

AECOM

City of Georgetown Transportation Development Plan

June 2016

ANNUAL BUDGET TO YOU BY
COURTESY MAIN STREET PROGRAM 2005

DISCOVER GEORGETOWN
ALL OVER AGAIN

Southwestern University
Lawsoning

CORNER OF 7TH & MAIN STREET

April 2012



Table of Contents

1.0 Introduction	1
1.1 City of Georgetown Overview	1
2.0 Goals, Objectives, and Service Standards	5
2.1 Goals and Objectives	5
2.2 Service Design and Performance Indicators and Standards	6
3.0 Public Involvement and Outreach	10
3.1 Public Meetings	10
3.1.1 Public Meeting #1	10
3.1.2 Public Meeting #2	11
3.2 Public Intercept Surveys	12
3.2.1 Georgetown Christmas Stroll Intercept Survey	12
3.2.2 Georgetown Public Library Intercept Survey	14
3.3 Online Survey	15
3.4 Stakeholder Interviews	15
4.0 Existing Conditions	18
4.1 City Overview	18
4.2 Demographics	18
4.2.1 Population Density	18
4.2.2 Employment Density	18
4.2.3 Population and Employment Density	18
4.2.4 Population Over 65 Years of Age	23
4.2.5 Population Under 18 Years of Age	23
4.2.6 Zero-Car Households	23
4.2.7 Median Income	23
4.3 Land Use	28
4.3.1 Existing Land Use	28
4.3.2 Future Land Use	30
4.4 Existing Transit Services in Georgetown	32
4.4.1 CARTS SERVICE	32
4.4.2 Commuter Rail Service	35
4.4.3 Greyhound Bus Service	35
4.4.4 Amtrak Rail Service	36
4.4.5 Non-Profit Services	36
4.4.6 Taxi and Other Demand-Response Car Services	36
4.4.7 Agency/Facility-Specific Shuttle Services	36
4.5 Review of Relevant Plans	36
4.5.1 Regional Plans	37
4.5.2 Local Plans	43
5.0 Transit Service Performance	51
5.1 CARTS Demand-Response Service Statistics	51
5.1.1 Overview	51

5.1.2	Performance Indicators.....	53
6.0	Service and Operations Plan	55
6.1	Fixed Route Recommendations	55
6.1.1	Service and Operations Plan	55
6.1.2	Service Characteristics	55
6.1.3	Route by Route Overview	58
6.1.4	Future Service Expansion Priority Area #1.....	66
6.2	Service Plan Operations	68
6.2.1	Route Interlining and Timed Transfers	68
6.2.2	Capital Plan	71
6.2.3	Marketing Plan	72
6.2.4	Service Monitoring.....	72
6.3	Financial Plan	74
6.3.1	Operating Costs.....	74
6.3.2	FTA Section 5307 Funding.....	74
6.3.3	Local Funding Sources.....	75
6.4	Appendix A: Demographic Maps with Proposed Route Network	77
6.5	Appendix B: Key Performance Measures.....	85

List of Figures

Figure 1: Georgetown City Limits (2014)	2
Figure 2: Central Georgetown.....	3
Figure 3: Number of Christmas Stroll Respondents That Would Use Transit.....	13
Figure 4: Existing Transportation Habits of Public Library Respondents.....	14
Figure 5: Number of Public Library Respondents That Would Use Transit	15
Figure 6: Population Density (2013)	19
Figure 7: Employment Density (2013)	21
Figure 8: Population and Employment Density	22
Figure 9: Percent of Population Age 65 and Older (2013).....	24
Figure 10: Percent of Population Under Age 18 (2013).....	25
Figure 11: Percent of Driving -Age Population with Zero Car Availability (2013).....	26
Figure 12: Median Income (2013).....	27
Figure 13: Existing Land Uses in the City of Georgetown	29
Figure 14: Future Land Use Plan for the City of Georgetown.....	31
Figure 15: CARTS Top 10 Origins.....	33
Figure 16: CARTS Top 10 Destinations.....	33
Figure 17: Georgetown’s Relative Location to Capital Metro Leander MetroRail Station.....	35
Figure 18: Extent of Project Connect North Corridor	39
Figure 19: Project Connect: North Corridor Study LPA.....	40
Figure 20: Lone Star Rail Project.....	43
Figure 21: CARTS Passengers for Georgetown Demand-Response Service (2011-2014).....	52
Figure 22: Annual Revenue Miles for Georgetown Demand-Response Service (2011-2014).....	52
Figure 23: Annual Revenue Hours for Georgetown Demand-Response Service (2011-2014).....	53
Figure 24: Passengers per Revenue Mile for Georgetown Demand-Response Service (2011-2014).....	54
Figure 25: Passengers per Revenue Hour for Georgetown Demand-Response Service (2011-2014).....	54
Figure 26: Proposed Georgetown System Map	56
Figure 27: Proposed Route 1 – Eastside/Southwestern University	59
Figure 28: Proposed Route 2 – Wolf Ranch Parkway	61
Figure 29: Proposed Route 3 – Hospital/Leander Road.....	63
Figure 30: Proposed Route 4 – Austin Avenue/Williams Drive	65
Figure 31: Phase 2 - Proposed Sun City/Williams Drive.....	67

List of Tables

Table 1: Performance Measures	7
Table 2: 2014 Land Use within Georgetown City Limits	28
Table 3: Future Land Use within Georgetown City Limits and ETJ	30
Table 4: CARTS Georgetown Service Characteristics	51
Table 5: Productivity Report for CARTS Demand-Response Service	51
Table 6: CARTS Georgetown Performance Indicators	53
Table 7: Route Characteristics	68
Table 8: Route Interlining and Transfers at the Downtown Transfer Center – Weekdays.....	69
Table 9: Proposed Fixed Route Operations Plan – Weekday.....	69
Table 10: Proposed Fixed Route Operations Plan – Saturday	69
Table 11: Peer City Farebox Recovery Rates.....	70
Table 12: Capital Unit Costs	71
Table 13: Financial Plan.....	76

This page intentionally left blank.

1.0 Introduction

The purpose of this study is to develop a local transit plan for the City of Georgetown that serves transit needs within the city limits and connects to existing and future regional transit options to form a regional transit network; improving mobility, the region's environmental and economic sustainability and slows the increase of congestion on roadways. Capital Metro and the city have undertaken this study to assist Georgetown in realizing its public transit goals and to help advance regional goals for transit expansion.

Capital Metro's Project Connect North Corridor Plan is a driving force behind the transit development plan for the City of Georgetown. Project Connect is a plan to expand transit service outside the existing service area to improve regional mobility. The North Corridor Plan of Project Connect includes express bus service to Georgetown from downtown Austin. It is the intent of this local transit plan to recommend service that serves Georgetown's transit needs that also complement the regional connections in Project Connect.

This report provides an assessment of transit needs in the city and the proposed service, implementation and financial plans for transit service. **Appendix A** contains a fact sheet about this study.

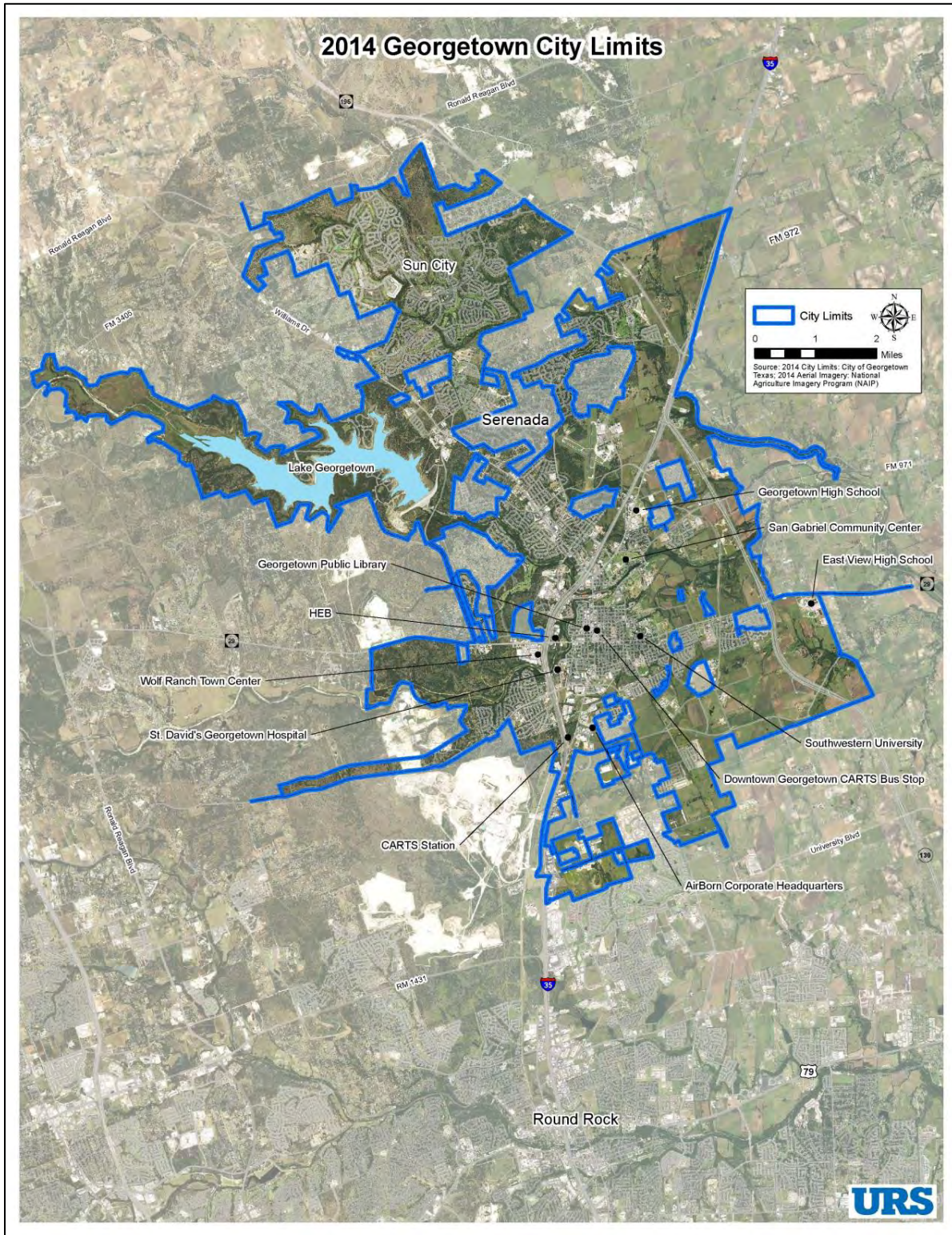
1.1 City of Georgetown Overview

Figure 1 shows the city limits of Georgetown and **Figure 2** shows central Georgetown. The city is a northern suburb of Austin with a 2010 population of 47,400 and a 2013 U.S. Census Bureau estimated population of 54,898. The San Gabriel River goes through the core of the city, forming the northern edge of the downtown area. Although the city is growing, it retains a small-town feel, especially in the central core of the city. The well-maintained and active downtown area and historic square, located just east of IH 35, are a source of pride for the city. Southwestern University, a small, private liberal arts institution established in 1840, forms the eastern boundary of the downtown area and plays a role in the history and culture of the city.

A more recent significant influence on the culture of the city is the growing senior population. With the development of Sun City Texas (originally named Sun City Georgetown) in 1995, as well as other active-adult communities, there is a large senior population in the city. This creates unique circumstances and challenges for the city, especially as the once active seniors age and become less independent, less mobile, and more in need of a variety of social services, including public transportation.

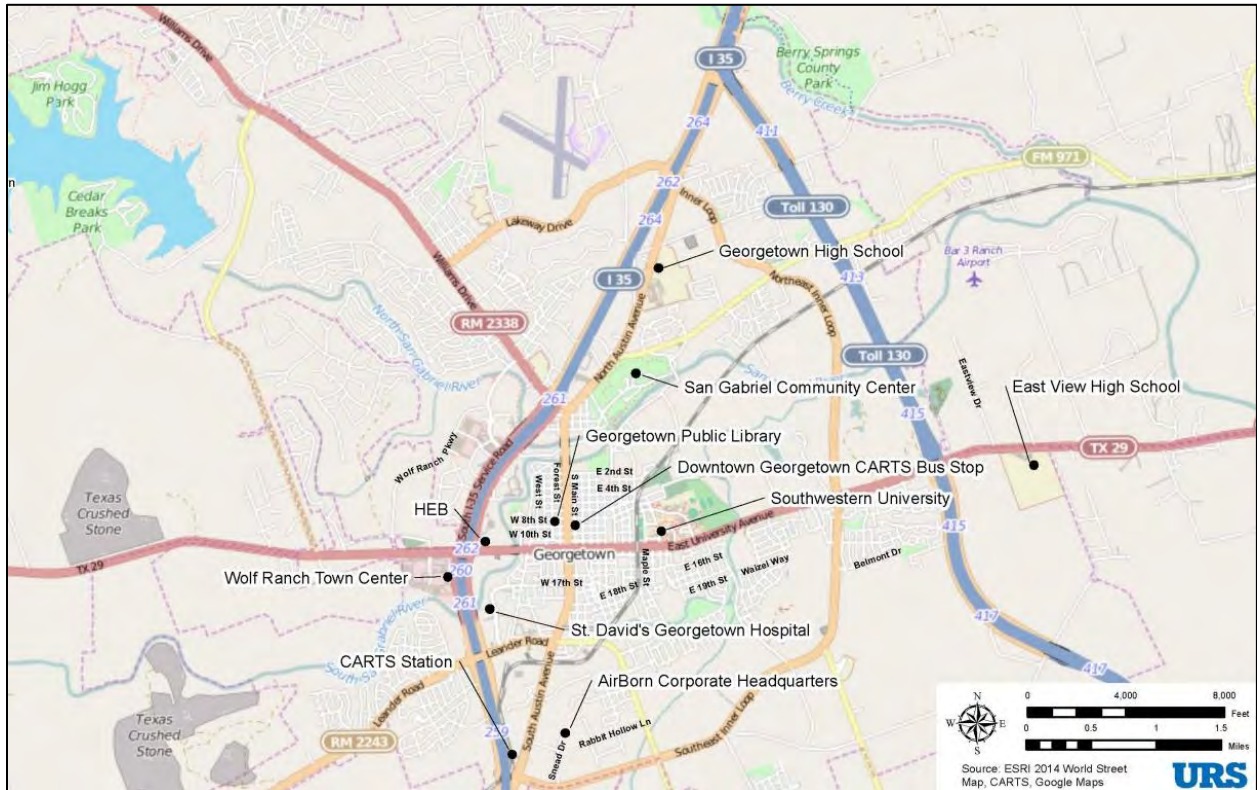
Georgetown has a small number of large employers. The major employers in the city (and number of employees from the spring of 2014) are Southwestern University (514), AirBorn, Inc. (462), and St. David's Georgetown Hospital (453). While there is a large employment base north of Austin, much of it is located in communities south of Georgetown. It should also be noted that Williamson County Government (1582), Georgetown Independent School District (1550), and the City of Georgetown (532) top the list; however, these employers have employees in multiple locations across the city.

Figure 1: Georgetown City Limits (2014)



Source: URS, 2015.

Figure 2: Central Georgetown



Source: URS, 2015.

This page intentionally left blank.

2.0 Goals, Objectives, and Service Standards

Transit system performance must be measured based on goals and standards that reflect the operating environment and values of the community it serves. The goals and objectives recommended for the City of Georgetown were created to establish a baseline. These measures are meant to be a starting point for Georgetown and Capital Metro to build on and further develop in the future. In order to make these goals and objectives successful Georgetown will need to establish performance measures and begin tracking and monitoring service performance.

2.1 Goals and Objectives

The 2008 plan listed five goals (and supporting objectives) for the initial TDP. Those goals were to 1) Identify and Prioritize the Transit Needs of the City, 2) Conduct Extensive Outreach to the Community, 3) Design Services to Meet the Needs of the City, 4) Develop a Transit Action Plan for Georgetown, and 5) Gain Support for the Transit System from the Community.

For this current study, the project team has developed goals, objectives, and strategies that both expand and refine the goals and objectives of the 2008 study, as shown below. These goals and objectives are guidelines for future evaluation of services.

Goal 1: Provide a safe, reliable, efficient, and accessible transportation option for residents and visitors of Georgetown.

Objective: Improve service efficiency and reliability for existing service by meeting or exceeding established standards of performance.

- **Strategy:** Identify key performance indicators specific to Georgetown; establish standards for these indicators that correlate with effective service delivery.
- **Strategy:** Establish a schedule for service evaluation and follow-up remedial actions.
- **Strategy:** Improve productivity in the service area.

Goal 2: Adequately address the mobility needs of Georgetown residents.

Objective: Improve access to employment, healthcare, shopping, and recreation.

- **Strategy:** Identify locations of employment, healthcare, shopping and recreation locations.
- **Strategy:** Develop a Georgetown Transportation Provider Working Group to meet on a regular basis to coordinate transportation efforts in the community.
- **Strategy:** Define delivery times for employment, healthcare, shopping and recreation locations.
- **Strategy:** Refine routing to provide more direct access to some of the major destinations in the city, within existing resources based on location and delivery time review.

Goal 3: Maximize resource utilization and operational efficiency with respect to system administration and operations.

Objective: Maintain capital assets (vehicles and maintenance materials) in state of good repair.

- **Strategy:** Develop objective standards for measuring conditions of capital assets.
- **Strategy:** Establish performance measures for capital assets.
- **Strategy:** Develop policies and standards for replacement and rehabilitation of capital assets.

Goal 4: Develop a local system that operates effectively in the short-term, continues to develop an audience for regional transit options in the mid-term, and will connect the local community to the region in the long-term.

Objective: Provide access to activity centers today with an understanding of where future regional transit infrastructure is proposed to be located.

- **Strategy:** Submit regional transit projects to the CAMPO Transportation Improvement Plan (TIP).
- **Strategy:** Develop dedicated funding sources for local transit system.
- **Strategy:** Promote transit and the Project Connect North Plan through city website and biennial Citizen Survey.

2.2 Service Design and Performance Indicators and Standards

Performance measures must be developed to address standards within the following categories: of efficiency, service quality, and service design.

- Efficiency, effectiveness and productivity
- Service quality
- Service design

These standards will be used to guide future service evaluation; set standards for future service changes, and to ensure compliance with the Americans with Disabilities Act (ADA), Title VI, and other local, state, and federal requirements.

The City of Georgetown service performance indicators that will be used to monitor efficiency, effectiveness, and productivity include:

- **Passengers per Revenue Hour:** The total number of passengers divided by the total number of revenue service hours provides a data point for monitoring ridership as it relates to total bus hours operated. This key productivity measurement works as an effective tool for future service planning. Improving ridership is often the goal of planning bus service, however it is just as important to plan for additional ridership with a “right sized” route or system.
- **Operating Cost per Revenue Hour:** This is calculated by dividing operating costs by the total number of revenue (in service) hours. Operating cost per revenue hour is one of the key cost effective performance measures to gauge the amount of service provided to the cost to operate that service. The standard should be tracked every six months for the system and by route to identify service areas that are less cost effective compared to other routes within the bus system.
- **Operating Cost per Passenger:** The total operating costs are divided by total passengers (unlinked trips) to calculate the cost for each passenger on the service. This is designed to track the cost effectiveness for the system as it relates to ridership over time.
- **Cost Recovery prior to Subsidy (Farebox Recovery):** This is calculated by dividing the revenue from the farebox by the total operating costs. Farebox recovery shows the amount of the total revenue that is generated by passenger fares. The goal for most small to medium sized systems should ultimately be 15 to 20 percent farebox recovery after the system has time to mature after one to two years in service.

Specific standards for the above-listed indicators will be agreed upon by the City of Georgetown and Capital Metro during contract negotiations before revenue service is implemented.

Service quality standards help staff evaluate system performance pertaining to reliable and high quality service which encourages ridership. The recommended service quality performance standards include the following:

- **On-time performance:** Buses must arrive at the stop no later than five minutes from the scheduled timepoint 95 percent of the time. To be considered on-time, buses should also not depart a timepoint prior to the time in the schedule.

Service design standards help guide decisions for adding new service and making changes to the system. It identifies standards to design the service with a more consistent and uniform approach. The service design standards include the following:

- **Bus stop design:** All bus stops should be clearly marked with bus stop signs. It is preferable that the bus stop signs show the route(s) serving each stop. Route number decals can be added to signs or removed from signs during service changes. Bus stop amenities should be added to stops only when a minimum boarding threshold has been met. These thresholds can be defined after one year of fixed-route service.
- **New service:** Ridership and productivity measures should be defined prior to introducing new service. Service should operate for at least one-year as a pilot program to allow for ridership to develop.

It is recommended that the service starts with several key efficiency and quality performance measures for fixed routes in the first three years of service. Additional measures should be added over time as the service matures and the City and Capital Metro continue to monitor the service metrics. The performance measures that will be monitored during the implementation of the service include the following:

- Passenger per revenue hour
- Fare recovery ratio
- Cost per passenger
- Cost per revenue hour
- On-time performance

Table 1 shows the recommended performance measures and the service standards over the first three years of service. The metrics are designed to show growth and overall improvement from Year 1 to Year 3. The measures will be reported by route and by the system as a whole. Additionally, the measures should be reported to Georgetown City Council at least yearly in order to assist City Council in making decisions about adjustments to the routes and the system.

Table 1: Performance Measures

Performance Measure	Year 1	Year 2	Year 3
Passengers per Revenue Hour	6	8	10

Farebox Recovery Ratio	6%	8%	10%
Cost per Passenger	\$12	\$9	\$7
Cost per Revenue Hour	\$75	\$77	\$79
On-Time Performance	95%	95%	95%

This page intentionally left blank.

3.0 Public Involvement and Outreach

Public input played a prominent role in the development of the Georgetown Transit Development Plan. Capital Metro and the City of Georgetown used a combination of public meetings, public intercept surveys (conducted at a local event and at the public library), an online survey, and stakeholder interviews. In addition, Capital Metro and the City of Georgetown disseminated information through their websites and social media accounts.

3.1 Public Meetings

Two public meetings were held for the Georgetown Transit Development Plan. The first meeting occurred on January 22, 2015, at McCoy Elementary School, and the second was held on April 1, 2015, at the Georgetown Public Library. Combined the two public meetings had a total of 62 attendees. Both meetings were advertised in the *Williamson County Sun* and through the City of Georgetown's and Capital Metro's social media outlets.

3.1.1 Public Meeting #1

The first meeting, held January 22, 2015 was a combined open house with the Georgetown Sidewalk Master Plan project held at McCoy Elementary School in Georgetown. Twenty-five (25) people attended the open-house, which included several maps and visual aids to introduce the project to the public. The consultant team informally engaged attendees and provided a project overview, answered questions and solicited feedback. A representative from Capital Metro was also in attendance to discuss the project and its relationship to the regional expansion efforts of Capital Metro. The sign-in sheet for this meeting is included in Appendix B of this report.

Feedback during the first meeting included identification of locations that meeting attendees felt should be served by transit. Attendees drew on a map, included in **Appendix B**, to indicate important locations. These locations included:

- Sun City
- HEB on Williams Drive
- Single-family residential on Shell Road (Village neighborhood)
- The Oaks (retirement community) on Williams Drive
- Benold Middle School
- Multi-family residential between Lakeway Drive and Golden Oaks Drive (Golden Oaks and Reata East neighborhoods)
- Boys & Girls Club
- Georgetown High School
- Multi-family residential near the hospital
- HEB on IH 35
- St. David's Georgetown Hospital
- Multi-family residential off of Leader west of IH 35
- Tippitt Middle School
- Round Rock Premium Outlets
- Seton Medical Center Williamson (in Round Rock)
- Southwestern University
- Downtown Square

- Forbes Middle School

Attendees also identified the top priorities for transit in Georgetown by placing dots on a board under one of their top three transit priorities. A photo of the transit priorities board is included in Appendix B. The priority options included access to employment centers, access to retail centers, connections to regional transit services, access to social services (including medical), access to entertainment and recreation, weekday service, weekend service and other. The top three priorities identified at the public meeting were:

- Access to retail centers
- Connections to regional transit services
- Access to social services (including medical)

Five people at the first public meeting took the intercept survey that was developed for the project. All five respondents stated that they would use public transit in Georgetown at least once per month if it were available. Current forms of transportation for the respondents included a personal vehicle, carpool, bicycle and walking. None of the respondents stated that they use CARTS as one of their current forms of transportation. Four respondents identified the convenience to or availability of transit where they live and where they need to go as a reason that would make them more likely to use transit.

3.1.2 Public Meeting #2

The second public meeting was held from 5:30 to 8:00 p.m. at the Georgetown Public Library on April 1, 2015. Thirty-seven (37) people attended the meeting. The meeting consisted of an open house and presentation. During the open house portion of the meeting, attendees had a chance to review project information exhibits, ask questions of project team members and interact with elected officials from the city. The presentation given at the meeting, as well as the sign-in sheet from the meeting, are included in **Appendix C** of this report.

A printed map was provided to allow attendees to mark important locations for the project team to note during the development of the transit plan. A photo of the map is included in Appendix C. The locations identified on the map included:

- Heritage Community Gardens at Mickler Park (entrance on Hutto Road north of Quail Valley Drive)
- Heritage Oaks on Shell Road northeast of Williams Drive (Custom Active Adult Community)
- Georgetown Recreation Center (Three respondents)
- Lake Aire Center (shopping center with various medical facilities, including the Lonestar Circle of Care facility, at River Bend Drive at Williams Drive)
- Single-family residential at Northwest Boulevard and Golden Oaks Drive

Several questions and concerns were shared with the Project Team during the meeting. Some of the topics included:

- The need for commuters to connect to CARTS service and future Project Connect service to Austin
- The need for young people to get from Quail Valley to the recreation center and pool
- The need to serve the local workforce commuting to places of employment within Georgetown
- The cost of implementing the proposed transit plan
- The need for effective marketing to advertise the transit service
- Outreach regarding transit to high schools
- Park-and-ride opportunities for special events

- Weather protection at bus stops
- Weekend service

No formal surveys were provided to attendees at the second public meeting, however all attendees were encouraged to fill out the provided comment form. Three comment forms were received from the public. Additionally, one comment in support of the transit development plan was received via telephone. Written comments from the public included:

- The need to consider practical routes for connecting the southeast and southwest quadrants of the city with the recreation center to allow children of working parents to access the center
- The need for public transit from Georgetown to Austin to Austin Bergstrom Airport
- The need for a bus stop at Austin Avenue at the recreation center (or sidewalk connections)
- The need for a bus stop at Heritage Oaks/Georgetown Village (or sidewalk connections to HEB)
- The need to consider work force cycle times along with active adult cycles

3.2 Public Intercept Surveys

The Project Team developed a written survey to solicit public input regarding transit in Georgetown. The survey instrument is provided in **Appendix D**. Survey questions included demographics, home and work zip codes, current transportation habits, and hypothetical future transit use.

The intercept surveys were administered on two occasions. Additionally a few surveys were completed by attendees at the first public meeting in January. The first intercept survey event occurred at the Georgetown Christmas Stroll on December 5 and 6, 2014. The second intercept survey was conducted on February 11, 2015, at the Georgetown Public Library. Project Team members administered the survey by intercepting people at the two locations and asking them to answer a few questions regarding public transit in Georgetown. Those who agreed to participate answered the questions verbally or filled out the survey on their own and handed it back to one of the team members.

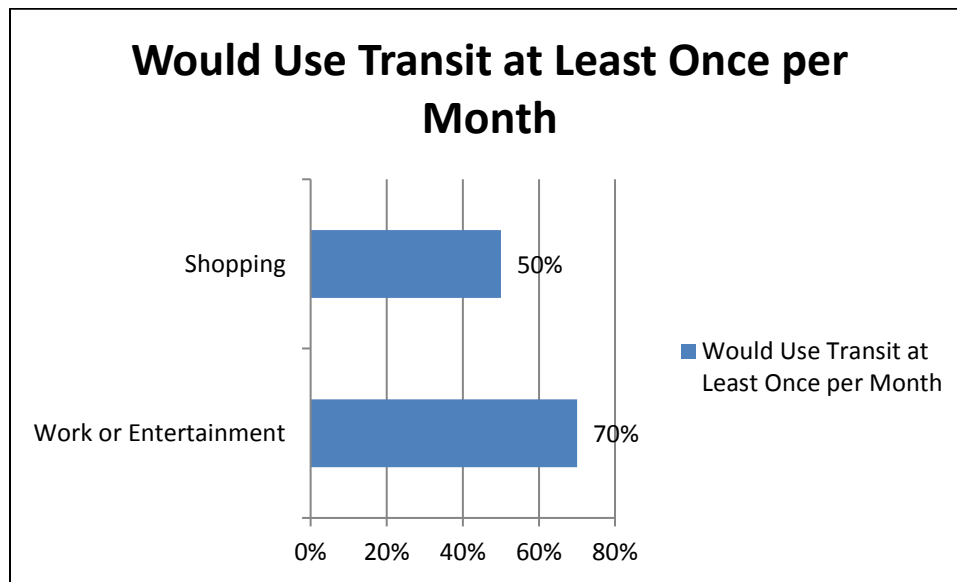
3.2.1 Georgetown Christmas Stroll Intercept Survey

Capital Metro and the City of Georgetown sponsored a booth at Downtown Georgetown’s annual Christmas Stroll on the evening of December 5 and all day on December 6. The booth included materials from Capital Metro about Project Connect and featured large maps of the local area. Project team members staffing the booth interacted with individuals walking by the booth, which was in a central location. Although most of the “strollers” were from Georgetown, the event also draws people from Austin and other nearby towns and cities (e.g., Round Rock, Pflugerville). This event offered a good opportunity to interact with large crowds of people in a casual setting. Twenty-five people signed in at the booth, 28 people filled out surveys, and a number of other people stopped by to chat over the course of the two-day event.

