Hall Area Transit Development Plan Update

March 2017









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SUPPLEMENTAL DOCUMENTS AVAILABLE UPON REQUEST:

- Baseline Conditions Memorandum
- Public and Stakeholder Meeting Summary
- Detailed Cost Assumptions for Fixed Route Service Options



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EXECUTIVE SUMMARY

The purpose of this Executive Summary is to highlight the contents of the Transit Development Plan (TDP) that follows. As such, it focuses on the overall needs and recommendations of the TDP.

Introduction and Overview

A requirement of the Georgia Department of Transportation (GDOT) and Federal Transit Administration (FTA), the Transit Development Plan (TDP) is a planning guide and implementation tool for Hall Area Transit to maximize resources by providing the most efficient and effective service possible. The purpose of this report is to provide recommended actions for Hall Area Transit based on current service demands and needs as identified through an assessment of baseline conditions and input from route drivers, TDP stakeholders, and the general public.

The TDP study area is determined by the demand response service area, which covers all of Hall County. Much of the study area is encompassed in the Gainesville Hall Metropolitan Planning Organization (GHMPO) urbanized area, which includes Gainesville, Oakwood, most of Flowery Branch, and portions of unincorporated Hall County to the north, east and west of I-985. A map of the study area and Gainesville Connection routes are provided in Figure 1.

Gainesville Connection Service Characteristics

The current Gainesville Connection fixed route transit service area encompasses approximately 17 square miles of Hall County and serves the cities of Gainesville and Oakwood. Key destinations include the University of North Georgia Gainesville Campus, Lanier Technical College, Brenau University, and the Northeast Georgia Health System and Medical Center. Highlights of the Gainesville Connection fixed route service characteristics are provided below.

- The six routes are Routes 10, 20, 30, 40, 41, and 50.
- All routes operate Monday through Friday, generally from 6:15 AM to 6:15 PM, with no weekend or holiday service.
- All routes operate on one-hour headways.
- All routes begin and end at the Gainesville Connection transfer center at the Hall Area Transit offices on Main Street.
- Monthly ridership totals are fairly consistent, averaging approximately 11,800 passengers per month.
- The month of June experienced the highest ridership in both 2015 and 2016.
- The months of November, December, and January have relatively low ridership totals compared to other months.
- With respect to individual route ridership:
 - Route 10 has the highest ridership, averaging roughly 2,600 riders per month.
 - Ridership along Routes 41 and 50 has increased steadily since February 2015.
 - For the first time, all Gainesville Connection routes surpassed 2,000 passengers in June 2016.
- With respect to fleet characteristics:



- O As of October 2016, 8 of the 16 fixed route vehicles were out of service due to maintenance needs. The existing fleet inventory is made up light duty vehicles with an expected five year life span which means that these vehicles experience more mechanical issues earlier than medium and heavy duty vehicles. Additionally the small fleet unit which maintains these vehicles are also responsible for servicing emergency vehicles which often take precedence in scheduling. The remainder of vehicles were in acceptable condition.
- Seven fixed route vehicles were scheduled for replacement in 2015-2016 (but were not), and two ADA vehicles and two support vehicles are also overdue for replacement.
 Collectively, this indicates the likely need for short-term capital expenditures for vehicles.

Gainesville Connection Funding Projections

Projected funding needs for the Gainesville Connection service assume no changes to the current routing or scheduling of fixed route services. Therefore, the funding estimates are primarily focused on needed capital and operating expenditures through FY 2021. Funding needs to maintain operations of the Gainesville Connection at current levels, based on the baseline conditions and information provided by Hall Area Transit, are summarized below.

- Operating costs through FY 2021 were projected by factoring a five percent increase of the average FY 2012-2016 costs to address liability insurance and salary increases. Operating costs are anticipated to total approximately \$4.7 million through FY 2021.
- Replacement of all fixed route vehicles is needed by 2021. Hall Area Transit has indicated its
 intent to shift to medium duty vehicles to reduce maintenance needs. Including ancillary
 equipment associated with these vehicles, the cost would be approximately \$200,000 per
 vehicle. In addition, two ADA vehicles and three support vehicles also need replacement.
 Therefore, the total vehicle replacement costs would be approximately \$3.4 million through FY
 2021.
- Electronic fareboxes are a great need and would assist in tracking ridership and service characteristics along the fixed routes. Information provided by Hall Area Transit indicates a cost of roughly \$15,000 per unit. Therefore, equipping the entire fixed route fleet would cost \$240,000.
- Repaving the fleet parking lot will cost approximately \$30,000.
- Providing benches throughout the existing system is assumed to continue at an estimated cost of \$10,000.
- Seven passenger shelters are currently in storage until such time as the required ADA compliant sidewalks can be installed. Therefore, coordination with the City and County for appropriate sidewalk installation at high boarding areas is a pressing need.

Table ES-1 provides a breakdown of the projected system operating and capital expenditures through FY 2021. Given the anticipated capital and operational needs, over \$2.5 million will be needed from local match to maintain existing service.



Table ES-1: Projected Gainesville Connection Operating and Capital Expenditures, FY 2017-2021

	Section 5307 (Urban Operating Expenses)													
Description	2012	2-2016 AVG		2017		2018		2019		2020		2021		Total
FY Operations	\$	812,175	\$	852,783	\$	895,423	\$	940,194	\$	987,203	\$	1,036,564	\$	4,712,167
PROJECT COST	\$	812,175	\$	852,783	\$	895,423	\$	940,194	\$	987,203	\$	1,036,564	\$	4,712,167
FEDERAL	\$	406,087	\$	426,392	\$	447,711	\$	470,097	\$	493,602	\$	518,282	\$	2,356,083
STATE	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
LOCAL	\$	406,087	\$	426,392	\$	447,711	\$	470,097	\$	493,602	\$	518,282	\$	2,356,083

Section 5307 (Urban Capital Expenses)											
Description		2017	2018	2019	2020	2021	Total				
Replacement Vehicles* (\$200K/per)		\$800,000	\$600,000	\$400,000	\$0	\$1,400,000	\$3,200,000				
ADA Vehicles (\$60K/per)		\$120,000	\$0	\$0	\$0	\$0	\$120,000				
Support Vehicles (\$35K/per)		\$70,000	\$0	\$0	\$35,000	\$0	\$105,000				
Expansion Vehicles (\$200K/per)		\$0	\$0	\$0	\$0	\$0	\$0				
Fareboxes (\$15K/per)		\$240,000	\$0	\$0	\$0	\$0	\$240,000				
Passenger Shelters (\$6K/per)		\$0	\$0	\$0	\$0	\$0	\$0				
Passenger Benches (\$500/per)		\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000				
Parking Lot & Bldg. Improvements		\$0	\$30,000	\$0	\$0	\$0	\$30,000				
PROJECT COST		\$1,240,000	\$640,000	\$410,000	\$45,000	\$1,410,000	\$3,745,000				
FEDERAL		\$992,000	\$512,000	\$328,000	\$36,000	\$1,128,000	\$2,996,000				
STATE		\$124,000	\$64,000	\$41,000	\$4,500	\$141,000	\$374,500				
LOCAL		\$124,000	\$64,000	\$41,000	\$4,500	\$141,000	\$374,500				
	Section 530	7 (Operating a	and Capital Ne	eds Combine	d)						
FEDERAL		\$1,418,392	\$959,711	\$798,097	\$529,602	\$1,646,282	\$5,352,083				
STATE		\$124,000	\$64,000	\$41,000	\$4,500	\$141,000	\$374,500				
LOCAL		\$550,392	\$511,711	\$511,097	\$498,102	\$659,282	\$2,730,583				
*Includes all of the ancillary equipmen	t such as wheelch	air lifts, bike rac	ks, etc.)								

Gainesville Connection Service Expansion Options

While the analysis in Section 2 describes certain ridership characteristics by route, the lack of available data about current ridership on/off patterns for each route each day makes it difficult to develop route optimization recommendations. The purchase of electronic fareboxes for both fixed route and demand response vehicles will enable more detailed analysis for future route optimization. The objectives of such an analysis would be to improve utilization on the fixed routes, shift some riders from the demand response service to the fixed routes, create enough capacity (given ridership shifts and limited increased cost) to improve peak period headways on the fixed routes, and/or implement the service options that follow.

Several service options were recommended and/or supported by the baseline conditions assessment:

- Peak hour service enhancement
- Extension of evening weekday service hours
- New routes/route extensions for expanded coverage
- Introduction of weekend service

T Table ES-2 briefly describes the service options and compares the opportunities and challenges of their implementation. Again, without the benefit of specific alighting and boarding information, the potential ridership generation from these changes is not currently available.



Table ES-2: Assessment of Potential Fixed Route Service Options

Service Option	Opportunities	Challenges
Increase Peak- Hour Headways	 Greater flexibility, convenience and reliability for commute trips within Gainesville More options for completing other trip purposes via transit No additional infrastructure needed at bus stops 	 Higher costs associated with additional vehicles and staff for operations Potential need for expansion of transfer center area
Extend Evening Hours	 More time for commuters to perform other duties on evening commute More commuters able to use the service with later hours No additional vehicles and/or employees required 	Additional costs resulting from increased operations and maintenance
Add New Route/Route Extensions	 Expanded service area within the region and improved access to more jobs Greater opportunities to a broader range of employers, who may be amicable to public-private partnerships 	 Much higher initial capital costs from additional vehicles and infrastructure associated with new stops Additional costs from increased operation and maintenance Potential need for expansion of transfer center area
Begin Weekend Service	 More personal travel options on weekends Improved service for employees of weekend businesses No additional vehicles and/or employees required 	Additional costs resulting from increased operations and maintenance

Fixed Route Service Recommendations

Both the peak hour service enhancements and evening service extensions should be considered for short-term implementation. Of the potential fixed route service options considered, these options appear to have the greatest potential to assist the business community and provide more flexibility to current transit riders for both commute and other trip purposes. Furthermore, better peak hour service will help attract more business to the area. Given the relatively low ridership numbers when compared to peer systems assessed for this report, it is a priority to improve and make the existing weekday system more attractive. It is for this reason the proposed route extensions and weekend service are recommended more of a long-term goal after the enhancements to the existing weekday service. Therefore, the recommended schedule for implementation is as follows:

- Year 1 Increase peak hour headways on the existing weekday service
- Year 2 Extend evening hours of weekday service
- Year 3 Extensions of Route 10 and 50 and new route along SR 60
- Year 4 Provision of Saturday service (without increased headways during peak hours)



The timeline of this implementation schedule will be dependent on the decisions of local officials and available funding.

Commuter Service Options

Building off of previous studies and input, a pivotal goal of this TDP effort was to identify commuter service options that best reflect the needs of Hall County commuters and assess the steps for initiating service to the Atlanta region. Based on input received and baseline conditions, the following commuter service options were developed:

- Gainesville Connection peak hour route to Gwinnett Park and Ride
- Coordination with Gwinnett County Transit (GCT) for expansion of Route 101 into Hall County
- Hall Area Transit Xpress Service to Atlanta
- Vanpool services
- Direct coordination with Georgia Commute Options

Table ES-3 highlights the commuter service options and their opportunities and challenges.

Table ES-3: Assessment of Potential Commuter Options

Service Options	Opportunities	Challenges
Gainesville Connection Peak Hour Route to Gwinnett Park and Ride	 Serves transit riders at the transfer facility and commuters at the SR 53 location Very little additional infrastructure needed at park and ride lot Direct control of operations within Gainesville 	 Higher costs associated with additional vehicles and staff for operations Potential need for expansion of transfer center area Need for coordination with GCT services
Expansion of GCT Route 101 into Hall County	 Much lower costs due to the use of existing fleet from GCT More established commute service No additional vehicles and/or employees required 	 Need for high level of intergovernmental coordination GCT branding on vehicles could confuse potential riders
Hall Area Transit Commuter Services to Atlanta	 Direct control of all services More direct service to Atlanta employment areas without stop at GCT's SR 20 lot Service to GCT fixed routes 	 Much higher initial capital costs for additional vehicles (which are much more expensive than fixed route vehicles) and infrastructure associated with new service Additional costs from increased operation and maintenance Potential need for expansion of transfer center area, particularly with use of larger vehicles
Vanpool Services	 Lower cost commute alternative than express bus Locally-controlled program 	 Additional costs of fleet vehicle(s) purchase Initiating a new program and undertaken new administrative duties



Service Options	Opportunities	Challenges
Staff Promotion	No additional capital or operating costs	Need for third-party coordination
of Georgia	Relatively low-cost compared to other	
Commute	commute options	
Options	Maximizes use of existing services	

Commute Service Recommendations

Of those considered, the most cost-effective and logical commute service option for short-term implementation would be dedicating staff time to promote the carpooling and vanpooling services provided by Georgia Commute Options. This is a very low-cost option and maximizes services that are already in place. Ideally, this would be the responsibility of a proposed new Hall Area Transit Marketing Director, which would also have other duties described later in this section. The remaining commute options considered present a wide range of opportunities and challenges that will need to be vetted with business and community leaders. Promoting Georgia Commute Options to enhance current participation in their programs will establish a baseline demand for additional services such as express bus service and locally-maintained vanpool programs.

Hall County Dial-A-Ride Service Characteristics

Hall County Dial-A-Ride is a reservation-based demand response transportation system available to residents throughout Hall County. Some highlights include:

- Service is provided Monday through Friday between the hours of 7:00 AM and 5:00 PM.
- Several more attendant trips are being utilized by disabled passengers.
- Operating characteristics have been relatively consistent since 2014.
- There was a slight reduction in trips, service and revenue hours, and overall revenues between FY 2015 and FY 2016.
- More passengers per service hour in FY 2016 than FY 2015 indicates increased service efficiency.
- The distribution of demand response services is fairly widespread with respect to origins and destinations.
- The ability to improve overall service efficiency for Hall Area Dial-A-Ride operations is somewhat limited by the provision of Department of Human Services (DHS) services due to their requirements for transit operations.
- With respect to fleet characteristics:
 - The current demand response fleet includes a total of 10 buses. All vehicles are the same model, with a capacity for eight passengers and space for two lift passengers.
 - All vehicles within the current fleet are operated on a daily basis and are in acceptable condition.
 - o All 10 demand response vehicles are scheduled for replacement before 2020.
 - The cost of demand response vehicles last procured by Hall Area Transit was approximately \$39,000 each.



Hall County Dial-A-Ride Funding Projections

The overall funding needs to continue Hall County Dial-A-Ride demand response services as they currently exist are summarized below. They are primarily focused on capital and operating expenditures through FY 2021.

- Operating costs, averaging roughly \$900,000 annually, are projected to total approximately \$3.8 million through FY 2021. A five percent increase from FY 2016 was assumed for liability insurance and salary increases.
- All 10 demand response vehicles are scheduled for replacement by 2021. Based on input from Hall Area Transit, the cost of the transit vehicles is approximately \$60,000 each. Therefore, an estimated total of \$600,000 is needed through FY 2021.
- Electronic fareboxes are also needed for all 10 demand response vehicles. At \$15,000 per unit, this would require \$150,000. It was assumed that these would be purchased along with the replacement vehicles.

Table ES-4 shows projected Section 5311 capital and operating costs through FY 2021. A total of approximately \$1.95 million will be needed through 2021 for demand response services.

Table ES-4: Projected Section 5311 Operating and Capital Expenditures, FY 2017-2021

	Section 5311 (Rural Operating Expenses)													
Description	2012	2-2016 AVG	2017	2018	2019	2020	2021	Total						
FY Operations	\$	646,537	\$678,864	\$712,807	\$748,448	\$785,870	\$825,164	\$3,751,153						
PROJECT COST		\$646,537	\$678,864	\$712,807	\$748,448	\$785,870	\$825,164	\$3,751,153						
FEDERAL		\$323,269	\$339,432	\$356,404	\$374,224	\$392,935	\$412,582	\$1,875,576						
STATE		\$0	\$0	\$0	\$0	\$0	\$0	\$0						
LOCAL		\$323,269	\$339,432	\$356,404	\$374,224	\$392,935	\$412,582	\$1,875,576						

Section 5311 (Rural Capital Expenses)												
Description		2017	2018	2019	2020	2021	Total					
Replacement Vehicles (\$60K/per)		\$360,000	\$0	\$240,000	\$0	\$0	\$600,000					
Expansion Vehicle (\$60K/per)		\$0	\$0	\$0	\$0	\$0	\$0					
Fareboxes (\$15K/per)		\$90,000	\$0	\$60,000	\$0	\$0	\$150,000					
PROJECT COST		\$450,000	\$0	\$300,000	\$0	\$0	\$750,000					
FEDERAL		\$360,000	\$0	\$240,000	\$0	\$0	\$600,000					
STATE		\$45,000	\$0	\$30,000	\$0	\$0	\$75,000					
LOCAL		\$45,000	\$0	\$30,000	\$0	\$0	\$75,000					

	Section 5311 (Operating and Capital Needs Combined)											
FEDERAL \$699,432 \$356,404 \$614,224 \$392,935 \$412,582 \$2,475,576												
STATE	\$45,000	\$0	\$30,000	\$0	\$0	\$75,000						
LOCAL	\$384,432	\$356,404	\$404,224	\$392,935	\$412,582	\$1,950,576						

Hall County Dial-A-Ride Service Options

A peer review of comparable demand response systems throughout the state was conducted to investigate potential opportunities as part of developing recommendations. Discussions with GDOT's Intermodal Office and other transit agencies in the state yielded the following observations:

 Very little coordination between fixed route services and demand response services occurs in Georgia. This is due in large part to the fact that many demand response trips are subsidized and there is very little incentive for those customers to utilize the fixed route system.



