of the DEIS and the public commenting period. Information on the operating characteristics of the light rail system is provided in Section 2.3.3.



Figure 2-2: Preferred Alternative



### 2.3.1 Light Rail System Components

Light rail is a conventional term for urban electric rail systems that have the flexibility to operate along an exclusive ROW at ground level, on elevated structures, or in subways. The main components of a light rail system include light rail vehicles, tracks, stations, platforms, traction power substations, signal systems, and facilities for storage and maintenance of trains. ATP is planning for low-floor, low-platform vehicles ranging from 100 to 130 feet long, with a maximum seating capacity of roughly 200 to 270 passengers and the potential to couple two or more vehicles together to meet demand as needed. The light rail vehicles would be powered using electrical wires (catenary) suspended from catenary poles along the guideway (see **Figure 2-3**). These light rail vehicles would operate on tracks that are either at-grade (i.e., embedded within a street) or elevated to cross over geographic or physical barriers or where at-grade trackway would not be appropriate.

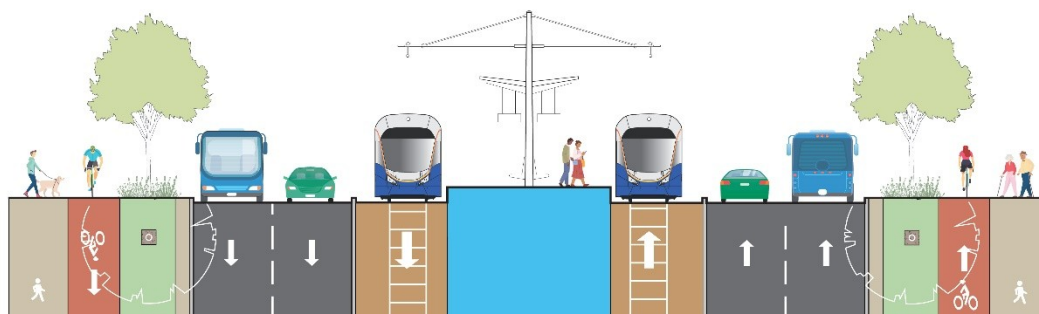
**Figure 2-3: Light Rail Vehicle Conceptual Rendering**



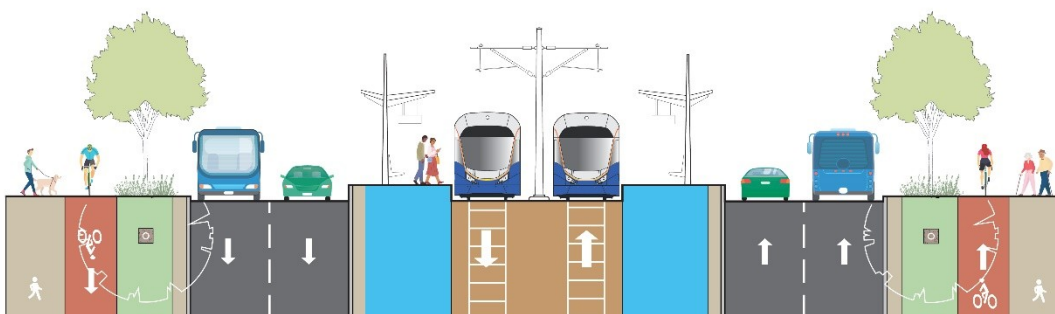
Depending on the location, ATP would design stations with center or side platforms. Center platform stations would allow passengers to access trains going in the opposite direction from the same platform in between the tracks. Side platform stations would be located outside of the tracks and would require riders to cross over tracks to access trains in the opposite direction (see **Figure 2-4**). The width of the platforms would range from 12 to 20 feet, and their length would be a minimum of 245 feet to accommodate 2-car trains, with platforms at some stations extending up to 400 feet to accommodate 3-car trains and meet passenger demand or other technical and operational needs.

Canopies would be installed to protect passengers from inclement weather. All stations would be fully compliant with the Americans with Disabilities Act (ADA).

**Figure 2-4: Center and Side Platform Station Configurations**



***Artist Rendering of Center Platform Station***



***Artist Rendering of Side Platform Station***

The Preferred Alternative would include signal system modifications and changes to the street network, including the number and configuration of lanes, turning movements, and improvements to adjacent roadways to accommodate traffic. Bicycle and pedestrian facilities would be provided throughout the corridor and would include bicycle lanes, sidewalks, and/or shared use paths with connections to existing and planned facilities.