The individuals who completed surveys represented a mix of students, young families, and working and retired individuals ranging in age from their twenties to early sixties. Fifty-eight percent of the respondents were men and 42 percent were women. The largest age groups represented were 41 to 52 and 53 to 64 with only a few individuals (three) in the 17 to 28 age group and three in the 29 to 40 age group. Most of these respondents rely on their personal cars (or a car pool) for transportation with only a handful noting that they use public transit (CARTS or the Capital Metro Express Bus), ride a bicycle, or walk to their destinations.

Nearly 70 percent of those who completed surveys indicated that they would use public transit at least once a month to go to work or to reach an entertainment/recreation destination and a little over 50 percent said that they would use transit at least once a month to do their shopping. **Figure 3** illustrates the potential transit use of Christmas Stroll respondents. When asked, “What would make you more likely to begin using public transportation?” the most common response (about 55 percent of the respondents) was that they would use transit if it were convenient to where they live and to their destination. About 28 percent explained that they would use transit if it took less time to get to their destination, and only a few people indicated that they would use public transit to avoid paying higher gas prices or if it made them feel more safe/secure.

Figure 3: Number of Christmas Stroll Respondents That Would Use Transit



Survey respondents were also asked about desired connections for public transportation and their responses varied. The most common request was for transportation from Georgetown to Austin (either the MetroRail Red Line station in Leander, Lakeline Mall, or central Austin) or Austin Bergstrom Airport. Several individuals noted the need for public transit for those without vehicles such as low-income individuals, youth, or the elderly. Other requested connections are as follows:

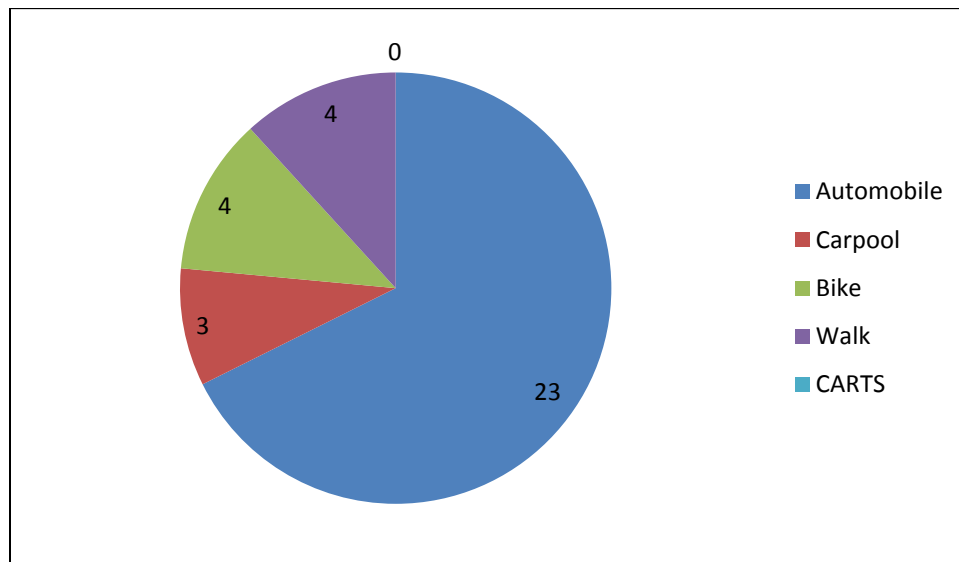
- Central Georgetown to the education area in Round Rock(TX State, ACC)
- Central Georgetown to the medical area
- Central Georgetown to Wolf Ranch
- Central Georgetown to Lake Georgetown
- Convention Center to downtown Georgetown
- Indian Springs neighborhood to Lake Georgetown, downtown, and medical area
- Sun City to downtown Georgetown and Austin
- Williams Drive to downtown Georgetown and Wolf Ranch
- 2nd Street to the Department of Motor Vehicles
- East Georgetown to ball fields and animal shelter on W.L. Walden Drive at N. College Street
- Access needed to the Federal Qualified Healthcare Center (Lonestar Circle of Care on Williams Drive)

3.2.2 Georgetown Public Library Intercept Survey

An intercept survey was conducted inside the foyer of the Georgetown Public Library on February 11, 2015, from 3:00 p.m. to 5:30 p.m. The late afternoon timing was chosen in order to have the potential to encounter a variety of people, including students, families, working individuals and retired individuals. Three members of the Project Team engaged with passers-by to request feedback regarding transit in Georgetown.

Twenty-five surveys were completed during this intercept survey event, with a nearly even split between male and female respondents. The largest age group of respondents was the “65+” category, at ten individuals. The next largest group was the 41 to 52 category, at eight individuals. As expected, nearly all respondents use a car for the vast majority of their trips. Very few individuals surveyed incorporate walking and biking into their transportation routine on a regular basis. No respondents indicated that they use the CARTS bus service, and only a few indicated that they utilize Austin’s bus and rail services on occasion. **Figure 4** illustrates the breakdown of existing transportation habits of respondents at the Georgetown Public Library.

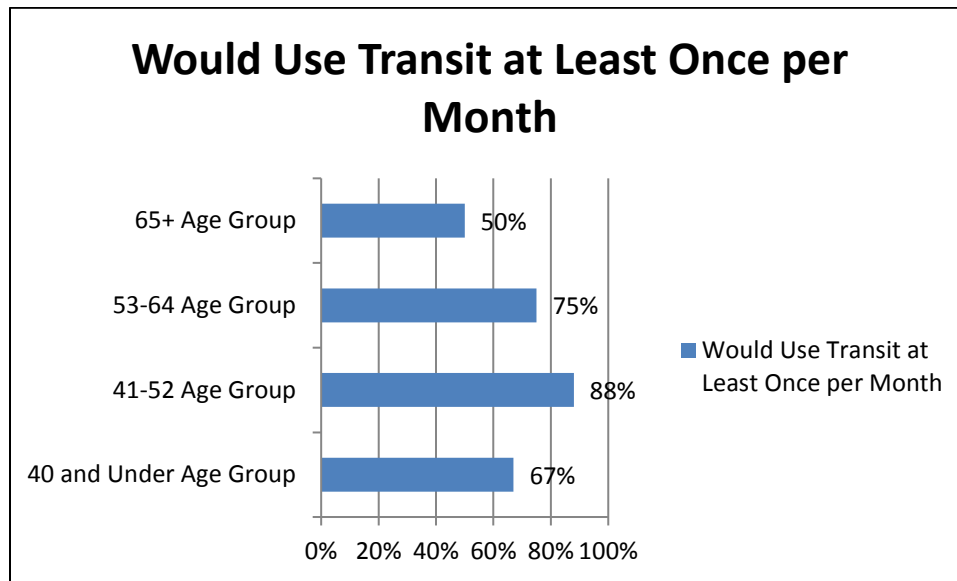
Figure 4: Existing Transportation Habits of Public Library Respondents



The majority of the senior age group indicated that they would not use transit on a regular basis, but 50 percent of the seniors surveyed said they would use transit once a month for one or more of the following types of activities: entertainment, shopping, social services, medical appointments, library visits, and special events downtown.

Those in the 41 to 52 age category were more varied in their current transportation choices, with carpooling, bicycling, and walking all being well-represented. The individuals surveyed in this age category all indicated that they would use transit for at least one type of trip, except for one respondent who did not answer this question. **Figure 5** illustrates the potential transit use of Library Intercept Survey respondents by age group.

Figure 5: Number of Public Library Respondents That Would Use Transit



3.3 Online Survey

The Project Team developed an online survey and uploaded the survey to the City of Georgetown website on April 13, 2015. The survey included questions pertaining to the proposed route network, transit priorities, and transit preferences. The complete survey instrument is provided in **Appendix E**. Results from the survey will be used by the city to help guide transit development decisions during this project and any future planning projects related to the development or expansion of public transportation in the City of Georgetown.

3.4 Stakeholder Interviews

This section provides a summary of discussions with local organizations, business groups, and regional transportation agencies. Stakeholders were identified by City of Georgetown Planning staff, Capital Metro staff, and consultant staff. The primary purpose of the stakeholder interviews was to identify community transit needs, preferences, and potential markets. Notes from the stakeholder interviews are provided in **Appendix F** of this report.

Ten organizations were interviewed during the first quarter of 2015, as identified below.

- Daniel Anstee, Branch Director – Boys & Girls Club of Georgetown
- LeAnn Powers, Chief Professional Officer – United Way of Williamson County
- Craig Erwin, Associate Vice President for Finance – Southwestern University
- Jim Romine, Executive Director – Sun City Texas Community Association
- Shelly Hargrove, Main Street Manager – Georgetown Main Street
- Caren Lee, Transit Coordinator – City of Round Rock
- Matt Synatschk, Senior Planner – City of Georgetown
- Jennifer Bills, Senior Planner – City of Georgetown
- Cari Miller, Tourism/CVB Manager – City of Georgetown
- Rhonda Pritchard, General Manager – Wolf Ranch Town Center

- Jackson Daly, Executive Assistant to the Assistant City Manager – City of Georgetown
- Dave Marsh, General Manager and Lyle Nelson, Chief of Staff – Capital Area Rural Transportation System (CARTS)
- David Biesheuvel, Director, Construction & Facilities and Suzanne Marchman, Director, Community Engagement & Communications – Georgetown Independent School District

Interviews were conducted both in person and over the telephone using an informal, conversational format that was guided by a few key questions, including:

- What role should public transit play in Georgetown and the region?
- Who are the people that most need to be served by transit and what destinations should be targeted?

Their responses to the interview questions are summarized below.

What role should public transit play in Georgetown and the region?

Stakeholders stated that public transit in Georgetown could benefit the members of the community without means of transportation; help reduce some traffic and parking problems; and provide an alternative mode of transportation to travel to shopping centers, the Downtown Square, the Southwestern University campus, medical facilities and jobs. Some stakeholders also pointed out that there is a need to connect to regional transit service to downtown Austin (Project Connect or Lone Star Rail), shopping in Round Rock, Lakeline Mall and the Capital Metro station in Leander. The Williams Road, Austin Avenue and University Avenue corridors were identified as the primary transportation corridors. Overall stakeholders believed that the two primary markets for transit were tourism and life line service for lower income residents to jobs and services.

Who are the people that most need to be served by transit and what destinations should be targeted?

According to the stakeholders, the people that most need to be served by transit include:

- seniors/elderly,
- zero to one vehicle households,
- low to moderate income,
- bicyclists,
- students,
- regional job commuters, and
- tourists.

Destinations that should be targeted by transit include:

- Southwestern University,
- St. David's Hospital,
- social service organizations including the Caring Place,
- the Downtown Square,
- library,
- parks,
- Sun City,
- the new Rivery Conference Center, and
- shopping (including Wolf Ranch, Walmart and HEB).

Regional service to Round Rock and Austin was also a priority. Lower income residential areas such as the San Jose neighborhood, south Georgetown off Quail Valley and the housing developments north of Williams were identified as specific areas that could benefit from transit service.

Additional comments include:

- Downtown should be the hub of the service
- Transfer location should be on the westside of downtown near the new City Hall and the library
- Limited service from the Social Center on Sun City to Wolf Ranch and downtown should be considered
- Fixed route service should use the smaller buses
- Service should continue to the CARTS Georgetown Station from downtown Georgetown
- Transit can help to alleviate some of the perceived parking constraints in downtown during special events
- Service to HEB on University is very important as some people are currently walking along University with bags of groceries
- Need to connect Wolf Ranch to outlet mall in Round Rock

4.0 Existing Conditions

4.1 City Overview

Georgetown is the county seat of suburban Williamson County, with a population of approximately 47,400 based on the 2010 census. Southwestern University, the oldest university in Texas, which was founded in 1840, is located about one-half mile east from the historic square. Sun City Texas is a large retirement-oriented and age-restricted development that accounts for more than one-third of Georgetown's population.

Georgetown has a sizable number of Victorian examples of commercial and residential architecture. In 1976, a local historic ordinance was passed to protect the significance of the historic central business district, and in 1977, the Williamson County Courthouse Historical District, containing 46 contributing structures, was listed on the National Register of Historic Places. Georgetown is also known as the "Red Poppy" Capital of Texas for the red poppy wildflowers planted throughout the city. Georgetown's Red Poppy Festival is held each year in April on the historic square and attracts up to 30,000 visitors.

Georgetown is located approximately 25 miles north of Austin's Central Business District and according to the US Census Bureau; the city has a total area of nearly 24.9 square miles. The city is located on the northeastern edge of Texas Hill Country. The North and Middle Forks of the San Gabriel River both run through the city, providing over 30 miles of hike and bike trails and several parks.

4.2 Demographics

4.2.1 Population Density

As shown in **Figure 6**, Georgetown is not a densely populated city. Moderate densities of three to six people per acre are present in the central portion of the city, a small area to the north, and a lower-income area to the south. With a city population of just over 47,000 in 2010, there are a few small pockets of more densely populated areas located just to the south of downtown on the south side of University Drive and to the north and west of downtown on the north side of Williams Drive. No areas of population density greater than nine people per acre are present in the City of Georgetown. The population density in Georgetown is slightly less than Round Rock which has several areas over 15 persons per acre but has greater overall densities than the nearby city of Pflugerville.

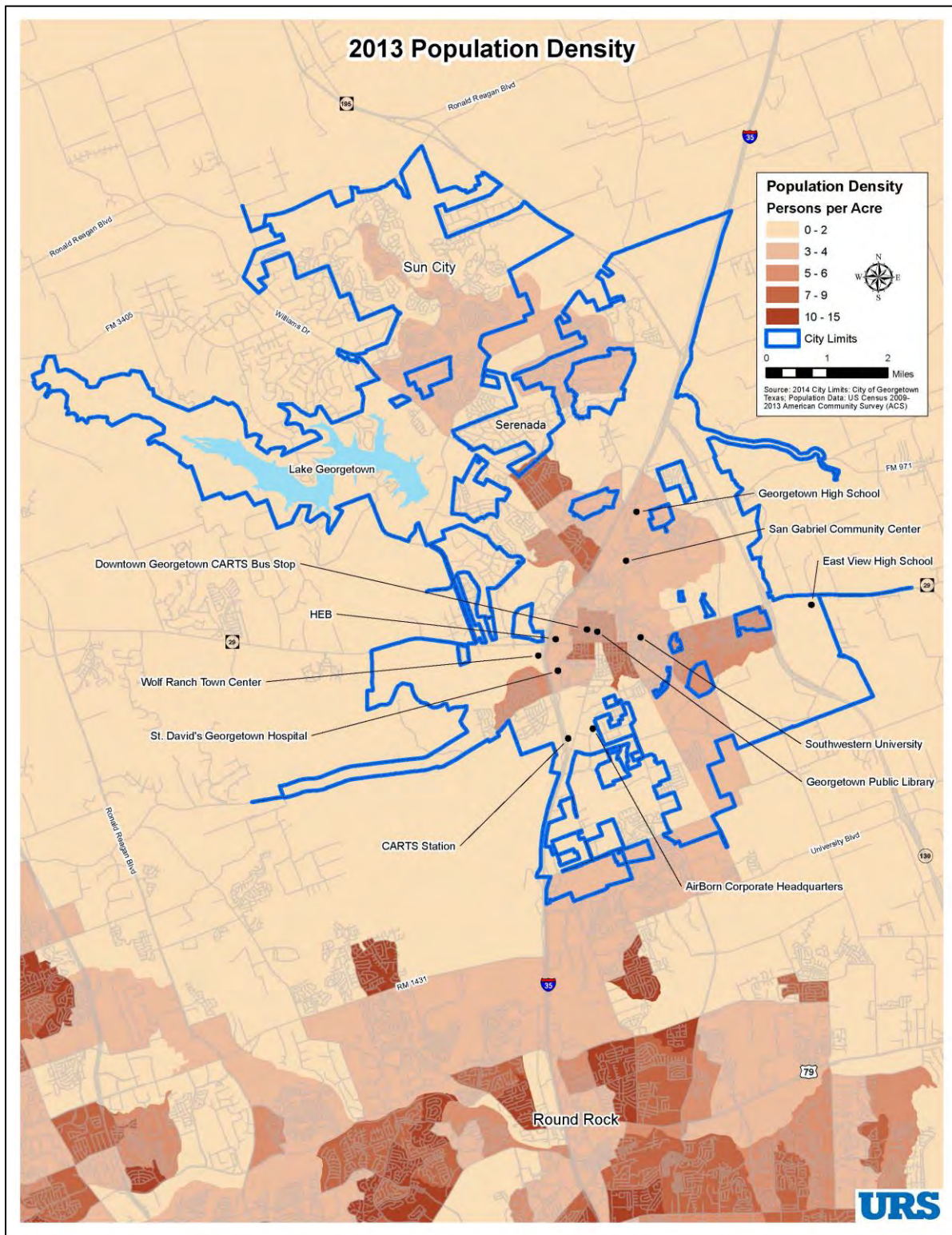
4.2.2 Employment Density

Figure 7 illustrates the employment centers in the City of Georgetown. The majority of the city has an employment density of zero to two people per acre. The low employment density in Georgetown is caused by a combination of conditions, including the small number of large employers and the low density of the city, which leads to small businesses being scattered and mixed in with a variety of land uses. The result is a lower concentration of large business parks or employment centers where potential transit ridership would be concentrated. The city of Round Rock averages an employment density of four persons per acre and Pflugerville averages five employed persons per acre.

4.2.3 Population and Employment Density

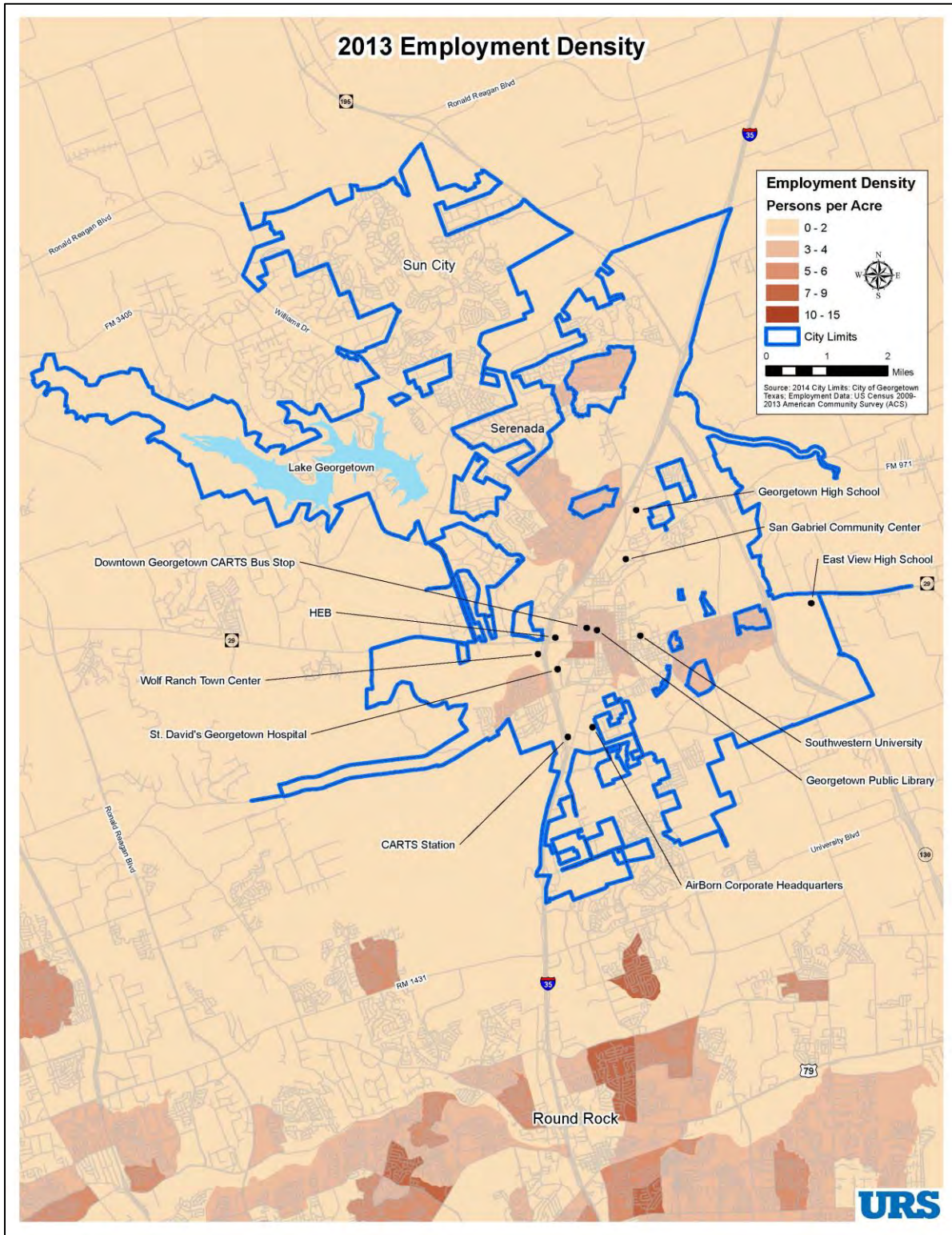
Figure 8 illustrates the combined population and employment densities in the City of Georgetown. The highest concentration of combined densities is most evident along the Williams Drive corridor, south of downtown along the University Avenue corridor, and the Southwestern University area.

Figure 6: Population Density (2013)



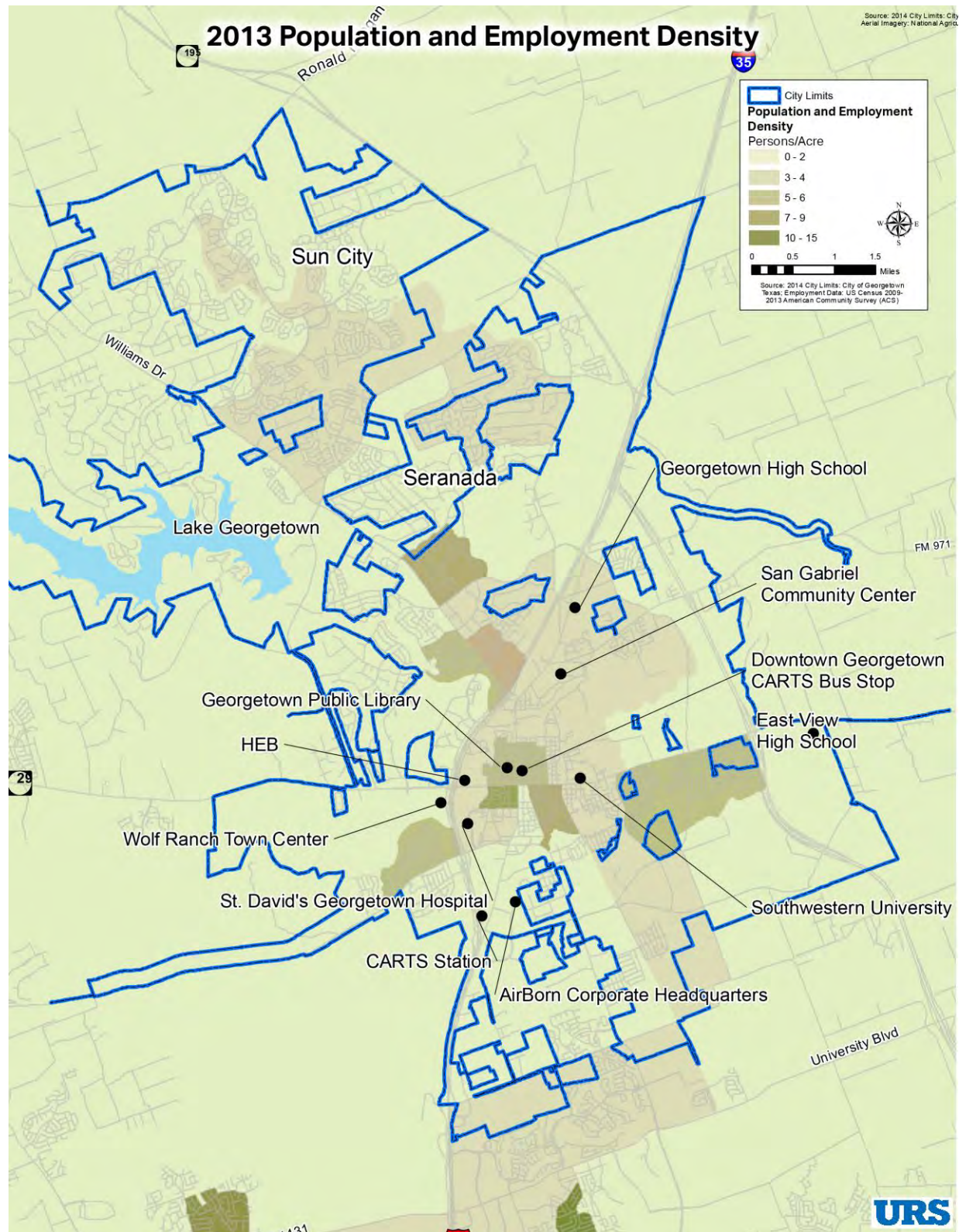
Source: American Community Survey, 2013.

Figure 7: Employment Density (2013)



Source: American Community Survey, 2013.

Figure 8: Population and Employment Density



Source: American Community Survey, 2013.

4.2.4 Population Over 65 Years of Age

As expected, the highest concentrations of individuals over 65 years of age occur in the Sun City community. Sun City is an age restricted community for retirees 55 and older. About 6,900 residents of Sun City's population are over the age of 65, and as of 2010, approximately 11,500 people live in the 5,300-acre community. **Figure 9** illustrates the distribution of the senior population in the city. Just South of Sun City, near the intersection of Williams Drive and Shell Road, Heritage Oaks is another age restricted development with 390 units that recently completed construction of all units. On the other end of the spectrum, the northern tip of the city, bounded by IH 35 to the east, FM 143 to the north, and SH 195 to the west, has a population that is zero to ten percent over the age of 65. Much of the southern portion of the city also falls into that category. The central part of the city is largely in the 11 to 25 percent range, with a few areas of 26 to 40 percent and zero to ten percent.

4.2.5 Population Under 18 Years of Age

Figure 10 illustrates the distribution of the youth population in Georgetown. As expected, the concentrations of the youth population are generally the reverse of the concentrations of the senior population. Sun City has a very low youth population, and the areas in the north tip and the south that had low senior populations are shown to have youth populations of between 26 and 40 percent of the total population. The area just north and east of downtown Georgetown is the only area besides Sun City with a youth population of zero to ten percent.

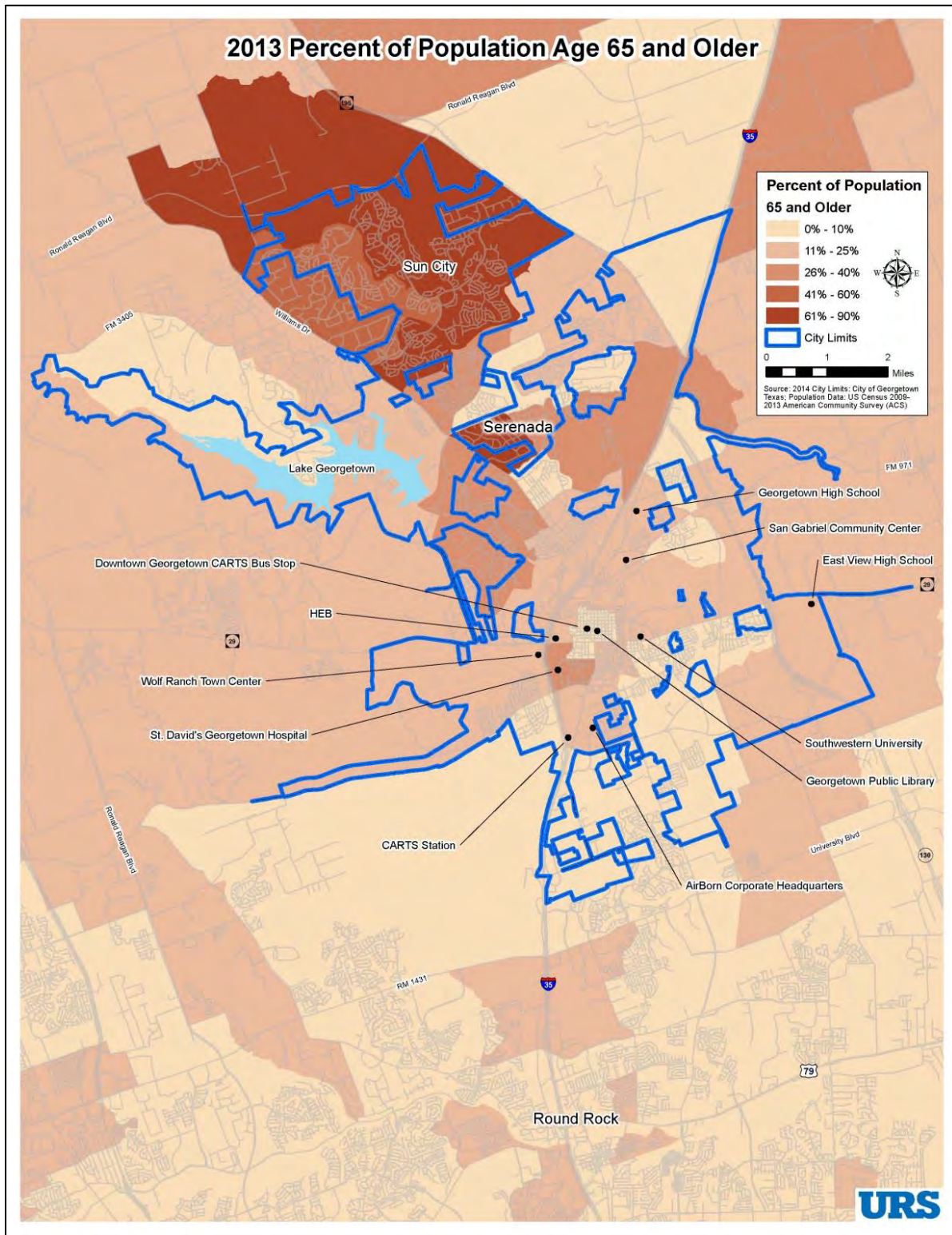
4.2.6 Zero-Car Households

As shown in **Figure 11**, the majority of the city has a very low rate of driving-age individuals with no car available to them (zero to one percent). Two percent of the population over 16 in the central eastern arm of the city does not have access to a vehicle, and portions of the center and southern parts of the city have three and four percent, respectively, of the driving-age population without access to a vehicle. The highest rates of four to six percent occur in the north on the west side of IH 35 from SH 195 to the north and Williams Drive to the south.

