East Texas
Regionally Coordinated Transportation Plan

Final Plan

February 17, 2022

KFH
◆ GROUP ◆

Austin, TX | Bethesda, MD | Seattle, WA

Prepared for:

east Texas
council of
Governments

Texas
Department
of Transportation

EasTexConnects

Table of Contents

Chapter 4: Planning for Comprehensive Services

Chapter 5: Integrated Planning Process

Chapter 6: Coordination Goals and Objectives

Chapter 7: Sustainability and Implementation Planning

Chapter 8: Strategies for the Future

Chapter 9: Goals and Performance Measures

Appendix A: Review of Recommendations for Improving and Expanding Mobility from Previous Plan
Appendix B: Stakeholders

Section 1:
Introduction

This plan is the culmination of a process led by the East Texas Council of Government (ETCOG) and the EasTexConnects Committee to update a 5-year regionally coordinated transportation plan. This updated plan will serve as a roadmap for implementing service changes, improvements, and/or potential expansion over the five year timeframe. It will also serve as a basis for preparing grant applications for funding.

While planning efforts were directed toward improving and increasing service to meet the needs of all residents, the updated plan provides an emphasis the mobility needs of the following population groups that often face transportation challenges:

- Older adults
- Persons with disabilities
- Low income residents
- Zero car households
- Youths
- Veterans
- Non-English speaking residents (Title VI)

Overview of the Plan

This section provides background on the planning requirements and discussion of several key considerations that helped frame the overall planning process. The remaining plan is presented through the following sections that address all elements of the plan structure as outlined by the Texas Department of Transportation (TXDOT):

- **Section 2: Transportation Resources in the Region** provides an inventory of current services offered through public, private, non-profit and other organizations in the region.

- **Section 3: Comprehensive Assessment of Unmet Transportation Needs** provides a review of demographics, travel patterns and comments received from stakeholders and the public. It also emphasizes transit dependent populations (elderly, persons with disabilities, low income, and zero-car households), veterans, and Title VI populations including those with a language barrier. This section also includes the gap analysis.

- **Section 4: Planning for Comprehensive Services** describes how human service and healthcare programs work with transit.

- **Section 5: Integrated Planning Process** reviews of other planning processes in the study area.

- **Section 6: Vision, Mission, Goals and Objectives** discusses priorities for the planning process.

- **Section 7: Sustainability Planning** provides metrics for ensuring services can continue into the future.

- **Section 8: Organizational, Operational and Financial Strategies for the Future** details strategies for improving and expanding mobility in the region.

- **Section 9: Performance Measures** includes measures for the plan as well as for service operations.

Purpose of the Regionally Coordinated Transportation Plan

One of the funding resources administered by the Federal Transit Administration (FTA) is the Enhanced Mobility of Seniors and Individuals with Disabilities Program, better known as Section 5310. The purpose of the Section 5310 Program is to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services. One of the requirements of the Section 5310 Program is that projects selected for funding must be included in a locally developed, coordinated public transit-human services transportation plan.

This plan is therefore designed to meet the FTA planning requirements, and incorporates the following four required elements – as well as additional requirements from TxDOT that administers the Section 5310, 5311, 5311(f) and Rideshare Programs for the state of Texas:

1) An assessment of available services that identifies current transportation providers (public, private and nonprofit).

2) An assessment of transportation needs for individuals with disabilities and seniors. This assessment can be based on the experiences and perceptions of the planning partners or on more sophisticated data collection efforts, and gaps in service.

3) Strategies, activities, and/or projects to address the identified gaps between current services and needs, and opportunities to achieve efficiencies in service delivery.

4) Priorities for implementation based on resources (from multiple program sources), time and feasibility for implementing specific strategies and/or activities identified.

Additional Planning Considerations

Looking Beyond the Federal Requirement

The update of the EasTexConnects Regionally Coordinated Transportation was not solely limited to the Section 5310 Program. As noted in the FTA guidance, while the plan is only required in communities seeking funding under the Section 5310 Program, a coordinated transportation plan should incorporate activities offered under other programs sponsored by federal, state, and local agencies to greatly strengthen its impact. Therefore, this plan takes a broader approach and includes information on a variety of transportation services offered in the region. It also provides strategies and potential projects beyond those eligible for funding through the Section 5310 Program. Overall this plan is designed to serve as a blueprint for future discussions and efforts in the region to improve mobility, especially for older adults, people with disabilities, veterans, people with lower incomes and young people with limited access to transportation.

A Focus on Public Transportation Services

While the coordinated transportation planning process takes a broad assessment of transportation services, experience and research across the country in both urban and rural areas show that scheduled public transit is the best way to provide coordinated transportation services. Many people needing mobility options can use fixed-route and scheduled services, so often the best way to support the needs of human service agency clients, veterans, and other populations is through excellent public transportation. When public transit systems are able to meet the majority of needs through the existing fixed-route/scheduled service network, then other resources can be freed up to focus on those customers who need more specialized services – true coordination. Section 8 of this plan discusses potential strategies and provides additional guidance with these efforts.

> *Excellent public transportation is the best way to address and coordinate the majority of transit dependent and human service client transportation needs.*
>
> **Any coordination effort should start with building the public transit network and maximizing the use of higher productivity services such as fixed route services and fixed schedule services.**

Section 2
Inventory of Transportation Resources

Introduction

This section for the regionally coordinated transportation plan documents existing transportation services and resources in the region. This review of existing services was used in combination with the completed demographic and land use analysis and the current public and stakeholder input to identify the unmet needs and gaps in service, and then to develop potential strategies to improve mobility in the region.

The inventory of transportation resources is organized as follows:

- Public Transportation Services
- Private Transportation Services
- Human Services Transportation

The process to identify the various transportation resources available in the region included:

- Using information from the previous coordinated transportation plan for the region.

- Incorporating information and data available through the Texas Transit Performance Dashboard that is sponsored by the Texas Department of Transportation Public Transportation Division (TxDOT PTN) developed by the Transit Mobility Program at the Texas A&M Transportation Institute for TxDOT.

- Reviewing information from recent and current transit and other planning projects in the region.

- Using data and information obtained through a transportation survey completed by some human service transportation providers in the region.

- Conducting interviews with public transit providers in the region.

Public Transportation Services

The following transit systems provide public transportation services in the ETCOG region:

- GoBus
- Longview Transit
- Tyler Transit

GoBus

ETCOG is a rural transit district authorized by Texas Transportation Code Chapter 458 in 1995 and therefore receives funding for rural transit services. Currently, ETCOG provides transit services for only the rural parts of Gregg and Smith Counties, and all of Anderson, Camp, Cherokee, Harrison, Henderson, Marion, Panola, Rains, Rush, Upshur, Van Zandt, and Wood Counties. The ETCOG service area shown in Figure 2-1.

Figure 2-1: GoBus Service Area
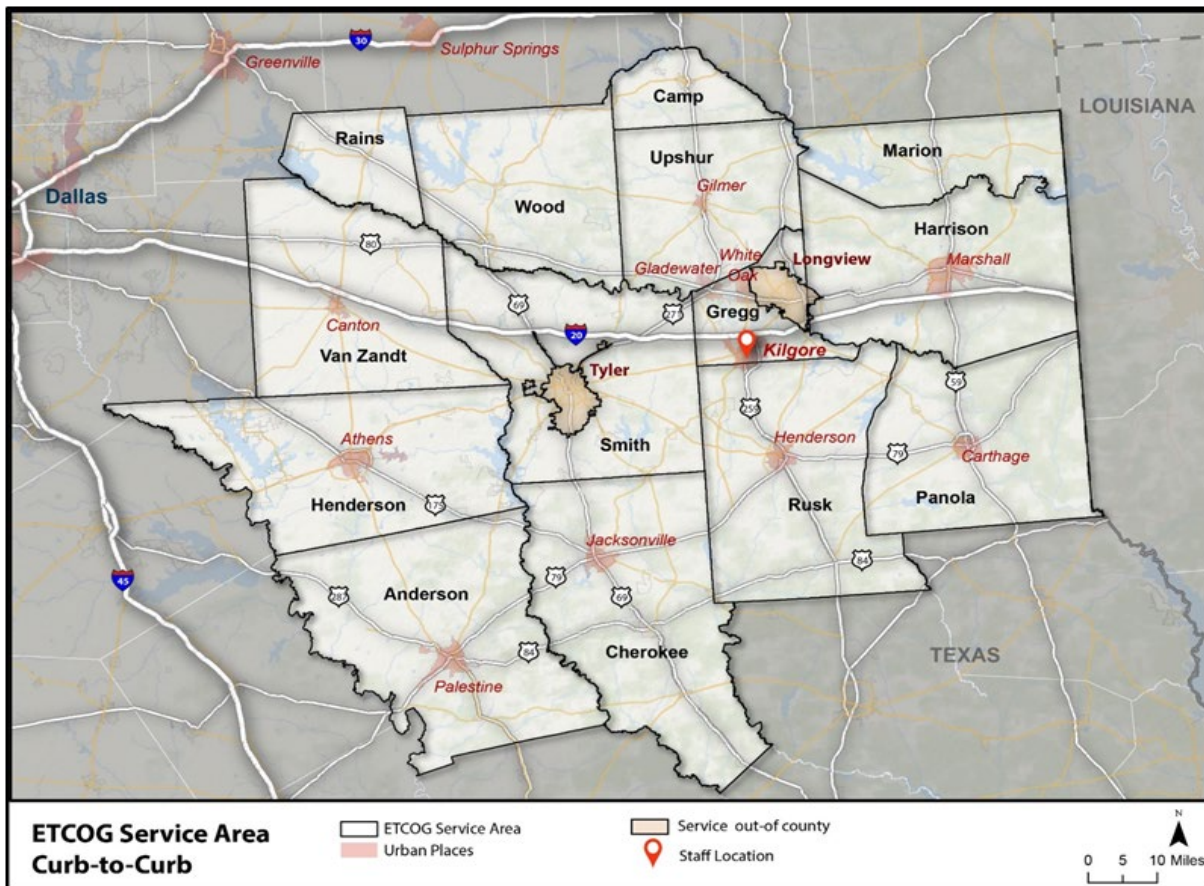
Services

GoBus provides public transportation service to the general public that includes seniors and people with disabilities. It serves a rural population of approximately 870,000, while its service area spans over 10,000 square miles covering 14 counties in East Texas. The GoBus office is in Kilgore, TX (Gregg County) that houses both the administration and dispatching units.

GoBus provides four types of transportation services:

- Demand response public transit in each county (outside the urbanized areas of Longview and Tyler)
- Flex route in Marshall
- A veteran's transportation program to the Overton Brooks Veterans hospital in Shreveport
- Charter service
- Non-Emergency Medical Transportation Services

Demand Response

GoBus provides curb to curb rural demand response transportation in 14 counties. This is a shared-ride service, and is provided within Anderson, Camp, Cherokee, Harrison, Henderson, Marion, Panola, Rains, Rusk, Upshur, Van Zandt, and Wood Counties and in the non-urbanized areas of Gregg and Smith Counties, Monday through Friday from 6:30 a.m. to 5:30 p.m. Smith County extended service operates Friday through Monday from 6:30 a.m. to 10:00 p.m. GoBus also provides service from rural areas into Longview and Tyler on Tuesdays and Thursdays; Tyler is the largest urban area in the region. Usually, trips to large urban areas are scheduled to arrive at 10:00 a.m. and depart at 2:00 p.m. The service is not available on weekends or major holidays.

The demand response service is available on a first come, first served basis, and requires advanced reservations. Riders are expected to call at least a day ahead to schedule their trips, before 2:00 p.m. on the day prior to the trip. Trip reservations can also be made up to 14 days in advance. Schedulers are available to take trip requests between 6:30 a.m. and 5:30 p.m., Monday through Friday. The same parameters for scheduling apply to deviation requests for the Marshall route. Reservations can also be requested online however they will only be confirmed when contacted back by a dispatcher. Trips can be booked for various purposes and are not limited to work, medical appointments, and shopping.

Same day trips are also provided but are subject to availability therefore reservations are preferred. Same day trip changes are also entertained based on the availability if the change is within a 2.5-mile radius. To avoid no-shows, riders should call the GoBus dispatchers to cancel their trips at least two hours prior to the scheduled trip. After three no-shows within 30-days, a customer is suspended from riding GoBus for 30 business days.

GoBus charges a $2 fare per one-way demand response trip, and accepts various payment modes such as cash, GoPass, credit card, money order, and checks. An additional $1 fare is charged for each additional stop. Riders are expected to be ready with the exact fare upon boarding. Active military and veterans ride GoBus for free.

GoPass is a reloadable card and can store a maximum amount of $100. GoBus has recently developed a marketing push for the use of GoPass. This has resulted in a total of 34 percent of all trips being paid through the system. Unlike e-fare technology on other transit systems, this card does not provide any security to the rider if the card is lost or stolen and the stored amount is non-refundable in case trips are not taken.

GoBus also provides travel training for free to ride GoBus demand response anywhere within the service area. This training can be provided to a group of people, on a one-on-one basis or to an organization.

Service by County

The service schedule for each county in the GoBus service area is provided in Table 2-1, and a depiction of the demand response service by county is provided in Figure 2-2 on the next page. A description of service by county then follows (note: number of vehicles in operations changes based on need).

Table 2-1: Demand Response Operation Schedule by County

Service Area	# Vehicles *in operation*	Local 6:30 a.m.-5:30 p.m. *(origin-destination)*	Longview 10 a.m.-2 p.m. *(destination only)*	Tyler 10 a.m.-2 p.m. *(destination only)*	Marshall 10 a.m.-2 p.m. *(destination only)*
Anderson	3	MTWTF	-	Tuesday	
Camp & Upshur	1	MWF	Tuesday	Thursday	
Cherokee	2	MWTF	-	Tuesday	
Gregg (Rural)	3	MTWTF	MTWTF	Thursday	
Harrison & Marion	3	MTWTF	Tuesday	Thursday	MTWTF
Henderson	3	MTWTF		Tuesday	
Panola	1	MWF	Tuesday	Thursday	Tuesday
Rains & Wood	2	MWF	-	Thursday	
Rusk	1	MWF	Tuesday	Thursday	
Smith (Rural)	Taxi Service	TWT, F-M until 10:00 p.m.	-	MTWTF	
Van Zandt	2	MTWF		Thursday	

Figure 2-2: GoBus Service by County
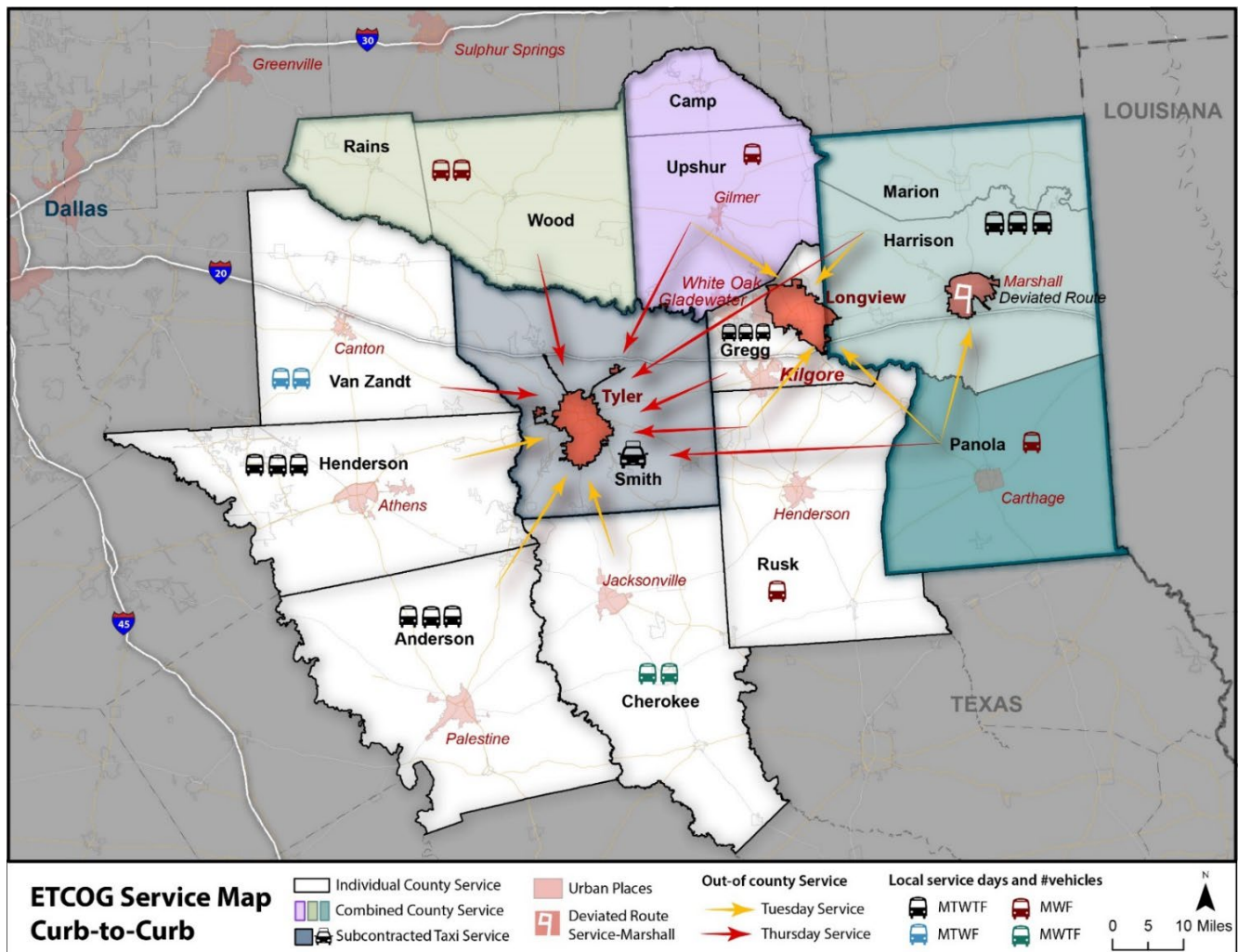
Anderson

Anderson County, located in the southwestern portion of the GoBus service area, is one of the busiest counties in terms of demand response service. According to GoBus management, the present pandemic has least affected ridership in this county. Anderson County has a population of 57,735. The largest city in the county is Palestine and it produces most ridership in the county. GoBus management has expressed interest in exploring fixed route type service options in Palestine. Local service within the county is provided Monday through Friday from 6:30 a.m. to 5:30 p.m. and service into Tyler is provided on Tuesdays between 10:00 a.m. and 2:00 p.m. According to GoBus management, there are usually three buses for local runs but on Tuesdays one bus serves Tyler while the remaining two buses serve the local area. Trip requests to Longview are also accommodated based on availability. Trips are booked for various purposes such as work, college and medical; dialysis trips are provided on Monday through Friday as needed.

Camp

Camp County is the northernmost county in the GoBus service area and is very rural. The county has a population of 13,094 and the largest city is Pittsburg. There are typically two vehicles serving the county with local service provided in Camp and Upshur counties Monday through Friday from 6:30 a.m. to 5:30 p.m. Out of county service goes to Tyler is on Thursday and Longview on Tuesday. The approximate arrival time into Tyler or Longview is 10:00 a.m. and departure is 2:00 p.m. Trips are generally booked for medical and human service purposes. GoBus also coordinates with the Ark-Tex Council of Government to provide trips as needed.

Cherokee

Measuring approximately 1,062 square miles, Cherokee County is one of the larger counties in the GoBus service area by geographical area. It is in the southern half of the service area directly south of Tyler and Smith County. The two largest cities in the county are Jacksonville and Rusk (county seat). The population of Cherokee County is 52,646. Local service is provided Monday, Wednesday, Thursday and Friday from 6:30 a.m. to 5:30 p.m. Out of county service to Tyler is on Tuesday, generally arriving around 10:00 a.m. and departing at 2:00 p.m. Trips are often for shopping, dialysis and human service purposes. Gateway Community Partners is a human service agency in Jacksonville working with individuals with developmental disabilities that works with GoBus to schedule rides for their clients to their facility, resulting in approximately 50 one-way trips per day in the county.

Gregg

Gregg County, located near the center of the service area, is one of the more densely populated counties in the region, containing both the cities of Longview and Kilgore. These cities make up an important urbanized area with major destinations for the entire service area. The population of Gregg County is 123,945, Longview accounts for 81,647 people while 14,826 live in Kilgore. The remaining 16,112 residents live in the county's rural areas. GoBus typically has three to four buses serving the area Monday through Friday from 6:30 a.m. to 5:30 p.m. GoBus has a memorandum of understanding with Longview Transit, the urban transit provider in the city, utilizing FTA Section 5310 funds to serve seniors and individuals with disabilities in the urbanized area but outside of the Longview Transit service area. This service provides trips from Gladewater and White Oak into Longview, as well as Longview to Longview if not near a Longview Transit Route. Service into Tyler is available on Thursdays generally from 10:00 a.m. to 2:00 p.m. Trip purposes include shopping, employment, medical and human service.

Harrison

Harrison County is in the eastern portion of the service area and shares a border with Louisiana along the Interstate 20 corridor. The population of Harrison County is 66,553 and the largest city is Marshall. There are typically four rural demand response vehicles stationed in the county that are shared with Marion and Panola counties along the Louisiana border. Trip purposes include shopping, employment, medical and human service. Service in the county is Monday through Friday from 6:30 a.m. to 5:30 p.m. with trips to Longview available on Tuesdays and trips to Tyler on Thursdays. In addition to the rural

demand response service, GoBus provides a flex-fixed route service in the City of Marshall. This service runs from 6:30 a.m. to 5:00 p.m. Flex off route can be requested 24 hours in advance of the trip and within ¾ of a mile from the fixed route.

Henderson

Henderson County is the westernmost county in the service area. The county is west of Tyler and its largest city is Athens. The population of Henderson County is 82,737. Service in the county is Monday through Friday from 6:30 a.m. to 5:30 p.m. with trips to Tyler available on Tuesdays. According to GoBus management there is significant demand for Tyler trips and the systems is looking at ways to provide a trip on Thursdays as well. There are typically three buses that operate in Henderson County. Trip purposes include shopping, employment, medical and human service.

Marion

Marion County is a small rural county in the northeastern portion of the GoBus service area. This area shares vehicles with Harrison and Panola counties, all areas directly on the state border. The population of Marion County is 10,017 with the largest town being Jefferson located 15 miles due north of Marshall. Service in the county is Monday through Friday from 6:30 a.m. to 5:30 p.m. Service into Longview is on Tuesdays and into Tyler on Thursdays. Trip purposes are typically medical and human service related.

Panola

Panola County is at the far eastern portion of the GoBus service area along the Louisiana border. This area shares vehicles with Harrison and Marion counties. Local service in the county is provided Monday, Wednesday and Friday from 6:30 a.m. to 5:30 p.m. Service to Longview and Marshall is provided on Tuesdays and service to Tyler is provided on Thursdays. Trip purposes are generally shopping, medical and human service related. The population of Panola County is 23,327 and the largest city and county seat is Carthage.

Rains

Rains is a small rural county in the far northwest portion of the GoBus Service area. The population is 11,766 and the largest city and county seat is Emory. Rains County shares two vehicles with Wood County. Local service in Rains county is provided Monday, Wednesday and Friday from 6:30 a.m. to 5:30 p.m. with service into Tyler on Thursdays. Trip purposes are generally shopping, senior meal sites, medical and human service related.

Rusk

Rusk County is a rural county due south of the Longview/Kilgore area in the southern portion of the GoBus service area. The population of the county is 54,406 with the largest city and county seat being Henderson. Rusk County typically has one vehicle serving the local area Monday, Wednesday and Friday from 6:30 a.m. to 5:30 p.m. with service into Tyler on Thursdays and Longview on Tuesdays. Trip

purposes are generally shopping, medical and human service related. With Kilgore located in both Rusk and Gregg Counties buses overlap in both areas as needed.

Smith

Smith County is the most populous county in the GoBus service area (232,751) anchored by Tyler, the largest city in the service area. Even still, 102,000 Smith County residents live in rural areas of the county. The county sits in the center of the GoBus service area and contains many regional medical destinations due to the large regional hospital and medical specialist offices in Tyler. GoBus, using NDMJ Transportation as a subcontractor, serves the rural portions of Smith County Monday through Friday from 6:30 a.m. to 5:30 p.m., with extended service operating Friday through Monday from 6:30 a.m. to 10:00 p.m. Trip purposes include employment, medical, shopping and human service. A gap in service can be observed in the Bullard and Whitehouse areas, which are designated as urban by the Census Bureau despite being up to 15 miles away from Tyler and rural in appearance. GoBus is unable to serve these areas with their typical FTA section 5311 rural demand response service, but management has expressed a desire to serve residents of these communities.

Upshur

Upshur County is a rural county to the north of the Longview area with a population of 41,753. Upshur County shares vehicles with Camp County. There is usually one vehicle serving the local area Monday, Wednesday and Friday from 6:30 a.m. to 5:30 p.m. with service into Tyler on Thursdays and Longview on Tuesdays. Trip purposes are generally shopping, medical and human service related.

Van Zandt

Van Zandt County is in the western portion of the GoBus service area. The county generally has two vehicles serving the area on Monday, Wednesday, Thursday and Friday from 6:30 a.m. to 5:30 p.m. with service into Tyler on Tuesdays. Trip purposes are generally shopping, medical and human service related. The population of Van Zandt County is 55,103 with Canton being the largest city and county seat.

Wood

Wood County is a rural county in the northern portion of the GoBus service area that shares two vehicles with Rains County. Local service is every Monday, Wednesday and Friday with service into Tyler on Thursdays. The population of Wood County is 44,366. The largest city in the county is Mineola and the county seat is Quitman. Trip purposes are generally shopping, medical and human service related.

Marshall City Route

GoBus, in association with the City of Marshall, operates a flex route service in Marshall, TX called the Marshall City Route, Monday through Friday from 6:30 a.m. to 5:00 p.m. This route can flex for persons with disabilities up to three-quarters mile of the regular route. The general public is charged $1 fare to

ride this route while seniors and students can ride it for 50 cents. Flex requests must be made 24 hours in advance, and must be within ¾ mile from the regular route.

This is a one-way loop style route, which requires virtually all passengers to ride for one hour for the round trip. If the ride to the destination is 10 minutes, the return is almost always 50 minutes.

The route starts at the Texas State Technical College (TSTC) campus and serves the entire portion of the city to the west of East End Boulevard S bounded by Loop 390 in the North and I-20 in the South. Major stops on this route include major shopping centers such as Walmart and Marshall Shopping Center (Mall); multi-unit housing apartments; various college campuses such as TSTC, ETBU and Wiley College; civic buildings; human service agencies such as food pantry and workforce center; medical facilities like Good Shepherd Hospital; various hotels and lodges; and Greyhound bus stop. Bus shelters are also provided on some of the major stops. This route is illustrated in Figure 2-3 below.

Figure 2-3: Marshall City Flex Route
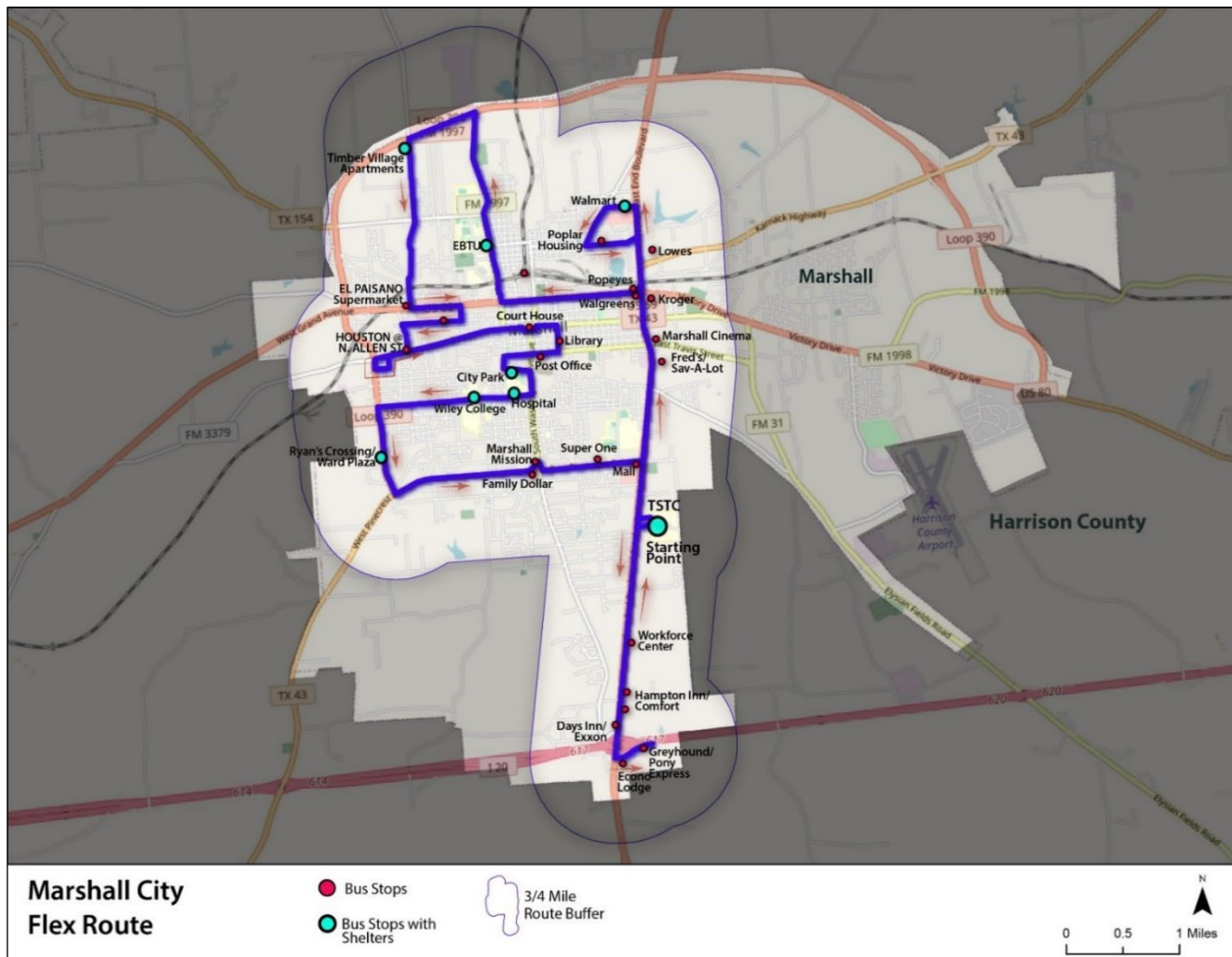
GoVET

GoBus also provides service called GoVET to Overton Brooks VA Hospital in Shreveport, LA. This service is provided to the veterans and active military customers living in the Camp, Gregg, Harrison, Marion, Panola, Rusk, and Upshur counties. The trips are scheduled to arrive at the VA hospital by 9:30 a.m. and depart back to the East Texas counties at 3:30 p.m. This service is provided free of charge and operates on Tuesdays. Group trips are also available on alternate days.