The Preferred Alternative would include traction power substations that provide electrical power to the trains via an overhead wire or catenary; a signal system including train control and communications bungalows and cabinets; and crossing gates, similar to traditional railroad crossing gates at select locations. The traction power substations would be adjacent to the alignment spaced approximately 1 mile apart. Train control and communication cabinets would be approximately 0.5 mile apart along the alignment. Examples of a traction power substation and train control bungalow, which support light rail are shown in **Figure 2-5**. ATP would refine the precise location of this equipment as the design advances to minimize effects on surrounding properties and resources and to balance safety, reliability, cost, and operational efficiencies.

The Preferred Alternative would include an OMF to maintain and store the light rail vehicles. The OMF would include administration and operations areas, light rail vehicle (LRV) maintenance areas, maintenance of way (MOW) areas, and the light rail transit control center (LRTCC). An approximate 2- to 3-story building would enclose the LRV maintenance and operations functions and an approximate 1- to 2-story building would house MOW equipment. LRV storage tracks would accommodate up to 32 LRVs.

**Figure 2-5: Examples of Light Rail Power and Communications Equipment**



***Example of a Traction Power Substation (Valley Metro, Phoenix, Arizona)***



***Example of a Train Control Bungalow (LA Metro, Los Angeles, California)***

### **2.3.2 Description of Preferred Alternative**

The horizontal and vertical alignment profile and proposed station locations for the Preferred Alternative are described below for each of the four sections of the alignment: North, Downtown, South, and East. The Preferred Alternative is the Build Alternative with five of the six Design Options shown in the 2024 DEIS. The Wooldridge Square Station, Lady Bird Lake Bridge Extension, Travis Heights Station, Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside, and Grove Station Design Options are included in the Preferred Alternative. The Cesar Chavez Station Design Option is not included in the Preferred Alternative.

#### **2.3.2.1 North Section**

The North Section of the alignment extends from 38th Street to MLK Boulevard and serves the UT campus, medical facilities, and the Museum District among other key destinations (see **Figure 2-6**). Beginning at the intersection of Guadalupe Street and 38th Street, the center-running at-grade alignment would extend in the middle of the street south to UT. Due to the high level of pedestrian activity on Guadalupe Street, a transit/active transportation corridor would be established between 29th and 27th Streets, with vehicular access restricted by signage, traffic control devices, and/or curbs. Emergency vehicle access would be accommodated. On Guadalupe Street