4.2.7 Median Income

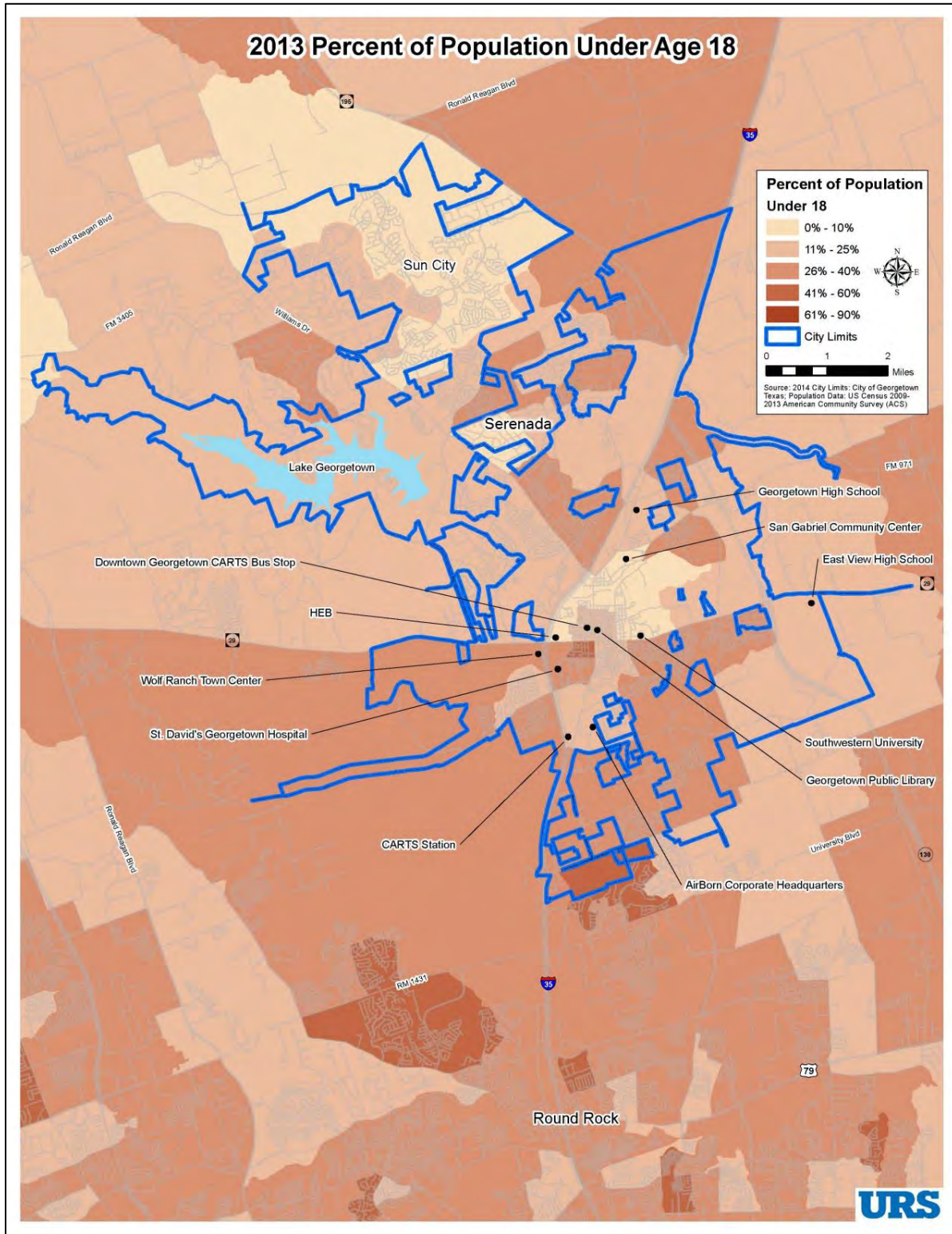
The majority of the City of Georgetown has a median income of between \$20,000 and \$40,000. As indicated in **Figure 12**, higher median incomes are present in pockets of the city, mostly to the west and north. A median income of between \$40,000 and \$60,000 is present in the central west arm of the city, bounded by IH 35 to the east, SH 29 to the north, and FM 2443 to the south. A median income of between \$60,000 and \$80,000 is present in the northern part of the city near IH 35 on the south side of SH 195.

Figure 9: Percent of Population Age 65 and Older (2013)



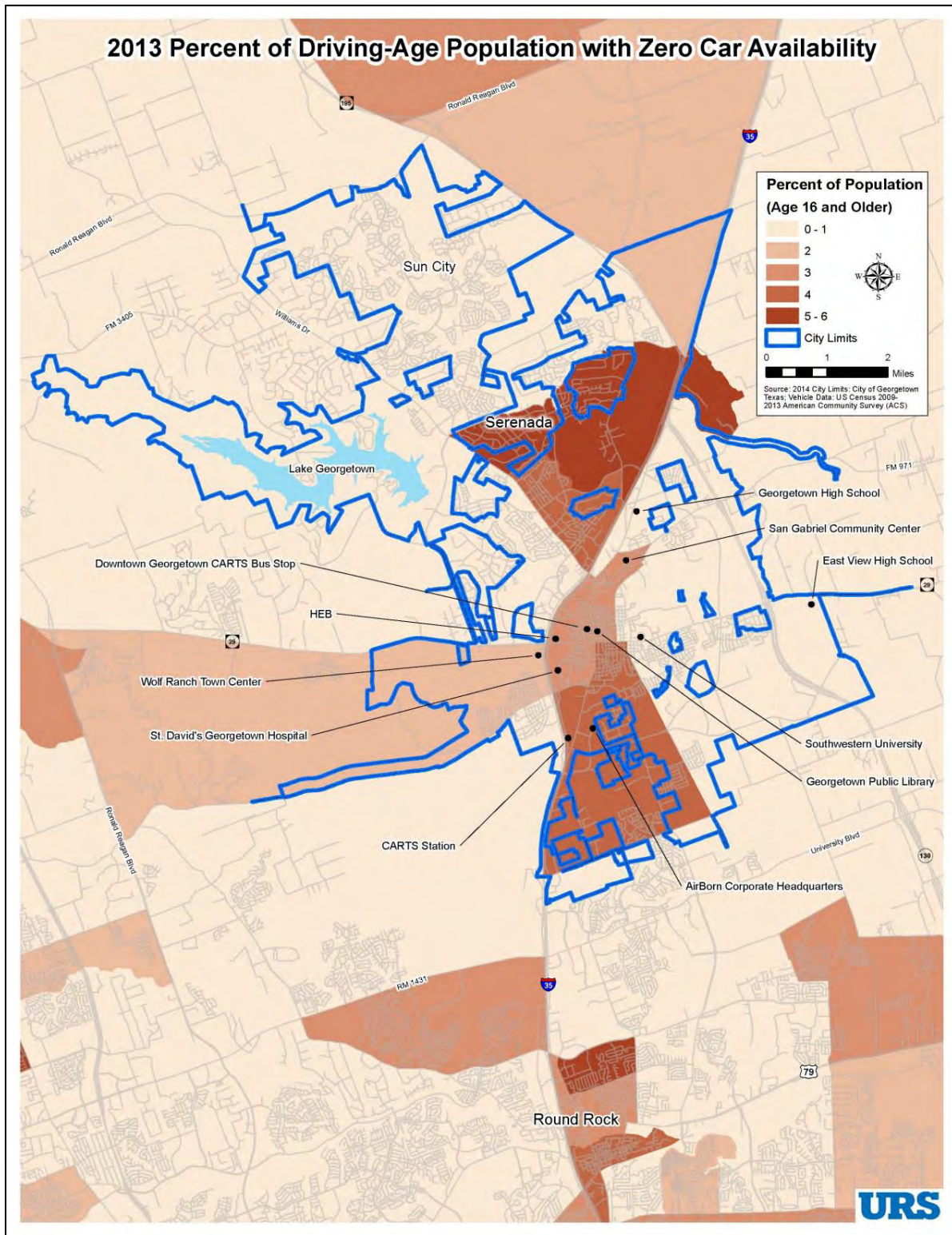
Source: American Community Survey, 2013.

Figure 10: Percent of Population Under Age 18 (2013)



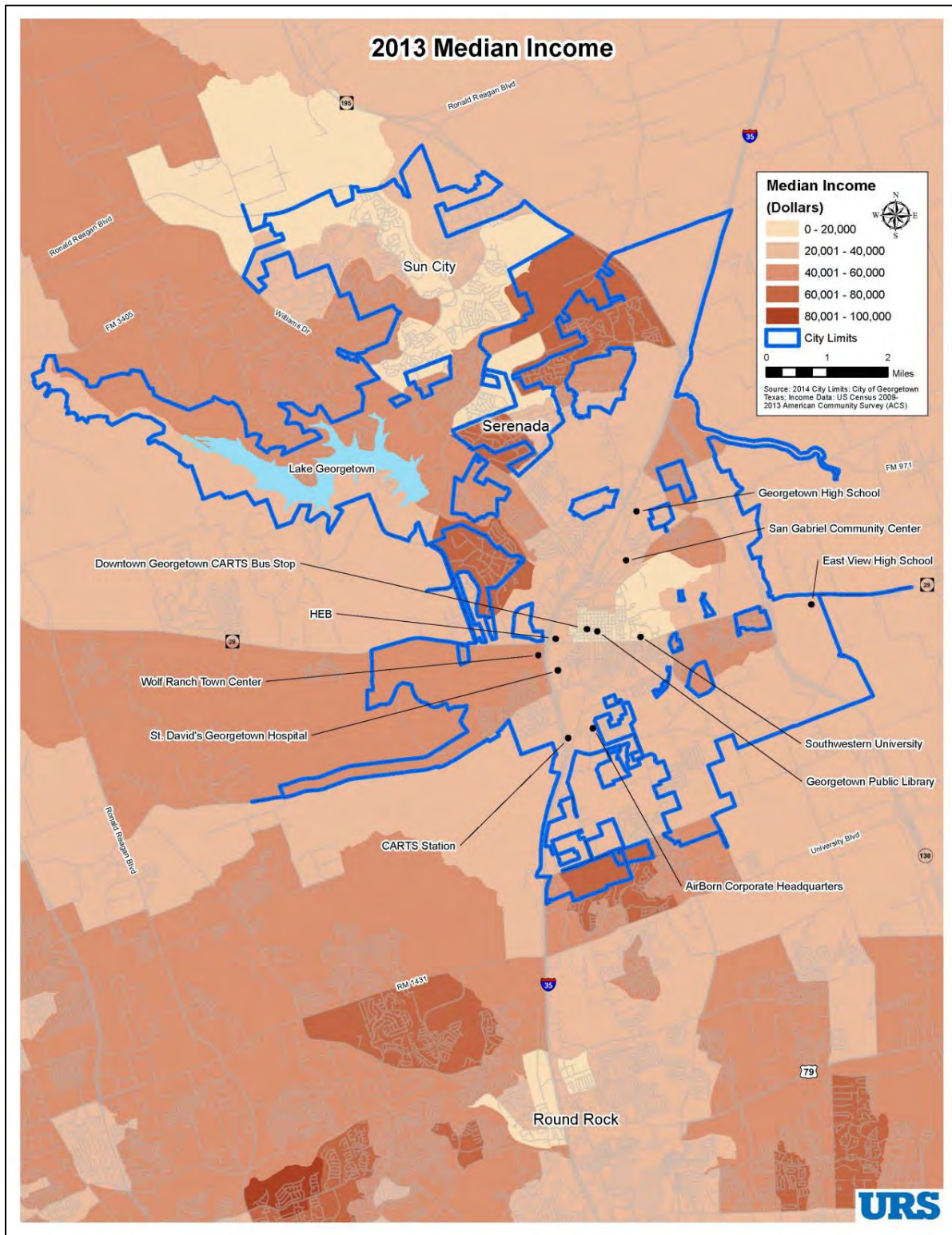
Source: American Community Survey, 2013.

Figure 11: Percent of Driving -Age Population with Zero Car Availability (2013)



Source: American Community Survey, 2013.

Figure 12: Median Income (2013)



Source: American Community Survey, 2013.

4.3 Land Use

4.3.1 Existing Land Use

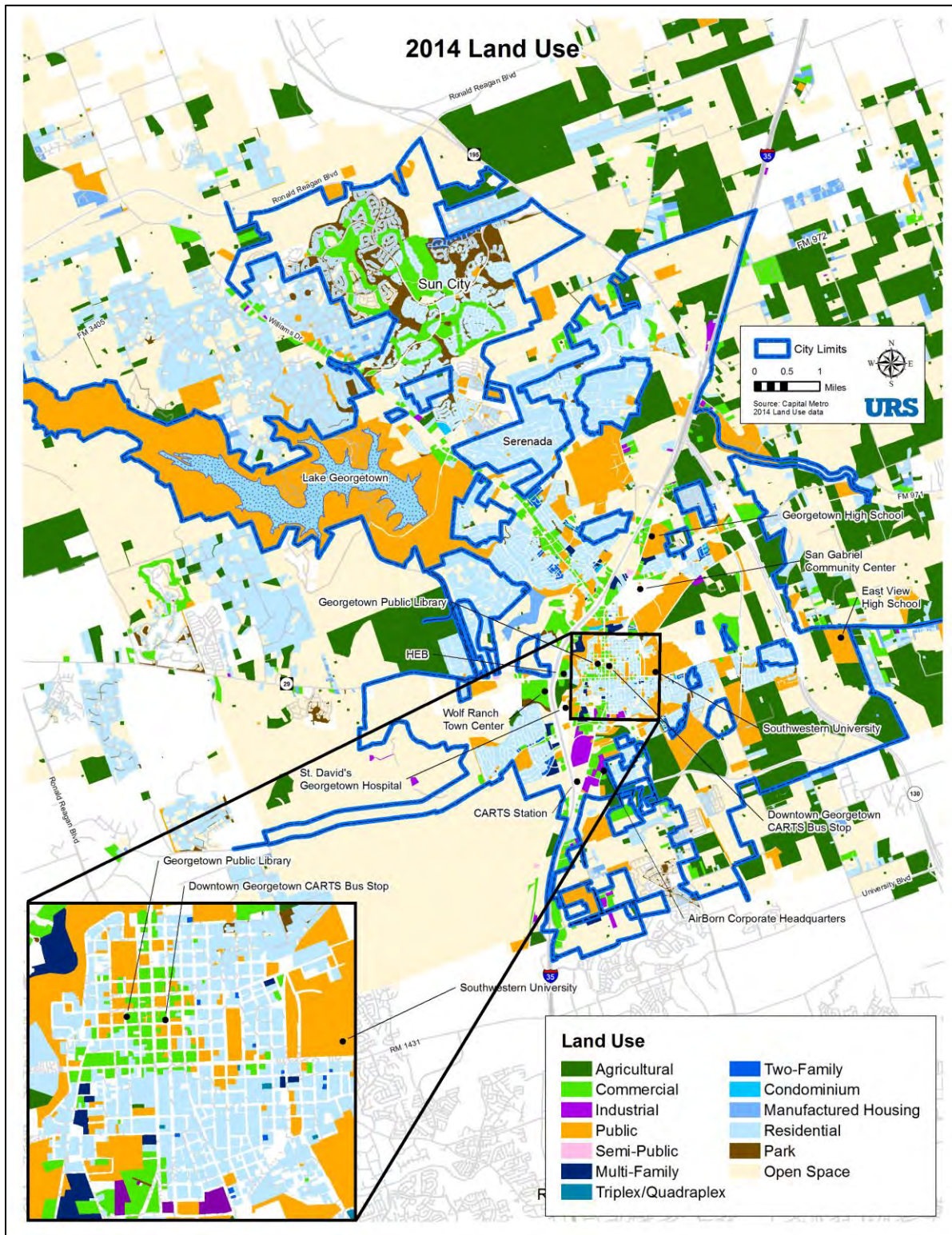
Existing land use in Georgetown is primarily public, single-family residential, open space/vacant, and agricultural. There is also a considerable percentage of acreage within the city limits, 14 percent, that was not identified in the city’s current land use data. **Table 2** provides a summary of the existing land uses within the city limits of Georgetown. The table does not include the land within the ETJ. A map of the existing land use is provided as **Figure 13**.

Table 2: 2014 Land Use within Georgetown City Limits

Land Use	Acres	Percent of City Limits
Agricultural	3,330.76	9.40%
Industrial	221.94	0.63%
Commercial	2,178.63	6.15%
Public	8,219.02	23.19%
Semi-Public	13.92	0.04%
Multi-Family	140.00	0.40%
Triplex/Quadplex	22.53	0.06%
Two-Family	123.63	0.35%
Condominium	230.38	0.65%
Manufactured Housing	103.51	0.29%
Residential	4,580.41	12.93%
Park	1,033.17	2.92%
Open Space	10,264.59	28.97%
Unidentified	4,974.18	14.04%
Total	35,436.66	100.00%

Source: City of Georgetown.

Figure 13: Existing Land Uses in the City of Georgetown



Source: City of Georgetown.

4.3.2 Future Land Use

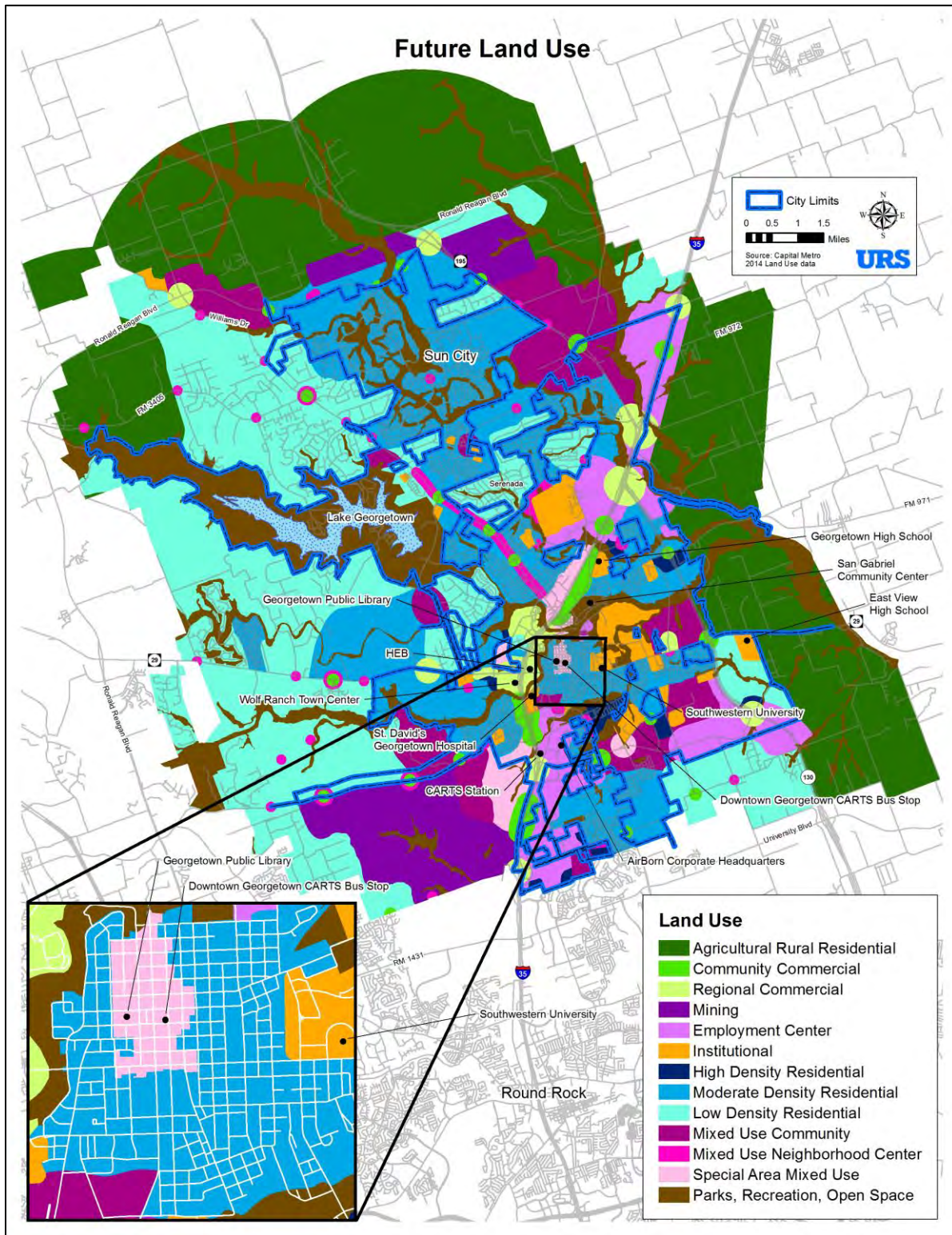
Georgetown’s plan for future land use includes the land in the ETJ in addition to the land within the city limits. The land within the ETJ is approximately double the amount of acres within the city limits at the end of 2014. The city’s plan for future land use includes a wider mix of housing types and densities than exists in the current land use. The future land use also introduces an “Employment Center” designation that is not part of the current land use, indicating the city’s intent to encourage development of employment centers and attract major employers to the city. **Table 3** summarizes the future land use plan for the City of Georgetown and its ETJ. The future land use plan is illustrated in **Figure 14**.

Table 3: Future Land Use within Georgetown City Limits and ETJ

Land Use	LU	Acres	Percent of City Limits
Regional Commercial	RC	2,155.58	1.87%
Special Area Mixed Use	SMUA	1,207.81	1.05%
Institutional	INST	2,055.87	1.78%
Moderate Density Residential	MDR	17,407.45	15.10%
Community Commercial	CC	1,582.68	1.37%
Employment Center	EC	4,883.24	4.24%
Mixed Use Neighborhood Center	MUNC	1,259.61	1.09%
High Density Residential	HDR	600.29	0.52%
Mining	M	5,203.18	4.51%
Low Density Residential	LDR	26,036.95	22.58%
Agricultural Rural Residential	ARR	29,688.08	25.75%
Mixed Use Community	MUC	6,448.09	5.59%
Parks, Recreation, Open Space	OS	16,769.22	14.54%
Total		115,298.00	100.00%

Source: American Community Survey, 2013.

Figure 14: Future Land Use Plan for the City of Georgetown



Source: City of Georgetown.

4.4 Existing Transit Services in Georgetown

4.4.1 CARTS SERVICE

CARTS buses operate from seven transit stations located throughout the CARTS service area in Central Texas. Fixed-route service is operated between the seven stations, and this service is available to anyone in the service area. CARTS also provides “curb-to-curb” service, also known as demand-response or on-call service, for mobility impaired individuals and individuals in need of special assistance in the CARTS service area. CARTS operates 60 mini-buses and vans to provide fixed-route and on-call services across Central Texas.

Fixed Route Service in Georgetown

CARTS operate a fixed, interurban bus route between Georgetown and Austin twice daily, Monday through Friday. Passengers in Georgetown are picked up by the interurban bus at two locations: Downtown Georgetown Bus Stop at 9th and Main Streets and the CARTS Georgetown Station at 3620 South Austin Avenue. From Georgetown, the Red Route 1511 stops at University Oaks (IKEA), CARTS Round Rock, Tech Ridge Park & Ride, Austin Greyhound, and CARTS Austin. In Austin, CARTS passengers have the option of utilizing the Grasshopper, a special CARTS on-call service that is only available to those transferring from another CARTS service in Austin, to reach their final destinations.

Curb-to-Curb Service in Georgetown

The CARTS Community Transit service provides on-call services within CARTS service area. Passengers reserve rides by telephone or online with a preferred 24-hour advanced notice. This type of service is called paratransit service by many transit agencies. The Community Transit service is offered Monday through Friday from 8:00 a.m. to 4:30 p.m. The fare for the service ranges from \$2.00 to \$6.00, depending on the zone of the destination. The Community Transit service also makes several scheduled trips from Georgetown to select locations. On Monday, Wednesday, and Friday a bus departs Georgetown for Austin at 8:00 a.m. and returns at 2:00 p.m. On Tuesday and Thursday a bus travels to round rock, leaving at 8:00 a.m. and returns at 12:00 p.m. On the 1st and 3rd Wednesday of the month, a bus travels to Temple from Georgetown at 8:30 a.m. and returns at 2:00 p.m.

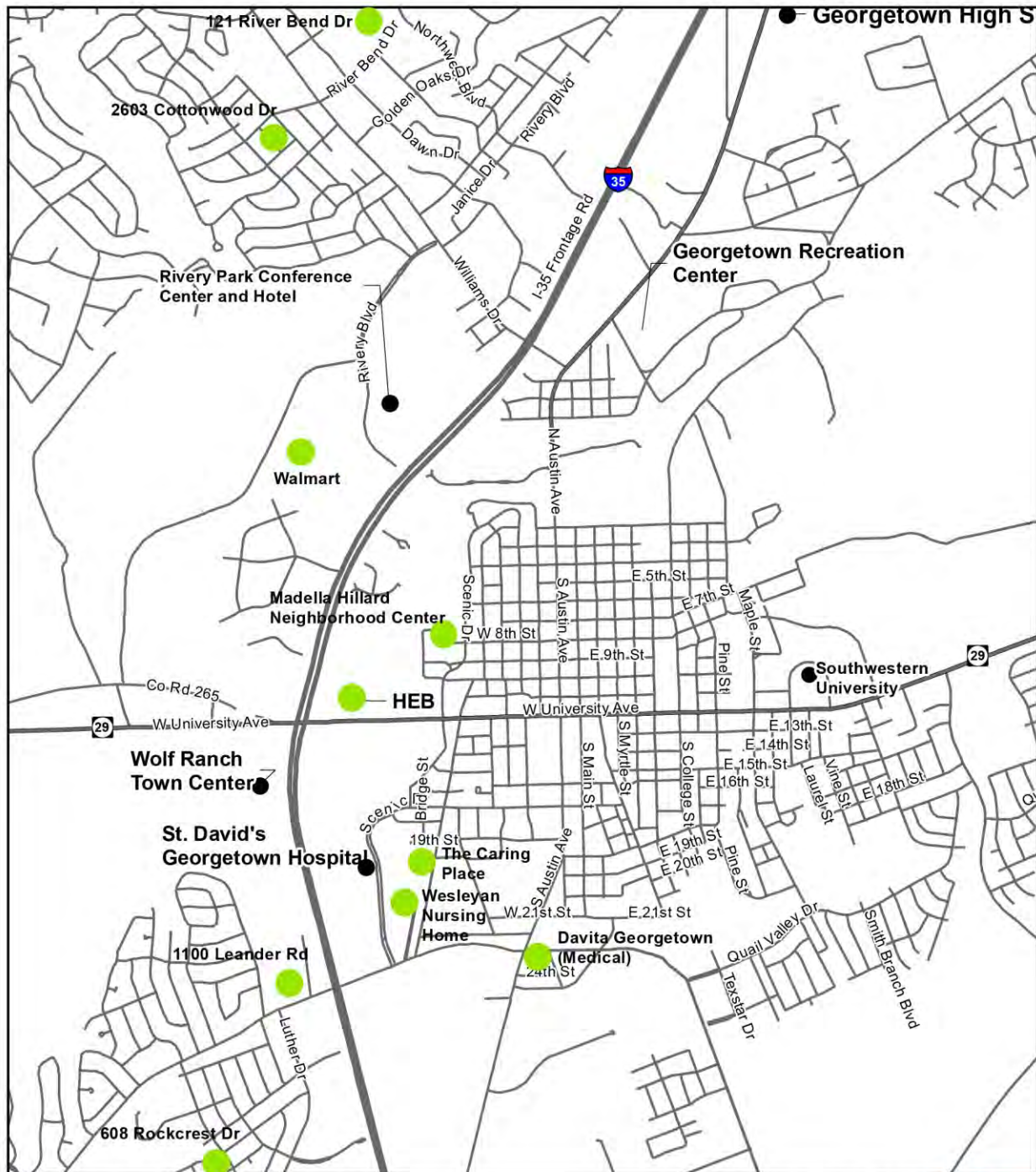
Medical Transit Service in Georgetown

CARTS provides non-emergency medical transportation services for Logisticare Solutions, LLC, a broker under contract to the Texas Department of Health and Human Services to arrange transportation for eligible persons in the CARTS District. These services are free and can be arranged through HHS call centers. People using Texas Health Steps and other Medicaid programs are eligible for the service. The service is called the HHSC Medical Transportation Program.

Origins and Destinations

Figures 15 and 16 show the top 10 origins and destinations of demand response riders in April 2016. The greatest concentration of trips is occurring in the southern part of the city at medical and social facilities including the Caring Place, Wesleyan Nursing Home and Davita Georgetown. Shopping destinations such as Walmart and HEB are also popular destination. Currently the most boarding occur at the Madella Hilliard Neighborhood Center on the westside of downtown on 8th Street just west of Scenic Drive.