GoBus reported that this service was discussed in the 2006 coordinated plan for the region, and the service was operating prior to that time. They also noted that based on input from former staff working during that time that the service was recommended somewhere between 2003-2005 by ETCOG Steering Committee members and Marshall Greyhound. It was approved by TxDOT at that time to provide service for veterans in the region to the VA hospital only, with no other stops allowed. GoBus also noted that it fell under multi-modal service because they pick up from Longview Transit (if requested) and Marshall Greyhound as transfer points. They also reported that all required documents to cross the state line, such as Federal Motor Carrier Safety Administration (FMCSA) approval and the USDOT #, were obtained.

Charter Services

GoBus provides charter services in the 14-county service area. GoBus adheres to all FTA charter bus guidelines and regulations. All trips are subject to GoBus availability and due to a limited number of buses and vans in the GoBus service area, charters may not always be available. Charter vehicles are not purchased with FTA or state public transit grant funds and the program is not operated using any public transit grant funding as well. There is a 2-hour charter minimum and no overnight trips are allowed. Charter service hours are 7 days a week, 24 hours a day. A completed Charter Service Request (available on the GoBus website) must be received no later than 15 business days prior to event. The number of vehicles required for a specific charter will be determined by the Transit Operations Manager based on the number of expected passengers and vehicle capacity. Charter fares are between $100 and $150 (depending on vehicle type) for the first two hours and $100 to $150 for each subsequent hour.

Performance Data

Table 2-2 presents trend data for general operating statistics of GoBus demand response service for the past five fiscal years.

Table 2-2: GoBus Demand Response Annual Operating Statistics, FY 2016 – FY 2020

Demand Response Service	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Unlinked One-Way Passenger Trips	87,882	88,548	89,040	97,575	94,314
Revenue Miles	1,094,069	1,106,921	1,054,992	1,155,752	836,422
Vehicle Miles	1,303,548	1,313,165	1,260,193	1,362,485	980,565
Revenue Hours	56,933	56,998	57,166	56,601	39,722
Vehicle Hours	64,836	65,833	65,346	66,104	46,897
Deadhead Miles	209,479	206,244	205,201	206,733	144,143
Deadhead Hours	7,903	8,835	8,180	9,503	7,175

Source: ETCOG PTN-128 Reports

Annual operating performance data for the flex route in Marshall, TX is provided in Table 2-3.

Table 2-3: Marshall Flex Route Operational Data

Demand Response Service	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Unlinked One-Way Passenger Trips	6,765	4,842	3,077	8,205	8,614
Revenue Miles	44,876	42,046	47,676	50,952	42,517
Revenue Hours	2,739	2,739	2,728	3,104	2,260
Revenue Miles Per Hour	16.38	15.35	17.48	16.41	18.81
Revenue Miles per One-Way Trips	6.63	8.68	15.49	6.21	4.94
One-Way Trips per Revenue Hour	2.47	1.77	1.13	2.64	3.81

Source: ETCOG PTN-128 Reports

Existing Maintenance, Fleet, Facilities, and Technology

Maintenance

Through a recent Comprehensive Operations Analysis (COA) of the transit system, maintenance was noted as a primary concern for GoBus management. Currently, the system uses a variety of contractors with varying degrees of success. In the eastern portion of the service area, Longview Transit (described in the next section of this section) provides some maintenance support and contracts with GoBus to maintain some of the vehicles in that portion of the service area. GoBus additionally uses five other private maintenance vendors to provide support in maintenance. Preventative maintenance and all other repairs are coordinated by the GoBus Operations Manager with the assistance of the Call Center Lead. Outside of Longview Transit the contractors often do not complete maintenance in a timely fashion and can charge high rates for labor. As a result, GoBus is looking at options, strategies and alternatives for developing its own maintenance program and building or procuring a maintenance facility through a recent maintenance feasibility plan.

Transit Fleet

GoBus has hat total of 57 vehicles in its transit program; 3 staff vehicles, 1 trolley, 2 charters, 4 maintenance vehicles, 16 vans and 31 body-on-chassis/cut-away style transit vehicles. Of the 57 vehicles, 8 were purchased before 2016 and many of those are beyond or approaching the end of their useful life. A total of 4 vehicles are out of service due to breakdowns or being past the useful life. All of the vehicles in public transit service are lift or ramp equipped and accessible.

Facilities

GoBus has one primary facility in Kilgore which houses their administrative and dispatch operations. This facility also has vehicle parking for some of the vehicles used in the Gregg County area. Due to the size and the rural nature of the service area vehicle stationing is spread through the region. While this is necessary to avoid excessive deadhead mileage for the vehicles it is difficult to manage for scheduling and maintenance as there are 20 different locations in the service area where vehicles are stationed. Table 2-4 details the facilities across the region where vehicles are stationed and the approximate number of vehicles kept at each location. GoBus works with organizations in the area that allow the system to park in their locations for free, and the associated cost is considered "donated services" so that value can be used to offset expenses.

Table 2-4: Bus Stationing Facilities

County	Vehicles (Qty.)	Location	Address
Anderson	4	Palestine Dialysis	2260 S. Sycamore St., Palestine, TX 75801
Camp/Upshur	4	TxDOT Gilmer	2105 US-271, Gilmer, Tx 75644
Cherokee	1	Jacksonville Dialysis	908 E Tx-456 Loop Ste 100, Jacksonville, Tx 75766
Cherokee	1	Reklaw City Hall	530 Nacogdoches St., Reklaw, Tx 75784
Cherokee	1	Overton Brookshire's	200 W. Henderson St., Overton, Tx 75684
Gregg	1	Longview Transit	908 E. Pacific Avenue #200, Longview, Tx 75602
Gregg	Quantity Varies	ETCOG Kilgore Lot	3008 Stone Rd. Kilgore, Tx 75662
Gregg	1	Gladewater PD	511 S. Tyler St. Gladewater, TX
Harrison	4	TSTC Marshall	2650 W End Blvd S, Marshall, Tx 75672
Henderson	1	Eustace PD	107 Edgar St, Eustace, TX 75124
Henderson	2	Athens's Dialysis	1220 S Palestine St., Athens, Tx 75751
Henderson	1	Henderson County Precinct 3	460 Broad St., Chandler, Tx 75758
Marion	1	TxDOT Jefferson	24522 SH 49, Jefferson, Tx 75657
Panola	1	TSTC Marshall	2650 W End Blvd S, Marshall, Tx 75672
Rains	1	East Tawakoni City Hall	288 Briggs Blvd. E. Tawakoni
Rusk	1	Rusk Co. Courthouse	115 Main St #201, Henderson, Tx 75652
Smith	Quantity Varies	NDMJ	321 N. Bois D Arc Ave, Tyler, Tx 75702
Smith	2	Lindale Water Department	212 North Commerce Street Lindale, TX 75771
Van Zandt	1	Veterans Memorial	1200 S Trade Days Blvd # 600, Canton, TX 75103
Wood	1	TxDOT Gilmer	2105 US-271, Gilmer, Tx 75644

Source: ETCOG bus stationing facilities data, provided by GoBus

Technology

GoBus has recently gone through a transition to a new scheduling software. The system was unhappy with the functionality and reporting features on their previous software and are now using Ecolane software for scheduling and reporting purposes. The software package is used in the Kilgore dispatch centers. All scheduled trips are entered into the software program and the program assigns trips to specific drivers and vehicles. Each vehicle and driver are equipped with a tablet that has the manifest and client information. The driver uses the tablet to confirm pick up, arrival and no-shows.

Each transit vehicle is equipped with a video recording system. This system cannot be accessed in real-time but can be viewed at the headquarters in Kilgore after a shift, to investigate accidents, issues or conduct of drivers and passengers. The system is used to complete periodic checks on routes and drivers, assess incidents and accidents and ensure driver and passenger safety.

For communications equipment, each driver is equipped with a push to talk cell phone. This is used to communicate with dispatch as needed. The tablet is also connected to the mobile network however there are several rural areas in the region where there is no cellular service creating problems for both communications' equipment and the tablets.

Recently, GoBus staff and management have marketed their new reloadable fare card system. This system can be used by a reloadable fare card or by using a payment app on a smart device. GoBus has seen a 34 percent increase in GoPass usage since the marketing push. GoBus is also in the process of installing routers on every vehicle to offer free Wi-Fi for passengers.

Longview Transit

The City of Longview serves as an urban transit district (UTD) for the Longview urbanized area (UZA) under Texas Transportation Code Chapter 458. HTG-Longview Transit LLC, known as Longview Transit, is a public transit provider in the UTD, providing fixed-route bus service and ADA paratransit service throughout Longview. TTI reports that the service area crosses Gregg and Harrison Counties, covering 81% of the population and 63.2% of the land area of the Longview UZA according to the U.S. Census 2010.

Services

- Fixed Routes: Longview Transit operates six fixed routes that provide services on a scheduled basis with designated stops, as well as flag stops along the route where safe to do so. Routes operate from 6:00 a.m. to 7:00 p.m., Monday through Friday and from 7:00 a.m. to 7:00 p.m. on Saturday. Regular fare is $1.25, and a day pass is available for $3.00 and a reduced fare of 60 cents is available for individuals who receive Medicare, people over the age of 60, or have a disability. Multi-ride tickets and monthly and student passes are also available.

Figure 2-4 on the next page shows the six routes and the areas served by Longview Transit.

Figure 2-4: Longview Transit System Map

Source: Longview Transit Website

- Paratransit Service: Longview Transit provides a shared ride transportation service for customers who are unable to access the fixed route system and meet Americans with Disabilities (ADA) requirements. Longview Transit notes that they provide origin-to-destination service with the basic mode of service being curb-to-curb, although they will provide door to door service and reasonable accommodation to all customers requesting that service. Fare is $2.50 per one-way trip.

- Travel Training/Trip Planning: Longview Transit offers assistance in the use of their fixed route services.

Performance Data

Table 2-5 presents trend data for general operating statistics of Longview Transit for the past five years. The 2020 figures should not be used to infer any new trends beyond the pandemic.

Table 2-5: Longview Transit Annual Operating Statistics, FY 2016 – FY 2020

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Unlinked One-Way Passenger Trips	250,526	237,740	258,429	241,422	172,995
Revenue Miles	363,874	359,738	356,265	357,604	418,703
Vehicle Miles	370,981	366,753	363,262	364,481	422,035
Revenue Hours	23,832	23,206	23,295	23,344	25,836
Vehicle Hours	24,446	23,817	23,905	23,956	26,272
Deadhead Miles	7,107	7,015	6,997	6,877	3,332
Deadhead Hours	614	611	610	612	436

Source: Longview Transit

Existing Maintenance, Fleet, Facilities, and Technology

Maintenance

Longview Transit has their own maintenance operation and facility, and the garage and equipment are owned by the system. Most maintenance work is conducted in house including preventative maintenance and most engine and drivetrain work. Major overhauls, warranty work and body work are contracted to vendors specializing in transit vehicle repair. Longview Transit also contracts with ETCOG and GoBus to do some repairs on GoBus vehicles in the Longview Area. GoBus currently contracts out all maintenance operations and Longview Transit is one of the most reliable contractors for maintenance.

Transit Fleet

Longview Transit reports using a fleet of eleven vehicles to operate their six fixed routes, and four vehicles are used to provide paratransit services. For their peak service Longview typically uses six fixed route buses and two paratransit vehicles. Due to the increase in transit funding during the pandemic Longview Transit was able to update their fleet and currently has no vehicle replacement needs.

Facilities

Longview Transit has two facilities that are directly adjacent to one another. The first is an administrative and operational facility. This facility houses all administrative offices, dispatch and scheduling, driver ready room, reception, maintenance garage and transit vehicle parking. Adjacent to this facility is a new $2 million transfer center for the fixed route service that has bays for each of the six fixed routes, a restroom for passengers, and a driver break room.

Technology

Longview Transit currently uses a RouteMatch software package coupled with automatic vehicle location (AVL) and security cameras that can all be viewed in the administrative offices in real time. The software is used to schedule paratransit trips and paper manifests are printed out for vehicle operators to use on their routes. Longview Transit was just approved for FTA 5339 grant funding to upgrade their website and procure mobile ticketing and "where's my bus" technology. In the near future Longview Transit is looking to upgrade their transit software technology and seek affordable Wi-Fi technology for their busses.

Tyler Transit

The City of Tyler serves as an UTD for the Tyler UZA under Texas Transportation Code Chapter 458. Tyler Transit is a public transit provider in the UTD and within the city limits of Tyler. TTI reports that the current service area falls entirely into Smith County, covering 74% of the population and 58% of the land area of the Tyler UZA according to the U.S. Census 2010.

Services

- Fixed Routes: Tyler Transit provides public transportation services on five fixed routes that operate Monday-Friday from 6:00 a.m. to 8:15 p.m., and on Saturday from 9:00 a.m. to 6:00 p.m. Regular fare is $1.00, a day pass is available for $2.00 and a reduced fare of 50 cents is available for individuals who receive Medicare, people over the age of 65, or have a disability. Tyler Transit also offers 30-day, 7-day, and student passes.

A map of the Tyler Transit system is shown in Figure 2-5 on the next page.

Figure 2-5: Tyler Transit System Map
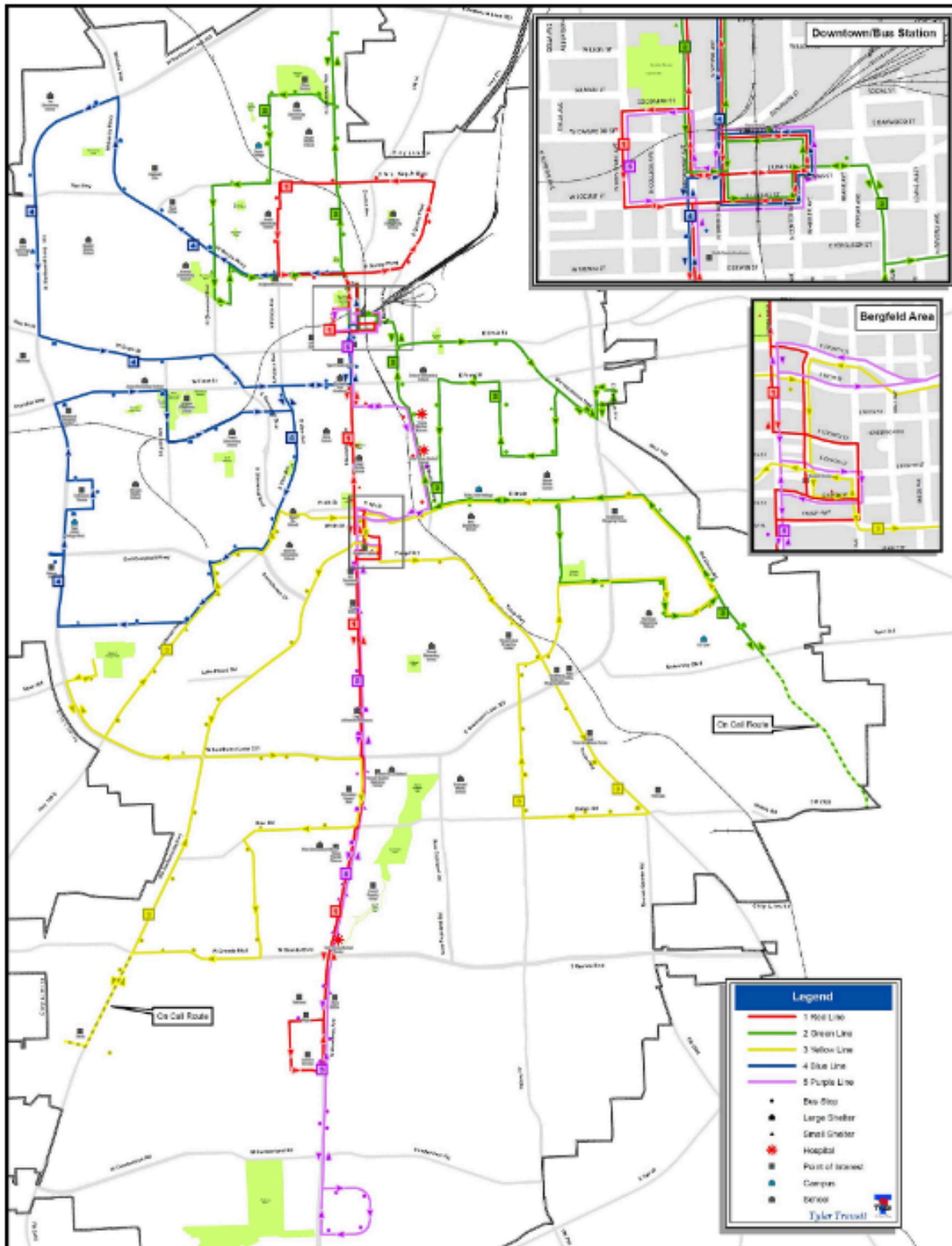
Source: Tyler Transit Route Study

- Paratransit Service: Tyler Transit provides curb-to-curb transportation for individuals who meet certification criteria as required by the ADA. While ADA requires service to be provided within ¾ of a mile of fixed route service, it is the City of Tyler's policy to provide paratransit service to all origins and destinations within city limits.

- Demand response service is also available in the gap area of the UZA under a Section 5310 Program gran through Smith County and contracted to NDMJ Transportation (discussed later in the Private Transportation Services part of this section).

Performance Data

Table 2-6 presents trend data for general operating statistics of Tyler Transit for the past five fiscal years, The 2020 figures should not be used to infer any new trends beyond the pandemic.

Table 2-6: Tyler Transit Annual Operating Statistics, FY 2016 – FY 2020

Demand Response Service	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Unlinked One-Way Passenger Trips	193,321	199,626	206,920	204,652	128,756
Revenue Miles	489,500	556,230	610,710	635,883	495,545
Vehicle Miles	536,145	600,032	656,677	684,481	533,992
Revenue Hours	35,568	39,604	42,628	44,002	34,693
Vehicle Hours	38,286	42,357	45,543	46,860	37,184
Deadhead Miles	46,645	43,802	45,967	48,598	38,447
Deadhead Hours	2,718	2,753	2,915	2,858	2,491

Existing Maintenance, Fleet, Facilities, and Technology

Maintenance

The City of Tyler maintains all of the Tyler Transit vehicles along with other city vehicles such as police, construction and administrative vehicles used for city business. Tyler Transit is pleased with the City's maintenance program as all preventative maintenance and most other repairs are conducted professionally and timely. Major overhauls, body work and warranty repairs are contracted to vendors specializing in transit vehicle maintenance.

Transit Fleet

The recently completed Tyler Transit Route Study reported the transit system currently has a fleet of twenty-two vehicles used for both fixed route and paratransit operations. It also noted that there are four vehicles in poor condition and/or at the end of their useful life and need replacing.

Facilities

Tyler Transit has one administrative office in the historic train depot in downtown Tyler. The space has a small reception area and administrative office and a dispatch area. Vehicles are stored in a parking lot across the street from the office. This office is also a transfer point for most of the current Tyler Transit fixed routes. The current facility is functional but small and with the continued growth of Tyler Transit a new larger and more functional facility may be needed. Tyler Transit is also exploring the building of a new southern transfer facility as a result of the recently completed route study and will look to build something within the next five years.

Technology

Currently Tyler Transit uses a VIA transit software package coupled with AVL and real time video monitoring technology. The software is also used to schedule paratransit trips and provide drivers with manifests on tablets. In the near future Tyler Transit will be looking to add to their technology packages with app-based paratransit scheduling, an annunciator system for fixed routes, and mobile fare/touchless/cashless ticketing.

Private Transportation Services

NDMJ Transportation

NDMJ Transportation is a private, for-profit agency that owns and operates more than 30 vehicles, 24 hours per day, seven days per week, to all of East Texas, primarily within the city of Tyler and Smith County. Services provided by NDMJ include:

- Medicab offers wheelchair equipped, non-emergency transport services in the East Texas area with no geographic boundaries. Medicab services are offered 24 hours per day, 7 days per week.

- App-based service through the Pony Ryde program.

- Section 5310 Program funded services in Smith County.

- Shuttle services to area hospitals, universities and college campuses as well as for special events on a reservation basis.

- Mobility management services that include complimentary, personalized trip planning services to qualified passengers.

Intercity Bus Services

Greyhound Lines Incorporated

Greyhound Lines currently operates 19 routes (tables) in Texas. As the largest carrier in Texas, with its headquarters based in Dallas, Greyhound operates to most corners of the state including two tables that operate in the ETCOG region.

Table 437, Dallas – Shreveport – Birmingham – Atlanta

This table has two roundtrips per day. The eastbound schedules from Dallas leave in the afternoon and night, with the night schedule skipping some local stops in Louisiana and Mississippi. There are two westbound schedules that leave Atlanta in the morning. Four local stops are served in the ETCOG region: Marshall, Longview, Kilgore, and Tyler. Pre-COVID, this table had four roundtrips per day.

Table 495, Texarkana – Houston

This table has one roundtrip daily, with four stops in the ETCOG region: Marshall, Longview, Kilgore, and Henderson. Pre-COVID, there were two roundtrips.

Turimex International

Turimex Internacional is a brand under Grupo Senda, which is a leading provider of bus transportation services in Mexico (primarily in northeastern and central regions), serving over 57 million people per year. In addition to Texas, it serves twelve other U.S. states including Alabama, Arkansas, Georgia, Illinois, Louisiana, Michigan, Mississippi, North Carolina, South Carolina, Tennessee, Oklahoma, and Missouri. Turimex buses offer service to/from the U.S. – Mexico border. Turimex provides service to more local stops compared to similar carriers like Omnibus Express, with a dozen or more stops each within the Dallas and Houston metropolitan area, and smaller cities including Sulphur Springs, Seguin, and Marshall. Other Grupo Senda brands include two which operate exclusively in Mexico: Del Norte which offers first-class service, and Coahuilenses which offers economy-class service. As of January 2021, some routes have been suspended and some stops have closed. For example, there are multiple stops around Dallas, Houston and San Antonio, but some of these stops have temporarily closed. Tickets to/from the U.S. and Mexico may be purchased on the Grupo Senda website.

Tornado Bus and El Expreso

Founded in Dallas, Tornado Bus has been operating since 1993, providing service across Mexico and the United States via El Paso, Laredo/Nuevo Laredo, McAllen/Reynosa, Matamoros/Brownsville. From the border communities, passengers can connect to the Texas Triangle and head north to Midwest states, or head east. Tornado Bus serves more than fifty locations in thirteen states including Louisiana, Arkansas, Missouri, Oklahoma, Illinois, Iowa, Wisconsin, Florida and Minnesota. Tornado owns the El Expreso brand (launched in Houston in 1989), which share the same website and app, and is featured on some of its buses (sometimes displaying both brands) and terminals. Tornado Bus and El Expreso partner with multiple Mexican carriers like Grupo Estrella Blanca, Autobuses de Oriente and others to provide service within Mexico. The corridor with the highest frequency of trips is between Laredo and Dallas with 49 roundtrips per week (7 per day), with two less roundtrips per day between Nuevo Laredo and Dallas.

Omnibus Express

Omnibus Express has been operating since 2008, when it began under the name Autobuses Ejectivos. It connects millions of people each year through different services including intercity bus travel, charter buses, and school groups. Omnibus provides service in Mexico and eight states, including Texas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, and North Carolina. Florida has the most frequent number of stops in the U.S., followed by Texas. Omnibus serves five border regions in Texas, including El Paso/Juarez, Laredo/Nueva Laredo, Roma, McAllen, and Brownsville/Matamoros. From Brownsville and the southern border communities, Omnibus provides service to the Texas Triangle and extends east from Dallas and Houston stopping in states on the way to North Carolina and Florida. Service in Mexico is extensive, covering more than twenty Mexican states. As of January 2021, some routes have been suspended, however there is still active service between Monterrey, MX to San Antonio/Houston/Dallas; and from Matamoros, MX to Houston.

Rail Services

Amtrak

Three cities in the ETCOG 14-county region have service on Amtrak's *Texas Eagle* long-distance passenger rail route, which connects San Antonio and Chicago. The three Amtrak-served cities in the northeast Texas region are Mineola in Wood County, Longview in Gregg County, and Marshall in Harrison County.

These cities have two frequencies a day on the Texas Eagle route, with train #21 traveling to San Antonio in the mornings through northeast Texas and train #22 traveling to Chicago in the evenings. The Texas Eagle represents a north-south connection through northeast Texas.

The hours when the Customer Service Representatives (CSR) for Amtrak, often called ticket agents, are on duty at the Marshall Depot Amtrak station are 7:00 a.m. – 10:00 a.m. daily, and 5:30 p.m. – 8:30 p.m. daily. This schedule allows customers to purchase tickets in the Depot lobby/waiting room, then board the Texas Eagle. Train #21 travels to San Antonio in the mornings and the Texas Eagle train #22 travels to Chicago in the evenings.

The Texas & Pacific Railway Museum and Gift Shop, which are located in the historic Marshall Depot, are also open 10:00 a.m. – 3:00 p.m. Wednesday through Friday, and 11:00 a.m. - 3:00 p.m. on Saturday.

Passenger rail advocacy groups such as the non-profit I-20 Corridor Council (previously East Texas Corridor Council) have been working for many years with Amtrak to urge the establishment of an additional long-distance passenger rail connection between Dallas/Fort Worth and Atlanta, Georgia. This would provide two additional Amtrak frequencies through the northeast Texas region and provide an east-west connection.

Studies have determined that this east-west long-distance passenger rail route could be economically viable and established on existing track along the I-20 Corridor. ETCOG and other councils of governments, in the counties and parishes along the I-20 route, have joined the multi-state coalition of support, with the I-20 Corridor Council and the Southern Rail Commission, in favor of the establishment of this rail route. This multi-state coalition supports the proposed route and the benefits related to transportation, tourism, economic development, environment, and quality of life that it would provide for Texas, our southern region, and nation.

Non-Emergency Medical Transportation

- GoBus works with several brokers to receive fully credentialed for Medicaid trips. They currently take trips for Access2Care and are working on credentialing for SafeRides and ModivCare.

- TLC Medical Transport is private, for profit company that provided non-emergency medical transportation (NEMT) for ambulatory customers and those that use wheelchairs Through a transportation survey TLC Medical Transport provided the following information and data:
    - Service area: Smith and surrounding counties.
    - Eligible customers: older adults, people with disabilities, people with lower incomes, veterans.
    - Eligibility for Transportation Services: If the service is covered by the client's health insurance plan, healthcare facility, or private pay.
    - Service Hours: 5:00 a.m. – 11:00 p.m. Monday through Saturday.

Taxi Services

The following taxi providers were identified in the region:

- American Cab Company – services the Corpus Christi Area with 4 Passenger Sedans and 6 Passenger Vans to the airport, in town, and out of town. Those aged 65+ receive a 10% discount.
- East Texas Yellow Cab -
- Taxi Cab Co. of Tyler – services East Texas with specialized Medicab, wheelchair accessible and paratransit transportation, shuttle, courier and cargo services. The rates include $25 per trip and $25 per hour for waiting. They offer a frequent traveler program which gives the rider the 10th trip free after booking 9 trips.
- Bisese Sedan and Limousine – provides service to and from 10 different airports. The rental rates include $78 per hour for a 4 passenger Lincoln Town Car, $90 per hour for a 6 passenger Chevrolet Suburban SUV. Bisese Sedan and Limousine require a minimum of 2 hour rental Sunday through Friday, 3 hour minimum on Saturdays and Holidays, and a 6 hour minimum for proms, quinceañera and weddings.
- Lakeside Taxi and Transportation – provides services ranging from bar rides, grocery trips, and medical trips.
- Stephens Delivery Service – provides airport service to Love Field Airport, personal transportation, local courier service, and messenger service.
- Yellow Checker Cabs – provides taxi services in the Dallas and Fort Worth areas. The fleet includes sedans, mid-size SUVs, big SUVs, and vans.