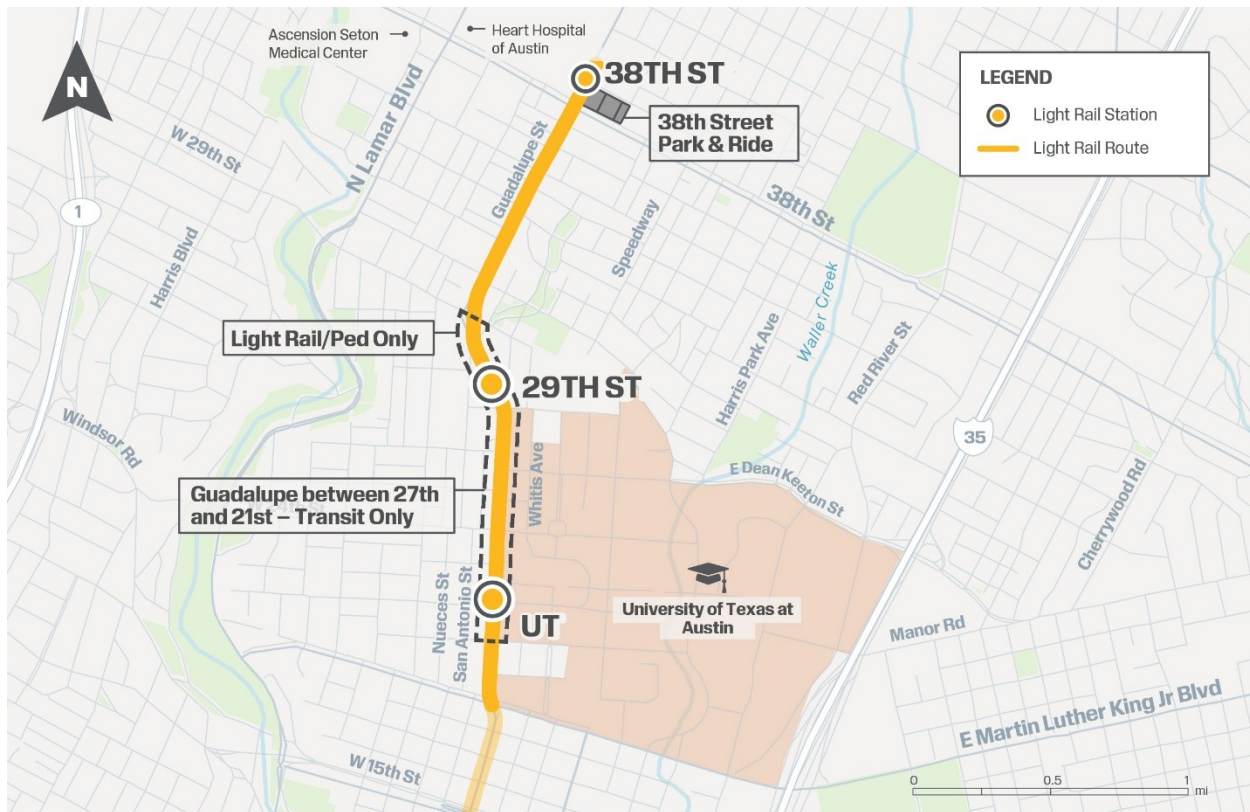
between 27th Street and 22nd Street (southbound)/21st Street (northbound), a transit-only corridor would be established. This segment of Guadalupe Street would include the light rail guideway, active transportation facilities, and one travel lane in each direction that is intended for bus and/or bicycle access. Buses would operate either in a shared bus/bicycle lane on either side of the guideway, or in a shared light rail/bus guideway in the center of the roadway. Cars traveling through the area would use adjacent roadways for access. This will include San Antonio Street, North Lamar Boulevard, and Nueces Street. Improvements to these adjacent streets will be required as part of the Preferred Alternative. Guadalupe Street between 22nd Street and MLK Boulevard would accommodate limited vehicle and delivery access. A detailed description of the traffic changes is provided in Section 3.2.2 in **Chapter 3, Transportation**.

Three stations would be located in the North Section:

- **38th Street Station.** A center platform station on Guadalupe Street between West 39th Street and West 38th Street accessed via crosswalks at adjacent intersections.
- **29th Street Station.** A side platform station in a transit/pedestrian-focused corridor on Guadalupe Street between West 27th Street and Fruth Street accessed via adjacent sidewalks.
- **UT Station.** A center platform station on Guadalupe Street, in a transit-only corridor, between West 23rd Street and West 22nd Street at the West Mall entrance to the UT campus accessed via signalized pedestrian crosswalks.

A park-and-ride surface lot near the 38th Street Station would be located on three adjacent parcels on Guadalupe Street and 38th Street. The park-and-ride was originally proposed as a multi-story structure to accommodate 300 parking spaces. Based on DEIS public comments, ATP has modified the 38th Street Station design to include a surface parking lot for approximately 50 to 60 vehicles. To balance the needs of the community with the potential demand for parking at 38th Street, ATP will monitor traffic conditions and park-and-ride use after light rail service begins to ascertain capacity constraints. ATP will seek opportunities to lease unused parking spaces at nearby lots (e.g., Austin State Hospital, Hyde Park Baptist Church, Baker Center) if increased vehicle parking demand occurs in adjacent neighborhoods.

Figure 2-6: Project Components in the North Section



### 2.3.2.2 Downtown Section

The Downtown Section would extend from MLK Boulevard to Lady Bird Lake and serve key employment centers, government facilities, the Convention Center, Town Lake Metro Parks, and the Ann and Roy Butler Hike and Bike Trail. The center-running at-grade alignment would extend south on Guadalupe Street from MLK Boulevard to 3rd Street. Along this segment, Guadalupe Street would include the light rail guideway, sidewalks, and one traffic lane in each direction on either side of the guideway between MLK Boulevard and 3rd Street.