Figure 15: CARTS Top 10 Origins



Legend
 ● CARTS Origins

GEORGETOWN TDP **URS**
TOP 10 Origins

Source: CARTS April 2016

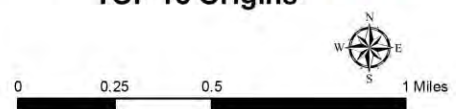
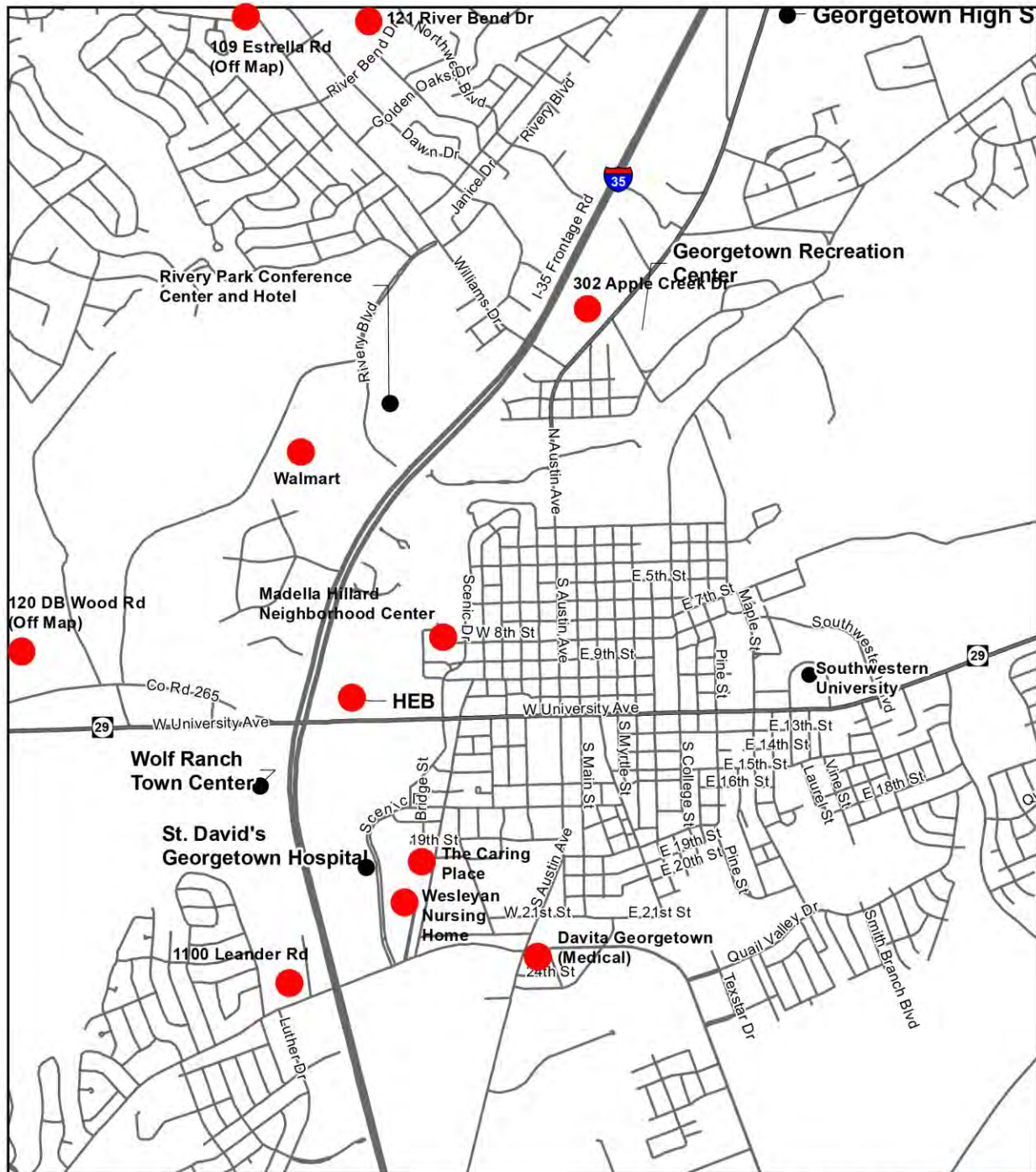


Figure 16: CARTS Top 10 Destinations



Legend

● CARTS Destinations

GEORGETOWN TDP TOP 10 DESTINATIONS **URS**



0 0.25 0.5 1 Miles

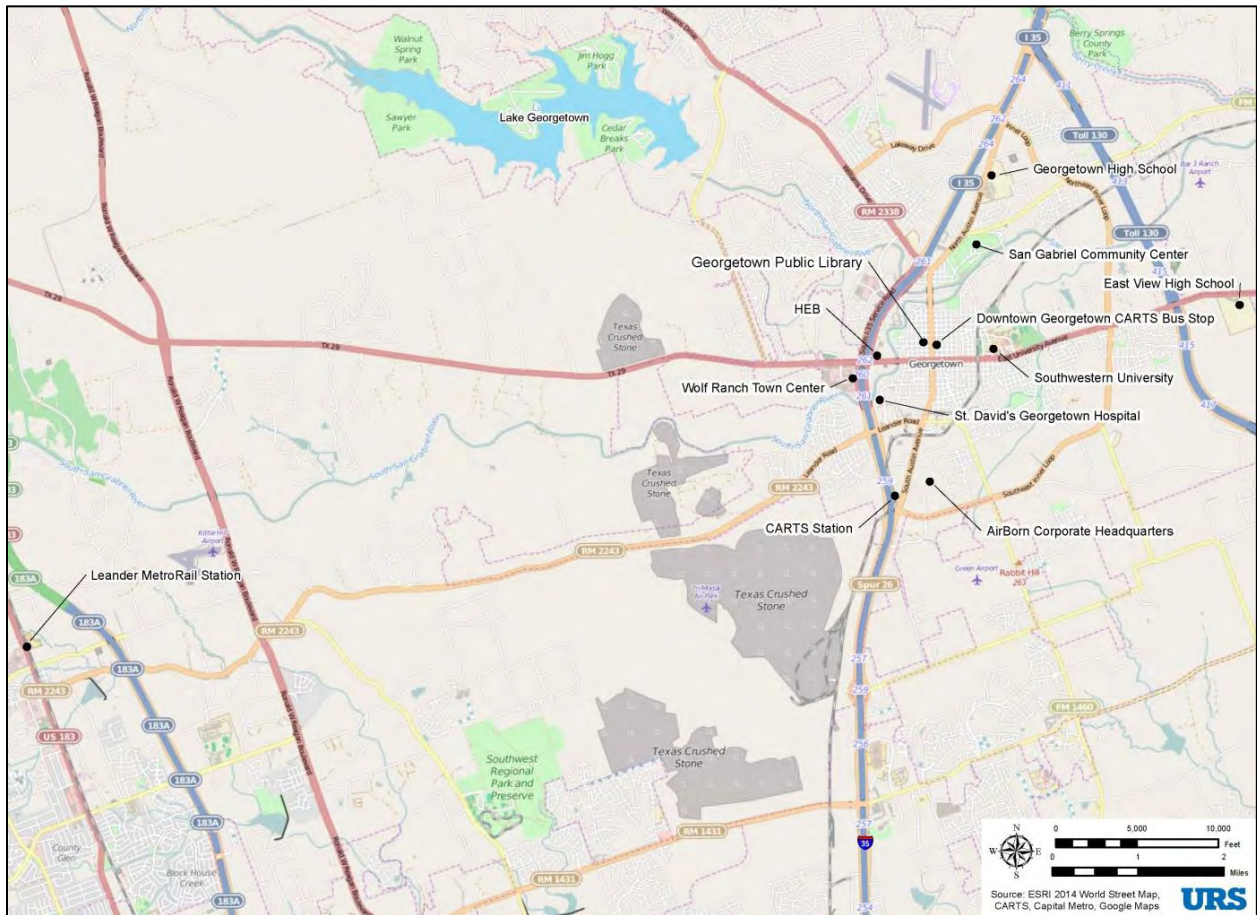
Source: CARTS April 2016

4.4.2 Commuter Rail Service

Capital Metro’s MetroRail provides rail service between Austin and Leander Monday through Friday in the morning and evening peak periods. No mid-day service is provided at Leander Station. On Saturdays, MetroRail northbound service terminates at Lakeline Station, thus no service is available at Leander Station. MetroRail does not operate on Sundays.

Although the service does not operate in Georgetown, the Leander Station is approximately 17 minutes west of downtown Georgetown by car. **Figure 17** shows the location of the Leander MetroRail Station (on the left edge of the map) relative to the City of Georgetown.

Figure 17: Georgetown’s Relative Location to Capital Metro Leander MetroRail Station



Source: URS, 2015.

4.4.3 Greyhound Bus Service

Georgetown has a Greyhound bus service at the CARTS Georgetown Station at 3260 South Austin Avenue. The route serving Georgetown provides connection to the Austin Bus Station where passengers then transfer to routes heading to cities such as Dallas, Houston, and San Antonio.

4.4.4 Amtrak Rail Service

Georgetown does not have Amtrak service in the city limits. The nearest Amtrak station to Georgetown is in Taylor, approximately 20 miles east of the city. There are also stations to the south of Georgetown in Austin and to the north in Temple.

4.4.5 Non-Profit Services

For the past 15 years **Faith in Action Georgetown** has provided rides for the elderly who are unable to drive. Faith in Action drivers are volunteers who utilize their personal vehicles free of charge to help seniors get to medical appointments and run errands. Clients who have enrolled in the program are allowed two one-way trips per week and must be over the age of 65 and unable to drive. Volunteer drivers are not able to accommodate people in wheelchairs; however, they can provide assistance to clients from their home to the vehicle and then from the vehicle into the destination (known as door-to-door service). Volunteers can also provide door-through-door service, which means that the volunteer would stay with the client to assist during the trip. In a recent survey, Faith in Action found that 76% of their clients would have to find alternate living arrangements if Faith in Action's transportation services were not available.

Faith in Action Georgetown is a partner of Drive a Senior, another non-profit program that utilizes volunteer drivers to assist those in need of transportation assistance by offering curb-to-curb, door-to-door, and door-through-door service. Drive a Senior has several service areas in the region, including five Austin service areas, an Elgin service area, and a Pflugerville/Round Rock service area. Another Faith in Action partner operates the Northwest Austin service area. In 2015 Faith in Action provided 6,097 volunteer hours and enrolled three to four new clients each week.

4.4.6 Taxi and Other Demand-Response Car Services

Flash Transportation Services provides shuttle service from Austin-Bergstrom International Airport to Georgetown. Flash also provides service in shuttles, limousines, Lincoln Town Cars, and vans for special occasions, tourist day trips, and daily local trips.

Georgetown Taxi provides taxi and limousine services in Georgetown for local and out-of-town service. Services include private airport transportation to the Austin-Bergstrom International Airport and late night/early morning services by appointment. Transportation network companies such as Uber and Lyft also provide service in Georgetown.

4.4.7 Agency/Facility-Specific Shuttle Services

Many agencies provide targeted service for their clients to access the services of the agency. Scott & White Healthcare System has a shuttle service that transports people among the four Scott & White facilities in the area. The Boys & Girls Club of Georgetown provides its own transportation for children from area schools to the Boys & Girls Club sites. It also coordinates with the GISD school bus system to facilitate its targeted transportation system.

4.5 Review of Relevant Plans

The following plans include information for achieving multi-modal planning objectives. The most directly relevant plans are the Project Connect: North Corridor Plan, which acts as the system plan for the Central Texas region. The Lone Star Rail Project proposes the implementation of commuter rail between Georgetown, Austin, and San Antonio. The previous Georgetown Transit Development Plan provides a starting point in terms of data, as well as the vision of the city. Finally, the city has conducted biannual

surveys that show some of the transportation interests of the greater community, which is important to consider in the event of any potential future ballot initiatives to fund transportation improvements.

While the service areas in these plans are different than that of the City of Georgetown, having a clear understanding of regional and neighboring services allows the city to develop transit options that are complementary to regional and other local services both in the short- and long-term.

4.5.1 Regional Plans

Project Connect: North Corridor Plan

Project Connect was developed by the project partners in the Central Texas region to coordinate transportation options. The Project Connect High-Capacity Transit System Plan provides a framework for moving forward with high-capacity transit in Central Texas, with the goal of including the fiscally constrained portions of the Project Connect System Plan in the Capital Area Metropolitan Planning Organization's 2040 Regional Transportation Plan (CAMPO 2040) and implementing the components of the plan as fiscally feasible. Project Connect is the vision for Central Texas' high-capacity transit system. Linking activity centers within the fastest growing region in the country, Project Connect aims to connect people, places, and opportunities in an easy, efficient way. The vision unites efforts to develop the best solutions for getting around Central Texas and addressing regional growth challenges.

From 2005 to 2035, the region's population is forecasted to increase by 123 percent, with employment increasing by 135 percent. Half the population of Williamson and Travis counties are projected to reside in the North Corridor by 2035 and 55 percent of all jobs in the five-county region will be located in the North Corridor. The North Corridor extends north from approximately US 290 north of Downtown Austin, and generally follows IH 35 north of the City of Georgetown, as shown in **Figure 18**. Additionally, 14 of the 38 regional growth centers (areas with a dense mix of employment, housing, and retail) identified in the CAMPO 2035 plan are located in the North Corridor. With this significant population and employment projected to reside in the North Corridor by 2035, the Project Connect: North Corridor Study was initiated as one of the first projects to advance elements of the regional plan. High-Capacity transit improvements are expected to:

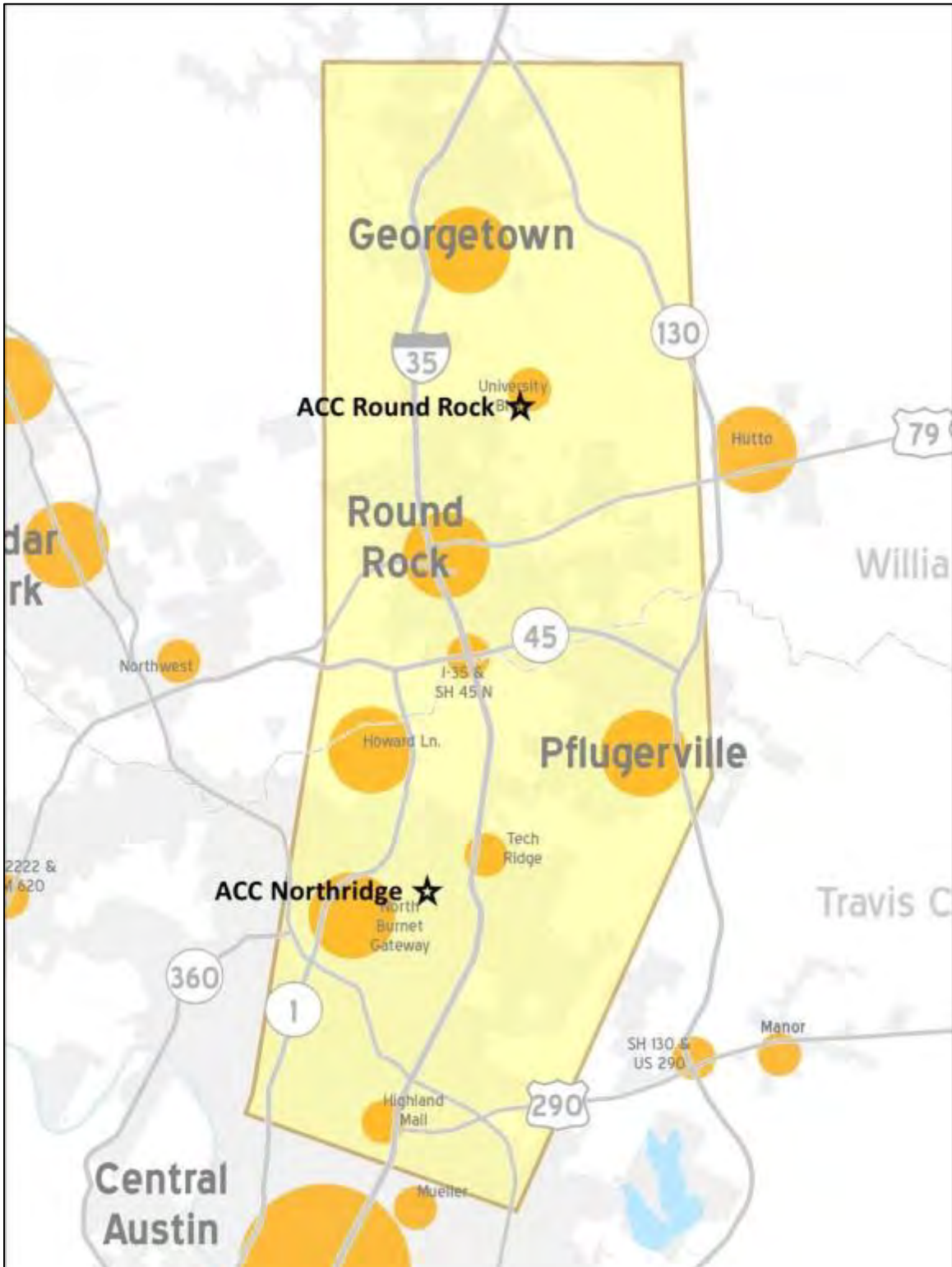
- Provide direct and frequent service between Austin's core and the North Corridor
- Link activity centers in the North Corridor with Connect and Rapid service
- Serve both traditional and new target transit markets
- Maximize both existing vacant and planned future land use opportunities
- Offer a scalable and expandable transit network

Capital Metro, CAMPO, the Lone Star Rail District, and the cities of Austin, Pflugerville, Round Rock, Georgetown, and other partners are working together to improve long-term mobility and accessibility in the North Corridor. The North Corridor team began an alternatives analysis in June 2012 by collecting public input on the issues facing the corridor. The project identified transportation problems within the corridor ("purpose and need"); determined feasible alternatives to address those problems; analyzed, evaluated, and refined alternatives; and selected a locally preferred alternative (LPA). Options considered included both roadway and transit projects, and while not all projects will connect to Georgetown initially, extensions are expected to bring additional travel options to the city. For the City of Georgetown, major elements of the plan include the following, and are illustrated in **Figure 19**.

- Extending Capital Metro's premium MetroRapid service from The Domain to Round Rock and Georgetown.

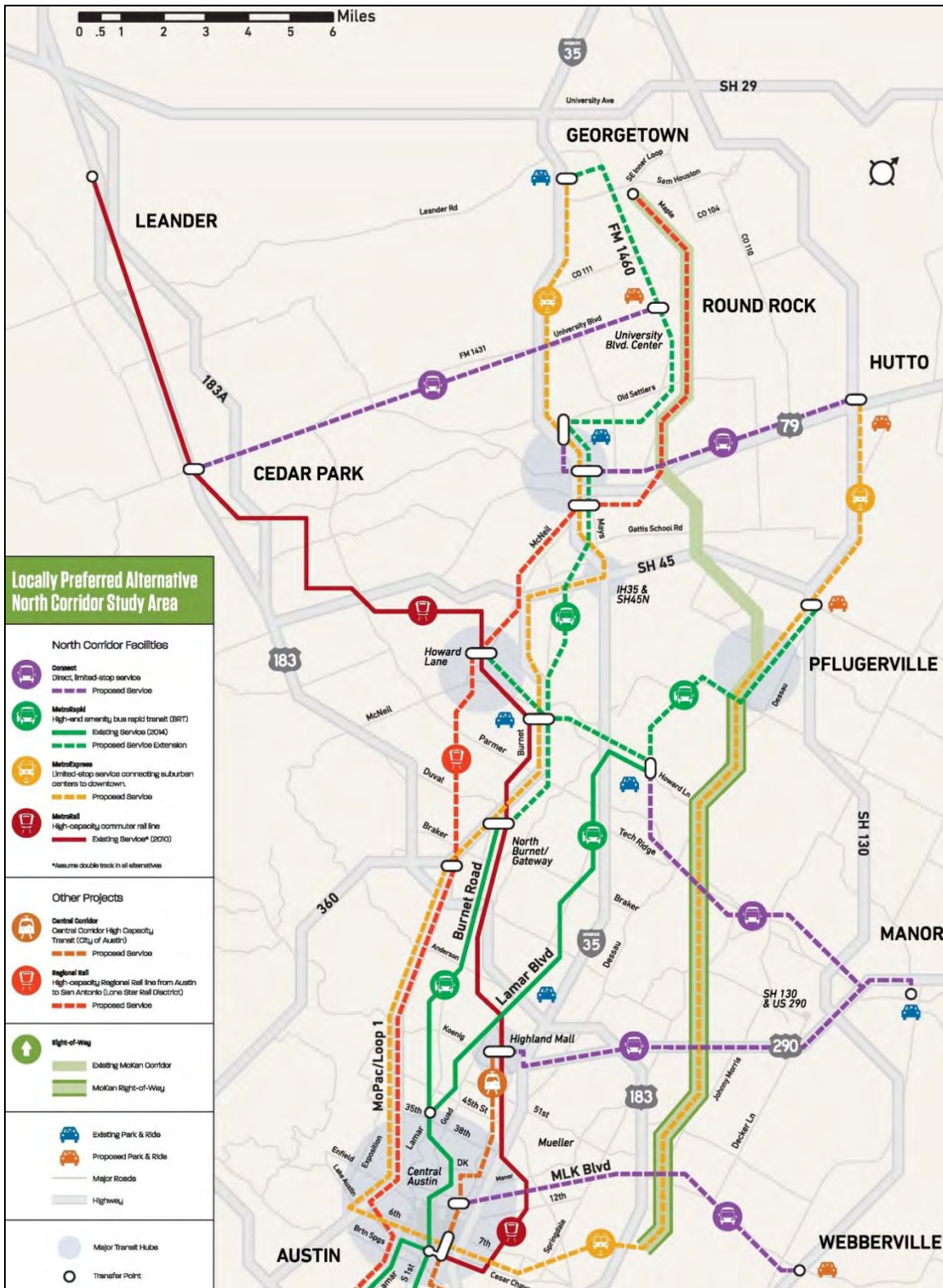
- New express routes from Georgetown and Round Rock to leverage investments in the new express lanes along MoPac.
- Moving forward with Lone Star Rail District’s plans for commuter rail from Georgetown through Austin to San Antonio.
- Initially using the MoKan Corridor from Pflugerville to downtown Austin as a dedicated busway with limited stops. Corridor preservation would allow the bus way to be extended to Georgetown in the future.
- Utilizing Capital Metro’s Express and Connect bus services to provide transit options within the Corridor, like Round Rock’s University Boulevard Center to Cedar Park and Round Rock’s established Park & Ride center to Hutto, and linking the centers from Georgetown to central Austin.

Figure 18: Extent of Project Connect North Corridor



Source: URS, 2011.

Figure 19: Project Connect: North Corridor Study LPA



Source: Capital Metro, 2014.

CAMPO 2035 (and updated 2040)

The *CAMPO 2035* plan is a long-range plan that specifies a set of investments and strategies to maintain, manage, and improve the surface transportation system in the five-county region of Williamson, Travis, Hays, Caldwell, and Bastrop Counties in Central Texas. Major transit projects recommended in the plan include:

- Urban commuter rail (MetroRail)
- Urban Rail
- Intercity passenger rail (LSTAR)
- Intercity bus service
- Express bus and commuter bus
- Rapid bus (MetroRapid)

Based on the 2035 plan's fiscally constrained analysis, approximately \$28.4 billion would be available to construct, operate, and maintain the regional transportation system over the 25-year timeframe (2010-2035), with \$2.9 billion dedicated to transit capital expenditures and \$10.3 billion dedicated to operations and maintenance (O&M).

CAMPO 2035 was the basis for the Project Connect System Plan. The Project Connect team worked with CAMPO on the development of the Project Connect System Plan to ensure that the fiscally constrained portions of the System Plan would then inform the planning process for *CAMPO 2040*.

The process to update the regional transportation plan, *CAMPO 2040*, began in May 2013, and was officially adopted on May 11, 2015.

Lone Star Rail Project

The Lone Star Rail Project, shown in **Figure 20**, is the central element of the Lone Star Rail District (LSRD), which is an independent public agency authorized by the Texas Legislature in 1997 and created in 2002. LSRD is governed by a board of directors made up of representatives of member cities and counties, various planning and transit agencies, the business community, and general public. Its planning area covers Williamson, Travis, Hays, Comal, and Bexar Counties.

The Federal Highway Administration (FHWA), Texas Department of Transportation (TxDOT), and the LSRD began an Environmental Impact Statement (EIS) for a proposed passenger rail line that would travel along the IH 35 corridor connecting the greater Austin and San Antonio metropolitan areas. Agency and public scoping meetings were held in January 2015.

The LSRD has worked closely with the Union Pacific Railroad (UPRR), as a major stakeholder, to evaluate operational scenarios for joint freight and passenger operations within UPRR's existing system. A potential alternative to be evaluated in the EIS includes development and operation of passenger rail service within the abandoned MoKan railroad right-of-way between Georgetown and Round Rock, and along the existing UPRR corridor between Round Rock and San Antonio. A branch route providing passenger rail service between Round Rock and Taylor along the existing UPRR corridor could also be evaluated.

A potential alternative could include development of a freight bypass to accommodate some existing freight rail traffic that could be displaced by the proposed passenger rail operations. The proposed freight rail bypass could extend from near Taylor along a greenfield alignment to Seguin. From Seguin, the proposed freight rail bypass could follow existing UPRR right-of-way and terminate near downtown San Antonio.

The need for the proposed project stems from the rapid growth occurring in Central Texas. Congestion within the IH 35 corridor has resulted in decreased mobility and travel time reliability for both travelers and freight transporters. The deficiencies of the existing transportation network, including lack of modal transportation options and limited roadway capacity, contribute to decreased regional air quality, increased crash rates, and diminished quality of life for residents living in proximity to IH 35.

The Lone Star Regional Rail Project would provide regional passenger rail service connecting communities along the IH 35 corridor between the metropolitan areas of Austin and San Antonio, including the City of Georgetown. As currently envisioned, the project would span approximately 120 miles across Williamson, Travis, Bastrop, Hays, Caldwell, Comal, Guadalupe, and Bexar counties. Based upon previous studies, the purpose of the proposed project is to improve mobility, accessibility, transportation reliability, modal choice, safety, and facilitate economic development along the IH 35 corridor in Central and South Texas.

Figure 20: Lone Star Rail Project



Source: Lone Star Rail District.

4.5.2 Local Plans

City of Georgetown Overall Transportation Plan (OTP)

Development of the Plan

The Overall Transportation Plan (OTP) was completed in February 2015 and is critical to the overall development of the city as it guides future roadway improvements, construction of new facilities, and outlines the city’s transportation goals. The adoption of the OTP, sets forth long term capital planning and financing considerations designed to ensure that basic transportation infrastructure needs and right-of-way will be available as the city grows and network needs improvements.

The updated plan is a continuation of the effort that the city completed in 2004 with the adoption of the initial OTP, which provided an analysis of existing conditions and travel characteristics, a travel demand model, review of the city’s roadway functional classification system, and a revised Transportation Improvement Program (TIP). The 2004 OTP assisted the city in defining cross-sectional needs as well as access management and detailed intersection needs.

Since the 2004 OTP, the city has experienced tremendous growth, including several major retail and residential developments. Additionally, Georgetown’s 2030 Comprehensive Plan adopted in 2008 includes a revised Future Land Use Plan. While the Comprehensive Plan serves as a guide for physical growth and land use within the city, the OTP provides guidelines for transportation management and development. These documents should be used in coordination with one another, not as separate competing documents. The update provides a review of the existing sidewalk and pedestrian/bicycle infrastructure and outlines the requirements for future analysis and planning studies.

The transportation improvement recommendations are based on the projected 2035 travel demands. The implementation program will categorize improvements through short-term and long-term prioritization recommendations. The improvements already chosen for funding are identified as “near term” and those where funding, routing, and right-of-way have not been identified are considered “long term”. Potential improvements offered for consideration include roadway widening and/or extensions, bicycle and pedestrian infrastructure, and transit programming. The study involves an evaluation of various transportation improvements and considers the impacts related to traffic/mobility, anticipated construction, and right-of-way costs as well as environmental/land use criteria.

The study area for the OTP includes the City of Georgetown city limits as well as the Extra Territorial Jurisdictional (ETJ) area, which typically extends one to two miles beyond the city’s limits. This area includes added roadways of which the city has sole control, including Williams Drive, Shell Road, D B Wood Road, and Inner Loop. These facilities provide critical connectivity for the residents within the city and, while there are some limitations, there are opportunities for roadway expansion.

The goals and objectives of the OTP are:

- Implement improvements to the local road and traffic control system, including new thoroughfare linkages to enhance connectivity, improved and coordinated traffic signalization, standards for access management to enhance traffic flow and safety.
- Progress toward a functional, well-integrated, multi-modal transportation system that provides a variety of choices – bicycle, public transportation, and pedestrian – on a local and regional level.
- Reduce reliance on single-occupant automobile traffic by retrofitting bicycle lanes and sidewalks in underserved areas to enhance bicycle and pedestrian mobility; incorporating these facilities in new developments; and encouraging compact mixed-use and other “walkable” development types.
- Guide the future growth and development of the city toward a more balanced approach between employment and commercial centers, schools and other high traffic generators.

Transit Service Pilot Program

The City of Georgetown does not independently provide or support transit services. The city is not in the Capital Metro service area and does not have direct access to Capital Metro bus or rail services. In order for residents to use the Capital Metro transit system, they currently must travel to Round Rock or Leander to ride the existing bus and rail lines. Limited transit service (Community and Connector Transit services) is provided by CARTS; however, the routes are limited with regard to drop-off points and service times.

During November of 2008, the City of Georgetown partnered with CARTS and TxDOT to develop a transit pilot program. The *Georgetown Fixed-Route Action Plan* was funded using \$75,000 from CARTS and was anticipated to last for seven months. The stated purpose of the service was to design a fixed-route transit service and implementation plan that would provide services from selected locations within the city. The program consisted of two separately-funded phases. The two-phase pilot project included four buses serving six routes for seven months of service. The initial startup-up costs included completion of full bus shelters – including shelter, signage, hub, and bicycle racks – at a total of 5 stops.