Transportation Network Companies

Uber and Lyft provide on-demand, ride-hailing transportation services in certain areas of the region. These areas include Tyler and Longview, and limited service in some of the other population centers in the region. Service is available 24 hours a day, 7 days a week though the supply of vehicles is limited and varies by time of day. Customers are required to set up an account with Uber or Lyft and link a debit/credit card to their account. No cash is exchanged between drivers and passengers, and two or more passengers can split payments.

To reserve a trip, customers are required to use a smartphone to request a vehicle, indicating their pickup location and destination. The TNCs guarantee a vehicle will arrive at a passenger's location within minutes. Passengers are sent the vehicle type, color, and license plate number of the vehicle coming to pick them up. Upon arrival at the requested origin, drivers wait two minutes for passengers.

Human Services Transportation

Section 5310 Program Subrecipients

The FTA Section 5310 Grant Program (49 USC, Section 5310) provides public transportation for the enhanced mobility of seniors and individuals with disabilities throughout Texas. TxDOT administers the Section 5310 program for the small urbanized (50,000-199,999 population) and rural areas of the state. This program provides assistance to help local private nonprofit organizations, public transportation agencies, and governmental authorities address mobility issues for the target population when other public transportation is unavailable, insufficient, or inappropriate. Section 5310 program funds are allocated after state administrative expenses are deducted. There is a formula that distributes funds among the 25 TxDOT Districts by area classification (small urbanized and rural), which are then allocated through a local competitive process to eligible projects.

Agency-Provided Transportation

Some residents in the region may be eligible to use transportation services provided by private, non-profit organizations. Most of these organizations offer transportation for their clients, allowing individuals to participate in day programs or employment. Many of these programs also provide transportation for medical appointments.

The following provides a summary of human services transportation providers in the region that were identified through a transportation survey or were included in the previous coordinated transportation plan for the region.

Andrews Center

Andrews Center is a private, non-profit agency located in Tyler, and provides fixed-route and demand-response services to more than one thousand clients annually. Fixed-route service operates Monday through Friday, 7:00 a.m. to 3:00 p.m. using vehicles owned and operated by the Andrews Center.

Atria Willow Park

Atria Willow Park is a senior living facility located in Tyler. The senior living facility offers transportation services Monday through Thursday, 8:30 a.m. to 2:30 p.m., to residents of the facility. Atria Willow Park owns and operates their own vehicles, typically providing trips to special events, medical, social, and recreation activities.

Brookdale Tyler East

Brookdale Tyler East is an extension of Brookdale Living Solutions and is located in Tyler. Brookdale, providing assisted living for persons 62 years of age and older, owns and operates their own vehicles, providing transportation on an as-needed basis. Also provided to residents of the facility are taxi services that are available Monday through Friday, 8:00 a.m. to 12:00 p.m.

Cedar Lake Nursing Home Located in Henderson County

Cedar Lake is a nursing home, hospice center, and rehabilitation facility providing a demand-response service to nearly five hundred clients annually.

Champagne, Inc.

Located in Lindale, Champagne is an assisted living facility providing transportation to clients using staff vehicles. Transportation is available 24 hours per day, seven days per week, transporting clients to medical, mental, dental, and social activities.

Community Healthcore

Community Healthcore provides mental health, substance use, developmental disability, early childhood intervention, veterans resources, psychiatric and primary healthcare services. Located in Longview, Community Healthcore serves Bowie, Cass, Gregg, Marion, Panola, Red River, Rusk, Red River, Upshur Counties. Eligible program recipients are older adults, people with disabilities, people with lower incomes, and veterans. Clients receiving mental health or developmental disability services may receive transportation to/from agency-specific appointments. Community Healthcore reports that currently between 50-100 individuals currently receive transportation services provided by their agency.

Disciple Homes (Eden Place)

Located in Longview, Disciple Homes provides assisting living to low income individuals and those over the age of 62. Disciple Homes provides on-call private tax/shuttle service Tuesday through Thursday, 8:00 a.m. to 3:00 p.m.

East Texas Council on Alcohol and Drug Abuse (ETCADA)

ETCADA, a social service agency located Longview, and operates a volunteer driver program, Monday through Friday 8:00 a.m. to 5:00 p.m., along with specific after-hours and weekend events. ETCADA provides transportation services to all 14 East Texas counties to persons over the age of 14, as well as those meeting Texas Department of State Health Services eligibility requirements and federal poverty guidelines.

East Texas Lighthouse for the Blind

Located in Tyler, East Texas Lighthouse for the Blind provides Rehabilitation, education, training, employment, and low vision products for blind and visually impaired individuals across a 40-county area. In the previous coordinated transportation plan it was noted that East Texas Lighthouse for the Blind did provides transportation to their clients, but through the transportation survey they reported that transportation is not provided but it is needed by their clients.

Henderson County HELP Center

The Henderson County HELP Center is located in Athens and is a social service agency that develops programs to support care, health, and well-being of the people of Henderson County. The HELP Center reimburses clients for transportation services such as taxi, shuttle, or other private transportation services.

Heritage Healthcare Residence

Heritage Healthcare Residence is an assisted living facility located in Quitman. Heritage provides demand-response services 24 hours per day, seven days per week to more than five hundred annual clients. Activities for which transportation is provided include medical, mental, dental, recreational, and social services.

Oakwood Place

Oakwood Place, located in Athens, is an assisted living community operating both a demand-response and charter-type service within Athens. Oakwood Place provides assisted living for seniors, accommodating residents with transportation services to medical appointments, grocery shopping, recreation, among other activities. Oakwood Place does not have eligibility requirements, but is unable to transport passengers utilizing an electric wheelchair.

Palestine Healthcare Center

Located in Palestine, the Palestine Healthcare Center is an assisted living facility operating a demand-response service 24 hours per day, seven days per week to less than one hundred clients annually.

Palestine Regional Medical Center

Located in Palestine, the Regional Medical Center is a quasi-public/private agency providing transportation for medical and mental health services. The Medical Center provides demand- response (private on-call) services as needed to more than one thousand clients annually. Transportation services are available in Anderson, Cherokee, and Henderson counties.

Rains County Veterans Transportation

Rains County offers transportation services to County Veterans lacking the capability/ability to transport themselves to Veterans Affairs (VA) hospitals/clinics for medical appointments. This service is operated by volunteer drivers.

Section 3
Comprehensive Assessment of Unmet Transportation Needs

Introduction

This section provides a comprehensive review of the unmet transportation needs in the region. The needs assessment involved:

- A quantitative methodology, providing an analysis of demographic and land use data to identify underserved and unserved population subgroups in the region.

- A qualitative process to identify unmet needs and service gaps based on community and stakeholder input.

Together, the demographic analysis and the gap analysis serve as the foundation for the development of potential strategies through the next phase of the planning process, and ensure a broad and inclusive documentation of the mobility challenges in the region.

The demographics and land use analysis are presented in the following manner:

- **A population profile** that discusses recent changes and trends in the region as well as future population projections.

- **An analysis of transit dependent populations** that are more likely to rely on public transit or human services transportation services for their daily mobility.

- **A Title VI demographic analysis** that examines the minority and below poverty level populations of the region, as well as people with limited English proficiency.

- **A land use analysis** that identifies major trip generators and commuting patterns in the region.

This section then provides a review of the results from public outreach and stakeholder engagement efforts. The gap analysis is then presented, and compares the areas of need to the level of service provided, to assess how the needs are met and where unmet needs may exist.

Demographic and Land Use Analysis

Through the demographic analysis, data ranging from underserved and unserved population subgroups to major trip generators are documented and assessed. The analysis includes a general population profile, identification and evaluation of population groups more likely to depend on transit services and a review of the demographic characteristics pertinent to a Title VI analysis. Overall population density and the study area's more populous communities are also analyzed and mapped. Data sources include the 2010 Census and American Community Survey (ACS) 2019 5-year estimates.

Population Profile

The East Texas region contains fourteen counties spanning 9,534 square miles and containing approximately 621,341 people. Though a mostly rural service area, there are more urbanized pockets around the cities of Longview in Gregg County and Tyler in Smith County. Table 3-1 shows historical population trends throughout the service area. Between the 2000 and 2010 Census, the entire ETCOG service area grew by over 10 percent. Only Marion County saw its population decrease between 2000 and 2010. Rains County (16.3%), Rusk County (11.2%), Smith County (16.7%), and Wood County (12.4%) all increased at a higher rate than the entire study area. ETCOG's service area grew at a slower rate than the state of Texas (17.1%) during this time. Table 3-1 shows historical population trends in the region.

Between 2015 and 2019, the ETCOG service area's population increased overall by 2.2 percent, lower than the State of Texas 6.1 percent growth in that time. Most ETCOG counties grew at least marginally in that time period, but Anderson (-0.2%), Marion (-2.3%), and Panola (-2.5%) all saw slight decrease in population during this time period. The most growth between 2015 and 2019 occurred in Rains County (6.2%), while Smith (4.4%) and Van Zandt (4.3%) also saw a steady population increase. Table 3-2 displays more recent population trends in the ETCOG service area.

Table 3-1: Historical Population Trends, ETCOG Service Area

County	2000 Population	2010 Population	Percent Change
Anderson	55,109	58,458	5.7%
Camp	11,549	12,401	6.9%
Cherokee	46,659	50,845	8.2%
Gregg	111,379	121,730	8.5%
Harrison	62,110	65,631	5.4%
Henderson	73,277	78,532	6.7%
Marion	10,941	10,546	-3.7%
Panola	22,756	23,796	4.4%
Rains	9,139	10,914	16.3%
Rusk	47,372	53,330	11.2%
Smith	174,706	209,714	16.7%

County	2000 Population	2010 Population	Percent Change
Upshur	35,291	39,309	10.2%
Van Zandt	48,140	52,579	8.4%
Wood	36,752	41,964	12.4%
ETCOG Service Area	745,180	829,749	10.2%
State of Texas	20,851,820	25,145,561	17.1%

Table 3-2: Recent Population Trends, ETCOG Service Area

County	2015 Population	2016 Population	2017 Population	2018 Population	2019 Population	Percent Change 2015-2019
Anderson	57,915	57,772	57,747	57,863	57,810	-0.2%
Camp	12,516	12,631	12,670	12,813	12,878	2.8%
Cherokee	51,167	51,257	51,594	51,903	52,118	1.8%
Gregg	123,178	123,283	123,402	123,494	123,443	0.2%
Harrison	66,417	66,431	66,606	66,645	66,580	0.2%
Henderson	79,016	79,213	79,687	80,460	81,070	2.5%
Marion	10,248	10,191	10,140	10,083	10,017	-2.3%
Panola	23,900	23,771	23,574	23,440	23,327	-2.5%
Rains	11,037	11,087	11,246	11,473	11,766	6.2%
Rusk	53,457	53,197	53,026	53,595	53,755	0.6%
Smith	217,552	219,745	222,277	225,015	227,449	4.4%
Upshur	40,096	40,295	40,506	40,769	41,018	2.2%
Van Zandt	52,736	53,070	53,607	54,368	55,103	4.3%
Wood	42,712	43,198	43,315	43,815	44,366	3.7%
ETCOG Service Area	841,947	845,141	849,397	855,736	860,700	2.2%
State of Texas	26,538,614	26,956,435	27,419,612	27,885,195	28,260,856	6.1%

Figure 3-1 on the next page shows all towns and cities in the service area by population. Each county has at least one town with a population of 1,000 or greater. The most populous towns and cities are found in Gregg County and Smith County. Figure 3-2 shows the population density in the region. Most density in the area is concentrated around Longview and Tyler, though the cities of Athens, Marshall, and Palestine also have areas with over 2,000 people per square mile. Since 1990, the ETCOG service area has grown, mostly in traditionally rural areas like Rains County and also in the urban areas of Longview and Tyler.

Figure 3-1: Population of Cities and Towns in ETCOG Service Area
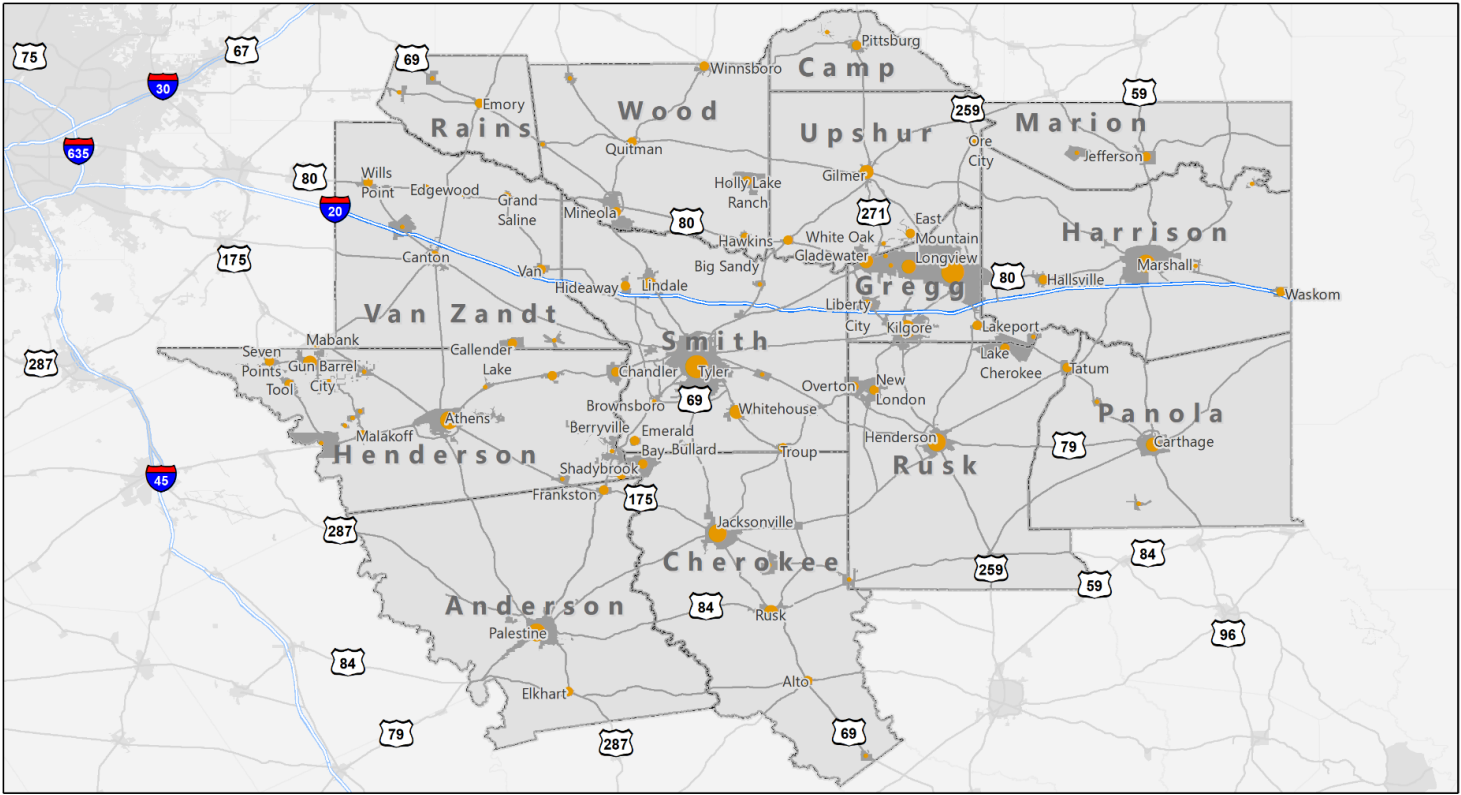
ETCOG Service Area

ETCOG Towns and Cities
— Major Roads

Population
— Interstate

- • Less than 1,000
- • 1,000-5,000
- ● 5,000-10,000
- ● 10,000-25,000
- ● Greater than 25,000

▨ Texas Towns and Cities
▨ Service Area

Source: US Census Burea American Community Survey
2015-2019 5-year Estimates

0 15 30 60
Miles

N
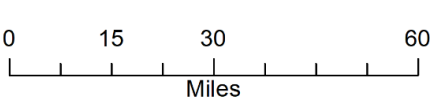
Figure 3-2: Population Density
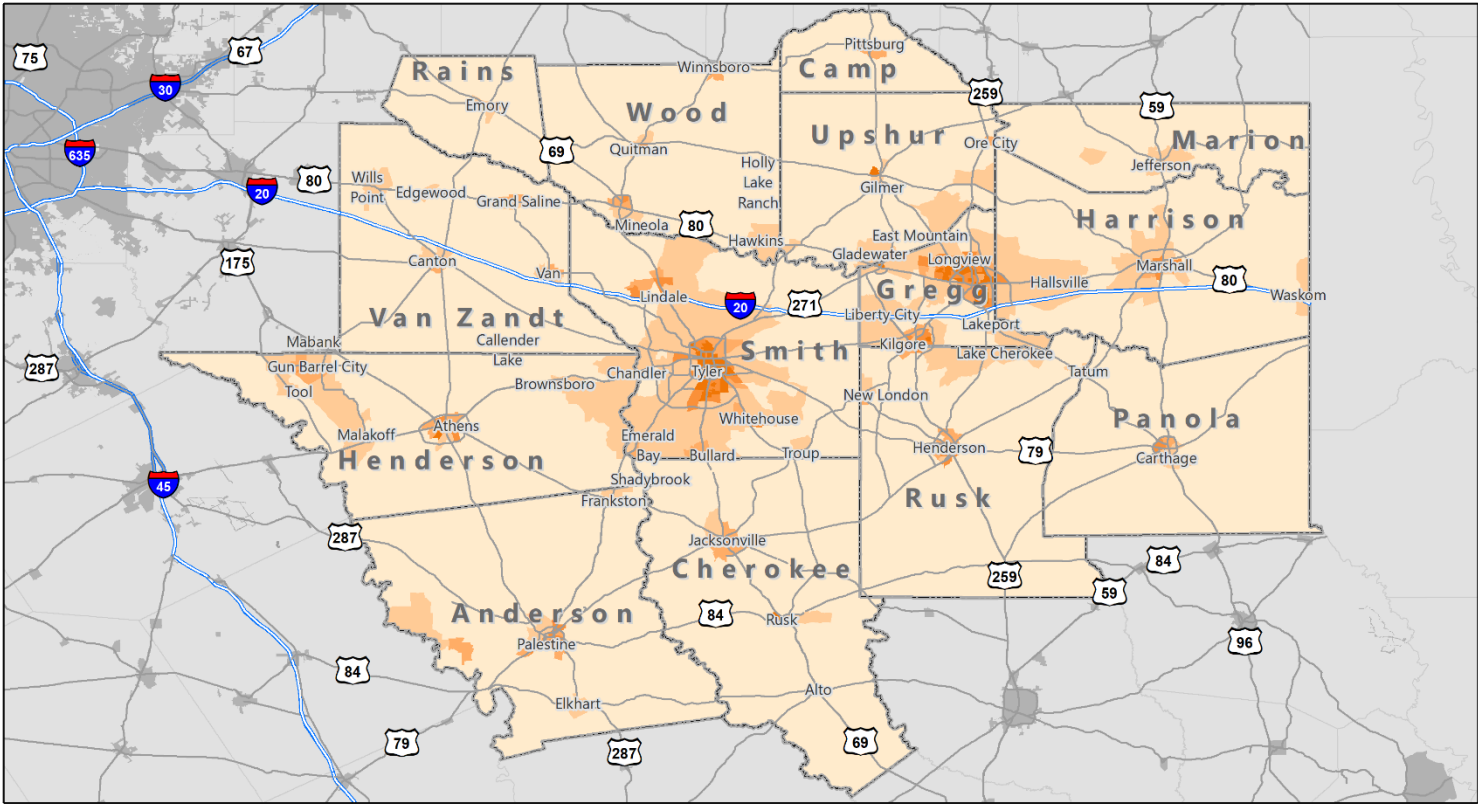
ETCOG Service Area: Population Density

Census Block Group ——— Major Roads

People per Square Mile ——— Interstate

Less than 100	Texas Towns and Cities
100-500	Counties
500-1000	
1,000-2,000	
2,000 or greater	
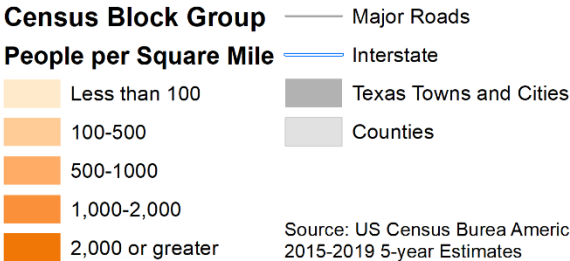
Source: US Census Bureau American Community Survey 2015-2019 5-year Estimates

0   15   30   60

Miles

N

Future Population Trends
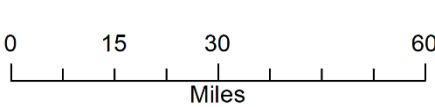
The Texas Demographic Center's 2010-2050 population projections predict future demographic patterns for all of Texas and each of its counties. While Texas is projected to grow by 37.3 percent, the ETCOG service area is projected to grow by only 5.9 percent. Between 2020 and 2050, Smith County has the highest projected population growth (18.8%) in the region, while Marion County has the largest projected population decrease (-25.9%). Several counties are projected to lose population, and some which are expected to grow overall between 2020 and 2050 are projected to experience population decreases between 2030 and 2040, as well as between 2040 and 2050. These population projections generally show that large urban areas are expected to grow, which may explain why Smith County is expected to continue growing at a higher rate than other counties in the service area. Table 3-3 breaks out population projections by county.

Table 3-3: Future Population Trends, ETCOG Service Area

County	2020 Population	2030 Population	2040 Population	2050 Population	Percent Change 2020-2030	Percent Change 2030-2040	Percent Change 2040-2050	Percent Change 2020-2050
Anderson	58,199	57,266	55,244	52,766	-1.6%	-3.7%	-4.7%	-10.3%
Camp	13,322	14,164	14,509	14,843	5.9%	2.4%	2.3%	10.2%
Cherokee	52,178	52,516	51,678	50,409	0.6%	-1.6%	-2.5%	-3.5%
Gregg	125,730	127,694	126,877	123,972	1.5%	-0.6%	-2.3%	-1.4%
Harrison	68,247	69,967	69,982	69,522	2.5%	0.0%	-0.7%	1.8%
Henderson	81,179	82,001	80,697	78,763	1.0%	-1.6%	-2.5%	-3.1%
Marion	10,294	9,580	8,795	8,176	-7.5%	-8.9%	-7.6%	-25.9%
Panola	24,576	25,008	24,670	24,030	1.7%	-1.4%	-2.7%	-2.3%
Rains	11,378	11,519	11,156	10,857	1.2%	-3.3%	-2.8%	-4.8%
Rusk	52,767	51,909	50,045	48,018	-1.7%	-3.7%	-4.2%	-9.9%
Smith	235,143	257,573	274,978	289,751	8.7%	6.3%	5.1%	18.8%
Upshur	41,655	44,000	46,000	48,571	5.3%	4.3%	5.3%	14.2%
Van Zandt	55,469	57,787	58,435	59,113	4.0%	1.1%	1.1%	6.2%
Wood	45,292	47,643	49,225	52,001	4.9%	3.2%	5.3%	12.9%
ETCOG Service Area	875,429	908,627	922,291	930,792	3.7%	1.5%	0.9%	5.9%
State of Texas	29,677,668	34,894,452	40,686,496	47,342,105	15.0%	14.2%	14.1%	37.3%

Transit Dependent Populations

Transit Dependency Index

Transit dependent populations are demographic groups that are more likely to rely on public transit for their daily mobility. For this analysis, transit dependent populations are defined as:

- Individuals living below the federal poverty line
- Households without access to a private vehicle
- Individuals with disabilities
- Older adults (ages 65 and older)
- Younger individuals (between ages 10 and 17)

Using the U.S. Census Bureau American Community Survey 2015-2019 5-year Estimates (ACS) for each of ETCOG's Census Block Groups, the percentage of each transit dependent population was calculated and assigned a score relative to the average percent in the study area's block groups. The amount of transit dependent populations in each group were combined and synthesized into two measures of transit dependence, the transit dependence index (TDI) and the transit dependence index percentage (TDIP). The Transit Dependent Index combines scores for each of the transit dependent populations and multiplies them by a population density factor. This measure shows the amount of transit dependent individuals in an area. As illustrated in Figure 3-3, the relative classification system utilizes averages in ranking populations. For example, areas with less than the average transit dependent population fall into the "very low" classification, while areas that are more than twice the average will be classified as "very high."

The TDIP is similar to the TDI but does not use the population density multiplier. Instead, the TDIP evaluates the total amount of transit dependent individuals in each block group, calculates the percentage of dependent individuals, and gives a score based on how that percentage relates to the study area average. The TDIP is useful in showing the block groups with a high degree of transit dependence, rather than a high number of transit dependent populations. In a service area as large and rural as ETCOG, the TDIP is especially important since it better demonstrates where high percentages of dependent individuals are living even if there is not high population density.

Accounting for population density, the highest amount of transit dependent populations are concentrated in the large cities of Tyler and Longview as well as Athens, Gilmer, Henderson, Kilgore, Lindale, and Pittsburg. The TDIP shows that the block groups with the highest percentage of transit dependent persons are found in the more rural areas, specifically in Marion County and Panola County. Cities with very high percentages of transit dependent individuals include Athens and Gladewater, while high percentages of transit dependent individuals were found in Gun Barrel City and Marshall. This analysis shows that high need transit groups exist in ETCOG's most rural areas as well as in its more urbanized cities. Figure 3-4 displays the TDI by Census Block Group, and Figure 3-5 displays the TDIP by Census Block Group.

Figure 3-3: Transit Dependent Classification System
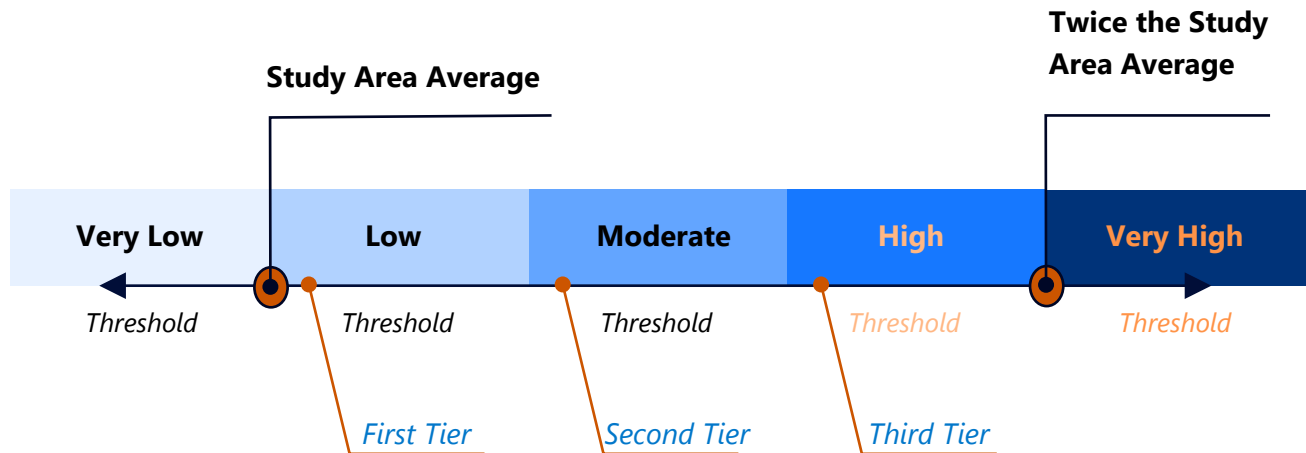
Autoless Households

People living in households without vehicle access are very likely to use transit to provide them an adequate level of mobility to satisfy their needs. High and very high percentages of autoless households were found throughout the study area, in Athens, Carthage, Gladewater, Kilgore, Longview, Palestine, and Pittsburg. Several rural areas in the study area also had high percentages of autoless households, including in Cherokee, Marion, Rusk, Upshur, and Wood. Figure 3-6 displays ETCOG's Census Block Groups by the percentage of autoless households.

Older Adults

Older adults (ages 65 and older) are more likely to rely on public transportation to satisfy their mobility needs. Block groups with high percentages of older adults are found throughout the study area in both rural and urban areas. Rural parts of Anderson, Cherokee, Henderson, Marion, Rains, and Wood contain very high populations of older adults. Lindale and Longview each have block groups with very high percentages of older adults. Figure 3-7 displays the percentage of older adults by block group.

Individuals with Disabilities

Individuals with disabilities often rely on public transportation as their primary mobility option, especially in less urbanized areas. Large percentages of individuals with disabilities are found throughout the study area, specifically Anderson, Henderson, Marion, Smith, Van Zandt, and Wood, mostly in those counties' more rural areas. Figure 3-8 maps the percentage of individuals with disabilities by block group.

