



# FTA Bus and Bus Facilities Program Round Rock Transit Center Expansion



August 2018

## EXECUTIVE SUMMARY

The City of Round Rock introduced fixed-route bus service on August 21, 2017. Initial transit service consists of three bus routes operating within the city and connecting to bus and commuter rail facilities in North Austin. A commuter express bus route connecting Round Rock with downtown Austin is scheduled to begin service in late 2017 following the completion of the managed lanes on the MoPac/Loop 1 Expressway. Located two blocks from the center of downtown, the Round Rock Transit Center is the primary connection point for existing and planned local and regional bus routes.

The Round Rock Transit Center is a two-story facility that includes 110 parking spaces, a bus loading/unloading area, bike lockers, a sheltered waiting area, and an office for bus pass sales. Constructed in 2010, the facility was designed to accommodate three additional floors of parking. Street-level parking spaces were designed so they could be converted into future ground-floor retail use should additional floors be constructed.

With planned commuter express bus service to Austin, the City of Round Rock is committed to providing environmentally-sustainable and stress-free commuting options for its residents. Available parking capacity is an important factor in the success of this highly anticipated service.

Expanding the Round Rock Transit Center would secure future parking capacity, accommodate future commuter express bus service expansion, and eliminate the need for additional parking facilities in the downtown area. The City of Round Rock is willing and able to commit local funds to the expansion of its downtown transit center.

### Round Rock Transit Center



Round Rock Transit Center Location



## SERVICE DESCRIPTION



Round Rock local routes provide access to employment, education, shopping and medical destinations within the city and connect to existing Capital Metro routes and facilities in Austin.

### **Route 50: Round Rock - Howard Station**

Route 50 provides local weekday service between Austin Community College, Round Rock Transit Center, and Howard Station. The route connects neighborhoods with key destinations throughout the city. Service on route 50 includes 12 daily trips in both northbound and southbound directions, with hourly departures beginning at 6:30 AM. Connections to Capital Metro Route 243 and Capital Metro Red Line are available at Howard Station and the express Route 980 at the Round Rock Transit Center.

### **Route 51: Round Rock Circulator**

Route 51 provides weekday service along collector streets in west, south, and central Round Rock. This route connects neighborhoods with medical, educational, shopping, and recreational destinations. Service on Route 51 includes 12 daily trips with hourly departures beginning at 6:30 AM in the westbound direction and 7:04 AM in the eastbound direction.