Phase 1 began on November 28, 2008 and continued through February 7, 2009, completing the 600 service hours as stated in the Notice to Proceed. The buses operated two fixed routes, Monday through Saturday between 11:00 a.m. and 8:15 p.m. for a total of 9.5 service hours a day. Phase 1 ended with a total of 598.5 hours of transit service, serving 1,475 trips (or 34.3 riders per day). Phase 1 of the pilot program cost the city \$21,850, not including the \$813 recouped from farebox revenue.

After reviewing the metrics from Phase 1, CARTS and the city began Phase 2 of the pilot program. Lessons learned from Phase 1 (including the need for additional stops and expanded operating times) were incorporated into new operating characteristics for Phase 2, which began on March 2, 2009 and continued through April 11, 2009. During Phase 2, CARTS operated the same two fixed routes, adding several additional stops. The days of service were limited to weekdays and the hours of service were extended to 8:00 a.m. and 8:00 p.m.

The pilot program was in service for a total of 1,486.5 hours. While the project allowed city staff to gain some preliminary insight into the need and desire for transit service, it was ultimately not cost effective for the city to develop self-contained (local, within the city service) transit service, so the city opted to discontinue the program until either funding or demand warrant it.

Lessons Learned from 2008-09 Pilot Program

The city was hopeful that it would reach the 50,000 residential population threshold during the 2010 United States Census, which would have significant implications on both state and local levels. With a population over 50,000, the city would qualify for more funding opportunities for transportation improvements.

According to the 2010 Census, the City of Georgetown has a population of 47,400. This represents a 67% increase between 2000 and 2010. If the city continues to grow at this rate, it is possible that the City's population could reach 100,000 residents by 2020. However, the city's Planning and Development department estimates the population to be 79,000 by 2020 and exceed 125,000 by 2030. These estimates are consistent with the CAMPO population model and the updated TDM. This rapid growth and development indicates that the city should begin considering transit options in its future transportation planning efforts.

Once Georgetown reaches the 50,000 population figure, it may be classified as a Small Urbanized Area, which would mean the city would not be tied to the City of Austin and it would become a separate Metropolitan Statistical Area (MSA). This designation has significant implications in terms of transit funding. The city will become eligible to receive separate funding from the Federal Transit Administration (FTA) and will not be combined with Capital Metro. The city is currently not part of Capital Metro's service area, and being in the same MSA as Capital Metro does not allow for separate funding (the funding of multiple transit agencies within one MSA). The FTA typically funds up to 50% of operating expenses and potentially 80% of capital expenses. The newly established areas are not expected to have the ability to allocate the funds immediately; thus, they may become eligible for transit funds of approximately

\$200,000. In addition, the designation does not guarantee the city will receive the funds, but it does allow them to apply for the funds once a transit district is authorized.

Under this new designation, the city would develop its own transit system or connect to existing Capital Metro system. The city needs good transit service – locally and regionally – to provide its citizens with mobility choices. There are on-going discussions taking place that would make the City of Georgetown the northern terminus of the proposed Austin-San Antonio Commuter Rail Line – Lone Star Rail District (LSRD). The location currently under consideration is near the intersection of FM 1460 and SE Inner Loop; however, the completion date and funding mechanisms are yet to be determined and the city could potentially have its own bus system prior to this date.

2008 City of Georgetown Transit Plan

The City of Georgetown, in conjunction with the Capital Area Rural Transportation System (CARTS), and the Texas Department of Transportation (TxDOT), has completed the *Georgetown Fixed-Route Action Plan*. The purpose of this effort was to design a fixed-route transit service and implementation plan for the City of Georgetown.

Bus service was proposed to operate using four buses on six routes. This service was to include four half-hour routes interlined (after completing one route, when the vehicle arrives at the transfer center it would become a second route and would alternate between the two routes to reduce the need for transfers). One route would have operated on a half schedule to serve the major shopping areas. This would have served that route exclusively. The Sun City Route would have operated on a one-hour schedule using a single bus.

The six routes were projected to serve a total of about 112,000 annual trips the first year and 180,000 the third year. The service was to rely on cut-away buses supplied by CARTS initially, with bigger buses being an option as ridership warranted. To operate the service, 9.5 full-time equivalent driver positions were expected to be required, costing about \$965,000 to operate annually. Start-up costs were projected at \$633,000, including \$500,000 for buses and \$85,000 for shelters as the two primary cost items.

In 2008, it was assumed that there were no federal funds available initially, and that operating costs would be picked up by the City of Georgetown, federal/state funds, advertising/sponsorships, CARTS, and rider fares.

City of Georgetown 2030 Comprehensive Plan

The *2030 Comprehensive Plan* was adopted by the City of Georgetown in 2004. Since that time, some elements of the plan have been updated or added. The Transportation Plan is in the process of being updated, and the Housing Element was added to the *2030 Comprehensive Plan* in 2012.

Housing Element

The Housing Element of the *2030 Comprehensive Plan* studies housing needs of the city with an emphasis on affordable housing. This document was developed in 2012, well after the *2030 Comprehensive Plan* was adopted; thus, its research and findings are recent and relevant to the city’s existing conditions in 2015.

The document focused on affordability for households at or below 80 percent of the median income for the Georgetown area, which translated to an income of \$48,734 or less at the time the document was developed. The Housing Element definition of “at or below 80 percent of median income” is always calculated with the most current available data for median income. Two high priority actions are recommended to be initiated within five years:

- Provide incentives to workforce housing developers (affordable housing developers) to construct new affordable housing units in Georgetown to bridge the gap between affordable housing demand and affordable housing supply
- Identify suitable multi-family zoning locations to create an appropriate mix of housing variety in the city.

Land Use Element

The Land Use Element of the *2030 Comprehensive Plan* outlines a two-pronged approach to the city’s development by implementing a growth management plan and a future land use plan. The document includes land use goals, policies, and actions to help make the city’s vision a reality. Factors that will influence future development, found in the Land Use Element include soils, floodplains, Edwards Aquifer protection zones (Recharge, Contributing, and Transition Zones), active limestone quarries, runway protection zones around Georgetown Municipal Airport, and the Courthouse View Protection Overlay District, which protects viewsheds toward the historic Williamson County Courthouse in downtown Georgetown.

The document establishes a tiered growth framework, which allows the city to concentrate development in rings or tiers around the developed core of the city and thus achieve more compact future development. Tier 1 is the focus for approximately the first ten years, then Tier 2 for the next ten years, and Tier 3 for 20 years and beyond. This more deliberate pattern to new development will reduce the potential for “leap-frog” communities that pop up far away from current development on the edges of the city limits or ETJ. This in turn will make infrastructure and utility service expansion less costly for the city.

Four goals are identified in the Land Use Element of the *2030 Comprehensive Plan*:

1. Promote sound, sustainable, and compact development patterns with balanced land uses, a variety of housing choices, and well-integrated transportation, public facilities, and open space amenities.
2. Promote sound investment in Georgetown’s older developed areas, including downtown, aging commercial and industrial areas, in-town neighborhoods, and other areas expected to experience land use change or obsolescence.
3. Provide a development framework for the fringe that guides sound, sustainable patterns of land use, limits sprawl, protects community character, demonstrates sound stewardship of the environment, and provides for efficient provision of public services and facilities as the city expands.
4. Maintain and strengthen viable land uses and land use patterns (e.g., stable neighborhoods, economically sound commercial and employment areas, etc.).

City of Georgetown Sidewalk Master Plan and Public Facility Access Audit

The 2014 Sidewalk Master Plan was adopted on March 10, 2015. The Transit Development Plan process will coordinate and collaborate with the Sidewalk Master Plan process as both processes move forward.

The 2014 Sidewalk Master Plan prioritizes the implementation and/or replacement of sidewalks within the City of Georgetown. There are 144 miles of roadways in the city that have sidewalks, and another 387 miles of roadways where sidewalks are not present. Additionally, 13 percent of existing sidewalks are in poor condition. The first task was to work with the community to determine the location preferences for upgrades to take place. Pedestrian attractors, pedestrian safety, demographics, and special

considerations were used to prioritize proposed improvements. Identified projects were prioritized into three levels of priority, with Priority 1, 2, and 3 projects costing \$10.1, \$7.0, and \$7.8 million, respectively.

Currently, sidewalks are implemented or replaced using \$75,000 annually from the general fund. The city also created a City Residential Sidewalk Fund; however, this is currently unfunded. The study has identified potential funding partners that include Special Revenue Districts (Downtown, Rivery, Williams Drive Gateway Tax Increment Reinvestment Zones [TIRZ]), Federal, State, County and Independent School District, Public Improvement Districts (PIDs), Municipal Utility Districts (MUDs), and Bonded funds. The Master Plan recommends that the city adopt an operations and maintenance program of \$4,980,000 (or \$480,000 annually) over a ten-year period.

The study recommends that the city enforce the unified development code (UDC) sidewalk installation requirements, monitor and manage the residential sidewalk fund, develop minor rewording of the UDC, and update the Sidewalks Management Plan (SWMP) every 10 years. The study also makes the following recommendations for the design and maintenance of sidewalks.

- Sidewalk Design
 - Locate sidewalks on one side of every roadway
 - Separate sidewalks from traffic
 - Develop clear sidewalk design guidelines
 - Focus on crosswalks at signalized intersections
 - Consider additional pedestrian safety designs above current design
- Sidewalk Installation and Maintenance
 - Implement Priority 1 projects before 2025
 - Formalize public request tracking system
 - Complete sidewalk “gaps”
 - Initiate an annual review process
 - Adopt operations and maintenance (O&M) standards
 - Adopt annual funding recommendations that support O&M

Downtown Master Plan Update, Chapter 4 – Pedestrian & Bicycle Circulation & Streetscape Design

This document, updated in January 2014, provides proposed ways to improve pedestrian and bicycle circulation in the downtown historic core. Implementation of some pedestrian circulation and accessibility projects will be aided by the 2014 Sidewalk Master Plan and annual Capital Improvement Projects (CIP). Proposed signalized intersections for pedestrians, bike trail connections, and open space will be considered during downtown routing efforts for the Transit Development Plan.

City of Round Rock Transit/Transportation Plans

The City of Round Rock currently operates a demand-response service in its city limits and extra-territorial jurisdiction (ETJ). The service, operated by Star Shuttle, is a reservation-based, curb-to-curb service. Fares are \$5 for residents within city limits and \$7 for residents of the ETJ. Discounted fares are \$2 for youth (under 12) and senior (over 60) riders and \$3 for low-income and disabled riders.

Round Rock also participates in the following services: CARTS Interurban Bus Service, Drive a Senior, Veteran Transportation Service – United for the People, and Medicaid Transportation Services.

Round Rock is currently in the process of developing a Transit Plan for local bus service. Initial discussions with city staff indicate that they are likely to provide their own transit service outside of the Capital Metro umbrella of services.

City of Georgetown Citizen Surveys

Beginning in 1998, the City of Georgetown began conducting biennial citizen and employee surveys. The results of these surveys have been used to gain valuable input into the needs, operations, and priorities of the city. The last three city surveys (2008, 2010, and 2012) were evaluated for this study.

Prior to the 2012 survey, no information was included about how the survey was administered. The 2012 survey noted that of the 20,965 household addresses that reside in the city, based on the Williamson Central Appraisal District's property tax land parcel database and then compared to the local 911 address database, a sample of 2,400 addresses were sent surveys. The survey was mailed to households, and it contained a web-link to allow respondents to submit surveys via the internet. There was a response rate of 44 percent, with 34 percent responding on-line and 66 percent responding via mail.

During the 2008 survey, when asked about the top three issues that Georgetown will face in next five years, "Managing Growth/Development" was first with 65 percent, "Traffic/Transportation" was second with 60 percent. Both of these concerns are related as new residents and employees must be accommodated largely on the existing roadway network. When asked if residents would be willing to fund public transportation such as a fixed route bus system or commuter rail at a cost of up to \$25 annually per family in taxes and fees, nearly sixty percent were supportive (with 32 percent strongly supportive). When asked about expanding sidewalks and bike paths, approximately 55 percent were supportive (with 28 percent strongly supportive). The final transportation question asked respondents to rank transportation options. Commuter rail service between Georgetown, Austin, and San Antonio received 34.5 percent, High-Occupancy Vehicle (HOV) lanes between Georgetown and Austin received 26.3 percent, developing a fixed bus route system within Georgetown and developing bus rapid transit between Georgetown and Austin each received 16.3 percent with "none" (4.5 percent) and "don't know" (2.3 percent) rounding out the responses.

In 2010, residents were asked what changes would make Georgetown a better place to live. Approximately 50 percent answered as either a transportation issue ("improve traffic situation" at about 20 percent, or "implement public transportation" at about 16 percent) or a development issue ("manage growth/development" at 14 percent). When asked how supportive respondents would be to developing a public transportation system that would cost the city \$900,000 per year (or about \$58 per household), about 53 percent were supportive. When asked about developing a passenger rail system at a cost to the city of \$1 million per year (or about \$64 per household), about 46 percent were supportive. Expanding sidewalks or adding on-street bike lanes, each with a cost to the city of \$5 million (or about \$25 per household), resulted in 42 percent and 41 percent, respectively, of respondents being supportive. The final transportation question asked respondents what their top transportation priority would be. Improvements to existing roadway system received 30.1 percent, passenger rail service between Georgetown, Austin and San Antonio received 23.2 percent, developing a fixed bus route system within Georgetown received 16.1 percent, developing bus rapid transit between Georgetown and Austin each received 13.4 percent, developing HOV lanes between Georgetown and Austin received 9.3 percent, with "none" (4.6 percent) and "don't know" (2.6 percent) rounding out the responses.

For the 2012 survey, residents were again asked what changes would make Georgetown a better place to live. About 20 percent replied "improve traffic situation," and only 11 percent replied "implement public transportation." About 18 percent responded "manage growth/development." Again, citizens were asked

if they would support a tax increase for several transportation-related items. Approximately 46 percent of citizens would support a tax increase to extend sidewalks to new locations, making this the most supported item. Approximately 36 percent of residents would support a commuter rail system to Austin and San Antonio, and 33 percent of residents support added bicycle lanes. Finally, only about 27 percent of citizens support increased taxes to add a fixed route bus system. The 2012 survey did not ask respondents to identify their top transportation.

2010 Census and the Impact on Transit Funding

The Impact on Transit Funding study prepared by Texas Transportation Institute (TTI) outlines a scenario for implementing and funding transit service in Georgetown if the city were to be categorized by the U.S. Census Bureau after the 2010 Census as a “small urbanized area.” Georgetown did not receive this designation, however, and instead was categorized as part of the Austin large urbanized area. This designation by the U.S. Census Bureau has transit funding implications for Georgetown, most of which are not covered in detail in this report. Further, transportation funding mechanisms have changed since this report was prepared; MAP 21 replaced SAFETEA-LU in 2012 as the funding mechanism for federal surface transportation programs.

5.0 Transit Service Performance

5.1 CARTS Demand-Response Service Statistics

5.1.1 Overview

CARTS operates with a fiscal year (FY) that begins on September 1 of each calendar year. Demand-response, or curb-to-curb, service is the only type of transit service offered within the City of Georgetown. Fixed-route intercity service provided by CARTS (to Austin) also stops at a commuter lot in Georgetown, but these fixed-route services do not provide local bus service. CARTS fares are \$2.00 for a one-way trip within Williamson County and \$4.00 for a one-way trip outside the county. Half-priced fares are offered for elderly and disabled passengers.

General operating statistics for the demand-response routes running in Georgetown were reviewed for FY2011 through FY2014; a summary of these statistics is provided in **Tables 4 and 5**. Route 904 and Route 911 signify the two buses that are used for the service. The buses do not have different service areas or routes. **Table 4** provides a summary of key service statistics for the total demand-response service in Georgetown (both routes). Total passengers have generally increased from FY2011 through FY2014. Total revenue miles and revenue hours have both nearly doubled between FY2011 and FY2014. Passengers per trip have stayed relatively constant across the board at just over one person per trip.

Table 4: CARTS Georgetown Service Characteristics

	FY2011	FY2012	FY2013	FY2014
Total Passengers	7,219	8,136	10,361	8,942
Passengers Per Trip	1.07	1.09	1.09	1.07
Total No Shows	206	404	475	573
Total Revenue Hours	1,991	2,834	4,228	4,215
Total Revenue Miles	21,735	30,578	44,666	45,417

Source: CARTS, 2015.

Table 5: Productivity Report for CARTS Demand-Response Service

	FY2011	FY2012	FY2013	FY2014
Total Passengers	7,219	8,136	10,361	8,942
Passengers Per Trip	1.07	1.06	1.05	1.01
Average Trip Length	15.66 min.	21.11 min.	22.95 min.	25.79 min.
Average Trip Distance	2.95 miles	4.04 miles	4.29 miles	4.85 miles
Total No Shows	206	404	475	573
Total Revenue Hours	1,991	1,991	1,991	1,991
Total Revenue Miles	21,735	30,577	44,666	45,417

Note: In FY 2012, a second bus was added to the system.

Source: CARTS, 2015.

As shown in **Figure 21**, total passengers reached a high in FY2013, and then dipped down again in FY2014 to a level that is still higher than the totals for FY2011 and FY2012.

Figure 21: CARTS Passengers for Georgetown Demand-Response Service (2011-2014)

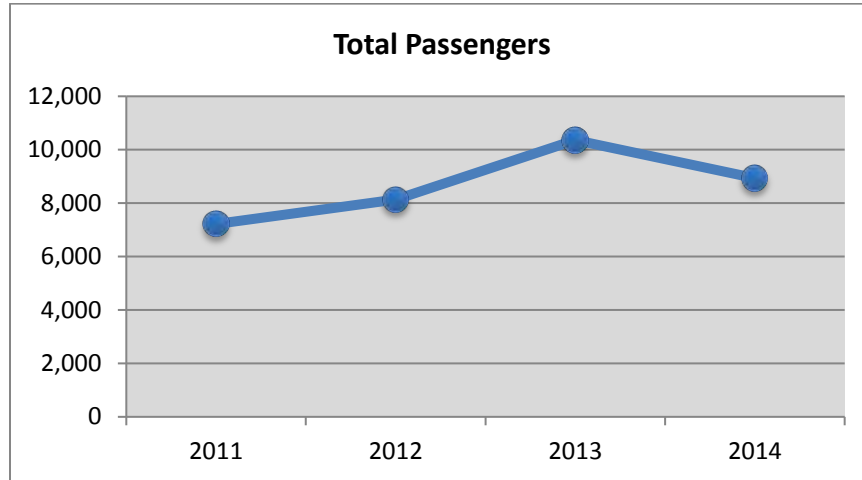


Figure 22 shows significant increases in revenue miles from FY2011 through FY2013, and then leveling off for only a slight increase in FY2014. Trip lengths have been generally increasing over the past four years, which provides an explanation for the revenue miles increasing at a higher rate than trips provided.

Figure 22: Annual Revenue Miles for Georgetown Demand-Response Service (2011-2014)

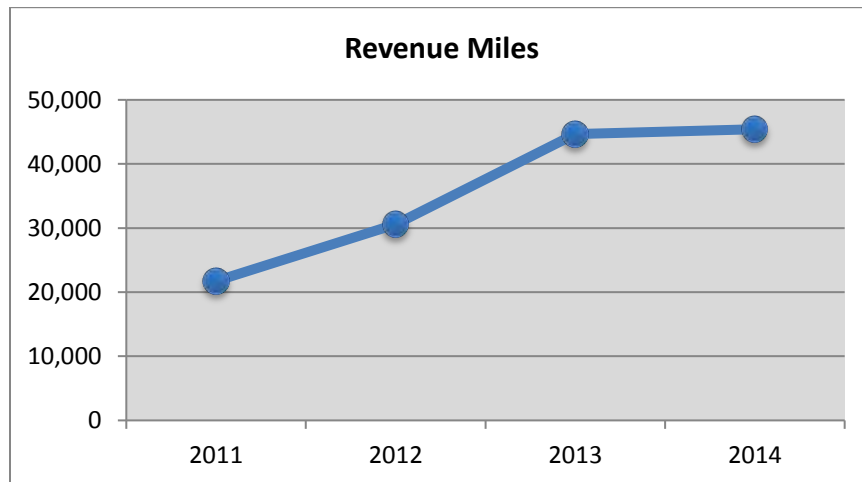
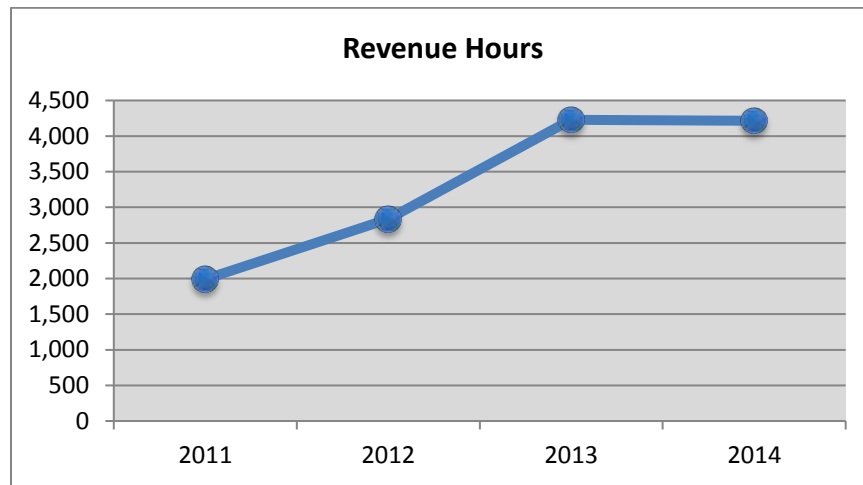


Figure 23 shows a nearly identical trend to that shown in Figure 19. The revenue hours increased sharply from FY2011 through FY2013 and then decreased very slightly from FY2013 to FY2014. The similar nature of the trending of revenue miles and revenue hours indicates that operational parameters have likely not changed much over the past four years. The amount of time it takes to provide a mile of service remained relatively constant as the mileage increased. It can thus be inferred from these trends that road conditions and congestion have not significantly degraded over the past four years.

Figure 23: Annual Revenue Hours for Georgetown Demand-Response Service (2011-2014)



5.1.2 Performance Indicators

This section characterizes the performance of the CARTS Georgetown demand-response service using standard transit performance measures.

As noted above, the number of passenger trips has increased between 2011 and 2014, but the second route that was initiated in 2012 has not doubled the passenger trips, so the passengers per mile and per hour have decreased compared to 2011 numbers. These figures are shown in **Table 6**.

Table 6: CARTS Georgetown Performance Indicators

	FY2011	FY2012	FY2013	FY2014
Annual Passenger Trips	7,219	8,136	10,361	8,942
Passengers per Revenue Mile	0.33	0.27	0.23	0.20
Passengers per Revenue Hour	3.63	2.87	2.45	2.12

Source: CARTS, 2015

Service Effectiveness

The number of passengers who are served per hour of revenue service and per mile of revenue service are indications of the productivity, or effectiveness, of the service. **Figure 24** shows that passengers per revenue mile have steadily decreased since FY2011. Total passengers have increased over time, while passengers per trip have remained relatively constant across the past four years at approximately one passenger per trip. During this same time period, trip distances have risen. Despite the increase in total passengers, trip distances are increasing at a higher rate than total passengers. This means that a given passenger is in a vehicle for a longer distance now than in FY2011, so fewer passengers are now served per mile of service. Longer trip distances could mean that clients are choosing CARTS for their longer trip needs and finding alternatives for their shorter trip needs.

Figure 24: Passengers per Revenue Mile for Georgetown Demand-Response Service (2011-2014)

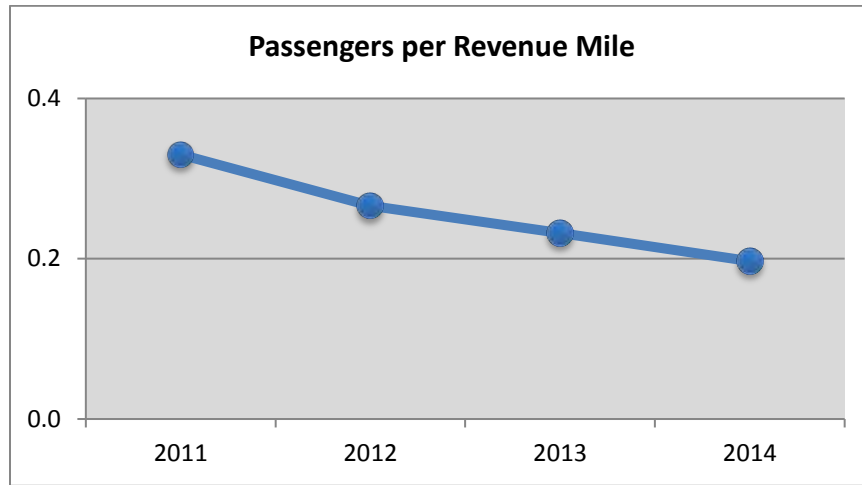
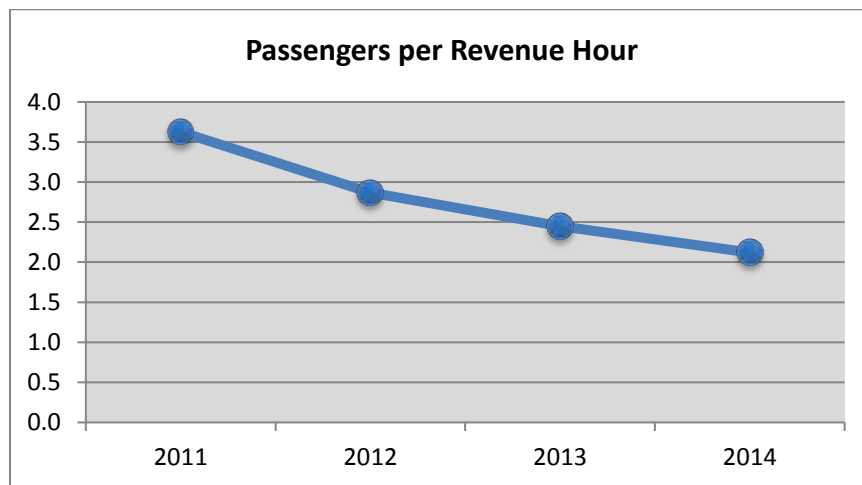


Figure 25 also shows a similar declining trend for passengers per revenue hour. If trip distances are longer, total passengers are not increasing as fast as trip distances are, and passengers per trip is remaining constant, then fewer passengers can be served in a given hour.

Figure 25: Passengers per Revenue Hour for Georgetown Demand-Response Service (2011-2014)



6.0 Service and Operations Plan

Based on input from the public outreach process and the comprehensive data analysis tasks, the project team developed recommendations for service and financial plans. The proposed fixed route transit system would serve many local destinations radiating from a centralized transfer center providing transit service within the City of Georgetown. A four route transit system was identified to provide a foundation of local service for the city. The routes were developed to link as many local origins and destinations as possible while keeping route lengths and running times reasonable. The proposed routes serve the higher density areas in the city. **Appendix G** illustrates the route system overlaid on the demographic maps.

Service operation assumptions include:

- Operating each route on a 60-minute frequency;
- Development of a central transfer center; and
- Complementary demand-response ADA paratransit service.

6.1 Fixed Route Recommendations

6.1.1 Service and Operations Plan

The service plan is focused on serving key markets and activity centers while creating a bi-directional network of direct and simple routes that operate with a timed-transfer for most routes in downtown Georgetown. The proposed service will operate 60-minute frequencies (also known as headways) all day on the four core routes. Two buses and one spare bus are needed to operate the fixed-route system. In an effort to create one-seat trips and crosstown routing, the routes will be interlined or paired together. Although no travel demand modeling was done as part of this TDP effort, the 2008 TDP included ridership projections. Based on the 2008 projections and the consultant team's assessment of the service it is estimated that each route will generate about 10,000 trips in the first year of service.