Younger Individuals

Individuals between the ages of 10 and 17 are either unable to drive or have limited access to a personal automobile and therefore may be more reliant on public transportation for their mobility needs. In the ETCOG service area, very high percentages of young individuals live in urban areas, as well as in more rural areas. Urban areas with very high percentages of younger individuals include Athens, Carthage, Gun Barrel City, Henderson, Lindale, Longview, Marshall, Palestine, and Tyler. Rural parts of Panola, Smith, and Van Zandt also have higher percentages of younger individuals. Figure 3-9 displays the percentage of younger individuals by block group.

Figure 3-4: Transit Dependent Index
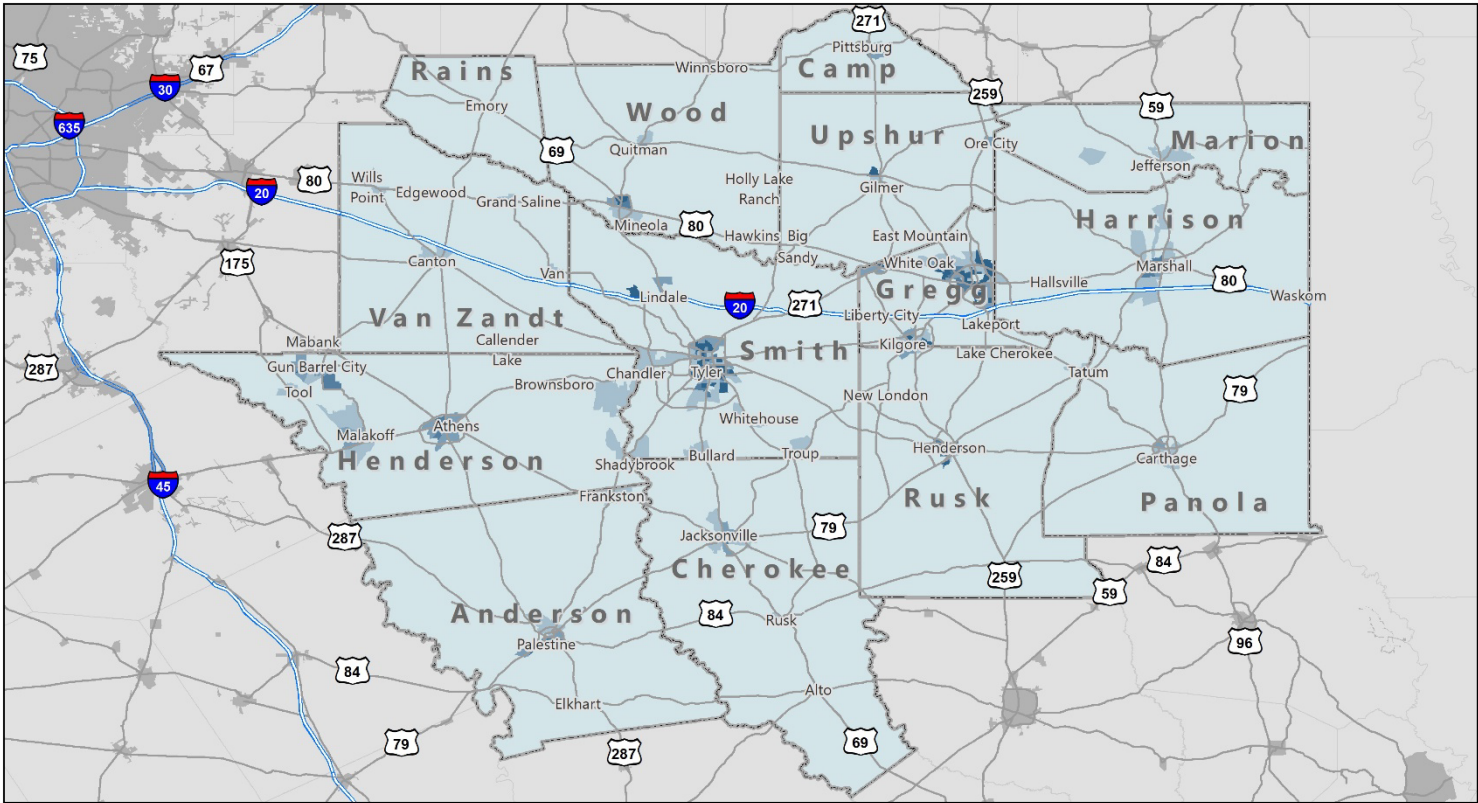
ETCOG Service Area: Transit Dependent Index (TDI)

Relative concentrations of transit dependent populations within ETCOG Region.

Census Block Group —— Major Roads

Very low	—— Interstate
Low	Texas Towns and Cities
Moderate	Counties
High	
Very high	
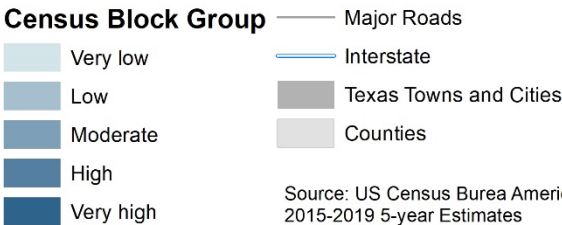
The Transit Dependence Index (TDI) is an aggregate measure to effectively display relative concentrations of transit dependent populations within a study area. Overall study area average of transit dependent population as well as population density per block group are used to calcualte TDI score.

E.g. a higher score indicates an area where a large number of transit dependent persons are present in an area with a high population density.

Source: US Census Burea American Community Survey 2015-2019 5-year Estimates

0   15   30   60
Miles

N
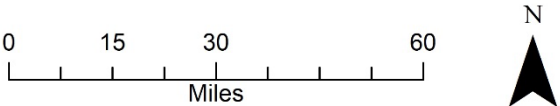
Figure 3-5: Percent Transit Dependent (TDIP)
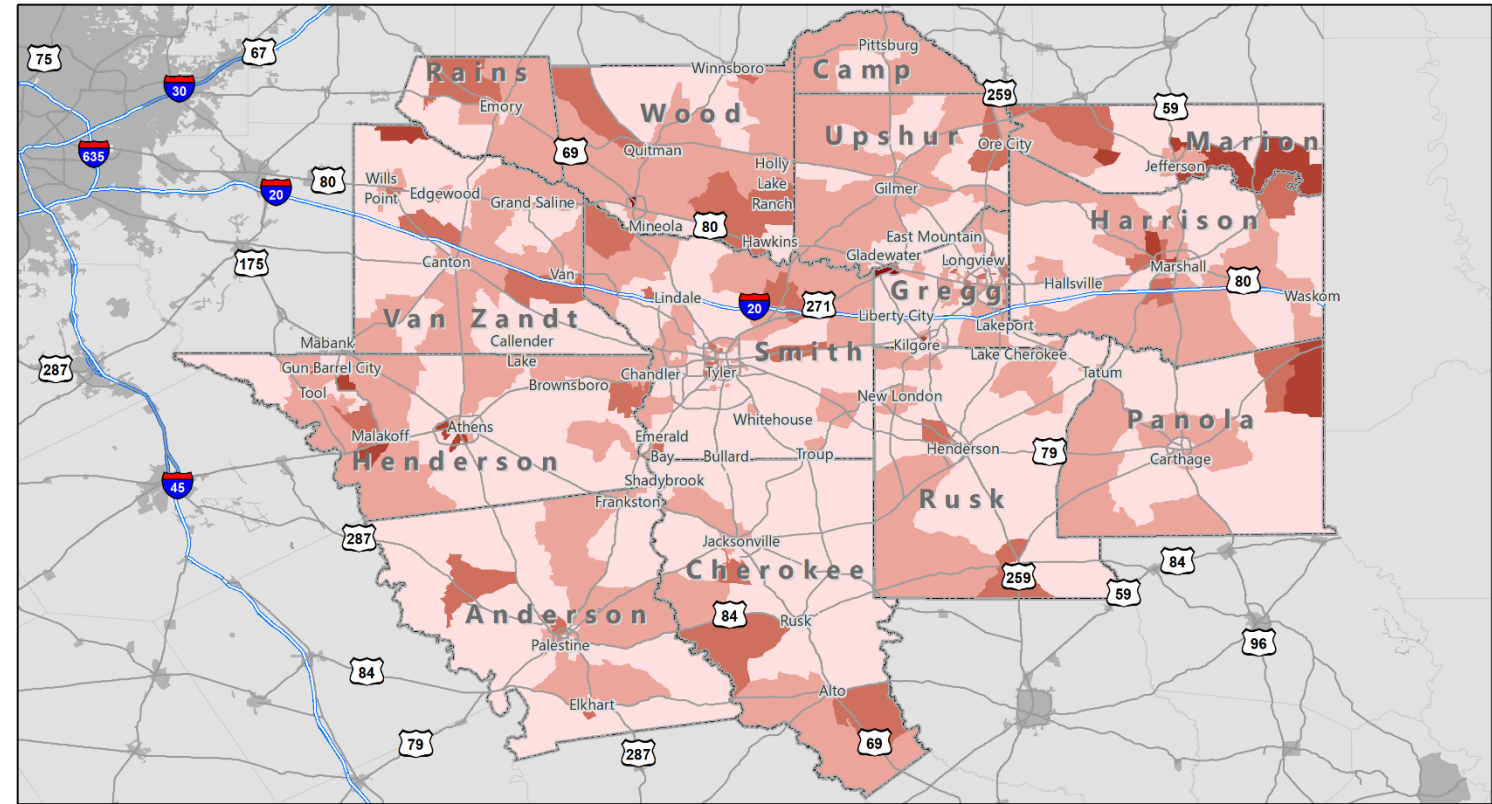
ETCOG Service Area: Percent Transit Dependent (TDIP)
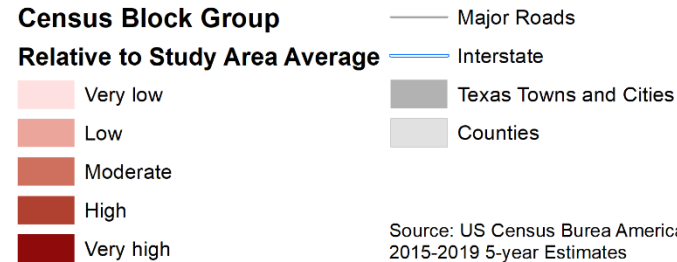
Census Block Group

Relative to Study Area Average

- Very low
- Low
- Moderate
- High
- Very high

— Major Roads

— Interstate

Texas Towns and Cities

Counties

Source: US Census Burea American Community Survey
2015-2019 5-year Estimates

0   15   30   60
Miles

N
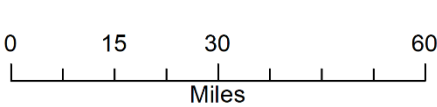
Figure 3-6: Percent Autoless Households
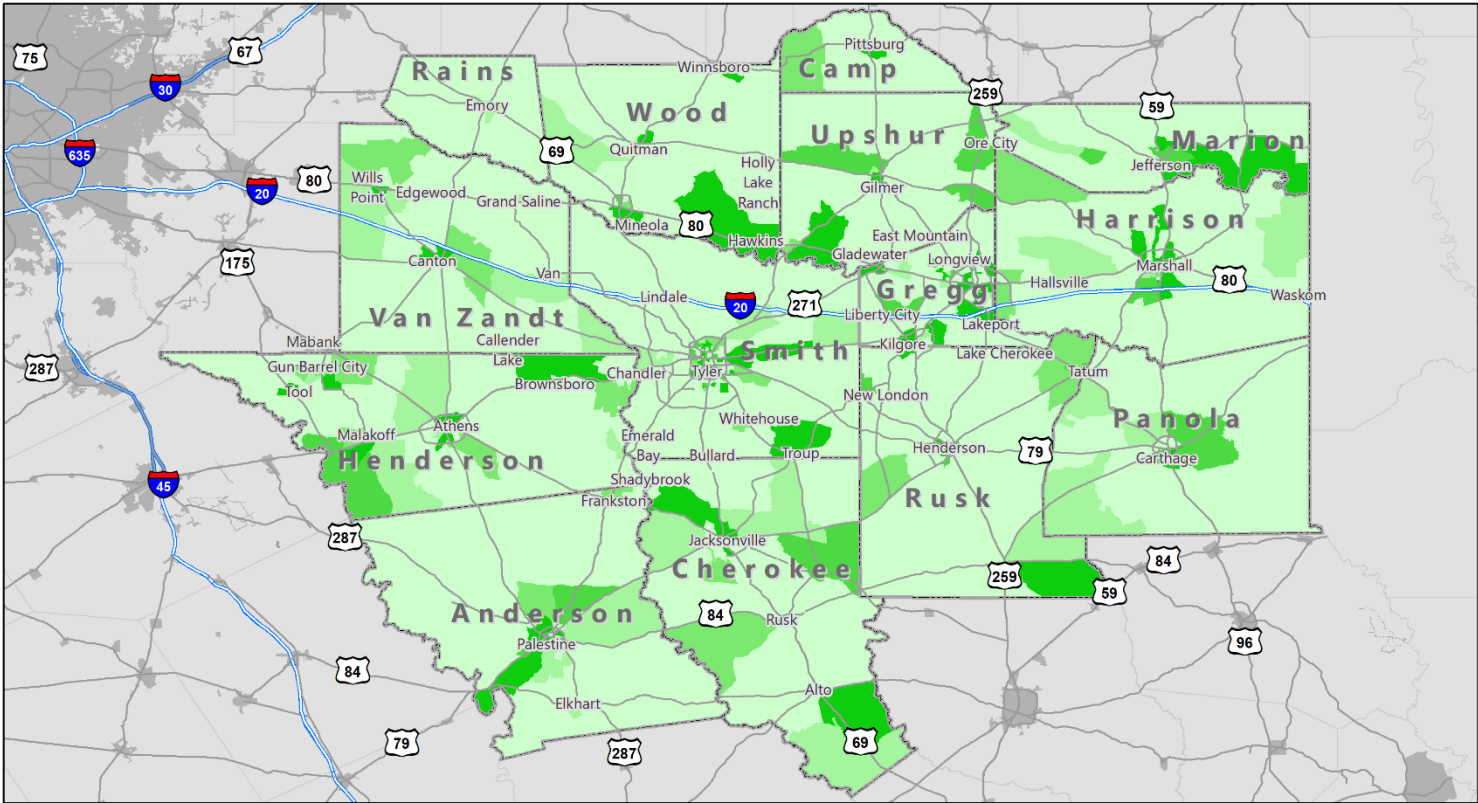
ETCOG Service Area: Percent Autoless Households
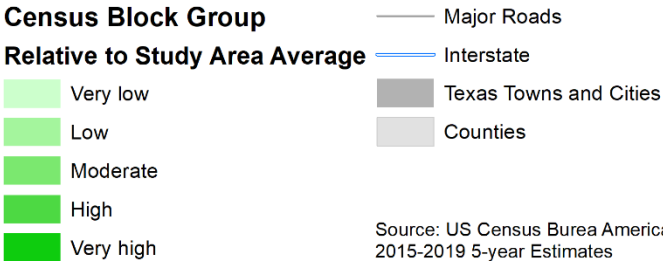
Census Block Group

Relative to Study Area Average

- Very low
- Low
- Moderate
- High
- Very high

— Major Roads

— Interstate

Texas Towns and Cities

Counties

Source: US Census Burea American Community Survey
2015-2019 5-year Estimates

0 15 30 60
Miles

N
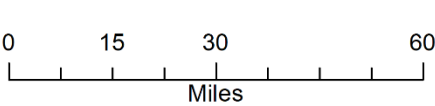
Figure 3-7: Percent Older Adults (65+)
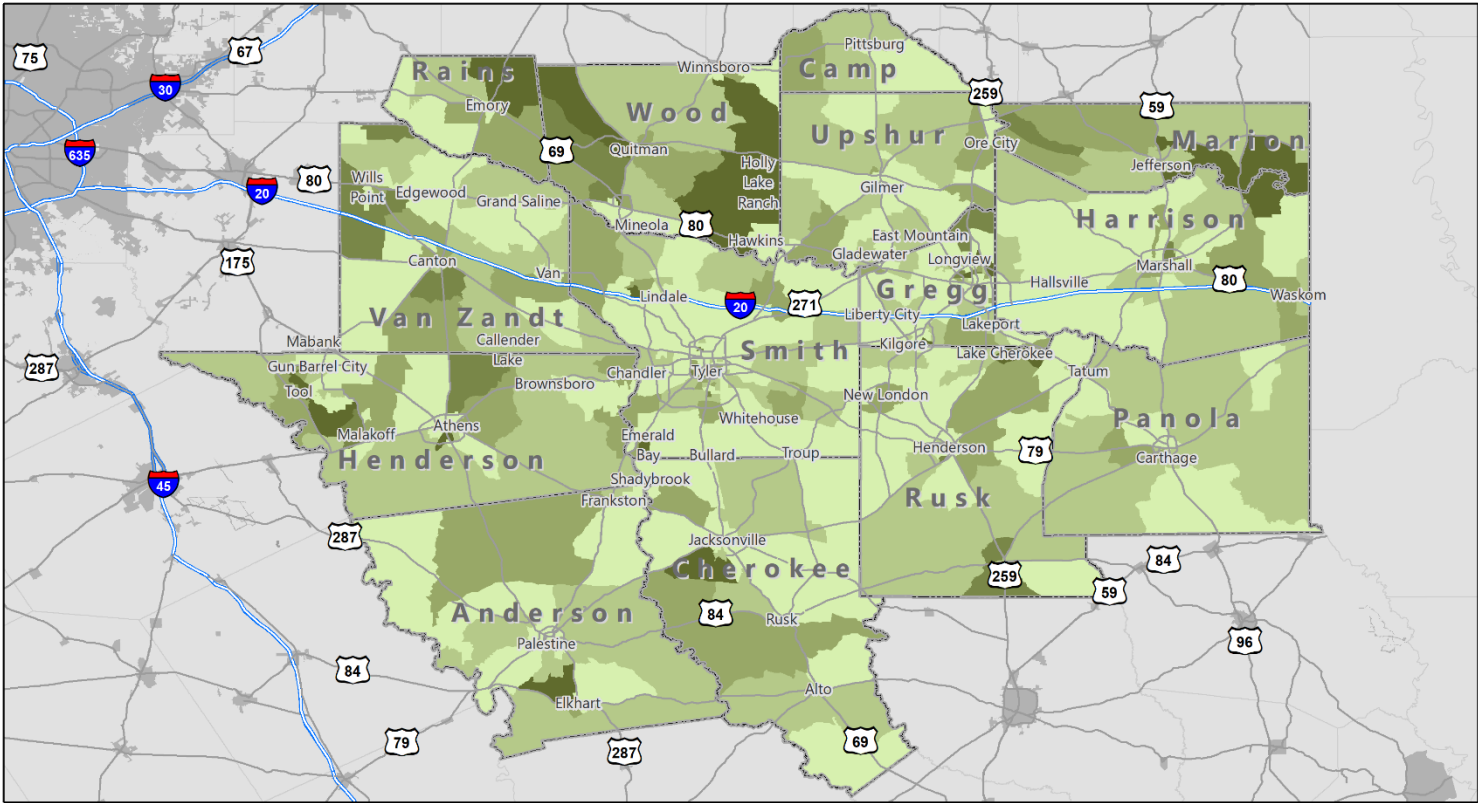
ETCOG Service Area: Percent Older Adults (65+)

Census Block Group

Relative to Study Area Average

- Very low
- Low
- Moderate
- High
- Very high

— Major Roads

— Interstate

Texas Towns and Cities

Counties

Source: US Census Burea American Community Survey
2015-2019 5-year Estimates

0   15   30   60
Miles

N
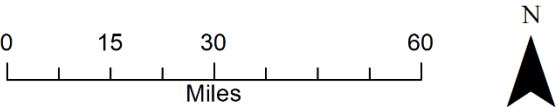
Figure 3-8: Percent Individuals with Disability

ETCOG Service Area: Percent Persons with Disability

Census Block Group

Relative to Study Area Average

- Very low
- Low
- Moderate
- High
- Very high

Major Roads

Interstate

Texas Towns and Cities

Counties

Source: US Census Burea American Community Survey
2015-2019 5-year Estimates

0   15   30   60
Miles

N

Figure 3-9: Percent Youth (Ages 10-17)
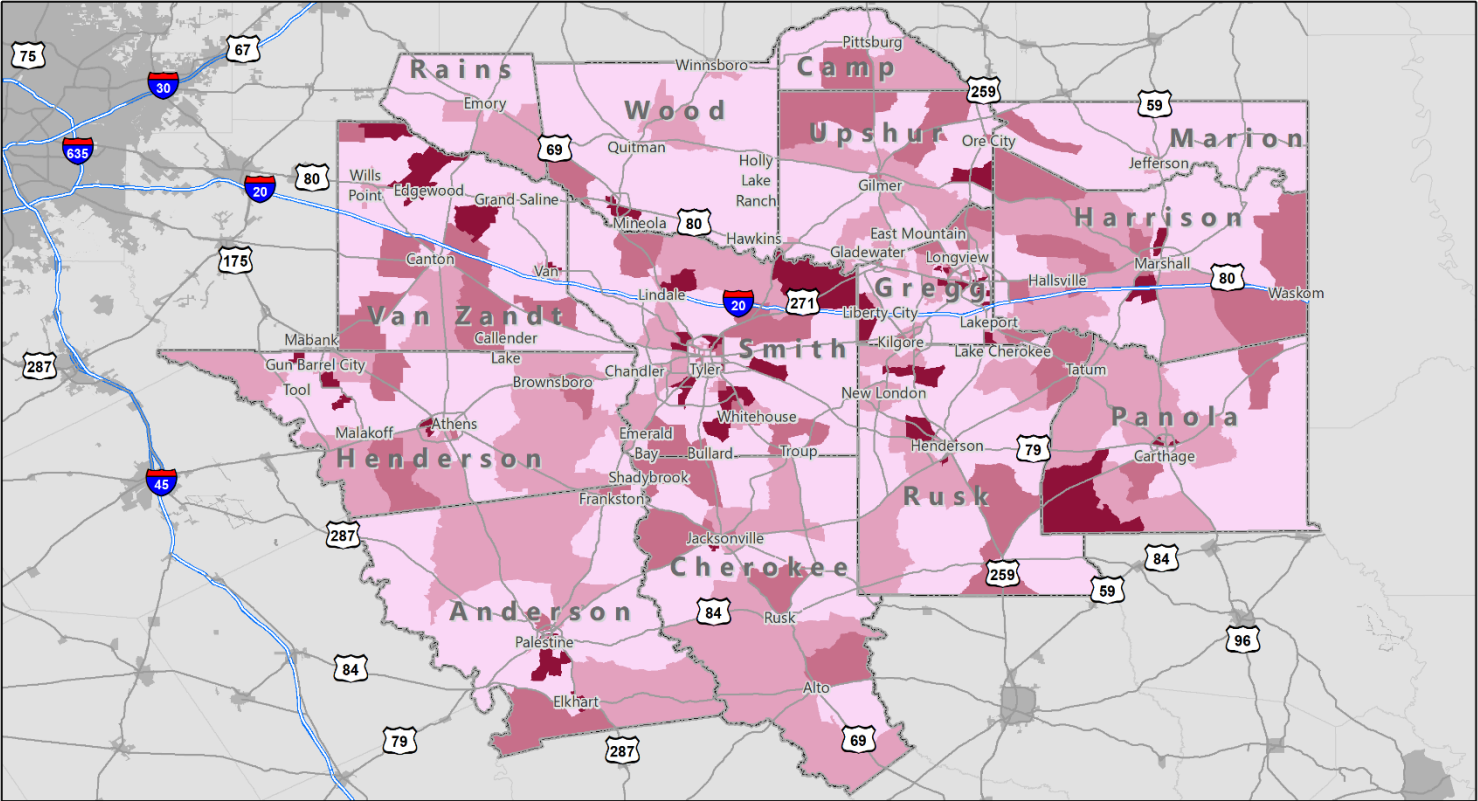
ETCOG Service Area: Percent Youth (Ages 10-17)

Census Block Group

Relative to Study Area Average

Very low
Low
Moderate
High
Very high

Major Roads
Interstate
Texas Towns and Cities
Counties

Source: US Census Burea American Community Survey
2015-2019 5-year Estimates

0   15   30   60

Miles

N
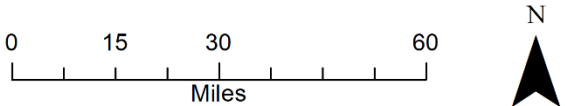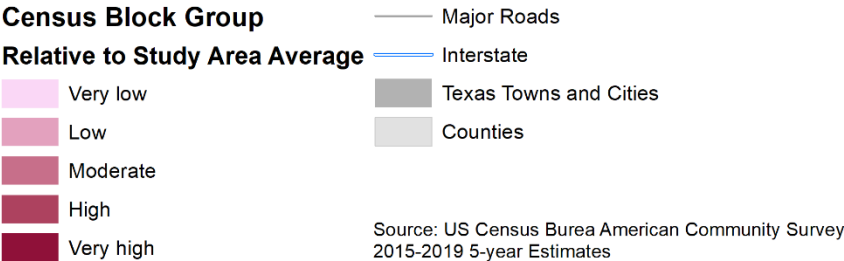
Title VI Demographic Analysis

Through the Civil Rights Act of 1964, Title VI prohibits discrimination on the basis of race, color or national origin in programs and activities receiving federal subsidies. This includes agencies providing federally funded public transportation. The following section examines the minority below poverty level, and limited English proficiency (LEP) populations in ETCOG's service area.

Below Poverty Populations

Individuals living below the federal poverty level are protected by Title VI of the Civil Rights Act, and any service change or improvement should be made so that there is disproportionate burden on this population group. In the ETCOG service area, above average percentages of below poverty individuals can be found throughout the study area, in both the service area's rural and urban areas. Each county has at least one block group with an above average percentage of below poverty individuals. Figure 3-10 maps below poverty individuals by block group.

Minority Populations

Minority populations are protected from discrimination under the Civil Rights Act, and therefore service changes should be analyzed for their impact on these communities. In ETCOG's service area, the highest number of block groups with above average percentages of minority populations are found in Anderson, Cherokee, Gregg, Harrison, Henderson, Panola, Rusk, and Smith. Figure 3-11 maps minority populations by Census block group in the service area.

Limited English Proficiency (LEP) Population

Title VI ensures that individuals of all national origins are entitled to the same level of service as everyone else, and as such any individual who is has LEP can request translated materials to better access transportation services. Limited English proficiency populations are defined by the FTA as including any person who identifies how they speak English as less than "very well". The FTA Safe Harbor Provision of Title VI stipulates that materials must be translated into any language that has a limited English population that represents over 1,000 individuals or over one percent of the service area population, whichever number is lower. The most recent dataset for the ETCOG service area was ACS 2011-2015 5-year estimates. Over five percent of the population speaks English less than "very well". Over 92 percent of the LEP population speaks Spanish at home. Spanish is the only language in the service area that clears the Safe Harbor Provision, so measures should be made to ensure that Spanish speakers receive translation and interpretation services to access federally funded transportation in the region. Table 3-4 provides a breakdown of the LEP population in the service area.