- Unlike Hall County Dial-A-Ride, many transit agencies (including Macon-Bibb County and Albany)
 do not take on Coordinated Transportation Program services in their regions due to the
 difficulties associated with DHS regulations, as noted in further detail in Section 2 and the peer
 review section of this report. In addition to transportation coordination difficulties, there are a
 great deal of reporting requirements and equipment needs related to service provision. Instead,
 private entities bid for these contracts from DHS.
- Many advocates of the Coordinated Transportation Program state that better service is
 provided by the public transit agencies because they feel that the transit agencies have more
 accountability for their services.

In consideration of Hall County Dial-A-Ride's service characteristics, the ability to improve service efficiency is somewhat limited due to DHS regulations and the overall distribution of trips throughout the county. Two options that may warrant consideration are:

- Investigating means for better connections to the fixed route system.
- Exploring the possibility of relinquishing DHS Coordinated Transportation Program responsibilities to another party.

The potential opportunities and challenges of these options are presented in Table ES-5.

Service Options Opportunities Challenges Maintain Service already established and operating • Difficulties in coordinating trips due Coordinated to DHS service requirements policies in place Transportation • More service and fleet demands More public service provided Service More revenue and ridership due to DHS services DHS revenues can be used as part of local match Relinguish • More opportunities to improve efficiency for • Overall less ridership and revenue to Coordinated Hall Area Transit Section 5311 trips Transportation • Opportunities to coordinate with fixed route • Less service without DHS revenues as Service to Third local match service Party Provider • Allows for private non-profit or for-profit agency to take over service

Table ES-5: Assessment of Demand Response Options

Further discussion amongst community leaders is needed to weigh the opportunities and challenges presented by providing DHS services with its demand-response system rather than opting for a third-party entity. With each subsequent update of the TDP, peer review systems and DHS regulations in place should be re-evaluated.



Other Recommendations

Other recommendations that resulted from the TDP effort include:

- Utilize additional funding sources to provide local match for federal resources.
- Provide staffing resources to support marketing services and serve as a community liaison.
- Develop an intermodal transportation center in the vicinity of the Amtrak rail station.

More information on these recommendations is provided in Sections 7 and 8.



SECTION 1: INTRODUCTION AND OVERVIEW

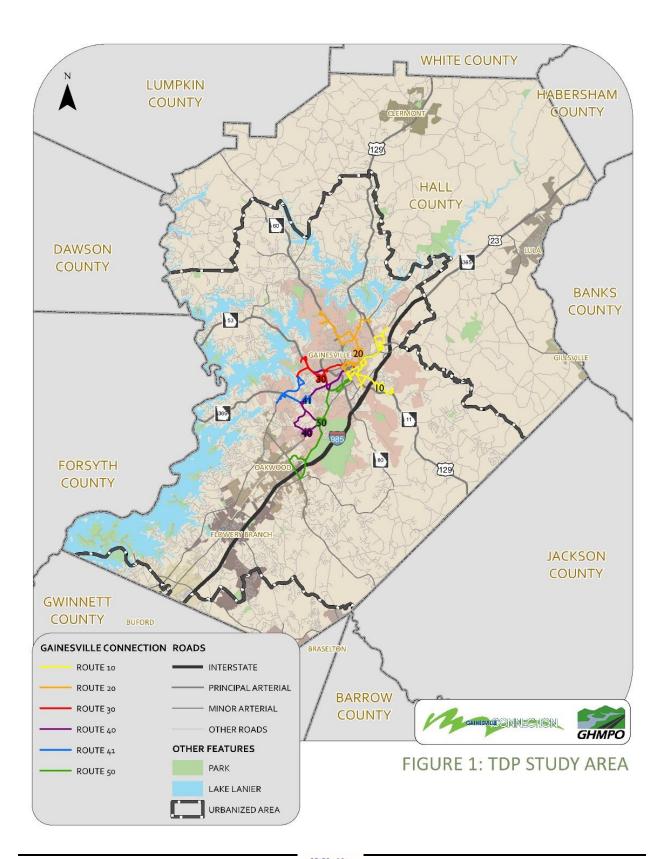
A requirement of the Georgia Department of Transportation (GDOT) and Federal Transit Administration (FTA), the Transit Development Plan (TDP) is a planning guide and implementation tool for Hall Area Transit to maximize resources by providing the most efficient and effective service possible. The TDP will provide short-term recommendations to meet immediate needs and long-term recommendations to meet projected needs and those requiring significant investment for implementation.

The TDP study area is determined by the demand response service area, which covers all of Hall County. Much of the study area is encompassed in the Gainesville Hall Metropolitan Planning Organization (GHMPO) urbanized area, which includes Gainesville, Oakwood, most of Flowery Branch, and portions of unincorporated Hall County to the north, east and west of I-985. A map of the study area and existing Hall County Transit fixed routes is provided in Figure 1.

The purpose of this report is to provide recommended actions for Hall Area Transit based on current service demands and needs as identified through an assessment of baseline conditions and input from route drivers, TDP stakeholders, and the general public. The report builds upon the major findings from the *Baseline Conditions Technical Memorandum* (referred to hereafter as the Baseline Report). The remainder of the report is as follows:

- Section 2: Existing Transit Service Characteristics Highlights of key characteristics of the fixed route and demand response systems. This includes route descriptions, ridership and other operational characteristics.
- Section 3: Existing Transit Service Area Characteristics Key characteristics of Hall County that influence and/or indicate the need for fixed route and/or demand response service.
- Section 4: Review of Previous Studies Highlights from relevant planning and policy documents and their potential influence on transit service.
- Section 5: Input from Outreach Activities A summary of input received throughout the TDP process from TDP stakeholders, transit drivers, and the general public.
- Section 6: Overview of Funding Sources A breakdown of federal and local sources used for transit services and needed funding to maintain existing service levels.
- Section 7: Service Options A summary of potential service options, commuter services, funding mechanisms, and transit service promotion ideas.







SECTION 2: CURRENT TRANSIT SERVICE OVERVIEW

The baseline conditions for the Gainesville Connection and Hall County Dial-A-Ride services presented in this section includes a summary of service characteristics, fare policy, ridership trends, and fleet characteristics. This section also contains a summary of the current commute options to the Atlanta area. More detail on all of the baseline conditions is provided in the *Baseline Conditions Technical Memorandum*.

2.1 Gainesville Connection

The current Gainesville Connection fixed route transit service area encompasses approximately 17 square miles of Hall County and serves the cities of Gainesville and Oakwood. Key destinations include the University of North Georgia Gainesville Campus, Lanier Technical College, Brenau University, and the Northeast Georgia Health System and Medical Center. Highlights of the Gainesville Connection fixed route service characteristics are provided below.

- The six routes are Routes 10, 20, 30, 40, 41, and 50.
- All routes operate Monday through Friday, generally from 6:15 AM to 6:15 PM, with no weekend or holiday service.
- All routes operate on one-hour headways.
- All routes begin and end at the Gainesville Connection transfer center at the Hall Area Transit offices on Main Street.

<u>Ridership</u>

Based on the information provided in the *Baseline Conditions Technical Memorandum*, the following major trends have characterized Gainesville Connection ridership since February 2015:

- Monthly ridership totals are fairly consistent, averaging approximately 11,800 passengers per month.
- The month of June experienced the highest ridership in both 2015 and 2016.
- The months of November, December, and January have relatively low ridership totals compared to other months.

With respect to individual routes:

- Route 10 has the highest ridership, averaging roughly 2,600 riders per month.
- Ridership along Routes 41 and 50 has increased steadily since February 2015.
- For the first time, all Gainesville Connection routes surpassed 2,000 passengers in June 2016.



Peer Review

In order to gauge systemwide efficiency of transit services, a peer review of service characteristics reported to FTA for the National Transit Database (NTD) was conducted. Fixed route systems similar to Gainesville Connection with respect to population and/or service characteristics were used for this analysis. These systems include:

- Albany Transit System
- Macon-Bibb Transit Authority
- Anderson (SC) Transit Authority
- East Alabama Regional Planning and Development Commission (Anniston, AL)

A comparison of similar characteristics is provided in Table 1.

Table 1: Peer Comparison of Fixed Route Systems

	Albany Transit	Macon-Bibb County Transit	Anderson (SC)	East Alabama Regional Planning and Development	Hall Area
	System	Authority	Authority	Commission	Transit
Area Characteristics			-		
Total Urbanized Area Population	95,779	137,570	75,702	79,796	130,846
Total Urbanized Area Square Miles	71	98	74	87	126
Population Density (Pop/Sq. Mi.)	1,352	1,404	1,022	920	1,036
Service Characteristics					
Total Passengers (Unlinked Passenger Trips)	712,590	996,305	366,897	171,230	149,594
Vehicles Operated in Maximum Service	8	22	5	4	7
Vehicle Revenue Miles	600,107	1,418,468	250,177	207,523	235,115
Vehicle Revenue Hours	35,095	83,941	15,430	13,348	19,003
Total Operating Expenses	\$2,508,794	\$7,478,405	\$1,071,910	\$660,902	\$740,858
Fare Revenues	\$542,312	\$973,929	\$89,692	\$67,467	\$78,251
Passengers/Revenue Hour	20.30	11.87	23.78	12.83	7.87
Revenue Miles/Revenue Hour	17.10	16.90	16.21	15.55	12.37
Passengers/Revenue Mile	1.19	0.70	1.47	0.83	0.64
Operating Expenses/Revenue Mile	\$4.18	\$5.27	\$4.28	\$3.18	\$3.15
Fare Revenue/Operating Expenses	21.6%	13.0%	8.4%	10.2%	10.6%
Operating Costs per Passenger	\$3.52	\$7.51	\$2.92	\$3.86	\$4.95

Source: FTA National Transit Database, 2015

A review of this information indicates:

- Gainesville Connection carries significantly fewer passengers per revenue hour and passengers
 per revenue mile than the peer systems, as also reflected in its lower fare revenues. To some
 degree, this is a function of Hall Area Transit's relatively low service area population density.
 Regardless of the cause, it indicates the need to promote transit opportunities and investigate
 service to other areas/employers.
- Hall Area Transit's operating expenses per revenue mile are the lowest among the peer systems, which is an indicator of service efficiency. An additional comparison of passengers per service



mile (which takes into account when buses operate to/from areas with no passengers) could not be conducted because the necessary NTD data is not required by "reduced reporting agencies" such as these.

 The percentage of fare revenue to operating expenses for Gainesville Connection is similar to that for both the Macon-Bibb and Anderson systems. The exception, Albany Transit System, is twice that of Hall Area Transit.

Route Efficiency

Specific performance measures such as revenue hours and passenger miles by route were unavailable for this analysis. Therefore, the efficiency of each route was determined by assessing passengers per trip. This was calculated by dividing a month's total riders by total days of operation by the total trips for that route per day. The results of this analysis are displayed in Table 2. In summary:

- Route 10 has the highest number of passengers per trip, averaging slightly over nine customers per trip.
- Systemwide, the average is slightly less than eight passengers per fixed route trip.
- Average passengers per trip for all six of the fixed routes range from six to nine passengers.

Trips per Rt# Day Jan-16 Feb-16 Mar-16 Apr-16 May-16 Jun-16 Avg 9.23 7.55 8.10 8.22 7.02 6.78 **Total System** 7.86 Days of Service

Table 2: Passengers per Trip by Route, January-June 2016

Source: Hall Area Transit

Mobility Plus Services

Americans with Disabilities Act (ADA) Complementary Service, also known as Mobility Plus, is available to eligible persons who live within ¾-mile of a Gainesville Connection bus route but cannot safely navigate streets to access the service due to disability. ADA approved riders can call and receive a ride directly to a Gainesville Connection bus stop or to their desired destination. In FY 2016, significant ADA service characteristics included:

- A total of 366 passengers on 344 one-way trips
- A total of 1,807 service hours and 1,644 revenue hours
- A total of 188.88 revenue hours



Gainesville Connection Fleet Characteristics

A breakdown of the vehicles provided through FTA 5307 funds as of October 2016 was provided by Hall Area Transit. A summary of key vehicle characteristics includes:

- The current 5307 funded fleet includes 16 fixed route buses, 2 ADA flex buses, and 3 support vehicles.
- The capacity of the fixed route vehicles ranges from 15-18 persons.
- As of October 2016, 8 of the 16 fixed route vehicles were out of service due to maintenance needs. The existing fleet inventory is made up light duty vehicles with an expected five year life span which means that these vehicles experience more mechanical issues earlier than medium and heavy duty vehicles. Additionally the small fleet unit which maintains these vehicles are also responsible for servicing emergency vehicles which often take precedence in scheduling. The remainder of vehicles were in acceptable condition.
- Seven fixed route vehicles were scheduled for replacement in 2015-2016 (but were not), and both ADA vehicles and two support vehicles are also overdue for replacement. Collectively, this indicates the likely need for short-term capital expenditures for vehicles.
- The cost of the fixed route vehicles last procured by Hall Area Transit was approximately \$83,000 each. Given the age of the ADA and support vehicles, their replacement costs should also be investigated.

2.2 Hall County Dial-A-Ride Services

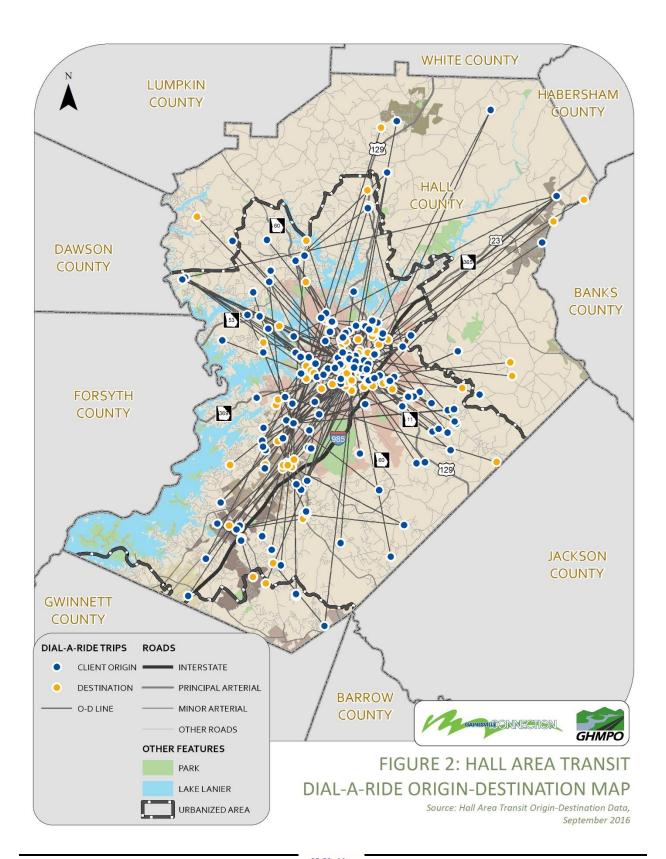
Hall County Dial-A-Ride is a reservation-based vanpool transportation system available to residents throughout Hall County. Some highlights of the service include:

- The service is provided Monday through Friday between the hours of 7:00 AM and 5:00 PM.
- Several more attendant trips are being utilized by disabled passengers.
- Operating characteristics have been relatively consistent since 2014.
- There was a slight reduction in trips, service and revenue hours, and overall revenues between FY 2015 and FY 2016.
- More passengers per service hour in FY 2016 than FY 2015 indicates increased service efficiency.

Trip Distribution

Widely dispersed origins and destinations is one of the challenges to providing efficient demand response services. Figure 2 illustrates the origins and destinations of Hall County's demand response trips during September 2016. As shown, the distribution of demand response services is fairly widespread with respect to origins and destinations.







DHS Service Requirements

As noted in the *Baseline Conditions Technical Memorandum*, the Department of Human Services (DHS) administers Section 5310 funds for Hall County Dial-A-Ride services. The Coordinated Transportation System serves consumers of DHS divisions, including the Division of Aging Services (DAS) and the Division of Family and Children Services (DFCS), as well as consumers of partner agencies including the Department of Behavioral Health and Developmental Disabilities (DBHDD) and the Georgia Vocational Rehabilitation Agency (GVRA). The goal of the DHS Coordinated Transportation System is to enhance the lives of consumers in Georgia by strengthening families while supporting their self-sufficiency and helping to protect vulnerable children and adults.

The ability to improve overall service efficiency for Hall Area Dial-A-Ride operations is somewhat limited by the provision of DHS services due to their requirements for transit operations. For example, according to the *DHS Transportation Manual (July 18, 2016)*, Hall Area Dial-A-Ride must ensure a DHS trip is no more than 45 minutes longer than the average travel time required for a direct trip between a customer's origin and destination. Other specific operation requirements noted in the manual that could offer challenges for trip coordination include:

- There is no right of refusal for trips scheduled within time frames dictated by local policy. If a trip cannot be accommodated, the contractor must document the date and time of the request, the name of the requesting Human Services Provider, the name of the individual making the request, and the reason why the trip is not accommodated.
- Transportation services are made available 24 hours per day, 7 days per week. Core hours are between 6:00 AM and 6:00 PM, Monday through Friday; however, the contractor must provide scheduled trips beyond these core hours and days as demand warrants to meet the needs of DHS consumers.
- While DHS is responsible for payment of no-shows at the same rate as scheduled trips if
 notification requirements are not met, the driver must wait five minutes after the appointed
 pick up time before a consumer is considered a no-show.
- A 20-minute pick up window is allowed (10 minutes before and 10 minutes after estimated pick up time); however, consumers are not to be picked up prior to the end of an appointment or activity (such as a doctor's appointment).

Peer Review

A peer review of comparable demand response services utilizing FTA NTD data was undertaken to assess the efficiency of the Hall Area Dial-A-Ride services, as provided in Table 3. The most recent year with complete NTD data was 2015. The service agencies examined were:

- Albany Transit System
- Macon-Bibb County Transit Authority
- East Alabama Regional Planning and Development Council (Anniston, AL)



Table 3: Peer Comparison of Dial-A-Ride Services

	Albany Transit System	Macon-Bibb County Transit Authority	East Alabama Regional Planning and Development Commission	Hall Area Transit
Area Characteristics	- Cycle	7.00.110,110,110,110,110,110,110,110,110,		
Total Urbanized Area Population	95,779	137,570	79,796	130,846
Total Urbanized Area Square Miles	71	98	87	126
Population Density (Pop/Sq. Mi.)	1,352	1,404	920	1,036
Service Characteristics				
Total Passengers (Unlinked Passenger Trips)	14,837	27,155	119,988	26,970
Vehicles Operated in Maximum Service	6	6	24	9
Vehicle Revenue Miles	95,234	313,077	427,002	188,704
Vehicle Revenue Hours	7,052	19,088	38,755	12,173
Total Operating Expenses	\$417,847	\$751,912	\$1,270,791	\$590,464
Fare Revenues	\$39,173	\$65,253	\$180,221	\$27,759
Passengers/Revenue Hour	2.10	1.42	3.10	2.22
Revenue Miles/Revenue Hour	13.50	16.40	11.02	15.50
Passengers/Revenue Mile	0.16	0.09	0.28	0.14
Operating Expenses/Revenue Mile	\$4.39	\$2.40	\$2.98	\$3.13
Fare Revenue/Operating Expenses	9.4%	8.7%	14.2%	4.7%
Operating Costs per Passenger	\$28.16	\$27.69	\$10.59	\$21.89

Source: FTA National Transit Database, 2015

A review of this information indicates:

- With respect to passengers per revenue hour and passengers per revenue mile, Hall County Dial-A-Ride has similar efficiency to Albany Transit System. This is encouraging since Hall Area Transit provides roughly twice the amount of services.
- Macon-Bibb County Transit Authority carries fewer passengers per revenue hour and passengers per revenue mile than Hall County. Although both systems carry relatively the same amount of passengers, Macon-Bibb County's revenue miles are roughly 65 percent higher. This reflects typically longer trips per passenger.
- Of the four systems, Hall County Dial-A-Ride's percentage of fare revenue per operating
 expenses is roughly half that of the other two systems. This indicates a need to investigate the
 current fare system.
- The East Alabama Regional Planning and Development Commission (EARPDC) was included in the peer review because they also provide Section 5310 services. In comparing their operational characteristics, the EARPC has a similar operating expense per revenue mile despite the size of its service area. It should be noted that their system also has a great deal more fare revenues, due primarily to usage from nearby counties throughout the region, which also results in a lower operating cost per passenger for the EARPDC.



Hall County Dial-A-Ride Fleet Characteristics

A breakdown of the vehicles provided through FTA 5311 funds as of October 2016 was provided by Hall Area Transit. Key characteristics include:

- The current demand response fleet includes a total of 10 buses. All vehicles are the same model, with a capacity for eight passengers and space for two lift passengers.
- All vehicles within the current fleet are operated on a daily basis and are in acceptable condition.
- All 10 demand response vehicles are scheduled for replacement before 2020.
- The cost of the demand response vehicles last procured by Hall Area Transit was approximately \$39,000 each.

2.3 Current Commute Options

Over the recent past, there has been a great interest shown by community leaders for better commuter service between the Gainesville and Atlanta regions. The section provides an overview of current services and previous analysis regarding the potential for commuter services. The two most viable options for Hall County residents to commute to the Atlanta area are:

- Gwinnett County Transit Route 101
- Georgia Commute Options Services

Gwinnett County Transit Route 101

The Gwinnett County Transit (GCT) Route 101 is an express route that serves Midtown and Downtown Atlanta from the I-985 Park and Ride off SR 20 in Gwinnett County. One downside is that Hall County Transit does not provide a direct transit connection to this lot. Route 101 operational characteristics include:

- Eight AM Peak trips depart from the I-985 Park and Ride between 5:30 AM and 8:00 AM.
- Nine PM Peak trips arrive at the I-985 Park and Ride between 4:07 PM and 7:12 PM.
- Trips take approximately one hour and ten minutes.
- A direct connection to MARTA is provided at the Civic Center Station, with additional stops within walking distance to the Five Points and Georgia State stations.
- Fares are \$5.00 per one-way trip, \$45.00 for a 10-ride ticket block, \$180 for a monthly pass, and \$2.00 per ride with a Breeze Card (MARTA fare card).

Georgia Commute Options

As recommendations are developed for commuter transit services, consideration of Georgia Commute options will be considered as an interim step. Georgia Commute Options is a Georgia Department of Transportation (GDOT) program in the Atlanta Region (including Hall County) that offers a free service with more than 50,000 potential carpoolers or vanpoolers. More than 2,000 employers and property managers in Metro Atlanta also participate with Georgia Commute Options. The program offers a variety of services to employers. Assistance begins with a one-on-one consultation to customize a



program for each participating employer's particular workplace and ways to start or expand alternative work arrangements like teleworking, compressed work weeks and flexible work hours. Benefits to employees include financial incentives for not driving alone, pre-tax commute expenses benefits, and commuter ridematching and Guaranteed Ride Home services. Interested individuals can receive live ridematches sent either by email or text. Incentives such as gas cards are offered for participants, and through the Guaranteed Ride Home (GRH) program, participants can receive up to five trips each year from work to their home or car if an unexpected event occurs.

Recent data was obtained from Georgia Commute Options on the number of Hall County participants in the offered programs. A breakdown of utilization is provided in Table 4. Significant points of note:

- The number of registered commuters in the program has steadily declined from 44 in 2014 to 17 in 2016.
- Although the total number of commuters has declined since 2014, the number of reported commute trips has steadily increased, with significant increases in carpooling trips.
- Another shift in commute patterns has been a steady increase in teleworking since 2014.

Previously Recommended Service Options

The two policy documents that supported the establishment of commuter services from Hall County were the previous TDP and the Vision 2030 "Big Ideas" report.

The previous TDP recommended further study of how to better utilize the park and ride facility located off SR 20 (as noted in Section 2) and the potential for new commuter service to the following locations:

- I-985 Exit 4 Park and Ride
- MARTA Doraville Station
- Midtown/Downtown Atlanta
- Hartsfield-Jackson Atlanta International Airport

The recommended stop locations for consideration in the previous TDP were:

- The intersection of SR 53 (Mundy Mill Road) and Wallis Road, just south of the I-985 northbound off-ramp
- SR 13 (Atlanta Highway) and I-985

As a follow-up activity, the Vision 2030 "Big Ideas" report recommended development of a new I-985 commuter service to Downtown Atlanta with park and ride stops at the I-985 interchanges at SR 13 (Atlanta Highway) and US Business 129 (Exits 17 and 24, respectively). Local fixed route service would be modified to connect to these locations, with a total of four buses running during both the AM and PM peak hours. It should be noted that service to the I-985 park and ride was not considered optimal due to the need for an additional transfer (thus lengthening the trip to Metro Atlanta).



Table 4: Georgia Commute Options Hall County Participation

Regional Activity Summary	2014		2015		2016	
Number of commuters registered:	44		23		17	
Number of commuters who have logged at least once:	20		17		20	
Number of daily commute logs submitted:	802		1,211		1,453	
Percentage of commuters logged:	6.33 %		4.99 %		7.12 %	
Percentage of days logged that were clean commute days:	44.26 %		60.69 %		82.79 %	
Percentage of all commute miles considered clean miles:	30.86 %		43.50 %		70.13 %	
Distribution of All Trip Segments Reported						
Drive Alone	998	58.84 %	1,005	40.92 %	1,380	36.55 %
Carpool	213	12.56 %	595	24.23 %	1,672	44.28 %
Vanpool	4	0.24 %	12	0.49 %	3	0.08 %
Bus or Train	0	0.00 %	1	0.04 %	0	0.00 %
Bicycle	6	0.35 %	0	0.00 %	113	2.99 %
Walk	39	2.30 %	150	6.11 %	34	0.90 %
No travel - compressed work week day off	382	22.52 %	451	18.36 %	116	3.07 %
No travel - teleworked at home	54	3.18 %	242	9.85 %	458	12.13 %
Impact of Commuter's Use of Clean Modes						
Vehicles Miles Reduced:	8,932		25,965		50,410	
Vehicle Trips Reduced:	552		1,244		1,316	
Total Pollution Reduced (in tons):	7.24		21.06		40.88	
NOx Reduced (in lbs):	44.50		129.37		251.17	
VOC Reduced (in lbs):	31.90		92.73		180.04	
PM Reduced (in lbs):	2.28		6.64		12.89	
CO2 Emissions Reduced (in tons):	6.93		20.15		39.12	
Fuel & Maintenance Cost Savings:	\$4,645		\$12,554		\$25,055	
*- Includes through November 30, 2016						



SECTION 3: EXISTING TRANSIT SERVICE AREA CHARACTERISTICS

The purpose of this section is to provide an overview of key characteristics throughout Hall County that influence transit service. This includes:

- Existing and projected population characteristics
- Existing and projected employment characteristics
- Transit dependent populations
- Land use characteristics
- Other transportation characteristics

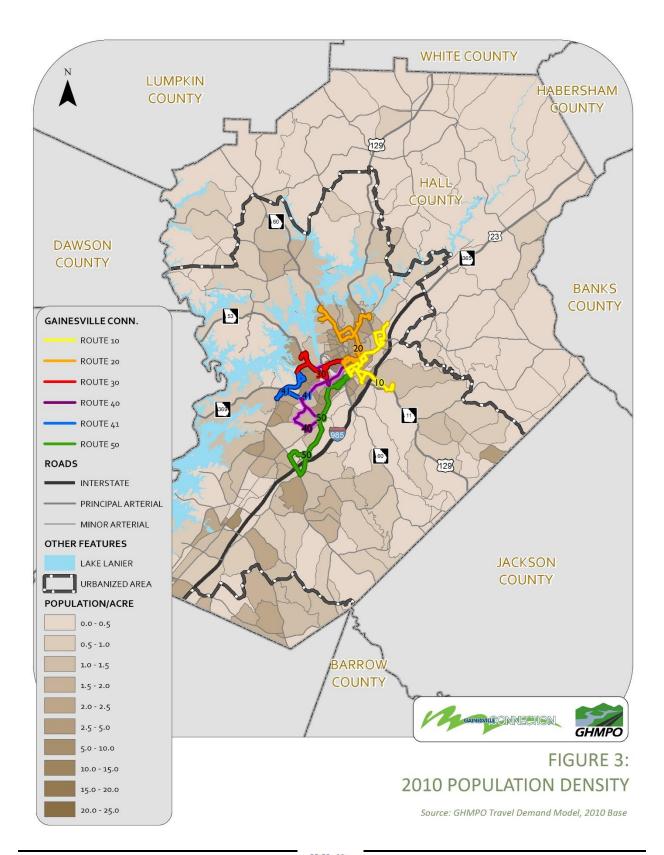
A more detailed description of these characteristics is provided in the *Baseline Conditions Technical Memorandum*.

3.1 Existing and Projected Population Characteristics

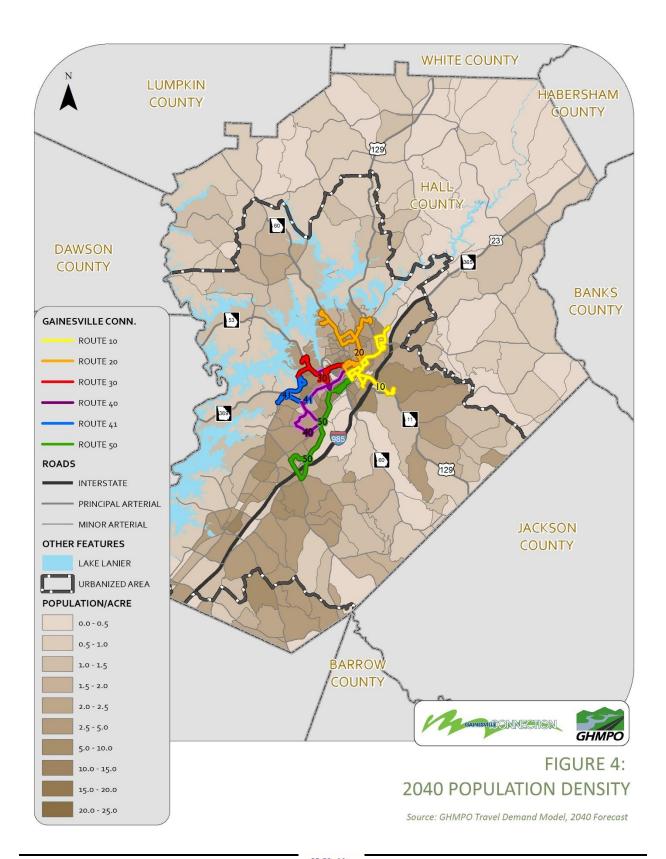
Understanding current and projected population trends and growth areas is a key consideration for transit planning. Socioeconomic data from the GHMPO travel demand model was used to develop existing and projected population totals. The 2010 Census estimated Hall County's population to be 177,870. By 2040, the projected population is expected to increase to 371,570, more than twice the 2010 estimate. As shown, the areas where growth is expected to occur are currently low-density suburban areas of unincorporated Hall County and within the cities of Oakwood and Flowery Branch. The housing type is expected to consist primarily of single family homes, with increasing population density along the I-985 parallel arterials, southeast of the I-985 corridor, and northwest of Gainesville along SR 53 towards Forsyth County, SR 60 towards Lumpkin and Dawson counties, and US 129 towards White County. Other areas of high population are found on the banks of Lake Lanier, along SR 53, and on SR 60. The potential to expand service into these areas should be monitored as they continue to grow and develop. As the cities of Oakwood and Flowery Branch develop and implement their individual plans, the demand for transit service should considered.

Population density is key to providing efficient transit service. Socioeconomic data from the GHMPO travel demand model was used to derive existing (2010) and projected (2040) population density. Most of the county consists of low density residential areas, with the most densely populated areas located within the City of Gainesville. Isolated pockets exhibit densities of over 15 persons per acre, but most of the core areas have densities of 2-5 persons per acre. Projected 2040 population densities for the areas surrounding Gainesville Connection routes are provided in Figure 4. Many areas of the Gainesville core are projected to have a slight increase in residential density, with some projected to exceed 10 persons per acre.











3.2 Existing and Projected Employment Characteristics

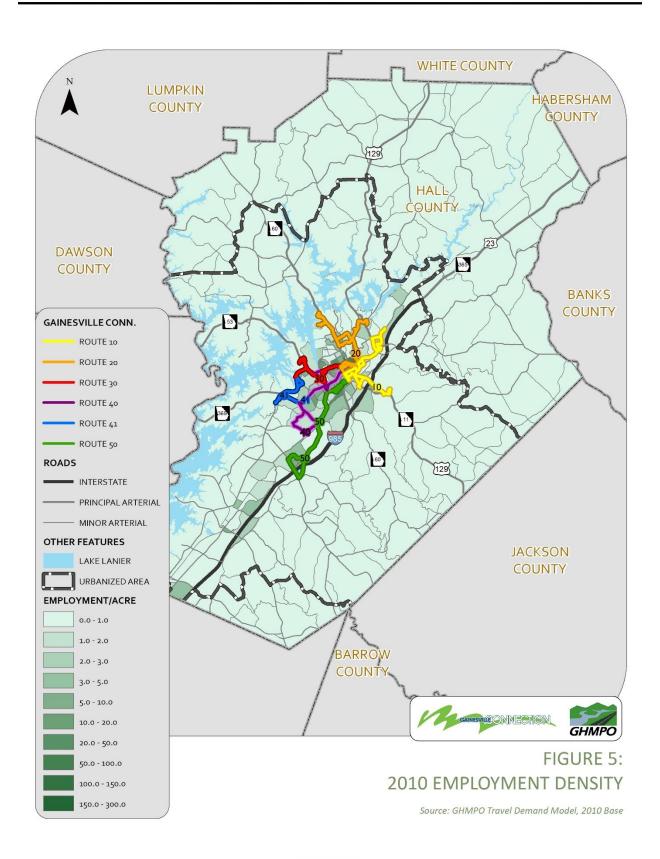
Serving employment areas and providing access to jobs is a critical function of transit services. Industry in Hall County is driven largely in part by the manufacturing plants, poultry and food processing, and distribution centers located near Gainesville. Several manufacturing, warehousing and distribution centers that support various industries, including poultry production, are located along the SR 60 corridor south of I-985. Other major employment sources include the Gainesville City School System, Hall County School System, Brenau University, University of North Georgia, Northeast Georgia Health System, and Lee Gilmer Memorial Airport.

Existing (2010) and projected (2040) employment totals were derived from the GHMPO travel demand model and are shown in Figures 5 and 6. Full-time employment throughout the county is estimated at 89,220 jobs. Total employment is projected to increase by nearly 150 percent, with a 2040 projection of 215,280 full-time jobs. As the figures illustrate, most of the areas with higher employment densities are within the City of Gainesville and along the I-985 and SR 60 corridors. Employment growth will increase moderately in most portions of the county through 2040, with higher growth in the areas along I-985 and SR 60.

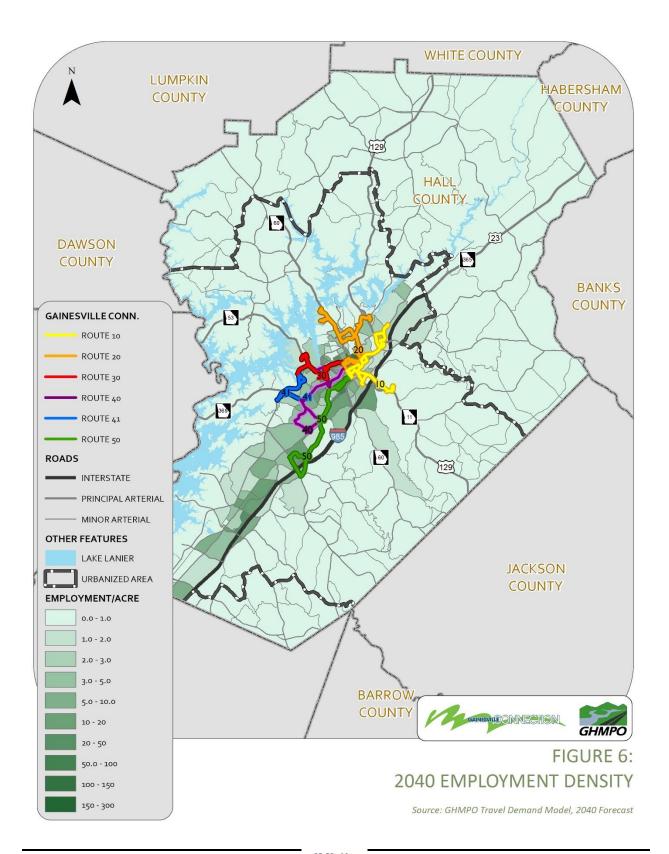
Hall County's future land use plan emphasizes proximity and access to the freeway system as a key component to job growth for manufacturing, warehousing and distribution. Therefore, this growth is expected to be focused along SR 365, SR 60, US 129 (south of Gainesville), and the arterials that run parallel to I-985, such as Thurmon Tanner Road and SR 13/Atlanta Highway. New commercial and retail nodes are expected along US 129 north of Gainesville, along SR 53 southeast of Gainesville, within Oakwood, Flowery Branch and Buford, and along SR 365. As the cities of Oakwood and Flowery Branch develop and implement their individual plans, the demand for transit service should be considered.

Population density is key to providing efficient transit service. Socioeconomic data from the GHMPO travel demand model was used to derive existing (2010) and projected (2040) population density. Most of the county consists of low density residential areas, with the most densely populated areas located within the City of Gainesville. Isolated pockets exhibit densities of over 15 persons per acre, but most of the core areas have densities of 2-5 persons per acre. Projected 2040 population densities for the areas surrounding Gainesville Connection routes are provided in Figure 4. Many areas of the Gainesville core are projected to have a slight increase in residential density, with some projected to exceed 10 persons per acre.











3.3 Transit Dependent Population Concentrations

Simply stated, transit dependent adult populations are those that are too poor, too old, or physically unable to operate an automobile. With that said, the transit dependent analysis included within this section includes the following:

- Low income populations
- Zero car households
- Disabled populations
- Elderly populations

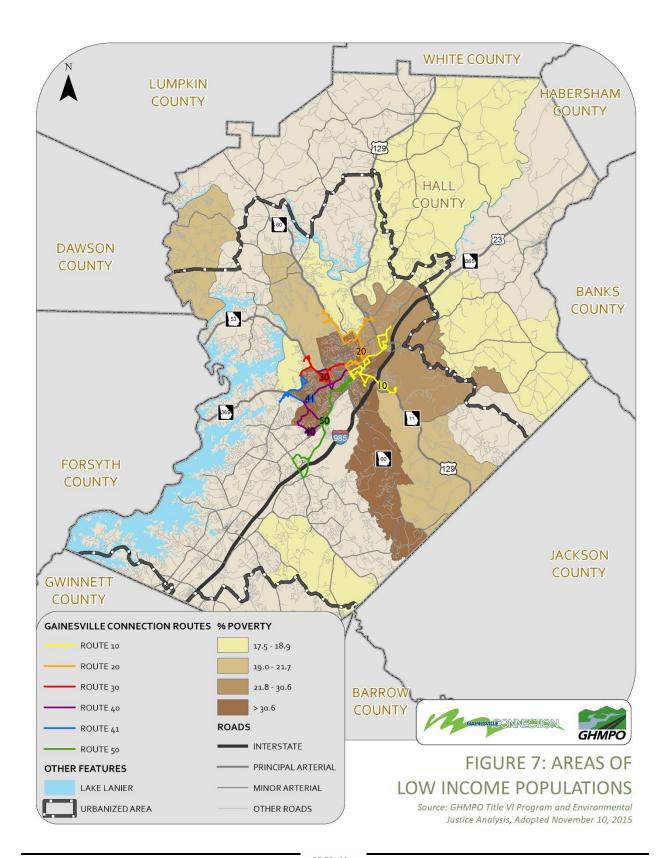
Low Income Populations

Households in poverty often do not have the means to provide personal transportation and must rely on fixed route bus service to reach grocery stores, places of employment, and other basic human services. Low income persons are those with incomes below the poverty level defined by the Department of Health and Human Services. Based on information included within the *GHMPO Title VI Program and Environmental Justice Analysis*, the highest concentrations of low income populations are located around southern Gainesville and along US 129 and SR 60. Additionally, areas experiencing slightly higher than average poverty levels lie north and east of Gainesville, in the low-density rural areas of northern Hall County. Other pockets of higher-than-average poverty lie to the west near Dawson County and in southern Hall County near SR 53. The concentrations of low income populations throughout the county are shown in Figure 7. Most of the low income areas are serviced by the Gainesville Connection fixed route system. The only significant concentrations of low income populations not served by the system are in the SR 60 corridor south of Gainesville. Much of this area is not located within the limits of the City of Gainesville, which funds the fixed route service.

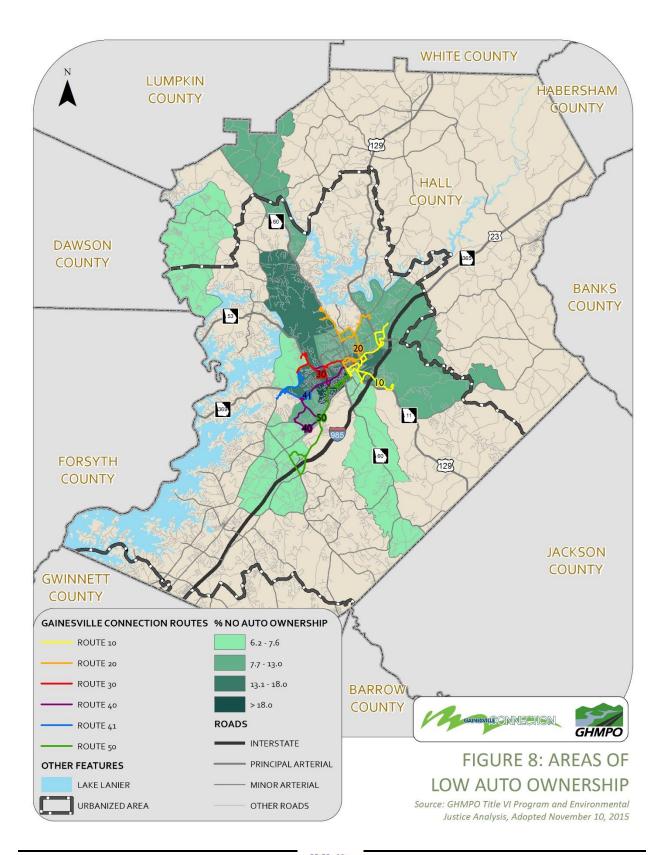
Zero Car Households

Figure 8 illustrates areas of low auto ownership. The lack of a personal vehicle can be (but is not always) a result of elevated poverty. In some instances, lower auto ownership levels may be related to a high number of students, as is likely the case in the Census Tract near Oakwood, where a large number of University of North Georgia students reside. According to the 2015 GHMPO Title VI Program and Environmental Justice Analysis, the areas in Hall County where vehicle ownership levels are lower than the regional average correspond to areas of above average poverty. One exception is along SR 60 in the northwest part of the county. This tract has a relatively low household count as compared to other tracts falling below the regional average auto ownership threshold, and as such, the magnitude of the percentage of households that do not own a vehicle is naturally higher than in more populous areas.











Disabled Populations

The 2013 American Community Survey (ACS) estimates provide workforce information with disability status. The sample of population that is surveyed ranges from ages 16-64, which represents the full-time workforce. No distinction or other defining information related to the type of disability is provided in this data. Figure 9 shows the concentration of disabled populations for Hall County.

It can be difficult to determine how much a person's individual disability impairs their mobility. For the purposes of this study, it is assumed that someone living with a disability, regardless of the severity or type, represents a person with a higher propensity to use transit for some, if not all, trips. The type of transit a person with a disability might use can be either a fixed route network or paratransit. The distribution of disabled persons in proximity to Gainesville Connection routes is not easily identified; however, some concentrations are located within Gainesville, to the south along SR 60, to the north along SR 53, and along Lake Lanier.

Elderly Populations

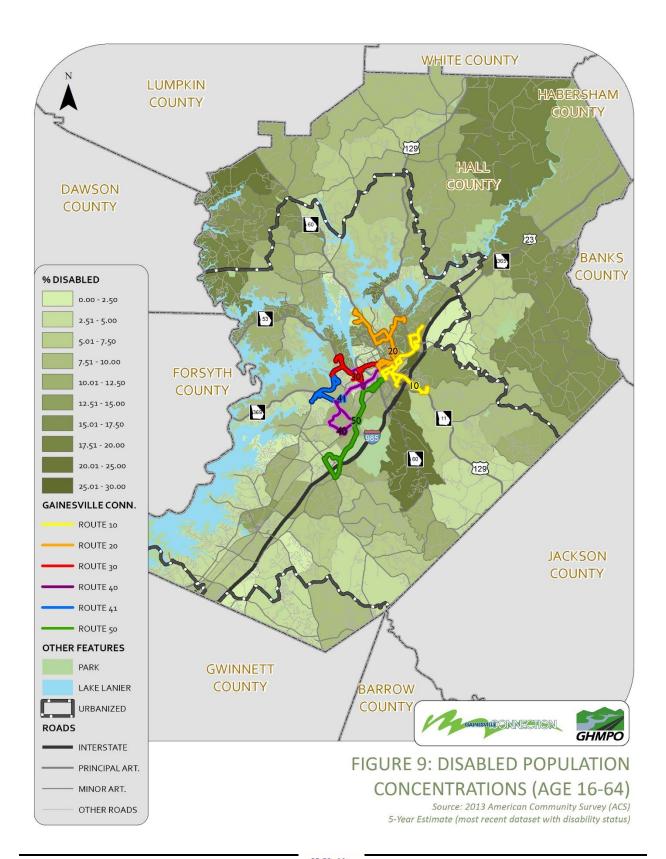
Population age by Census Block Group estimates were also obtained from the 2014 ACS. Elderly individuals may begin to drive personal autos less frequently due to health reasons or simply by choice based on personal preference and comfort levels. Regardless of the reason a person may switch his or her primary mode of transportation from personal vehicle to bus and transit, it is important to provide a transit alternative to successfully support a population that is aging in place. Figure 10 illustrates the concentration of population age 65 or over. Note that the general population age increases in the northern part of Gainesville and along the banks of Lake Lanier. As this population ages in place, providing additional means of travel, whether by fixed route or by paratransit, will become important.

3.4 Land Use Characteristics

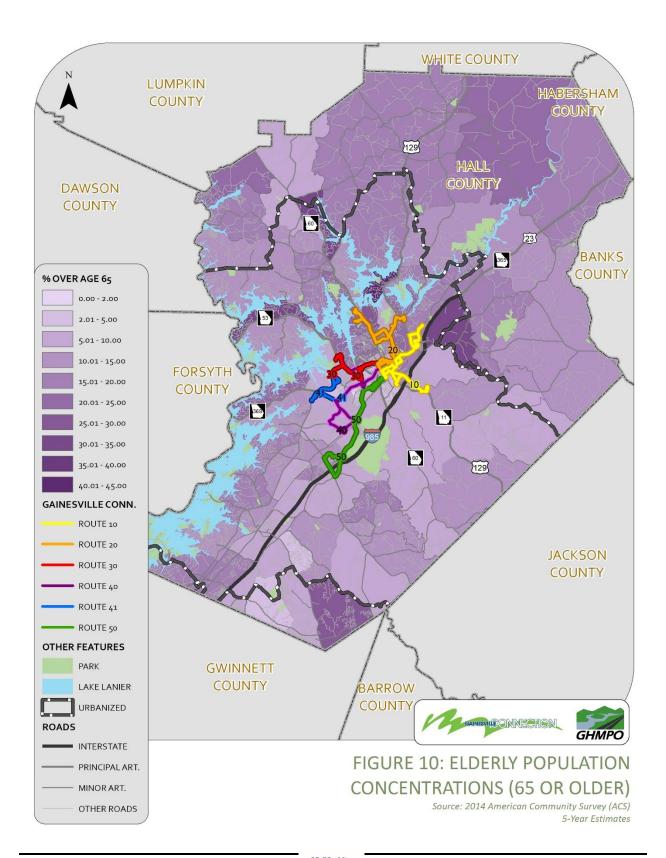
The relation of existing Gainesville Connection routes to community facilities that could be potential destinations for people taking transit is represented in Figure 11. Major destinations include Brenau University and the University of North Georgia, Lanier Technical College, and the Northeast Georgia Health System and Medical Center. Other destinations include county and city courthouses, community civic centers, and food banks. It should be noted that the existing fixed route system serves most of these locations. The City of Oakwood's City Hall and several food banks are not accessible by existing routes. Additionally, other destinations along SR 60 are not covered with existing bus service.

The *Gainesville Comprehensive Plan* provides a future land use plan for the region, which includes locations of major industrial sites, commercial nodes, and mixed use facilities. These uses are shown in Figure 12. The current land use plan indicates that large concentrations of industrial development is expected between SR 60 and US 129, north of Gainesville along SR 365, and between Oakwood and Flowery Branch. The principal arterials are all planned for commercial and mixed use development, while the I-985 corridor south of Gainesville is largely expected to develop as a commercial corridor between Mundy Mill Road and Gwinnett County.

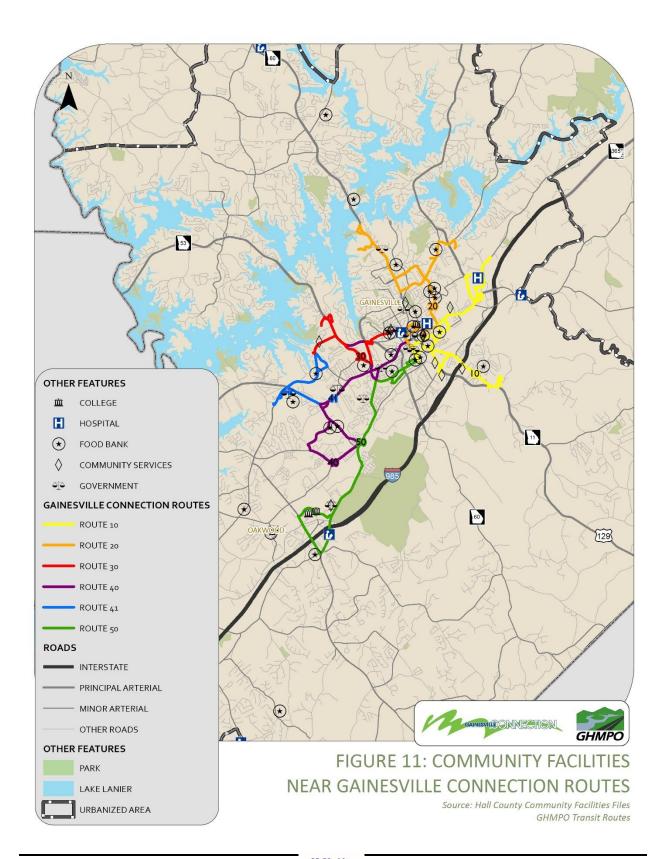




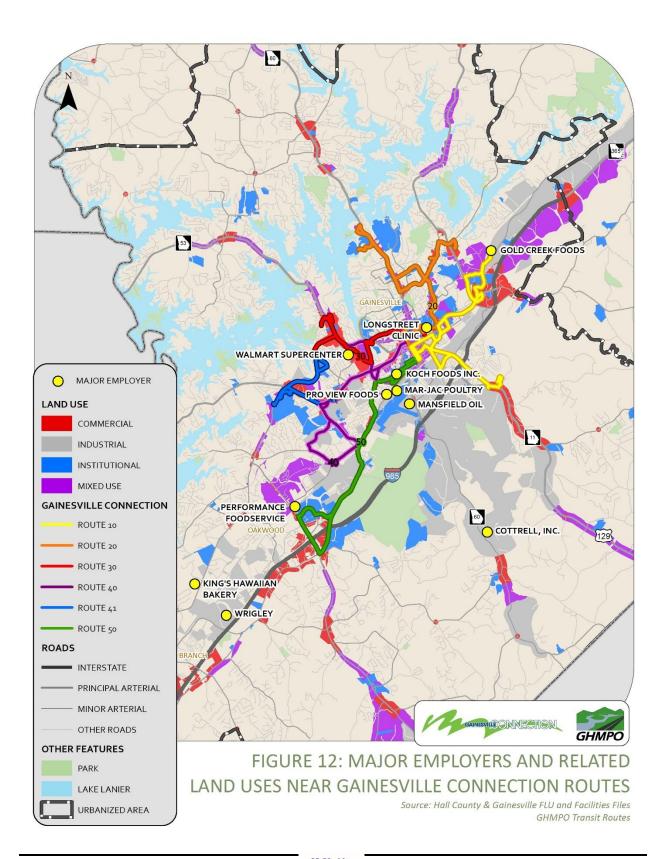














Current major employers are also represented on Figure 12. Several of these sites are far removed from any existing transit service, and an expansion to these sites could prove beneficial for the employees that work in these industries. Cottrell Inc., King's Hawaiian, and Wrigley could all benefit from expanded bus service. Additionally, a route that circulates through the Lee Gilmer Memorial Airport to serve the various industrial sites nearby would be of benefit.

3.5 Notable Transportation Characteristics

A well-functioning transportation system can lend itself to increased transit reliability and accessibility. Two of the most important characteristics assessed in this section are pedestrian access/connectivity and congestion levels.

Pedestrian Access/Connectivity

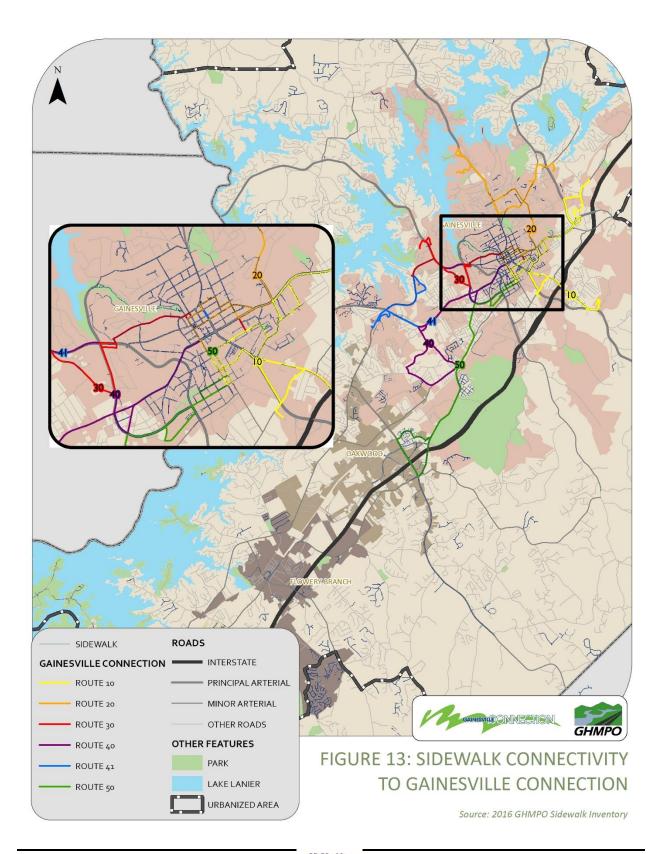
The concept known as "last mile connectivity" refers to any part of a transportation network that takes users to their final destination. As shown in Figure 13, sidewalk coverage around existing routes is generally comprehensive within the central urban core of Gainesville. As routes extend further outside of this core, the presence of sidewalks diminishes. Significant sidewalk gaps along the fixed route system include the following:

- Along most of the roadways serviced by Route 50 Atlanta Highway, Mundy Mill Road (SR 53), and areas within the University of North Georgia and Lanier Technical College campuses.
- Along Browns Bridge Road serviced by Routes 40 and 41.
- Along Thompson Bridge Road serviced by Route 20.
- Along Pearl Nix Highway near Lakeshore Mall.

Levels of Congestion

Hall County roadways are generally operating at efficient levels. Therefore, transit operational issues are more likely to be better resolved through intersection and signalization improvements than increasing capacity.







3.6 Potential for Commuter Services

Two basic components for determining the propensity for commuter services are travel patterns and appropriate locations for parking facilities. The following subsection provides a high level assessment of both.

Travel Patterns

The Atlanta Regional Commission (ARC) tracks travel patterns throughout the Atlanta metropolitan area. Data from ARC related to commuter trips provides a high-level snapshot for the potential of commuter services between Hall County and the Atlanta region. Table 5 provides a breakdown of the labor force characteristics. Highlights include:

- There are roughly 70,000 jobs and employees within the Gainesville area.
- Approximately 45 percent of Gainesville residents work in the area, while 55 percent work outside, primarily in the Atlanta region.
- Roughly 45 percent of jobs in the region are filled with local residents.

It appears there would be potential to promote commuter services. However, it is important to recognize that the relatively low employment densities throughout the region may also present challenges for efficient commuter service options.

Table 5: Hall County Labor Market Characteristics, 2014

Selection Area Labor Market Size (Primary Job	s)	
	Count	Share
Employed in the Selection Area	70,945	100.0%
Living in the Selection Area	69,697	98.2%
Net Job Inflow (+) or Outflow (-)	1,248	-
In-Area Labor Force Efficiency (Primary Jobs)		
	Count	Share
Living in the Selection Area	69,697	100.0%
Living and Employed in the Selection Area	31,327	44.9%
Living in the Selection Area but Employed Outside	38,370	55.1%
In-Area Employment Efficiency (Primary Jobs)		
	Count	Share
Employed in the Selection Area	70,945	100.0%
Employed and Living in the Selection Area	31,327	44.2%
Employed in the Selection Area but Living Outside	39,618	55.8%

Source: Atlanta Regional Commission



Potential Park and Ride Locations

Potential park and ride locations were determined by qualitatively assessing the following characteristics:

- Existing and future land uses (and presence of existing parking)
- Proximity to population concentrations
- Proximity to existing fixed route service

Table 6 identifies the relative strengths of each interchange along I-985.

Land Use Transit Proximity Population Exit 16 (SR 53 – Mundy Mill Parkway) High Medium Medium Exit 17 (SR 13 - Atlanta Hwy) Low Medium Low Exit 20 (SR 60 – Candler Road) Low Medium Low Exit 22 (US 129 – Athens Hwy) Low High Medium Exit 24 (US Business 129) Medium Medium High

Table 6: Assessment of Potential Park and Ride Locations

Based on this assessment, it appears that the interchanges at Mundy Mill Parkway and US Business 129 (Exits 16 and 24) would be best suited for park and ride services. This is especially true for the Mundy Mill Parkway exit, which already has a rideshare lot adjacent to the interchange.

3.7 Key Area Characteristics

The existing Gainesville Connection transit routes currently provide a much needed service to the City of Gainesville and immediate surrounding areas. Ridership counts dating from February 2015 to the present for the six existing fixed route schedules show an average monthly ridership of approximately 11,800 passengers. However, there is still room to expand the service out beyond its current limits.

An immediate service need is to extend Route 50 south into Oakwood and Flowery Branch. The development taking place in the I-985 corridor, especially on Thurmon Tanner Road, paired with the expanding student body at the University of North Georgia, will likely generate transit demand as new sites come online. A route along McEver Road, SR 13, and Thurmon Tanner would capture that demand.

Paratransit is and will continue to be an important service for Hall County citizens. As residents age in place, the on-demand service that paratransit provides becomes more useful. Additionally, the disabled population in Gainesville and the neighboring cities would benefit from expanded paratransit services.

The vision for a more long-term strategy of growth should focus on expanded routes along the following corridors:

- SR 60 south of Gainesville
- SR 11/US 129 east of Gainesville
- SR 53 southeast of Gainesville



SR 365 northeast of Gainesville, from the terminus of I-985

Routes on these corridors will serve the areas that are expected to see the strongest growth in population over the next 25 years. These areas of the county are also susceptible to transit dependency, based on poverty levels and auto ownership within households. In addition, these corridors are targeted as being important components to the county's economic growth, as seen in future land use plans, by being major industrial and commercial corridors.

Coordination among Hall Area Transit, GHMPO, City Public Works, and other County staff will be important for enhancing existing service or creating new routes. Often, new transit infrastructure can be incorporated early in the design process for roadway and sidewalk or sidepath projects, helping to minimize their costs.

Given the roughly 38,000 persons that commute outside of the area on a daily basis, the numbers currently utilizing Georgia Commute Options is relatively low. However, given the number of trips to and from outside of the region, it appears there is potential to promote these services further.



SECTION 4: REVIEW OF PREVIOUS STUDIES

The review of previous studies helps to highlight recommendations from relevant planning and policy documents with potential influence on transit service. There are several such documents and/or activities that support the identification of needs and development of recommendations. For this effort, the following documents were reviewed:

- 2015 GHMPO Regional Transportation Plan
- 2013 Gainesville Transportation Master Plan
- City of Gainesville Comprehensive Plan
- Vision 2030 Transportation Committee "Big Ideas" and Recommendations
- 2008 Transit Development Plan and 2009 Human Services Plan
- GHMPO Title VI Program and Environmental Justice Analysis

A more detailed description of the documents above is provided in the *Baseline Conditions Technical Memorandum*.

<u>2015 GHMPO RTP</u> – The 2015 RTP developed a fiscally constrained project list that relied on \$1,520,940,000 worth of funding from state, federal, and local sources. The improvements include several along the current transit fixed routes, which should assist in relieving congestion and improving operational characteristics to result in better service reliability. The transit section of the 2015 RTP Update identified a few challenges to the Gainesville Connection bus system, including a lack of pedestrian accessibility, limited service hours, and connectivity with other modes of transportation, including biking and Georgia Regional Transportation Authority (GRTA) Xpress park and ride lots. The RTP also identified the need to expand the demand response services provided by Hall Area Transit's paratransit system.

<u>Gainesville Transportation Master Plan</u> – Several recommendations were made in the plan to help pedestrian connectivity within the area of Midtown Gainesville near the Amtrak station at 116 Industrial Boulevard. Enhancing streetscapes, improving walking conditions, and tying into planned trail circuits opened up this area to potentially become the multimodal hub envisioned in the 2009 TDP. This hub would ideally connect the Gainesville Connection local routes with Amtrak, Greyhound bus service, pedestrian facilities, and even GRTA Xpress service by way of proposed I-985 extensions to the regional commuter bus service.

<u>City of Gainesville 2030 Comprehensive Plan</u> – The Gainesville 2030 Comprehensive Plan was adopted in June 2011. Among its contents are land use and transportation recommendations that influence transit service by promoting more transit supportive land uses and transit friendly infrastructure.

The following were identified as issues related to transit service:

- Limited and/or underutilized transit service
- Better connections to Gwinnett Transit needed
- Atlanta Highway is a major transit corridor in need of sidewalks



The Gainesville Comprehensive Plan also identifies locations designated for major industrial sites, commercial nodes, and mixed use facilities. Most of the population and economic information within the Plan has since been updated, as presented in the previous section.

<u>Vision 2030 Transportation Committee "Big Ideas" and Recommendations</u> – The Vision 2030 report is a culmination of individual tasks assigned to the members of the Transportation Committee of the Greater Hall Chamber of Commerce to identify and address various transportation needs in the Gainesville-Hall County area. Among the committee recommendations were:

- Expansion of the transit service to the Social Security Offices on Thompson Bridge Road, Division
 of Family and Children Services on McEver Road, Department of Labor on Atlanta Highway,
 Gainesville State College (now the University of North Georgia), Lanier Technical College, and
 targeted industries throughout the city.
- Development of a new I-985 commuter service to downtown Atlanta with park and ride stops at Exits 17 and 24. Local fixed route service would be modified to connect to these locations, with a total of four buses running during both the AM and PM peak periods.
- Better marketing strategies for the Red Rabbit (now Gainesville Connection) and potential revenues from advertising.

It should be noted that the recommended expansions to the locations listed above have taken place. Furthermore, this TDP update will investigate potential commuter service to Atlanta.

<u>2008 Transit Development Plan and 2009 Human Services Plan</u> – The 2008 TDP and associated 2009 Human Services Plan were the predecessor to this TDP effort. As such, they served to examine the former Red Rabbit fixed route and Hall County demand response systems and provide recommendations for improvements. Among the recommendations from the previous TDP were:

- Relocation of the transfer center to the Hall Area Transit offices. This action was completed.
- Extension of the transit service to Flowery Branch and Gainesville State College (now the University of North Georgia). Expansion to the University of North Georgia has occurred.
- Creation of commute service to Atlanta from the Mundy Mill Road interchange (Exit 16). This is being investigated during this TDP update effort.
- Marketing efforts that concentrate heavily on continued public outreach and building awareness about the system and the benefits of the services offered. This is being investigated during this TDP update effort.
- Development of attractive English and Spanish versions of informational materials such as posters and flyers. *This is already being done*.
- Redesign of bus stops signs to provide rider-friendly information and to coordinate with the new bus paint scheme in order to encourage ridership and increase HAT's visibility in the community. The rebranding to the Gainesville Connection has been very visible.
- Developing a dedicated website, with emphasis on design that makes the site accessible for people with disabilities.



<u>2015 GHMPO Title VI Program and Environmental Justice Analysis</u> – In November 2015, the GHMPO updated its *Title VI Program and Environmental Justice Analysis*. Much like the RTP update, the analysis needed to be updated with the adjustment of the GHMPO urbanized area boundary. The purpose of the plan is to document policies and procedures to ensure equity in the MPO planning process. Relevant content from the analysis includes:

- Identification of minority, low income and zero car households/concentrations throughout the GHMPO region. Information from this analysis was used for the transit dependent population assessment in Section 3.
- Establishment of target areas based on the concentrations of populations listed above. The analysis also notes that 71 percent of the target areas within the region are serviced by fixed route transit service.
- Approximately 42 percent of the population of Gainesville is Hispanic, an important consideration in developing public information materials.

Relevant Policy Takeaways

The major takeaways from the review of relevant documents include:

- Several improvements identified in the GHMPO RTP have the potential to increase transit service reliability and accessibility.
- Some form of commuter service to Atlanta has been recommended in multiple documents.
- Several planning documents call for the development of an intermodal center to connect Amtrak and Greyhound to the fixed route transit system.
- Many of the service extensions recommended within the documents have been implemented.
- Much of the region's Environmental Justice (EJ) population is currently served by fixed route transit.
- The concentration of Hispanic populations within Gainesville underscores the need for bilingual information and promotional materials.



SECTION 5: INPUT RECEIVED THROUGH OUTREACH ACTIVITIES

In important component to any planning process is receiving input from transit stakeholders and the general public. There were three key activities undertaken to gather input into the TDP development process:

- Stakeholder coordination
- Joint public and stakeholder meetings
- Transit drivers meeting

5.1 Stakeholder Coordination

A committee of municipalities, institutions, employers, business organizations and social service agencies was invited to serve as a sounding board to the TDP process, outreach approaches, and recommendations for improved service. Discussions were held with several committee members to obtain opinions on current service and strategies for improvement as well as recommendations to bring public awareness to the TDP. Committee members include:

- Hall County Board of Commissioners
- City of Gainesville Commission
- GHMPO Policy Board
- Chamber of Commerce
- Gainesville Housing Authority
- City of Flowery Branch
- City of Oakwood
- City of Lula
- City of Braselton
- GDOT Intermodal Office
- University of North Georgia
- Brenau University
- Lanier Technical College

Committee representatives will also review final recommendations and promote the TDP to their constituencies.

5.2 Joint Public and Stakeholder Meetings

On November 10, 2016, joint public stakeholders meetings were held at the Community Service Center in Gainesville. The meetings were from 9:00 to 10:30 AM and from 1:30 to 3:00 PM. Attendees of the meetings included a mix of riders, community organization representatives, local government staff, community leaders and the general public.

The purpose of the workshops was to provide opportunities to riders and other members of the public to share input and feedback about current and future transit needs. Notification of the workshops



included direct mail and email to a project database of residents and other Hall County stakeholders, media announcements, and distribution of notices on the Gainesville Connection buses.

Maps of Hall County demographics with existing bus routes were displayed around the room. Attendees were given a survey form with a list of questions related to transit service in the county. Each workshop began with a brief open house to allow attendees to view the maps and interact with the client and consultant team. A presentation was then given, followed by a discussion with attendees that included the written survey questions. Several attendees also provided the written survey during each workshop. To maximize the opportunities to receive feedback, the public was given one week to provide additional surveys, and several were received during that time period. Through this process, input was received on several issues. A summary of this input by topic area is provided below.

Rider Destinations

• The commercial area near Walmart (off Shallowford Road) is popular for both work and lifestyle trips.

Needed Services

- Fixed route expansion is needed along White Sulphur Road to service new industrial uses.
- New fixed route service is needed along the SR 60 corridor (Queen City Parkway and Candler Road).
- Better commuter services are needed to Atlanta. Douglas County has a successful vanpool program that should serve as a good example.
- More service is needed beyond 6 PM and on the weekends especially Saturday to get people to work.
- Better services are needed to the industrial parks throughout the city, including along Palmour Drive (near the airport) and to Gainesville Industrial Park South.
- Buses should be allowed to access the North Georgia Physicians Group campus directly to assist elderly, disabled, and expecting mothers.

Needed Stops

- More stops are needed along:
 - Browns Bridge Road near Honda dealership
 - o Memorial Park Drive
 - o Park Hill Drive

Pedestrian Facilities

- Sidewalks are needed along:
 - Thompson Bridge Road
 - Browns Bridge Road
 - James Jewell Parkway
 - o SR 60 Corridor



• The City of Gainesville Sidewalk Master Plan needs to be updated to prioritize access to transit stops.

Other

- There needs to be more local political support of transit to match the existing federal funds available.
- While the buses have bike racks, roads in Gainesville are not bicycle-friendly.
- More promotional materials are needed for the service.

5.3 Transit Drivers Meeting Summary

A meeting with the fixed route and demand response drivers offered the opportunity to gain their unique perspective on service and route characteristics and needs. The meeting was held on November 1, 2016, at the Hall Area Transit offices. After reviewing baseline data such as existing and projected population and employment, major employment centers and transit dependent population concentrations, drivers were asked specific questions for input. Below is a summary of responses.

Rider Destinations

Overwhelmingly, the destinations for fixed route riders are employment centers, shopping, and medical appointments. Major destinations include the Gainesville Wal-Mart, which is both an employment center and a shopping area. Major destinations identified by route include:

- Route 10 Lenox Park Apartments and locations along Athens Highway
- Route 20 Joe's Place, Park Hill, Longstreet Clinic
- Route 30 Georgia Power office, banks, and areas along Lake Forest (This is considered the busiest route, with 25 people boarding and departing consistently.)
- Route 40 Gainesville Wal-Mart and poultry plant
- Route 50 Serves some of the rural areas and riders; destinations vary among those identified above

Safety Issues

- Generally, safety is a challenge at bus stops due to the lack of pull-off areas. Buses stop in lanes for boarding and departures, which presents a safety issue for riders and drivers, particularly along certain roads. Along most routes there are no sidewalks, wheelchair ramps or curbs, which also present safety issues for riders. Shelters are also minimal.
- The lack of lighting exacerbates safety issues at bus stops. In the dark, it is very difficult to see riders waiting at bus stops. Reflective strips attached to the bus stop signs would help.
- Thompson Bridge Road (Route 20) is a very dangerous road. There is a site distance challenge at the Social Security Building and changing lanes from right to left is difficult. The area around Home Depot is also dangerous.
- Jesse Jewell (Route 10) presents challenges at the Imaging Center, which is always busy.



Needed Services

- Riders frequently request extended service past 6 pm and weekend service for all routes.
- The hourly turnaround for routes is also problematic for many riders because of longer wait times
- Along Route 10, there are requests for service at SR 365 and Lanier Tech.
- Along White Sulphur Road, new jobs are being added in a rural industrial area and riders ask for service to these areas.
- Riders would like to see service to Flowery Branch.
- Riders would also like to have service connect to transit outside the county including Gwinnett and MARTA.

Needed Stops

• More stops are needed along Browns Bridge, Spring Road, Springview Drive, and Mountain View Road. Some riders have long walks to the main thoroughfares from these areas.

Maintaining Schedule

• Routes 20, 30 and 40 present the most difficulty maintaining schedules, primarily due to traffic. It is especially challenging in the afternoons and on Fridays.

Demand Response Destinations

- The primary destinations for demand response transit are senior centers, medical offices, and the dialysis clinics (DaVita).
- It is often challenging to get people to their locations due to conflicts of time. Service is provided between 10 am and 1:30 pm, and reservations are accepted between 7 am and 1 pm for two days in advance. However, many riders often call later due to emergencies and forgetting to call.

Demand Response Customer Use

- Most riders use the service 3-5 days.
- Most residents think the service is only for seniors and medical appointments. It is estimated
 that 90 percent of Hall County residents do not know about the demand response service.
 More marketing is needed and the website needs to be updated to better explain transit
 opportunities. The website is difficult to find and is connected to the City's web portal.
- The demand response service could be used as a feeder but would require additional drivers.

Pedestrian Facilities

 Better crosswalks, sidewalks, and other pedestrian amenities are needed on all State routes, including Browns Bridge Road, Atlanta Highway, and the Wal-Mart area, which does not have safe exits.



Problematic Roadway/Operational Issues

- In the early morning, there are long holds at Main Street and Jesse Jewell Parkway and at Ridge Road and E. E. Butler Parkway.
- Dawsonville Highway and Thompson Bridge Road have signalization issues and long holds.
- College Street and E.E. Butler Parkway have stacking and intersection blocking problems.
- Longstreet Clinic, Jesse Jewell Parkway, and the Wisteria Building all present access issues.
 Operating on private property presents legal challenges, especially picking up and dropping off.

Other Comments

- It is hard to hire drivers; the school system pays more and provides benefits.
- Develop an App to access services.
- Many buses are back to back but many riders do not understand how to schedule themselves. Education is needed on how to use the system.
- Route maps are very hard to read.
- Decision makers do not respect transit in the county and do not take the issues seriously.
- A mini-transfer station and circulation of buses at the Wal-Mart area could help.
- Fixed route and demand response services are managed by two different entities and are not very coordinated. These need to be managed by one system.
- Buses are supposed to be designed for two wheelchairs but are very difficult to accommodate.
 The new oversized power wheelchairs also take up more space. Riders with walkers that do not fold are also challenging to accommodate on the buses.
- Inspections and maintenance of buses can lead to long down times, as long as two weeks.
 Maintenance is provided by the City, and police and fire vehicles have higher priority.
- When maintenance is requested by a driver, the results of the maintenance are not shared with the driver, so they must assume the issue was resolved.
- Buses are poorly designed; there are blind spots which present safety issues.



SECTION 6: FUNDING SOURCES AND NEEDS

This section details funding sources, historic expenditures and revenues, and funding needs for Hall Area Transit.

6.1 Federal Sources

The Fixing America's Surface Transportation (FAST) Act is the latest federal transportation bill that allocates and dictates policy priorities for federal transportation funding. Adopted in December 2015, the FAST Act authorizes \$305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs.

In reviewing the programs carried through the FAST Act, there are four programs which the Gainesville Connection or Hall County Dial-A-Ride systems could utilize:

- Section 5307-Urbanized Area Formula Grants
- Section 5310-Enhanced Mobility for Seniors and Individuals with Disabilities
- Section 5311-Rural Area Formula Grants
- Section 5339-Bus and Bus Facilities

Of the programs listed above, Hall Area Transit utilizes all but Section 5339 funds. The following provides an overview of these programs.

Section 5307

The Urbanized Area Formula Funding program (49 U.S.C. 5307) makes federal resources available to urbanized areas for transit capital and operating assistance and for transportation related planning. Other facts about Section 5307 funding include:

- Because the Gainesville urbanized area is under 200,000, funding is provided through the GDOT
 Intermodal Division to Hall Area Transit for operation of the Gainesville Connection, ADA
 services, and demand response services within the urban area.
- Activities eligible include planning, engineering, design and evaluation of transit projects and
 other technical transportation-related studies as well as capital investments in bus and busrelated activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime
 prevention and security equipment, and construction of maintenance and passenger facilities.
 All preventive maintenance and some ADA complementary paratransit service costs are
 considered capital costs. Because the population of the Gainesville urban area is less than
 200,000, operating assistance is an eligible expense.
- The federal share is not to exceed 80 percent of the net project cost. The federal share may be 90 percent for the cost of vehicle-related equipment attributable to compliance with the ADA and the Clean Air Act, and also for projects or portions of projects related to bicycles. The federal share may not exceed 50 percent of operating assistance.
- Funds are available the year appropriated plus five years.



5310 Funds

The Section 5310 program (49 U.S.C. Section 5310) supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities in all areas. Other facts about Section 5310 funding include:

- Funding is provided to Hall Area Transit through the Georgia Department of Human Resources for operation of the Gainesville Connection and demand response services within the urban area.
- Eligible activities for 5310 funds include the following provisions:
 - At least 55 percent of program funds must be used on capital or "traditional" 5310 projects. Examples include:
 - Buses and vans; wheelchair lifts, ramps, and securement devices; transit-related information technology systems including scheduling/routing/one-call systems; and mobility management programs.
 - Acquisition of transportation services under a contract, lease, or other arrangement. Both capital and operating costs associated with contracted service are eligible capital expenses. User-side subsidies are considered one form of eligible arrangement. Funds may be requested for contracted services covering a time period of more than one year. The capital eligibility of acquisition of services as authorized in 49 U.S.C. 5310(b)(4) is limited to the Section 5310 program.
 - The remaining 45 percent is for other "nontraditional" projects for new public transportation services and alternatives beyond those required by the ADA, designed to assist individuals with disabilities and seniors. Examples include travel training; volunteer driver programs; building an accessible path to a bus stop including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features; improving signage, or way-finding technology; incremental cost of providing same day service or door-to-door service; purchasing vehicles to support new accessible taxi, rides sharing and/or vanpooling programs; and mobility management.
- The federal share allowable under this program is 80 percent for capital projects and 50 percent for operating assistance.
- Match for federal funds can come from other federal (non-DOT) funds. This can allow local communities to implement programs with 100 percent federal funding.
- 5310 program recipients may partner with meal delivery programs such as the Older Americans
 Act (OAA)-funded meal programs and the US Department of Agriculture (USDA) Summer Food
 Service Program. Transit service providers receiving 5310 funds may coordinate and assist in
 providing meal delivery services on a regular basis if they do not conflict with the provision of
 transit services.
- FTA requires its formula grantees to provide half fare service for fixed route service supported with FTA funds to older adults and individuals with disabilities who present a Medicare card.



Section 5311

The Section 5311 program provides capital, planning, and operating assistance to support public transportation in rural areas, where many residents often rely on public transit to reach their destinations. It also provides funding for state and national training and technical assistance through the Rural Transportation Assistance Program. Other facts about Section 5307 funding include:

- Eligible activities include planning, capital, operating, job access and reverse commute projects, and the acquisition of public transportation services.
- The federal share allowable under this program is 80 percent for capital projects, 50 percent for operating assistance, and 80 percent for ADA non-fixed route paratransit service.

Section 5339

The Grants for Buses and Bus Facilities program (49 U.S.C. 5339) makes federal resources available to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities. Funding is provided through formula allocations and competitive grants. A sub-program provides competitive grants for bus and bus facility projects that support low and zero-emission vehicles.

- As fixed route service operator and a recipient of 5307 and 5311, Hall Area Transit is eligible to receive these funds. Should Hall Area Transit make application for these funds, it would be administered by the GDOT Intermodal Division.
- Eligible activities include the replacement, rehabilitation and purchasing of buses, vans, and related equipment, and construction of bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities.
- The federal share allowable under this program is 80 percent for all eligible projects.

6.2 Historic Funding

In FY 2016, the total amount of expenditures for fixed route and demand response transit services was approximately \$1,369,500. Of these expenditures, approximately 60 percent or \$821,600 comes from federal sources. The remaining funding, approximately \$548,000, comes from local sources. Hall County pays for the costs of demand response services and the City of Gainesville provides the funding for the fixed route services. Historic funding for Hall Area Transit is provided in Table 7. Other key observations on historic funding include:

- Operating expenditures have remained relatively steady, ranging from a low of approximately \$1.28 M in FY 2014 to a high of \$1.39 M in 2013, and averaging approximately \$1.33 M per year since FY 2011.
- Local match levels have also remained steady, ranging from a low of approximately \$524K in FY 2014 to a high of \$566K M in 2011, and averaging approximately \$541,000 per year since FY 2011.



Table 7: Historic Revenues and Expenditures, FY2011-FY2016

		FY	11			FY	12	
	TOTAL	5311	5307	NOT REQUESTED	TOTAL	5311	5307	NOT REQUESTED
Total Operating Deficit/Exps	1,313,367.76	559,283.67	753,331.11	752.98	1,318,359.19	586,010.41	731,497.14	851.64
5307 Fuel Provision								
Total Operating Deficit/Exps Minus 5307 Fuel								
*DHS Revenue 5310		65,312.44				117,552.82		
NET Operating Deficit		493,971.23	753,331.11			468,457.59	731,497.14	
*Fare Revenue		41,618.05	62,483.72	_		41,551.00	87,960.73	_
Required 5311 Fare Revenue(10% of expense:	2)	49,397.12	02,100.72			46,845.76	01,000.10	
Troquired corr raio rrovendo (1070 er expenses	, 	442,370.22	690,847.39	752.98		416,300.42	643,536.41	851.64
		, , , , , ,	,			.,		
5307 Grant (Federal = 50% Deficit)			345,423.70				321,768.21	
5307 Fuel Provision Grant (Federal =90%)			,				,	
5307 Local Match (=50% Deficit)			345,423.70				321,768.21	
5307 Fuel Provision Local Match (=10%)			0.10,10					
0001 1 0011 101101011 20001 11101011 (1070)								
5311 Grant (Federal = 50% Deficit)		221,185.11				208,150.21		
5311 Local Match (=50% Deficit)		221,185.11				208,150.21		
COTT EGGG Maion (COTT E CHOIN)		221,100111				200,100.21		
*DHS Revenue non 5310		143,416.27				80,530.18		
		FY	13			FY	14	
	TOTAL	5311	5307	NOT REQUESTED	TOTAL	5311	5307	NOT REQUESTED
Total Operating Deficit/Exps	1,387,949.49	613,955.59	772,929.46	1,064.44	1,284,456.53	569,100.53	714,390.70	965.30
5307 Fuel Provision			49,155.40					
Total Operating Deficit/Exps Minus 5307 Fuel			723,774.06					
*DHS Revenue 5310		106,305.42	-	-		107,602.75	-	-
NET Operating Deficit		507,650.17	723,774.06			461,497.78	714,390.70	
*Fare Revenue		25,801.00	107,151.64	-		29,021.00	80,435.86	-
Required 5311 Fare Revenue(10% of expenses	5)	50,765.02	-			46,149.77	-	
	ĺ	456,885.15	616,622.42	1,064.44		415,348.01	633,954.84	965.30
			-				-	
5307 Grant (Federal = 50% Deficit)		-	308,311.21			-	316,977.41	
5307 Fuel Provision Grant (Federal =90%)			44,239.86				-	
5307 Local Match (=50% Deficit)		-	308,311.21			-	316,977.42	
5307 Fuel Provision Local Match (=10%)			4,915.54				-	
5311 Grant (Federal = 50% Deficit)		228,442.58	-			207,674.01	-	
5311 Local Match (=50% Deficit)		228,442.58	-			207,674.02	-	
*DHS Revenue non 5310		114,176.62				123,418.67		
		FY				FY ⁻		
	TOTAL	5311	5307	NOT REQUESTED	TOTAL	5311	5307	NOT REQUESTED
Total Operating Deficit/Exps	1,331,322.69	590,464.32	740,858.37	-	1,369,480.82	623,717.52	745,763.30	-
5307 Fuel Provision								
Total Operating Deficit/Exps Minus 5307 Fuel								
*DHS Revenue 5310		135,509.24	-	-		136,113.57	-	-
NET Operating Deficit		454,955.08	740,858.37			487,603.95	745,763.30	
*Fare Revenue		27,759.00	78,251.48	-		33,950.00	85,690.55	-
Required 5311 Fare Revenue(10% of expenses	3)	45,495.46	-			48,760.37	-	
		409,459.62	662,606.89	-		435,623.65	660,072.75	-
			-				-	
5307 Grant (Federal = 50% Deficit)		-	331,303.45			-	330,036.38	
5307 Fuel Provision Grant (Federal =90%)			-				-	
5307 Local Match (=50% Deficit)		-	331,303.45			-	330,036.38	
5307 Fuel Provision Local Match (=10%)			-				-	
5311 Grant (Federal = 50% Deficit)		204,729.77	-			217,811.81	-	
5311 Local Match (=50% Deficit)		204,729.85	-			217,811.84	-	
*DHS Revenue non 5310		128,158.10				112,716.75		



A key issue facing Hall Area Transit is the inability to draw down on the allocated apportionment of federal funding. This is due primarily to the inability to provide the local match for the full allocation. An example of this trend is provided in Table 8, which depicts the unused 5307 operating funds since 2013. As shown, approximately 75 percent of the federal allocation, totaling more than \$3.4 M, has been returned due to a lack of local funds. This trend indicates a strong need to investigate alternative sources for local matches beyond Hall County and the City of Gainesville, including private sector sources.

FTA Section 5307 Section 5307 Apportionments Section 5307 Year **Local Match** for Hall Area **Unused Funding** Provided Transit \$ \$ \$ 2013 1,482,376 389,067 1,093,309 2014 \$ 1,534,619 \$ 368,476 \$ 1,166,143 2015 \$ 1,531,289 \$ 367,713 \$ 1,163,576 **TOTAL** \$4,548,284 \$ \$ 1,125,256 3,423,028

Table 8: Unused FTA 5307 Operating Funds, FY2013-FY2015

Source: Hall Area Transit

6.3 Projected Funding Needs – Gainesville Connection

Projected funding needs for the Gainesville Connection assumes no changes to the current routing or scheduling of fixed route services. Therefore, the funding estimates are primarily focused on needed capital and operating expenditures through FY 2021. Funding needs to maintain operations of the Gainesville Connection at current levels, based on the baseline conditions and information provided by Hall Area Transit, are summarized below.

- Operating costs through FY 2021 were projected by factoring a five percent increase from the average of costs from FY 2012-2016 for liability insurance and salary increases. They are anticipated to total approximately \$4.3 million through FY 2021.
- Replacement of all fixed route vehicles is needed by 2021. Hall Area Transit has indicated its
 intent to shift to medium duty vehicles to reduce maintenance needs. Including the costs of
 ancillary equipment associated with these vehicles, the cost would be approximately \$200,000
 per vehicle. In addition, two ADA vehicles and three support vehicles also need replacement.
 Therefore, the total vehicle replacement costs would be approximately \$3.4 million through FY
 2021.
- Electronic fareboxes are a great need and would assist in tracking ridership and service characteristics along the fixed routes. Information provided by Hall Area Transit indicates a cost of roughly \$15,000 per unit. Therefore, equipping the entire fixed route fleet would cost \$240,000.
- Repaying the fleet parking lot will cost approximately \$30,000.



 Providing benches throughout the existing system is assumed to continue at an estimated cost of \$10,000.

Table 9 provides a breakdown of the projected system operating and capital expenditures through FY 2021. Given the anticipated capital and operational needs, it is anticipated that over \$2.5 million will be needed from local match to maintain existing service.

Table 9: Projected Gainesville Connection Operating and Capital Expenditures, FY 2017-2021

	Section 5307 (Urban Operating Expenses)											
Description	2012	-2016 AVG		2017		2018		2019	2020	2021		Total
FY Operations	\$	812,175	\$	852,783	\$	895,423	\$	940,194	\$ 987,203	\$ 1,036,564	\$	4,712,167
PROJECT COST	\$	812,175	\$	852,783	\$	895,423	\$	940,194	\$ 987,203	\$ 1,036,564	\$	4,712,167
FEDERAL	\$	406,087	\$	426,392	\$	447,711	\$	470,097	\$ 493,602	\$ 518,282	\$	2,356,083
STATE	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-
LOCAL	\$	406,087	\$	426,392	\$	447,711	\$	470,097	\$ 493,602	\$ 518,282	\$	2,356,083

	Section 5307 (Urban Capital Expenses)								
	2017	2018	2019	2020	2021	Total			
	\$800,000	\$600,000	\$400,000	\$0	\$1,400,000	\$3,200,000			
	\$120,000	\$0	\$0	\$0	\$0	\$120,000			
	\$70,000	\$0	\$0	\$35,000	\$0	\$105,000			
	\$0	\$0	\$0	\$0	\$0	\$0			
	\$240,000	\$0	\$0	\$0	\$0	\$240,000			
	\$0	\$0	\$0	\$0	\$0	\$0			
	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000			
	\$0	\$30,000	\$0	\$0	\$0	\$30,000			
	\$1,240,000	\$640,000	\$410,000	\$45,000	\$1,410,000	\$3,745,000			
	\$992,000	\$512,000	\$328,000	\$36,000	\$1,128,000	\$2,996,000			
	\$124,000	\$64,000	\$41,000	\$4,500	\$141,000	\$374,500			
	\$124,000	\$64,000	\$41,000	\$4,500	\$141,000	\$374,500			
Section 530	nd Capital Ne	eds Combine	d)						
	\$1,418,392	\$959,711	\$798,097	\$529,602	\$1,646,282	\$5,352,083			
	\$124,000	\$64,000	\$41,000	\$4,500	\$141,000	\$374,500			
	\$550,392	\$511,711	\$511,097	\$498,102	\$659,282	\$2,730,583			
		\$120,000 \$70,000 \$0 \$240,000 \$0 \$10,000 \$0 \$1,240,000 \$124,000 \$124,000 \$124,000 \$1,418,392 \$1,418,392 \$1,24,000 \$550,392	\$120,000 \$0 \$70,000 \$0 \$70,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$10,000 \$10,000 \$1,240,000 \$640,000 \$124,000 \$644,000 \$124,000 \$644,000 \$124,000 \$644,000 \$124,000 \$644,000 \$124,000 \$644,000 \$124,000 \$644,000 \$550,392 \$511,711	\$120,000 \$0 \$0 \$70,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$240,000 \$10,000 \$10,000 \$0 \$30,000 \$0 \$1,240,000 \$640,000 \$410,000 \$124,000 \$512,000 \$328,000 \$124,000 \$64,000 \$41,000 \$124,000 \$64,000 \$41,000 \$124,000 \$64,000 \$41,000 \$124,000 \$64,000 \$41,000 \$1,418,392 \$959,711 \$798,097 \$124,000 \$64,000 \$41,000	\$120,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$120,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0			

6.4 Projected Funding Needs – Hall County Dial-A-Ride Services

The overall needs to continue Hall County Dial-A-Ride demand response services as they currently exist are summarized below. They are primarily focused on capital and operating expenditures through FY 2021.

- Operating costs, averaging roughly \$900,000 annually, are projected to total approximately \$3.8 million through FY 2021. A five percent increase from FY 2016 was assumed for liability insurance and salary increases.
- All 10 demand response vehicles are scheduled for replacement by 2021. Based on input from the Hall Area Transit, the cost of the transit vehicles is approximately \$60,000 each. Therefore, an estimated total of \$600,000 is needed through FY 2021.
- Electronic fareboxes are also needed for all 10 demand response vehicles. At \$15,000 per unit, this would require \$150,000. It was assumed that these would be purchased along with the replacement vehicles.



Table 10 shows projected Section 5311 capital and operating costs through FY 2021. A total of approximately \$1.95 million will be needed through 2021 for demand response services.

Table 10: Projected Section 5311 Operating and Capital Expenditures, FY 2017-2021

Section 5311 (Rural Operating Expenses)								
Description	2012	2-2016 AVG	2017	2018	2019	2020	2021	Total
FY Operations	\$	646,537	\$678,864	\$712,807	\$748,448	\$785,870	\$825,164	\$3,751,153
PROJECT COST		\$646,537	\$678,864	\$712,807	\$748,448	\$785,870	\$825,164	\$3,751,153
FEDERAL		\$323,269	\$339,432	\$356,404	\$374,224	\$392,935	\$412,582	\$1,875,576
STATE		\$0	\$0	\$0	\$0	\$0	\$0	\$0
LOCAL		\$323,269	\$339,432	\$356,404	\$374,224	\$392,935	\$412,582	\$1,875,576

Section 5311 (Rural Capital Expenses)							
Description		2017	2018	2019	2020	2021	Total
Replacement Vehicles (\$60K/per)		\$360,000	\$0	\$240,000	\$0	\$0	\$600,000
Expansion Vehicle (\$60K/per)		\$0	\$0	\$0	\$0	\$0	\$0
Fareboxes (\$15K/per)		\$90,000	\$0	\$60,000	\$0	\$0	\$150,000
PROJECT COST		\$450,000	\$0	\$300,000	\$0	\$0	\$750,000
FEDERAL		\$360,000	\$0	\$240,000	\$0	\$0	\$600,000
STATE		\$45,000	\$0	\$30,000	\$0	\$0	\$75,000
LOCAL		\$45,000	\$0	\$30,000	\$0	\$0	\$75,000

Section 5311 (Operating and Capital Needs Combined)							
FEDERAL		\$699,432	\$356,404	\$614,224	\$392,935	\$412,582	\$2,475,576
STATE		\$45,000	\$0	\$30,000	\$0	\$0	\$75,000
LOCAL		\$384,432	\$356,404	\$404,224	\$392,935	\$412,582	\$1,950,576



SECTION 7: RECOMMENDED SERVICE OPTIONS AND EVALUATION

The purpose of this section is to present options for potential service enhancements and modifications based on current ridership trends, Hall County population and employment characteristics, land use and development patterns, and input received throughout the TDP process. This section will also provide needed actions for the development of commuter services, an intermodal transfer center, and the promotion of transit services.

7.1 Fixed Route Service Options

While the analysis in Section 2 describes certain ridership characteristics by route, the lack of available data about current ridership on/off patterns for each route each day makes it difficult to develop route optimization recommendations. The purchase of electronic fareboxes for the fixed route and demand response vehicles will allow for a more detailed analysis for future route optimization. The objectives of such an analysis would be to improve utilization on the fixed routes, shift some riders from the demand response service to the fixed routes, create enough capacity (given ridership shifts and limited increased cost) to improve peak period headways on the fixed routes, and/or implement the service options that follow.

Several service options were recommended and/or supported by the baseline conditions assessment:

- Peak hour service enhancement
- Extension of evening weekday service hours
- New routes/route extensions for expanded coverage
- Introduction of weekend service

The following paragraphs describe the service options and compare the opportunities and challenges of their implementation. Again, without the benefit of specific alighting and boarding information, the potential ridership generation from these changes is not currently available.

Peak Hour Service Enhancement

One detractor for potential employment riders is the 60-minute headways, especially for riders who have to transfer between routes to access their jobs. Shorter headways would ensure a more reliable commute trip. Furthermore, the longer headways make it difficult if not impossible to perform other tasks on commute trips, such as dropping by the pharmacy or grocery store. Key characteristics of the proposed peak hour service frequency increase would be as follows:

- Increase service frequency to every 30 minutes during weekday peak hours (7:00-9:00 AM and 4:00-6:00 PM).
- Given the additional service demands, additional vehicles as well as a larger transfer center (which currently only accommodates four buses at one time) would be required.



Extension of Evening Weekday Service Hours

Another option that was recommended throughout the TDP process was the extension of evening service hours. In addition to making it possible to capture more evening commute trips, extending hours later into the evening provides additional opportunities for riders to add other tasks onto their commute trips. Other key aspects include:

- Extend the hours of operation an additional two hours, from 6:10 PM to 8:10 PM.
- No additional vehicles would be required.
- The additional drivers needed would be minimal; the extension of existing staff shifts could potentially accommodate the service extension.

New Routes/Route Extensions for Expanded Coverage

Potential route extensions and new services were identified by an assessment of current ridership trends, Hall County population and employment characteristics, land use and development patterns, and input received throughout the TDP process. The current route system has been well vetted with the public through the Gainesville Connection rebranding, and the only change to the existing route coverage recommended throughout the TDP process has been the expansion of service. As with modifications to the existing route structure, the potential route extensions provided below will need to be re-evaluated for ridership potential upon the collection of specific alighting and boarding data information.

The following service modifications are identified:

- Route 10 Extension Extend Route 10 further along White Sulphur Road to Ramsey Road to serve Kubota Manufacturing, the new Lanier Technical location, and other nearby employment. The proposed route extension to Ramsey Road would lengthen the route by 1.7 miles. A map of this extension is provided in Figure 14.
- Route 50 Extension Extend Route 50 from Mundy Mill Road to Reed Industrial Parkway/Rafe Banks Road, thereby serving serve the VA Hospital, King's Hawaiian Bakery, and industrial uses in Oakwood. This represents an extension of approximately of 4.8 miles. A map of this extension is provided in Figure 15.
- New Route 60 Add new service, proposed as Route 60, along Queen City Parkway/Candler Road of approximately 7.7 miles to serve employment centers and low-income populations along the corridor. The route is proposed to extend from the transfer center to the Ampro Products facility at O'Kelly Road, as shown in Figure 16.

Given the fact the proposed extensions would require additional vehicles with or without headway increases, this service option would have the following characteristics:

- Hours of operation would be from 6 am- 6 pm on weekdays
- It was assumed that routes would operate with 30 minute headways during peak hours and at one hour headways in the off-peak hours



• In order to allow for accommodation of the new route at the transfer center, it was assumed that the Route 60 would operate at the same times as the Routes 30 and 41

Key aspects of the route extensions include:

- Of the service area expansions, Route 60 presents the most potential expenses due to its length of route miles when compared to the other two extensions.
- Given the additional service demands, the proposed enhancement would likely require additional vehicles, additional space at the transfer center, and staffing for the effort. In conjunction, this represents a significant amount of additional capital and operating costs.
- Much of the proposed extensions serve areas outside of the City of Gainesville, which sponsors
 the fixed route system. Therefore, it is likely that other jurisdictions, particularly Hall County,
 would have to contribute for service expansion.

Weekend Service

Another recommendation received from the public input is the provision of weekend service. While adding weekend service would require more staff resources and maintenance needs due to the additional service miles, there would likely be no need for capital expenditures from additional vehicles or infrastructure related to new bus stops. Weekend service would allow those transit riders who do not have time throughout the week to run errands and conduct other business as needed. This service would also benefit those who work for employers open on weekends, such as retail and restaurants.

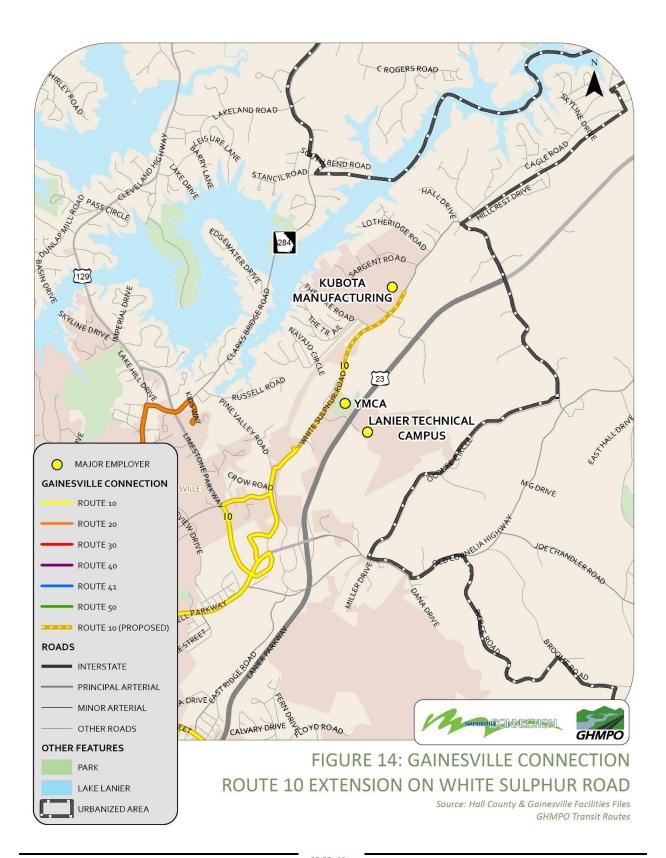
A breakdown of the opportunities and challenges of the fixed route options are presented in Table 11.



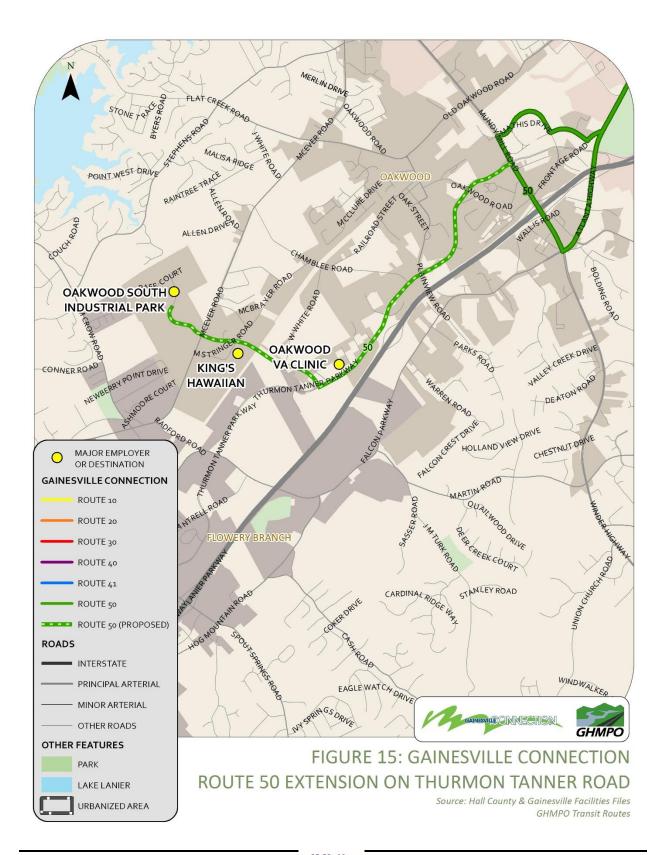
Table 11: Assessment of Potential Fixed Route Service Options

Service Option	Opportunities	Challenges
Increase Peak- Hour Headways	 Greater flexibility, convenience and reliability for commute trips within Gainesville More options for completing other trip purposes via transit No additional infrastructure needed at bus stops 	 Higher costs associated with additional vehicles and staff for operations Potential need for expansion of transfer center area
Extend Evening Hours	 More time for commuters to perform other duties on evening commute More commuters able to use the service with later hours No additional vehicles and/or employees required 	Additional costs resulting from increased operations and maintenance
Add New Route/Route Extensions	 Expanded service area within the region and improved access to more jobs Greater opportunities to a broader range of employers, who may be amicable to public-private partnerships 	 Much higher initial capital costs from additional vehicles and infrastructure associated with new stops Additional costs from increased operation and maintenance Potential need for expansion of transfer center area
Begin Weekend Service	 More personal travel options on weekends Improved service for employees of weekend businesses No additional vehicles and/or employees required 	Additional costs resulting from increased operations and maintenance

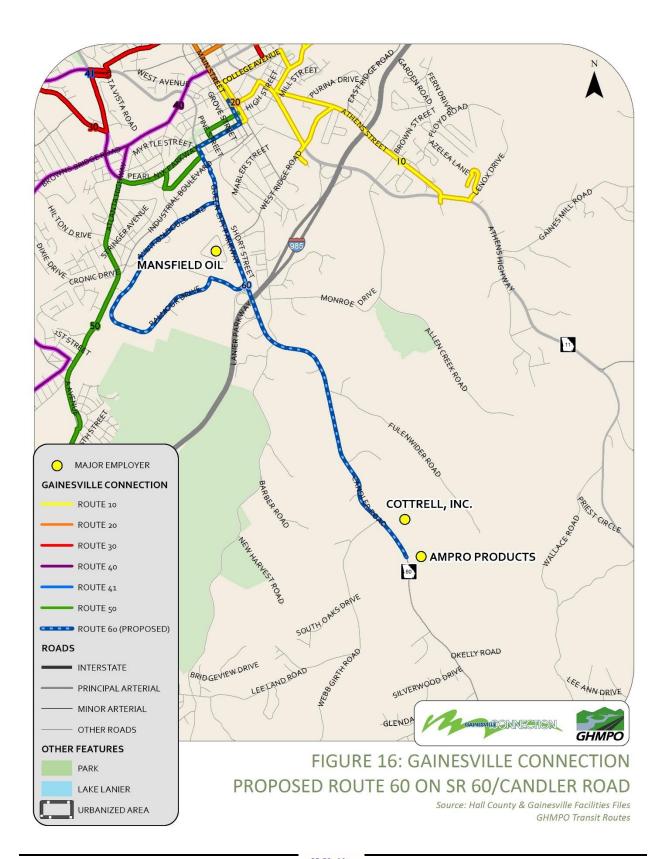














7.2 Commuter Service Options

Building off of previous studies and input, a pivotal goal of this TDP effort was to identify commuter service options that best reflect the needs of Hall County commuters and assess the steps for initiating service to the Atlanta region. The section that follows describes the potential service options based on available services, baseline conditions and input from stakeholders.

The following commuter service options were developed:

- Gainesville Connection peak hour route to Gwinnett Park and Ride
- Coordination with Gwinnett County Transit (GCT) for expansion of Route 101 into Hall County
- Hall Area Transit Xpress Service to Atlanta
- Vanpool services
- Direct coordination with Georgia Commute Options

Gainesville Connection Peak Hour Route to GCT Park and Ride

As noted in Section 2, Gwinnett County Transit operates a GRTA Xpress Route from the interchange of I-985 and SR 20 to Midtown and Downtown Atlanta. In order to provide an interim connection to these services, a potential option would be for a Gainesville Connection route to service the park and ride lot during peak hours. Key characteristics of the proposed service are as follows:

- Originating from the transfer center, the route would serve the park and ride lot at SR 53 before terminating at the GCT park and ride lot at SR 20 and I-985.
- The recommended service would run two buses per peak hour per day, or four trips per day total. The two trips would occur at one-hour headways.
- Given the length and frequency of the proposed route, additional vehicles would be needed, requiring initial capital costs. It is expected that this route would be served by fixed route vehicles.
- The route would add approximately 55,000 annual revenue miles. Additional maintenance and operations costs would also be required to accommodate this service.

Coordination with Gwinnett County Transit for Expansion of Route 101 into Hall County

Another potential option for connecting to the GCT-operated express bus service from SR 20 is the extension of GCT services into Hall County. Information provided by GCT during the TDP development process includes the following:

- GCT contracts out the Xpress service to a third party.
- Annual ridership is approximately 83,000 persons.
- Operation costs charged by the contractor are roughly \$100 per revenue hour. With the roughly 6,800 revenue hours over the past year, the annual expenditures were approximately \$680,000.
 Maintenance costs are approximately \$200,000 annually.
- GCT has an abundance of fleet vehicles that could serve a potential extension.



While the Chamber of Commerce "Big Ideas" report provided some preliminary indicators of potential demand, more detailed surveys should be collected to accurately determine the share of Hall County commuters utilizing the service.

In order for this service option to occur, an intergovernmental agreement would be needed between GCT and Hall County. With an intergovernmental agreement with GCT, expenditures for capital and operational costs could be significantly reduced compared to new services given the current GCT fleet inventory and operations already in place.

Hall Area Transit Express Commuter Service to Atlanta

Following the recommendations of the Vision 2030 report, a potential commuter service option operated by Hall Area Transit was identified. Key characteristics of this service include:

- A total of four buses running during both the AM and PM peak hours, for a total of eight per day.
- Initiate at the transfer center, then pick up at the I-985 interchanges at US Business 129 and SR 53.
- Service limited to the Midtown and Downtown areas of Atlanta, with a potential stop at Gwinnett Place on every other route to allow transfer for Gwinnett County workers.
- Timeframe for AM departure of 5:15-8:30 AM, with PM arrival from 4:15-7:30 PM.

The service characteristics outlined above would require substantially higher implementation costs than other options. Per cost estimates provided by GCT, these include:

- Vehicles used for longer commute trips, such as those used by GRTA and GCT, cost much more
 than the fixed route vehicles used for Gainesville Connection. The cost of the vehicles and
 related equipment used for the GCT service are approximately \$720,000 each. It should be
 noted that 80 percent of the capital costs are typically reimbursed by FTA for vehicles.
- The service assumptions above reflect roughly half of the trips and revenue currently being provided by GCT Route 101. Half of the operating and maintenance costs incurred by GCT for their Route 101 services is roughly \$440,000 annually. Typically 50 percent of operating and maintenance costs are reimbursed through FTA funds.

A more detailed operating plan and assessment of potential ridership is needed to develop accurate costs and revenues for this service.

Vanpool Services

Another commute option developed through the TDP process is the initiation of vanpool services. An example of a vanpool operated by a government entity in the Atlanta region is the Douglas County Rideshare, which operates a total of 44 commuter vanpools in the Metro Atlanta area. Key elements of the service include:

• The purchase price ranges from \$23,000 to \$30,500 per van with the State contract. Add-on costs are lettering, numbering, logo wrapping, additional running boards, etc.



- The monthly operational costs for each van ranges from \$500 to \$600 per month.
- Recurring costs are insurance and gas.
- Incidental costs are maintenance every 6,500 miles, tires and mechanical issues.
- Douglas County Rideshare has 12 back-up vans for replacement when route vans are taken out of service for maintenance or other issues.
- As a department of Douglas County, Rideshare vans fall under the County fleet insurance and maintenance facility; therefore, the costs for these services are less than the public costs.
- Drivers for Rideshare are volunteers. Commuters volunteer to drive the van and in exchange are not charged a monthly fare.
- Commuters join the vanpool and pay a monthly fare, which pays the operational costs of the van if ridership is good.
- At this time, average monthly ridership ranges from 7-11 riders per van.

Based on the information provided by Douglas County, a major drawback to Hall Area Transit establishing vanpool services would be associated with developing the program from the ground floor. This would include initial capital costs as well as developing procedures for the program. On the other hand, operating its own system gives Hall Area Transit a better means of directly serving its citizens.

Direct Coordination with Georgia Commute Services

As noted in Section 2 of this report, Georgia Commute Options offers services to promote carpooling, vanpooling and ridesharing opportunities between Gainesville and the Atlanta region and the number of commute trips has been steadily increasing since 2014. In order to continue this trend, dedicated staff should be assigned to maximize and promote use of these services to and from Hall County.

The opportunities and challenges of each commuter service option is provided in Table 12.

7.3 Demand Response Options

A peer review of comparable demand response systems throughout the state was conducted to investigate potential opportunities as part of developing recommendations. Discussions with GDOT's Intermodal Office and other transit agencies in the state yielded the following observations:

- Very little coordination between fixed route services and demand response services occurs in Georgia. This is due in large part to the fact that many demand response trips are subsidized and there is very little incentive for those customers to utilize the fixed route system.
- Unlike Hall County Dial-A-Ride, many transit agencies (including Macon-Bibb County and Albany)
 do not take on Coordinated Transportation Program services in their regions due to the
 difficulties associated with DHS regulations, as noted in further detail in Section 2 and the peer
 review section of this report. In addition to transportation coordination difficulties, there are a
 great deal of reporting requirements and equipment needs related to service provision. Instead,
 private entities bid for these contracts from DHS.
- Many advocates of the Coordinated Transportation Program state that better service is
 provided by the public transit agencies because they feel that the transit agencies have more
 accountability for their services.



Table 12: Assessment of Potential Commuter Service Options

Service	Opportunities	Challenges
Options		
Gainesville Connection Peak Hour Route to Gwinnett Park and Ride	 Serves transit riders at the transfer facility and commuters at the SR 53 location Very little additional infrastructure needed at park and ride lot Direct control of operations within Gainesville 	 Higher costs associated with additional vehicles and staff for operations Potential need for expansion of transfer center area Need for coordination with GCT services
Expansion of GCT Route 101 into Hall County	 Much lower costs due to the use of existing fleet from GCT More established commute service No additional vehicles and/or employees required 	 Need for high level of intergovernmental coordination GCT branding on vehicles could confuse potential riders
Hall Area Transit Commuter Services to Atlanta	 Direct control of all services More direct service to Atlanta employment areas without stop at GCT's SR 20 lot Service to GCT fixed routes 	 Much higher initial capital costs for additional vehicles (which are much more expensive than fixed route vehicles) and infrastructure associated with new service Additional costs from increased operation and maintenance Potential need for expansion of transfer center area, particularly with use of larger vehicles
Vanpool Services	 Lower cost commute alternative than express bus Locally-controlled program 	 Additional costs of fleet vehicle(s) purchase Initiating a new program and undertaken new administrative duties
Staff Promotion of Georgia Commute Options	 No additional capital or operating costs Relatively low-cost compared to other commute options Maximizes use of existing services 	Need for third-party coordination

In consideration of Hall County Dial-A-Ride's service characteristics, the ability to improve service efficiency is somewhat limited due to DHS regulations and the overall distribution of trips throughout the county. Two options that may warrant consideration are:

- Investigating means for better connections to the fixed route system.
- Exploring the possibility of relinquishing DHS Coordinated Transportation Program responsibilities to another party.

The potential opportunities and challenges of these options are presented in Table 13.



Table 13: Assessment of Demand Response Service Options

Service Options	Opportunities	Challenges
Maintain Coordinated Transportation Service	 Service already established and operating policies in place More public service provided More revenue and ridership due to DHS services DHS revenues can be used as part of local match 	 Difficulties in coordinating trips due to DHS service requirements More service and fleet demands
Relinquish Coordinated Transportation Service to Third Party Provider	 More opportunities to improve efficiency for Section 5311 trips Opportunities to coordinate with fixed route service Allows for private non-profit or for-profit agency to take over service 	 Overall less ridership and revenue to Hall Area Transit Less service without DHS revenues as local match

7.4 Funding and Revenue Options

As noted throughout this report, there is a shortage of local match to take advantage of the federal funding allocation for fixed route service. Furthermore, desired service expansions will also require local funds. Therefore, a critical need for Hall Area Transit will be to identify additional resources. A major selling point for utilizing additional local resources for transit is the ability to attract employment growth. The Transit Cooperative Research Program (TCRP) provides guidance in this regard. Revenue streams for smaller systems such as Hall Area Transit are typically limited to traditional taxes and fees. Based on the current characteristics, the potential funding sources that could be utilized for additional transit service revenue are as follows:

- SPLOST VIII
- Other local tax options
- Private sector contributions
- Advertising on buses, benches, and shelters

SPLOST VIII

Since 1985, Hall County voters have approved a Special Local Option Sales Tax (SPLOST) on seven different occasions. The last tax, SPLOST VII, passed in March 2015 and included \$158 million of capital improvements over a 60-month timeframe. Of these improvements, \$46.6 million were dedicated for roadway improvements. As this tax expires, consideration should be given for including funding for fixed route and demand response services in the improvement program for the next SPLOST.



Other Local Tax Options

Currently, all local match funding from the City of Gainesville (fixed route) and Hall County (demand response) comes from their respective General Funds. Per guidance from the TCRP, the following also represent potential additional local funding sources specifically for transit:

- Sales taxes
- Property taxes
- Vehicle fees

Other fees from the business community that could assist in funding transit could include:

- Employer/payroll taxes
- Vehicle rental and lease fees
- Realty transfer tax and mortgage recording fees
- Corporate franchise taxes
- Room/occupancy taxes
- Business license fees
- Utility fees/taxes

Hall Area Transit should work with local officials to investigate the potential to utilize the sources listed above.

Private Sector Contributions

Most of the service enhancements recommended to the fixed route system were primarily to increase access to employment opportunities throughout the Gainesville region. Several key employers would benefit from these services. In recognition, Hall Area Transit should work with the Hall Area Chamber of Commerce to explore opportunities for private contributions to transit in order to facilitate service enhancements.

Advertising Revenues

A potential revenue stream commonly used by transit agencies is advertising proceeds. The installation of benches and shelters throughout the system provides an opportunity to subsidize capital expenses by selling advertising on these facilities. While advertising on vehicles is also an option, advertising strategies for vehicles should be done in a way that does not disrupt the Gainesville Connection rebranding process in the community. Currently, Hall Area Transit does not have a program set up to collect revenues from its assets.

7.5 New Intermodal Transfer Center

Given the long-term potential for commuter rail service and the current presence of intercity passenger rail and bus, there is potential for the City to explore an intermodal center. The previous TDP also called for consideration of developing a multimodal terminal in the vicinity of the existing Amtrak rail station on Industrial Drive. There are two great advantages of an intermodal center: it provides opportunities for intercity travel via the transit system while providing more visibility to the system for a traveler from



outside the region. A terminal could serve as a centralized location where many different modes could operate cooperatively to provide transportation services. Potential services at the facility include:

- HAT local bus service
- Amtrak rail service
- Greyhound intercity bus service
- Pedestrian facilities
- Bicycle facilities
- Parking, including that for commuter services

In the longer term, an intermodal center could also serve as a community revitalization tool. There are several examples of ongoing redevelopment surrounding intermodal centers throughout the nation. For example, in Meriden, CT, the city has secured \$2.4 million in state and federal funding for an intermodal center will serve Meriden's existing Amtrak service, the proposed New Haven to Springfield commuter rail line and will also offer linkages to local bus, taxi and corporate van services. It will allow for transit-oriented development opportunities on the site and throughout the downtown area.

It should be noted that many intermodal centers and redevelopment opportunities are being funded through the USDOT TIGER Grant Program, which offers grants for innovative transportation projects that spur economic development opportunities.

7.6 Transit Marketing

One of the needs identified during the development of baseline conditions was better marketing of the transit services. The FTA Regional Transit Assistance Program (RTAP) was surveyed to assess potential strategies. The RTAP program is designed for smaller systems such as Hall Area Transit that do not have full-time marketing staff.

Per the RTAP guidance, one of the most fundamental elements of promoting a transit system is branding. It identifies the service and everything associated with it, conveying a unified image to potential customers and helping to create immediate recognition of all aspects of the service. A common look of vehicles, bus stop signage, shelters, and benches is essentially the transit system's packaging; vehicles and facilities are its most visible marketing tools. With the recent Gainesville Connection rebranding, most of these actions have been undertaken and vehicles, shelters and stops are clearly visible.

Based on input received during the TDP process and transit marketing research, the following steps are recommended:

- Develop an initial marketing strategy and procedures for Gainesville Connection.
- Improve the Gainesville Connection web presence.
- Supply and monitor the availability of informational brochures in public places.



SECTION 8: RECOMMENDATIONS AND NEXT STEPS

This section provides recommended actions for Hall Area Transit to move forward with enhancing and/or promoting transit service in the Gainesville region. It builds off of the evaluation of service options provided in Section 7 as well as other needs identified throughout the report. Given that the TDP update should ideally occur every five years, recommended actions are considered as short-term if within the next five years and long-term if beyond five years.

It is important to note that the actions described in this section are in addition to the immediate needs to retain existing transit services, which are detailed in Section 6.

Fixed Route Service Recommendations

Both the peak hour service enhancements and evening service extensions should be considered for short-term implementation. Of the potential fixed route service options considered, these options appear to have the greatest potential to assist the business community and provide more flexibility to current transit riders for both commute and other trip purposes. Furthermore, better peak hour service will help attract more business to the area. Given the relatively low ridership numbers when compared to peer systems assessed for this report, it is a priority to improve and make the existing weekday system more attractive. It is for this reason the proposed route extensions and weekend service are recommended more of a long-term goal after the enhancements to the existing weekday service. Therefore, the recommended schedule for implementation is as follows:

- Year 1 Increase peak hour headways on the existing weekday service
- Year 2 Extend evening hours of weekday service
- Year 3 Extensions of Route 10 and 50 and new route along SR 60
- Year 4 Provision of Saturday service (without increased headways during peak hours)

The timeline of this implementation schedule will be dependent on the decisions of local officials and available funding.

Commute Service Recommendations

Of those considered, the most cost-effective and logical commute service option for short-term implementation would be dedicating staff time to promote the carpooling and vanpooling services provided by Georgia Commute Options. This is a very low-cost option and maximizes services that are already in place. Ideally, this would be the responsibility of a proposed new Hall Area Transit Marketing Director, which would also have other duties described later in this section. The remaining commute options considered present a wide range of opportunities and challenges that will need to be vetted with business and community leaders. Promoting Georgia Commute Options to enhance current participation in their programs will establish a baseline demand for additional services such as express bus service and locally-maintained vanpool programs.



Demand Response

Further discussions amongst community leaders are needed to weigh the opportunities and challenges presented by providing DHS services with its demand-response system rather than opting for a third-party entity. With each subsequent update of the TDP, peer review systems and DHS regulations in place should be re-evaluated.

Other

- Marketing Coordinator A key component to implementing the recommendations within this
 report is the creation of a staff position responsible for the promotion of transit service revenue
 within the Gainesville region. In addition to promoting Georgia Commute Options services, some
 of the responsibilities would include:
 - o Developing an overall marketing plan consistent with FTA guidance;
 - Developing of marketing materials and maintenance of Gainesville Connection and Hall
 Dial-A-Ride Services web pages for better promotion and access;
 - Ensure schedules and other marketing materials are distributed at community facilities,
 via the website and other innovative outlets;
 - Promote commuter services provided by Georgia Commute Services to the Gainesville area throughout the community;
 - Coordinate with the local municipalities for the implementation of capital projects that help promote transit use (sidewalks, crosswalks, etc.);
 - Serve as a community liaison with businesses, community groups and other parties to promote the utility of transit service; and
 - Develop a program to generate revenue from advertising and solicitation from local businesses.
- Intermodal Transfer Center As the Gainesville Connection continues to strengthen its ridership
 and overall ties to the community, coordination amongst community leaders should take place
 to discuss the potential for an intermodal center. The potential for this center would be
 heightened with the implementation of commuter rail to the Atlanta region, which is starting to
 gain momentum with state leaders. Such a center would not only be a benefit to local residents
 or visitors, but also serve as one more catalyst for economic development.



Gainesville - Hall Metropolitan Planning Organization

A Resolution by the Gainesville-Hall Metropolitan Planning Organization Policy Committee Adopting the Hall Area Transit Development Plan Update

WHEREAS, the Gainesville-Hall Metropolitan Planning Organization (GHMPO) is the designated Metropolitan Planning Organization for transportation planning within the Gainesville Metropolitan Area Boundary which includes all of Hall County and a portion of Jackson County following the 2010 Census; and

WHEREAS, Fixing America's Surface Transportation (FAST) Act directs the Metropolitan Planning Organization to increase the accessibility and mobility options available to people;

WHEREAS, the Transit Development Plan Update makes recommendations to improve the area's public transit system.

NOW, THERE, BE IT RESOLVED that the Gainesville-Hall Metropolitan Planning Organization adopts the Hall Area Transit Development Plan Update.

Danny Dunagan, Chairperson

Policy Committee

Subscribed and sworn to me this the March 7, 2017.

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My commission expires

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