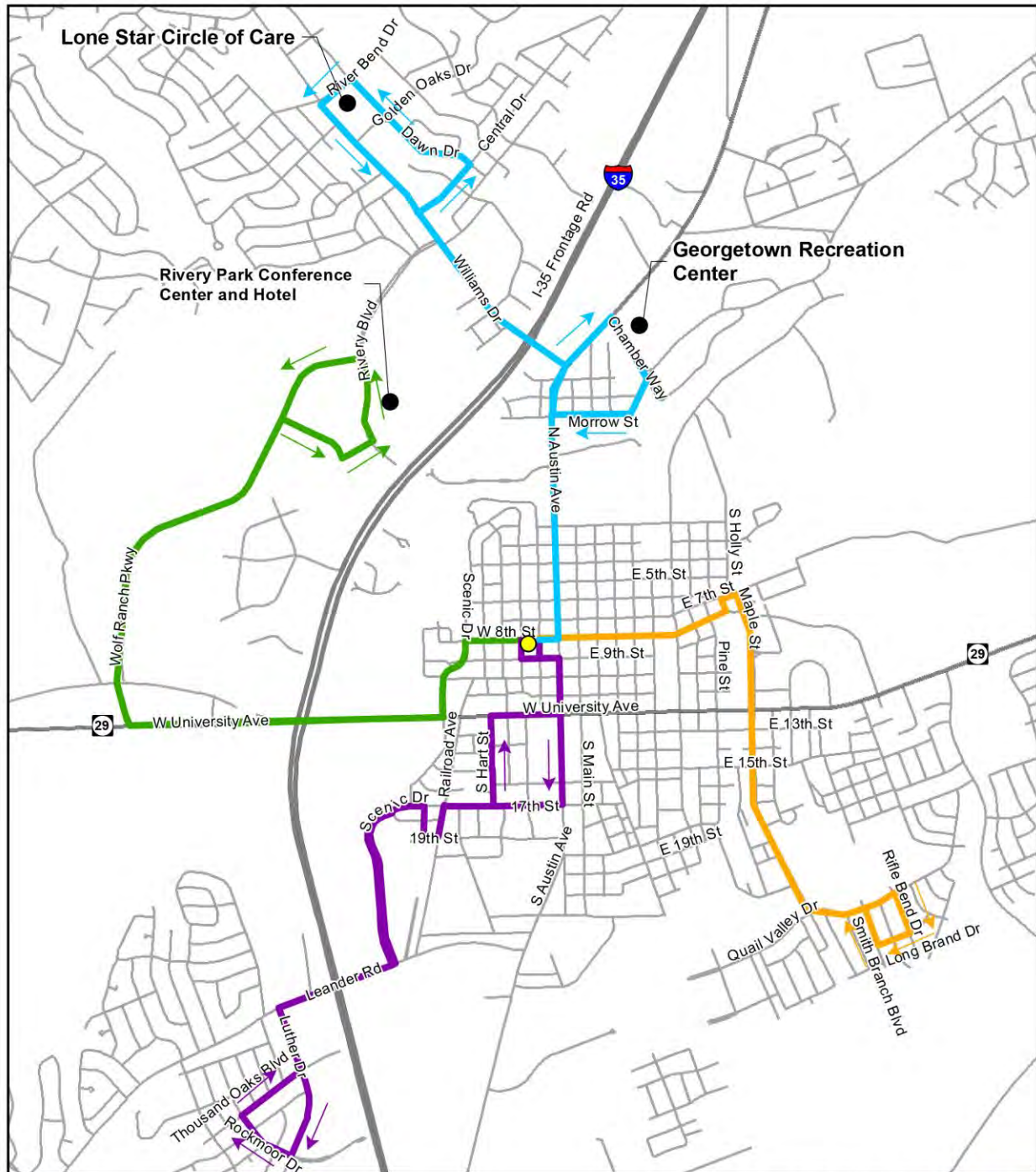
The route structure proposed in the service plan provides a base structure for service growth. The service, guided by public input throughout the development of this Transit Development Plan, is recommended for implementation in August 2017. Key components of the plan are as follows:

- Introduces bi-directional linear routing in the north, south, west, and east sectors of the city
- Proposes a downtown transfer center on 8th Street across from the library.
- Provides one-seat rides from Southwestern University and the neighborhoods in the east to the shopping in the west at Wolf Ranch and the Rivery area
- Provides service from all areas of the city to downtown
- Provides service to the Georgetown Recreation Center
- Provides transit connections to the primary shopping centers and medical facilities
- Proposes six day service Monday to Saturday
- Provides connections to the CARTS regional service to Round Rock and Austin
- Provides complementary curb-to-curb paratransit service for seniors and persons with disabilities
- Proposes longer term service to Sun City in Phase 2

6.1.2 Service Characteristics

Figure 26 illustrates the bus routes proposed in this Transit Development Plan.

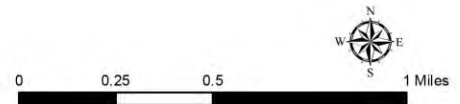
Figure 26: Proposed Georgetown System Map



Legend

- Route 1: Eastside/Southwestern University
- Route 2: Wolf Ranch Pkwy
- Route 3: Hospital/Leander Rd
- Route 4: Austin Ave/Williams
- Potential Transfer Station

GEORGETOWN TDP URS SYSTEM MAP



The following sections present a detailed summary for each proposed weekday route.

6.1.3 Route by Route Overview

Route 1 – Eastside/Southwestern University

The proposed Route 1 Eastside/Southwestern University connects Quail Valley Drive in the south to Southwestern University and downtown via Maple Street and 7th Street. The route makes a round trip in approximately 25 minutes and is interlined with Route 2. A round trip is a trip to a given location and back again, typically along the same route.

A turn-by-turn description of the proposed route is as follows:

Outbound from proposed transfer center – west on W 8th Street, north on Martin Luther King Street, south on Rock Street, east on E. 8th Street, north on South College Street, East on 7th Street, south on Maple Street, east on Quail Valley Drive, south on Rifle Bend Drive, west on Long Branch Drive, north on Smith Branch Boulevard, west on Quail Valley Drive.

Inbound from Quail Valley Drive (beginning from end of loop) – north on Maple Street, west on E. 7th Street, south on South College Street, West 8th Street to the transfer center. A map of Route 1 is shown in **Figure 27**.

Proposed bus stops for the route include:

- Downtown transfer center on W. 8th Street
- W. 8th Street and Main Street
- E. 8th Street and S. Church Street
- E. 8th Street and S. Elm Street
- E. 8th Street and Pine Street
- Maple Street and Southwestern Boulevard Maple Street and Soule Drive (Southwestern University)
- Maple Street and 13th Street
- Maple Street and 15th Street
- Maple Street and 19th Street
- Maple Street and Quail Valley Drive
- Quail Valley Drive and Smith Branch Boulevard
- Quail Valley Drive and Rifle Bend Drive
- Rifle Bend Drive and Long Branch Drive
- Long Branch Drive and Smith Branch Boulevard

The same bus stop locations are recommended for both the outbound and inbound directions excluding outbound only stops: Quail Valley Drive and Rifle Bend Drive, Rifle Bend Drive and Long Branch Drive, Long Branch Drive and Smith Branch Boulevard.

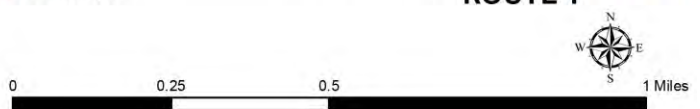
Figure 27: Proposed Route 1 – Eastside/Southwestern University



Legend

- Route 1: Eastside/Southwestern University
- Potential Stops
- Potential Transfer Station

GEORGETOWN TDP **URS**
ROUTE 1



Route 2 – Wolf Ranch Parkway

The proposed Route 2 Wolf Ranch Parkway connects downtown to the shopping areas of Wolf Ranch Town Center, Walmart and the Sheraton Georgetown Hotel and Conference Center on Rivery Boulevard. The route makes a round trip in approximately 25 minutes and is interlined with Route 1.

A turn-by-turn description of the proposed route is as follows:

Outbound from the transfer center – west on W. 8th Street, south on Scenic Drive, west on University Avenue, north on Wolf Ranch Parkway, east on Rivery Driveway, northeast on Rivery Driveway, north on Rivery Boulevard, as illustrated on **Figure 28**.

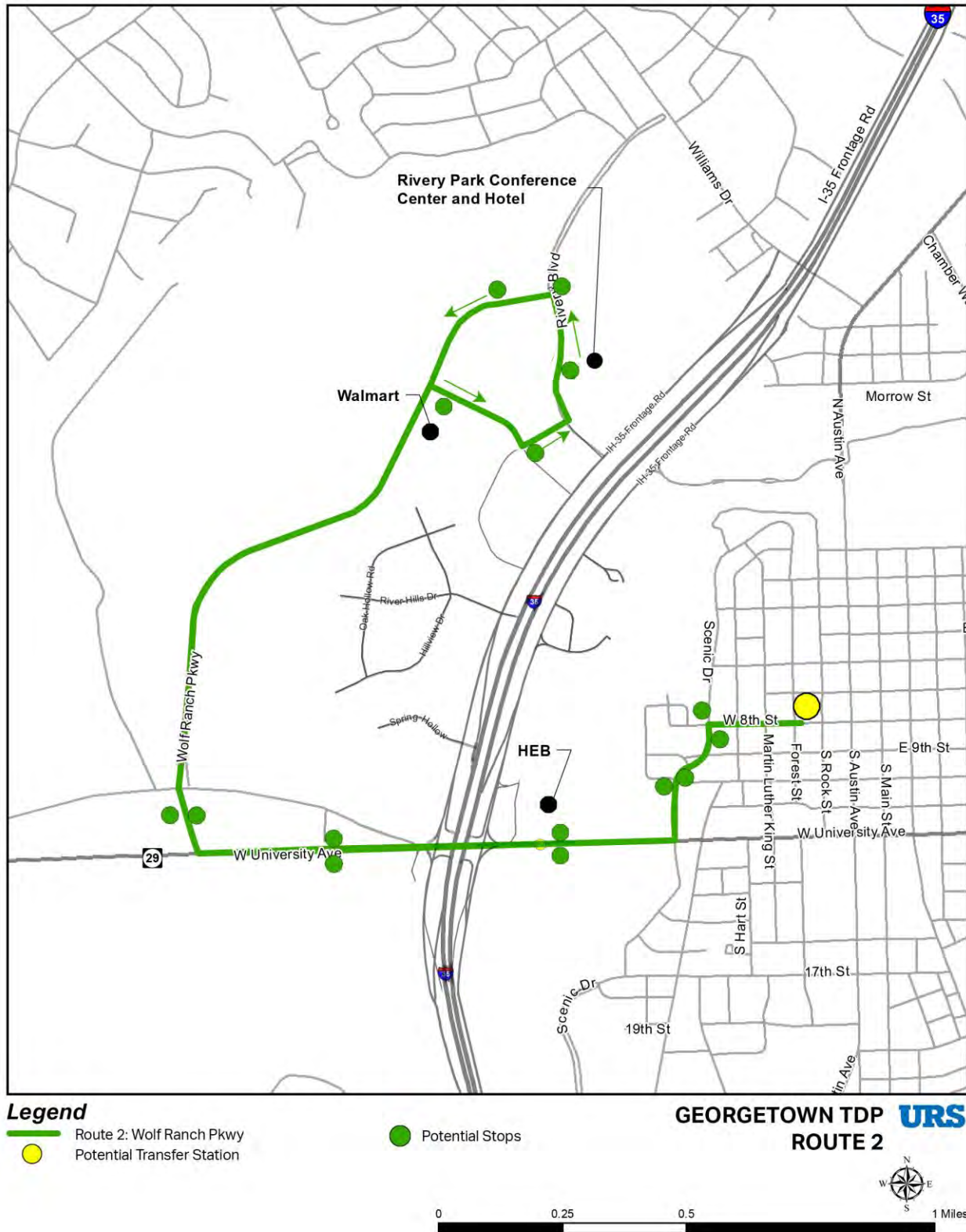
Inbound from Rivery Boulevard and Wolf Ranch Parkway –southwest on Wolf Ranch Parkway, east on W. University Avenue, north on Scenic Drive, east on 9th Street, north on Rock Street, west on 8th Street.

Proposed outbound bus stop locations for the route include:

- Downtown transfer center on W. 8th Street
- Scenic Drive and W. 8th Street
- Scenic Drive and W. 10th Street
- HEB (near University Avenue and IH 35)
- Wolf Ranch Town Center (University Avenue and Simon Road)
- University Avenue and Wolf Ranch Parkway
- Walmart (Rivery Driveway)
- Rivery Driveway and Rivery Boulevard
- Sheraton Hotel and Conference Center
- City Lights Georgetown – A Schulman Theatre (Wolf Ranch Parkway)

The same bus stop locations are recommended for both the outbound and inbound directions excluding outbound only stops: Walmart (Rivery Driveway), Rivery Driveway and Rivery Boulevard, Sheraton Hotel and Conference Center, and inbound stop: City Lights Georgetown – A Schulman Theatre (Wolf Ranch Parkway).

Figure 28: Proposed Route 2 – Wolf Ranch Parkway



Route 3 – Hospital/Leander Road

The proposed Route 3 Hospital/Leander Road connects downtown to the San Jose neighborhood, St. David’s Hospital, and the multi-family residential area in southwest Georgetown. Route 3 also provides service within one block of the Caring Place on Railroad Avenue. The route makes a round trip in approximately 25 minutes and is interlined with Route 4.

A turn-by-turn description of the proposed route is as follows:

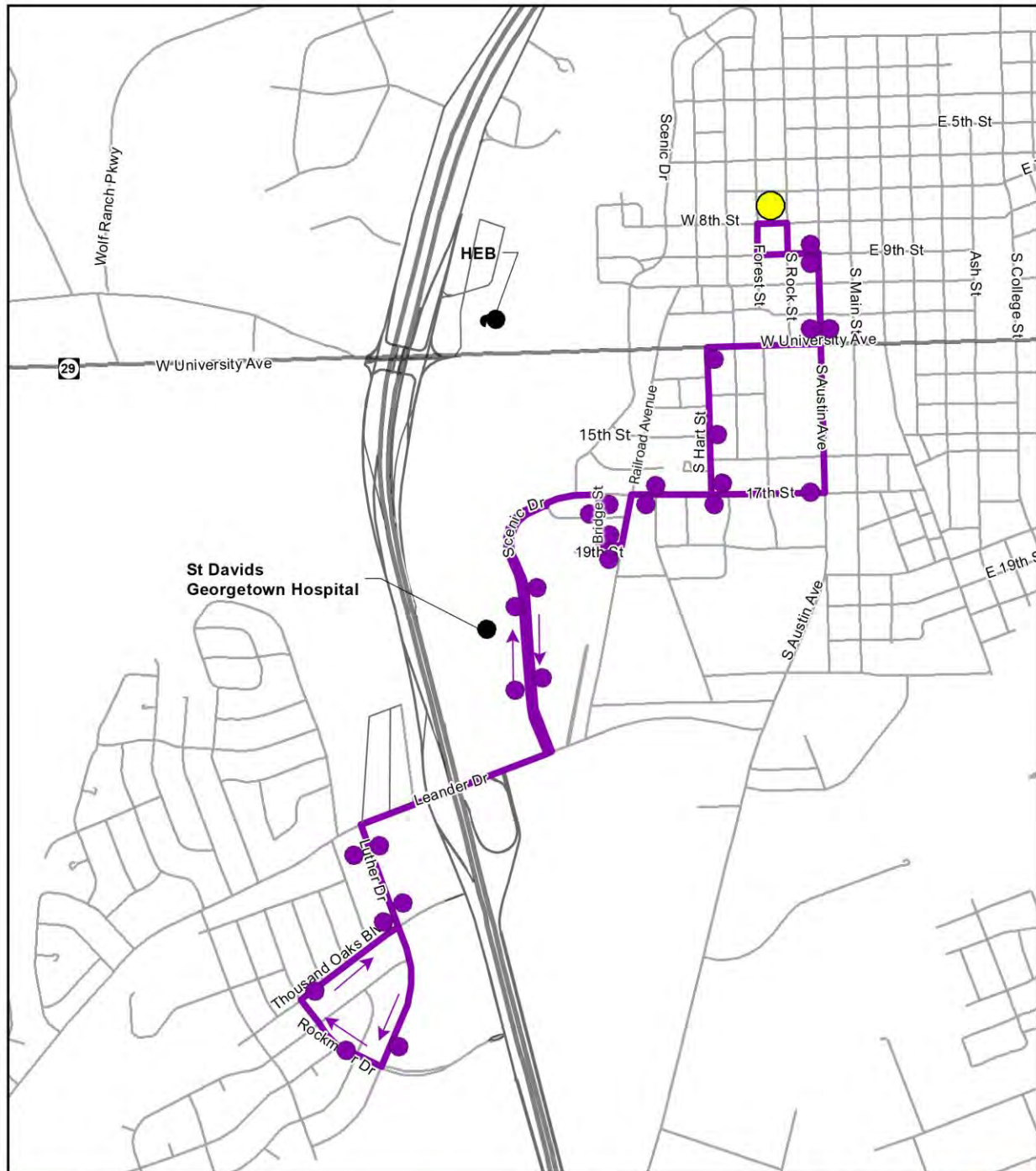
Outbound from proposed transfer center – west on 8th Street, south on Martin Luther King Street, east on W. 9th Street, south on S. Austin Avenue, west on W. 17th Street, south on Railroad Avenue, west on 19th Street, north on Bridge Street, west on W. 17th Street (turns into Scenic Drive), south on Scenic Drive, southwest on Leander Road, south on Luther Drive, northwest on Rockmoor Drive, northeast on Thousand Oaks Boulevard, as illustrated on **Figure 29**.

Inbound from Thousand Oaks Boulevard – north on Luther Drive, northeast on Leander Road, north on Scenic Drive (turns into W. 17th Street), south on Bridge Street, east on 19th Street, north on Railroad Avenue, east on W. 17th Street, north Hart Street, east on University Avenue, west on W. 9th Street, North on S. Rock Street, west on 8th Street.

Proposed outbound bus stop locations for the route include:

- Downtown transfer center on W. 8th Street
- W. 9th Street and Austin Avenue
- Austin Avenue and University Avenue
- Austin Avenue and 17th Street (outbound only)
- 17th Street and Hart Street
- 17th Street and Railroad Avenue
- 19th Street and Railroad Avenue
- Bridge Street and Scenic Drive
- St. David’s Hospital (Scenic Drive)
- Scenic Drive at the Post Office
- Leander Road and Luther Drive
- Georgetown Park Apartments (Luther Drive)
- Luther Drive and Rockmoor Drive
- Rockmoor Drive and Thousand Oaks Boulevard
- Thousand Oaks Boulevard and Luther Drive
- Georgetown Park Apartments
- Leander Road and Luther Drive
- Scenic Drive at the Post Office
- St. David’s Hospital (Scenic Drive)
- Bridge Street and Scenic Drive
- 19th Street and Railroad Avenue
- 17th Street and Railroad Avenue
- 17th Street and Hart Street
- Hart Street and 15th Street
- Hart Street and University Avenue
- University Avenue and Austin Avenue
- W. 9th Street and Austin Avenue

Figure 29: Proposed Route 3 – Hospital/Leander Road



Legend

- Route 3: Hospital/Leander Rd
- Potential Transfer Station

- Potential Stops

GEORGETOWN TDP **URS**
ROUTE 3



Route 4 – Austin Avenue/Williams Drive

The proposed Route 4 Austin Avenue/Williams Drive connects the downtown transfer center to Downtown Square, the Austin Avenue corridor, recreation center (inbound only) and to the multi-family residential area and Lone Star Circle of Care north on Williams Drive. The route makes a round trip in approximately 25 minutes and it interlined with Route 3.

A turn-by-turn description of the proposed route is as follows:

Outbound from the transfer center – west on W. 8th Street, north on Martin Luther King Street, east on 9th Street, north on S. Austin Avenue, northwest on Williams Drive, northeast on Central Drive, northwest on Dawn Drive, southwest on River Bend Drive, south on Williams Drive, as illustrated on **Figure 30**.

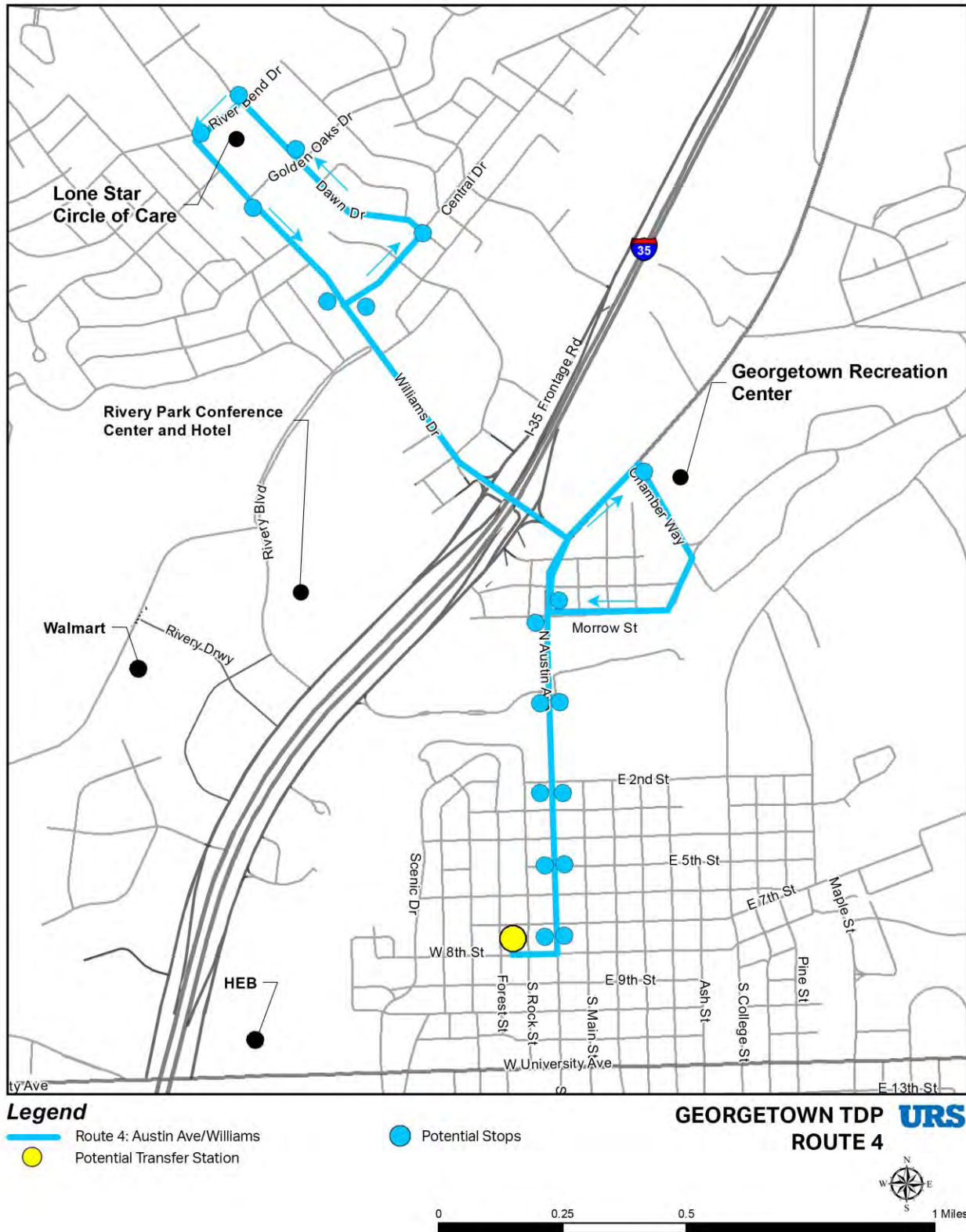
Inbound from Williams Drive including Recreation Center loop – southeast on Williams Drive, northeast on N. Austin Avenue, southeast on Chamber Way, west on Morrow Street, south on S. Austin Avenue, west on W. 8th Street.

Proposed outbound bus stop locations for the route include:

- Downtown transfer center on W. 8th Street
- S. Austin Avenue and 7th Street
- S. Austin Avenue and 5th Street
- S. Austin Avenue and 2nd Street
- N. Austin Avenue and San Gabriel Village Boulevard
- Austin Avenue and Morrow Street
- Williams Drive and Central Drive
- Central Drive and Dawn Drive
- Dawn Drive and Golden Oaks Drive
- Dawn Drive and River Bend Drive
- River Bend Drive and Williams Drive
- Williams Drive and Golden Oaks Drive
- N. Austin Avenue and Chamber Way (Recreation Center)

The same bus stop locations are recommended for both the outbound and inbound directions excluding outbound only stops: Central Drive and Dawn Drive, Dawn Drive and Golden Oaks Drive, Dawn Drive and River Bend Drive, River Bend Drive and Williams Drive, and inbound only stops Williams Bend Drive and Golden Oaks Drive, N. Austin Avenue and Chamber Way (Recreation Center).

Figure 30: Proposed Route 4 – Austin Avenue/Williams Drive



6.1.4 Future Service Expansion Priority Area #1

The goal of the Future Service Expansion Priority Area #1 is to further improve the operations by extending service to new markets. The Future Service Area adds service along the Williams Drive corridor with direct connections to the residential and retail centers and Sun City. The implementation of this service would occur outside of the three-year planning horizon of the TDP after the initial four-route system has time to operate and mature.

The Sun City/Williams Drive route could operate mid-day only service providing connections from the downtown transfer center to the HEB on University Avenue, Wolf Ranch Town Center, Walmart on Rivery Driveway, the Williams Drive corridor, and the Sun City Activity Center. The route would make a round trip in approximately 52 minutes. The route would provide connections to Route 2 on Rivery Boulevard and Route 4 on Williams Drive.

A turn-by-turn description of the proposed route is as follows:

Outbound from proposed transfer center – west on W. 8th Street, south on Scenic Drive, west on University Avenue, north on Wolf Ranch Parkway, northwest on Rivery Boulevard, northwest on Williams Drive, northeast on Del Webb Boulevard, northeast on Sun City Boulevard, as illustrated on **Figure 31**.

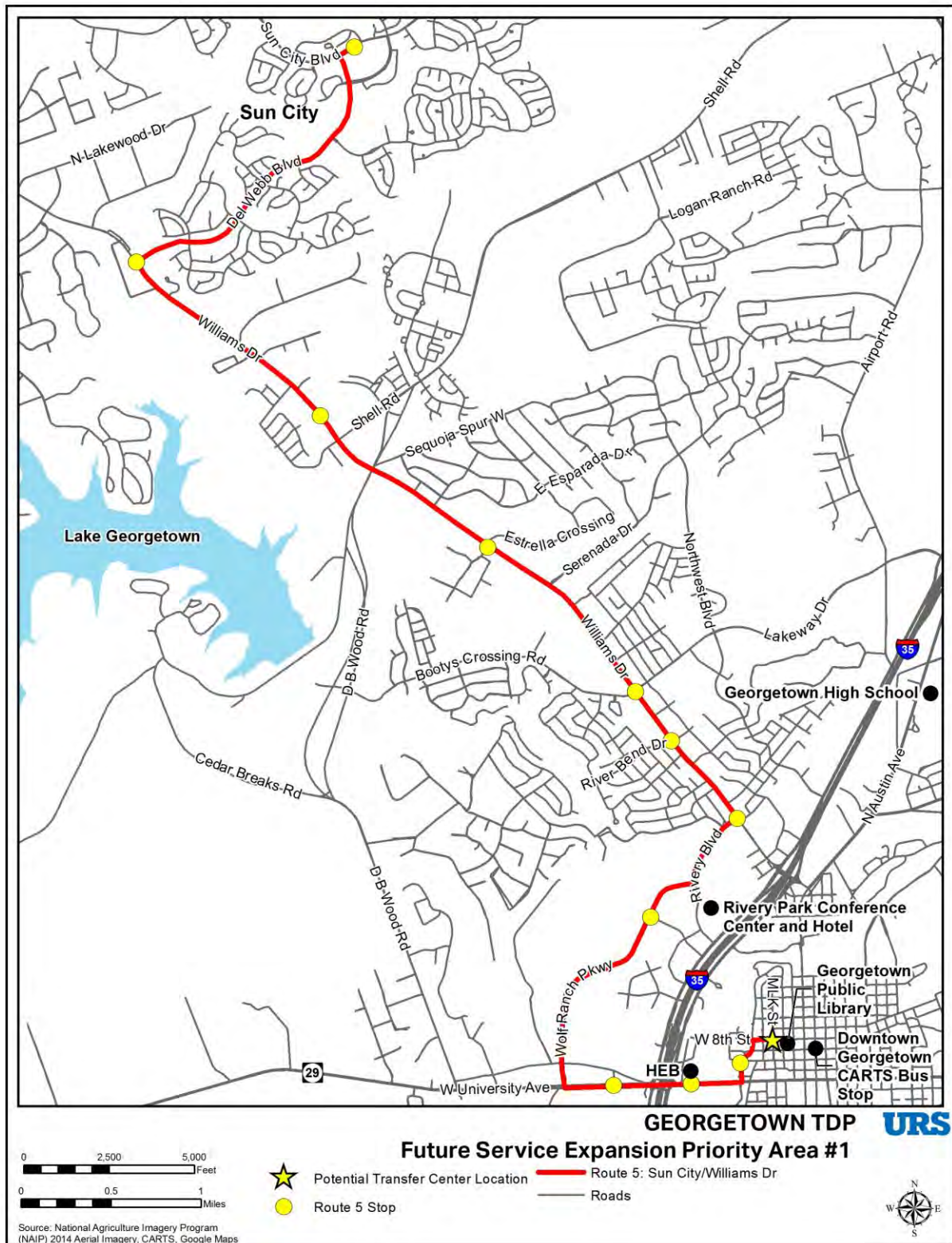
Inbound from Sun City Boulevard – southwest on Del Webb Boulevard, southeast on Williams Drive, southwest on Rivery Boulevard, southwest on Wolf Ranch Parkway, east on University Avenue, north on Scenic Drive, east on W. 8th Street.

Proposed outbound bus stop locations for the route include:

- Downtown transfer center
- Scenic Drive and 10th Street
- HEB (near University Avenue and IH 35)
- Wolf Ranch Town Center (University Avenue and Simon Road)
- University Avenue and Wolf Ranch Parkway
- Walmart (Rivery Driveway)
- Rivery Boulevard and Williams Drive
- Williams Drive and River Bend Drive
- Williams Drive and Lakeway Drive
- Williams Drive and Estrella Crossing
- HEB (Williams Drive and Shell Road)
- Scott & White Clinic (Williams Drive and Del Webb Boulevard)
- Sun City Activity Center

The same bus stop locations are recommended for both the outbound and inbound directions.

Figure 31: Future Service Expansion Priority Area #1 - Proposed Sun City/Williams Drive



In addition, the City of Georgetown may want to consider a special events circulator that connects the new Rivery Park Conference Center with the Downtown Square. This could be a charter service for festivals such as the Red Poppy Festival that provides transportation options other than parking downtown.

6.2 Service Plan Operations

Routes 1, 2, 3, and 4 will operate 12 revenue hours on weekdays from about 6:30 am to 6:30 pm with 60-minute headways on all routes. The round trip travel times on Routes 1, 2, 3, and 4 are about 25 minutes. Each route will have a minimum of five minutes for a layover at the transfer center.