Figure 3-10: Percent of Population Below Poverty
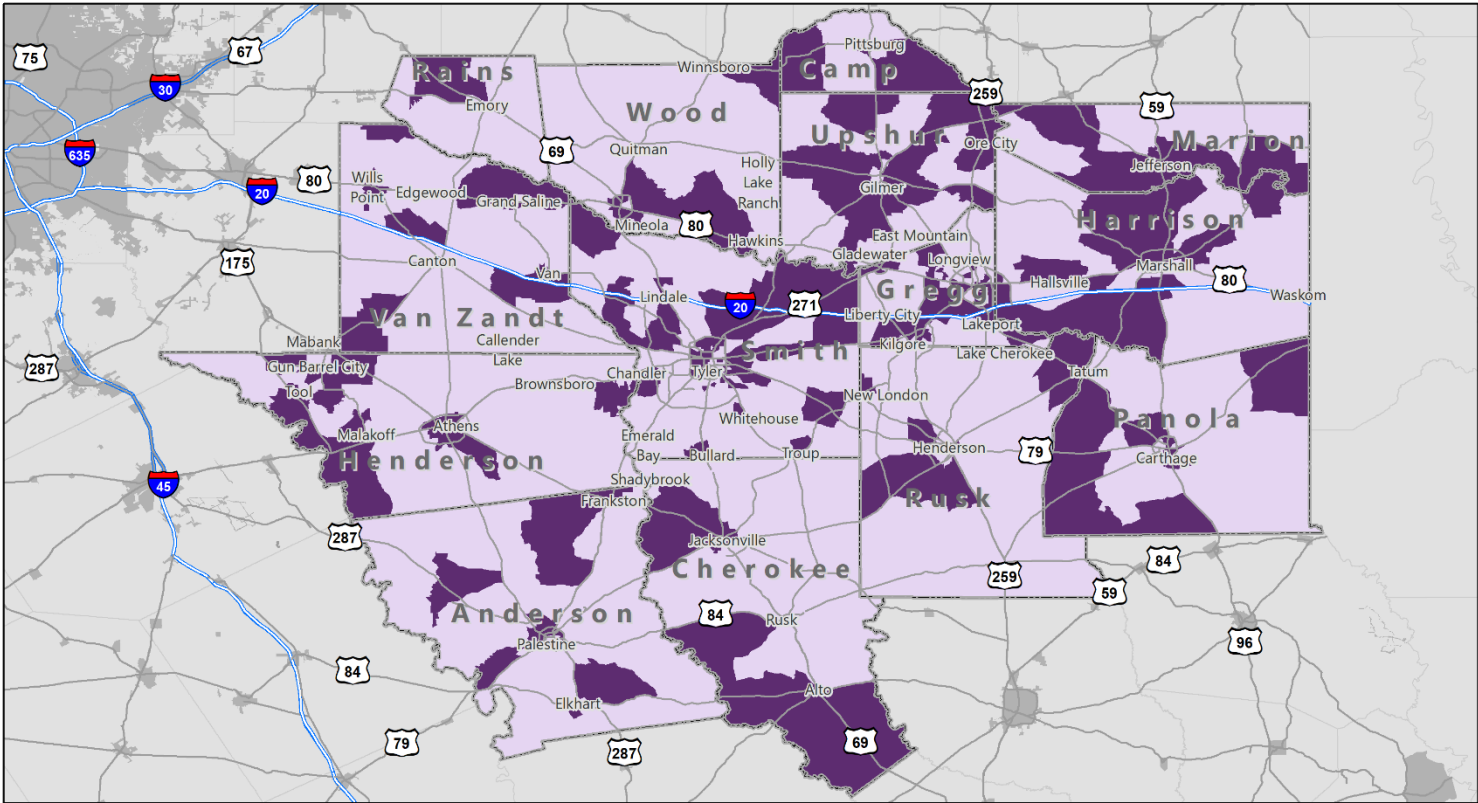
ETCOG Service Area: Percent Below Poverty

Census Block Group

Relative to Study Area Average of 16.1%

Below average

Above average

Major Roads

Interstate

Texas Towns and Cities

Counties

Source: US Bureau American Community Survey
2015-2019 5-year Estimates

0   15   30   60
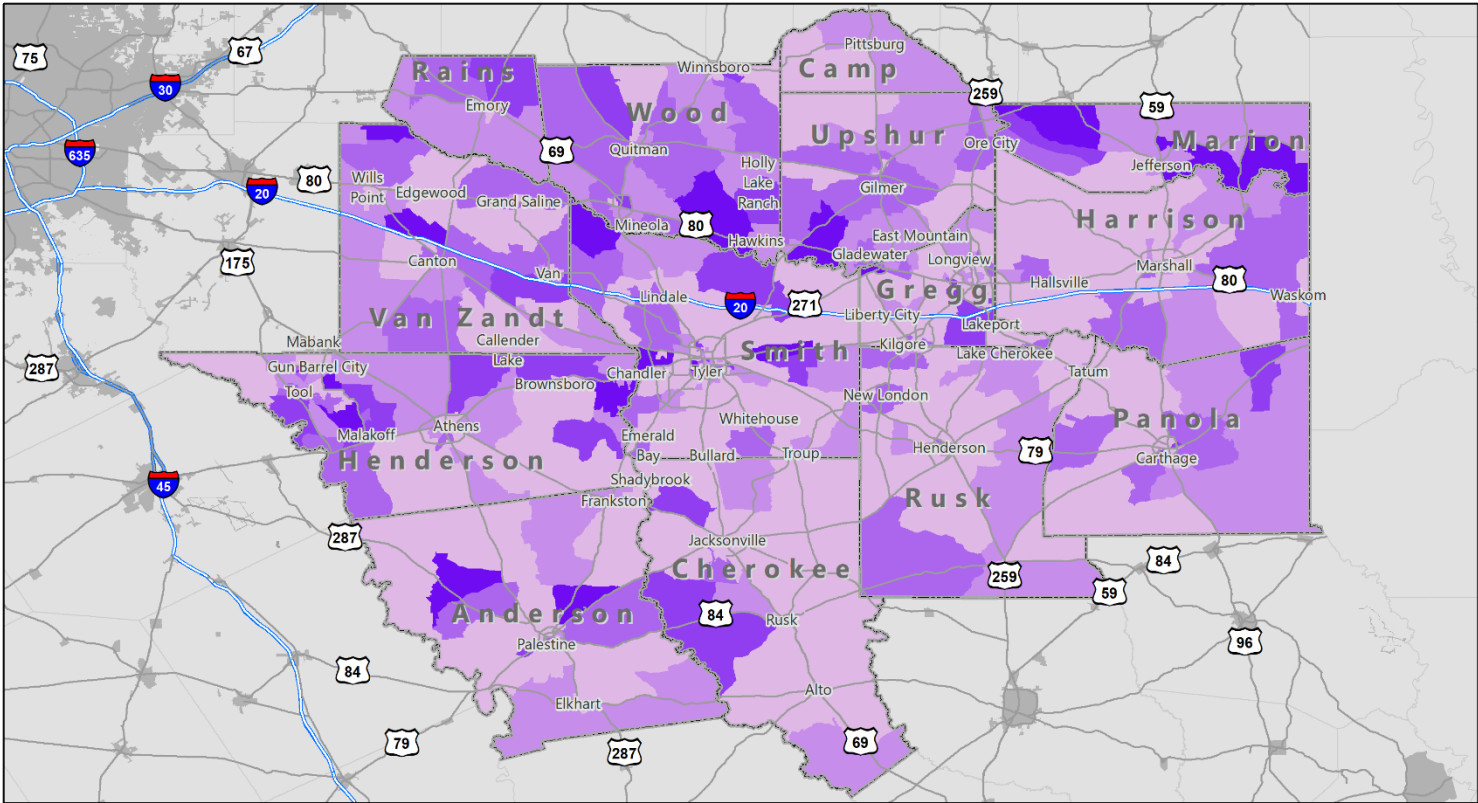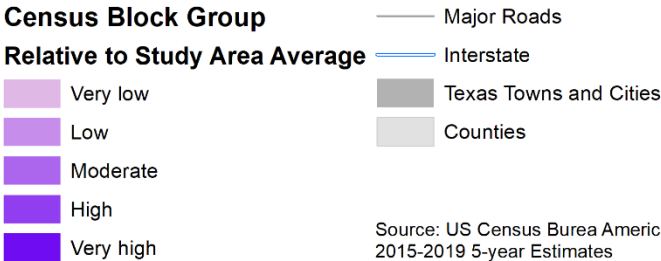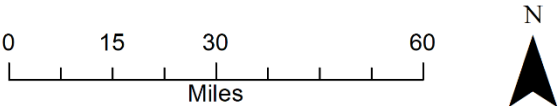Miles

N
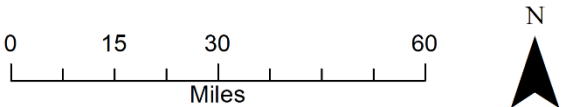
Figure 3-11: Percent Minority Population
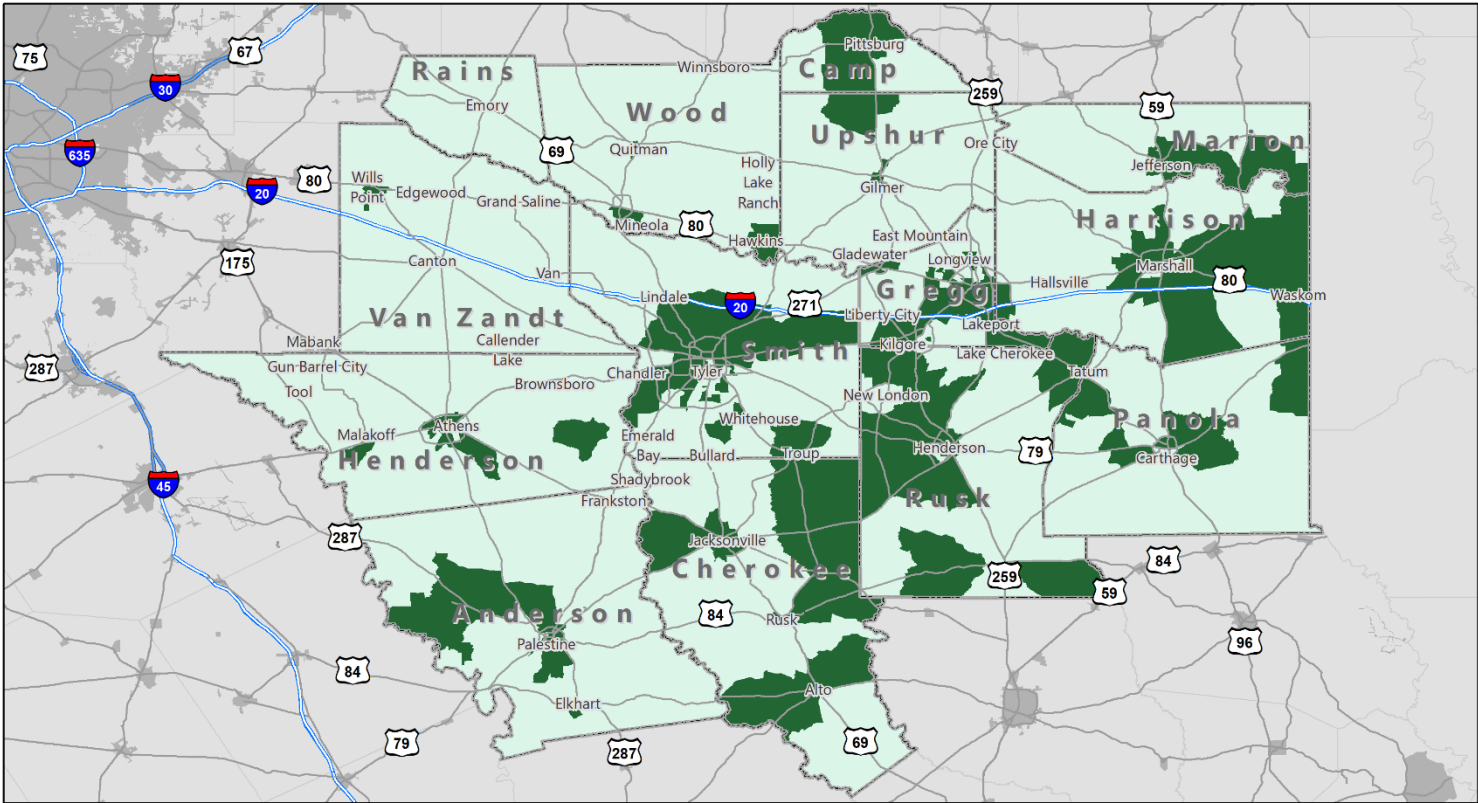
ETCOG Service Area: Percent Minority

Census Block Group

Relative to Study Area Average of 35.5%

Below average

Above average

Major Roads

Interstate

Texas Towns and Cities

Counties

Source: US Burea American Community Survey
2015-2019 5-year Estimates

0   15   30   60
Miles

N
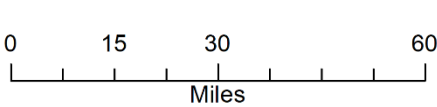
Table 3-4: LEP by Language Spoken at Home in ETCOG Service Area

	Anderson	Camp	Cherokee	Gregg	Harrison	Henderson	Marion	Panola	Rains	Rusk	Smith	Upshur	Van Zandt	Wood	ETCOG Service Area	% of Total
Total	54,896	11,650	47,585	113,830	61,956	74,574	9,822	22,352	10,498	50,033	202,358	37,536	49,832	40,677	787,599	
Speak only English	46,760	9,206	38,263	95,194	55,875	67,852	9,429	20,715	9,822	43,388	167,237	35,257	45,585	37,562	682,145	86.61%
Spanish or Spanish Creole LEP	2,668	1,056	4,003	6,860	2,964	2,690	69	590	197	2,651	13,127	738	1,678	1,165	40,456	5.14%
French (incl. Patois, Cajun) LEP	0	0	0	34	0	8	0	0	0	1	17	0	0	3	63	0.01%
French Creole LEP	0	0	3	0	13	0	0	0	0	0	0	0	0	0	16	0.00%
Italian LEP	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	0.00%
Portuguese or Portuguese Creole LEP	0	0	3	15	0	0	0	0	0	0	14	0	0	0	32	0.00%
German LEP	39	0	8	14	0	2	0	0	0	0	16	0	0	6	85	0.01%
Other West Germanic Languages LEP	0	0	0	0	0	0	0	0	0	0	27	0	0	0	27	0.00%
Russian LEP	0	0	0	0	28	11	0	0	0	0	11	0	0	0	50	0.01%
Polish LEP	0	0	0	0	11	0	0	0	0	0	0	0	0	0	11	0.00%
Serbo-Croatian LEP	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12	0.00%
Other Slavic Languages LEP	0	0	0	30	0	0	0	0	0	5	0	0	0	0	35	0.00%
Persian LEP	0	0	0	20	15	48	0	0	0	0	0	23	20	0	126	0.02%
Gujarati LEP	0	0	0	75	0	0	0	0	0	0	30	0	104	0	209	0.03%
Hindi LEP	0	0	0	0	26	0	0	0	0	0	0	0	0	0	26	0.00%
Urdu LEP	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	0.00%
Other Indic Languages LEP	0	0	8	64	20	42	0	0	24	0	0	0	30	5	193	0.02%
Other Indo-European languages LEP	0	0	0	13	0	0	0	0	0	0	14	0	0	0	27	0.00%
Chinese LEP	0	8	0	58	0	36	0	4	0	14	120	0	0	8	248	0.03%
Japanese LEP	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14	0.00%
Korean LEP	10	0	22	56	0	3	13	0	0	0	9	0	24	5	142	0.02%
Mon Khmer, Cambodian LEP	16	0	4	42	0	2	0	0	0	0	42	0	0	0	106	0.01%

	Anderson	Camp	Cherokee	Gregg	Harrison	Henderson	Marion	Panola	Rains	Rusk	Smith	Upshur	Van Zandt	Wood	ETCOG Service Area	% of Total
Thai LEP	6	0	0	0	0	0	0	0	0	0	40	0	0	0	46	0.01%
Laotian LEP	0	0	0	0	0	2	0	0	0	0	28	0	0	0	30	0.00%
Vietnamese LEP	161	0	34	160	12	126	0	0	0	25	146	15	0	88	767	0.10%
Other Asian languages LEP	2	0	34	0	0	4	0	0	0	0	194	0	0	0	234	0.03%
Tagalog LEP	2	0	0	55	15	0	0	0	0	17	346	0	0	0	435	0.06%
Other Pacific Island languages LEP	0	0	0	0	0	7	0	0	0	0	106	0	46	0	159	0.02%
Arabic LEP	0	0	11	19	0	5	0	0	0	0	0	0	0	0	35	0.00%
Hebrew LEP	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0.00%
African languages LEP	4	0	18	0	14	0	0	0	0	0	200	0	0	0	236	0.03%

Land Use Analysis

Trip Generators

This section of the needs assessment identifies where trip generators, including human service and workforce agencies, are located within ETCOG's study area. Major employers, shopping destinations, education facilities, human service agencies, medical centers, and high-density housing were identified throughout the region as potential trip generators. Figure 3-12 displays all trip generators identified throughout the ETCOG Region. Most human service agencies, major medical facilities, educational facilities, and shopping destinations are concentrated in Kilgore, Longview, and Tyler, though cities throughout the service area like Athens, Marshall, and Palestine also have a share of important trip generators.

Commuting Patterns

Most commuters in the ETCOG service area drive themselves to work, and very few use public transportation to access employment. 83.2 percent of all service area residents drove alone to work, while only 0.2 percent used public transportation. Less than one percent of each county's population used public transportation to get to work. Carpooling was a more popular alternative, with 10 percent of the service area's population carpooling or vanpooling to work. Cherokee County had the highest percentage of carpooling in the service area, over 15 percent of the working population use shared rides to get to work. Table 3-5 displays the commuting trends in each ETCOG County.

Census LEHD data was used to identify where study area residents worked and where study area workers lived. Most members of the workforce lived in the service area, with the largest out-of-service area work and home locations being Dallas and Houston. Tyler and Longview were the most common destinations in the service area. Table 3-6 displays the most common residences for county workers, and Table 3-7 displays the most common work destinations for service area residents.

Figure 3-12: ETCOG Trip Generators

ETCOG Service Area: Trip Generators

Generator Type

- 🏫 Educational Facility
- 🏠 High Density Housing
- 🏛 Human Services
- 🏭 Major Employer
- ✚ Medical
- 🛒 Shopping Destination

— Major Roads
— Interstate
⬛ Texas Towns and Cities
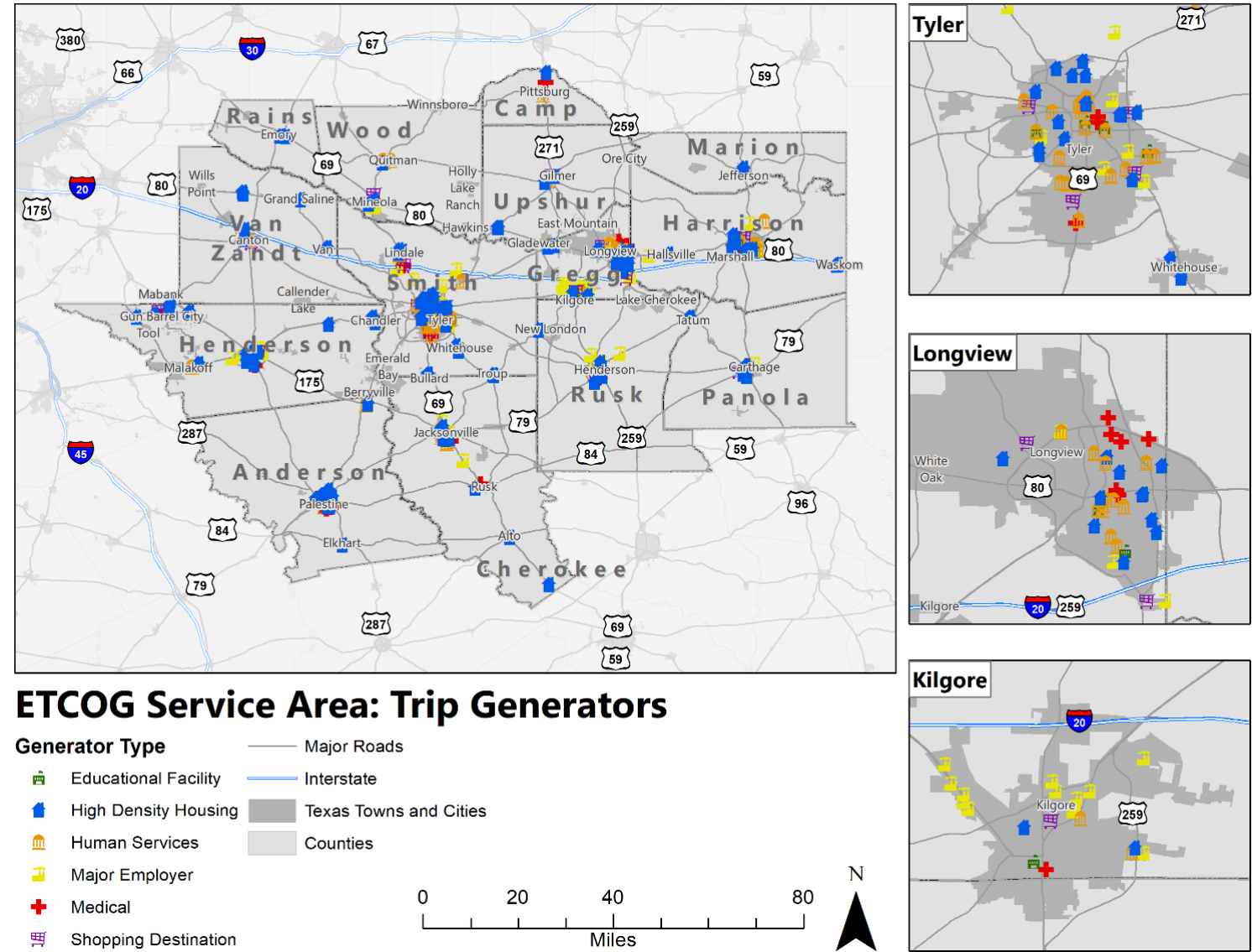⬜ Counties

0   20   40   80   Miles

N

Table 3-5: Commuting Characteristics of ETCOG Workforce

County	Workers 16 Years and Older	Work In State of Residence		In County of Residence		Outside County of Residence		Outside State of Residence		Car, truck, or van - drove alone		Car, Truck, or Van - carpooled		Public Transportation		Walked		Taxicab, motorcycle, bicycle, other		Worked at Home	
Anderson	18,989	18,679	98.4%	15,143	79.7%	3,626	19.1%	220	1.2%	15,954	84.0%	1,945	10.2%	88	0.5%	108	0.6%	199	1.0%	695	3.7%
Camp	5,293	5,182	97.9%	2,079	39.3%	3,103	58.6%	111	2.1%	4,226	79.8%	669	12.6%	19	0.4%	39	0.7%	111	2.1%	229	4.3%
Cherokee	19,977	19,673	98.5%	12,808	64.1%	6,865	34.4%	304	1.5%	15,748	78.8%	3,042	15.2%	52	0.3%	278	1.4%	165	0.8%	692	3.5%
Gregg	54,346	53,707	98.8%	44,888	82.6%	8,819	16.2%	639	1.2%	45,683	84.1%	5,603	10.3%	44	0.1%	925	1.7%	345	0.6%	1,746	3.2%
Harrison	27,772	25,467	91.7%	15,614	56.2%	9,853	35.5%	2,305	8.3%	23,630	85.1%	2,134	7.7%	0	0.0%	329	1.2%	484	1.7%	1,195	4.3%
Henderson	31,861	31,661	99.4%	18,494	58.0%	13,257	41.6%	200	0.6%	26,299	82.5%	3,580	11.2%	167	0.5%	347	1.1%	164	0.5%	1,304	4.1%
Marion	3,700	3,516	95.0%	1,670	45.1%	1,846	49.9%	184	5.0%	3,086	83.4%	338	9.1%	11	0.3%	20	0.5%	34	0.9%	211	5.7%
Panola	9,458	8,473	89.6%	5,847	61.8%	2,626	27.8%	985	10.4%	8,237	87.1%	729	7.7%	2	0.0%	244	2.6%	54	0.6%	192	2.0%
Rains	4,897	4,886	99.8%	1,989	40.6%	2,897	59.2%	11	0.2%	3,844	78.5%	736	15.0%	0	0.0%	11	0.2%	77	1.6%	229	4.7%
Rusk	20,872	20,701	99.2%	9,734	46.6%	10,967	52.5%	171	0.8%	18,222	87.3%	1,560	7.5%	52	0.2%	194	0.9%	171	0.8%	673	3.2%
Smith	100,354	99,251	98.9%	86,760	86.5%	12,491	12.4%	1,103	1.1%	83,605	83.3%	9,047	9.0%	360	0.4%	915	0.9%	1,601	1.6%	4,826	4.8%
Upshur	16,792	16,590	98.8%	6,067	36.1%	10,523	62.7%	202	1.2%	13,699	81.6%	1,701	10.1%	8	0.0%	480	2.9%	205	1.2%	699	4.2%
Van Zandt	21,843	21,477	98.3%	10,389	47.6%	11,088	50.8%	366	1.7%	17,679	80.9%	2,518	11.5%	11	0.1%	410	1.9%	173	0.8%	1,052	4.8%
Wood	15,977	15,775	98.7%	9,290	58.1%	6,485	40.6%	202	1.3%	12,904	80.8%	1,488	9.3%	40	0.3%	355	2.2%	141	0.9%	1,049	6.6%
ETCOG Service Area	352,131	345,038	98.0%	240,772	68.4%	104,446	29.7%	7,003	2.0%	292,816	83.2%	35,090	10.0%	854	0.2%	4,655	1.3%	3,924	1.1%	14,792	4.2%

Table 1-6: Common Workplaces for ETCOG Residents

Where ETCOG Residents Work		
County	Population	Percent
Tyler	32,682	10.8%
Longview	25,524	8.4%
Marshall	6,755	2.2%
Jacksonville	4,460	1.5%
Palestine	4,284	1.4%
Kilgore	4,101	1.4%
Henderson	4,050	1.3%
Dallas	3,784	1.2%
Houston	3,409	1.1%
Athens	3,025	1.0%
Total Workforce	303,430	

Table 1-7: Common Residences for ETCOG Workers

Where ETCOG Workforce Lives		
County	Population	Percent
Tyler	60,115	18.1%
Longview	38,020	11.5%
Dallas	11,450	3.5%
Houston	8,424	2.5%
Kilgore	8,162	2.5%
Marshall	8,066	2.4%
Jacksonville	6,646	2.0%
Palestine	6,525	2.0%
Athens	6,146	1.9%
Henderson	4,900	1.5%
Total Workforce	331,325	

Stakeholder Engagement and Public Outreach Efforts

Numerous local and regional stakeholders have a vital role in the coordinated transportation planning process, so a variety of public and community outreach activities were held to ascertain the overall attitudes towards passenger transportation, mobility needs, and potential strategies to meet those needs in the ETCOG region. This effort took into account the ramifications of the COVID-19 pandemic, and the need for outreach strategies that were compatible with ongoing social distancing and CDC recommendations and community spread preventions. Therefore, due to the current pandemic a variety of web-based interactions were implemented to protect participants as well as to elicit substantive input on regional mobility needs. Overall, outreach activities included:

- Web-based Open House Meetings
- Stakeholder Interviews
- Focus Groups
- Meeting with the EasTexConnects Committee

The following sections detail the findings from each outreach effort, including those in attendance, needs identified, and potential strategies discussed.

Open House Meetings

On August 18, 2021, two web-based public open house meetings were conducted to solicit input from the community on regional mobility needs and potential solutions to meet those needs. The meetings were one hour long and consisted of a short presentation by the consultant team on the planning process and work completed to date, followed by a needs discussion with the entire group. The first meeting was held at 10:00 a.m., and the second at 6:30 p.m. A total of 22 individuals participated in the open houses representing the general public, transit customers, and human service clients.

A variety of topics were discussed and are summarized below by category.

Service Parameters

- Many participants noted that service industry workers and people who work second and third shift jobs have mobility needs that are unable to be met during normal transit operational hours. Extended hours in the evening and on the weekends are desired. Some people in the community have had to quit jobs because there are no transportation options to get them to or from work at the times needed.

- Some individuals noted that pick-up and drop-off times are inconsistent, with one-hour windows in certain rural areas and two-hour windows in other areas.

- Rural transit customers have no problem making appointments but have had issues with the return trips, stating that sometimes wait times can be several hours.

- Long gaps in time between scheduled pick-up/drop-off times and actual pick-up/drop-off times can be frustrating for customers. This issue applies to rural demand response service and urban paratransit services.

- Some customers are confused by the scheduled service, and make appointments in Longview or Tyler that do not match up with these services and therefore miss their appointment.

Service Area

- Many participants stated the desire to see increased transportation options in the rural communities, including fixed routes, on-demand transit and increased scheduled service into the urban areas.

- It was noted that many of the jobs in Longview are well outside of the Longview Transit service area.

- Many individuals cited a need for increased connections to Tyler for medical appointments, particularly from Longview and Jacksonville.

- There are many people in the overall ETCOG region that need transportation services to Longview and Tyler.

Marketing and Communication

- The rural scheduled service can be difficult for some transit customers to understand. Improved communication and outreach to human service agencies and clients from all transit agencies could use improvement.

- Increased information and communication options for demand response customers could help them understand better when a bus is going to arrive. This could be improved through the use of a mobile application or phone calls from dispatch operations.

Technology

- GoBus customers noted that they are pleased with the new mobile ticketing.
- Fixed route customers would like to see next bus technology be implemented.

Coordination

- All of the transit agencies have positive working relationship, though customers would like to see more service and technology integration amongst the providers. Being able to use a mobile application across agencies is desired.

- Participants stated a desire to see a coordinated service between Tyler and Longview, connecting the transfer centers in each city.

- All transit agencies can coordinate with organizations focused on independent living, such as Project SEARCH, to help with travel training.

Service Modes

- All participants were excited at the prospect of mobility on demand services in the larger towns and cities in the region.

- Mobility on demand services were see as a solution to many students' transportation needs in rural and urban areas. This was also seen as a potential solution for "safe ride" options for students on Friday and Saturday nights.

- Fixed route customers in Longview would like to see a route reorganization to help mitigate long travel times.

- Workforce agencies would like to see a pilot project for van pools for "after hour" jobs and employees.

Funding

- It was noted that GoBus is able to increase the menu of services in the region with increased local support. Marshall was cited as an example.

- The FTA 5310 grant program administered by TxDOT was noted as a potential opportunity to expand some services to meet the gaps in human service transportation services.

Stakeholder Interviews

As part of the outreach process EasTexConnects committee members were provided the opportunity to give input on regional transportation needs through individual interviews. Interviews were conducted with:

- GoBus
- Tyler Transit
- Longview Transit
- Rail Passengers Association
- NDMJ, Ltd Transportation

This section summarizes the findings from these interviews.

GoBus

As the rural transit provider for the region GoBus has a unique perspective on transportation and mobility issues in the region. This interview was an hour long and covered topics for service design to funding. Below is a summary of the key topis and issues discussed in the meeting.

- **New Modes:** GoBus would like to transition away from the day-in-advance rural demand response mode to newer and more productive modes. This includes mobility on demand modes in appropriately sized cities and towns, and fixed schedule services connecting areas throughout the region. To do this GoBus needs a plan that helps them understand what is achievable and practical, as well as steps to implement this transition.