Local traffic would be maintained along Guadalupe Street in this section, including use by buses and emergency vehicles, and for local delivery and garage access. General or through-traffic access in this area would be relocated to Lavaca Street, which would be converted to bidirectional flow between MLK Boulevard and 2nd Street. To support the change in traffic patterns, Lavaca Street would be restriped between East MLK Boulevard and Cesar Chavez Street. The new lane configuration would allow for two-way vehicular traffic from East MLK Boulevard to West 2nd Street. The roadway would include two northbound and two southbound travel lanes, with left-turn lanes at some intersections. Existing curbs and sidewalks would be maintained for much of the corridor. In some locations, the curb would be reconstructed to accommodate the roadway width necessary for two-way traffic, and corner radii would be modified to accommodate new turning movements.

The existing southbound bicycle lane on Guadalupe Street and the existing northbound bicycle lane on Lavaca Street north of 4th Street would be removed to accommodate the new street configurations. ATP will coordinate with the City to mitigate removal of downtown bicycle lanes along Guadalupe and Lavaca Streets by adding active transportation lanes to Nueces Street between the limits of West Cesar Chavez Street and West MLK Boulevard. A northbound bicycle lane would be provided between 4th Street and Cesar Chavez Street. All traffic signals would be modified to facilitate two-way traffic.

To support connectivity and traffic operations to the south, the South 1st Street bridge would be restriped to accommodate a northbound left-turn lane for buses to access northbound Guadalupe Street. At the northwestern corner of West Riverside Drive and South 1st Street, a new sidewalk connection to the western side path of South 1st Street bridge would be constructed and the existing sidewalk on that corner repurposed as a dedicated bikeway. ATP will advance the design in a manner that provides a comparable level of active transportation connectivity across the South 1st Street bridge as currently exists. Additionally, the West Riverside Drive and South 1st Street traffic signal would be modified to install a northbound bus queue jump. This would facilitate the movement of northbound buses from the outer traffic lane to the innermost traffic lane to access the left-turn approach to W. Cesar Chavez Street and northbound Guadalupe Street.

At the intersection of Guadalupe Street and 3rd Street, the alignment would extend east on 3rd Street, cross Congress Avenue, and connect to Trinity Street. Between Colorado Street and Congress Avenue, vehicular traffic would be prohibited and redirected to surrounding roadways and nearby thoroughfares (e.g., 2nd Street and 4th Street). The existing protected bikeway along 3rd Street would be relocated to 4th Street. 4th Street would be modified between Nueces and Trinity Streets to include protected bicycle lanes in each direction of travel. The existing parking on 4th Street would be modified or removed as necessary to accommodate the bicycle lanes while maintaining one lane of vehicular travel in each direction. Sidewalk modifications may be necessary to accommodate the new bicycle lanes while maintaining the existing loading docks in the block between Lavaca Street and Colorado Street.

The light rail alignment would turn south from 3rd Street onto Trinity Street and would cross Lady Bird Lake on a new light rail bridge. Dedicated bicycle and pedestrian facilities would be provided as part of the new bridge crossing of Lady Bird Lake, with connections to the Ann and Roy Butler Hike and Bike Trail in Waller Beach at Town Lake Metro Park.

Since publication of the DEIS, the conceptual design on Trinity Street was refined to reflect public comments on DEIS and coordination with the Austin Convention Center, adjacent property owners with loading docks, and City utilities. The alignment of the light rail, bikeway, and trail connection in this area was shifted to facilitate access to loading docks and utilities, and to support the redevelopment plans for the Austin Convention Center. The modifications are reflected in the preliminary engineering drawings presented in **Appendix C**.



Under the Preferred Alternative, four stations would be located in the Downtown Section, as shown in **Figure 2-7**:

- **15th Street Station.** A center platform station on Guadalupe Street between West 16th Street and West 14th Street accessed via crosswalks at the adjacent intersections.
- **Wooldridge Square Station.** A center platform station on Guadalupe Street between West 10th Street and West 9th Street near Wooldridge Square.
- **Congress Station.** A side platform station on 3rd Street between Colorado Street and Congress Avenue accessed via adjacent sidewalks.
- **Cesar Chavez Station.** A side platform station on Trinity Street between East Cesar Chavez Street and 2nd Street accessed via adjacent crosswalks.