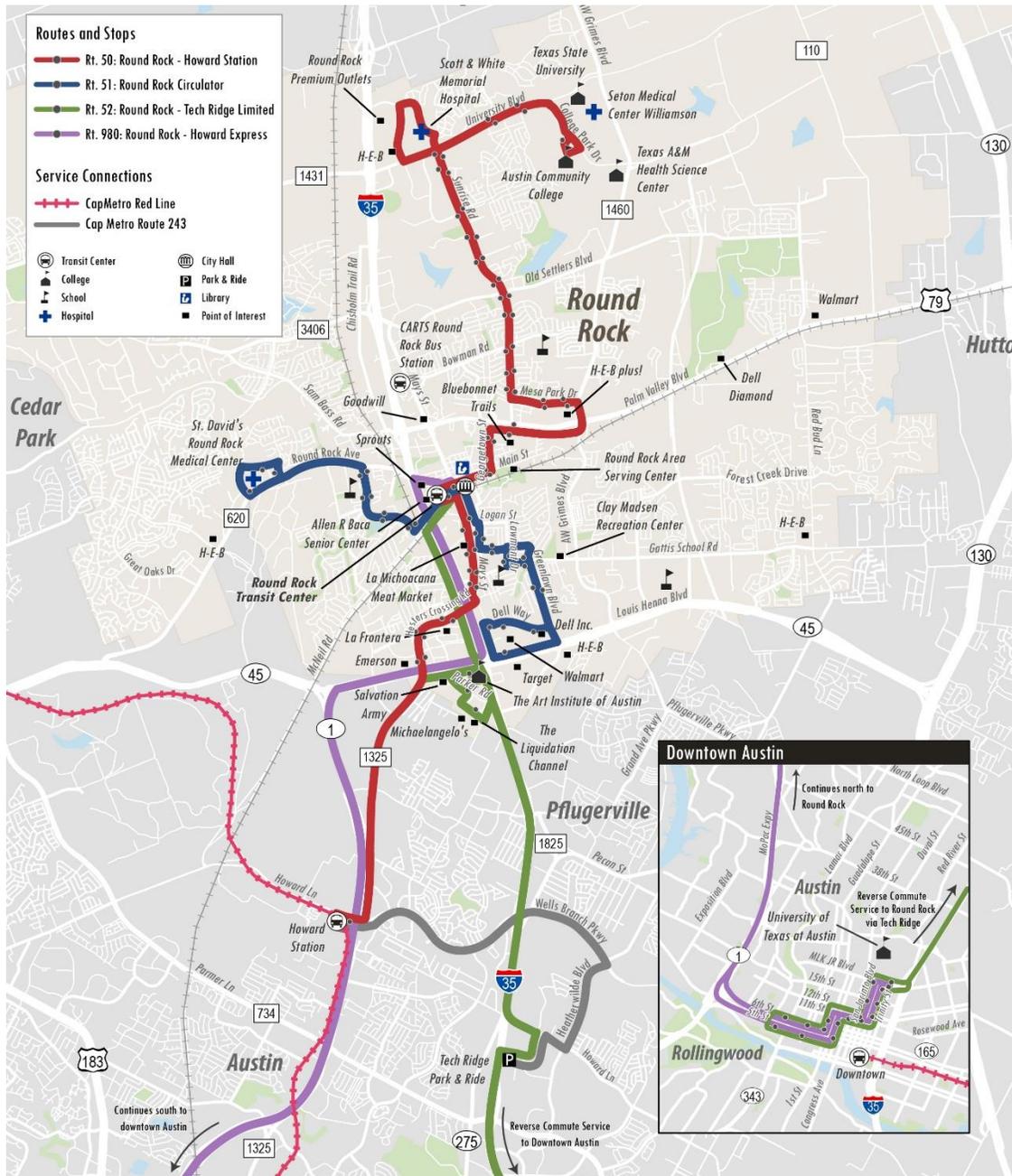
### **Route 52: Round Rock - Tech Ridge Limited**

Route 52 provides a connection between Tech Ridge Park-and-Ride and the Round Rock Transit Center, with three local stops at employment centers in the southwest corner of Interstate 35 and SH 45. Two weekday morning and two weekday evening trips in both directions provide reverse-commute options between Round Rock and Tech Ridge. At the Tech Ridge Park-and-Ride, connections are available to Capital Metro Route 243 and MetroRapid Route 801.

**Route 980: Round Rock - Howard Express**

Route 980 is a commuter express bus service between the Round Rock Transit Center and downtown Austin. Service began November 13, 2017. The route consists of two morning southbound trips and two afternoon northbound trips, with an estimated trip time of 45 minutes. A significant share of Round Rock residents that currently drive to Howard Station or Tech Ridge Park-and-Ride in North Austin to access Capital Metro express bus and commuter rail services are expected to shift their trip to the Round Rock Transit Center.