- **Coordination:** GoBus and the other transportation providers in the region work well together but need to improve coordination. Specifically, GoBus would like to help pick up transit customers in the urbanized areas of Tyler and Longview that are well outside of the urban fixed route networks, but as a Section 5311 rural provider they are not able to provide service in urban areas unless that service is funded by other sources (as is typically done in many urban areas). They would like to see this plan help the agencies reach agreements on how to serve these populations.

- **Funding:** GoBus is current at it limit with the amount of service they can provide. With the vehicle fleet they have in the region they are providing as many service and vehicle hours as possible. Increased local support the municipalities, counties or private partnerships can help them expand services like they have been able to do in Marshall. GoBus would like to expand services in places like Athens, Henderson, Jacksonville, and Palestine, but do not have the funding to do so.

Tyler Transit

Tyler Transit is the urban transit operator in the City of Tyler providing fixed route and paratransit services. Tyler Transit was interview for about one hour, discussing their recently completed route study and desired outcomes of the coordinated planning process. The key topics discussed are summarized below.

- **Coordination:** There are several communities that are part of the census designated Tyler urbanized area that are a considerable distance outside of the current Tyler Transit service area. Tyler Transit would like to set up a formal agreement with GoBus so that they can bring transit customers in these locations into the Tyler Transit service area.

- **Technology:** Tyler Transit would like to invest in new technologies to improve their services. Specifically, they are looking to install annunciation technology on their fixed routes. Also, they would like to explore the possibility of app-based fare collection, next bus technology, and mobility on demand technology (for paratransit services).

- **New Service:** Tyler Transit notes that there is demand for express and/or commuter service connecting Longview and Tyler. Coordination between the service providers in the region and securing funding for this service is needed for implementation.

- **New Route Structure:** Tyler Transit recently completed a route study that has resulted in the planned reconfiguration of the fixed route system. As part of this effort new transfer locations have been identified and Tyler Transit would like to see coordination with GoBus and Greyhound to use these facilities for transfers as appropriate.

Longview Transit

Like Tyler Transit, Longview Transit provides fixed route and paratransit service in the City of Longview. An hour-long interview was scheduled with Longview Transit that covered a variety of topics regarding service provision, coordination, and desired planning outcomes of this process. A summary of key issues discussed is detailed below.

- **Coordination:** Longview Transit coordinates well with GoBus but would like to increase coordination efforts. They have worked with GoBus on coordinated training, and this effort is something they would like to continue into the future. Longview Transit previously coordinated with GoBus to provide some service in the urbanized area, specifically in Gladewater using Job Access and Reverse Commute (JARC) funding, but other communities are not being served due to lack of funding. These communities include Lakeport, Clarksville City and White Oak. A single fare for the region, or some sort of fare integration would also be a benefit for transit customers that use multiple providers.

- **Technology:** Longview Transit has seen a decline in functionality in their current software package and understands that other providers in the region are pleased with their software. If Longview Transit changes software vendors there may be opportunities to coordinate with other providers. Longview Transit is a flag stop system, does not currently have AVL technology and still uses paper manifests for paratransit services. A strategy to upgrade some of these systems in the coordinated plan would help them secure funding for improvements.

- **Desired Outcomes:** Longview Transit completed several activities outlined in the previous coordinated plan including the construction of a new transfer facility. The City is pleased with these outcomes. Longview Transit would like to see a plan that helps them procure new technology, expand services (particularly in the evenings and on the weekends) and strengthen partnerships in the region.

Rail Passengers Association

As part of the stakeholder engagement the consultant team interviewed the local representative of the Rail Passengers Association (RPA). In addition to their involvement on the EasTexConnects Committee, this representative is a member of the I-20 Corridor Council and also serves on several other boards and organizations dealing with public and human service transportation. The meeting lasted about an hour and a half, and covered a variety of topics including making sure that this process highlights what has already been accomplished in previous planning efforts and that areas of the region where services are limited are made clear. Additional key topics are summarized below.

- **Regional Connectivity:** Improved regional connectivity was stressed as an essential need and focus of this planning process. Intercounty connections were highlighted as a major need.

- **Marketing:** It was stated that many residents are unaware of the transportation services available to them and that increased marketing and education is needed on this front. Holding events such as "Interconnectivity Day" or "Get on Board, East Texas" Day with all regional providers participating, including Amtrak and intercity providers was suggested as a way to raise awareness.

- **Coordination:** It was noted that a one call center had been discussed and proposed in previous regional planning efforts, but it never came to fruition. It was discussed that this could possibly be of benefit to transit users. Additionally, a regional fare card or fare collection system was mentioned as a possible strategy for coordination.

NDMJ, Ltd Transportation

An interview was conducted with the general manager of NDMJ regarding the needs and potential future transportation strategies for the East Texas Region. The following summarizes the important findings from this interview:

- **Private transportation:** There is always an emphasis on the public transit agencies for these plans which is essential to success. Also important is the continued use and support of private companies like NDMJ, to not only fill in service gaps within the public transit network but to also operate public transit services. NDMJ has been a contractor for public transit service and has been an innovator in creating matching funds for public transit projects.

- **Funding:** NDMJ in Tyler was recently trying to convert their fleet to compressed natural gas (CNG). They initially tried to go through traditional FTA capital grant funding mechanisms but could not find the local match needed to complete the grant process. Undeterred NDMJ found a Texas Commission on Environmental Quality (TCEQ) grant opportunity to build their CNG facility with no local match. The facility is now operational and NDMJ not only fuels their fleet with the CNG, but also sells fuel to other local and regional entities that use CNG to power their vehicles. As a result, NDMJ has started a fund using $0.25 of every gallon of CNG fuel they sell for local match for

passenger transportation grants in the future. As a result, TCEQ has awarded NDMJ with another grant (the first TCEQ multiple grant award for such projects in Texas) to expand the facility. This is the type of funding innovation using both public and private sources that the East Texas region should build upon.

- **Coordination:** NDMJ is proud of the coordination work they do with Tyler Transit and GoBus and is willing and ready to expand their coordination efforts to help the mobility needs of East Texas residents. NDMJ is ready to coordinate with public transit and human service agencies to ensure area residents get to where the need to go.

Focus Groups

As part of community outreach efforts two focus groups were conducted, with one focused on human service agencies and the other focused on government and regional planning representatives. Both focus groups were held on August 9, 2021, and included representatives of:

- Human Service Agencies:

  - Workforce Development
  - Palestine Center for Independent Living
  - Community Healthcore
  - Veteran Services
  - Children's Advocacy
  - Area Agency on Aging

- Government and Planning Agencies:

  - ETCOG
  - City of Tyler
  - Tyler MPO
  - Longview MPO
  - TxDOT
  - Panola County
  - Rusk County

Both meetings lasted an hour, and consisted of a short presentation on the planning process and work completed to date by the consultant team followed by a discussion of needs and potential strategies. Key discussion items are summarized below.

- It was noted by several participants that there are limited services in rural areas and major gaps in areas where people with significant mobility issues reside.

- Veteran's service provides transportation and covers a large rural area, but there is a significant veteran homeless population and they need for service to VA centers in Longview, Texarkana, and Shreveport.

- All participants liked the idea of dial-a-ride or mobility on demand services in Palestine.

- Strengths noted by the group:
  - Strong working relationship between the three public transit providers.
  - City of Marshall does contribute support to GoBus and as a result gets a higher level of service than other rural communities in the region.

- Top weaknesses expressed by the groups:
  - Issues with network and connectivity between urbanized areas in the region.
  - No commitment for local dollars. Transit needs to start engaging jurisdictions during their budget cycles. The suggestion was to start low, at something like 25 center per capita.
  - Funding silos for public and human service transportation make coordination and provision of service across jurisdictional line difficult.

- Opportunities identified by the focus groups:
  - Engage Walmart, HEB for support for the private sector.
  - Look at Paris, TX as example of successful public/private partnerships.
  - It was stated that this plan needs to quantify to locals what types of service improvements they could receive with additional support to public transit.
  - Microtransit service is seen as a solution to local mobility needs in rural communities with the funding and population to support such service.

EasTexConnects Committee Meeting

The EasTexConnects Committee is comprised of elected officials or their appointees, citizens, and representatives of social service agencies, local transportation providers, and businesses. The committee's purpose is to improve the quality of life in East Texas through transportation choices. On July 28, 2021, the EasTexConnects Committee held their quarterly meeting. As part of the agenda for this meeting the consultant team gave a short presentation on the progress of the demographic review and transportation resource inventory, and had a limited discussion on regional needs and the planning process.

The committee noted that they would like to see the plan highlight successes that have been achieved since the last coordinated plan update. The committee also gave their support to the outreach plan for this planning effort that included the community and stakeholder engagement strategies discussed in this technical memorandum.

Gap Analysis

By coupling the demographic analysis, inventory of current services and outreach efforts, service gaps and unmet needs are revealed. Table 3-8 summarizes these service gaps and unmet needs by:

- Geographic Location
- Time Related
- Population Analysis
- Transportation Service Type
- Marketing and Outreach
- Technology
- Funding

Table 3-8 Gap Analysis and Need Assessment Summary

Gaps and Needs: Geographic Location
Despite additional services designed to fill these needs, stakeholders noted that there are employment opportunities in Longview that are outside of current public transit services in the area.
There is a need for increased connections to Tyler from outlying areas, particularly from Longview and Jacksonville.
Expanded regional transportation services are needed to access destinations in Longview and Tyler.
There is a need for a coordinated public transit service between Tyler and Longview, connecting the transfer centers in each city.
An agreement is needed between Tyler Transit and GoBus on how best to serve customers, while taking into account small urban and rural funding streams.
There is a need for new and expanded intercounty connecter services.

Gaps and Needs: Time Related
Service industry workers and people who work second and third shift jobs have mobility needs outside hours public transit operates in the region.

Gaps and Needs: Population Analysis

The demographic analysis indicates that high need transit groups exist in ETCOG's most rural areas, particularly in Marion and Panola Counties.

Transit dependent populations are also concentrated in the large cities of Tyler and Longview as well as Athens, Gilmer, Henderson, Kilgore, Lindale, and Pittsburg.

Gaps and Needs: Transportation Service Type

There is a need to explore the use of mobility on-demand and microtransit services in the larger towns and cities in the region.

Guidance is needed with the steps and the process for implementing on-demand services in the region.

There is a need to assess current routes and to determine if modifications are needed to address long travel times.

There is an opportunity to implement a vanpool pilot project that would help serve workers with shifts or locations not served by public transportation.

The route study recently completed by Tyler Transit provides the opportunity to reconfigure and improve the fixed route system, including implementation of new transfer locations that help facilitate improved coordination with GoBus and Greyhound.

Gaps and Needs: Marketing and Outreach

Some customers need additional education and guidance in the use of schedules services.

There is a need for expanded outreach/marketing of transportation services and options for human service agency staff and the people they serve, and who may be unaware of the transportation services available to them.

Many residents of the region are unaware of the transportation services available to them, and increased marketing and education is needed. Specific events and marketing efforts should be planned to raise awareness of mobility options.

There is an opportunity for improved agency coordination on a variety of efforts, including travel training that will assist customers in using existing transit services.

There is need to address the regional one-call center that has been discussed, but never implemented through previous planning effort.

Gaps and Needs: Technology

Technology can be used more extensively to communicate options for demand response customers, and to provide them with real-time arrival information.

Improved service and technology integration is needed between transportation providers, and that would allow expanded use of mobile application across agencies and be a component of regional fare integration.

Gaps and Needs: Funding

Local funding support is needed to increase transportation services in the region.

There can be greater use of FTA Section 5310 grant program funds administered by TxDOT to expand human services transportation in the region.

There is a need to engage the private sector, and to explore public-private partnerships in an effort to secure funding to expand transportation to businesses that benefit from these services.

Section 4
Planning for Comprehensive Services

Introduction

ETCOG is a voluntary association of counties, cities, school districts and special districts within the fourteen-county East Texas region. Planning for transportation services is led by the EasTexConnects Committee that is comprised of elected officials or their appointees, citizens, and representatives of social service agencies, local transportation providers, and businesses.

Comprehensive Planning

As the region's council of governments, ETCOG conducts a wide range of activities that require a comprehensive planning effort. This regionally coordinated five year plan includes the transit services operated by ETCOG, as well as other transit providers in the region. The planning process also takes into account the variety of other human service and private transportation services in the region. In addition, ETCOG works closely with various state, regional, and local agencies that fund and support health and human service, workforce, and other programs.

Section 5:
Integrated Planning Process

Introduction

The update of the regionally coordinated transportation plan included a review of recent studies and plans. This review allows for a better understanding of previous planning efforts, along with local trends and issues that should be considered through the update process.

The assessment of previous plans and studies also recognizes that the plan update is not happening in a vacuum, and previous and current efforts in the region need to be taken into account. It also helped to reduce duplication through the update process, and to ensure the update builds upon previous work in the region.

Planning Activities

The previous EasTexConnects Five-Year Regionally Coordinated Transportation Plan that was competed in 2016 is discussed in Section 8.

Other recent planning activities relevant for the update of the regionally coordinated transportation plan involve the following:

- **2020 ETCOG Comprehensive Operations Analysis** – Through this study, issue areas were identified and a number of recommendations and strategies were developed. The plan stated seven recommendations, including organizational alignment, administrative and management, operations, maintenance, and service design, vehicles and facilities, technology, marketing, and financial alternatives and funding sources. The plan took into account the changes from the COVID-19 pandemic, such as changes in travel patterns and ridership levels. The implementation plan was broken into four sections: during the pandemic, recovery from the pandemic, post-pandemic, and the new normal.

- **2020 ETCOG Maintenance Study** – The study laid out six different maintenance strategies ranging from status quo to leasing a facility. In regard to the facility alternatives, three alternatives were given with approximate costs, which include full build ($9.7M), reduced build ($7.9M), and existing facility. A full build would include room for administration, transportation, maintenance, on-site fueling, and automatic bus wash, and a reduced build would only include transportation, maintenance, and a manual bus wash bay. A hybrid model was recommended where a portion of the fleet is centrally located and a portion is decentralized. Out of the six identified strategies, number 4 (purchase/lease a maintenance and operations facility), 5 (purchase/lease a facility for

administration, maintenance, and operations), and 6 (develop a prefabricated building with a bus bay and mechanic) fall into the hybrid model.

- **2021 Tyler Route Study** – The Tyler Area MPO and Tyler Transit conducted a study to review the public transportation system to better assess how to improve efficiency. Feedback was provided from a steering committee, bus drivers, and the public. The project team also conducted an in-depth technical analysis of each fixed route. As a result, six recommendations were developed, which includes shortening headways, simplifying the system for easier use, improving the services for healthcare, social services, and grocery store workers, providing better service to essential workers and the general public, providing services to the growing south Tyler area, and creating better connections between the local universities to downtown Tyler and other areas.

- **Longview MPO Transportation Improvement Program, 2021-2024** – The TIP identifies and schedules transportation projects to be implemented in the Longview MPA for the upcoming four fiscal years and is updated every two years. The TIP's planning area includes the cities of Longview, White Oak, Gladewater, Clarksville City, Warren City, Union Grove, East Mountain, and Lakeport, and portions of Gregg, Upshur, and Harrison Counties. The TIP was developed in accordance with the Public Participation Plan (PPP) of the Longview MPO. The MPO provided opportunities for citizen and elected official involvement throughout the planning process. Projects within the TIP ranges from capital improvement projects, ADA projects and facility projects.

- **Longview MPO 2045 Metropolitan Transportation Plan** – The Metropolitan Planning Area includes the cities of Longview, White Oak, Gladewater, Warren City, Union Grove, Clarksville City, East Mountain, and Lakeport, as well as portions of Gregg, Harrison, and Upshur Counties. An online transportation survey was opened for input throughout March and 167 survey responses were collected. Several public meetings were also held to gain the public's opinions regarding transportation issues and opportunities. The plan is broken down into strategies including multimodal planning, roadway system, freight, financial plan, and performance management.

- **2018 Longview MPO Bicycle and Pedestrian Plan** – Throughout the planning process, the project team utilized in-person and online surveys, open houses, listening sessions, and online mapping exercises. Public input fell into five categories, including building and enhancing infrastructure, providing new infrastructure and amenities, connecting specific destinations, educating the public regarding laws and regulations, and improved maintenance of roadways and sidewalks. The plans recommendations are structured into two interconnected networks: walking infrastructure and bicycling infrastructure.

- **Tyler Area Transportation Improvement Program FY 2021-2024** – The Tyler Area TIP includes the entire urbanized area of Tyler as defined by the 2010 Census. Tyler Transit established targets, which included rolling stock and equipment state of good repair and facilities state of good repair. Projects included planning/technical studies, capital and preventative maintenance, ADA/paratransit, etc.

- **Tyler Area MPO Active Transportation Plan 2019** – The Active Transportation Plan serves as a tool to help guide investment for transportation projects within the Tyler region. Public engagement was collected through workshops, pop-up events, online engagement, and open house meetings. The recommendations included an equestrian trail, local connections, and sidewalk updates.

This information was supplemented with information and data available through the Texas Transit Performance Dashboard that is sponsored by the TxDOT Public Transportation Division (TxDOT PTN) and developed by the Transit Mobility Program at the Texas A&M Transportation Institute for TxDOT.

Section 6
Coordination Goals and Objectives

Purpose, Mission, and Priorities

The EasTexConnects Committee's purpose is to improve the quality of life in East Texas through transportation choices, and the mission is to create and connect a comprehensive, flexible, and sustainable public transportation system throughout and beyond the 14 counties in the region. The EasTexConnects committee has officially adopted six priorities to fulfill the mission:

- People first, barrier free
- Multi-modal interconnectivity across the region
- Aggressive outreach and education to a broad base
- Increased and flexible funding
- Increased and expanded services
- Emergency planning and homeland security

Coordination Project Goals and Objectives

For the process in updating the regional plan the EasTexConnects Committee approved an overall coordinated planning goal:

> *Help provide for more trips for more people while providing cost effective,*
> *high quality, and safe transportation for our community.*

The following specific goals and objectives for the next five years were also identified through the coordinated transportation planning process. Strategies and priorities for meeting the goals and objectives are detailed in Section 8 of this plan. Section 9 of this plan then includes specific performance measures for meeting the overall goal.

Goal No. 1: Identify Opportunities to Improve Coordination Between Transportation Providers in the Region

a) Build upon current coordination efforts and assess areas to improve process for coordinated service improvements
b) Formalize coordination agreements between public transit providers in the region
c) Expand coordination efforts between public and private operators
d) Assess transfer locations and implement improvements as needed

Goal No. 2: Conduct Ongoing Assessment of Transportation Needs and Services in the Region

a) Continually assess existing services and make modifications as needed
b) Maintain inventory of transportation resources and update as needed
c) Monitor changes to demographics and land use in region
d) Conduct regular gap analysis that solicits input from riders, stakeholders, and the community to identify specific transportation and overall mobility needs
e) Identify opportunities to improve the efficiency of service delivery

Goal No. 3: Implement Strategies to Meet Needs, Improve Service, and Generate Higher Ridership

a) Monitor existing services to ensure they are effectively meeting transportation needs in the region
b) Introduce new service designs and strategies to serve the existing riders as well as those with unmet needs
c) Incorporate recommendations from other transportation plans and studies into regional coordinated planning efforts
d) Assess opportunities to expand mobility management efforts to ensure people in the region are more fully aware of their transportation options
e) Expand marketing and outreach efforts with key agencies and organizations who serve people with transportation needs

Goal No. 4: Ensure Funding Stability and Plan for Future Growth

a) Maintain funding for current transportation services that are meeting needs
b) Identify federal, state, and local funding sources to support expanded transportation services
c) Assess opportunities to develop partnerships between private and public sectors
d) Prepare for a post-COVID period in regard to funding and service design

Section 7
Sustainability and Implementation Planning

As the planning organization for the region, as well as an agency that operates rural public transit services and administers the Area Agency on Aging of East Texas and the East Texas Economic Development District, ETCOG clearly has the capacity to sustain and regional transportation planning activities and to implement recommended strategies included in this plan.

In addition, ETCOG is fully supported by the EasTexConnects Committee that is comprised of key stakeholders and providers in the East Texas region. This committee meets quarterly, and has established by-laws that clearly articulate the purpose:

EasTexConnects has been established to ensure that the benefits of the State's public transportation resources are maximized through coordination of services within and beyond the Texas State Planning Region 6, that consists of Anderson, Camp, Cherokee, Gregg, Harrison, Henderson, Marion, Panola, Rains, Rusk, Smith, Upshur, Van Zandt, and Wood counties and is the standing committee designated to oversee regionally coordinated transportation planning activities. EasTexConnects will update the East Texas Regional Transportation Coordination Plan and will coordinate and review the work produced to ensure the Plan complies with project goals as well as ensure projects are implemented in a timely manner and according to the Texas Department of Transportation requirements.

In addition to the goals and objectives for the planning process that were outlined in the previous section of this plan, the following are the objectives for the EasTexConnects Committee:

1. To improve the delivery of transportation services.
2. To generate efficiencies in operation that can lead to increased levels of service.
3. To enhance customer service /satisfaction.
4. To encourage cooperation and coordination.

The next section of this plan includes several organizational structure strategies. One calls for the expansion of mobility management efforts, and this expansion could further increase the region's capacity to implement other coordination and service strategies detailed in this plan.

Section 8
Strategies for the Future

Introduction

A key element in the updated regionally coordinated transportation plan involves the development of strategies, activities, and/or projects that address the identified gaps between current services and needs, as well as opportunities to achieve efficiencies in service delivery. This section presents a variety of strategies for moving the region forward, taking into account the transportation resource inventory and comprehensive needs assessment detailed in previous sections. The proposed strategies also incorporate recommendations from other recent transportation plans completed in the region.

This section begins with a discussion of the progress in regard to the recommendations included in the previous coordinated transportation plan for the region. This is followed by the updated strategies for the region.

Review of Progress Toward Previous Goals and Projects

The previous five-year regionally coordinated transportation plan included a variety of recommendations for improving and expanding mobility. A review of the status of these recommendations, based primarily on input from ETCOG, is provided in Appendix A.
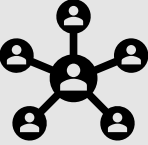
Introducing the Strategies for the Future

The following section presents a wide range of strategies that were reviewed and adopted by the EasTexConnects Committee for inclusion in the updated regionally coordinated transportation plan. The strategies are summarized in Table 8-1, and while many of the strategies to improve mobility in the region are interrelated they are categorized by:

1. **Organizational and Coordination Strategies**
2. **Operating Strategies for the Future**
3. **Sustainability and Financial Strategies**

Table 8-1 is followed by a description of each strategy. All of the strategies are important, and therefore subsequently the priorities are discussed based on which activities need to be conducted first and which should be conducted later through a Priorities: Implementation Activities section.

Table 8-1: Summary of Strategies by Categories

Categories	Strategies
1. Organizational and Coordination Strategies	1. Formalize coordination efforts between GoBus, Tyler Transit, Longview Transit, NDMJ and other private providers.
	2. Explore opportunities to improve coordination between public transit with NDMJ, Amtrak, human services transportation, and intercity bus services as well as other private providers.
	3. Implement new transfer locations that provide improved connections between Tyler Transit, GoBus, and Greyhound.
	4. Implement expanded regional mobility management efforts.
	5. Implement recommendations from maintenance study.
	6. Administer trainings for human service agency staff, medical facility personnel, and others on the use and availability of transportation services.
2. Operating Strategies	1. Maintain services that are effectively meeting identified transportation needs in the region.
	2. Promote fixed schedule services and implement new scheduled services where feasible.
	3. Plan and implement regional connections.
	4. Plan and implement on-demand microtransit services.
	5. Reassess allocation of transit services in the region.
	6. Reassess existing routes for efficiency and effectiveness.
	7. Consider vanpool and long distance rideshare services.
3. Sustainability and Financial Strategies	1. Secure Federal, State, and Local funding.
	2. Initiate a private sector sponsorship program and develop additional innovative partnerships to identify new funding sources.
	3. Work with human service and healthcare organizations.
	4. Advocate for additional funding to support public transit and human service transportation.
	5. Advocate for recommendations to improve public transportation identified through previous transit plans conducted in the region.
	6. Assess opportunities to improve recruitment and retention of vehicle operators.
	7. Prepare for COVID-19 recovery period and long-term impacts of the pandemic.

1. Organizational and Coordination Strategies

This section highlights strategies that build upon current coordination efforts in the region, and discusses possible opportunities to expand these expands to improve mobility and to ensure customers are aware of their transportation options.

1.1 Formalize Coordination Efforts between GoBus, Tyler Transit, Longview Transit, NDMJ, and Other Private Providers

While transportation providers in the region work well together, through the needs assessment and gap analysis opportunities to improve coordination were noted. This includes the opportunity for GoBus to pick up transit customers in the urbanized areas of Tyler and Longview that are well outside of their urban fixed route networks, but as a Section 5311 rural provider they are not able to provide service in urban areas unless that service is funded by other sources. Through this strategy the three transit systems would work to formalize agreements on how to serve populations living in these areas, and on mechanisms to obtain necessary funding sources. Additionally, private providers should also be used to help bolster mobility options for residents in the region. Providers such as NDMJ already coordinate with public transit, and these successes should be built upon to help fill the gap in service particularly for specialized trip needs.

Beyond this formal service coordination there are opportunities to continue other coordination efforts in the region, including those related to group training and maintenance.

1.2 Explore Opportunities to Improve Coordination between Public Transit with NDMJ , Amtrak, Human Services Transportation, and Intercity Bus Services as well as other private providers.

There are also opportunities to continue or implement other coordination efforts in the region. These include efforts to improve coordination between public transit services in the region with intercity bus services and Amtrak. They also include improved coordination of human services transportation that can be funded through the federal Section 5310 Program. In addition this strategy also calls for identifying opportunities to improve coordination efforts with NDMJ Transportation and other private providers.

1.3 Implement New Transfer Locations that Provide Improved Connections Between Tyler Transit, GoBus, and Greyhound

Tyler Transit recently completed a route study that has resulted in the planned reconfiguration of the fixed route system. The stagey supports the recommendation in the route study that proposes implementation of new transfer locations that help facilitate improved coordination between Tyler Transit services with GoBus and Greyhound.

1.4 Implement Expanded Regional Mobility Management Efforts

Currently GoBus has a contracted position responsible for coordinating resources for mobility management and travel training. This position promotes the use of public transit in the region through a variety of outreach efforts, to include one-on-one trainings as well as through meetings, town halls, and conferences. The Memorandum of Understanding (MOU) between ETCOG and the regional mobility manager notes that overall responsibilities involve:

- Travel training
- Marketing
- Public relations
- Advocacy on the use of public transportation
- Regional coordination, covering the areas designated in the 5-year Regional Coordination Plan
- Secret Shopper through which customers are surveyed about services

Despite this position through the gap analysis, it was noted that many residents in the region are still unaware of the transportation services available to them, and the need for expanded marketing of transportation services was identified. Therefore, this strategy recommends an increased education campaign through an expanded mobility management effort. This effort could build upon the current position, and the overall mobility management concept where the focus is on the customer and their needs, and the meeting of these needs through the coordinated use of a variety of providers. The expansion of mobility management efforts in the region has the capability of greatly improving access to transportation services in the region, particularly for veterans, older adults, people with disabilities, and individuals with lower incomes.

Based on stakeholder input through the gap analysis and the progress on the outreach strategies included in the previous version of the regionally coordinated transportation plan, an expanded mobility management program could take a variety of roles that include the following efforts:

- Assist customers to better understand rural scheduled services, and work with human service agencies staff so that they are knowledgeable of the transportation services in the region and are able to use this information when assisting the people they serve with their mobility options.
- Continue efforts to promote available services through social media campaigns and promotions.
- Continue work with larger employers on efforts to subsidize employee travel via GoBus or subsidize vanpool programs.
- Help in the planning and implementation of improved technologies that allow customers to access information on available services or that help them understand better when a bus is going to arrive.
- Facilitate opportunities to coordinate trainings between transportation providers in the region.
- Assist with efforts to improve and expand regional connectivity such as regional fare collection systems.
- Lead interim updates of the regionally coordinated transportation plan.
- Develop and implement a sponsorship program (discussed later in a separate strategy).

Through the National Cooperative Research Program (NCHRP) the KFH Group produced "Successful Mobility Management Practices for Improving Transportation Services in Small Urban and Rural Areas," a guidebook that identified best practices and analyzed successfully implemented rural and small urban mobility management programs. The guide is designed to serve as a "one-stop" central point of information for improving or implementing mobility management and coordination strategies, providing resources developed through the research as well as those available through the National Center for Mobility Management and other federal initiatives. Key sections of the guide include:

Expanding Access to Our Communities: A Guide to Successful Mobility Management Practices in Small Urban and Rural Areas

January 2018

The four key attributes and characteristics of successful mobility management: Community Outreach and Engagement, Needs Assessment and Program Design, Program Evaluation and Assessment, and Funding

A checklist for implementing successful mobility management approaches and strategies.

Program profiles that highlight mobility management practices from across the country that can serve as potential models for other efforts.

The guidebook is available for download from the TRB website through this link.