Saturday service will operate 10 service hours from 8:30 am to 6:30 pm with 60-minute headways on Routes 1 to 4. **Table 7**, below, illustrates the proposed schedule of service for fixed route service.

Table 7: Route Characteristics

Route	Headways (in minutes)			Span of Service
	AM Peak (6:30 – 9:00 a.m.)	Base	PM Off-peak (4:00 – 6:30 p.m.)	
Weekday				
1	60	60	60	6:30 am to 6:30 pm
2	60	60	60	7:00 am to 7:00 pm
3	60	60	60	6:30 am to 6:30 pm
4	60	60	60	7:00 am to 7:00 pm
Saturday				
1	60	60	60	8:00 am to 6:00 pm
2	60	60	60	8:30 am to 6:30 pm
3	60	60	60	8:00 am to 6:00 pm
4	60	60	60	8:30 am to 6:30 pm

Source: URS, 2016.

6.2.1 Route Interlining and Timed Transfers

The proposed system is designed to pair routes to provide one-seat rides from one side of the service area to the other. For example, Route 1 on the east side is interlined with Route 2 to Wolf Ranch Parkway which connects the residential areas on Quail Valley to shopping at HEB and Wolf Ranch Town Center. In addition, routes will be timed to arrive and depart the downtown transfer center at designated intervals to allow for timed-transfers or a limited pulse. This means that every half hour at least two of the routes will arrive at the transfer center at the same time allowing a five-minute window for transfers to occur. This alleviates the issue of having 30-minute to 60-minute wait times to transfer between buses. As shown in **Table 8** not all routes will pulse at the same time at the transfer center. For example, passengers on Route 1 have the option of staying on the bus to travel on Route 2 or they can transfer within the five minute window to Route 4. Since Route 1 and Route 3 arrive at the transfer center at the same time the transfers between the routes are not timed. Transfers are also not timed between routes 2 and 4 and will have a 30 minute wait time

Table 8: Route Interlining and Transfers at the Downtown Transfer Center – Weekdays

Starting Route	Departs Transfer Center	Arrives Transfer Center	Layover at Transfer Center	Paired Route	Departs Transfer Center	Arrives Transfer Center	Layover at Transfer Center
Route 1	:30	:55	5 minutes	Route 2	:00	:25	5 minutes
Route 3	:30	:55	5 minutes	Route 4	:00	:25	5 minutes

Source: URS, 2015.

Revenue Hours

Weekday fixed-route operations require 24 daily revenue hours for fixed-route service. The four core routes each operate with a total of six daily revenue hours. Saturday service requires 20 revenue hours due to the shorter span of service and reduced number of routes. Sunday service is not part of the initial three-year plan it can be added over time based on demand.

Revenue Miles

The proposed weekday service plan will require 252.8 total daily revenue miles. The four core routes range between 52 and 73 daily revenue miles. It is recommended to cycle buses between each route in order to balance out the mileage and wear on the vehicles over time.

The total revenue miles for Saturday service is 210.7.

Tables 9 and 10 present the operations plan for the proposed Weekday and Saturday services.

Table 9: Proposed Fixed Route Operations Plan – Weekday

Route No.	Proposed Route Name (Corridor)	Weekday Revenue Hours	Weekday Revenue Miles
1	Eastside/Southwestern University	6.0	60.2
2	Wolf Ranch Parkway	6.0	73.8
3	Hospital/Leander Road	6.0	66.0
4	Austin Avenue/Williams Drive	6.0	52.8
Total		24.0	252.8

Source: URS, 2015.

Table 10: Proposed Fixed Route Operations Plan – Saturday

Route No.	Proposed Route Name (Corridor)	Saturday Revenue Hours	Saturday Revenue Miles
1	Eastside/Southwestern University	5.0	50.2
2	Wolf Ranch Parkway	5.0	61.5
3	Hospital/Leander Road	5.0	55.0
4	Austin Avenue/Williams Drive	5.0	44.0
Total		20.0	210.7

Source: URS, 2015.

Intermodal Connectivity

A key factor in the success of a transit system is intermodal connectivity. The ability of transit users to connect to local transit services via pedestrian and bicycle facilities and to use local transit to reach regional transit connections impacts the ridership of a local system. A system that includes regional connections and safe pedestrian and bicycle access to its facilities will be more successful than a system that does not offer intermodal connectivity. The City of Georgetown plans to complement the future local bus system with connections to other transportation modes. Intermodal connectivity considerations will help transit riders get to the bus stop at the beginning of their trip and reach their final destination at the end of the trip (often referred to as first-mile and last-mile connections). The city has completed an audit of the existing sidewalk infrastructure and has developed a master plan for improving its sidewalk network, including both refurbishment/replacement of existing sidewalk infrastructure and construction of new sidewalk facilities. Additionally, a bike share program is already in place in downtown Georgetown. There are currently two locations, the Georgetown Public Library and the Georgetown Visitors Center, where bicycles can be checked out. Transit riders can also use their personal bicycles to begin and end their transit trips, as bike racks will be available on all Georgetown buses.

The future local bus system will also connect with regional transit services. CARTS will continue to operate trips from downtown Georgetown to the CARTS Georgetown Station on South Austin Avenue north of the SE Inner Loop; the future route of these trips would change slightly to connect with the future transfer center in downtown Georgetown. Connections to future regional services implemented by Capital Metro (Project Connect) and Lone Star Rail District would also be provided by Georgetown’s local bus service.

Paratransit Service

The Americans with Disabilities Act (ADA) requires that all fixed-route transit systems provide complementary demand-response service. ADA only requires that demand-response services operate within a ¼ mile service area of a fixed route. Currently CARTS operates a curb-to-curb general public demand-response system throughout the Georgetown city limits. It is recommended to continue to operate an ADA-only paratransit service within the boundaries of the city instead of the ¾ mile catchment area.

The paratransit service will operate with one demand-response bus 12 hours per day on weekdays and 10 hours per day on Saturdays.

Fare Policy

Determining a fare policy for the system is a local decision. It is very difficult to project ridership, but the target for revenues should be close to six (6) to 10 percent of operating costs. Figures from peer city farebox revenues are shown in **Table 11**. A 10 percent farebox recovery rate should be used as a goal for Georgetown, and as data shows, there are few autonomous peer cities with both a similar population and without the presence of a major college campus. San Marcos, Killeen/Temple (which are now served by the same transit agency), San Angelo, and Tyler are all central Texas communities that do not have major college campuses, are relatively geographically separated from other municipalities, and have populations that provide reasonable comparisons. While Georgetown has a smaller population than most of the peer cities, it is expected to see a growth pattern that will put it within this range in the coming years.

Table 11: Peer City Farebox Recovery Rates

Peer System	Year 2010 Population	Operating Expense	Farebox Revenue	Farebox Recovery Rate
San Marcos	45,000	\$717,069	\$29,431	4.1%
Hill Country (Killeen/Temple)	194,000	\$2,858,387	\$371,526	13.0%
San Angelo	93,000	\$1,227,050	\$110,902	9.0%
Tyler	97,000	\$1,059,543	\$109,725	10.4%
Average of All Four Peer Cities		\$5,862,049	\$621,584	10.6%

Source: National Transit Database, Year 2013 Figures.

Until the system is initiated and the city gains a full understanding of how the system will be utilized, the base fare should be set for a year with an adjustment planned for year 2. CMTA base fare is \$1.25 and CARTS requires \$2 for intra-county trips. Since the Georgetown system is limited to the city limits it is recommended that the city implement a base fare of \$1.00. This is based on what seems to be the market for the trip lengths in the system (less distance than the full county fare at CARTS) but higher than CMTA which is more of a volume-based fare. It should be widely publicized by the city that fare structure will be re-examined for year 2 and potentially adjusted based on ridership and desired revenue recovery percentage (10%).

CARTS utilized a stored-value card system for fares on its system. If CARTS is selected to operate the service, that fare system is customer friendly and reduces cash handling. Most systems do offer a reduced or half-fare for the elderly, disabled, and school-aged children. The city should consider adding this type of fare at the outset of service but this would negatively impact the revenue recovery rate. Other structural changes to the fare policy like adding weekly passes and other discounted fares should be reserved for a future fare analysis based on actual understanding of system utilization.

6.2.2 Capital Plan

The primary capital investments for the system are related to bus stop infrastructure. Since the operation of the system and provision of vehicles are most likely to be contracted with a turnkey operator, major capital investments like vehicles or a maintenance facility will not be necessary to initiate service. To begin the service, an investment in bus stop signage and other amenities will be required and should be implemented in phases as the system matures. It was assumed that up to 90 signs with poles would be installed as well as six benches and four sheltered bench locations.

While it is not expected all of this material would be installed right away, these quantities allow the City to procure the material at a price that will reflect a decent volume. In addition, planning for all capital costs to occur up front allows for the fullest use of federal funds (as described in Section 6.4 below). The City may want to approach CMTA or other transit system for the opportunity to purchase shelters since there are only four needed at this time.

The system will need a total of four vehicles to begin revenue service, all of which will be provided through contract. Two vehicles will be used for fixed route service, one for complementary paratransit, and one spare vehicle will fulfill a standard 20% spare requirement. It is recommended that the City’s fleet consist of four identical cutaway vehicles (similar to the vehicles used by CARTS) for both fixed route and paratransit service, so that the vehicles are easily interchangeable.

Table 12 outlines capital needs for the system.

Table 12: Capital Unit Costs

Item	Unit Cost*	Number of Proposed Units	Total Cost
Flag Stop Signs/Poles	\$250	90	\$22,500
Bench	\$800	10	\$8,000
Shelters	\$7,500	4	\$30,000
Concrete Bench Pad	\$2,500	6	\$15,000
Concrete Shelter Pad	\$2,900	4	\$11,600

**Unit costs are approximate including labor and install in FY15 dollars.*

Costs may vary as a result of condition, quantity, or special agreement

SOURCE: AECOM, 2016

6.2.3 Marketing Plan

A comprehensive marketing plan for the recommended system should be developed to assist in implementing the new system. This can be done through a partnership between the city and Capital Metro staff. A strong marketing plan is crucial for establishing the foundation for future marketing strategies once the implementation is completed.

Items to be addressed could include:

- Overall system image/brand
- Graphics/maps/schedules
- Community outreach
- Advertising
- Coordination techniques with other organizations

It is essential that a distinctive system logo, vehicle paint scheme, signage, and theme for the new services be developed to generate a unique and positive image for the transit program. A key recommendation is that the image (logo/graphics) created be unique to the service area and avoid the more conventional or institutional look often utilized by new transit systems.

Customer Service is closely linked with marketing as this function typically:

- Provides transit service information through various methods including internet, printed media and telephone
- Coordinates the sale of fare media
- Handles customer complaints, commendations, inquiries, requests, and suggestions
- Responsible for “Lost and Found”

6.2.4 Service Monitoring

Transit systems have recurrent needs and requirements to collect and report a wide range of information about operations and ridership. The continual compilation of data is essential for the effective planning and management of transit services. Without detailed operations information, the ability to effectively monitor and report system performance and subsequently revise services would be severely impacted. Resource limitations frequently limit comprehensive service monitoring programs. However, the information resulting from service monitoring is very important because fundamental transit functions

such as scheduling, service planning, maintenance, finance, and marketing require this data for decision making and reporting.

Key considerations for establishing a service monitoring program include:

- Identification of the data categories to be collected
- Methods and sources to be used in data collection
- Procedures to be used to process and store the data
- Evaluating and reporting the data in a meaningful and ongoing format
- Determining where required reports should be transmitted
- Ensuring required reports are properly transmitted

Program elements must be identified prior to the initiation of service as certain data must be recorded on a daily basis. The City of Georgetown should work with Capital Metro to ensure the data is collected, evaluated, and reported in an accurate and timely manner. In addition to compilation of statistical data, periodic field observations of system operations and contract monitoring must also be regularly undertaken. See Appendix B for City of Georgetown proposed service monitoring metrics.

Implementation Plan

The following section outlines the recommended phased approach of the TDP.

Year 0 – August 2016 – September 2017 – Contracting and System Start-up

- Present Plan for adoption to Georgetown City Council
- City of Georgetown and Capital Metro finalize budget for service based on council priorities
- Maintain existing CARTS service during Year 0.
- Set system start-up date – Financial Plan (Section 6.4) assumes a start date of August 1, 2017.
- City of Georgetown and Capital Metro enter into an agreement for service.
- Develop Capital Plan.
- Procure buses for service.
- Procure bus stop amenities – stops, benches, and shelters.
- Initiate marketing campaign to promote new service. City of Georgetown and Capital Metro coordinate outreach to the public about service and implementation date.
- Begin bus stop placement and transfer center implementation.
- August 1, 2017 – Start service.

Year 1 – FY 2018 – Implementation and Monitoring Service

- Develop method for collecting feedback from clients – customer comments should be documented by contractor for analysis by the city.
- Prepare Title VI review to ensure that the level and quality of fixed-route and demand-response services are provided in a non-discriminatory manner. The City of Georgetown and Capital Metro will need to provide equitable service that meets the requirements of the Title VI Civil Rights Act of 1964 (Title VI). Title VI ensures that no person shall be excluded from participation in, denied benefits of or be subjected to discrimination on the basis of race, color, or national origin under any program receiving federal financial assistance. This process may best be incorporated into the Capital Metro plan.
- Update and establish regular procedures for maintaining system goals, objectives, and strategies based on first six months of service.
- Track service data for service standards and present to the City Council.
- Provide annual TDP update to Capital Metro.

Year 2 – FY 2019

- Conduct on-board counts and rider survey – the survey would be most effective in the spring of 2018 to allow for 18 months from initial start-up. Travel patterns and utilization by passengers should be established by then.
- Assess service for potential service improvements or changes for implementation at the.
- Begin to implement a more comprehensive passenger amenities program to optimize bus stops and add benches and shelters as necessary.
- Monitor fleet needs to plan for adequate inventory.
- Incorporate any budgetary changes into city budget and service contract.
- Provide annual TDP update to Capital Metro.
- Assess demand and funding for Williams Road and Sun City service.

Year 3 – FY 2020

- Implement service improvements, if warranted.
- Provide annual TDP update to Capital Metro.

6.3 Financial Plan

A three-year financial plan was developed for the system based on the capital needs, operating plan, and an assumed start date of August 1, 2017. This start date will allow the City adequate time to negotiate a contract with a service provider, procure vehicles (if necessary) and assemble federal funds and will serve as a soft launch of services prior to schools resuming at the end of August. Fiscal Year 2017, which begins October 1, 2016, will include ten months of Demand-Response service at existing levels and two months of the recommended service from August 1 to September 30. The financial plan includes FY 17 cost and revenue projections as year-zero, with three years of full service costs and revenues for FY18 – FY20.

6.3.1 Operating Costs

As mentioned in the operating plan, the overall cost of the system is based on the assumption that the City will choose to have the service contractor provide vehicles. This eliminates a major capital outlay but results in a higher unit cost for service. Fixed Route system operating costs start at \$75 per revenue hour in FY17 and are inflation adjusted through 2020. Demand Response service costs for the beginning of FY17 reflect current inflation-adjusted costs. Operating costs reflect 6,114 revenue hours of service in FY17 and 10,686 revenue hours for FY18-FY20.

Operating costs assume farebox revenues will increase gradually over the 3-year plan, corresponding with targets for ridership growth. Farebox revenues are expected to account for 6% of operating costs in FY18, 8% in FY19, and 10% in FY20. The City should reserve a contingency to cover net operating cost, in the event that system utilization does not generate this level of fare recovery. Total operating costs for the system will start at approximately \$757,000 in FY18.

6.3.2 FTA Section 5307 Funding

The urbanized formula funding program (Section 5307) provides dollars for capital and operating assistance in urbanized areas (UZA) as well as transportation-related planning. The formula is based on the UZA's population, population density, and transit service statistics. Based on the formula, the revenue coming to the region should increase as more service is introduced and as the population continues to grow. New 2020 census estimates may increase total allocation to the region; however, for purposes of this financial plan, no growth in federal §5307 funding is assumed the FY18-FY20 plan years.

The current level of FTA §5307 funding allocated to the City of Georgetown is \$251,098 annually. An additional \$14,285 is available for transit services in the Serenada subdivision. These funds can be used for both operating and capital expenditures with 60% and 20% non-federal funding match requirements, respectively. The urbanized formula is also broken down into three categories based on population that have different regulations governing eligible expenditures and the formula itself.

In FY17, local match requirements limit the amount of §5307 funding that can be applied to capital and operating expenses. Just under \$70,000 of available §5307 resources, not committed to operating or capital expenses outlined in this plan, is expected to be applied towards planning activities. In FY18 – FY20, operating expenses exceed local match requirements, and the entire available amount is applied.

6.3.3 Local Funding Sources

The Georgetown Health Foundation has set aside \$600,000 over three years to help initiate transit service improvements. The financial Plan assumes \$200,000 per year beginning the first full year of service. An additional revenue stream is assumed to come from advertising on wrapped vehicles. Projected revenue is based on \$1,000 per month per vehicle, yielding \$4,000 for two months of fixed route service in FY17, and \$24,000 per year thereafter.

The remaining local funding needed to meet capital and operating costs of the proposed transit system is expected to come from the City of Georgetown. All operating and capital costs and revenue sources are shown in **Table 13**, the Georgetown TDP Financial Plan.

Table 13: Financial Plan

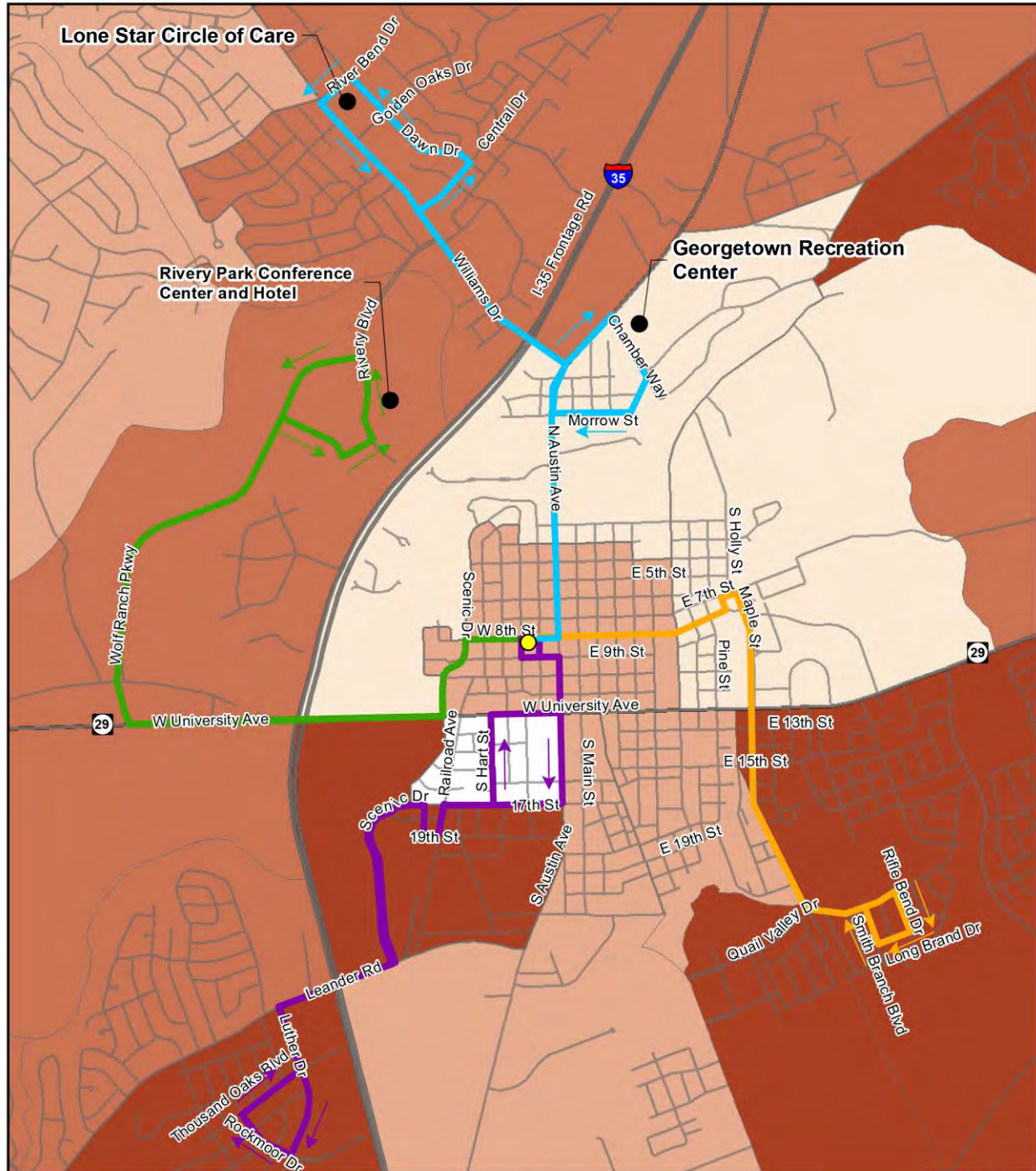
Operating Plan	Vehicles	Daily Hrs.	Service Date	Annual Rev. Hrs. FY 17	Annual Rev. Hrs. FY 18	Annual Rev. Hrs. FY 19	Annual Rev. Hrs. FY 20
Fixed Route - Weekday	2	24	8/1/2017	1,004	6,024	6,024	6,024
Fixed Route - Saturday	2	20	8/1/2017	183	1,100	1,100	1,100
Paratransit - Weekday	1	12	8/1/2017	502	3,012	3,012	3,012
Paratransit - Saturday	1	10	8/1/2017	92	550	550	550
Demand Response (Oct16-Aug17)			Phase out	4,333	0	0	0
System/Fleet Total	4			6,114	10,686	10,686	10,686
Operating Expenses				FY 17	FY 18	FY 19	FY 20
Cost/Rev. Hr. Fixed Route				\$ 75	\$ 77	\$ 79	\$ 81
Cost/Rev. Hr. Demand Response				\$ 69			
Annual Operating Cost for proposed service				\$ 431,658	\$ 823,089	\$ 845,313	\$ 868,136
Fare Recovery (Variable from 6-10%)				\$ (25,899)	\$ (65,847)	\$ (84,531)	\$ (86,814)
Operating Total				\$ 405,759	\$ 757,242	\$ 760,781	\$ 781,322
Capital Expenses			\$FY 15 Est.	FY 17	FY 18	FY 19	FY 20
Vehicles provided through contract			\$ -				
Stop Amenities (FY15 Est. Cost)			\$ 87,100				
FY 17 Capital (50,000 programed in FY 16)			\$ 41,611				
Total Capital and Operating Expense			\$ 447,370	\$ 757,242	\$ 760,781	\$ 781,322	
Revenue				FY 17	FY 18	FY 19	FY 20
5307 Operating (60% Local Match)				\$ 162,304	\$ 251,098	\$ 251,098	\$ 251,098
5307 Capital (20% Local Match)				\$ 33,289	\$ -	\$ -	\$ -
Serenada Subdivision				\$ 14,285	\$ 14,285	\$ 14,285	\$ 14,285
5307 Available for Planning*				\$ 69,791	\$ -	\$ -	\$ -
Georgetown Health Foundation				\$ -	\$ 200,000	\$ 200,000	\$ 200,000
Advertising (\$1,000 per month of FR service * 2 vehicles)				\$ 4,000	\$ 24,000	\$ 24,000	\$ 24,000
Local Funding				\$ 233,492	\$ 267,859	\$ 271,398	\$ 291,939
Total Revenue				\$ 447,370	\$ 757,242	\$ 760,781	\$ 781,322

*No assumptions have been made regarding the need for planning funds or local contributions towards planning. This represents the amount of Georgetown 5307 funding remaining in each fiscal year after capital and operating assumptions are met.

Source: AECOM, 2016

6.4 Appendix A: Demographic Maps with Proposed Route Network

Percent of Population 18 and Under

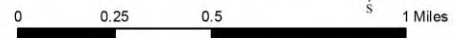


Legend

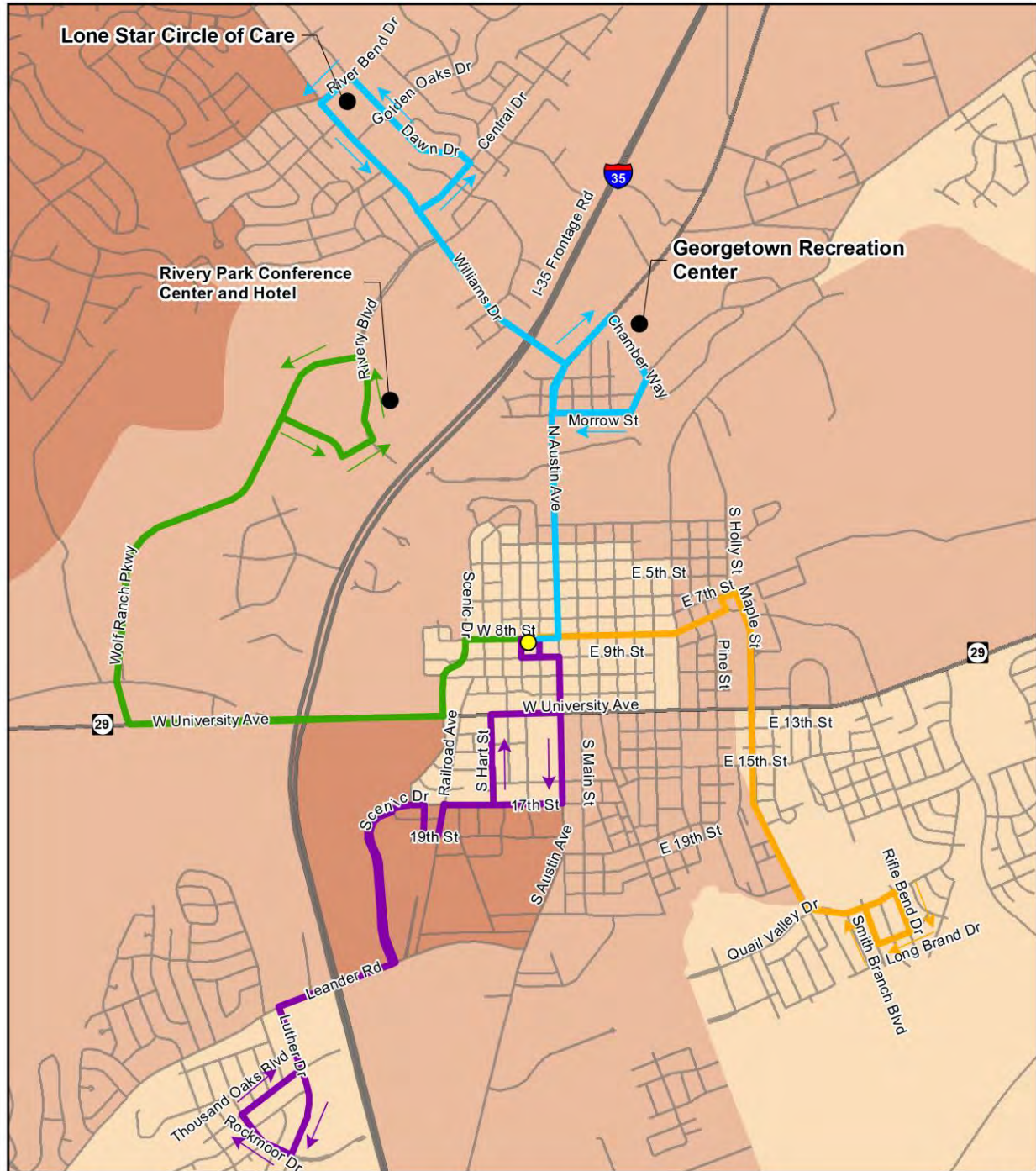
- Route 1: Eastside/Southwestern University
- Route 2: Wolf Ranch Pkwy
- Route 3: Hospital/Leander Rd
- Route 4: Austin Ave/Williams
- Potential Transfer Station