The Wooldridge Square Station was evaluated as a Design Option in the DEIS. A Design Option for the Cesar Chavez Station was considered in the DEIS. It would locate the station and guideway off-street on a diagonal through private property. The Cesar Chavez Station Design Option would be integrated with transit-oriented development (TOD) that is being planned for the site. FTA and ATP developed this Design Option to explore the potential for a joint development opportunity with a private developer. This Design Option is not included in the Preferred Alternative because a joint development agreement with a private developer has not been advanced. If progress is made on a joint development agreement, this Design Option may be reconsidered in the future. This is the only Design Option not included in the Preferred Alternative.

Figure 2-7: Project Components in the Downtown Section



### 2.3.2.3 South Section

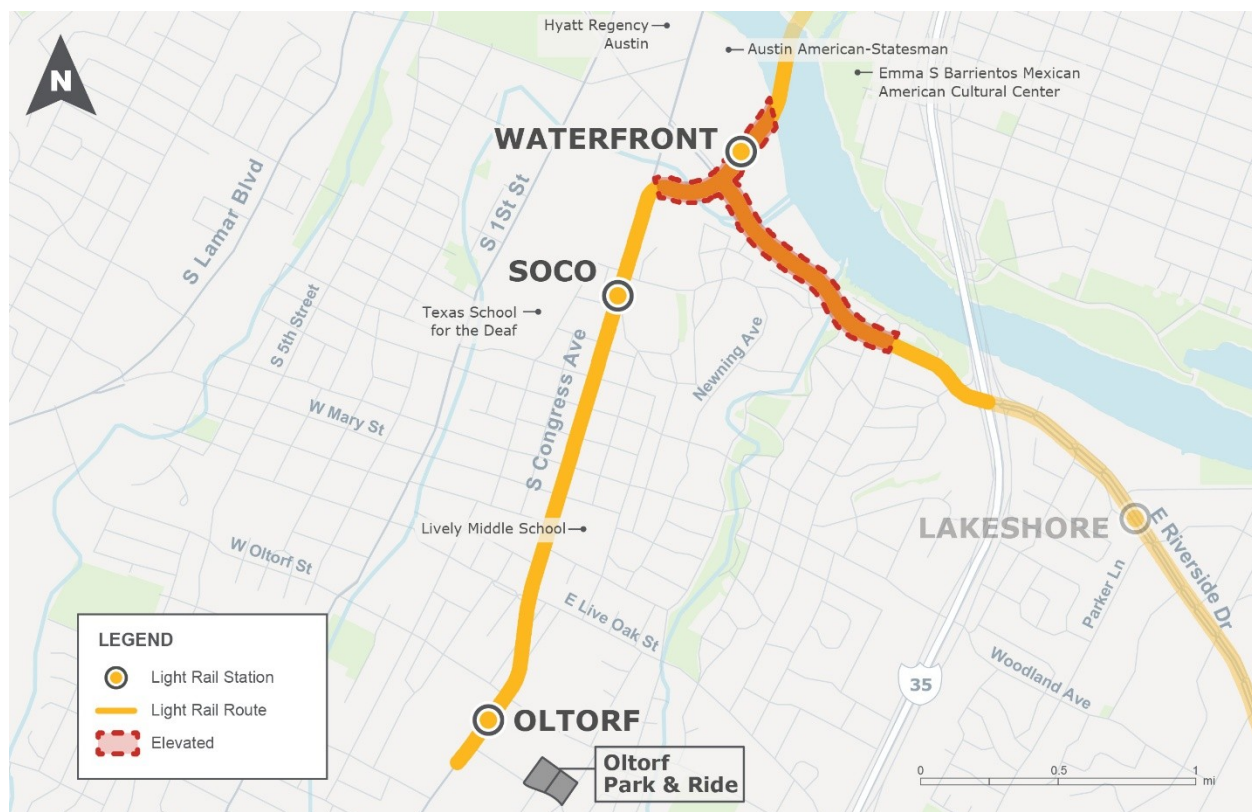
The South Section extends from Lady Bird Lake south to Oltorf Street and from South Congress Avenue east to I-35. On the south shore of Lady Bird Lake, the alignment would split into two branches at East Riverside Drive, crossing over East Bouldin Creek in both the eastward and southward directions. Under the Preferred Alternative, south of Waterfront Station, the center-running elevated alignment would extend southwest and meet South Congress Avenue at-grade, where it would continue at grade terminating at an at-grade station at the intersection of South Congress Avenue and Oltorf Street. This area on South Congress Avenue hosts a high activity mixed-use district and education facilities including Lively Middle School and the Texas School for the Deaf. The center-running elevated eastern portion of the alignment would traverse the residential neighborhood of Travis Heights and parkland on the south shore of Lady Bird Lake and touch down at Travis Heights Boulevard. Active transportation facilities would be provided throughout the corridor and would include variations of bicycle lanes, sidewalks, and/or shared use paths with connections to existing and planned facilities.