**Round Rock Transit System Map**

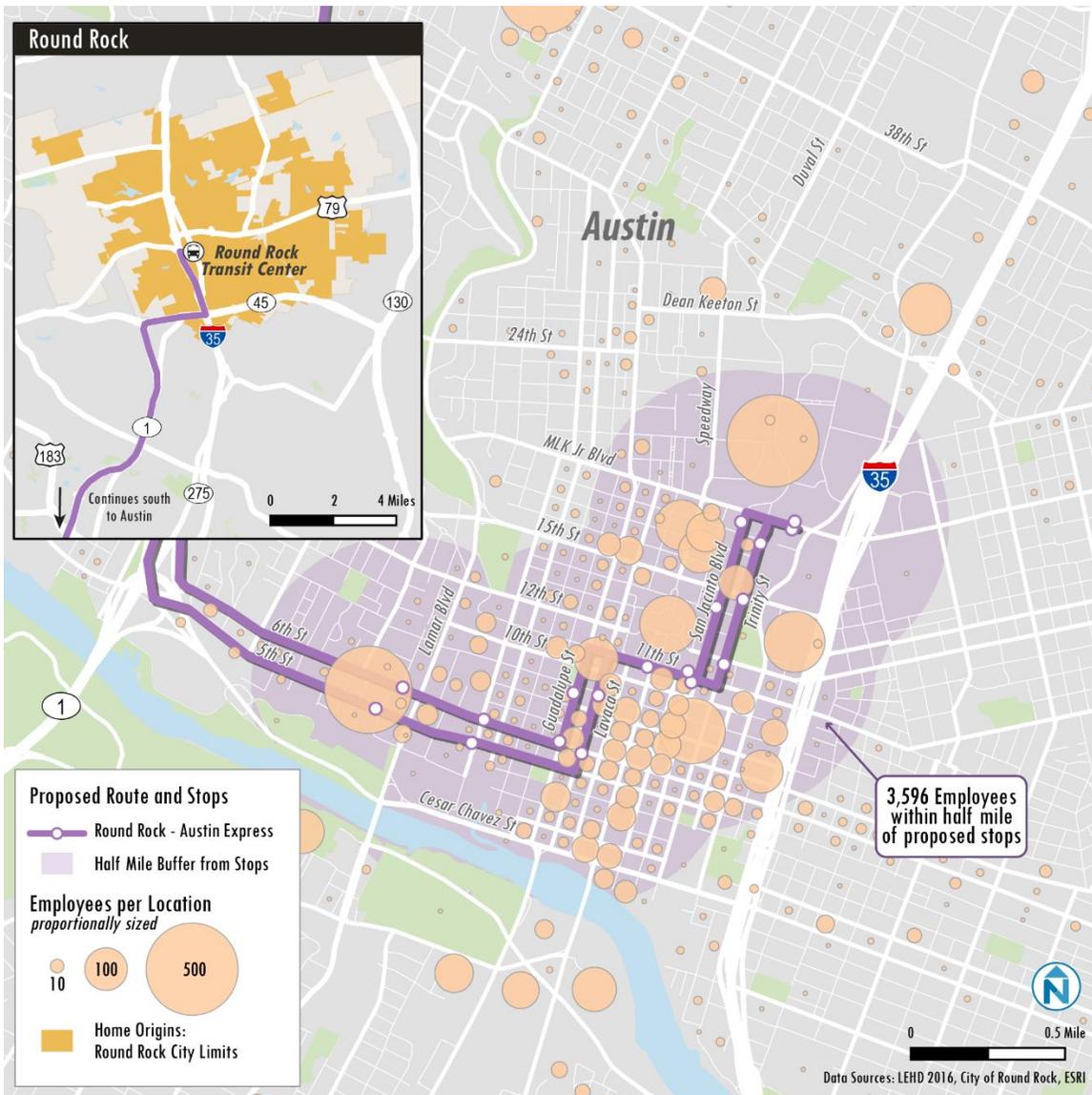


# PROJECT NEED

## Short-Term Parking Capacity

Parking availability is an important component of park-and-ride commuter express bus service. An analysis of 2016 Longitudinal-Employer Household Dynamics (LEHD) data indicates that 3,596 Round Rock residents currently work within downtown Austin. Applying a commuter bus mode share of 3% to this employment figure results in a projected 108 daily riders, which equates to 97-102 occupied spaces, assuming 5-10% of riders are dropped off. This projection suggests that the transit center could approach maximum capacity within the first year of service.

### Employment Locations of Round Rock Workers



## Long-Term Parking Capacity

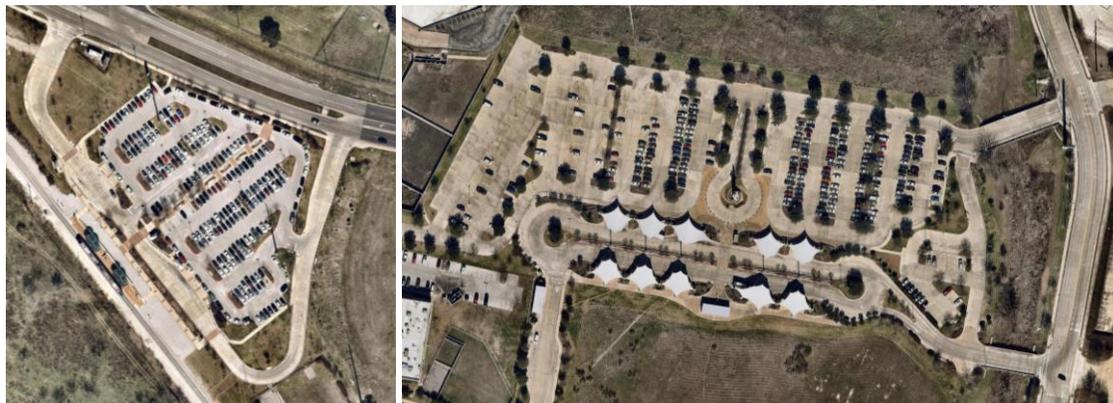
The City of Round Rock Planning and Development Services projects a 46-percent population increase from 2017 to 2030<sup>1</sup>. Assuming that the percentage of Round Rock residents employed in downtown Austin remains constant and the commuter bus mode share increases from 3% to 4% due to ridership maturation and increased service levels, the parking demand for the Round Rock Transit Center is projected to nearly double to 200 spaces by 2030.

Population, Employment and Ridership Projections	2017	2030
Round Rock Population	112,201	158,217
Round Rock Residents Employed in downtown Austin	3,596	5,251
Commuter Express Bus Mode Share	3.0%	4.0%
Projected Round Rock Commuter Express Bus Riders	108	210
Projected Drop-off Rate	5%	5%
Projected Parking Demand at Round Rock Transit Center	102	200

Sources: City of Round Rock Planning and Development Services Department, LEHD 2016

Aerial photography from November 2014 to May 2017 reveals that Howard Station (served by Capital Metro MetroRail Red Line) and Tech Ridge Park-and-Ride (served by Capital Metro Route 935 Tech Ridge Express) have each averaged between 200-225 occupied parking spaces on weekdays. Howard Station has been over capacity for several years and is scheduled to be expanded by 85 parking spaces. Round Rock Transit Center will provide Interstate 35 and MoPac/Loop 1 Expressway commuters with a third park-and-ride option that will likely prove to be the most convenient for many existing and potential transit users.

### Park-and-Ride Activity: Howard Station and Tech Ridge Park-and-Ride



Source: Nearmap Ltd.

Expanding the Round Rock Transit Center would extend the useful life of the facility by meeting long-term parking needs, and eliminate the need for additional park-and-ride facilities along the congested Interstate 35 corridors in Round Rock.

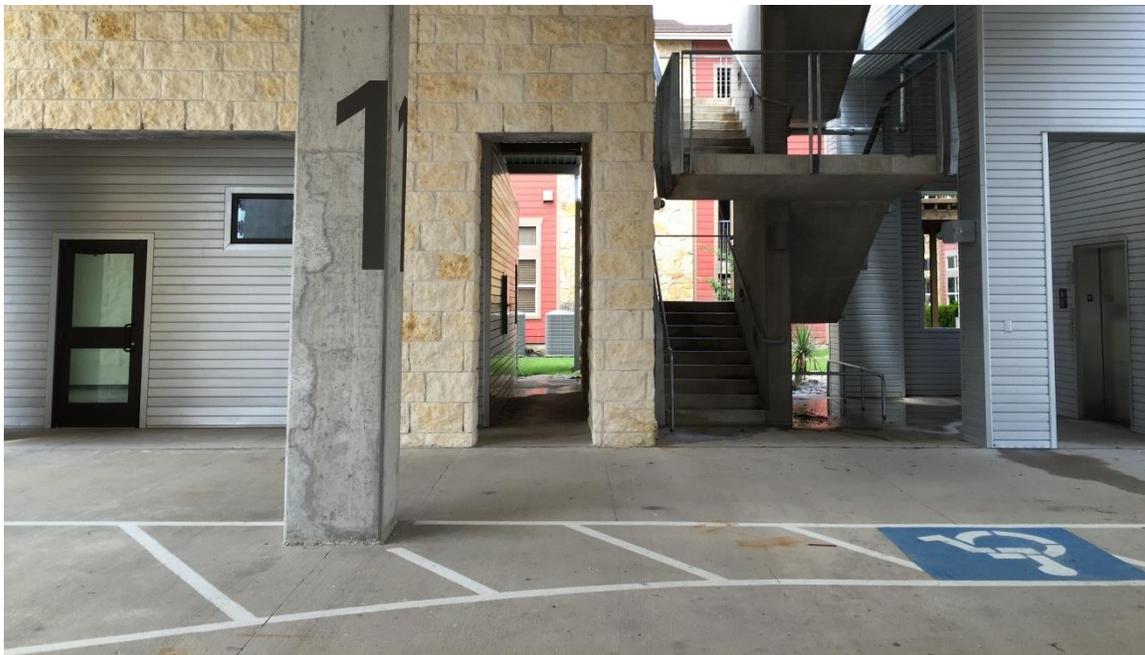
<sup>1</sup> <https://www.roundrocktexas.gov/wp-content/uploads/2017/04/2010-2030-Population-Projections-All-Years-with-Growth-Rates-and-Adjusted-2017.pdf>

## Passenger Safety and Operational Efficiency

Maintaining reliable schedules requires safe and efficient bus loading operations. The loading/unloading area at the Round Rock Transit Center currently consists of an open, paved area level with the ground floor of the parking structure. While the area provides sufficient space for buses to access the facility, it lacks a curb and sidewalk.

The addition of a curb and sidewalk in the bus loading area in conjunction with facility expansion would improve accessibility by reducing potential conflicts between passengers and vehicles by creating a safe, visible area for passengers. Curb-level loading also makes stepping onto or off the bus easier for riders of all ages and abilities, thereby reducing dwell time. As bus service and passenger activity at the transit center increases, the need for managing foot and vehicle traffic within the loading area will increase significantly.

### Bus Loading and Unloading Area



# PROJECT BENEFITS

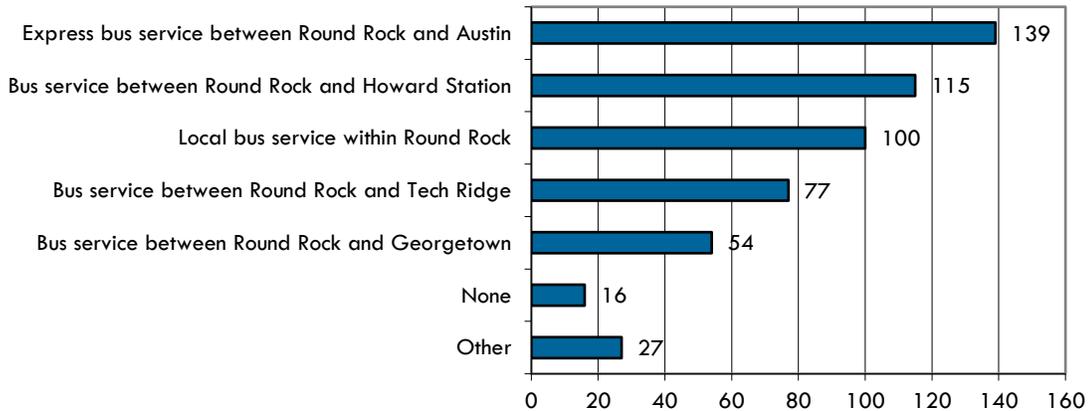
In addition to meeting future parking demand and improving passenger safety and operational efficiency, expansion of the Round Rock Transit Center would yield several benefits for residents of Round Rock and the greater Central Texas region.