Expanded mobility management efforts in the region is potentially a valuable resource, and one that could involve all three transit systems in the region. Depending on the additional mobility management responsibilities the expanded program will most likely necessitate at least one additional position, therefore there may be a need to develop by-laws and procedures that ensure each entity is getting its fair share. Staffing and funding could include existing staff from each entity splitting responsibilities, or all can contribute or secure grant funding to support expanded mobility manager positions -- and as needed office space for that additional staff.

Capital Area Office of Mobility Management

Two transit agencies in central Texas—the Capital Metropolitan Transportation Authority (Capital Metro) and the Capital Area Rural Transportation System (CARTS)— partnered to develop a regional mobility manager charged with expanding transit for those in need in the nine-county Capital Region surrounding Austin. The resulting Office of Mobility Management (OMM) has coordinated funding and services with numerous health care providers in:

- Capital Metro's service area of Austin and some close in suburbs
- Rural parts of nine counties surrounding Austin; six of those counties are entirely rural

Additionally, the OMM helped build a number of transportation services in the geographic area between the two transit agencies' service areas that previously had no service (including Georgetown).

The coordinated efforts of Capital Metro, an urban transit agency, and CARTS a rural transit agency, now provide access to almost 30 community partners through the OMM, which is dedicated to meeting the transportation needs of seniors, people with disabilities, veterans, and others in need. This collaborative effort has increased fixed route and specialized transportation, **improving access to health care through the expansion of public transit service in formerly under and unserved areas.**

1.5 Implement Recommendations from Maintenance Study

Due to the large area served by GoBus, vehicles are stationed across the region. A recent study determined the need for a maintenance facility centrally located in the region. This strategy supports the implementation of the recommendations from the maintenance study.

1.6 Administer Trainings for Human Service Agency Staff, Medical Facility Personnel, and Others on the Use and Availability of Transportation Services

Through the gap analysis it was noted that often times staff at different human service agencies and medical facilities were unaware of the transportation services available to their clients. While possibly a component of a broader mobility management effort, this potential strategy is segmented to highlight the support for the implementation and administration of transportation trainings for these employees. These trainings could be helpful marketing, outreach, and education tools, especially for healthcare and social service providers. People who consistently rely on social programs and/or need regular medical care are likely to rely on public or human service transportation. If providers of these services are not well educated on the variety of transportation options in the region, it can be difficult to see their clients. Hosting trainings or information sessions for these individuals, as well as the general public, could increase the community awareness of these services.

2. Potential Operating Strategies

This section highlights potential operational strategies, primarily focused on possible service improvements. Overall, these strategies are intended to:

- Maintain existing transportation services that are meeting mobility needs in the region
- Increase ridership
- Improve service quality and make it easier to ride
- More effectively use available resources so that transportation needs can be met through virtually no additional operating cost

The operating strategies begin with a discussion on the service area needs, and service designs that should be taken into account in any future planning and implementation of these potential strategies.

The Key Element

> The best way to coordinate service is to have excellent public transportation that most human service clients and health care patients can use. Specialized service should be available **for those unable to use public transportation.**

Service Area Needs

Different parts of the service area call for different services, to include:

Countywide Paratransit / Out-of-County Service – Countywide paratransit along with back-and-forth trips to Tyler and Longview and other out of county destinations requires the vehicles to be serving a limited number of people. As a result this service is the least productive and most expensive service that is operated. The Comprehensive Operations Analysis (COA) recently conducted for GoBus discussed other approaches to improve productivity that are included in this section with the proposed operational strategies.

Fixed Route Service – In the urbanized areas of Longview and Tyler, fixed routes are operated that connect residents with key locations. Tyler Transit recently completed a transit plan that identified opportunities to improve services that are incorporated appropriately into this plan. Through the stakeholder engagement, needs that are outside of the current service areas were expressed, and therefore there is potential for service expansions or the use of on-demand services.

Regional Connector Service – Through the gap analysis stakeholders noted the need to improve connections to key destinations in the region, particularly to shopping, medical and other services located in Longview and Tyler.

On-Demand Microtransit Services – In communities with a population over 1,500, on-demand microtransit services can be considered and are discussed through a potential strategy. These services, with 15–60-minute response times, would greatly enhance the quality of the service without the need for additional operating revenue. Currently, an advance request is necessary, even though it only takes seconds to assign the trip.

Service Design Considerations

The service design is critical to quality service and operating costs when operating public transit. Service designs that are unproductive will never be cost-effective. Proper service design is essential to the success of any transit system. Improper service typologies and designs often result in lower ridership, lower productivity (measured as one-way trips per vehicle hour) and higher per trip costs, while applying the right service design can improve performance often at no extra cost. This section reviews the concepts of grouping trips, increasing productivity, and reducing per trip costs.

Grouping Trips: Essential for Success

Productivity drives the cost per trip and ultimately system costs. Productivity is measured as one-way trips per vehicle service hour. Productivity, which must be balanced with providing a safe (social distancing is critical at the time of this report), timely and comfortable service is critical to cost control.

Why is productivity important?

One of the best ways to lower transportation costs is through productivity improvements. The end result: That will depend on different modes or types of service which will yield different productivities (and costs per trip) as shown below in Table 8-2.

Table 8-2: Typical Productivity for Rural Service Types

Service Type	Productivity
Countywide Paratransit	1-2 trips per hour
Urban Paratransit	1-6 trips per hour
On-Demand: Towns and Small Cities	2-6 trips per hour
Fixed Schedule: Rural and Out-of-County	4-8 trips per hour

Source: Rural Transit Service Design - Matching Service to Meet Needs: An Introduction, Rural, and Intercity Bus Conference, October 2018, KFH Group

Productivity: One-way passenger trips per vehicle hour

- For illustrative purposes in this example, if it costs a transit system $80 per hour to provide service:

  o Productivity of 1.5 trips per hour will yield a cost of **$53.33** per trip
  o 3 one-way trips per hour bring the cost to **$26.67** per trip
  o 10 trips per hour **- $8**
  o 25 trips per hour **- $3.20**

Therefore, consideration should be given to fixed schedule service where feasible. This is where the vehicle will be scheduled for different parts of the service area on different days and times. These schedules should be well marketed and posted throughout each community and online. This service design is illustrated in Exhibit 8-1 on the next page.

Exhibit 8-1: Example of Fixed Schedule Service

CARTS

Effective date January 4, 2016

CARTS RIDE LINE 1-512-456-RIDE (7433)   **CALDWELL COUNTY**

RIDES ARE SCHEDULED MONDAY-FRIDAY FROM 8:00 AM TO 4:00 PM / 24 HOURS ADVANCE NOTICE RECOMMENDED LOCAL
VEHICLES SERVE NEIGHBORING TOWNS SO LOCAL RIDE TIMES MAY VARY

Community Served	Destination	Route Day	Departure	Return	One-Way Fare	Reduced Fare*
DALE	To: San Marcos	Monday & Friday	7:30a	12:00p	$6.00	$3.00
	To: Lockhart	Monday & Friday	7:30a	12:00p	$4.00	$2.00
FENTRESS	To: San Marcos	Thursday	9:00a	12:00p	$6.00	$3.00
	To: Lockhart	Monday	9:00a	1:00p	$4.00	$2.00
	To: Luling	Friday	9:00a	12:00p	$4.00	$2.00
LOCKHART	**Local Service**	**Monday thru Friday**	**8:00a to 4:30p**		**$2.00**	**$1.00**
	To: Austin	On the Interurban Coach *	Mon, Wed. and Fri.		$6.00 All Day Pass	
	To: San Marcos	Monday, Wednesday & Friday	8:00a & 2:00p	12:00a & 3:00p	$6.00	$3.00
	To: Luling	Tuesday & Thursday	9:00a	1:00p	$4.00	$3.00
LULING	**Local Service**	**Monday thru Friday**	**8:00a to 4:30p**		**$2.00**	**$1.00**
	To: Austin	On the Interurban Coach *	Mon, Wed. and Fri.		$6.00 All Day Pass	
	To: Lockhart	Tuesday & Thursday	8:00a	2:00p	$4.00	$2.00
	To: San Marcos	Thursday	9:00a	12:00p	$6.00	$3.00
	To: Seguin	Wednesday	9:00a	12:00p	$6.00	$3.00
LYTTON SPRINGS	To: Lockhart	2nd & 4th Thursday	8:45a	1:00p	$4.00	$2.00
MARTINDALE	To: Austin	Monday & Wednesday	8:15a	2:00p	$6.00	$3.00
	To: San Marcos	Monday, Wednesday & Friday	9:15a	3:00p	$6.00	$3.00
	To: Lockhart	Wednesday	11:30a	2:00a	$4.00	$2.00
MAXWELL	To: Austin	Tuesday & Thursday	8:30a	2:00p	$6.00	$3.00
	To: San Marcos	Monday, Wednesday & Friday	9:30a	3:00p	$6.00	$3.00
	To: Lockhart	Wednesday	11:30a	2:00p	$4.00	$2.00
McMAHAN	To: Lockhart	1st and 3rd Monday	8:45a	12:00p	$4.00	$2.00
McNEIL	To: Lockhart	Monday	9:00a	12:00p	$4.00	$2.00
	To: Lulling	Friday	9:00a	12:00p	$4.00	$2.00
MENDOZA	To: Lockhart	2nd & 4th Thursday	8:30a	1:00p	$4.00	$2.00
NEIDERLAND	To: San Marcos	Tuesday & Thursday	9:00a	12:00p	$6.00	$3.00
	To: Lockhart	2nd & 4th Thursday	8:30a	1:00p	$4.00	$2.00
PRAIRIE LEA	To: Lulling	Friday	9:00a	12:00p	$4.00	$2.00
	To: San Marcos	Thursday	9:00a	12:00p	$6.00	$3.00
REEDVILLE	To: San Marcos	Monday, Wednesday & Friday	8:30a	12:00p	$6.00	$3.00
	To: Austin	Monday & Wednesday	8:00a	2:00p	$6.00	$3.00
STAIRTOWN	To: Luling	Friday	9:00a	12:00p	$4.00	$2.00
	To: San Marcos	Thursday	9:00a	12:00p	$6.00	$3.00
UHLAND	To: Lockhart	2nd and 4th Tuesday	8:30a	1:00p	$4.00	$2.00

*Reduced Fare: Registered CARTS Customers, Seniors 65 and older, Persons with Disabilities, and Children Under 12
* Interurban Coach Schedule at RideCARTS.com

RideCARTS.com

2.1 Maintain Services That are Effectively Meeting Identified Transportation Needs in the Region

While most proposed strategies are designed to improve and expand mobility options in the region, it is vital to maintain services and infrastructure that are currently meeting transportation needs. Maintaining the current capital infrastructure is vital to meeting community transportation needs, and financial resources are needed to operate vehicles and continue services at the current level. This strategy involves providing capital and operating funds to support existing public transit services and human services transportation that are effectively meeting mobility needs identified in the region, especially those serving older adults and individuals with disabilities. Industry performance standards can serve as a tool to monitor effectiveness and efficiency, and include:

- Operating Cost Per Hour
- Operating Cost Per Mile
- Operating Cost Per Passenger Trip
- Farebox Recovery
- Passenger Trips Per Mile
- Passenger Trips Per Hour

Through this strategy there would be support for public transit services operated by the three systems in the region that are meeting these standards. It also allows for opportunities to identify existing services that are important to the community, but that could be improved through modifications or technical assistance. This strategy would also enable the transit systems, the EasTexConnects Committee, and other regional stakeholders to establish public transit service baselines to help determine if additional funding is warranted. This process should also take into account the impacts of the COVID-19 pandemic on current and future services, and consider modifications to previous industry metrics for measuring transit's full value in the region.

Transportation provided through human service agencies is more specialized, and therefore is not monitored through these performance measures. Agencies that would like to evaluate their transportation programs to ensure that financial resources are being used effectively can utilize *Transportation by the Numbers*, a resource available through the National Aging and Disability Transportation Center (NADTC). This tool provides human service organizations with ways to more easily identify expenses, revenues and performance outcomes so that they can make more informed decisions about their future in the transportation business. This tool is available through the NADTC website at *https://www.nadtc.org/resources-publications/resource/transportation-by-the-numbers*.

2.2 Promote Fixed Schedule Services and Implement New Scheduled Services Where Feasible

Regional stakeholders noted the need to assess current services and consider different modes that may be more effective in meeting mobility needs in the region. GoBus offers a version of scheduled services described earlier in this section, through which out-of-county service is provided to Tyler and Longview on certain days of the week. However, through stakeholder outreach there was limited knowledge of these services.

EasTexConnects Regionally
Coordinated Transportation Plan

KFH Group Inc.

Therefore, this proposed strategy recommends that these services be further promoted, and a schedule similar to Exhibit 8-1 (on page 8-10) developed so that they are fully marketed and information posted throughout each community/county. Fixed schedule service has proven to be far more productive and less expensive than other services, and with greater promotion of the scheduled services those interested in traveling from their county to Tyler and Longview will be more aware of their travel options, ridership can increase, and productivity of these services improved.

There can also be an assessment of demand response services operated within each county to determine if additional scheduled services are feasible within each jurisdiction. Potentially these schedules can be set up based on historical travel patterns, as dialysis trips will often determine the schedule in a particular area. Each county can consist of 4 – 5 sections, based on typical ridership patterns, and these quadrants scheduled for different times and perhaps different days. The frequency of the service will be determined by existing and potential ridership, though the overall objectives is to group trips that can reduce costs as opposed to constant one-on-one set of trips that is very expensive.

2.3 Plan and Implement Regional Connections

Through the gap analysis stakeholders noted the need for increased connections to urbanized areas in outlying areas. There is ongoing work on redesigning regional routes that are under consideration, with the overall goal to increase ridership and create sustainable routes. Target riders for these regional routes would include shoppers and people needing to access medical facilities, particularly in Tyler, though there is an interest to design services that attract choice riders.

Therefore, this proposed strategy calls for planning and implementation of services to meet needs identified through the gap analysis, and could include:

- Possible commuter routes developed by GoBus and under review:
  - Proposed commuter route that would serve the Walmart Supercenter in Henderson, Kilgore College, Kilgore College - Longview, medical and shopping locations in Longview, and provide connections to Longview Transit.
  - Proposed commuter route that would serve the Athens Senior Center, Chandler Senior Center, Tyler Junior College, University of Texas at Tyler, The Village Shopping, and provide connections to Tyler Transit.
- Increased connections to Tyler from outlying areas, particularly from Longview and Jacksonville.
- Expanded regional transportation services to access destinations in Longview and Tyler.
- Coordinated public transit service between Tyler and Longview, connecting the transfer centers in each city.
- Transportation services from the region to major airports in the Dallas area.

Similar to the services described in the previous strategy, intercounty regional connections should be planned and implemented on a scheduled basis. Like the fixed schedule service, regional routes should be on a schedule and based on current and future ridership. This allows the provision of more trips for the same level of service. Experience in Texas and across the country tells us that customers get comfortable with schedules very quickly, and health care facilities are willing to work with the schedules.

Dialysis trips will at times determine the schedule of at least one set of trips, but schedules will vary based on need. For example, one service may warrant five days per week service with multiple trips, while another may need service just three days per week.

2.4 Plan and Implement On-Demand Microtransit Services

One of the major changes in planning transit services since the last regionally coordinated transportation plan for the region is the introduction of microtransit services. A growing number of public transportation providers have begun operating this service that features with an on-demand, e-hailing component. These services use mobile technology to provide dynamic routing through which customers use a smartphone application (app) to schedule and/or pay for a ride within a specific geofenced zone. On-demand services can provide more flexibility to customers than traditional demand response service. Riders can individualize service by selecting both their pick-up and drop-off locations, while dynamic routing capabilities allow drivers to quickly adjust pick-up locations to provide more efficient service.

Defining Microtransit

The Shared-Use Mobility Center (SUMC) defines microtransit as a technological evolution of dial-a-ride and paratransit, and refers to services with flexible routes and schedules and on-demand availability that use vehicles larger than personal autos but smaller than transit buses—generally vans or cutaways carrying up to 20 passengers. SUMC notes that microtransit services require professional drivers who are usually employed through a purchased-transportation arrangement with a vendor or employed directly by a transit agency. Microtransit works like a shared ride taxi service using an mobile application to hail and pay the fare for the trip.

They also report that microtransit functions best when operating within or between moderate-density environments that lack pedestrian connectivity or fixed route transit between activity nodes, especially areas with highly separated land uses and interrupted street grids. **It is best suited for short-to-medium range trips (1 to 5 miles) where transit connections are needed, but where fixed route transit cannot operate productively.**

Through the gap analysis a variety of needs were identified that could potentially be met through microtransit services. These needs and mobility challenges include service industry workers who work second and third shift jobs and have mobility needs that are unable to be met during normal transit operational hours; and jobs outside of the current transit service areas that are therefore challenging to access. Microtransit services are also appealing to college students. While once designed for larger urban areas, on-demand services are now expanding to small urban and rural communities. On-demand services can be designed to make local service easier, and instead of customers having to call the day

before the trip they can access the service in as little as one hour or less.

There are also operational advantages to on-demand microtransit services, as they can be useful where fixed route service may be ineffective. These services may make better use of the existing vehicles in all of the cities and towns in the service area. Further, these services – if marketed properly – often require almost no interaction with the dispatcher, reducing the demands on that position.

This strategy therefore proposes the planning and implementation of on-demand services. During the stakeholder interviews it was noted that guidance would be needed with the process, and the following section provides information on these services related to delivery, technology, and other key components.
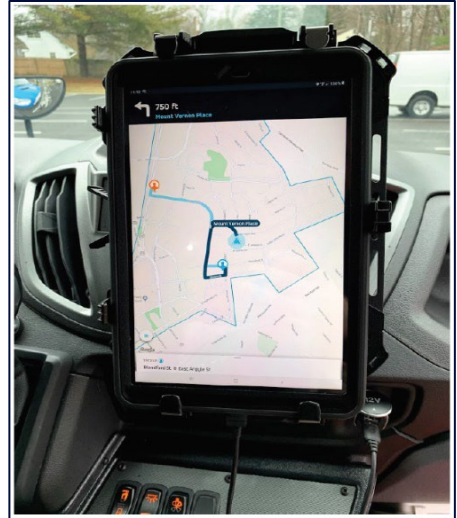
On-Demand Service Delivery

In recent years, a variety of different companies have begun offering on-demand transit software and turnkey transportation solutions, and vendors of transit scheduling software are adapting their products to meet the microtransit emergence. The companies that are currently promoting on-demand/ microtransit services typically break them into these categories:

- **Software-as-a-Service (SaaS)** that offers a localized version of the vendor's platform, allowing transit systems to use their vehicles, drivers, and support staff to operate an on-demand service.
- **Transportation-as-a-Service (TaaS)** which offers a turnkey approach through which the vendor provides the on-demand technology -- plus the drivers, vehicles, and overall operations.

On-Demand Technology

On-demand/microtransit apps are generally grouped into two distinct categories – a white label app and an integrated app. White label apps are a blank slate for the transit provider to create and design the service's public interface. This provides a high level of customization, but it can also limit the use of the app to only the microtransit service. An integrated app uses an already existing app structure to incorporate the microtransit service. For example, some service providers have partnerships with Uber, Lyft, and other transportation network companies to include microtransit service as an option in their service menus. Regardless of the design and platform, the app must be publicly available for customers to download through common app outlets, to include the Apple App Store and Google Play Store.

In addition to the microtransit app, transit systems need to ensure that individuals without a smartphone or internet connection can still access the service. This would be satisfied by providing a phone number for a call center or local dispatcher to schedule real time trips. Some services have set up websites for trip requests, but this should be done in addition to a call-in option.

Real Time Arrival Information

One of the most exciting elements of an on-demand service/microtransit app is the real time arrival information. After a customer has booked their trip, the app then allows them to track their vehicle and receive real-time updates on the vehicle's estimated time of arrival. The app can be configured to send pop-up notifications to the customer's smartphone once the vehicle is a certain distance away, once it has arrived, or if it experiences delays.

The service plan and operational capabilities are heavily influenced by the service model and characteristics of the geo-fenced zone. The distribution of vehicles within the zone will need to strike a balance between meeting the needs of high and low travel demand areas.

Maintaining Service Reliability

One of the key concepts of microtransit services is a short response time, as convenience and reliability will drive ridership growth. Response time will need to be a guiding element for designing and implementing microtransit services, as is configuring a zone so that a vehicle can reach every destination in the zone within this response time. The size and layout of each zone are therefore heavily influenced by the local street network, location of vehicle staging areas, and anticipated demand. **With a defined zone, service planners must ensure service reliability by providing an adequate number of vehicles within the zone.**

Potential On-Demand Microtransit Service Applications in the Region

There are multiple opportunities to consider microservices in the region that involve the following alternatives that will be discussed with the EasTexConnects Committee.

- **In-Town On-Demand Service** that makes accessing local service more convenient and expands mobility options.

- **First Mile/Last Mile Service** that provides connections from current transit services, expanding access to key destinations such as employment sites that are just beyond public transportation routes.

- **Extending Public Transit Reach** by offering a mobility option beyond current service hours and at times when workers need transportation, but the overall demand is not sufficient to efficiently operate typical bus services.

In-Town On-Demand Service

Through the gap analysis and need assessment several communities were noted in the region as possible candidates for on-demand microtransit services. Based on this input, and taking into account communities in the region with sufficient population to support this type of service, Figure 8-1 displays the most likely initial possibilities for the on-demand microtransit services. This includes changing Marshall's flex route into a microtransit zone.

Figure 8-1: Potential Microtransit Communities
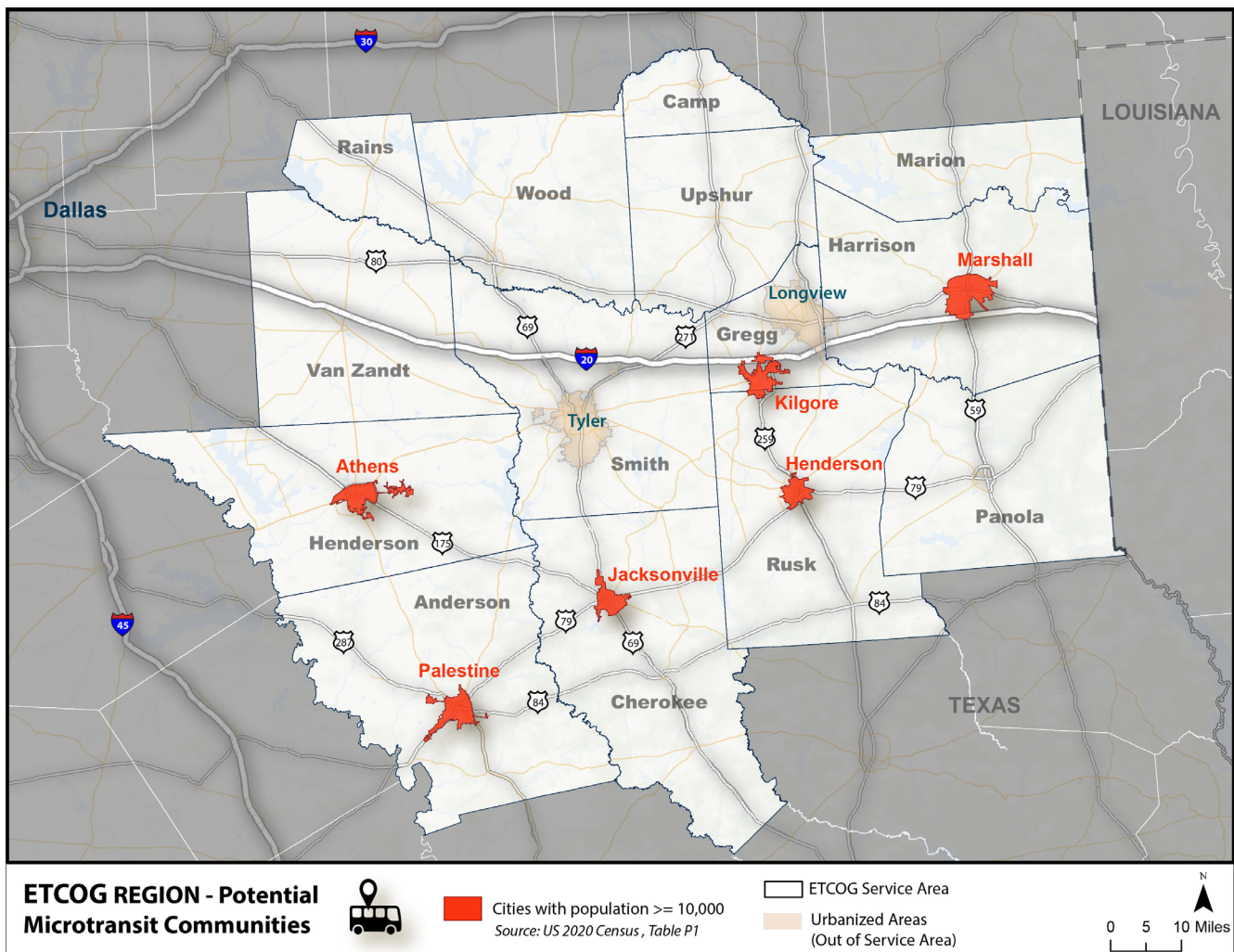
First Mile / Last Mile Connections

Regional stakeholders noted that there are employment opportunities in Longview that are outside of current public transit services in the area. On-demand microtransit services could provide a connection from existing public transit that help to extend access to these employment locations, and could be considered for Longview as well in other transit services in the region.

Extending Public Transit Service Reach

Regional stakeholders noted that service industry workers and people who work second and third shift jobs have mobility needs that are unable to be met during normal transit operational hours, and some people in the community have had to quit jobs because there are no transportation options to get them to or from work at the times needed. On-demand microtransit services could be considered for these times, and when it is not feasible to operate fixed route or scheduled bus services.

2.5 Reassess Allocation of Transit Services in the Region

The Comprehensive Operations Analysis (COA) completed for GoBus included an analysis of the level of transit service in each county in the region. The COA noted that based on the utilization rate analysis (ridership per capita) that some counties receive service well beyond what can be justified by ridership, while others do not. It highlighted the importance of equity for a multijurisdictional transit system like GoBus.

Therefore this potential strategy supports the allocation plan recommended in the COA that is based on population and current ridership, along with any additional adjustments that are necessary due to changes since completion of the COA. This recommendation in the COA was designed to ensure a minimum service level in each county in the region.

The COA noted that any additional service should be funded in part by the local jurisdiction, and recommended that GoBus provide a baseline level of service for each constituent county. For counties or cities that would like more service, GoBus could charge a fee based on a share of the cost per hour for the desired service.

In addition, the COA highlighted that long term sustainability requires a diversity of funding, and GoBus should continue pursuing federal grants to the maximum extent feasible and seek local funding through other opportunities. These options are discussed in further detail in the Sustainability and Financial Strategies discussed in the next section of this technical memorandum.

2.6 Reassess Existing Routes for Efficiency and Effectiveness

There have several recent plans conducted in the region that assess current services and propose possible service changes. This proposed strategy supports the findings from these plans, and recommends ongoing evaluation of existing routes and services that were noted by regional

stakeholders through the gap analysis, and to make modifications as needed to address long travel times.

2.7 Consider Vanpool and Long Distance Rideshare Services

Vanpool programs are typically used for commuter service, and as noted in a previous strategy could be a component of mobility management services. Vanpool programs are common across Texas and the country, and are a very low-cost way to meet commuter demand. Therefore this proposed strategy calls for consideration of the implementation of vanpool services in the region. Minivans and/or vans can be used depending on the demand. For groups going to same or nearby facilities to work these can be a low-cost option, as the vehicles and operating expenses are often funded in part or wholly through monthly fares.

An additional rideshare opportunity could be one that provides long-distance medical trips, particularly for people who are not eligible for Medicaid funded transportation. This potential strategy uses a commuter-oriented model as a basis for developing a ride-sharing program for long distance medical trips. A database of potential drivers and riders could be kept with a central "mobility manager," who would match the trip needs with the available participating drivers. The ridesharing strategy could be a cost-effective way to provide long-distance medical trips without sending a human service or public-transit vehicle out of the region for a day. However, it will require an agency or organization in the region with the organizational structure and the willingness to assume the lead role and the ability to coordinate and implement the program.

3. Sustainability and Financial Strategies

Sustainability is critical to all transit systems. There is a need for funding stability because if services come and go for lack of funding, ridership will be very quickly lost and they won't come back. At the present time, there is a significant amount of funding available for capital and operations. What is not in abundance however is local funding and match. NEMT service can reduce that need for local funding, and local governments can provide support in a number of ways, and the private sector is a valuable resource as well. Therefore, the following section discusses possible strategies that are designed to ensure sustainability and allow for future growth.

3.1 Secure Federal, State, and Local Funding

With the CARES Act and the new infrastructure bill's passage, there is and will be an abundance of FTA funding for operations and capital. The key is to seek it out, develop a solid plan and write a winning grant. The transit systems in the region should be actively writing grants to secure FTA funding for capital and operating services, taking into account the regionally coordinated plan and others recently completed in the region. As needed more detailed service plans may be needed. These plans should move forward as soon as possible so that they can serve as the basis for expanded federal funding that appears to be forthcoming through the recent infrastructure legislation.