The Preferred Alternative includes two general purpose traffic lanes in each direction on South Congress Avenue and left turns at select locations within the South Congress Business District as shown on the Current Design drawings in Appendix C. However, based on DEIS public and agency comment, ATP and the City will continue to evaluate the feasibility of modifications to the configuration of travel lanes, parking, active

transportation facilities, and back of curb amenities in future design work. No changes to the ROW footprint are anticipated, and potential modifications in the configuration in future design may be subject to further environmental review depending on the nature of the change and as determined in coordination with FTA. Under the Preferred Alternative, three stations would be located in the South Section along the southern branch, as shown in **Figure 2-8**:

- **Waterfront Station.** A center platform elevated station on East Riverside Drive at the Barton Springs Road extension accessed via adjacent sidewalks.
- **South Congress (SoCo) Station.** A center platform station on South Congress Avenue between Academy Drive and James Street accessed via crosswalks at the adjacent intersections.
- **Oltorf Station.** A center platform station on South Congress Avenue between Oltorf Street and Long Bow Lane accessed via crosswalks at adjacent intersections.

**Figure 2-8: Project Components in the South Section**



A park-and-ride surface lot near the Oltorf Station would be located on Long Bow Lane, east of South Congress Avenue and one block south of Oltorf Street. A parking facility is currently operated at the site, and ATP would seek to lease approximately 100 parking spaces on approximately 2 acres to meet the estimated demand.

The DEIS analyzed both an elevated and at-grade alignment in this section with and without a Travis Heights Station, as follows:

- **Lady Bird Lake Bridge Extension Design Option** would include an elevated Waterfront Station and extension of the elevated structure south of the station toward South Congress Avenue, and eastward in the median of East Riverside Drive to Travis Heights Boulevard. FTA and ATP developed this Design Option to address the surrounding topography challenges and the difficult traffic operations that would result from an at-grade alignment of the junction (connection point) of all three light rail branches at East Riverside Drive. This Design Option is included in the Preferred Alternative.
- **Travis Heights Station Design Option** would eliminate the station at Travis Heights. FTA and ATP evaluated this Design Option as an option to avoid the “use” (i.e., acquisition) of parkland under Section 4(f) of the Department of Transportation Act, to address technical challenges with topography, and to avoid overlapping construction sites with the planned I-35 Capital Express Central Project. This Design Option is estimated to result in approximately 100 fewer daily boardings. This Design Option is included in the Preferred Alternative. Consequently, the Preferred Alternative will not include Travis Heights Station.

#### 2.3.2.4 East Section

The East Section extends along East Riverside Drive from intersection of I-35 to Yellow Jacket Lane along a commercial corridor. The center-running at-grade alignment would extend southeast to its termination point just west of SH 71 at the Yellow Jacket Station. Active transportation facilities would be provided throughout the corridor and would include variations of sidewalks, bicycle lanes, and/or shared use paths with connections to existing and planned facilities. Two Design Options, a park-and-ride, the OMF, and the MOW shops would be located in this section, as shown in **Figure 2-9**.

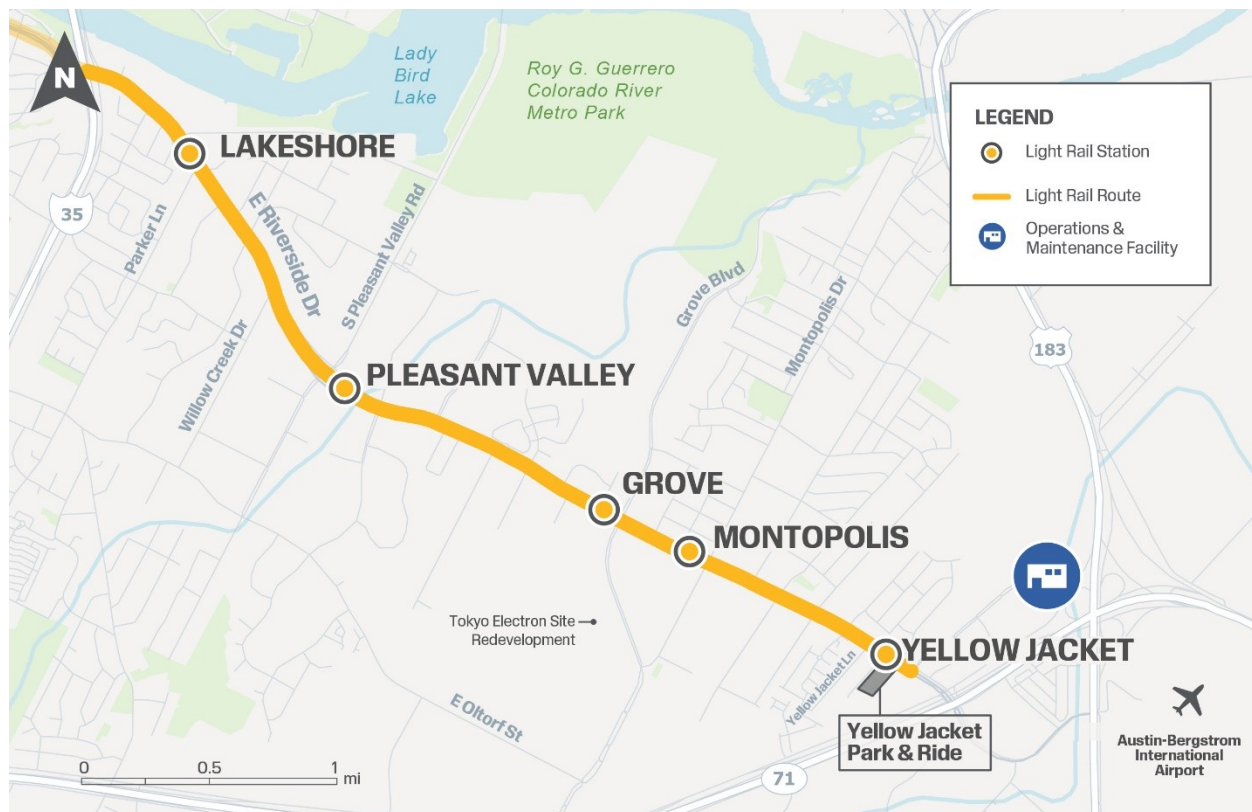
Under the Preferred Alternative, five stations would be located in the East Section:

- **Lakeshore Station.** A side platform station on East Riverside Drive between South Lakeshore Boulevard and Shore District Drive accessed via crosswalks at the adjacent intersections.
- **Pleasant Valley Station.** A side platform station on East Riverside Drive southeast of South Pleasant Valley Road accessed via an adjacent transit plaza in the median of East Riverside Drive.
- **Grove Station.** A side platform station on East Riverside Drive between Penick Drive and Grove Boulevard accessed via crosswalks at the adjacent intersections.



- **Montopolis Station.** A side platform station on East Riverside Drive between Brassie Street and Montopolis Drive accessed via crosswalks at the adjacent intersections. Subsequent to publication of the DEIS, ATP eliminated the need to displace four residences by shifting the Montopolis Station to the west side of the intersection of Montopolis Drive and East Riverside Drive.
- **Yellow Jacket Station.** A center platform station on East Riverside Drive between Yellow Jacket Lane and Coriander Drive accessed via crosswalks at the adjacent intersections, with a connection to the proposed park-and-ride.

Figure 2-9: Project Components in the East Section



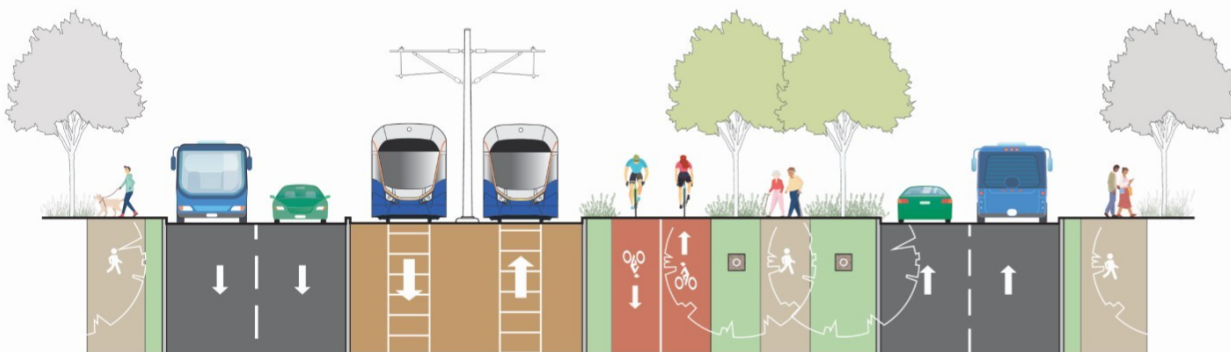
A surface park-and-ride near the Yellow Jacket Station would be located on the south side of East Riverside Drive southwest of Uphill Lane. The 2-acre site would provide approximately 150 parking spaces.

The OMF is proposed near the US 183 / SH 71 interchange near Airport Commerce Drive in an area developed with commercial and light industrial uses, with residential use restrictions due to its proximity to the Austin-Bergstrom International Airport. The proposed site would include space for administration, operations and maintenance staff, a light rail control center, light rail vehicle storage tracks, and MOW shops. Light rail vehicle access to the OMF is shown in the conceptual engineering drawings in **Appendix C**.

The DEIS analyzed two Design Options in the East Section:

- **Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option** would include center-running bicycle and pedestrian lanes next to the light rail east of I-35 on East Riverside Drive. In this part of the Project corridor, the roadway ROW is relatively wide, and there is a lack of shade and bicycle and pedestrian infrastructure serving the adjacent communities. The Design Option for a center-running configuration recognizes an opportunity to improve mobility options and user experience across all modes of travel in the corridor by providing continuous bicycle and pedestrian infrastructure that minimizes conflict points with driveways. This Design Option is also an opportunity to improve shade cover and plant taller trees along the corridor. The separated traffic in this configuration could contribute to better speed management and safer conditions for all users. The bicycle/pedestrian and shade tree configurations are shown in **Figure 2-10**. This Design Option is included in the Preferred Alternative.
- **Grove Station Design Option** was initially proposed to combine the Montopolis and Faro Stations into a single station at Grove Boulevard in order to improve bus connectivity to a nearby Austin Community College campus and provide direct access to planned housing. This Design Option was presented during scoping meetings in February 2024. In response to public feedback, a variation to the Grove Station Design Option was developed. The variation retains two stations in this area but would locate the Faro Station (renamed Grove Station) 800 feet to the east, closer to Grove Boulevard. The variation to the Grove Station Design Option is included in the Preferred Alternative.

**Figure 2-10: Center-Running Bicycle and Pedestrian Lanes**



***The Design Option would locate the bicycle and pedestrian lanes near the middle of the right-of-way next to the light rail with an opportunity for more shade trees.***

### 2.3.3 Operating Characteristics

Frequent service would be provided on the light rail system. In the North and Downtown Sections, between the 38th Street Station and Waterfront Station, trains would operate approximately every 5 minutes most of the day and up to every 7.5 minutes during off-peak hours. In the South and East Sections, peak-period service would operate every 10 minutes, with an off-peak service frequency of up to 15 minutes. Train speed would adhere to posted arterial automobile speed limits. The service would operate Monday through Friday 5:00 a.m. to 12:30 a.m., Saturday 5:50 a.m. to 12:30 a.m., and Sunday 6:00 a.m. to 12:30 a.m.

## 2.4 Estimated Project Cost and Schedule

The capital cost of the Project, estimated to be approximately \$7.1 billion in year-of-expenditure dollars (excluding financial costs), is based on the conceptual design drawings presented in **Appendix C**. ATP will update cost information at key milestones as more detailed design and updates to key cost factors are developed. The Project's construction schedule is anticipated to extend from 2027 to 2033, with service scheduled to begin shortly thereafter.