## Expanded Commuter Bus Service

The City of Round Rock completed a Transit Master Plan in November 2015 that included extensive community outreach in the form of public meetings, stakeholder discussions, a project website, and an online survey for Round Rock residents. Over 200 existing Capital Metro riders as well as 1,200 non-transit riders completed the online survey and overwhelmingly identified commuter express bus service to Austin as the highest transit priority for Round Rock.

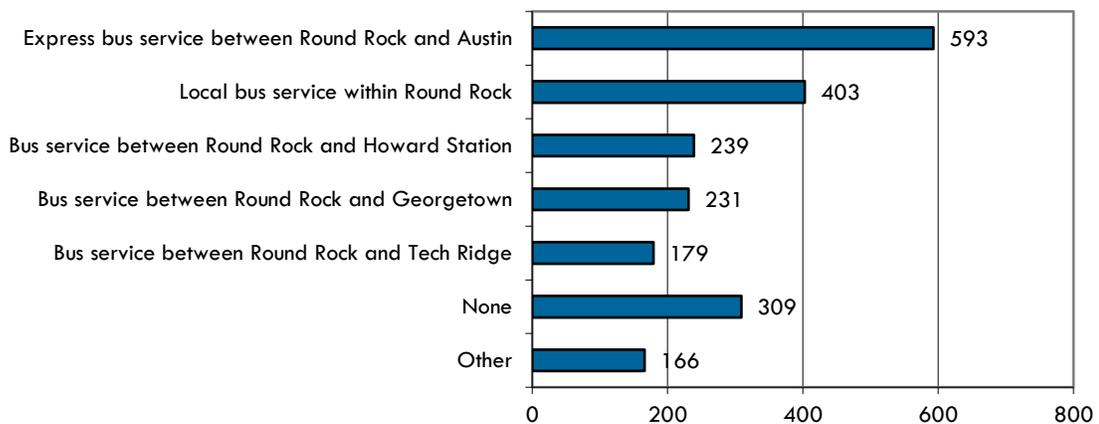
### Existing Transit Riders:

Would you be interested in taking any of the following new services?



### Non-Transit Riders:

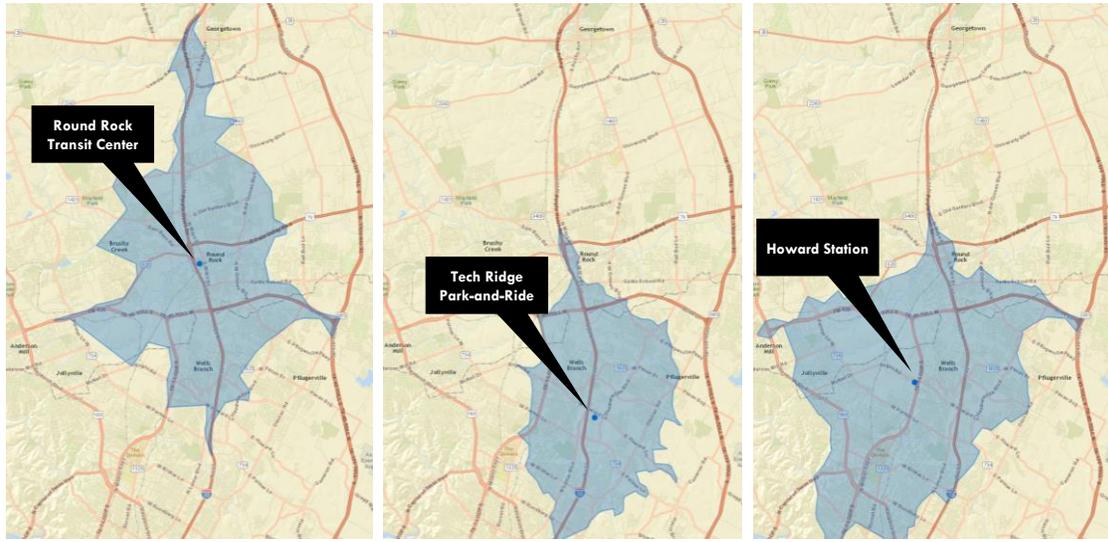
Would any of following new services motivate you to take transit?



**FTA BUS AND BUS FACILITIES PROGRAM | ROUND ROCK TRANSIT CENTER EXPANSION**  
City of Round Rock

The Round Rock Transit Center is centrally located and accessible by auto within ten minutes from most areas of the city, whereas Tech Ridge Park-and-Ride and Howard Station are within ten minutes from only the southernmost neighborhoods of Round Rock. Therefore, it is likely that the transit center will be the primary choice for potential commuter bus riders. By expanding the Round Rock Transit Center, the city will have the ability to increase the number of commuter express bus trips to meet anticipated future demand.

**Ten-Minute Driveshed of Area Park-and-Rides**

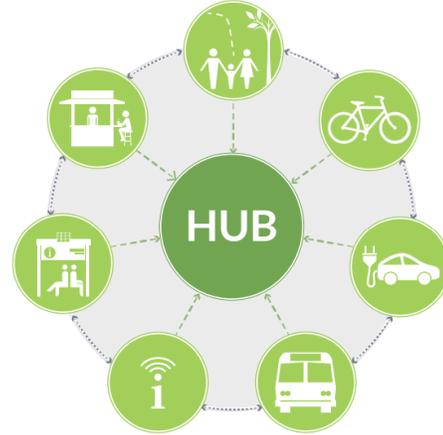


Source: Iso4App

## Enhanced Local Mobility

Transit center expansion would enhance the opportunity of establishing the facility as a local and regional mobility hub. Mobility hubs can include a range of amenities and services such as:

- Vehicle and bike connections
  - Ride share pick up/drop off zones
  - Car share parking
  - Electric vehicle charging stations
  - Bike share stations
- Bus layover zones (existing)
- Information/Signage
  - Wayfinding
  - Real-time transit information
  - Wi-Fi
- Retail



A full five-story buildout of the transit center would provide up to 297 new parking spaces on floors 3-5, which could allow the facility to function as more than a park-and-ride and transfer point. Designated space for ride share, car share, electric vehicles and bike share would benefit a significantly larger segment of the community and downtown Round Rock itself.

In addition to boosting the downtown economy, the potential conversion of the ground floor to retail space would allow riders to incorporate non-travel-related activities into their daily commutes, such as purchasing food or running errands. These conveniences have the potential to convert more personal auto users to bus service directly reduces harmful emissions by taking cars off the road, and increases system performance by boosting daily ridership. Wayfinding and real-time information are amenities that make transit connections easier for riders.

## Improved Regional Connectivity

Capital Area Rural Transportation System (CARTS), the region's rural transit provider also provides interurban service across nine counties.

The City of Georgetown (GoGeo Transit) has expressed an interest in extending their respective bus services to the Round Rock Transit Center within the year.

The nearby City of Hutto recently adopted a Transit Development Plan that includes a planned Highway 79 Flex route, which would connect to the Round Rock Transit Center.

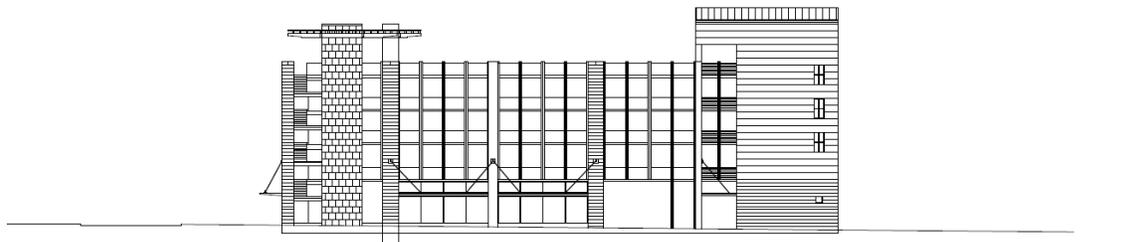
# IMPLEMENTATION TIMELINE

Round Rock Transit Center expansion would require a construction period of approximately twelve months. This condensed timeline is because parking expansion and ground floor retail conversion plans were created as part of the original facility design. The projected complete implementation timeline, from FTA award through construction, is detailed below.

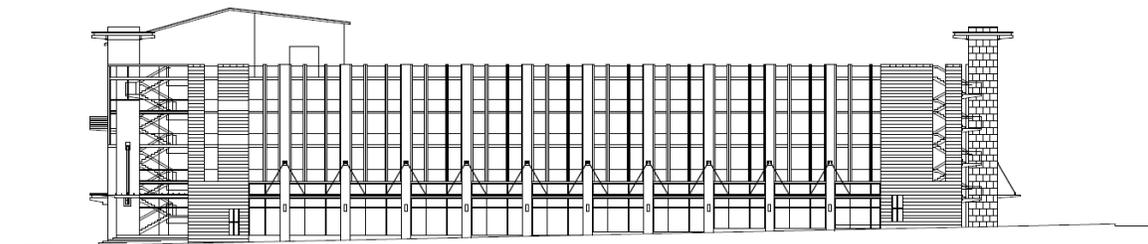
## Projected Implementation Timeline

Action	Anticipated Timeline
FTA Project Selection	Fall 2018
CAMPO TIP Amendment Process	Spring 2019
TxDOT Statewide TIP	Summer 2019
Grant Application Process	Fall 2019
Prepare Bid Documents and Bid Project	Winter 2020
Select Contractor	Spring 2020
Contract Signatures/Notice to Proceed	Summer 2020
Construction	Summer 2020 to Summer 2021

## Transit Center Expansion Site Plan



1 MAIN STREET ELEV.  
 SCALE: 1/16" = 1'-0"



2 BROWN STREET ELEV.  
 SCALE: 1/16" = 1'-0"

## PROJECT SCABILITY

Round Rock Transit Center expansion is scalable in terms of additional parking floors and the potential conversion of the ground floor to retail use. Each of the four options detailed below would enable the facility to meet projected 2030 park-and-ride demand of 200 spaces plus additional space for ride share, car share and bike share.

### Transit Center Expansion Options and Associated Costs

Spaces	Existing	Option 1: 2-Floor Expansion, No Retail	Option 2: 2-Floor Expansion, Ground Retail	Option 3: 3-Floor Expansion, No Retail	Option 4: 3-Floor Expansion, Ground Retail
Floor 1	49	49	0	49	0
Floor 2	61	61	61	61	61
Floor 3	-	99	99	99	99
Floor 4	-	99	99	99	99
Floor 5	-	-	-	99	99
<b>Total Spaces</b>	<b>110</b>	<b>308</b>	<b>259</b>	<b>407</b>	<b>358</b>
New Spaces	-	198	198	297	297
Net Spaces	-	198	149	297	248
Cost per Space	-	\$20,600	\$20,600	\$20,600	\$20,600
Ground Floor Retail Cost	-		\$2,060,000		\$2,060,000
<b>Total Cost</b>	-	<b>\$4,078,800</b>	<b>\$6,138,800</b>	<b>\$6,118,200</b>	<b>\$8,178,200</b>
Federal Amount Requested	-	\$3,263,040	\$4,911,040	\$4,894,560	\$6,542,560
Local Match	-	\$815,760	\$1,227,760	\$1,223,640	\$1,635,640