As noted under the Operating Strategies in the COA completed for GoBus, there is a recommended baseline level of service for each constituent county, and for counties or cities that would like more service that GoBus could charge a fee based on a share of the cost per hour for the desired service.

3.2 Initiate a Private Sector Sponsorship Program and Develop Additional Partnerships to Identify New Funding Sources

Local funding has always been an issue for rural and small urban transit systems. However, transit has a long history of providing advertising on and in buses for additional revenue. Many systems have engaged in advertising over the years, but a sponsorship program is more than simply advertising. Instead of the usual selling of just one form of advertising, transit systems in the region can explore the selling of sponsorship packages. Since sponsorship and advertising funds are an important source of local funding, this program can help expand the service. Large corporations have been known to participate in sponsorship programs and typically these companies (such as Walmart) have far more money than all the cities and counties in the service area combined.

This potential strategy would involve identifying partnership opportunities to leverage additional funding to support public transit and other mobility options in the region. It would include meeting multiple unmet needs and issues by tackling non-traditional sources of funding. Hospitals, supermarkets, and retailers who want the business of the region's riders may be willing to pay for part of the cost of transporting those riders to their sites. This approach is applicable to both medical and retail establishments already served, as well as to new businesses. While this plan helps to document the need for these additional services, some may need to be further quantified. It might also be necessary to document unmet needs and gaps in service as part of educating potential funders and sponsors.

Funding Innovation

It is important to always be looking out for different funding sources for passenger transportation and facilities that support mobility. NDMJ in Tyler was recently trying to convert their fleet to compressed natural gas (CNG). They initially tried to go through traditional FTA capital grant funding mechanisms but could not find the local match needed to complete the grant process. Undeterred NDMJ found a Texas Commission on Environmental Quality (TCEQ) grant opportunity to build their CNG facility with no local match. The facility is now operational and NDMJ not only fuels their fleet with the CNG but also sells fuel to other local and regional entities that use CNG. As a result, **NDMJ has started a fund using $0.25 of every gallon of CNG fuel they sell for local match for passenger transportation grants in the future.** As a result, TCEQ has awarded NDMJ with another grant (the first TCEQ multiple grant award for such projects in Texas) to expand the facility. This is the type of funding innovation using both public and private sources that the East Texas region should build upon.

3.3 Work with Human Service and Healthcare Organizations

The vast majority of human service and healthcare funding comes from NEMT service. Human service funding for transit has dried up for the most part. Healthcare organizations more frequently support transit. This provides excellent opportunities to build upon current NEMT services and to expand collaboration on additional or new grant opportunities that to support expanded healthcare access.

3.4 Advocate for Additional Funding to Support Public Transit and Human Service Transportation

Coupled with the need to develop additional partnerships is a stronger advocacy campaign that highlights the impact public transportation has on residents of the region, and how they are vital components of the community transportation infrastructure. This strategy involves a regional and unified effort to inform elected officials, local and national decision makers and the general public on the need for additional funding to support current services.

This advocacy campaign could be part of a national movement to stress the importance of community and public transit. The Community Transportation Association of America (CTAA) and the American Public Transportation Association (APTA) have developed a variety of resources that can be used in advocacy efforts with local offices of House and Senate members, local media and state and local elected officials.

3.5 Advocate for Recommendations to Improve Public Transportation Identified Through Previous Transit Plans Conducted in the Region

There can be specific advocacy to support service recommendations included in transit plans conducted in the region. While the regionally coordinated transportation takes a broader review of mobility needs and options, this planning process conducted by transit systems is more detailed, and assesses current services, identifies unmet transit needs, and identifies specific service and/or organizational changes, improvements, and/or potential expansions. Detailed in each plan, these recommendations respond to a variety of the transportation needs expressed by regional stakeholders such as improving access to work locations and employment opportunities. Specific transit plans also include projected costs and a proposed timeline for implementing service improvements that could involve:

- Increased frequency of existing services
- Extended evening hours
- Weekend service expansions
- System-wide efficiency improvements
- Infrastructure and accessibility improvements

3.6 Assess Opportunities to Improve Recruitment and Retention of Vehicle Operators

In order to safely operate service levels to meet community needs, transit agencies must have an adequate number of qualified operators. Transit systems in Texas, like many transit agencies and school districts across the nation are faced with a significant shortage of operators. Prior to the COVID-19 pandemic, operator vacancies were already an issue for some transit agencies. Since the onset of the pandemic a variety of issues, including the fear of COVID-19 infection has exacerbated the problem. Vacancy rates tend to be higher the farther a transit system is from an urbanized area.

The job of professional transit operator is an essential worker with specialized skills, who faces daily challenges with potentially belligerent passengers, pressure to keep on schedule with challenging driving conditions, long periods of time sitting, and safely assisting individuals with disabilities, all while ideally being the professional, courteous public face of the organization. During the pandemic, operators are also faced with the risk of exposure to the virus, the responsibility of trying to enforce the Transportation Security Administration directive requiring face coverings on transit vehicles (sometimes with violent reactions from passengers), and added tasks with cleaning and disinfecting of surfaces during their shift. Being a transit operator is a difficult job. Ideally their pay should reflect this.

If a transit agency cannot attract quality candidates to apply and continue working, the quality of the services the organization provides will suffer. Without enough employees (high quality or otherwise), service levels cannot be maintained, and some members of the community will lose their ride to work, school, the doctor, and other essential destinations. Each time a transit organization must fill a vacant position, there is a cost to the organization to hire and train a new employee. Paying overtime to current employees can be a short-term solution but is not a sustainable strategy. Not only is a high rate of overtime utilization costly to the agency in terms of payroll (because the overtime pay rate is typically 150% of the regular pay rate), but frequent overtime can also lead to safety risks due to operator fatigue and employee burnout, leading to yet more vacancies.

Therefore, this strategy recommends the assessment of opportunities to improve driver recruitment and retention, taking into account national research and analysis of operator vacancy rates that shows:

- Higher pay leads to lower vacancies – Systems with higher minimum and maximum pay rates have lower vacancy rates on average.

- Reliable hours and pay attracts workers – Systems with a higher percentage of full-time drivers and with more generous overtime levels have lower vacancy rates.

- Workers want training, health benefits, and a quality work environment – Systems that offer healthcare benefits, offer CDL training, and that foster a quality working environment have lower vacancy rates.

Additional considerations to support driver recruitment include:

- If they are to restore and maintain staffing levels, transit agencies will need to provide competitive wages and benefits that are commensurate with the levels of risk, pressures, and responsibilities

that come with the operator position. The compensation will need to be higher than that offered by low-risk, low-challenge jobs in their area, and competitive with other types of driving jobs such as school bus operators.

- To compete with other employers in the area in today's employment environment, transit agencies may need to offer hiring bonuses. Hiring bonuses could be paid in installments over the course of the first year to encourage continued employment. Bonuses for referrals from current employees should also be considered.

- In addition to offering competitive, higher entry-level wages, transit agencies need to offer regular cost of living increases so that operators can continue to earn a living wage, and periodic longevity increases and/or bonuses, rewarding operators for their years of service will help retain operators and reward them for continuing to work for the organization.

- Transit agencies with vehicles that require the operator have a CDL can seriously consider providing paid training to prepare new hires to obtain their CDL. Offering a competitive wage as well as a meaningful sign-up bonus contingent upon a minimum period of employment can help prevent new CDL operators from taking a higher-paying job as soon as they have earned their CDL.

- Transit agencies offer an advantage over transportation network companies (such as Lyft or Uber) not only with benefits, but also by being a trusted employer. Transit agencies can have an advantage in recruiting efforts by emphasizing the agency's mission and the importance of the job to the community. However, adequate pay is needed for the job to be attractive. Transit agencies with full-time operator positions (at least 35 hours per week) are likely to have lower operator vacancy rates.

Investing in adequate compensation to maintain full staffing operating staff levels should be a priority for every transit agency, but additional funding may be needed to do this. Additional funding to allow for competitive pay scales and hiring bonuses for transit operators is an investment in the economy and quality of life in the region. Transit operators are essential frontline employees—essential for safely getting other community members to their jobs, schools, health care appointments, retail establishments, and other essential needs.

3.7 Prepare for COVID-19 Recovery Period and Long-Term Impacts of the Pandemic

Through the pandemic transit providers across the country have been facing a variety of challenges when trying to continue to provide mobility for their communities. In addition to driver shortages and rising costs to operate services, these issues have included modifying vehicles to maintain safety for drivers and customers, conveying safety protocols to the public, and implementing service changes while minimizing the impacts on population groups most in need of mobility.

Looking ahead, this strategy supports future responses that will be needed to maintain the operations of transportation services through a pandemic recovery period. While specific changes will be identified as a hopeful return to a post-COVID period occurs, it is anticipated that this recovery period will include:

- Budgeting for a continued increase in operating costs. A number of factors have already led to transit systems incurring an increase of up to 30% in operating expenses, and it is expected that this will continue in the future with the need to improve driver salaries and benefits.

- Monitoring financial opportunities through post COVID-19 stimulus funding, and being prepared to respond in a timely manner to grant applications.

- Modifying fleets to include more vehicles with smaller passenger capacity to meet demand for new services (i.e. microtransit/on-demand services discussed in Strategy 2.4), and to expand the potential driver pool by reducing the number of vehicles that require an operator with a CDL. Beyond the challenge in finding drivers with a commercial driver license, GoBus noted that current CDL drivers are facing challenges when trying to just schedule an appointment to renew their current license.

- Assessing potential service changes or improvements, with a renewed focus on improving transportation services to vulnerable populations most impacted by the pandemic.

- Assessing opportunities to deploy new technologies, and to work out any bugs before increased ridership demands.

- Expanding marketing efforts to educate customers on new services that are implemented through the recovery period, and to alleviate any customer concerns related to their safety in using public transit and to build confidence in the systems.

While no one can predict the future, and the effects of COVID-19 will have long-term impacts on public transit and human services transportation, the pandemic recovery period will also present opportunities and the need to adapt to:

- Changes in the provision of healthcare services such as tele-medicine, that will in turn impact needed transportation services.

- Workplace changes, through which some people will be working from home permanently -- while service workers may need even more flexible transportation to access their employment locations.

- A need for renewed and reimagined transit systems that encompass a broader family of services, and include as appropriate fixed route services, scheduled services, microtransit, and demand response services.

Planning for the Post Pandemic Recovery Period

While this strategy supports the preparation for a recovery period, it recognizes the challenges inherit with the planning for the uncertainties that still exist. However, there are a variety of resources that are available for assistance with this transition and with implementing this strategy, and include:

- The National Rural Transit Assistance Program (RTAP) provides various resources to support transit with ongoing safety demands and the economic ramifications from the pandemic. These resources include a "Rural Transit Planning in the Time of COVID and Beyond" conducted by the KFH Group that provided guidance on planning efforts through three phases: 1) During the pandemic, 2) Recovery from the pandemic and 3) Post-pandemic. These resources are available at https://www.nationalrtap.org/Resource-Center/COVID-19-Information.
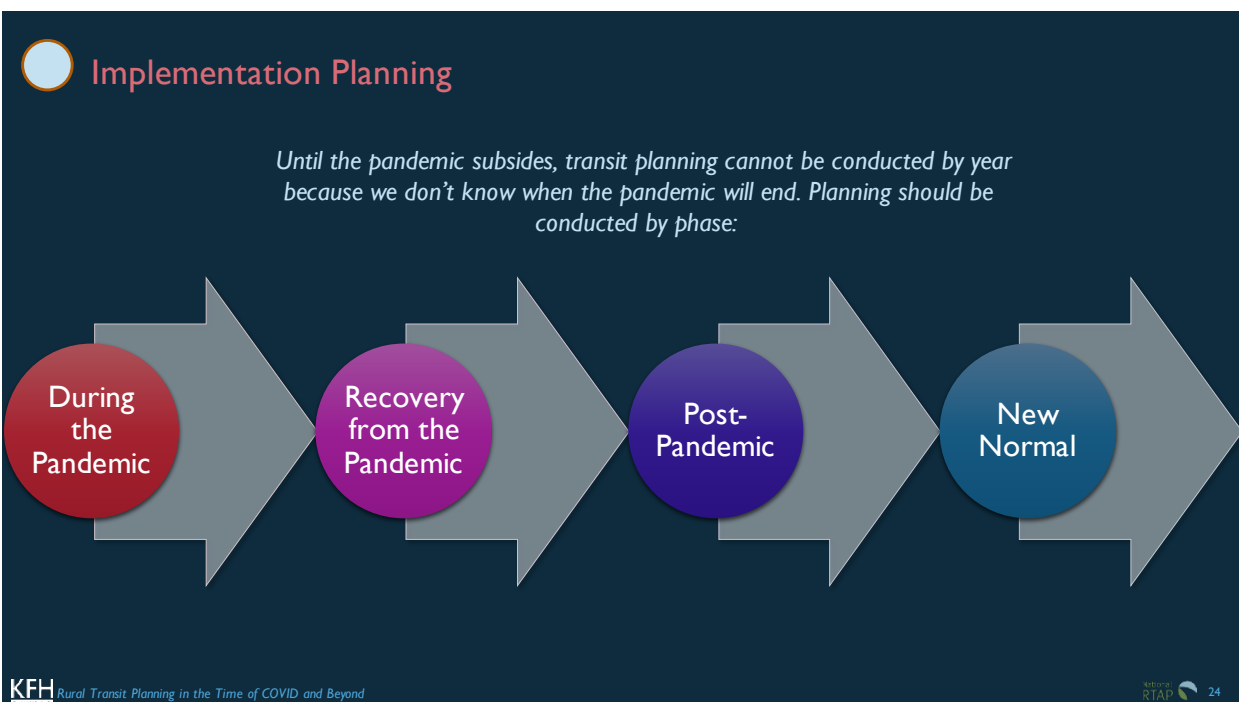
- The Community Transportation Association of America (CTAA) and the American Public Transportation Association (APTA) provide various resources and tools for dealing with COVID-19, and with preparing for a pandemic recovery period. These resources include guidance with planning for both ongoing and long-term impacts from the pandemic, and for a post-COVID environment. CTAA resources can be found at https://ctaa.org/covid-19-resources, and APTA guidance is available at https://www.apta.com/covid-19-resource-hub.

Priorities: Implementation Activities

While as noted earlier the identified strategies are important and ideally all implemented over the next five years (and some simultaneously), these efforts are prioritized in order of implementation activities. The EasTexConnects Committee will be working on multiple activities over the next five years, and this effort will require support and involvement from a variety of regional stakeholders. Therefore, the following section prioritizes the strategies in order of importance and timing. The Committee can revisit this prioritization and make modifications as needed based on changing conditions in the region.

Immediate Needs

To support the region's capacity to sustain planning activities and implement the identified strategies, these efforts should be implemented at the outset of the plan and continue as appropriate throughout the five-year horizon of the plan.

One of the highest priorities is strategies that ensure there is sufficient funding to continue current services and that current mobility options remain in place, and involve these efforts:

- Secure Federal, State, and Local funding.
- Maintain services that are effectively meeting identified transportation needs in the region.

It is also important that residents in the region are more fully aware of the transportation services in the region and are knowledgeable of their mobility options, and as a result these strategies are essential:

- Implement expanded regional mobility management efforts.
- Administer trainings for human service agency staff, medical facility personnel, and others on the use and availability of transportation services.

Recognizing the impacts of the COVID-19 pandemic on ridership, operations, and staffing these strategies are also of immediate need and consideration:

- Assess opportunities to improve recruitment and retention of vehicle operators.
- Reassess existing routes for efficiency and effectiveness.
- Prepare for COVID-19 recovery period and long-term impacts of the pandemic.

Second Level of Activities/Priorities

The next set of priorities focus on efforts to improve coordination and expand partnerships in the region. *Implementation on these activities should begin within six to nine months after completion and approval of the plan, and maintained as appropriate throughout the five-year plan timeframe:*

- Formalize coordination efforts between GoBus, Tyler Transit, Longview Transit, NDMJ and other private providers.

- Explore opportunities to improve coordination between public transit with NDMJ, Amtrak, human services transportation, and intercity bus services as well as other private providers.

- Reassess allocation of transit services in the region.

- Work with human service and healthcare organizations.

- Implement recommendations from maintenance study.

- Advocate for recommendations to improve public transportation identified through previous transit plans conducted in the region.

- Initiate a private sector sponsorship program and develop additional innovative partnerships to identify new funding sources.

- Advocate for additional funding to support public transit and human service transportation.

Planning and Implementation Priorities

Implementing new service and expanding ridership are the next steps in the process of meeting the mobility needs in the region. *These projects should be implemented over time, starting in eight to twelve months from the start of the process and continuing through the five-year timeline of the plan:* and involve the following efforts and activities:

- Implement new transfer locations that provide improved connections between Tyler Transit, GoBus, and Greyhound.

- Promote fixed schedule services and implement new scheduled services where feasible.

- Plan and implement regional connections.

- Plan and implement on-demand microtransit services.

- Consider vanpool and long distance rideshare services.

Section 9
Goals and Performance Measures

There are two parts to tracking performance. The first is tracking progress toward the goals and objectives provided in Section 6. The second part is tracking performance of transit services, a critical element to managing the service and identifying trends in their earliest stages.

Tracking Performance: Coordinated Planning

In addition to the performance data needed in the next part of this review, the progress toward the goals and objectives should be tracked.

Overarching Goal

As discussed in Chapter 6, the overarching coordinated planning goal should focus on outcomes.

> *Help provide for more trips for more people while providing cost effective, high quality, and safe transportation for our community.*

Performance Measure: Ridership on available transportation services.

Coordination Project Goals and Objectives

Next, the goals outlined earlier in this plan should be reviewed periodically, and updated as needed by the EasTexConnects Committee to ensure they are in sync with what stakeholders desire and the region's needs.

Goal No. 1: Identify Opportunities to Improve Coordination Between Transportation Providers in the Region

This goal provides the opportunity to build upon current coordination efforts through a variety of efforts noted in Chapter 6 and detailed through the strategies in Chapter 8.

Performance Measures: Implementation of coordination strategies that include more formal agreements between providers and improved connections between existing services.

Goal No. 2: Conduct Ongoing Assessment of Transportation Needs and Services in the Region

This goal involves ongoing efforts to review existing services review, obtain input through customer and community engagement, and monitor demographic and land use changes that may impact mobility needs in the region.

Performance Measures: Implementation of strategies that include maintaining services that are meeting needs, and new or modified services that respond to an ongoing needs assessment.

Goal No. 3: Implement Strategies to Meet Needs, Improve Service, and Generate Higher Ridership

In conjunction with the previous goal this one is designed to ensure the region responds effectively to identified needs, assesses opportunities to expand services, and introduced as appropriate new service designs.

Performance Measures: Implementation of operating strategies that involve maintaining successful services and expanding mobility options for residents of the region.

Goal No. 4: Ensure Funding Stability and Plan for Future Growth

This goal is designed to ensure sustainability, one of the key elements of a successful mobility network in the region. Sustainability also addresses growth, and the need to identify additional funding opportunities to support new or expanded services.

Performance Measures: Implementation of sustainability and financial strategies that include securing funing from a variety of sources, exploring opportunities to obtain additional monies through partnerships, and preparing for a post-COVID period.

System Performance Measures

The bottom line: The best coordinated service is excellent public transportation. This measure focuses on the outcomes from public transportation services in the region. But it's more than just the numbers and measures. Some of the measures should be collected daily, weekly or monthly. For GoBus the best description of the performance measures needed is in the Transit Cooperative Research Program's (TCRP) Research Report No. 136: *Guidebook for Rural Demand-Response Transportation: Measuring, Assessing, and Improving Performance,* available at – http://www.trb.org/Publications/Blurbs/162701.aspx. This publication was written by the KFH Group, and particular attention should be focused on Chapter 4 which details the measures management should be reviewing.

Determine Performance Measures to be used to Manage Performance

Transit systems in the region file a PTN 128 report documenting a wide variety of data and performance measures for TxDOT. While all of these numbers and measures are important to track, this effort will focus on those numbers and measures critical to operating performance. Further, this does not preclude the monitoring of any other activities – these should be considered a minimum.

Data Collection

1. One-way trips
2. Vehicle hours
3. Vehicle miles
4. Cost data
5. Accidents, incidents
6. On-time performance
7. No-shows
8. Missed trips
9. Road calls/breakdowns
10. Complaints/compliments

Performance Measures

Performance measures are critical to monitoring performance. Some are tracked on a daily basis, while most of the others can be tracked on a monthly basis. Following are the recommended key measures for management to use for guidance in operations. In all cases these numbers and measures should be disaggregated by county. All should be collected monthly with the exception of those indicated that should be collected daily.

The key is to rapidly identify an issue before it becomes a problem; and then find solutions.

Key Measures

1. <u>Passenger Trips per Vehicle-Hour</u> **– Daily** - This is productivity and is the most critical performance measure (excluding safety). It drives operating cost per trip and ultimately overall system cost.

2. <u>Operating Cost per Vehicle-Hour</u> – This is an important unit of cost and easily measurable. It reflects the cost to operate one vehicle for one hour. It should not fluctuate significantly from month to month unless a large one-time payment is made. It should not fluctuate significantly from year to year, unless costs such as fuel, insurance or other costs increase.

3. <u>Operating Cost per Vehicle-Mile</u> – Similar to operating cost per hour.

4. <u>Operating Cost per Passenger Trip</u> – This is partially a reflection of operating cost per hour but is most affected by system productivity, as is discussed below.

5. <u>Safety Incidents per 100,000 Vehicle-Miles</u> – **Daily** - Can be tracked separately for incidents, accidents and other problems.

6. <u>On-Time Performance</u> – **Daily** – Percentage of trips that are on time compared to all completed trips.

Other Important Measures

All measures should be reported and reviewed monthly, with most reported daily.

1. <u>No-Shows, Missed Trips</u> - **Daily** – Either actual number or percentage of total trips.

2. <u>Road Calls/Breakdowns</u> - Per 100,000 miles (daily numbers).

3. <u>Complaints/Complements</u> - **Daily**

4. <u>Miles per Hour and Average Trip Length</u> – These should be used monthly to test accuracy of other measures. Monthly fluctuations of more than a few percentage points should be investigated, verified and explained. If fluctuations occur, this should be tracked daily until the problem is resolved.

Appendix A:
Review of Recommendations for Improving and Expanding Mobility from Previous Plan

Short-Range 1-2 years	Completion %	Notes
Implement local resident education campaign through targeted mailings and social media	90%	Traffic reports from the website have increased; and other agencies post information they provide. Since marketing is an ongoing strategy work continues on updating the website and possibly offering online trip requests.
Increase social service provider marketing/outreach	90%	There have been a variety of outreach efforts with various organizations representing veterans and other groups.
Targeted marketing. Rusk residents. Promote GoBus service linking Rusk with Tyler	90%	There has been regional coordination on this effort.
Formalize intercity service between Palestine et al and Tyler. Establish route, not less than two days per week.	N/A	GoBus reports that they are currently not filling an entire bus the one day we do go from Palestine to Tyler.
Expand GoBus service linking Jacksonville and Tyler. Currently operated Tuesdays only, 10a to 2p	N/A	GoBus reported that there's insufficient demand for this service.
Meet with larger employers to determine willingness to either: subsidize employee travel via GoBus or subsidize vanpool program	20%	There have been discussion with Economic Development staff.
Establish service from communities outside Marshall to connect with Amtrak/GoBus service to from VA Hospital (SHV).	100%	GoVet service in place.
Introduce non-cash fare options for GoBus (multi-ride passes)	75%	Currently using Square but still accepting cash.
Expand Service between Smith County and Henderson County	100%	Added an additional bus and in the process of adding an additional day of service.

Design routes that link outlying communities with larger/urban centers (Tyler, Longview). Focus on centralized pickup locations. Minimum service standard: two days per week.	Researching	The process for how this service would work is under assessment, including how services would operate and how would best serve customers that need to access different destinations.
Promote GoBus, Tyler Transit, Longview Transit, Chariot Bus lines, "economic development" role amongst local decision-makers.		Ongoing effort to promote importance of public transit in region. Note: Chariot Bus is no longer in operation.
Significantly increase marketing/public education. Include quantifiable targets	100% -	Were able to track how many people were reached via Facebook.
Improve connectivity (aka trip scheduling) between GoBus, Tyler Transit, Longview Transit, and Chariot Bus Lines		Noted that a study is needed to examine costs.
Increase outreach to healthcare providers in Tyler for seniors and persons with disabilities		Ongoing effort to increase outreach.
Bring back transit service to/from Bullard		Effort in progress.
Reduce "pick up windows" for paratransit service. For seniors and persons with disabilities.		Current pickup window for service is one hour (taxi +/- 30 mins).
Implement/expand regional travel training program to support both paratransit and fixed-route service	100%	Created travel training flyer, hired Regional Mobility Manager

Medium-Range 3-4 years

Increase service between Henderson and Tyler (currently one day per week.)		Need to survey for demand.
Establish link between Rains County and Hunt County (healthcare providers in Greenville)	100%	Surveys were conducted, talked with Rains County, driver, passengers, and identified need to travel into Greenville and Sulphur Springs for medical appts, currently piloting project. Service into Greenville and Sulphur Springs is currently running. However, there have not been any requests to go into Sulphur Springs since the service started.
Establish local circular within Jefferson	N/A	Not feasible except maybe during certain times of the year

Evaluate creating a weekday peak-hour shuttle linking residences in north Jacksonville with employers in central Jacksonville	100%	GoBus currently serves all of Jacksonville five days a week.
Provide "feeder service" from Jefferson to Marshall to connect with Amtrak (taxi voucher?)	N/A	The Marshall Amtrak station was closed for a period of time, but funding was restored with support from passenger rail advocates and the station is open.
Establish inter-county service to Nacogdoches (via Mt. Enterprise)	N/A	Brazos Transit; no requests to go to Nacogdoches.
Introduce a weekday flex-route service in Henderson (no less than two days per week, not less than six hours per day)	N/A	Palestine would be higher priority for a fixed/flex route service. Henderson is more walkable.
Implement 90-day local circular in Carthage (no less than 2 days per week, no less than 6 hours per day)	N/A	Service is not currently full, very few riders, not big enough to support and we already provide local demand response service in Carthage.
Establish link between Carthage and Marshall (Harrison county) to improve access to post-secondary schools	100%	GoBus currently provides this service and students ride on Tuesdays.
Introduce service linking Canton, State Hwy 64 communities and Tyler	100%	GoBus currently serves this corridor on Thursdays
Establish link between GoBus and ATCOG(Trax)	100%	GoBus provided this service for several months and there was very little ridership. Both GoBus and TRAX have a good working relationship and allow each agency to provide trips into the others service area.
Focus GoBus on addressing non-work trips (chiefly intra-community travel and intercounty travel)	100%	GoBus currently provides this service.
Implement trial 90-day Sunday service within Longview		
Implement 30-minute weekday service on highest ridership routes		
Re-establish service linking Longview and Gladewater.	75%	Partnership between GoBus and Longview Transit to provide trips in the urbanized areas for seniors and individuals with disabilities.
Introduce Sunday Service		No Sunday Service.
Expand weekday and Saturday service hours		Already meeting PTAC request.

Improve/expand bus stop amenities (shelter, signage, benches, and lighting)		Looking at advertising opportunities to aid in this area
Introduce transit service to outlying communities (e.g. Whitehouse)		Needs to consider urbanized area funding considerations.
Introduce same-day paratransit reservation scheduling. For seniors and persons with disabilities		Policy reviewed, No same day service
Focus on vanpools for home-to-work travel		Further study needed to assess opportunities.
Introduce trip planning app		Study on utilization; fixed Route customers can trip plan through Google maps.
Leverage local taxi companies and the emerging transportation network companies (TNCs) to facilitate access to the traditional transit network (Longview, Tyler, GoBus)	100%	Working with Tyler Taxi in Smith County.
Long Range 5 years or more		
Establish shuttle linking Longview with education centers in Kilgore and Tyler		Kilgore College Ranger Ride Meeting - possible start up in the fall
Establish volunteer driver program for intra-county travel as well as inter-county travel	N/A	No volunteer driver programs.
Establish intra-county local circulator (in lieu of volunteer driver program) no less than two days per week, no less than six hours per day	N/A	Unsure how this would work or operate.
Implement "one-stop" call center		Further study needed to determine costs.

Appendix B:
Stakeholder List

Last Name	First Name	Organization
Allen	Gary	ETCOG
Anderson	Christina	NARRP & ETCC
Beck	Ida	Panola County
Benge	Maggie	Cherokee County
Cleveland	David	ETCOG
Torres	James	Tyler Transit
Hale	Judge (Joel)	Rusk County Judge
Howell	Michael	Tyler MPO
Hubbard	Griff	Amtrak
Huerta	Vince	GoBus
Johnson	Roger	Van Zandt County
Knowles	Chesley	Community Healthcore
Lewis	Scott	Longview Transit
Marshall	Patsy (Commissioner)	Rains County
McBride	Bryan	Longview MPO
Miller	Roy	E T Regional Airport
Minton	Sara	HHSC
Mitchell	Bettye	AAA
Moharer	Jamal	Smith County
Oyer	Linda	Childrens Advocate
Range	Kristy	E/D Advocate
Skinner	Rick	Greyhound
Snow	Jim	Veterans Advocate
Timmins	Zephaniah (Commissioner)	Harrison County
Hoehn	Nancy	TxDOT