Percent of Population 18 and Under

- 0.00% - 0.10%
- 0.11% - 0.20%
- 0.21% - 0.30%
- 0.31% +



Percent of Population Age 65 and Older

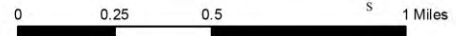


Legend

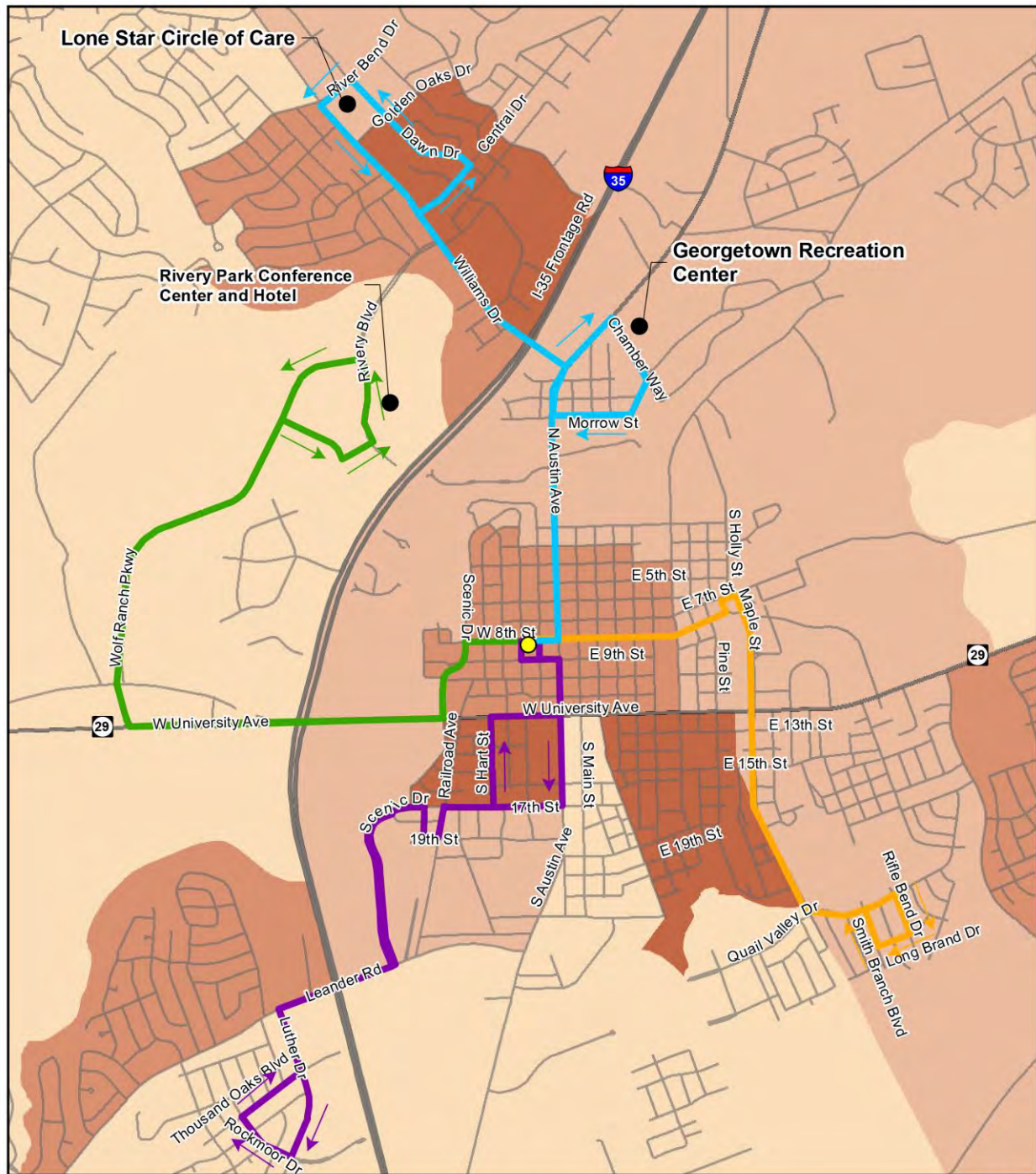
- Route 1: Eastside/Southwestern University
- Route 2: Wolf Ranch Pkwy
- Route 3: Hospital/Leander Rd
- Route 4: Austin Ave/Williams
- Potential Transfer Station

Percent of Population Age 65 and Older

- 0% - 10%
- 11% - 25%
- 26% - 40%
- 41% - 60%
- 61% - 90%



Population Density



Legend

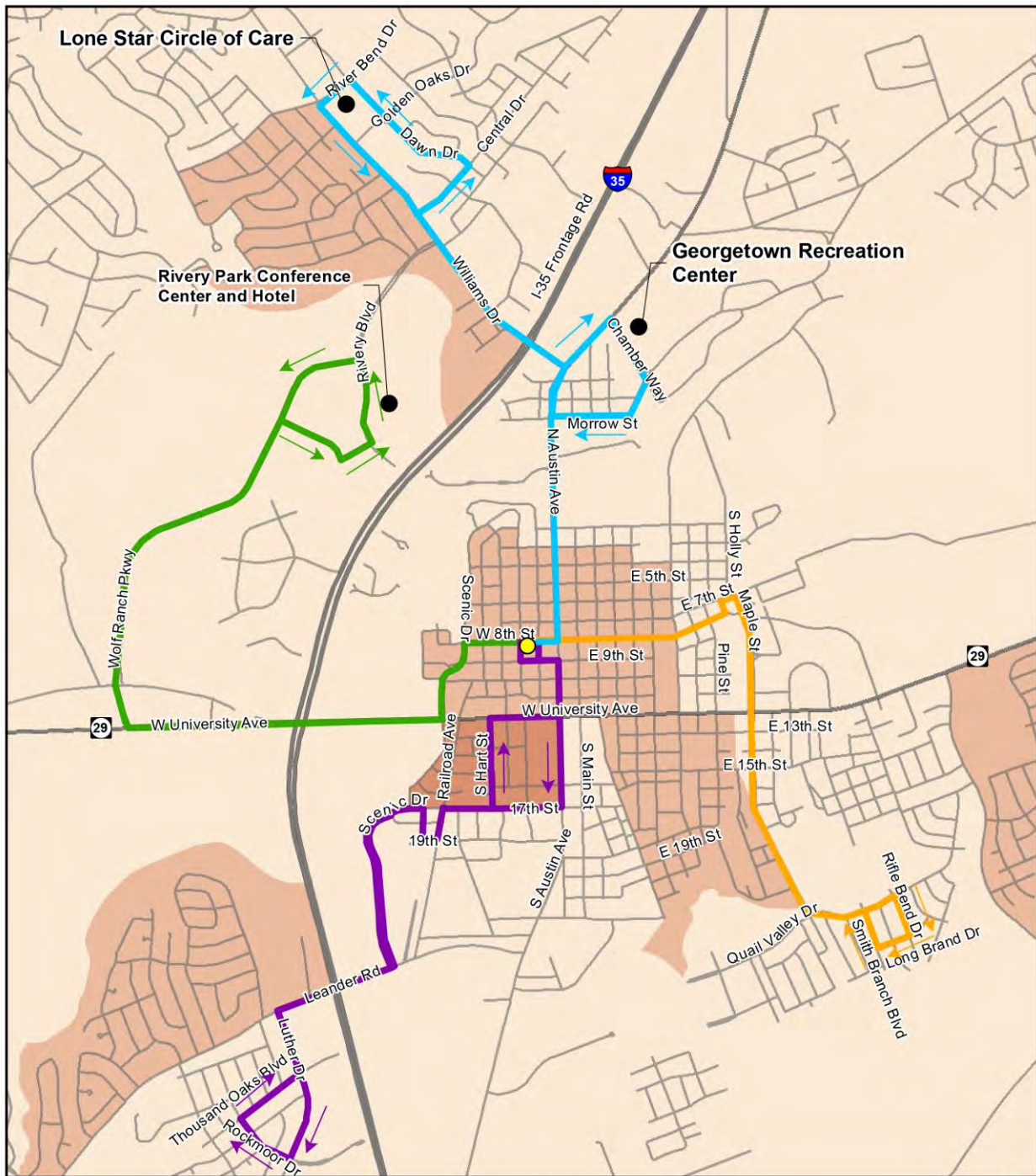
- Route 1: Eastside/Southwestern University
- Route 2: Wolf Ranch Pkwy
- Route 3: Hospital/Leander Rd
- Route 4: Austin Ave/Williams
- Potential Transfer Station

Population Density - Persons/Acre

- 0 - 2
- 3 - 4
- 5 - 6
- 7 - 9
- 10 - 15



Employment Density

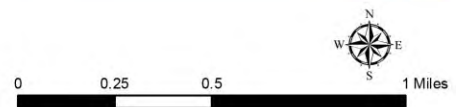


Legend

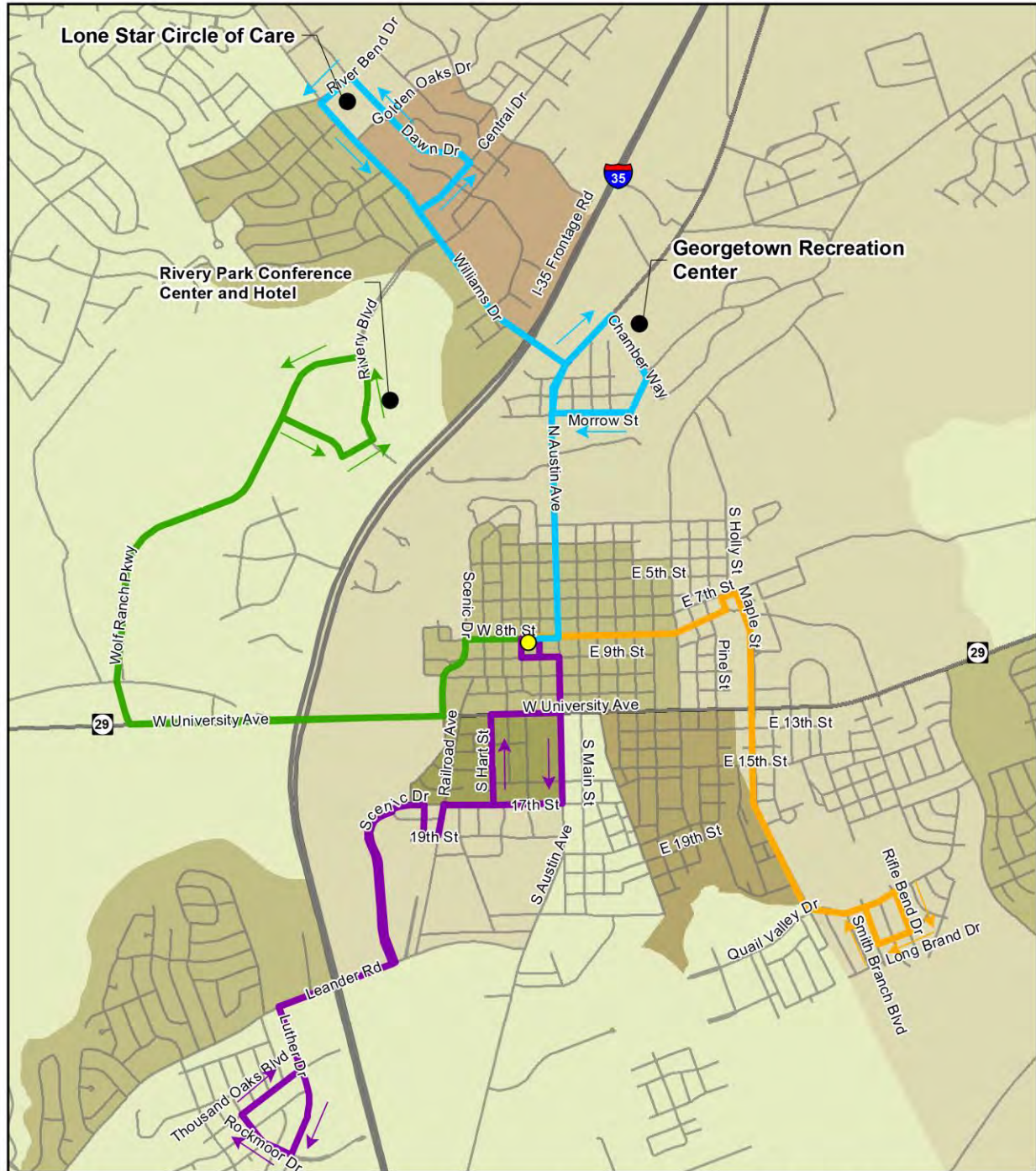
- Route 1: Eastside/Southwestern University
- Route 2: Wolf Ranch Pkwy
- Route 3: Hospital/Leander Rd
- Route 4: Austin Ave/Williams
- Potential Transfer Station

Employment Density - Persons/Acre

- 0 - 2
- 3 - 4
- 5 - 6
- 7 - 9
- 10 - 15



Combined Population and Employment Density



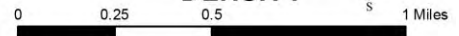
Legend

- Route 1: Eastside/Southwestern University
- Route 2: Wolf Ranch Pkwy
- Route 3: Hospital/Leander Rd
- Route 4: Austin Ave/Williams
- Potential Transfer Station

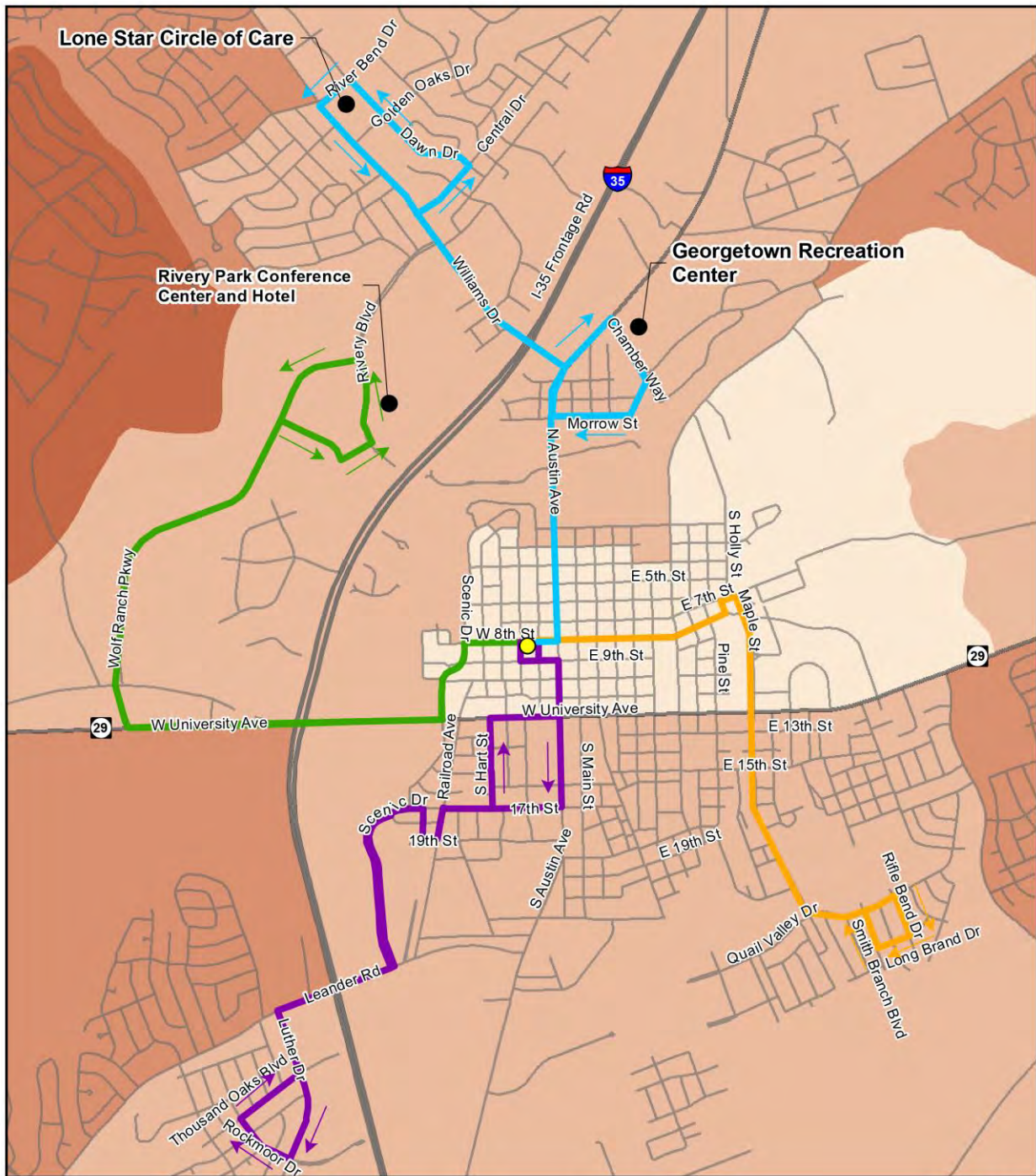
Employment and Population Density

- Persons/Acre
- 0 - 2
 - 3 - 4
 - 5 - 6
 - 7 - 9
 - 10 - 15

**GEORGETOWN TDP
EMPLOYMENT &
POPULATION
DENSITY**



Median Income



Legend

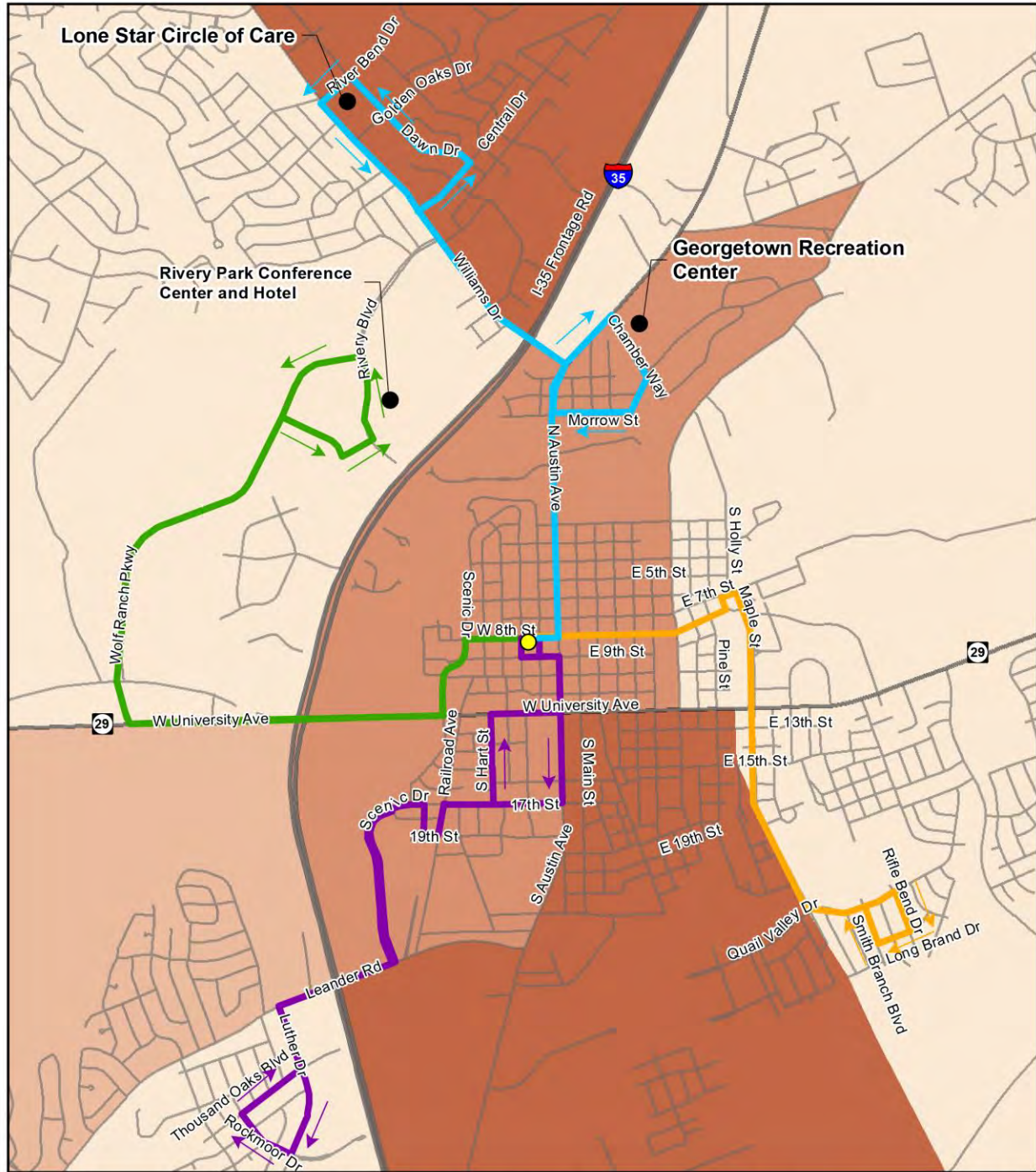
- Route 1: Eastside/Southwestern University
- Route 2: Wolf Ranch Pkwy
- Route 3: Hospital/Leander Rd
- Route 4: Austin Ave/Williams
- Potential Transfer Station

Median Income - Dollars

- 0 - 20,000
- 20,001 - 40,000
- 40,001 - 60,000
- 60,001 - 80,000
- 80,001 - 100,000



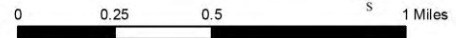
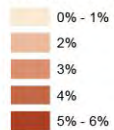
Zero Car Availability



Legend

- Route 1: Eastside/Southwestern University
- Route 2: Wolf Ranch Pkwy
- Route 3: Hospital/Leander Rd
- Route 4: Austin Ave/Williams
- Potential Transfer Station

Percent of Driving Age Population with Zero Car Availability



6.5 Appendix B: Key Performance Measures

I. Transit Goals and Objectives

Transit system performance must be measured based on goals and standards that reflect the operating environment and values of the community it serves. The goals and objectives for transit service in Georgetown were established in the 2015 Georgetown Transit Development Plan. The goals and objectives reflect the needs heard from the community, a review of existing conditions, and an analysis of the type of transit service that would meet the community's needs. Below are the four goals developed through this process.

Goal 1: Provide a safe, reliable, efficient, and accessible transportation option for residents and visitors of Georgetown.

Objective: Improve service efficiency and reliability for existing service by meeting or exceeding established standards of performance.

- Strategy: Identify key performance indicators specific to Georgetown; establish standards for these indicators that correlate with effective service delivery.
- Strategy: Establish a schedule for service evaluation and follow-up remedial actions.
- Strategy: Improve productivity in the service area.

Goal 2: Adequately address the mobility needs of Georgetown residents.

Objective: Improve access to employment, healthcare, shopping, and recreation.

- Strategy: Identify locations of employment, healthcare, shopping and recreation locations.
- Strategy: Define delivery times for employment, healthcare, shopping and recreation locations.
- Strategy: Refine routing to provide more direct access to some of the major destinations in the city, within existing resources based on location and delivery time review.

Goal 3: Maximize resource utilization and operational efficiency with respect to system administration and operations.

Objective: Maintain capital assets (vehicles and maintenance materials) in State of Good Repair.

- Strategy: Develop objective standards for measuring conditions of capital assets.
- Strategy: Establish performance measures for capital assets.
- Strategy: Develop policies and standards for replacement and rehabilitation of capital assets.

Goal 4: Develop a local system that operates effectively in the short-term, continues to develop an audience for regional transit options in the mid-term, and will connect the local community to the region in the long-term.

Objective: Provide access to activity centers today with an understanding of where future regional transit infrastructure is proposed to be located.

- Strategy: Submit regional transit projects to the CAMPO Transportation Improvement Plan (TIP).
- Strategy: Develop dedicated funding sources for local transit system.
- Strategy: Promote Project Connect North through city website and biennial Citizen Survey. Coordinate public awareness of Project Connect through public meetings and open houses.

II. Performance Measures

Performance measures are developed to address standards of service effectiveness, cost effectiveness, and cost efficiency. These standards will be used to guide service evaluations, set standards for future service changes, ensure compliance with federal requirements for the city of Georgetown, and ensure that the city’s transit goals are being met.

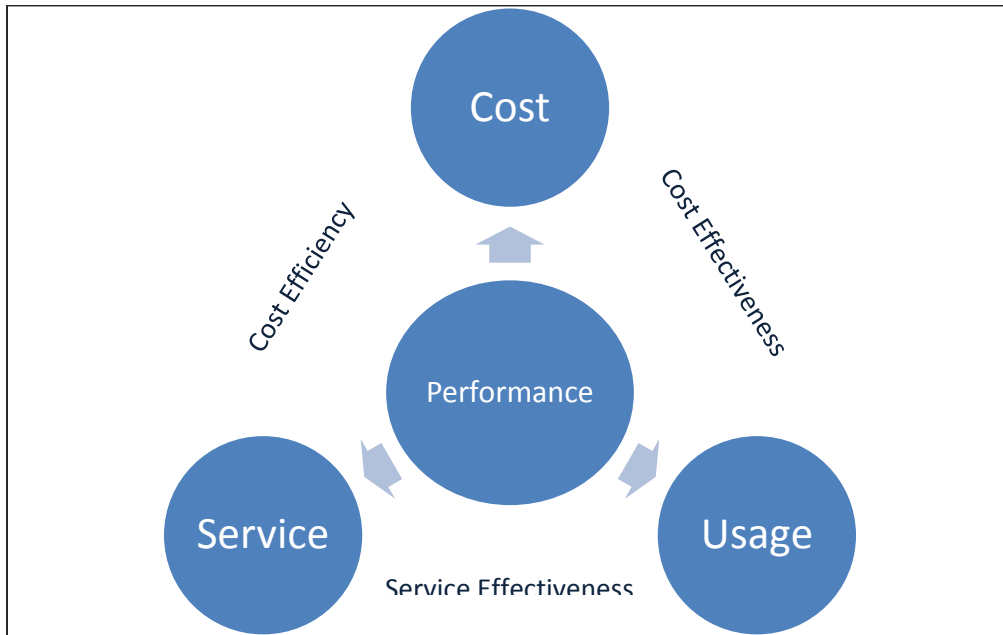
The standards used to measure performance of the Georgetown system are a sub-set of the measures that all federally funded transit agencies are required to provide the National Transit Database (NTD). The NTD was established by Congress to be the Nation’s primary source for information and statistics on the transit systems of the United States. Recipients of grants from the Federal Transit Administration (FTA) under the Urbanized Area Formula Program (§5307) are required by statute to submit data to the NTD.

There are several measures that are used for NTD reporting; however, some measures are more helpful in determining success of a route or system. Four measures have been selected to monitor the Georgetown fixed-route service. They are based on the selected measures that peer transit agencies use to monitor transit systems. The selected measures of the Georgetown fixed-route system and include:

1. Passengers per revenue hour (service effectiveness/productivity)
2. Fare recovery ratio (cost effectiveness)
3. Cost per passenger (cost effectiveness)
4. Cost per revenue hour (cost efficiency)
5. On-Time Performance (service effectiveness)

The five performance measures will be considered in relationship to each other, as success of a system is based on a number of factors, as shown below. The measures will be reported by route and by the system as a whole. Additionally, the measures should be reported to Georgetown City Council at least yearly in order to assist City Council in making decisions about the routes and the system.

Performance Standards and Common Elements



III. Descriptions of Key Performance Measures and Goals for Years One, Two and Three

Below is a description of the performance measures and goals that will be used to assess Georgetown’s four core bus routes. Routes one and two are paired, so the goals should be shown in combination for both routes. Routes three and four are also paired, so the goals are paired as well.

1. PASSENGERS PER REVENUE HOUR

Passengers per revenue hour is a key productivity measurement that works as an effective tool for future service planning. Improving ridership is often the goal of planning bus service, however it is just as important to plan for additional ridership with a “right sized” route or system. Passengers per revenue hour is calculated by dividing the total number of passengers by the total number of revenue service hours. It provides a data point for monitoring ridership as it relates to total bus hours operated.

Passenger Per Revenue Hour Goals

	Year 1	Year 2	Year 3
Routes 1 & 2	6	8	10
Routes 3 & 4	6	8	10

2. FARE RECOVERY RATIO

Fare recovery is the fraction of operating expenses that are met by the fares paid by passengers. Fare recovery is calculated by dividing fare revenue by operating costs.

Fare Recovery Goals

	Year 1	Year 2	Year 3
Routes 1 & 2	6%	8%	10%
Routes 3 & 4	6%	8%	10%

3. COST PER PASSENGER

Cost per passenger is designed to track the cost effectiveness for the system as it relates to ridership over time. Cost per passenger is calculated by dividing the total operating expenses by total passengers (unlinked trips) to calculate the cost for each passenger on the service. Cost per passenger does not include fare recovery.

Cost Per Passenger Goals

	Year 1	Year 2	Year 3
Routes 1 & 2	\$12	\$9	\$7
Routes 3 & 4	\$12	\$9	\$7

4. COST PER REVENUE HOUR

Cost per revenue hour is considered a cost efficiency measure, focusing on how well an agency uses resources to deliver services, irrespective of usage. Cost per revenue hour is calculated by dividing total operating expenses by revenue hours. Revenue hours represent the hours that vehicles are available for public use. Cost per revenue hour does not include fare recovery.

Cost Per Revenue Hour Goals

	Year 1	Year 2	Year 3
Routes 1 & 2	\$75	\$75	\$75
Routes 3 & 4	\$75	\$75	\$75

5. ON-TIME PERFORMANCE

Schedule adherence or on-time performance refers to the level of success of the bus remaining on the published schedule. On time performance is expressed as a percentage, with a higher percentage meaning more vehicles are on time. The level of on time performance is an important measure of the effectiveness of the system.

On-Time Performance Goals

	Year 1	Year 2	Year 3
Routes 1 & 2	95%	95%	95%
Routes 3 & 4	95%	95%	95%

Attachment A

Draft Yearly Performance Measure Report

1. PASSENGERS PER REVENUE HOUR

Goal			
	Year 1	Year 2	Year 3
Routes 1 & 2	6	8	10
Routes 3 & 4	6	8	10

Actual			
	Year 1	Year 2	Year 3
Routes 1 & 2			
Routes 3 & 4			

Observations/Comments			

2. FARE RECOVERY RATIO

Goal			
	Year 1	Year 2	Year 3
Routes 1 & 2	10%	10%	10%
Routes 3 & 4	10%	10%	10%

Actual			
	Year 1	Year 2	Year 3
Routes 1 & 2			
Routes 3 & 4			

Observations/Comments

3. COST PER PASSENGER

Goal			
	Year 1	Year 2	Year 3
Routes 1 & 2	\$12	\$9	\$7
Routes 3 & 4	\$12	\$9	\$7

Actual			
	Year 1	Year 2	Year 3
Routes 1 & 2			
Routes 3 & 4			

Observations/Comments			

4. COST PER REVENUE HOUR

Goal			
	Year 1	Year 2	Year 3
Routes 1 & 2	\$75	\$75	\$75
Routes 3 & 4	\$75	\$75	\$75

Actual			
	Year 1	Year 2	Year 3
Routes 1 & 2			
Routes 3 & 4			

Observations/Comments

5. ON-TIME PERFORMANCE

Goal			
	Year 1	Year 2	Year 3
Routes 1 & 2	95%	95%	95%
Routes 3 & 4	95%	95%	95%

Actual			
	Year 1	Year 2	Year 3
Routes 1 & 2			
Routes 3 & 4			

Observations/Comments

6. SUMMARY

Observations/Comments on overall system performance:
Observations/Comments on unmet goals:
Next Steps: