GAINESVILLE-HALL
Metropolitan Planning Organization

2875 Browns Bridge Road
Gainesville, GA 30504
Tel: 770.531.6809
Fax: 770.531.3902
ghmpo.org

Technical Coordinating Committee

Wednesday, July 19, 10:30 AM
Banquet Hall, 4th Floor, Hall County Government Center
2875 Browns Bridge Road, Gainesville, GA 30504

AGENDA

1. **Welcome – Adam Hazell, Chair**

2. **Election of TCC Chair and Vice Chair for FY 2024**

3. **Approval of April 19, 2023 Meeting Minutes**

4. **Update on GHMPO's Designation as a Transportation Management Area (TMA)**
   – Joseph Boyd, GHMPO

5. **Recommend Approval of Hall Area Transit's Zero Emission Vehicle Transition Plan**
   – Phillippa Lewis Moss, Hall Area Transit

6. **Recommend Approval of Draft FY 2024-2027 Transportation Improvement Program (TIP)**
   – Michael Haire, GHMPO

7. **Recommend Approval of Draft Amendment #2 to the FY 2024 Unified Planning Work Program (UPWP)**
   – Michael Haire, GHMPO

8. **Other**
   – Update from the Trails Subcommittee
   – Update from the McEver Road Subcommittee
   – MTP/Bike & Pedestrian Plan Updates

9. Jurisdiction and Agency Reports

- City of Flowery Branch
- City of Gainesville
- City of Oakwood
- City of Buford
- Town of Braselton
- Federal Highway Administration
- Georgia Department of Transportation
- Georgia Mountains Regional Commission
- Hall Area Transit
- Hall County
- Jackson County

10. Public Comment

11. Upcoming Meeting Date: October 18, 2023

12. Adjourn

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Technical Coordinating Committee

HR Training Room, 2nd Floor, Hall County Government Center
Draft Minutes of April 19, 2023 Meeting

Voting Members Present:
Gina Roy, Jackson County, Vice-Chair
Matt Tarver, City of Gainesville
Corey Jones, City of Gainesville
Angela Sheppard, City of Gainesville
Ana Peng, City of Flowery Branch
Jennifer Scott, Town of Braselton
Frank Miller, Hall County
Jorge Gomez, Hall County
Bill Nash, Hall County
Phillippa Lewis Moss, Hall Area Transit
Gina Roy, Jackson County
Jomar Pastorelle, GDOT
Michael Haire, GHMPO

Voting Members Absent:
Dan Branch, City of Buford
Tonya Parish, City of Flowery Branch
Rich Atkinson, City of Flowery Branch
B.R. White, City of Oakwood
Dan Schultz, City of Oakwood
Srikanth Yamala, GHMPO
Joseph Boyd, GHMPO

Others Present:
Jeff Gill, Gainesville Times

1. **Welcome – Gina Roy, Vice-Chair**

   Ms. Roy opened the meeting at 10:35 AM.

2. **Approval of February 15, 2023 Meeting Minutes**

   MOTION: Ms. Moss made a motion to approve the minutes of the February 15, 2023 meeting, with a second from Ms. Scott, and the motion passed by unanimous vote.

3. **Recommend Approval of Draft Amendment #1 to the FY 2024 Unified Planning Work Program (UPWP)**

   Mr. Haire introduced Draft Amendment #1 to the FY 2024 Unified Planning Work

Program. This Amendment was requested by Hall Area Transit and the Georgia Department of Transportation, and adds language to two sections of the document. The first is in Sub-Element 5.1 – Program Support & Administration – and states that GHMPO will work alongside Hall Area Transit (HAT) to develop an indirect-cost analysis to enable HAT to claim indirect cost reimbursements in the future. The second update is in Sub-Element 5.2 – Long Range Transportation Planning – and states the intent of GHMPO to provide support to Hall County in managing the Safe Streets For All Grant (SS4A) to whatever extent is needed. Mr. Haire received a question from Mr. Nash regarding who would be managing the grant, to which he replied that it would technically be Hall County, and GHMPO is still discussing with Hall County Finance whose name should be the primary contact on the grant agreement.

MOTION: Ms. Sheppard made a motion to recommend approval of Draft Amendment #1 to the FY 2024 Unified Planning Work Program (UPWP), with a second from Mr. Nash, and the motion passed by unanimous vote.

4. First Review of Draft FY 2024-2027 Transportation Improvement Program (TIP)

Mr. Haire introduced the first draft of the FY 2024-2027 Transportation Improvement Program (TIP), which is scheduled for adoption at the August 8, 2023 Policy Committee meeting. This new Transportation Improvement Program includes all federally and state funded projects in the GHMPO planning area scheduled from fiscal years 2024 to 2027. Included in the new TIP is the new GHMPO System Performance Report, which has been published on the GHMPO website, as well as the new PM1, PM2, and PM3 performance measures that were adopted in February 2023. GHMPO is currently working with Hall Area Transit to collect new funding amounts for the new TIP's program years in order to finalize Appendix B.

This is the first round of review for the FY 2024-2027 Transportation Improvement Program, and local jurisdiction staff have the opportunity to comment on the document prior to the summer round of meetings.

5. Other

Mr. Haire discussed a question that recently arose during a Citizens Advisory Committee, where a committee member asked who had maintenance responsibility for the concrete surrounding railroad crossings. Local jurisdiction staff unanimously agreed that would be the responsibility of the railroad companies, but Ms. Decker explained that there were some ways that GDOT would be able to assist. Ms. Decker passed along the contact information for Jill Franks, Utilities Railroad Liaison Manager at GDOT.

Mr. Gomez provided a brief update on the Tumbling Creek Trail, for which Phase II was put on pause due to weather conditions that caused unfavorable soil conditions. As the weather has begun to trend warmer and the soil is becoming more suitable, the project has been resumed and the contractor has continued work on the trail segment. It is anticipated that the trail segment will be completed in the summer. Ms. Sheppard provided a brief update on the Gainesville Airport

Connector Trail, which is currently under design. The City of Gainesville is currently working on addressing comments received from GDOT.

Mr. Miller provided an updated on the Lights Ferry roundabout. The design has been completed and has been put out for bid, with the County proceeding with utilities and construction. Mr. Miller also mentioned that to their knowledge the City of Flowery Branch was working on design for the Gaines Ferry roundabout.

Lastly, Mr. Haire provided an update on the Metropolitan Transportation Plan / Bicycle and Pedestrian Plan Update. The RFP is completed and will be posted by Hall County Finance on April 26th, and advertised for four weeks. Mr. Haire will reach out in the near future to establish a selection committee for the consultant, and they will have almost two weeks after the RFP closes to select a consultant before the June 5th deadline for the June 22nd Board of Commissioners meeting.

6. Jurisdiction and Agency Updates

Representatives shared the status of projects being completed by their jurisdictions: Mr. Tarver for the City of Gainesville, Ms. Scott for the Town of Braselton, Mr. Miller and Mr. Nash for Hall County, Ms. Roy for Jackson County, Ms. Moss for Hall Area Transit, and Ms. Decker for the Georgia Department of Transportation.

7. Public Comment

There were no public comments.

8. Upcoming Meeting Date: July 19, 2023

Ms. Roy reminded the Committee of the upcoming meeting date on July 19, 2023.

9. Adjourn

There being no other items of business, the meeting adjourned.

_____
Adam Hazell, Chair

_____
Michael Haire, GHMPO

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GAINESVILLE-HALL
Metropolitan Planning Organization

MEMORANDUM

To: **Technical Coordinating Committee Members**

From: **Joseph Boyd, GHMPO**

Date: **July 12, 2023**

Re: **Update on GHMPO's Designation as a Transportation Management Area (TMA)**

In the previous round of GHMPO committee meetings, MPO and FHWA staff discussed GHMPO's designation as a Transportation Management Area (TMA) as the population crosses the 200,000 threshold as a result of the 2020 Census. As a TMA, GHMPO would be able to access increased funding and exercise more local control over the selection of transportation projects.

The 2020 Census revealed that the Gainesville Urbanized Area had expanded into Forsyth County, with a portion of the county moving over from the Atlanta Urbanized Area. The Atlanta Regional Commission (ARC) noticed potential errors in the Census Bureau's methodology, and requested an investigation from the Bureau.

The Census Bureau has affirmed that there was an error in methodology, and the Gainesville Urbanized Area will not be extending into Forsyth County. Additionally, the Bureau confirmed that there would not be additional growth in Hall or Jackson Counties. Therefore, the Gainesville Urbanized Area will have a total population of 164,365, and will no longer be transitioning into a TMA.

RECOMMENDED ACTION: **None**

Attachment: *None*

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GAINESVILLE-HALL
Metropolitan Planning Organization

MEMORANDUM

To: **Technical Coordinating Committee Members**

From: **Phillippa Lewis Moss, Hall Area Transit**

Date: **July 12, 2023**

Re: **Recommend Approval of Hall Area Transit's Zero Emission Vehicle Transition Plan**

In March of 2023, GHMPO and Hall Area Transit met with consultant Planning Communities to kick-off the Zero Emission Vehicle Transition Plan. Having a transition plan in place will enable Hall Area Transit to begin accessing new funding opportunities provided by the Infrastructure Investment and Jobs Act (IIJA). The final draft of the plan was submitted to Hall Area Transit at the end of June, and it will be up for approval by the Policy Committee at their next meeting on August 8, 2023.

According to FHWA guidelines, the plan must address six elements:

1. Demonstrate a long-term fleet management plan with a strategy for how the applicant intends to use the current request for resources and future acquisitions.
2. Address the availability of current and future resources to meet costs for the transition and implementation.
3. Consider policy and legislation impacting relevant technologies.
4. Include an evaluation of existing and future facilities and their relationship to the existing transition.
5. Describe the partnership of the applicant with the utility or alternative fuel provider.
6. Examine the impact of the transition on the current workforce by identifying skill gaps, training needs, and retraining needs of the existing workers to operate and maintain zero-emission vehicles and related infrastructure and avoid displacement of the existing workforce.

RECOMMENDED ACTION: **Recommend Approval of Hall Area Transit's Zero Emission Vehicle Transition Plan**

Attachment: *HAT Zero Emission Vehicle Transition Plan*

WEGO

GHMPO

Zero Emission Vehicle Transition Plan

JUNE 2023

PREPARED BY

Planning Communities

MGL
Microgrid Labs

INTERNATIONAL TRANSPORTATION LEARNING CENTER

TCC 12

Table of Contents

Introduction

Hall Area Transit (HAT) is the public transportation service provider for Hall County, Georgia. HAT is part of the City of Gainesville/Hall County Community Services department and delivers transportation services with the microtransit service WeGo using an agency fleet of 22 vehicles. In December 2020, HAT launched an on-demand vanpool service through known as WeGo serving the City of Gainesville; in July 2021, WeGo service replaced the fixed-route Gainesville Connector and Dial-a-Ride service and was expanded to the remaining parts of Hall County. This service was introduced as a more cost effective and efficient option than fixed-route service that also addresses first-last mile connectivity. Passengers can book using a free app or by phone, and can be picked up and dropped off within a few blocks of their origin and destination.

The Zero Emission Vehicle Transition Plan (ZEVTP) evaluates scenarios for adopting the agency's electric vehicles and charging infrastructure, and assesses available technologies, resources, facilities and partnerships to develop a strategy for transitioning HAT to a fully zero emission fleet.

FTA Requirements

Under the Bipartisan Infrastructure Law, transit agencies using the expanded Low or No Emission Program or the Grants for Buses and Bus Facilities Competitive Program to purchase zero emission buses (battery electric, hydrogen fuel cell, or rubber tire trolley buses powered by overhead catenaries) must submit a plan for implementing a transition to a Zero Emission Vehicle (ZEV) fleet. While these grants refer to buses, the FTA defines a low or no emission bus as "a passenger vehicle used to provide public transportation that sufficiently reduces energy consumption or harmful emissions, including direct carbon emissions, when compared to a standard vehicle", which would apply to electric WeGo vans. The Zero Emission Vehicle Transition Plan (ZEVTP) is being prepared in accordance with Federal Transit Administration (FTA) guidelines as set in the Dear Colleague Letter dated December 1, 2021.

Approach

The ZEVTP was developed based on FTA guidance for preparing Zero-Emission Transition Plans (2021) in alignment with statutory requirements for projects related to zero-emission vehicles applying for funding under the Grants for Buses and Bus Facilities Program (49 USC 5339(b)) and the Low or No Emission Program (49 USC 5339(c)). FTA defines six key elements for these plans as listed below.

1. Demonstrate a **long-term fleet management** with a strategy for how the applicant intends to use the current request for resources and future acquisitions.
2. Address the availability of **current and future resources to meet costs** for the transition and implementation.
3. Consider **policy and legislation** impacting relevant technologies.
4. Include an evaluation of **existing and future facilities** and their relationship to the technology transition.
5. Describe the **partnership** of the applicant **with the utility or alternative fuel provider**.
6. Examine the **impact of the transition on the current workforce** by identifying skill gaps, training needs, and retraining needs of the existing workers to operate and maintain zero-emission vehicles and related infrastructure and avoid displacement of the existing workforce..

Each element of the plan was evaluated for the specific local and agency operating context. Scenarios were developed to assess future electrification strategies and suitability for HAT's operating conditions.

FTA Element 1: Long-Term Fleet Management Plan

FTA requires a long-term fleet management plan that shows how funding requests will support a strategic fleet transition. This section of the plan provides an overview of the existing HAT fleet, a comparison of the available technologies, and a detailed analysis of HAT's current and future fleet and routing to identify potential scenarios for the transition to zero emission vehicles (ZEVs).

1

FTA ELEMENT 1

Demonstrate a long-term fleet management plan with a strategy for how the applicant intends to use the current request for resources and future acquisitions.

Fleet Overview

As of April 2023, the active HAT microtransit fleet is comprised of 22 vehicles with the following breakdown:

Microtransit Fleet

Number of vehicles in operation	Manufacturer / Model	Vehicle / Description
10	Dodge Ram Promaster 1500	17' vans
5	Dodge Ram Promaster 1500	19' vans
2	Ford Candidate II	19' shuttle buses
5	BraunAbility Voyager Rear Entry	17' vans

Table 1-1: Microtransit Fleet

20 VANS | 2 SHUTTLE BUSES | 22 VEHICLES

The microtransit vehicles operate only on weekdays, with the exception of major holidays, for a total of 252 days throughout the year. A maximum of 20 vehicles operate per day. The vehicles operate Monday-Friday between 5:00 AM and 9:00 PM.

The model years of the microtransit vehicles range from 2020 to 2023.

The fleet assessment used information about the current active fleet as provided by HAT to extract the key inputs for fleet modeling efforts.

KEY MICROTRANSIT OPERATING STATS

- 439,117 miles traveled/year
- Averaging 21,956 miles per vehicle/year
- Average fuel economy of 12.6 miles per gallon (MPG)
- Total fuel consumption of 34,808 gallons of fuel

ZEV Technologies

Table 1-2 compares current available technologies.

	Description	Benefits	Challenges
Diesel	Diesel is refined from crude oil that is less refined than gasoline and takes longer to evaporate.	• Lowest petroleum-based fuel cost and cost per mile • Burns at a lower rate than gasoline resulting in high fuel economy • Diesel engine's life expectancy may range from 250,000-300,000 miles	• High emissions • High maintenance costs compared to gasoline
Gasoline	Gasoline is another refined crude oil that has a relatively more complex refining process than diesel and ignites more evenly. HAT uses it for the 22 vehicles in operation	• Lower emissions than diesel • Lower maintenance costs compared to diesel	• Lower fuel economy than diesel • Higher TCO than diesel
Hybrid-Electric	Hybrid-electric uses low sulfur diesel in combination with energy stored in batteries.	• Lower emissions than diesel • Higher fuel economy than diesel	• Higher TCO than diesel • Unsuitable for long distances due to reduced regenerative breaking
Battery Electric	Battery Electric uses on-board batteries to drive electric motors.	• Zero tailpipe emissions and noise • Operating costs one-third of diesel	• Higher initial investment costs • Requires recharging for long distances and extended routes due to range constraints

Table 1-2: Fuel technology comparison

Zero emission technologies for transit vehicles generally fall into one of two types: battery-electric vehicles (BEVs) and hydrogen powered fuel cell electric vehicles (FCEVs).

BEVs are driven by electric motors and derive energy from on-board batteries. BEVs must be charged at a station; unlike BEV buses which require specialized infrastructure for charging, BEV vans and shuttles may be charged at commercial charging stations, allowing them to use standard AC charging and DC fast-charging stations. BEV vans and shuttles use plug-in chargers, which vary in output from 50 to 300 kW. Battery sizes range from 68kWh to over 120kWh. Adoption of BEV vans and shuttles lags behind that of BEV cars and buses, and many agencies choose to retrofit gasoline or diesel transit vans to electric, but there are commercially available vans on the market (METRO Staff, 2022). The Ford E-Transit is available as a full-

sized cargo van or cutaway with an estimated range of 126 miles, and the electric version of the conventional version of the Ford Transit which is commonly used for microtransit. (Cruz & Dorian, n.d.; Ford, 2023).

BEV van and shuttle technology is expected to improve in the coming years. One promising initiative is a partnership between Zeus Electric Chassis Inc. and Pegasus Bus Company, who have stated that their goal is "to change the trajectory of electric shuttle and paratransit bus development, performance, and reliability." They plan to produce a Pegasus Bus on a Zeus Z-19 Power Platform specifically designed for transit and paratransit with a standard range of 150 miles (METRO Staff, 2022).

FCEVs generate electricity by combining hydrogen from an on-board storage tank and oxygen from the air emitting only heat and water vapor. Although the use of FCEV buses has grown in recent years, usage of FCEV cars, and especially vans, is far more limited. As of mid-2022, fewer than 15,000 FCEV cars were in use in the United States – all of these vehicles are in California, the only state with a hydrogen vehicle fueling network (Voelcker, 2022). FCEV vans are not currently in use for microtransit – Ford is planning to test FCEV E-Transit vans in the UK, but these vehicles are prototypes not available for mass production (Carey, 2023). Therefore, FCEV technology was not considered to be a suitable option for HAT.

Detailed Assessment and Modeling of Future Fleet Technologies

The HAT microtransit fleet is relatively new, with the oldest vehicles from 2019, and the fleet currently consists entirely of internal combustion engine (ICE) cutaway vans. FTA indicates that cutaway vehicles are eligible for replacement after approximately five years in service, which informs the anticipated timeline for the van fleet transition. Based on vehicle ages, current funding availability, and budgeted and anticipated fleet expansions, it is estimated that the entire fleet could transition to BEVs by 2029, as shown in Figure 1-1. This timeline and the rate of transition may be affected by future budget allocations and grant funding.

Figure 1-1: Projected Fleet Composition

TCC 18

Modeling Approach

The fleet transition plan was developed using the results of an in-depth technical analysis conducted with a software platform (EVOPT®) specifically designed for fleet transition planning and optimization of vehicle deployments.

The following were key inputs to the model from the current active HAT fleet

- Vehicle make and model, and fuel type.
- Vehicle mileage and annual fuel usage.
- Operating schedule for the microtransit fleet.
    - o Hours of operation, and driver schedules to extract number of trips per day, driving time, and daily mileage per vehicle integrated with driver schedule for the microtransit fleet.

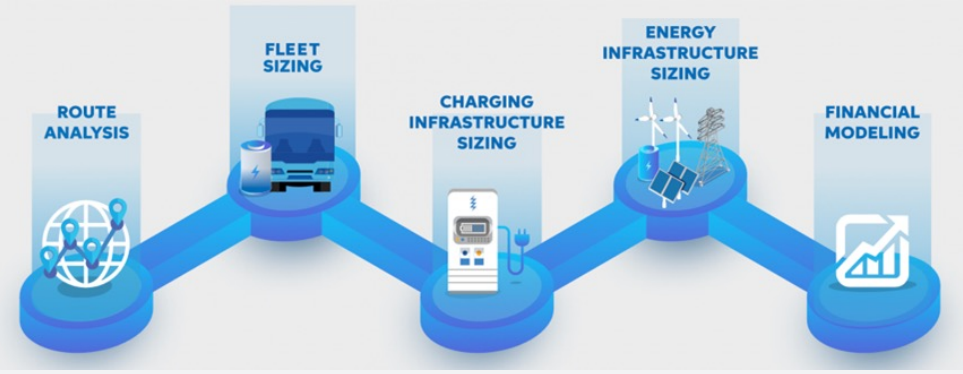
The operating schedule of the fleet was manually reconstructed from the received information, and then uploaded into the modeling software for analysis. The electrification analysis included:

1. Route energy analysis integrating of weather, terrain gradient, gross vehicle weight rating (GVWR), and passenger capacity.
2. Vehicle battery and charging equipment sizing.
3. Energy load profiles.

Overall goals of the assessment are to determine the suitability of vehicles for electrification, and the most cost-effective options to electrify the HAT fleet through equipment right-sizing while maintaining operational uptime, and to inform a long-term management plan.

Modeling Platform

EVOPT® incorporates algorithms for route energy analysis, vehicle battery and charging infrastructure sizing, charging scenario simulation, financial modeling, and emission reduction calculations. The figure below illustrates the main modules. EVOPT® uses a rigorous energy modeling algorithm to accurately extract the real-world energy needs of an electric vehicle, which is important in cold and hot weather when the battery range can decrease up to 40% below the nominal values. These algorithms incorporate the effects of vehicle mileage, average payload, terrain gradient, and temperature and have been independently verified against real-world fleets in operation to confirm accuracy. The resulting route energy estimates includes two major elements: traction energy (required to move the vehicle); heating, ventilation, and air conditioning (HVAC). The calculated energy values are then used to perform the vehicle battery charging equipment right-sizing assessment, extract the daily energy needs at the charging location, and inform the financial and emission reduction analyses.



Route Energy Analysis

The route energy analysis provides the energy required to complete daily operations (where a daily operation is the sum of all the trips completed by a vehicle from the time it leaves and returns to depot) based on real-world electric vehicle efficiency values calculated using vehicle mileage, GVWR, and climate. For the HAT fleet, the analysis was conducted for the winter temperature of 36°F (reflecting the historic 24-hr average of the daily temperature data collected for Hall County by the National Oceanic and Atmospheric Administration, NOAA) to size the vehicle batteries for conditions that can present operational constraints. (Note: the energy analysis does not include the energy that might be needed for battery preconditioning under certain cold temperature conditions).

The GVWR chosen for the electric microtransit fleet was taken from a commercially available ZEV equivalent to a HAT Dodge Ram Promaster 3500 cutaway shuttle (14,500 lbs for the ZEV replacement).

The resulting energy efficiency for the ZEVs was 0.8 kWh/mile. Figure 1-2 shows the total energy requirements obtained for the 20 analyzed vehicles. The modeled energy is equally distributed across the vehicles and the mileage served based on HAT's county-wide service area, rather than fixed route service

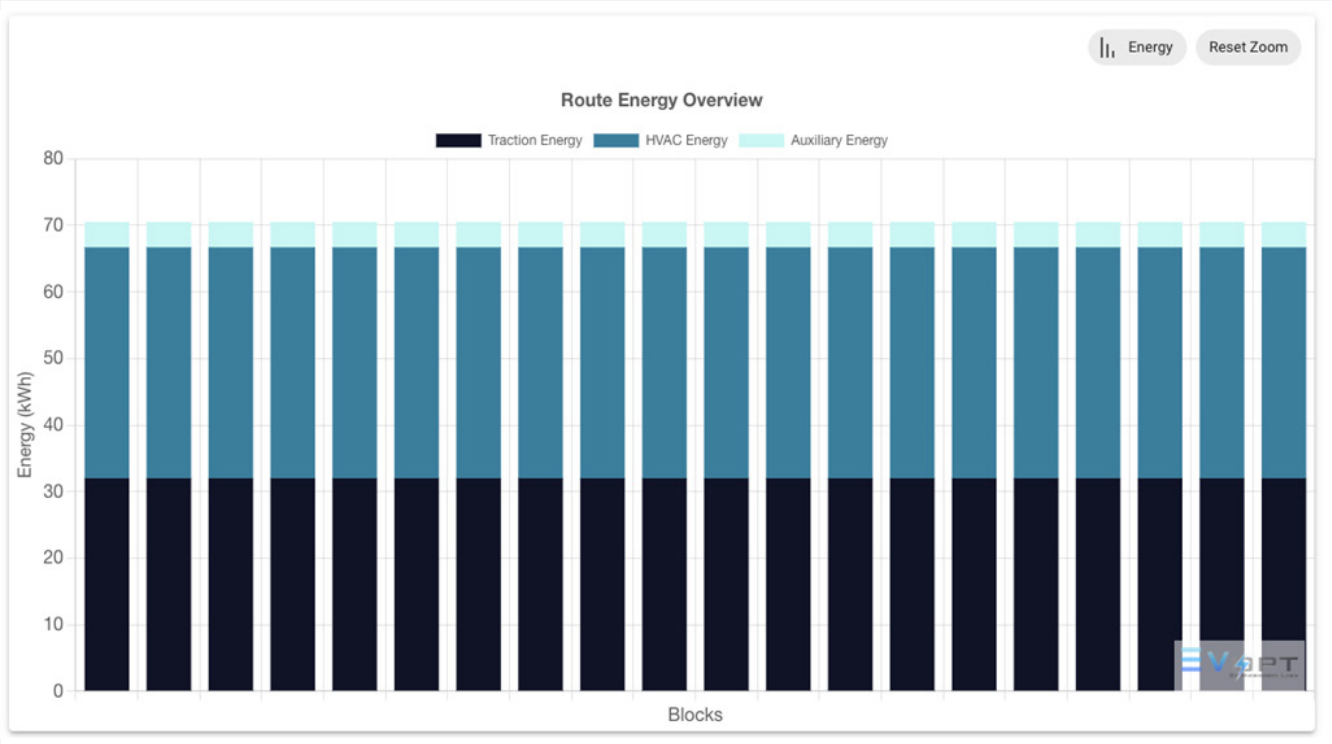


Figure 1-2: Results of the energy analysis for the HAT vehicles. The total energy is the sum of traction, HVAC, and auxiliary loads.

TCC 20

Equipment and Fleet Sizing

The results of the route energy analysis were used to size the vehicle batteries and charging equipment.

Figure 1-3 shows the battery sizes needed to operate each vehicle in year 12, the modeled vehicle lifespan, after accounting for battery degradation (3% degradation per year of operation) and 80% usable battery capacity. The modeling suggests that 100% of the vehicles can be operated on one charge by a 120-kWh battery, throughout the 12-year modeled lifespan of the vehicle.

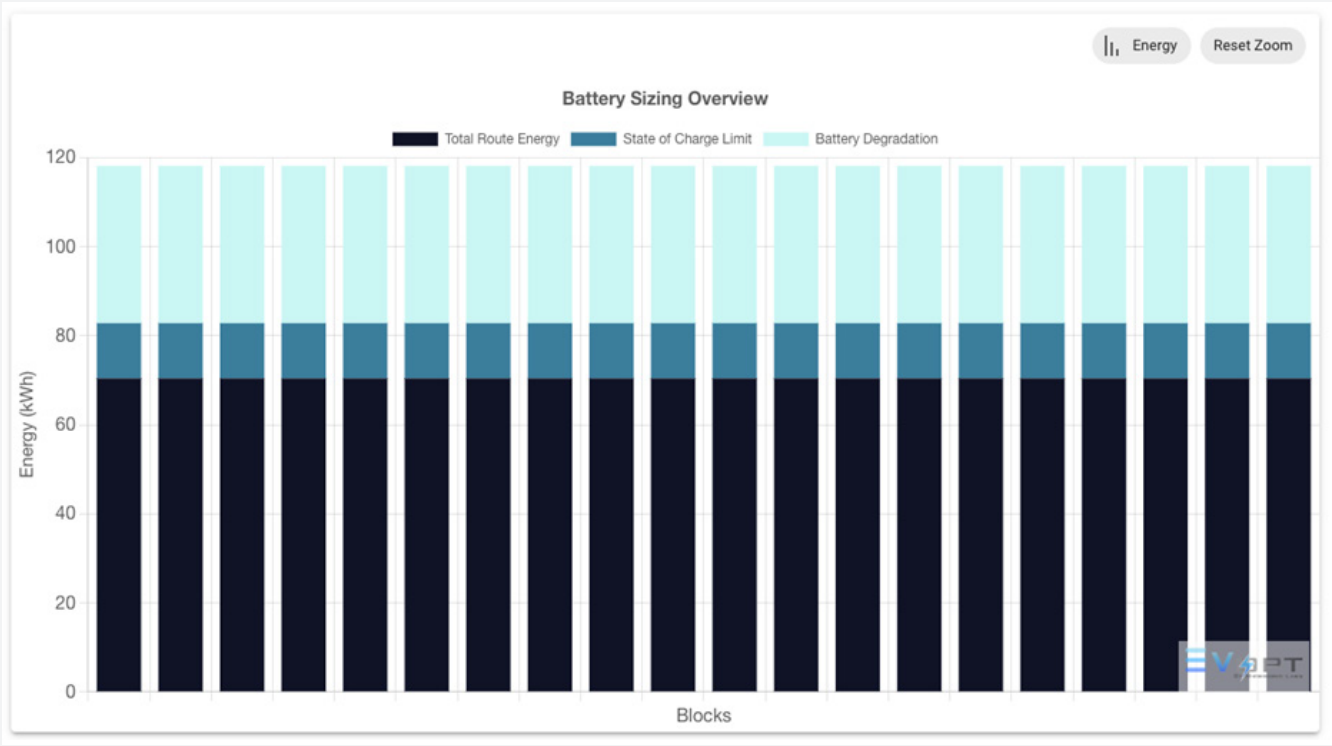


Figure 1-3. Chart of battery sizes needed for each vehicle for year 12 of operation. All vehicles are feasible to be electrified with existing BEV technology and a single charge.

Charging Scenarios/Sizing

The charging scenario analysis was performed by evaluating different charger sizes to find the minimum power rating required to maintain operational viability of the vehicles. This charging scenario assumes:

- Charging will occur only at the maintenance facility.
- Operating fleet size is based on the 20 vehicles in daily use.
- The fleet consists of 20 cutaways (battery size of 120-kWh).
- The vehicles operate 252 days a year and operate from 5am to 9pm daily.
- Every vehicle has the same efficiency, or fuel economy (0.8 kWh/mi).
- Vehicles are available to charge for 90% of the time they are at the facility.
- Every vehicle has its own charging port.

For the modeled microtransit fleet, four charger options (11.5 kW, 19.2 kW, 30 kW, and 60 kW charging ports) were selected for evaluation. For each scenario, the analysis calculates the number of chargers and vehicles needed to operate the fleet at each specific charger rating. Figure 1-4 shows the charger ratings and the resulting vehicle replacement ratio. The replacement ratio is the comparison of the number of BEV vs ICE vehicles it would take to fulfil the operational requirements. In this case, 20 BEVs could fulfil the same operational requirements as 20 gasoline vehicles, for a 1:1 replacement ratio. In this case, an 11.5 kW port for each vehicle would minimize the replacement ratio while not oversizing the charger.

Select Charging Scenario

	Scenario	Charger Count	Rating	Vehicle	Battery Capacity	BEV Needed	ICE Needed	Replacement Ratio
☑	Scenario 1	20	11.5 *kW*	23'Cutaway	120 *kWh*	20	20	1
☐	Scenario 2	20	19.2 *kW*	23'Cutaway	120 *kWh*	20	20	1
☐	Scenario 3	20	30 *kW*	23'Cutaway	120 *kWh*	20	20	1
☐	Scenario 4	20	60 *kW*	23'Cutaway	120 *kWh*	20	20	1

Figure 1-4: Charging scenarios created for the HAT analysis of the microtransit fleet.

Figure 1-5 shows the full fleet sizing result. The 20 vehicles in daily operation can be served with a 120-kWh battery and an 11.5 kW charging port for each vehicle.

Electric Vehicles (BEV) | Conventional Vehicles (ICE)

Rating	Charger Count	Vehicle Type	Vehicle Size	Battery Capacity	Total Blocks	Feasible Blocks	ICE Needed	Equivalent BEV	Replacement Ratio
11.5 *kW*	20	Cutaway	23 *ft*	120 *kWh*	20	20	20	20	1

Figure 1-5: Results of charging scenario for the 20 BEVs covering daily operations.

Key Findings

- Route energy efficiencies calculated for wintertime conditions are 0.8 kWh/mile for the modeled ZEVs.
- The daily energy requirement for each vehicle is 71 kWh.
- 100% of the fleet vehicles are 'feasible' and daily routes can be completed on a single charge (typically overnight) with a 120 kWh battery throughout a 12 -year modeled lifespan of the BEV.
- For the fleet operating under average conditions modeled in this study, an 11.5 kW charger is appropriate to maintain vehicle operability.

Recommendations

- Under the modeled conditions, the HAT microtransit fleet can be electrified with 120 kWh battery vehicles that are charged once daily.
- HAT can use the battery sizing results to inform vehicle procurement and a long-term fleet management plan.

FTA Element 2: Current and Potential Funding Summary

HAT is planning to transition to a fully zero emission fleet. This analysis outlines the planned future funding that can support this transition and identifies additional funding sources that may be available to fill any funding gaps.

2

FTA ELEMENT 2

Address the availability of current and future resources to meet costs for the transition and implementation.

Current and Planned Funding for Zero Emission Vehicles

HAT receives funding from federal, state, and local sources.

GHMPO's 2021-2024 Transportation Improvement Plan identifies transit funds from 2021 through 2024. Table 2-1 below summarizes funds that may support the ZEV transition. Funds for future replacement and expansion vehicles can be directed towards ZEVs. A portion of funds for planned building and facility improvements and renovation could be directed towards vehicle charging or other support infrastructure for ZEVs.

Description	Funding Source	2021	2022	2023	2024	Total
Replacement Vehicles	Section 5307 (Urban Capital)	$1,300,000	$0	$0	$600,000	**$1,900,000**
Expansion Vehicles	Section 5307 (Urban Capital)	$0	$0	$625,000	$200,000	**$825,000**
Parking Lot & Building Improvements	Section 5307 (Urban Capital)	$0	$0	$0	$50,000	**$50,000**
Replacement Vehicles	Section 5311 (Rural Capital)	$0	$0	$0	$50,000	**$50,000**
Buy <30 Foot Bus For Expansion	Transit Funds for the Atlanta Urbanized Area in Hall County	$0	$0	$0	$800,000	**$800,000**
Rehab/renovate Administrative Facility	Transit Funds for the Atlanta Urbanized Area in Hall County	$0	$0	$0	$190,000	**$190,000**

Table 2-1 – FY 2021 - 2024 Hall Area Transit Capital Expenses

GHMPO has also requested to flex $391,424 in FHWA Carbon Reduction Funds (Y606) to purchase ZEVs under FTA oversight.

Potential Grants and Other Funding Sources

While funds allocated to HAT may be used to support the ZEV transition, additional funding sources are also available. The following programs may provide funding that supports planning for, transitioning to, implementing, operating, and maintaining zero emission vehicles.

Potential Grants and Funding Sources		
Agency	**Program**	**Program Description & Eligible Activities**
Federal Funding Sources		
United States Department of Transportation (USDOT)	Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program	**Program Type:** Competitive grants **Project Types supported:** Investments in surface transportation projects that will have a significant local or regional impact; Capital projects and planning projects. **ZE Transition Applicability:** Could be used for future ZEV purchases, related infrastructure, or planning assistance
	Transportation Infrastructure Finance and Innovation Act (TIFIA) loans, loan guarantees, and standby lines of credit	**Program Type:** Competitive grants **Project Types supported:** Projects of regional and national significance. **ZE Transition Applicability:** Unlikely to be needed for current HAT plans, but may be applicable for future significant projects or expansions.
	Bus and Bus Facilities Grant Program	**Program Type:** Competitive grants **Project Types supported:** Purchase, replacement, or rehabilitation of buses, related equipment, or bus-related facilities. WeGo vehicles should qualify as buses under the policy definition, which states that "a low or no emission bus is defined as a passenger vehicle used to provide public transportation that sufficiently reduces energy consumption or harmful emissions, including direct carbon emissions, when compared to a standard vehicle." The Buses and Bus Facilities Competitive Program has funded projects that do not include buses, including an Idaho Department of Transportation project to buy commuter vans and a Bloomington-Normal Public Transit System to fund microtransit vehicles. Direct recipients for the Buses and Bus Facilities Competitive Program must operate a fixed route service, although subrecipients do not have this requirement. HAT may seek opportunities to apply as a subrecipient. **ZE Transition Applicability:** Could be used to purchase ZE vehicles as replacements or for fleet expansion, purchase charging or other ZE fueling equipment and infrastructure, future facility expansions, and other elements needed for full fleet transition.
	Low or No Emission Vehicle Program - 5339(c)	**Program Type:** Competitive grants **Project Types supported:** Purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, or lease of required supporting facilities. **ZE Transition Applicability:** Could be used for future ZE bus purchases and related infrastructure.

Federal Transit Administration (FTA)	Accelerating Innovative Mobility Program	**Program Type:** Competitive grants **Project Types supported:** Activities leading to the development and testing of innovative mobilities. **ZE Transition Applicability:** HAT's on-demand WeGo service and integration with an app represents an innovative approach, making the service a potential candidate for this program.
	Zero Emission Research Opportunity (ZERO) Program (as part of consortium led by a nonprofit organization)	**Program Type:** Competitive grants **Project Types supported:** Efforts to research, demonstrate, test, and evaluate zero emission and related technology for public transportation applications. **ZE Transition Applicability:** Program is applicable to non-project organizations; however, HAT could participate as part of a consortium led by a non-profit.
	Mobility on Demand (MOD) Sandbox Demonstration Program - 5312	**Program Type:** Competitive grants **Project Types supported:** Planning, equipment, developing software, and piloting projects that demonstrate innovative Mobility on Demand. **ZE Transition Applicability:** HAT's on-demand WeGo service, which utilizes a technology platform including an app for users, is a potential candidate for this grant program.
State of Georgia Funding Sources		
Georgia Environmental Finance Authority	Georgia Solar Program	**Program Type:** Rebate program **Project Types supported:** Materials, design, and installation of ground or rooftop mounted solar. **ZE Transition Applicability:** TThis program could be used to build supportive charging infrastructure. Georgia Solar Program rebate funds are available to cities, counties, and K-12 public schools; HAT would need to partner with City of Gainesville or Hall County to take advantage of this program.
	Solar Resiliency Technical Assistance Program	**Program Type:** Technical Assistance **Project Types supported:** Creation of solar and storage resilient "critical facilities", including government facilities and transportation systems. **ZE Transition Applicability:** This program could provide technical assistance to aid HAT in creating more resilient facilities. Additionally, the program has provided funding for feasibility studies and installations.

Table 2-2 – Potential Grants and Funding Resources for HAT

Total Cost of Ownership

A financial analysis was conducted to model the existing fleet and compare against a fully electrified fleet. The primary inputs for the financial analysis used a combination of fleet specific and industry average capital and operational costs. The capital costs for the existing fleet reflect the price that HAT paid with their local funds. Annual mileage and fuel usage, along with the associated fueling costs, were obtained directly from HAT and used in the total costs for the existing fleet. For the simulated BEV fleet, electricity usage and costs were calculated for the unmanaged charging scenario, using the Georgia Power tariff *Power and Light Medium "PLM-14"*, summarized in Table 2-4. The electricity costs were calculated for each month and accounted for the average monthly temperature to scale the charging needs (for instance, the fleet will use less energy in April compared to January because of the mild springtime temperatures, requiring less HVAC load, allowing the battery to maintain charge longer and require less charging). The modeled BEV fleet assumes that 25% of the vehicle and charger costs will be covered by grants.

	Costs and incentives	Microtransit	Gasoline
CAPITAL	Vehicle Cost	$72,621	$200,000
	Vehicle Incentives	n/a	25% of cost
	Charging Equipment Costs Including Installation	n/a	$ 6,900 for a 11.5 kW charger port ($600/kW)
	Charging Infrastructure Incentives	n/a	25% of cost
OPERATIONAL	Fuel (Fleet Cost/yr)	$103,979	Electricity rate ($/kWh) = $0.11571 Demand charges ($/kW) = $8.47 Monthly charge: $141
	Maintenance ($/mile)	$1.50	$0.53

Table 2-4. Data inputs for the financial modeling module. The inputs are categorized by Capital and Operational costs. The numbers are on a per-vehicle and per-charger port basis unless otherwise stated.

Figures 2-1 through 2-3 show the results of the financial analysis for the HAT fleet. Capital costs, operating costs, and total costs (sum of capital and operating costs) are shown for the existing gasoline vehicles (ICE fleet) and the BEV fleet under the unmanaged charging scenario. While the capital costs associated with the existing ICE fleet are lower than the BEV fleet, the total lifetime costs are lower for a BEV fleet due to the much lower operating costs. The TCO analysis only compares the cost of vehicles required for daily operation, i.e., no spares. The lifetime cumulative costs at the 12-year mark are $10.8 million for the ICE fleet and $6.4 million for the BEV fleet.

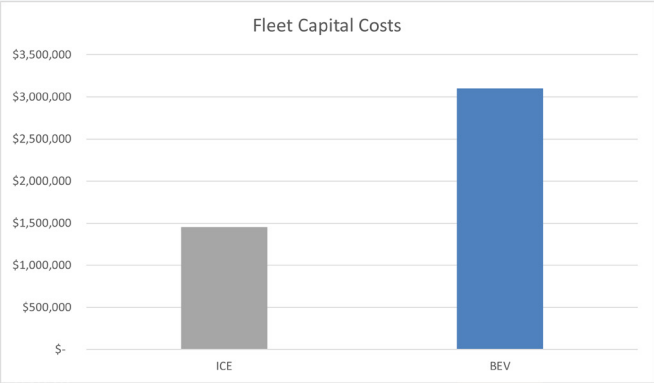


Figure 2-1: Initial fleet capital costs.

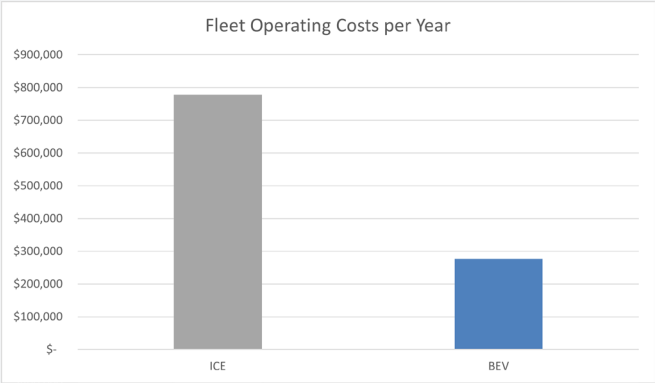


Figure 2-2: Fleet operating costs per year

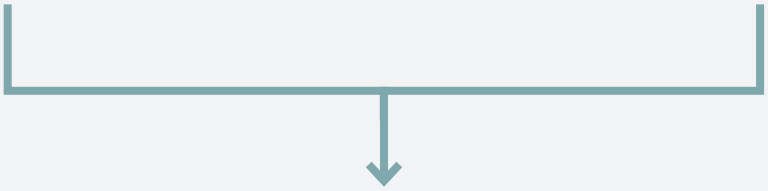
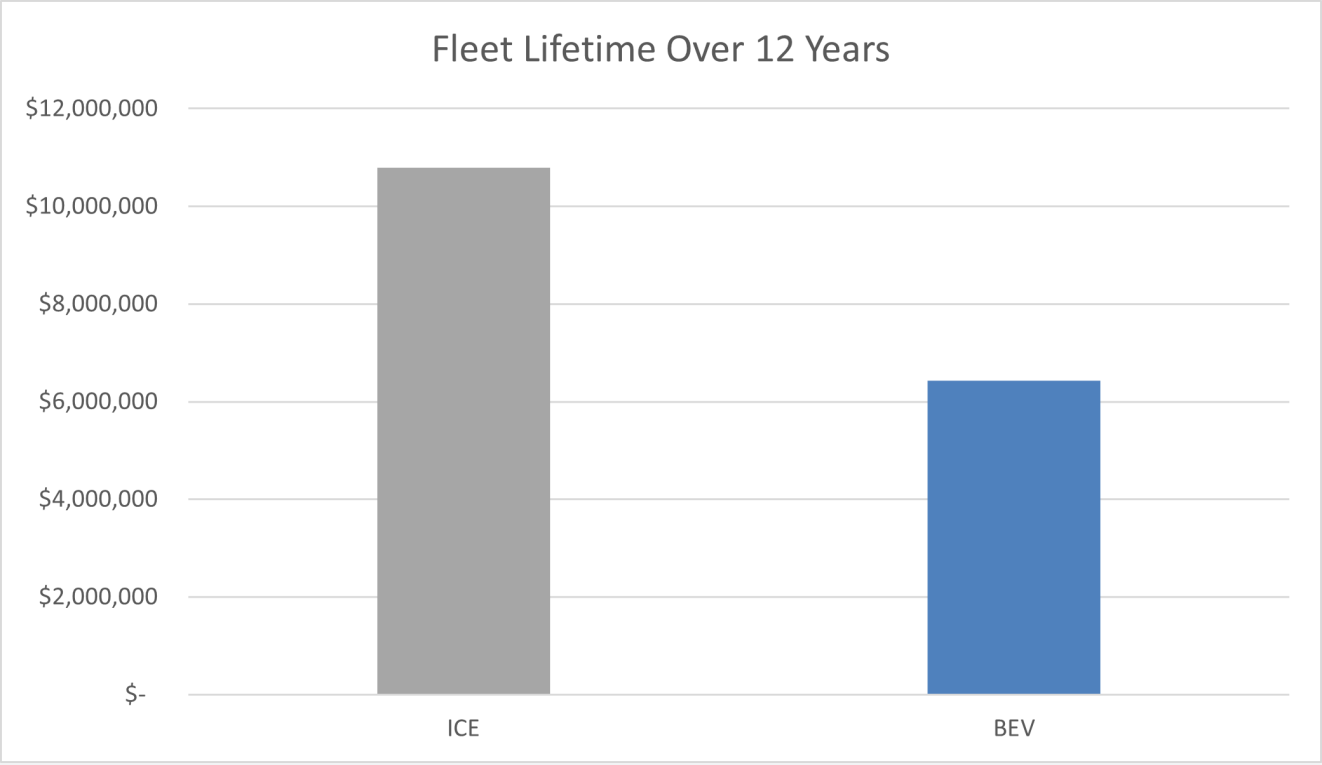


Figure 2-3: Fleet costs over 12 years. The total includes the initial capital costs, plus cumulative operating costs over 12 years.



TCC 28

Model-Based Emissions Analysis

The emissions analysis was performed to account for both greenhouse gases (GHG) and nitrogen oxides (NOx) emitted by the gasoline vehicle tailpipes, and emissions coming from electricity generation needed for vehicle charging. The analysis used emission factors (EFs) obtained as follows, and listed in Table 2-5:

- Gasoline tailpipe EFs
    - GHG EFs were obtained from the EPA Emission Factor Inventory. GHGs were reported as carbon dioxide equivalent (CO2e) which includes CO2, CH4, and N2O.
    - NOx EFs were obtained from the Argonne National Laboratory AFLEET tool which has state and vehicle age specific EF values (EF values are for Georgia, and 2021, which is the average fleet age).
- Electricity grid emissions
    - GHG EFs (as CO2e) and NOx EFs were obtained from the EPA Power Profiler eGRID Summary Tables, which lists specific EFs for each state.

For the modeled microtransit fleet, four charger options (11.5 kW, 19.2 kW, 30 kW, and 60 kW charging ports) were selected for evaluation. For each scenario, the analysis calculates the number of chargers and vehicles needed to operate the fleet at each specific charger rating. Figure 1-4 shows the charger ratings and the resulting vehicle replacement ratio. The replacement ratio is the comparison of the number of BEV vs ICE vehicles it would take to fulfil the operational requirements. In this case, 20 BEVs could fulfil the same operational requirements as 20 gasoline vehicles, for a 1:1 replacement ratio. In this case, an 11.5 kW port for each vehicle would minimize the replacement ratio while not oversizing the charger.

TCC 29

Emissions Factors (EFs)	CO_2e	NOx
Gasoline (lbs/gallon)	19.41	0.5
Electric Grid (lbs/MWh)	762.4	0.3

Table 2-5. Fuel specific CO2e and NOX emission factors (EFs) for gasoline and electricity used in the analysis.

Figure 2-4 shows the results of the emission analysis for the HAT fleet. CO2e and NOx emissions are shown for the existing gasoline vehicles (ICE fleet) and for the future fleet (BEV fleet).

The electrification of the HAT fleet would eliminate more than 103 tons of NOx emissions from the fleet. Electricity production for fleet charging would still emit CO2e, but still result in net GHG savings of 2,912 tons of CO2e for the fleet.

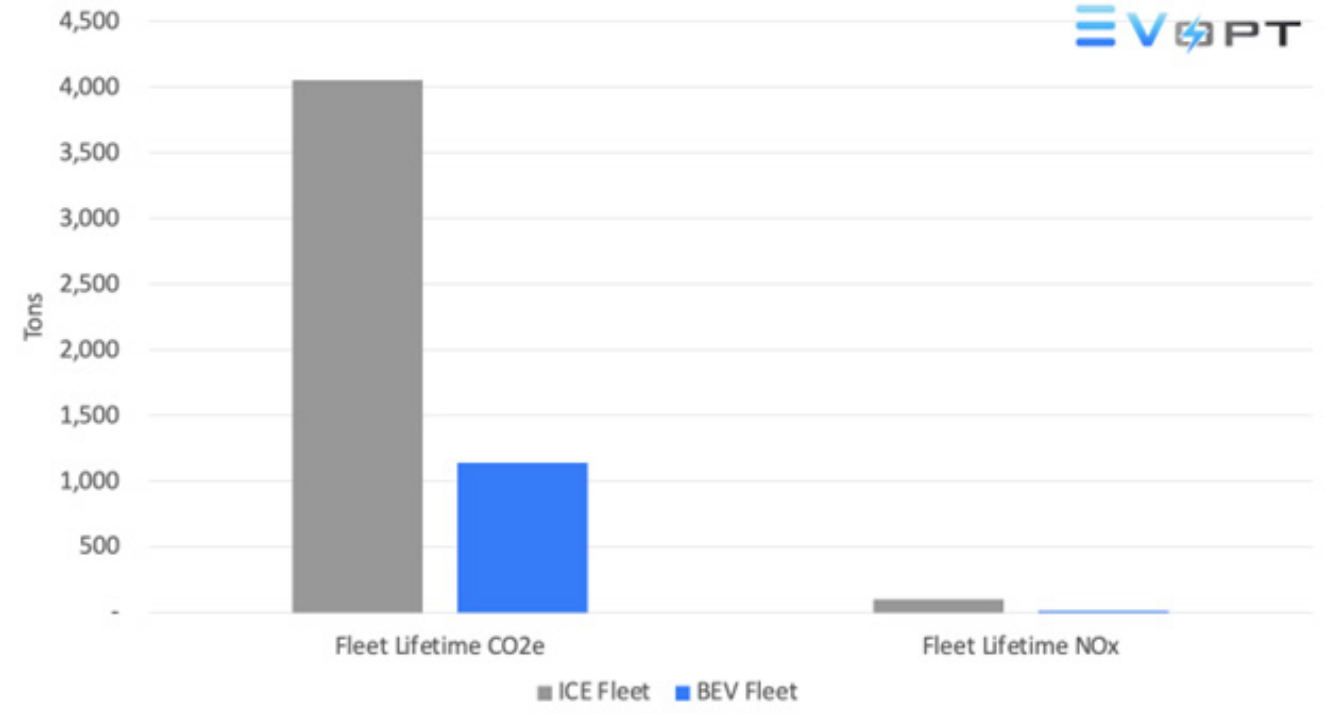


Figure 2-4: Emission analysis for the HAT microtransit fleet.

Key Findings

- The Buses and Bus Facilities Competitive Program requires that direct recipients of funds operate a fixed route transit system. HAT is not eligible to be a direct recipient of funds, but they may be eligible as a subrecipient through another state agency.
- Although WeGo vehicles are not vans, the system still qualifies as a public transit zero emission bus under federal definitions. Thus, even though HAT no longer operates any full-sized buses or cutaways, the system is still eligible for zero and low emission bus grants.
- Electrification of HAT fleet vehicles would save an average of $219,000 per vehicle over 12 years.
- Electrification of the HAT fleet would result in net GHG savings of 2,912 tons of CO2e and 103.97 tons of NOx for the fleet over 12 years.

Recommendations

- HAT should evaluate whether they may be eligible as a subrecipient for federal grants where they are not eligible as a direct recipient.
- If HAT transitions the fleet to BEVs on the most expedited timeline that is feasible and supported by available funding , the agency will significantly reduce operational costs as well as emissions.

FTA Element 3: Policy and Legislation Impact Analysis

HAT's transition to a zero-emission fleet is guided by federal, state, and local policies and legislation. Many policies support the fleet transition, while some may create challenges. The analysis below outlines key relevant policies, legislation, plans, and guidance and summarizes how they may impact or provide opportunities for HAT.

FTA ELEMENT 3

Consider policy and legislation impacting relevant technologies.

Federal Policies and Legislation Impact Analysis

Reducing carbon emissions is a global priority, demonstrated by the agreement of 196 countries at the 2015 United Nations Conference of the Parties in Paris to limit global warming to less than two degrees Celsius compared to pre-Industrial Revolution levels. Federal orders, legislation, and policies support this goal.

Federal Executive Order 14057

100% ZEV acquisitions by 2035

Federal Legislation, Regulations, And Guidance

Legislation, Regulation, or Guidance	Key Provisions	Impacts/Opportunities for HAT
Executive Order 14008: Tackling the Climate Crisis at Home and Abroad (2021)	• Creates a new position and climate task force and sets intention to participate in forums and develop plans to meet Paris Agreement • Sets policy for government-wide approach to climate, including procurement to support climate action including zero emission vehicles for government fleets. • Promotes assessment, disclosure, and mitigation of climate risks. • Develops climate finance plan and focuses on aligning investments with climate action. • Established Justice 40 Initiative and other environmental justice efforts	• Establishes policy supporting zero emission fleets. • May lead to available federal resources

Federal Legislation, Regulations, And Guidance		
Legislation, Regulation, or Guidance	**Key Provisions**	**Impacts/Opportunities for HAT**
Justice 40 Initiative	• Sets an intention to provide 40 percent of the benefits of federal investments to disadvantaged communities. • Focuses on investments related to climate change and clean energy	• Implementation of ZEVs may need to demonstrate the level of benefit to disadvantaged communities
Federal Sustainability Plan	• Plan to implement EO 14008 • ZEV strategies include optimizing agency fleet management, aligning financial planning, expanding charging infrastructure, improving workforce understanding for cultural change, seek seeking opportunities for State, Tribal, and local government fleets to benefit, and establishing a Zero Emission Vehicle Fleets Federal Leaders Working Group.	• Establishes policy supporting zero emission fleets. • May lead to available federal resources
Executive Order 14057: Catalyzing Clean Energy Industries and Jobs through Federal Sustainability (2021)	• Seeks to reduce emissions across federal operations. • Includes a goal of 100 percent zero emission vehicle acquisitions by 2035, with 100 percent of light-duty vehicle acquisitions to be zero emission vehicles by 2027.	• Provides detailed goals for zero emission vehicle acquisitions at the federal level. • May lead to available federal resources
Bipartisan Infrastructure Law (BIL) and Related Implementation (Pub. L. 117-58) (2021O	• Includes requirements for zero emission transitions for some Federal transit grant programs. • Federal Transit Administration (FTA) requires transit agencies applying for competitive funding to include a Zero Emission Transition Plan with the application for funding for • Grants for Buses and Bus Facilities Competitive Program (49 USC §5339(b)) • Low or No Emission Program (49 USC §5339(c))	• Requires completion of a Zero Emission Transition Plan to apply for certain federal grants
FTA Guidance for Zero Emission Transition Plans (Dear Colleague letter dated December 1, 2021)	• Provides guidance on preparing Zero Emission Transition Plans • Refers applicants to the Guidebook for Deploying Zero Emission Transit Buses published by the Transit Cooperative Research Program (TCRP) in 2021 for additional information.	• Establishes FTA Expectations for key grant programs. • TCRP Guidebook is a valuable resource for transit agencies at any phase of zero emission deployment, from initial needs assessment through monitoring performance and evaluating data
USDOT Innovation Principles	• USDOT Innovation principles support policy priorities related to creating high quality jobs, achieving racial equity, increasing opportunity, and tackling the climate crisis, driving innovation. • Seeks to increase adaptability and resilience to future-proof infrastructure. • Focused on empowering workers. • Allows for experimentation, learning opportunities, and collaboration. • Promotes flexibility and adaptability to technology changes	• Sets policy direction for transportation innovation. • May provide resources for testing and piloting new technologies. • May provide support for training and developing staff

Table 3-1 – Federal legislation, regulations and guidance supporting reducing carbon emissions

State of Georgia Policy and Legislation Impact Analysis

The State of Georgia's efforts to promote electric vehicles are based primarily on economic goals and partnerships. No specific state-level GHG, climate, or fleet transition plans were identified, and no state-level targets for emission reduction or ZEV adoption have been set. Georgia's Alternative Fuel Vehicle (AFV) Annual Fee presents a minor barrier in the form of an annual licensing fee per zero emission vehicle.

State Policies, Legislation and Plans		
State Policy, Legislation, Guidance	**Key Provisions and Actions**	**Impacts / Opportunities for Gainesville**
Alternative Fuel Vehicle (AFV) Annual Fee	• All-electric vehicles are subject to an annual licensing fee of $316.40 for commercial vehicles and $210.87 for non-commercial vehicles.	• This fee will increase the cost per vehicle per year and require HAT to ensure the requirements are met

Table 3-2 – Georgia State Policies

Local Plans and Policy Impact Analysis

There are several comprehensive and mobility plans for the Gainesville-Hall County region that are in alignment with HAT's plans for a full transition to a zero-emission transit fleet.

The GHMPO 2020 Regional Transportation Plan was adopted in May 2020. One of the Goals and Planning Factors is protecting the environment, promoting energy conservation, and promoting consistency between transportation improvement and other planning efforts. The plan also identifies Environment in its Goals and Objectives, specifically the development of a transportation system that conserves energy, improves air quality, and protects natural resources.

The GHMPO FY2024 Unified Planning Work Program (UPWP) was updated in March 2023. The UPWP supports Planning Emphasis Areas outlined by the FHWA and FTA that are supportive of HAT's zero-emission transition, including Tackling the Climate Crisis, Equity and Justice, and Planning and Environmental Linkages. Key UPWP activities and products highlight HAT transit expansion and improvement, including improvements for WeGo microtransit, in FY2024, and this current ZEVTP.

The Gainesville 2040 Comprehensive Plan was updated in June 2022. The plan highlights the success of HAT's WeGo service in providing an innovative solution that is responsive to the needs of riders. The plan also includes Environmental Sustainability as one of the ten Community Objectives.

Key Findings

- The ZEVTP fulfills a wide variety of policy goals and requirements, including federal climate goals and local goals to continue to enhance mobility while protecting the environment and promoting energy conservation.
- Although WeGo vehicles are now vans, they appear to still qualify as a “low or no emission bus” under federal program definitions and would thus be eligible for grant funding.
- Georgia’s Alternative Fuel Vehicle (AFV) Annual Fee presents a minor barrier in the form of an annual licensing fee per zero emission vehicle.

Recommendations

- Ongoing mobility and transit planning efforts should consider the impact of recommendations on the ZEVTP. When any substantial changes to transit service are planned, the ZEVTP timeline and recommendations may require slight adjustments to align with future transit services.

FTA Element 4: Evaluation of Current and Future Facilities

FTA ELEMENT 4

Include an evaluation of existing and future facilities and their relationship to the technology transition.

Transitioning to a ZE fleet may require modifications to or construction of transit facilities to support ZEVs, such as charging and fueling stations or maintenance facilities and equipment. This section outlines existing, proposed, and potentially needed facilities. The facilities assessment includes analysis of the existing electrical capacity at the facility where the electric vehicles would be charged.

Transit fleet operators need to make sure that implementing and deploying new technologies doesn't create major disruption to service. For a fleet running on electricity, power disruptions are a concern, as any grid-level disruption can effectively disable their fleet. Thus, HAT must ensure that they can continue to operate their fleet and provide critical mobility services even in the event of a grid outage.

This section also outlines the social and environmental context of HAT operations to provide an initial screening of any future facilities recommendations. As HAT develops future facilities and services, demographic and social factors should be considered to inform equitable distributions of the benefits and burdens associated with transit services and facilities. When possible, facilities should not be placed in areas at risk due to environmental hazards such as flooding, and potential environmental and climate hazards, especially those intersecting with areas of social vulnerability, should be incorporated into planning a resilient transit system.

Existing & Planned Facilities

Transit Centers and Maintenance Facilities

HAT operates a transit facility and utilizes a City fleet maintenance facility, both located in Gainesville. The agency is planning for expansion and changes in vehicle types. The parking lot at the transit facility at 687 Main Street SW Gainesville, GA 30501 is at maximum capacity and the agency is searching for additional property that would allow parking of 10-15 additional vehicles.

EV Charging Infrastructure

There is currently no EV charging infrastructure in place as part of the HAT system. As part of the transition, the agency will have to install new chargers and related EV infrastructure.

Distributed Energy Resources and Resiliency Analysis

A transit depot with charging infrastructure and distributed energy resources (DER) assets to support a fleet of electric vehicles has the potential to function as an advanced electric grid that can charge the fleet at the lowest possible cost and lowest impact on the grid, while generating and storing energy.

A key point of consideration for an all-electric fleet can be the ability to disconnect from grid and fully support the local loads during an outage (i.e., island mode). This can be achieved by implementing a microgrid at the depot. Microgrids also provide the opportunity to integrate local renewable energy generation to reduce lifecycle carbon emissions and increase resilience.

A DER and resiliency analysis was performed to help HAT plan risks associated with power disruptions for a long-term electric fleet management scenario. The analysis consisted of estimating a solar photovoltaic (PV) output from the current HAT depot and designing an integrated solar PV and battery energy storage system (BESS) that can function as a local microgrid when coupled with a controller software that can direct power generated and stored onsite to the vehicle charging stations. In such a conceptual design, the microgrid can instantaneously island itself in the event of a power outage, allowing HAT to operate their fleet and thus providing the needed resiliency, in addition to reducing electricity costs through local energy generation and charging management measures.

A microgrid is a local, self-sufficient energy system that uses distributed energy resources to produce power. A microgrid serves a local area or specific purpose, such as charging a transit fleet.

An assessment of solar PV generation potential of the HAT main facility was prepared. The analysis was conducted with the software PVWatts, which allows the user to design a solar array system and to estimate the solar output potential of a location on an annual basis by considering seasonality (see Figure 4-1). The analysis indicates that the HAT rooftop and carport have approximately 262 kW DC solar peak generation potential, corresponding to 367,121 kWh of annual production. To put these numbers in perspective, the fully electrified HAT fleet of 20 BEVs would require 249,517 kWh of charging capacity annually at the depot.

Thus, solar PV could completely offset the charging load from the vehicles.

Figure 4-1: Solar PV generation potential estimated for the HAT facility, including rooftop and carport solar.

This microgrid system was modeled with a BESS rated at 250 kW and 500 kWh coupled with the onsite solar array of 262 kW. The DER analysis results were used to explore resiliency options for the fully electrified fleet. Assuming that the BESS is fully charged at the onset of the power outage, the analysis calculated the number of hours that the entire fleet can operate in resilient mode.

Table 4-1 shows the length of operations that could be sustained in the case of a grid outage occurring at 1 AM on a weekday and the solar array and BESS supporting all charging loads (representing a worst-case scenario). During the winter months when solar production is the lowest and HVAC requirements are high, full operations can be sustained for about 22 hours. During the milder spring and fall months when HVAC requirements are low, operations can be sustained from 73-156 hours. In the summer months when HVAC requirements to cool the buses are high operations can be sustained for 23-49 hours.

Month	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Fully Electric Fleet	22	22	24	97	156	49	23	25	73	156	43	24

Table 4-1: Estimated daily hours of operation in resilient mode during a hypothetical power outage. In this simulation, the power to the vehicle chargers is supplied by solar onsite generation combined with a BESS system in a microgrid design.

TCC 38

Figure 4-2 shows a more detailed simulation for the BEV fleet in the month of August. It is worth noting that power outages are most likely to occur during the coldest and hottest months of the year due to winter snowstorms or blackouts that are caused by grid stressors such as high air conditioning usage in summertime or hurricane-related damage. In these instances, the HAT fleet operator would need to decide which services can be discontinued and which ones are most essential to be covered in a power outage situation.

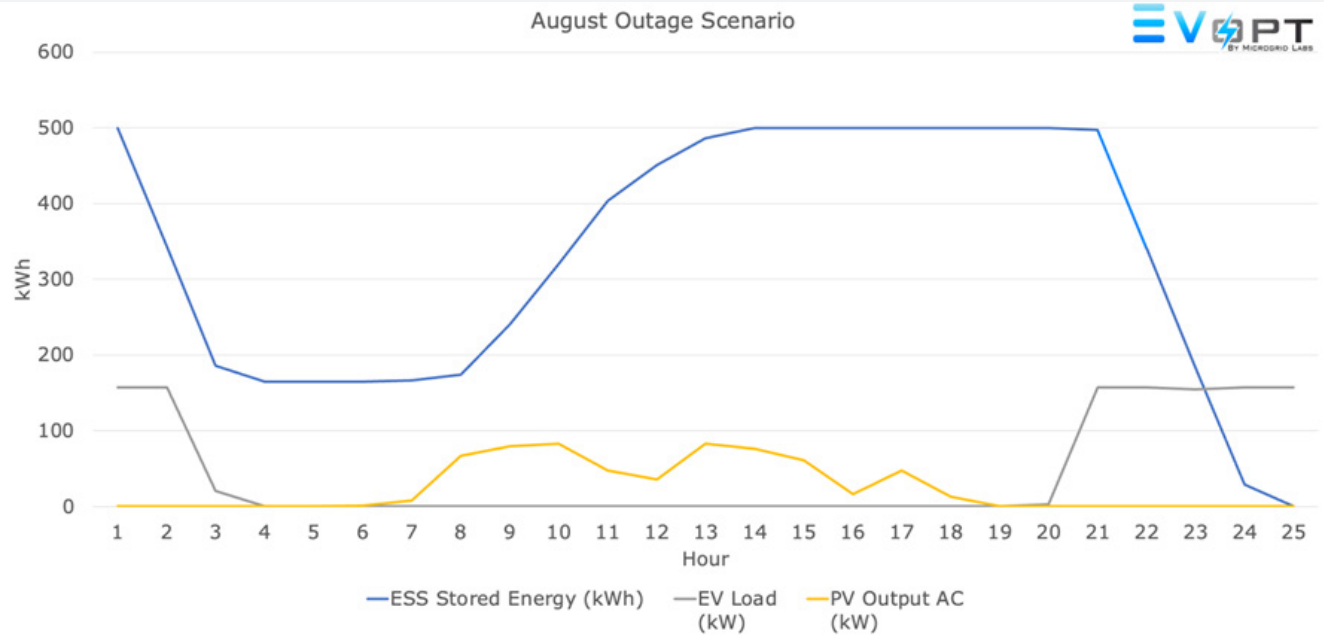


Figure 4-2: Simulation of a grid outage in the month of August with solar output (kW), BESS stored energy (kWh), and needed EV load (kW) for the fleet 20 BEVs charging fully at depot.

In the long-term, HAT will have to prepare emergency response plans that incorporate resilient operation scenarios. While power outages are often impossible to predict, accurate weather forecasting can allow operators to predict in advance when an outage event is likely to occur and take the appropriate measures to prepare the system by ensuring BESS are completely charged and altering the operating strategy as necessary.

Context/Screening for Future Facilities Planning

Social and Environmental Context

HAT provides microtransit services in the Gainesville-Hall County area. As ZEVs are introduced into the microtransit fleet, the social and environmental context of this service area should be considered to ensure that that transit services are as equitable and resilient as possible.

Social Context and Demographics

The deployment of zero emission vehicles has the potential of reducing emissions of GHGs and other criteria pollutants that are harmful to vulnerable populations including those served by transit. HAT provides reliable and safe public transportation services to Gainesville/Hall County community members, which include vulnerable populations that depend on the existence of these public services.

Social context and demographics were examined using two tools: the Social Vulnerability Index (SVI) and the Climate and Economic Justice Screening Tool developed to support the federal Justice 40 initiative.

TCC 39

Social Vulnerability Index

The Social Vulnerability Index (SVI) was created by the Centers for Disease Control (CDC) and Agency for Toxic Substances and Disease Registry (ATSDR) to provide a snapshot of the relative social vulnerability, or risk of negative effects caused by external stresses on human health, of communities. The SVI provides an aggregate view of sixteen variables as reported by the U.S. Census to provide a snapshot of the overall vulnerability level.

The following map shows the SVI for HAT's service area. The areas with the highest vulnerability are in the central and south-eastern regions of Gainesville-Hall Metropolitan Planning Organization (GHMPO).

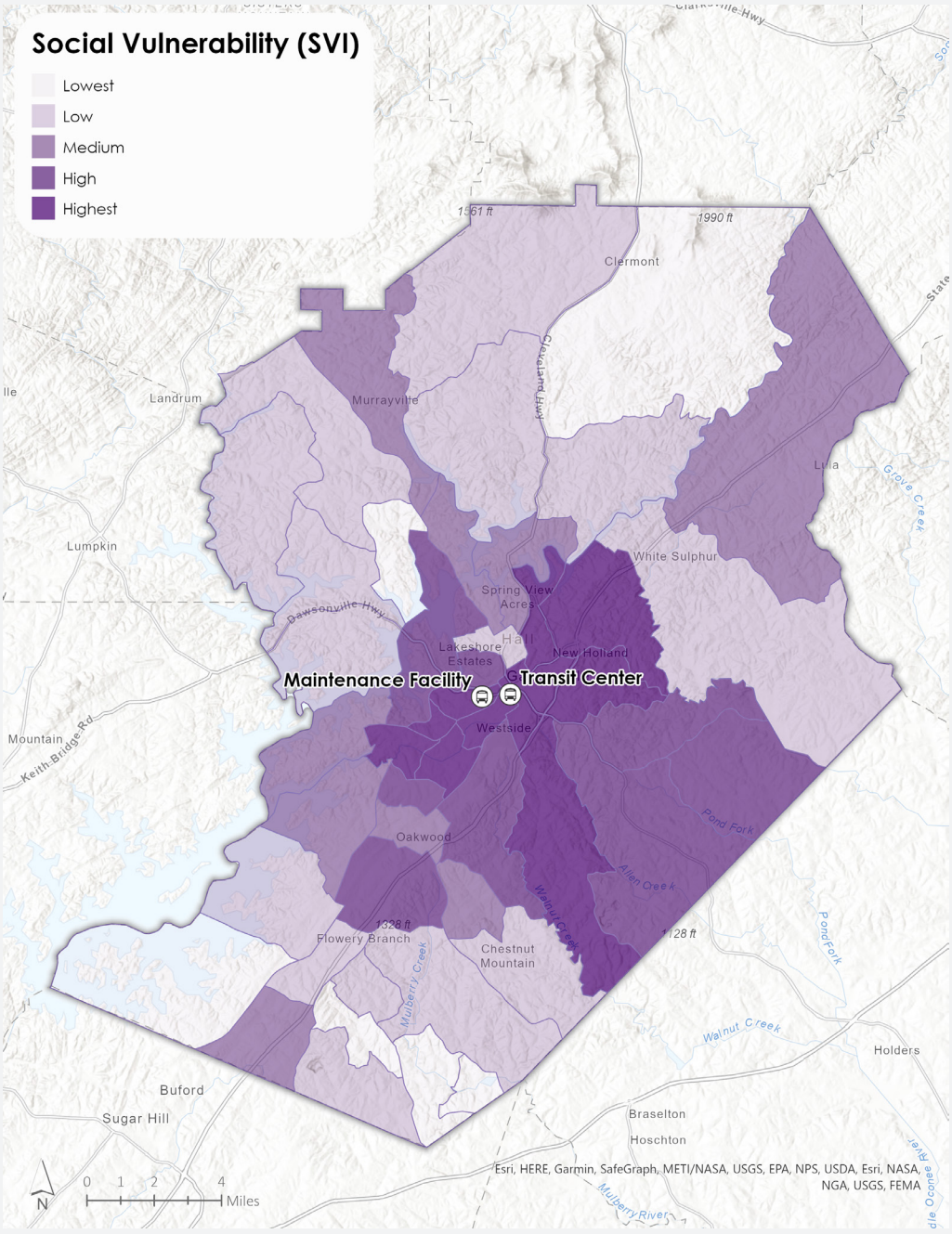


Figure 4-3: Social Vulnerability Index Map

TCC 40

Climate and Economic Justice Screening Tool

The Federal Justice 40 initiative sets a goal of delivering 40 percent of the overall benefits of many Federal investments to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. The Climate Justice and Economic Screening Tool is a mapping tool that identifies Census Tracts that are considered disadvantaged because they demonstrate a combination of socioeconomic and burden thresholds identified in the tool. There are similarities between the results of this tool and the SVI, but they are not identical. The tool includes 31 different socioeconomic factors and environmental burdens. Eleven census tracts in Hall County are identified as disadvantaged. The map identifies these Census Tracts. All disadvantaged census tracts in Hall County meet the threshold for low income. More detailed maps showing the parameters determining the disadvantaged status of the census tracts identified through the Justice40 screening throughout Hall County / HAT's service area are shown in Appendix A along with detailed on the thresholds met for each designated tract.

The locations of disadvantaged populations and their characteristics can inform equitable distribution of transit services and benefits. Many vulnerable communities are exposed to higher levels of hazards like air pollution. Risk factors like asthma can increase the severity of impacts related to these exposures. Replacing conventional vehicles with ZEVs improves air quality and reduces exposure to harmful emissions on and near roads. The benefits of ZEVs should be distributed as equitably as possible.

Future service and facilities planning should incorporate demographic and social characteristics to ensure equitable distribution of impacts. While the impacts of implementing ZEVs are generally positive, facilities may have negative impacts such as increased noise or traffic. Potential facility locations should be assessed to ensure that negative impacts are not increasing in already heavily burdened communities, while benefits are distributed equitably and in support of Justice 40 goals.

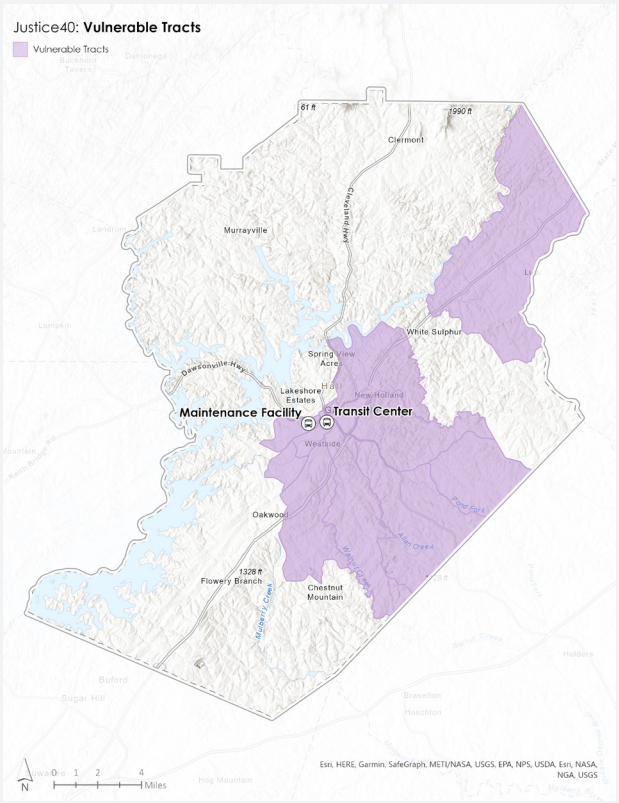


Figure 4-4: Justice40 Vulnerable Tracts

Environmental Context

Gainesville's topography consists of creeks and streams in and around the city. There are various environmentally sensitive areas located throughout the city, including streams, the Chattahoochee River and Lake Lanier. All surface waters are protected by ordinances stipulating setbacks ranging from 25-150 feet. Hall County and the City of Gainesville employ development standards that prevent land disturbance and encourage maintenance of local topography. Gainesville has a humid subtropical climate with hot summers and cold winters. The summers are hot and muggy, while the winters are short and very cold. The temperature typically varies from 34°F to 88°F and is rarely below 22°F or above 94°F. Areas susceptible to severe heat must be analyzed to determine locations that may need service routes and shelters for stops.

TCC 41

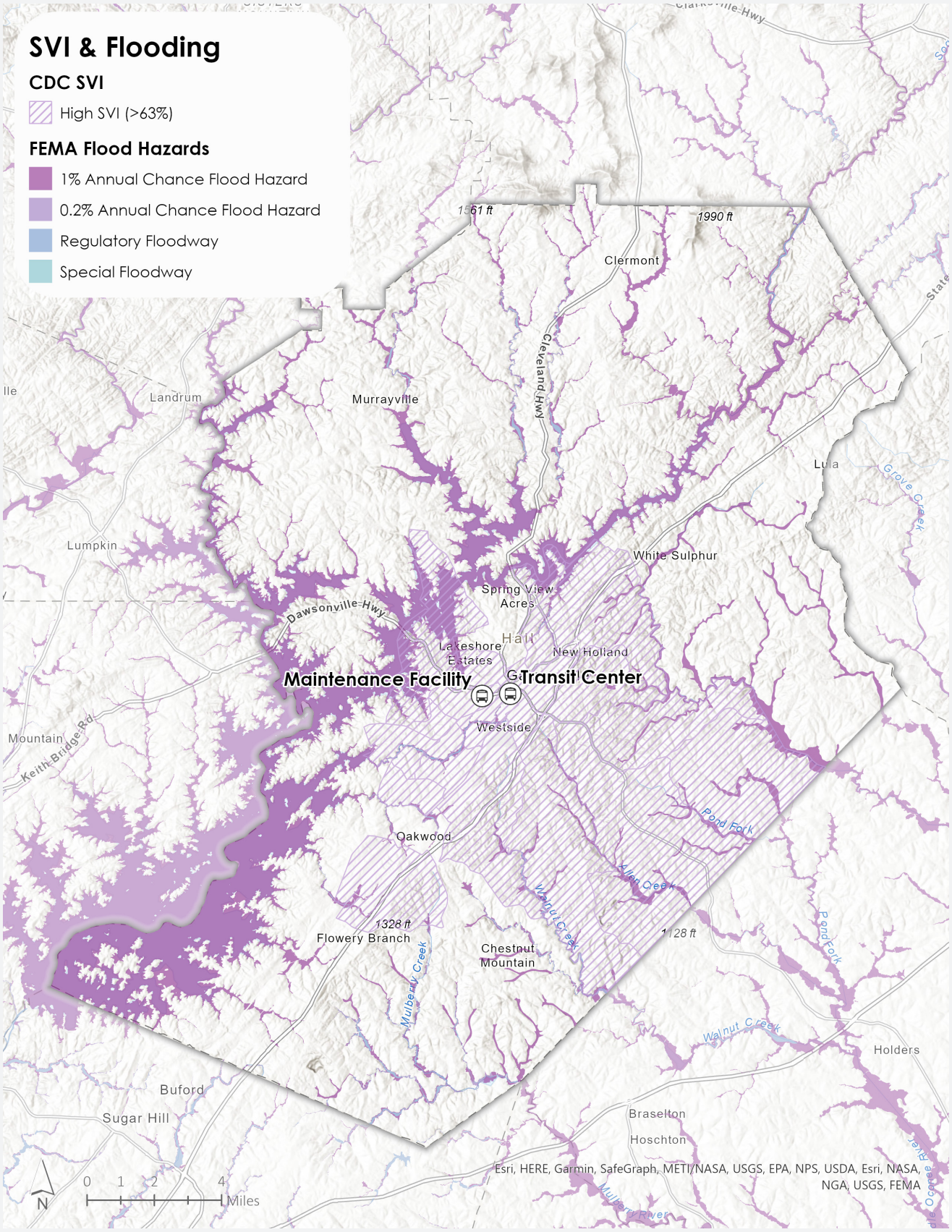


Figure 4-5: Social Vulnerability Index & Flooding Map

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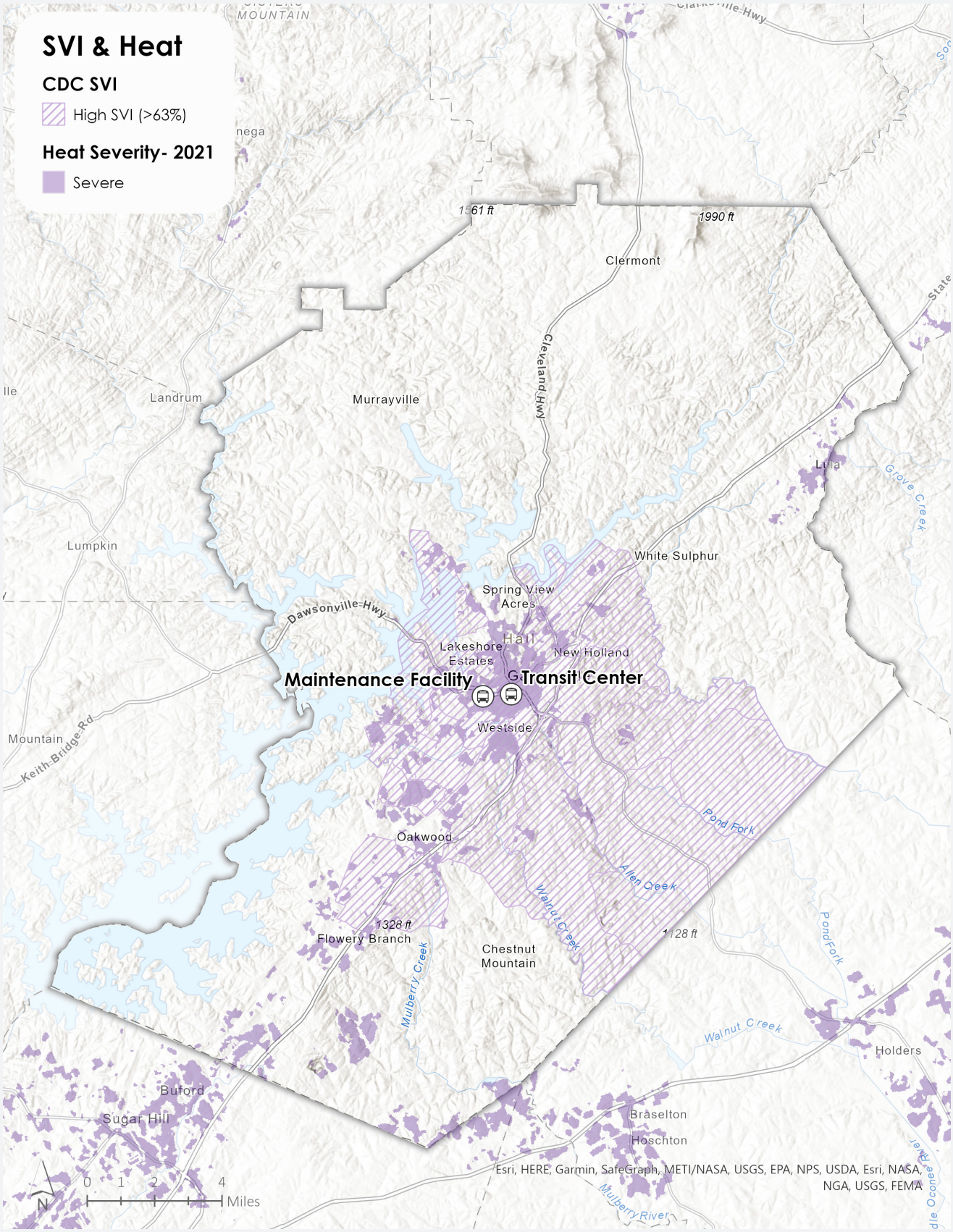

Figure 4-6: Social Vulnerability Index & Heat Map

TCC 43

The maintenance facility and transit center are located in areas with relatively high social vulnerability and severe heat risk. Potential flooding is unlikely to affect current HAT facilities but could disrupt service and should be considered when siting future facilities. As the risk and severity of storms, wildfires, floods, and other climate-related events increases, planning for effective emergency management and response is essential. The potential for power outages or other fuel disruptions should be considered when planning for a resilient ZE fleet.

Key Findings

- Analysis indicates that the HAT rooftop and carport have approximately 262 kW DC solar peak generation potential, corresponding to 367,121 kWh of annual production, completely offsetting the charging load from the vehicles.
- Areas with the highest social vulnerability are in the central and south-eastern regions of Gainesville-Hall Metropolitan Planning Organization (GHMPO).
- HAT's maintenance facility and transit center are susceptible to severe heat risk while potential flooding is likely to affect routes and services.

Recommendations

- HAT should consider the implementation of a microgrid backed by onsite solar generation and a BESS to enhance resiliency and ensure that fleet operations can be sustained in the event of a grid outage.
- As ZEVs are introduced into the microtransit fleet, the social and environmental context of this service area should be considered to ensure that that transit services are as equitable and resilient as possible.

FTA Element 5: Utility Stakeholder and Energy Considerations

HAT's transition to a ZE fleet will require coordination with other entities. Utility stakeholders are particularly important, as ZEVs can create additional demand on utilities. Partnerships also offer opportunities to support implementation of innovative approaches and new technologies. This section outlines the existing and potential stakeholder partnerships that can support the ZEVTP.

FTA ELEMENT 5

Describe the partnership of the applicant with the utility or alternative fuel provider.

In order to support conversations with utilities and other potential partners, a predictive load profile with peak power demands was calculated based on the modeling analysis in Element 1. HAT can use this information to engage with Georgia Power and anticipate and plan for energy requirements and necessary infrastructure upgrades.

Utility Stakeholders

It is important for transit agencies transitioning to a ZEV fleet to work closely with utility providers. Transit agencies need assurance of a reliable supply for its power and other needs, while utility companies need to understand the agency's needs and any potential impact of the transition on overall demand.

Hall County's energy utility is Georgia Power. Georgia Power's Electric Transportation Make Ready Program can reduce the cost of charging infrastructure; chargers in projects included in this program are designed, installed, owned, and maintained by Georgia Power.

Other Stakeholders and Partnerships

While partnerships with utility stakeholders are critically important for fleet transition. HAT may also wish to pursue partnerships with other entities that can provide additional expertise or support opportunities for funding. For example, partnerships with universities or manufacturers can provide opportunities to participate in testing new technologies or systems. Community organizations or non-profits may be able to provide support or help with equitable implementation of ZEVs and there are funding programs that require partnerships, for example FTA's Zero Emission Research Opportunity (ZERO) program provides funds to consortiums led by non-profit organizations.

The Partnership Matrix identifies utility stakeholders as well as other entities that HAT may consider partnering with in the future.

TCC 45

Partner Organization	Partner Type(s)				Type	Description
	Utility	Energy	Climate	Community		
Climate Reality Project: Atlanta Chapter		X	X	X	Non-profit	Climate Reality Project is a non-profit that works on training and educating people about climate solutions and energy transition around the world. The organization is working on major steps towards zero emissions. HAT may partner with the organization to enable knowledge sharing and best practices on reducing community and municipal emissions and to help staff and commuters learn about transit climate solutions.
Electric Mobility and Innovation Alliance Barton Lowrey, Director BLowrey@georgia.org Georgia Department of Economic Development Technology Square, 75 5th Street N.W. Suite 1200 Atlanta, GA 30308	X	X			Public	Led by the Georgia Department of Economic Development, the Alliance supports the growth of electric vehicles and innovation throughout the state of Georgia. Their latest report (2021 -2022) identifies electrification of fleets as an opportunity. HAT may benefit from additional partnerships and opportunities to aid in the ZEV transition through the Alliance
Georgia Power				X	Public	The transition to ZEVs will increase the demand for electricity and the consumption of it by the agency's facilities. A partnership with Georgia Power will enable the agency to work with the utility provider to manage demand during peak times, negotiate pricing, help set up and manage required infrastructure to support charging, or develop distributed energy resources such as solar projects.
Lanier Technical College, Gainesville				X	Public	HAT and the City can benefit from partnerships with educational institutions that would enable knowledge sharing and training of staff. Lanier Technical College's provides an Automotive & Transportation Technologies program that may be relevant to fleet maintenance and transition. During the agency's fleet transition to zero emission, graduates could be recruited and/or allowed to intern at the City's shops and the City may explore options to share knowledge and technical expertise with the college.

Partner Organization	Partner Type(s)				Type	Description
	Utility	Energy	Climate	Community		
Southern Alliance for Clean Energy, Georgia Chapter		X	X	X	Private, Non-profit	The Southern Alliance for Clean Energy (SACE) promotes responsible and equitable energy choices to ensure clean, safe, and healthy communities throughout the Southeast. SACE works with utilities, decision makers, and in local communities to promote clean energy. HAT may seek out technical assistance and opportunities to connect with additional partners from SACE.

Table 5-1 – Potential Partnership Stakeholders for HAT

TCC 47

Energy Considerations

Charging Demand

The load profile analysis provides the daily energy load profile resulting from the fleet charging needs at a specific charging rate, and the size of the transformer needed to support fleet charging.

Two load profiles are possible: 1) unmanaged, e.g., load generated by vehicles charging at full rated power until the battery is fully charged; and 2) managed, e.g., optimized charging scenario during which vehicles charge at a lower power rating and for longer time as allowed by the vehicle schedule to maintain uptime; this optimization can be achieved through a dedicated charging software. The 11.5 kW AC chargers do not have the capability to be managed, and since the HAT fleet only requires an 11.5 kW charger, managed charging was not considered as a viable strategy.

Figure 5-1 is an example of the load profile calculation output and shows the load profile for the simulated microtransit fleet of 20 BEVs covering the daily operations and charging at 11.5 kW in depot. The fleet has a peak power demand of 230 kW.

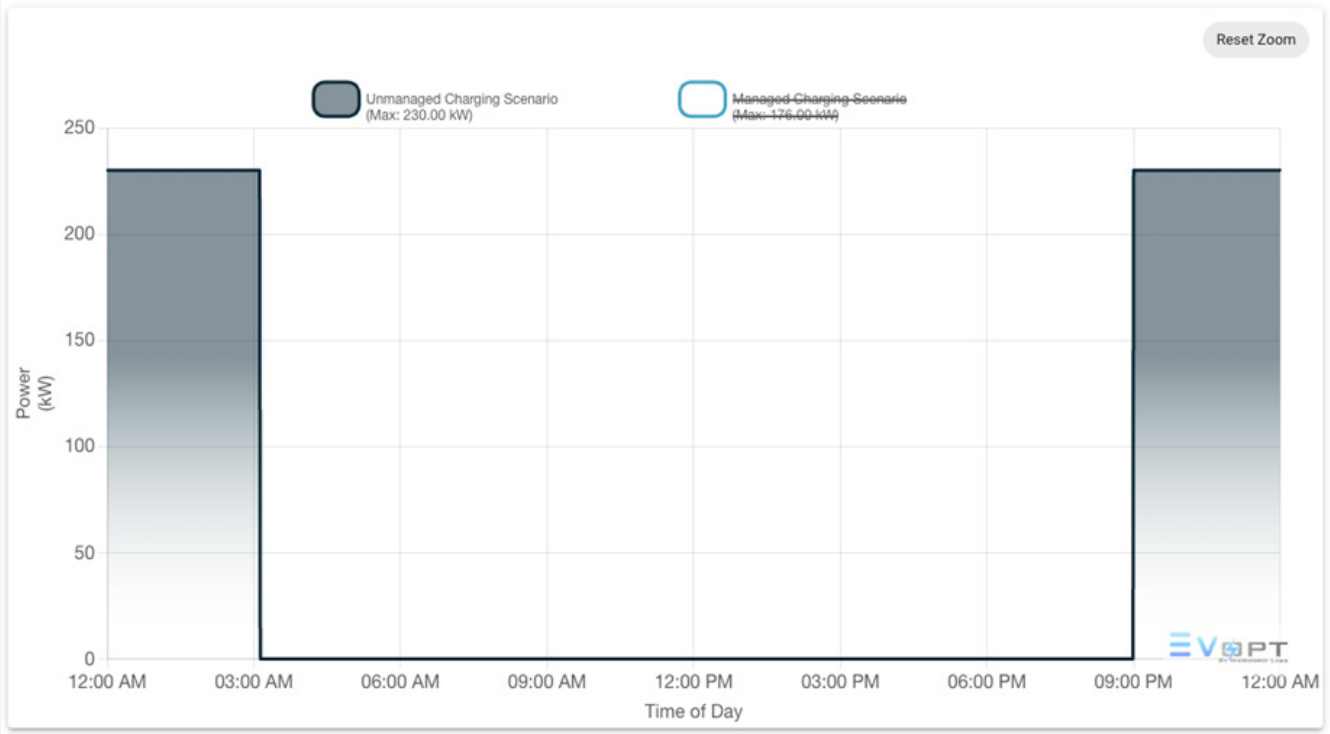

Figure 5-1. Results of energy analysis for the depot, showing unmanaged charging profiles for the fleet of 20 BEVs charging at 11.5 kW.

TCC 48

Table 5-2 shows the projected peak power demands and associated transformer size required at the maintenance facility for the entire electric fleet.

Electrification Scenario	Fleet Makeup	Peak Power Unmanaged	Minimum Transformer Size Unmanaged
100% Electrification	20 BEVs	230 kW	320 kVA

Table 5-2. Results of energy analysis for the depot with the fully electrified fleet.

Key Findings

- Partnership opportunities are available to support the transition to zero emissions in support of climate, energy and other goals.
- The deployment of the 20 microtransit vehicles charging in-depot at 11.5 kW will generate a daily peak power demand of 230 kW and will require a minimum transformer of 320 kVA.

Recommendations

- HAT could explore partnership with Lanier Technical College through their Automotive & Transportation Technologies program.
- Collaborating with community climate and energy partners could support HAT's transition efforts through education, engagement, or funding partnerships.
- HAT can use the results of the energy load profile to discuss the pathway to full fleet electrification with the local utility to assess what infrastructure is needed and plan the timing and costs of upgrades accordingly without causing service disruption.

FTA Element 6: Human Resources Analysis

Considering the fleet for Hall Area Transit will mainly consist of transit vehicles built on light-duty EV platforms, the transition to an EV, be it battery-electric or fuel-cell-electric, will follow a similar track to that of an automotive fleet. The City's fleet technicians should already have skills in maintaining a similar fleet driven by internal-combustion engine (ICE) power and are therefore skilled in areas such as Suspension and Steering; Brakes; Climate Controls; and Low Voltage Electrical, and the upskill for the maintenance staff is, therefore, less dramatic. However, considering that the staff have had no official training on HV Safety, Electric Propulsion, Energy Storage Systems, there is still a significant gap that needs to be closed when making the transition to a zero-emission fleet.

FTA ELEMENT 6

Examine the impact of the transition on the applicant's current workforce by identifying skill gaps, training needs, and retraining needs of the existing workers of the applicant to operate and maintain zero-emission vehicles and related infrastructure and avoid displacement of the existing workforce.

Suggested Approach

Under the Bipartisan Infrastructure Law, transit agencies using the expanded Low or No Emission Program or the Grants for Buses and Bus Facilities Competitive Program to purchase Zero-Emission Bus ((ZEB) battery electric, hydrogen fuel cell, or rubber tire trolley buses powered by overhead catenaries) must submit a plan for implementing a transition to a Zero Emission Bus (ZEB) fleet. To assist agencies with an examination of the impact of transition to a zero-emission fleet on the current workforce, the Federal Transit Administration (FTA) has issued information on a Zero Emission Fleet Transition Plan Element 6: Workforce Evaluation Tool consisting of eight (8) questions:

1. *Identify the skills, training and credentials required to maintain and operate the proposed fleet and associated infrastructure.*
2. *Describe how the skills of existing workers will be assessed. Identify the estimated number and percentage of workers who may be impacted by this transition as a result of new skills requirements.*
3. *Assess and identify any current or anticipated gaps between necessary workforce skills identified above and the existing baseline skills/credential requirements of the current workforce.*
4. *Describe the training plan, including strategies and partners that will be deployed and resourced to help the agency transition existing workers to meet new skills requirements. Identify any additional staff that will need to be recruited and hired.*
5. *Identify the process by which training programs and partners will be identified and selected.*
6. *Indicate the role training resources will play in supporting the recruitment, training and development of new workers, and what steps are being taken to ensure non-displacement of the existing workforce.*
7. *To demonstrate steps to avoid displacement, explain how current workers were engaged in the development of these transition strategies and how they will be consulted in finalizing any plans and training to meet the needs of this transition.*
8. *Identify how training needs will be paid for.*

TCC 50

Skills, Training, and Credentials Needed

The City's technicians are likely already skilled in Basic Electrical and Electrical Theory topics, and have proficiency in use of Digital Multimeters (DMMs) so refresher training should be pursued to guarantee that the skills are recently solidified to establish the base on which the rest of the required training can build. Courses on HV Safety and PPE are imperative and must be prioritized for any staff that will encounter HV equipment. After establishing the foundational and safety skills, ZEB Familiarization needs to follow to create a very high-level overview of the equipment. Finally, OEM-specific training should close out the process of upskilling with the expectation that refresher training take place annually to update the learners of any changes in vehicle functionality, and requalify on HV safety.

Operators require less training on ZEB equipment, but they should not be overlooked. In any instance of new equipment, Operators should receive at least a half-day class of instruction on safe and efficient use of the vehicle. An Operator that is trained to drive a ZEB efficiently can mean the difference between 80 miles of operation on a single charge, and 100 miles (depending on the battery sizing).

Administrative staff should also not be overlooked as they will need to be aware of safety response measures, and some may need to understand the capabilities and limitations of the equipment in operation. These personnel should receive ZEB Familiarization training at a minimum. Typically, four (4) hours of introduction will suffice.

Assessment of Existing Worker Skills

The most effective way to identify the skills of exiting workers is through a well-written skills gap analysis. This analysis involves a questionnaire that is answered by the relevant personnel, and the responses are analyzed to understand where the workforce is deficient in certain skills. The skills gap analysis can also be used to conceptualize how well the training program is working for HAT staff. It is extremely important that the any staff or contractors administering the skills gap analysis emphasize that the data collected will not result in any punitive measures against the respondents, rather that it will help the administrative staff more effectively target the necessary training. Further, written protocols forbidding punitive actions against staff should be implemented to prevent the possibility of collecting flawed data.

Skills Gap

As mentioned in the introduction to this section, the maintenance staff will have an advantage in the transition to zero-emission technologies. The main focus needs to be on training for the new technologies that differ from current designs, HV safety, and PPE. Operators will need training on how to efficiently drive any zero-emission vehicles with emphasis on the fact that their ability to drive efficiently will seriously impact the operational range of the vehicle. Administrative staff will need to receive introductory-level training on zero-emission vehicles to best prepare for ways in which the operational characteristics will impact their work, and the response procedures necessary in case of emergency.

Training Plan

Below are resources immediately available to HAT to follow through on the recommended actions.

- Electrified Transportation Pro+ Training and Certification program
  - Resource for identifying skills needed to maintain and repair ZEBs.
- Bus Maintenance Apprenticeship Framework
  - Apprenticeship frameworks approved by DOL.
- ASE transit bus certifications for Electrical/Electronic Systems (H6)
  - Method for quantifying electrical skills.
- Skills Gap Survey
  - Survey used for identifying electrical/electronic skills gaps.
- APTA standard/recommended practice
  - Job tasks that can be used to focus updated job descriptions
- Report on recommended procurement language
  - Draft recommended procurement language for ZEBs
- Fluke Multimeter Online Training
  - Online digital multimeter training
- E/E troubleshooting training
  - Available through Simutec
- Electrical System Training-aids
  - Available through Veejer
- Labor-Management Partnership
  - Best practices for joint labor-management partnerships
- Zero Emission Bus Committee
- Workforce Development Committee
- Community Transportation Association of America (CTAA)
- Zero Emission Bus Resource Alliance (ZEBRA)
- The West Coast Center of Excellence in Zero Emission Technology and Renewable Energy

Selection of Training Programs and Partners

Community colleges, technical colleges, trade schools and state workforce development boards are immediately available resources that can be utilized to support upskilling HAT's workforce. In most cases, community colleges, technical colleges, and trade schools already have an automotive program available, and guidance from the transit agency is needed to focus in on gaps. Additional support is available through the International Transportation Learning Center's (ITLC) Transit Workforce Center (TWC) on ZEB Training Standards in transit that can be supplied to identified training partners. Contact the Center at twc@transportcenter.com or via the web page.

Protection and Expansion of the Workforce

HAT has an opportunity to proactively attract ZEB-focused talent by incentivizing current and potential employees with training and comparable salaries. Maintaining zero-emission vehicles requires significant technical skill, and compensation adjustment for this increased level of technical expertise should be anticipated. Further, utilizing apprenticeship framework that includes training on zero-emission vehicles guarantees a continued pipeline of workers are skilled, and incentivizes potential candidates to pursue a path in transit.

Worker Engagement

Under the resources in the Training Plan section is a link to best practices for establishing and maintaining joint labor-management partnerships. For the smoothest transition to maintaining and operating a zero-emission fleet, establishing HAT's own zero-emission fleet committee is highly recommended. The committee should be comprised of equal numbers of management and frontline workforce, be empowered to address a variety of issues that may arise, and meet regularly. These committees have proven to be the most direct line of feedback from the workforce on concerns that may affect the agency's ability to operate the fleet, as well as an extremely effective way to communicate new initiatives from the management, gaining additional buy-in.

Training Resources

Currently, all grants received by transit agencies in the United States have an additional 5% of the funding requested added to the total amount that is allocated towards workforce development. This funding is sufficient for the training needed to upskill HAT's workforce. In the event that this funding is exhausted, exploring a registered apprenticeship program is a viable option to secure additional funding. Workforce development boards are an additional resource to identify funding available to the agency for further training needs. Finally, as of writing, there are currently 224 open grants in Georgia that are available for workforce development. Many of these grants require minimal input on proposals to receive funding.

Recommended Training Courses

Below are the recommended number of training hours to successfully transition HAT's workforce personnel to operating and maintaining zero-emission vehicles. Note that while the costs for training may vary based on location, an estimate of $65/learner/hour of training can be applied to calculate total cost.

Course	Description	Target Audience	Length (Hours)
Operator Orientation	Class should cover driver familiarity, operation of all vehicle systems including the wheelchair ramp, and CDL pre-trip requirements for the safe operation of Battery Electric powered vehicles. This orientation should also cover familiarity of vehicle for safe operation and specific procedures that can be used to train First Responders.	Maintenance Personnel, Operations Personnel (Operators, Supervisors, Managers, etc.), First Responders	4 - 6 Hours
Maintenance General Orientation	Class should cover fluid types, fluid quantities, fluid level checks inspection and maintenance of fluid types, (manual and electronic), fill ports and basic servicing of bus to include PM schedules and all related safety precautions, procedures for charging buses for quick or slow charge and cover all hazards, safety procedures, and PPE.	Maintenance Personnel and Operations Personnel, if applicable	8 Hours
Electrical and Vehicle Communications	Class should cover the non-propulsion electrical system and vehicle controller communications systems (multiplexing, etc.). Class should cover the inspection, location, troubleshooting, diagnostics, maintenance and repair of voltage monitors, battery equalizer, battery maintenance, print reading, CAN system, ladder logic, wiring color coding, harnesses, connectors, plugs, and schematics.	Maintenance Personnel	24 Hours
Energy Storage & Management Systems	Class should cover the inspection, location, troubleshooting/diagnostics, maintenance (preventive and corrective) and repair of the high voltage energy storage system, battery management system, and any related components, controllers, etc. The class should provide safety procedures for handling and working with a high voltage system, and power down procedures; general construction and principles of operation and troubleshooting; battery thermal management system, pumps/piping diagnostics, lock-out/tag-out, and assembly and disassembly procedures.	Maintenance Personnel	12 Hours

Course	Description	Target Audience	Length (Hours)
Propulsion System Familiarization/HV Safety	Class should cover fluid types, fluid quantities, fluid level checks inspection and maintenance of fluid types, (manual and electronic), fill ports and basic servicing of bus to include PM schedules and all related safety precautions. procedures for charging buses for quick or slow charge and cover all hazards, safety procedures, and PPE related to both types of charging.	Maintenance Personnel	16 Hours
Charging System Equipment	Class should cover the inspection, location, troubleshooting/diagnostics, maintenance (preventive and corrective) and repair of all aspects of the charging equipment.	Maintenance Personnel or Facilities Maintenance Personnel (Contractors, if applicable).	8 Hours
Wheelchair Ramp System	Class should cover the inspection, location, troubleshooting/diagnostics, maintenance (preventive and corrective) and repair of the wheelchair ramp system including automatic and manual operation as applicable	Maintenance Personnel	4 Hours
Operator Totals			**4-14 Hours**
Maintenance Totals			**76 – 78 Hours**

Figure 6-1: Recommended Training Courses

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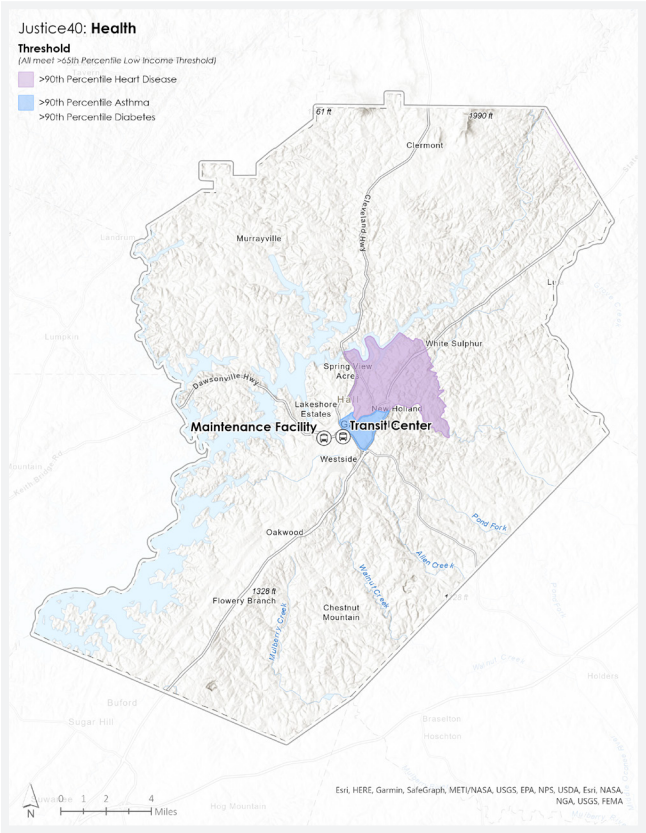
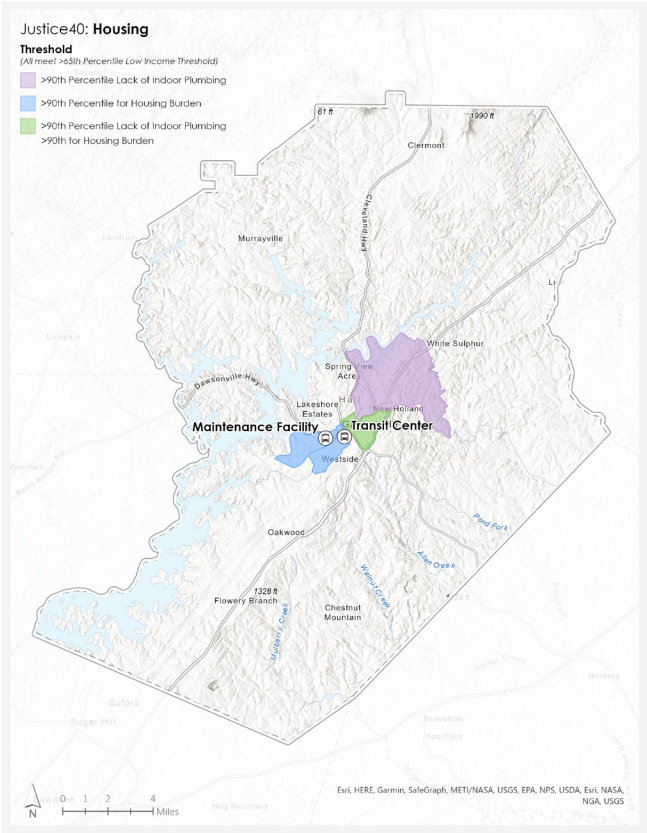
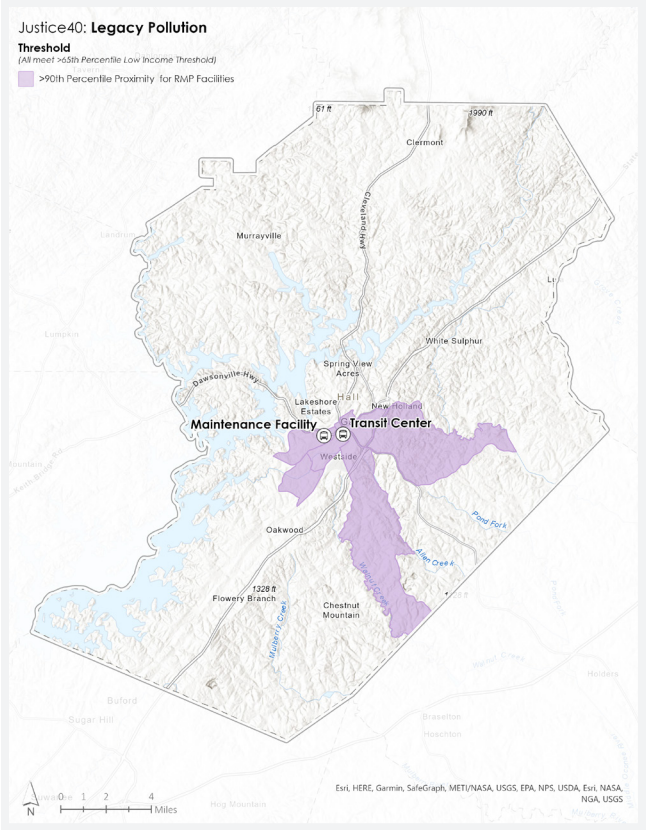
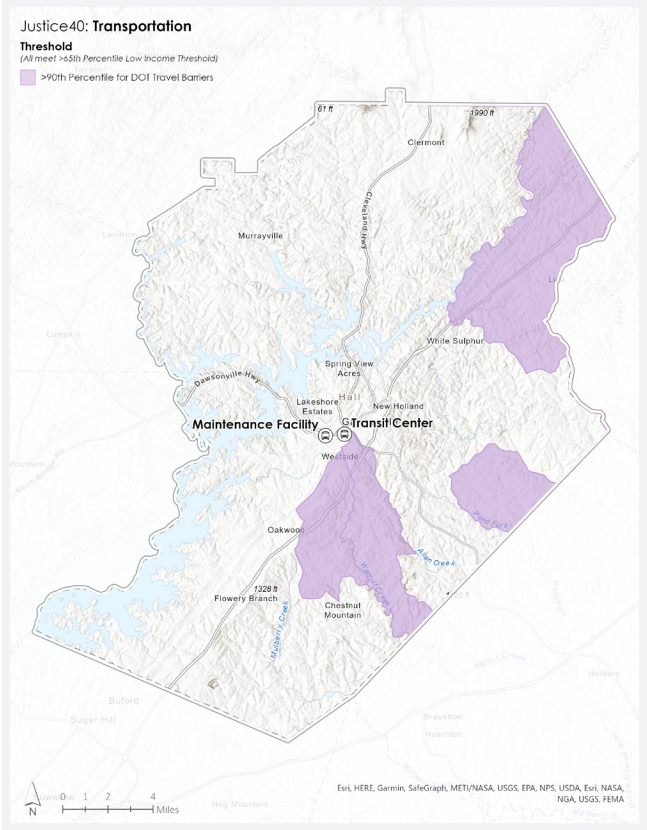
Appendix A: Justice40 Screening

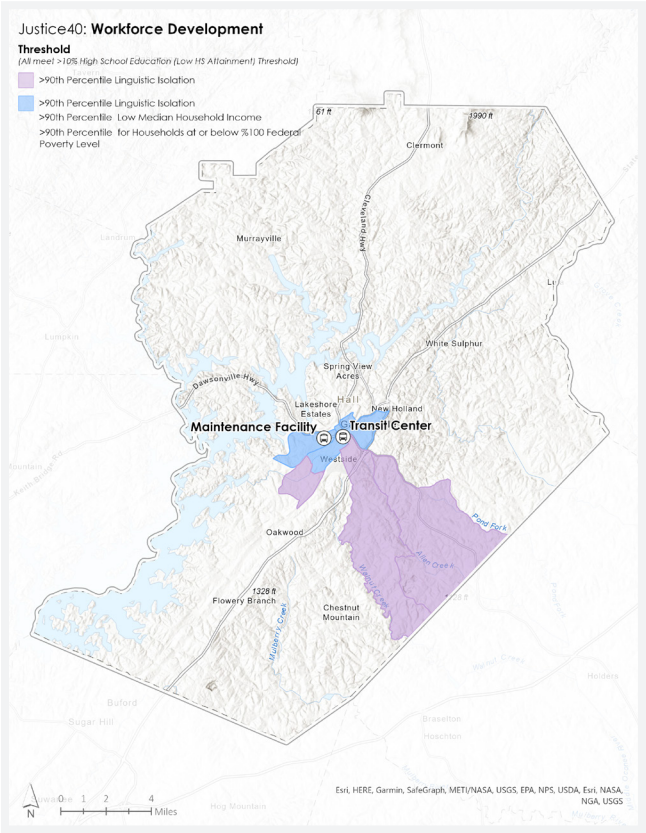








TCC 59


Justice40: Workforce Development
Threshold
(All meet >10% High School Education (Low HS Attainment) Threshold)
>90th Percentile Linguistic Isolation
>90th Percentile Linguistic Isolation
>90th Percentile Low Median Household Income
>90th Percentile for Households at or below %100 Federal Poverty Level
61 ft
1990 ft
Clermont
Cleveland Hwy
Murrayville
White Sulphur
Spring View Acres
Dawsonville Hwy
Lakeshore Estates
New Holland
Maintenance Facility
Transit Center
Westside
Oakwood
Pond Fork
Alen Creek
1328 ft
Flowery Branch
Chestnut Mountain
Mulberry Creek
Buford
Sugar Hill
Braselton
Hoschton
Holders
Hog Mountain
N
0 1 2 4
Miles
Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, Esri, NASA, NGA, USGS

TCC 60

PREPARED BY

GAINESVILLE-HALL
Metropolitan Planning Organization

2875 Browns Bridge Road
Gainesville, GA 30504
Tel: 770.531.6809
Fax: 770.531.3902
ghmpo.org

Technical Coordinating Committee

Wednesday, July 19, 10:30 AM
Banquet Hall, 4th Floor, Hall County Government Center
2875 Browns Bridge Road, Gainesville, GA 30504

AGENDA

1. **Welcome – Adam Hazell, Chair**

2. **Election of TCC Chair and Vice Chair for FY 2024**

3. **Approval of April 19, 2023 Meeting Minutes**

4. **Update on GHMPO's Designation as a Transportation Management Area (TMA)**
   – Joseph Boyd, GHMPO

5. **Recommend Approval of Hall Area Transit's Zero Emission Vehicle Transition Plan**
   – Phillippa Lewis Moss, Hall Area Transit

6. **Recommend Approval of Draft FY 2024-2027 Transportation Improvement Program (TIP)**
   – Michael Haire, GHMPO

7. **Recommend Approval of Draft Amendment #2 to the FY 2024 Unified Planning Work Program (UPWP)**
   – Michael Haire, GHMPO

8. **Other**
   – Update from the Trails Subcommittee
   – Update from the McEver Road Subcommittee
   – MTP/Bike & Pedestrian Plan Updates

GAINESVILLE-HALL
Metropolitan Planning Organization

MEMORANDUM

To: **Technical Coordinating Committee Members**

From: **Michael Haire, GHMPO**

Date: **July 12, 2023**

Re: **Recommend Approval of the Draft FY 2024-2027 Transportation Improvement Program (TIP)**

GHMPO, in partnership with the Georgia Department of Transportation, has finalized the Draft FY 2024-2027 Transportation Improvement Program, which contains all projects receiving federal and state funding between fiscal years 2024 and 2027. This is the final round of review for this document, and it will be up for adoption at the August 8, 2023 Policy Committee meeting. The Transportation Improvement Program will be amended periodically at the request of GDOT each time a new project receives funding.

Since the last Technical Coordinating Committee meeting, the FY 2024-2027 Transportation Improvement Program has been updated to include new funding amounts and phase years for multiple projects, as well as updated funding amounts for Hall Area Transit, which can be found in Appendix B of the document.

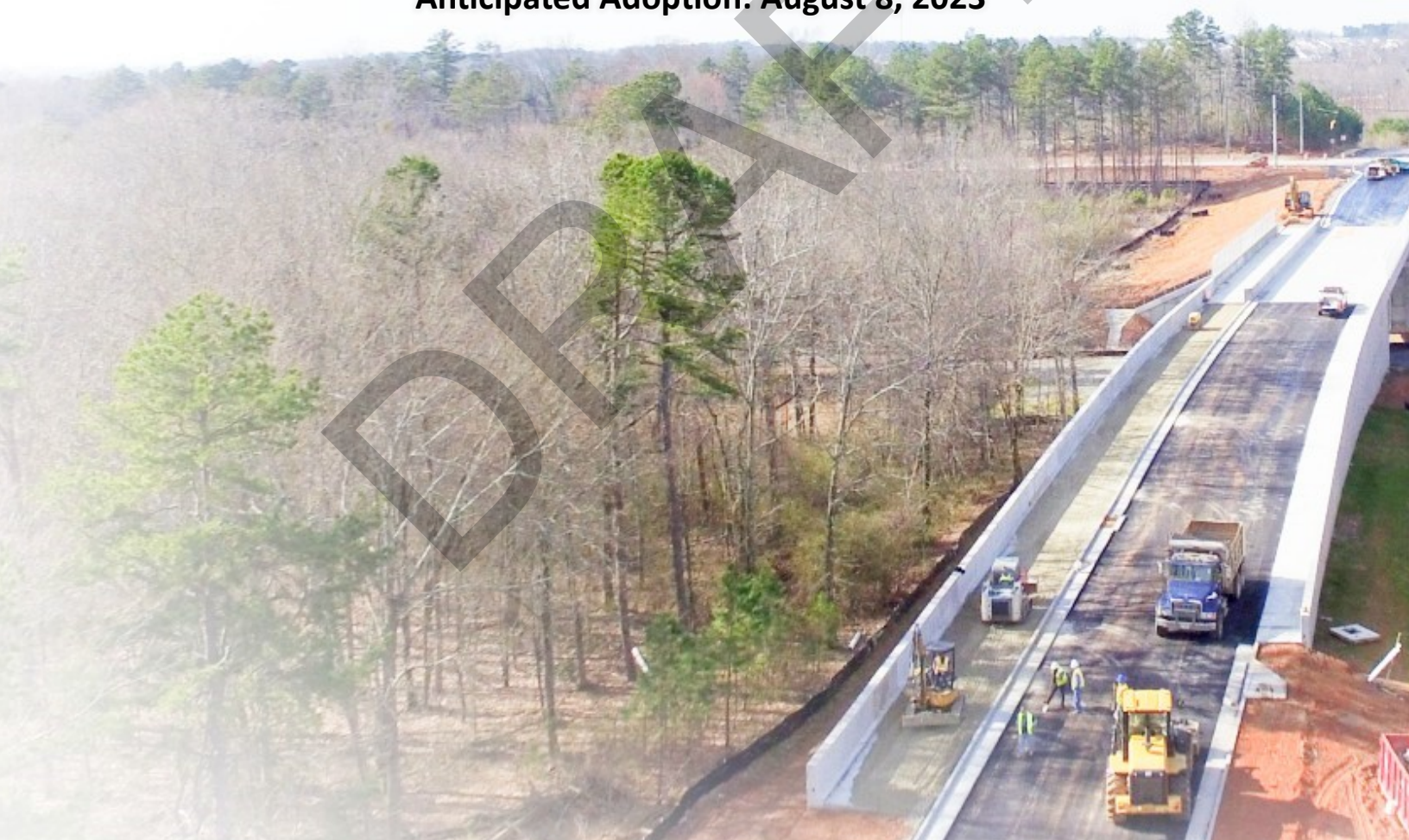
RECOMMENDED ACTION: **Recommend Approval of Draft FY 2024–2027 Transportation Improvement Program**

Attachment: *Draft FY 2024-2027 TIP*

GAINESVILLE-HALL
Metropolitan Planning Organization

FY 2024—2027
TRANSPORTATION IMPROVEMENT PROGRAM

Anticipated Adoption: August 8, 2023



In accordance with Title VI of the Civil Rights Act of 1964 and other nondiscrimination laws, public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, familial, or income status.

Prepared by the Gainesville-Hall Metropolitan Planning Organization in coordination with the City of Gainesville, City of Oakwood, City of Flowery Branch, Town of Braselton, City of Hoschton, Hall County, Jackson County, Hall Area Transit, Jackson County Transit, the Georgia Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration.

Table of Contents

GHMPO Committees

As the designated MPO for the Gainesville-Hall Area, the Gainesville-Hall Metropolitan Planning Organization is responsible under Section 134 of Title 23, United States Code, for carrying out a "continuing, cooperative and comprehensive" (3-C) transportation planning process. The process uses three committees (Policy Committee (PC) – the decision making body, Technical Coordinating Committee (TCC) – the staff, and Citizens Advisory Committee (CAC) – the public) to develop and carry out a comprehensive transportation planning process and to ensure that programs, improvements, and expenditures are consistent with regional goals, policies, and plans.

- The Policy Committee is the decision making body and is represented by elected officials from the member jurisdictions and an official from the Georgia Department of Transportation (GDOT). The committee is responsible for taking into consideration the recommendations from the Citizens Advisory Committee and the Technical Coordinating Committee when adopting plans or setting policy.
- The Technical Coordinating Committee membership includes staff from the member jurisdictions, various federal, state, and local agencies and associations that have a technical knowledge of transportation or planning. The TCC evaluates transportation plans and projects based on whether or not they are technically warranted and financially feasible.
- The Citizens Advisory Committee consists of volunteer members who are interested in transportation issues. They are appointed by their member jurisdictions. The CAC is responsible for ensuring that values and interests of the citizens in Hall County and a portion of Jackson County are taken into consideration in the transportation planning process.

Policy Committee

Voting

Lamar Scroggs, *Mayor, City of Oakwood* - Chair
Ed Asbridge, *Mayor, City of Flowery Branch* – Vice-Chair
Sam Couvillon, *Mayor, City of Gainesville*
Richard Higgins, *Chairman of the Board of Commissioners, Hall County*
Kathy Cooper, *District 1 Commissioner, Hall County*
Jeff Stowe, *District 4 Commissioner, Hall County*
Jim Hix, *District 1 Commissioner, Jackson County*
Megan Weiss, *Representative for the Director of Planning, GDOT*

Non-Voting

Srikanth Yamala, *Director, GHMPO*
Renee Gerrell, *Chair, GHMPO Citizens Advisory Committee*
Adam Hazell, *Chair, GHMPO Technical Coordinating Committee*
Ann-Marie Day, *Planning Team Leader, Federal Highway Administration*
Holly Peterson, *Community Planner, Federal Transit Administration*
Johnathan McLoyd, *Transit Planner, GDOT*
Kelvin Mullins, *District Engineer, GDOT District 1*
Leigh Ann Trainer, *Transit Program Manager, GDOT Intermodal Programs*

Phillippa Lewis Moss, *Director, Hall Area Transit*
Phillip Beard, *Chairman, City of Buford*
James Nix, *Mayor, Town of Clermont*
Wade Dale, *Mayor, City of Gillsville*
Joe Thomas, *Mayor, City of Lula*
Kurt Ward, *Mayor, Town of Braselton*
Lauren O'Leary, *Mayor, City of Hoschton*

Technical Coordinating Committee

Voting

Adam Hazell, *Planning Director, Georgia Mountains Regional Commission* - Chair
Gina Roy, *Assistant County Manager, Jackson County* - Vice-Chair
Rhonda Brady, *Traffic Engineering Coordinator, City of Gainesville*
Angela Sheppard, *Assistant City Manager, City of Gainesville*
Matt Tarver, *Deputy Director of Engineering & Transportation, City of Gainesville*
Corey Jones, *Senior Civil Engineer, City of Gainesville*
BR White, *City Manager, City of Oakwood*
Dan Schultz, *Community Development Director, City of Oakwood*
Rich Atkinson, *Community Development Director, City of Flowery Branch*
Bill Nash, *Public Works Director, Hall County*
Frank Miller, *County Engineer, Hall County*
Jennifer Scott, *Town Manager, Town of Braselton*
Jennifer Kidd-Harrison, *City Manager, City of Hoschton*
Phillippa Lewis Moss, *Director, Hall Area Transit*
Phillip Peevy, *Planning & Environmental Manager, GDOT*
Kelvin Mullins, *District Engineer, GDOT*
Megan Weiss, *Capital Region MPO Branch Chief, GDOT*
Joseph Boyd, *Transportation Planning Director, GHMPO*
Srikanth Yamala, *Director, GHMPO*

Non-Voting

Jared Lombard, *Transportation Planner, Federal Highway Administration*
Holly Peterson, *Community Planner, Federal Transit Administration*
Johnathan McLoyd, *Transit Planner, GDOT*
Kevin Keller, *Planning Director, Town of Braselton*
Renee Gerrell, *Chair, GHMPO Citizens Advisory Committee*
Chad Bolton, *Northeast Georgia Medical Center*
Kit Dunlap, *President, Greater Hall Chamber of Commerce*
Jay Parrish, *Police Chief, City of Gainesville*
Gerald Couch, *Sheriff, Hall County*
Chris Hulsey, *Police Chief, City of Flowery Branch*
Terry Esco, *Police Chief, Town of Braselton*
Dan Branch, *Public Safety Director, Buford Department of Public Safety*
Will Schofield, *Superintendent, Hall County Schools*
Jeremy Williams, *Superintendent, Gainesville City Schools*
Scott Puckett, *Traffic Engineer, Hall County*
Dennis Bergin, *City Manager, City of Lula*
Lauren O'Leary, *Mayor, City of Hoschton*

Wade Dale, *Mayor, City of Gillsville*
Tim Hatch, *Chief, Oakwood Police Department*
Michael Haire, *Transportation Planning Manager, GHMPO*

Citizens Advisory Committee

Renee Gerrell, *Hall County* - Chair
Patrick O'Rouke, *Hall County* - Vice Chair
Toni Buffington, *Hall County*
Nick Haynes, *Hall County*
Brent Hoffman, *Hall County*
Joe Kennedy, *Hall County*
Greg Simpson, *Hall County*
Sloan Spivey, *Hall County*
William Bush, *City of Gainesville*
Berlinda Lipscomb, *City of Gainesville*
Beverly Nordholz, *City of Gainesville*
Vacant, City of Gainesville
Sammy Smith, *City of Gainesville*
Pat Jones, *City of Oakwood*
Tony Millwood, *City of Oakwood*
Rick Marzano, *City of Flowery Branch*
Chip McCallum, *City of Flowery Branch*
Vacant, Town of Braselton
Michele Price, *Jackson County*

GHMPO Staff

Srikanth Yamala, *Director*
Joseph Boyd, *Transportation Planning Director*
Michael Haire, *Transportation Planning Manager*

Introduction

Gainesville-Hall Planning Area

The Gainesville-Hall Metropolitan Planning Organization (GHMPO) was designated in early 2003 in order to ensure the federally required continuing, cooperative, and comprehensive (3-C) transportation planning process for the Gainesville Urbanized Area. GHMPO is responsible for conducting and maintaining the Gainesville-Hall Planning Area, which covers all of Hall County and a portion of western Jackson County. Figure 1 illustrates the boundary of GHMPO's planning area.

The Planning Process

There are three documents that form the foundation for the ongoing work of the GHMPO:

- Metropolitan Transportation Plan (MTP): The MTP is the heart of the MPO planning process, and is required to be updated at least every five years. The most recent GHMPO Metropolitan Transportation Plan was adopted in 2020, and the GHMPO Policy Committee is expected to adopt the Metropolitan Transportation Plan: 2025 Update in May of 2025. The Metropolitan Transportation Plan outlines planning objectives within the Gainesville-Hall Planning Area over the next thirty years.

- Transportation Improvement Program (TIP): The TIP is GHMPO's short to medium range planning document, which lists federally funded projects within the Gainesville-Hall Planning Area over the next three to four years. This document is amended at the request of the Georgia Department of Transportation to include new projects as funding is assigned to them during the TIP program years.

- Unified Planning Work Program (UPWP): The UPWP serves as the annual operating budget for GHMPO, and provides funding for equipment, planning activities, and planning studies throughout a single fiscal year.

Project Evaluation & Selection Process

Projects were evaluated based on their ability to reduce congestion or enhance safety, address community needs, and their specific support from the community. A process was developed in which a list of candidate roadway and transit projects was ranked in three separate but equal categories described below:

- Technical Analysis: Used to determine how successful projects are at making the transportation system safer and more efficient. This analysis utilized primarily travel demand model data.

- Needs Categories: Used to determine how successful projects are at addressing the different needs categories as ranked by the community.

- Community Support: Used to determine those projects that have specific support.

For more details on the methodology used, please see the Project Evaluation section on page 53 of the Gainesville-Hall Regional Transportation Plan: 2015 Update (RTP) and Appendix E: Project Evaluation Scores.

Plan Consistency

Each project in this TIP is taken from the financially-constrained project list on the MTP. The project worksheets in Appendix A list both a GHMPO and a GDOT project identification numbers, if available, for cross-reference between the MTP and the TIP.

Amendments and Administrative Modifications

The following actions are eligible as **Administrative Modifications** (minor revisions not requiring public review or a Policy Committee vote) to the STIP/TIP/LRTP:

- Revise a project description without changing the project scope, conflicting with the environmental document or changing the conformity finding in nonattainment and maintenance areas (less than 10% change in project termini). This change would not alter the original project intent.
- Splitting or combining projects.
- Federal funding category change.
- Minor changes in expenditures for transit projects.
- Roadway project phases may have a cost increase less than $2,000,000 or 20% of the amount to be authorized. The 20% scenario amount may not exceed $10,000,000.
- Shifting projects within the 4 year STIP as long as the subsequent annual draft STIP was submitted prior to September 30.
- Projects may be funded from lump sum banks as long as they are consistent with category definitions.

An administrative modification can be processed in accordance with these procedures provided that:

- It does not affect the air quality conformity determination.
- It does not impact financial constraint.
- It does not require public review and comment.

The following actions are eligible as **Amendments** (revisions requiring public review and a Policy Committee vote) to the STIP/TIP/LRTP:

- Addition or deletion of a project
- Addition or deletion of a phase of a project
- Roadway project phases that increase in cost over the thresholds described in the Administrative Modification section.
- Addition of an annual TIP.
- Major change to scope of work of an existing project. A major change would be any change that alters the original intent i.e. a change in the number of through lanes, a change in termini of more than 10 percent.
- Shifting projects within the 4-year STIP which require re-demonstration of fiscal constraint or when the subsequent annual draft STIP was not submitted prior to September 30.

Amendments of the STIP/TIP/LRTP will be developed in accordance with the provisions of 23 CFR Part 450. This requires public review and comment and responses to all comments, either

individually of in summary form. For amendments in MPO areas, the public review process should be carried out in accordance with procedures outlined in the Participation Plan.

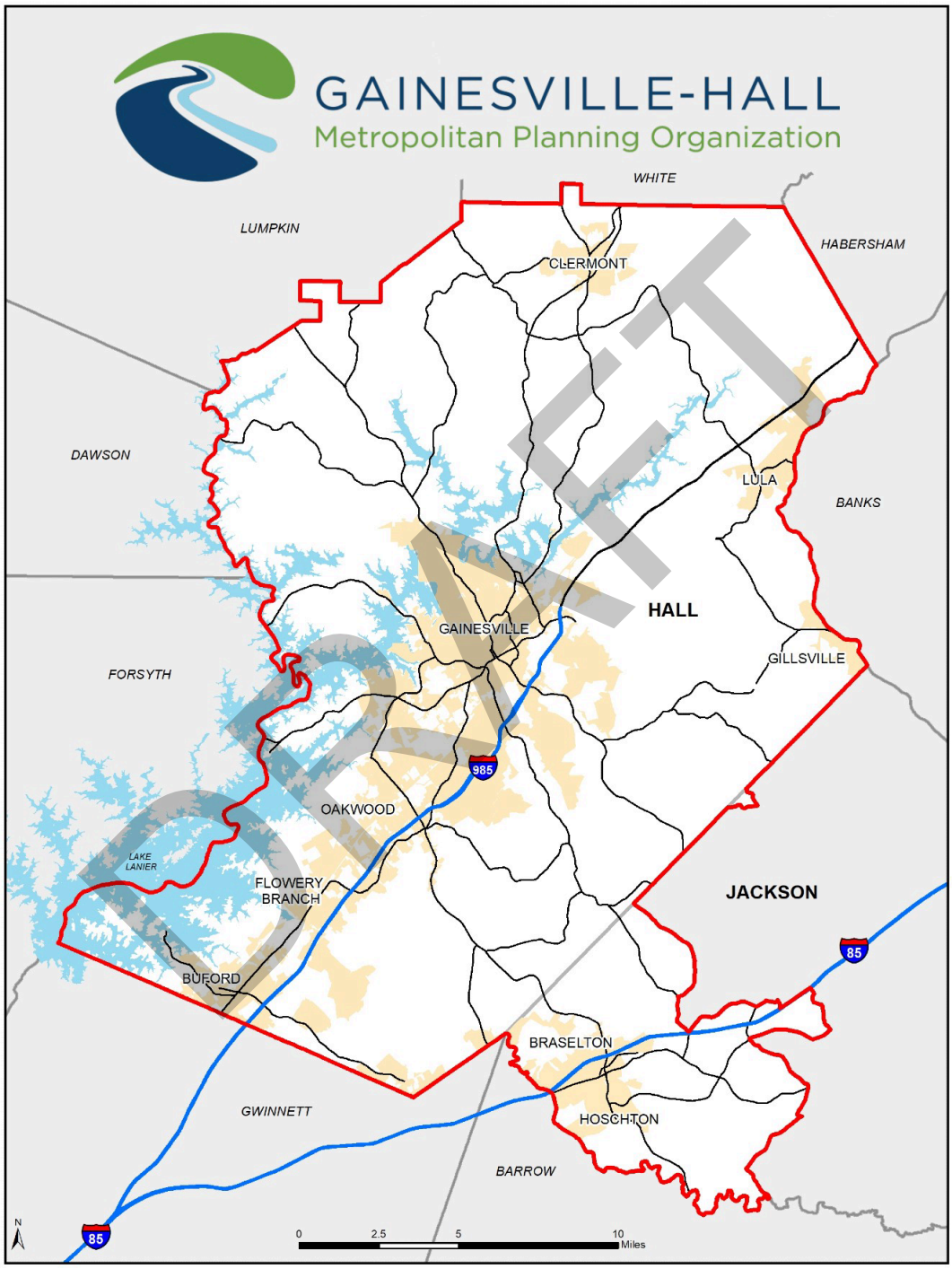


Figure 1: Gainesville-Hall Planning Area Boundary

Transportation Improvement Program

Overview

The Transportation Improvement Program (TIP) shows the federally required four-year capital improvement program, akin to the State Transportation Improvement Program (STIP) but exclusively for projects within the GHMPO planning area. This TIP covers a four-year period from FY 2024 (beginning July 1, 2023) to FY 2027 (ending June 30, 2027) that is consistent with the Gainesville-Hall Metropolitan Transportation Plan: 2020 Update (MTP). The TIP is updated at least once every four years and amended as frequently as necessary. The GHMPO Technical Coordinating Committee (TCC) and the Citizens Advisory Committee (CAC) are responsible for reviewing the TIP and recommending it for adoption to the GHMPO board, or the Policy Committee. The public is also invited to review and comment on the proposed TIP.

In addition, the federal Infrastructure Investment and Jobs Act (IIJA), requires that in the TIP development process, the MPO should consult with officials responsible for other types of planning activities that are affected by transportation in the area and governmental agencies and non-profit organizations that receive federal assistance from a source other than USDOT. GHMPO satisfies this requirement by inviting these agencies to participate in the TIP development process and by making the draft TIP available to them for review and comment. Through adoption by the Policy Committee, the proposed document becomes the official TIP for the Gainesville-Hall area. Project-by-project review and approval by the Georgia Department of Transportation (GDOT), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) is also necessary before federal funds become available. It should be understood that the TIP is a flexible program which may be modified in accordance with the procedures outlined in the adopted Participation Plan by resolution of the Policy Committee if priorities, area goals, or funding levels change.

Fiscal Constraint

Federal planning statutes require that the TIP must be financially constrained, which means that the estimated cost for all transportation improvements cannot exceed the amount of reasonably expected revenues projected from identified federal, state, and local funding sources. This requirement ensures that the TIP is based upon realistic assumptions and can be implemented. The total cost of all projects taking place between fiscal years 2024 and 2027 is $165,717,450.00, shown in the table on page 12. This does not exceed the available total of $294,225,456.00, shown in the table on page 13, indicating financial constraint. The local funds identified on page 13 are provided by the local jurisdictions that the transportation projects are occurring in, further detailed in Appendix A.

Public Participation

The development of the TIP process involves a public outreach effort to identify community issues, concerns, and priorities. A legal ad was published in the Gainesville Times informing the public of the TIP with a 30-day public comment period for review of the document. The draft TIP was available for public review on the GHMPO website as well as in the form of a hard copy at the GHMPO office.

Infrastructure Investment and Jobs Act (IIJA) Planning Factors

The transportation planning process must explicitly address the eleven planning factors included in the Infrastructure Investment and Jobs Act (IIJA) and previously outlined in the Fixing America's Surface Transportation Act (FAST Act), 23 CFR 450 Subpart C, 23 CFR 420 Subpart A, and 49 CFR Subtitle A, listed below:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the surface transportation system for motorized and non-motorized users;
4. Increase the accessibility and mobility options available to people and for freight;
5. Protect and enhance the environment, promote energy conservation, and improve quality of life;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system;
9. Improve transportation system resiliency and reliability;
10. Reduce (or mitigate) the storm water impacts of the surface transportation; and
11. Enhance travel and tourism.

The overall planning program is designed to comply with the requirements of IIJA, which was signed into law on November 15, 2021. It encourages MPOs to address the planning factors listed above when solving current and future transportation issues.

Format

The TIP document contains the following five spreadsheets showing a list of projects and the funding dollars:

FY 2024-2027 Projects
This spreadsheet contains a list of projects along with the dollar amounts scheduled for the fiscal years 2024-2027.

FY 2024-2027 Lump Sum Funding Categories
This spreadsheet reflects available funding dollars for the GHMPO area in lump sum categories for the fiscal years 2024-2027.

FY 2024-2027 Hall Area Transit Funding
This spreadsheet contains the Hall Area Transit funding categories along with the dollar amounts for the fiscal years 2024-2027.

This is followed by project worksheets in Appendix A that supply more detail on these projects that are funded from 2024-2027. Prefacing these worksheets is a project definitions page to explain various items that are not self-explanatory. It also includes project worksheets that supply more detail on these projects. Appendix B provides a detail breakdown of the various transit funding categories. Appendix C includes public comments received on the TIP. Appendix D and E provide a narrative on lump sum funding and lump sum funded projects. Appendix F lists all the MPO authorized projects. Appendix G provides a list of definitions,

abbreviations, funding and phase codes, and acronyms used within the text of this TIP. Appendix H provides the adopted resolutions relating to performance measures and targets related to the GHMPO planning area.

FY 2024-2027 Transportation Improvement Program

GHMPO No.	GDOT No.	Project Name	$ Thousands																			
			FY 2024					FY 2025					FY 2026					FY 2027				
			SCP	PE	ROW	CST	UTL	SCP	PE	ROW	CST	UTL	SCP	PE	ROW	CST	UTL	SCP	PE	ROW	CST	UTL
GH-016	0003626	Sardis Road Connector from SR 60 to Sardis Road near Chestatee Road				$36,638	$1,243															
GH-020A	122060	SR 11/US 129 from Lakeview Street to S of Nopone Rd - Phase I									$47,173	$2,103										
GH-020B	0016862	SR 11/US 129 from Brittany Court to S of Lakeview St - Phase II												$1,500								
GH-020C	0016863	SR 11/US 129 from Limestone Parkway to N of Brittany Court - Phase III												$1,500								
GH-023B	0015280	Spout Springs Road Widening from Union Circle to South of SR 347 - Phase II				$26,492	$3,669															
GH-119	0015551	SR 60/Thompson Bridge Road at Chattahoochee River			$101																	
GH-121	0017392	Green Street Improvements			$5,110											$14,857	$1,507					
GH-124	0015702	SR 53/Dawsonville Hwy from Ahaluna Dr to Shallowford Road				$3,282	$70															
GH-126	0015918	SR 60/Green Street at CS 898/Academy Street				$2,255	$425															
GH-133	0016074	SR 365/Cornelia Hwy at YMCA Drive/Lanier Tech Drive - New Interchange				$15,884	$585															
GH-141	0017735	SR 283/Holly Springs Road at Flat Creek								$250												
GH-144	0019079	SR 284/Shoal Creek Road at Eubank Creek													$325							
GH-145	0016921	SR 53 @ SR 369				$750																
		TOTAL	$0	$0	$5,211	$85,301	$5,991	$0	$0	$250	$47,173	$2,103	$0	$3,000	$325	$14,857	$1,507	$0	$0	$0	$0	$0

FY 2024-2027	$ Thousands
SCP	$0
PE	$3,000
ROW	$5,786
CST	$147,331
UTL	$9,601
TOTAL	$165,717

FY 2024-2027 Funding Categories

FUND	CODE	LUMP DESCRIPTION	2024	2025	2026	2027	TOTAL
NHPP	Y001	NATIONAL HIGHWAY PERFORMANCE PROGRAM	$ 100,815.00	$ -	$ -	$ -	$ 100,815.00
STBG	Y236	STBG - AREAS WITH POPULATION 50K - 200K	$ -	$ 5,449,431.00		$ 74,092,476.00	$ 79,541,907.00
STBG	Y238	STBG - AREAS WITH POPULATION <50K	$ -	$ 250,000.00	$ -	$ -	$ 250,000.00
Carbon	Y606	CARBON REDUCTION (IIJA)	$ 453,696.00	$ 753,195.00	$ 753,195.00	$ 753,195.00	$ 2,713,281.00
BFP	Y110	BRIDGE FORMULA PROGRAM	$ -	$ -	$ 325,000.00	$ -	$ 325,000.00
Local	LOC	LOCAL FUNDING	$ 32,178,571.00	$ 3,000,000.00	$ -	$ -	$ 35,178,571.00
State	HB170	HB170	$ 36,347,475.00	$ 78,394,947.00	$ -	$ 20,560,000.00	$ 135,302,422.00
Transit	5303	METROPOLITAN PLANNING	$ 133,579.00	$ 133,579.00	$ 133,579.00	$ 133,579.00	$ 534,316.00
Transit	5307	URBAN CAPITAL AND OPERATING EXPENSES	$ 3,490,918.00	$ 3,490,918.00	$ 3,490,918.00	$ 3,490,918.00	$ 13,963,672.00
Transit	5311	RURAL CAPITAL AND OPERATING EXPENSES	$ 150,989.00	$ 85,161.00	$ 85,161.00	$ 85,161.00	$ 406,472.00
NHPP	Y001	LIGHTING	$ 14,000.00	$ 14,000.00	$ 14,000.00	$ 14,000.00	$ 56,000.00
NHPP/STBG	Various	BRIDGE MAINTENANCE	$ 608,000.00	$ 608,000.00	$ 608,000.00	$ 608,000.00	$ 2,432,000.00
NHPP/STBG	Various	ROAD MAINTENANCE	$ 3,782,000.00	$ 3,377,000.00	$ 3,377,000.00	$ 3,377,000.00	$ 13,913,000.00
STBG	Y240	LOW IMPACT BRIDGES	$ 284,000.00	$ 284,000.00	$ 284,000.00	$ 284,000.00	$ 1,136,000.00
STBG	Y240	OPERATIONS	$ 162,000.00	$ 162,000.00	$ 162,000.00	$ 162,000.00	$ 648,000.00
STBG	Y240	TRAF CONTROL DEVICES	$ 405,000.00	$ 405,000.00	$ 405,000.00	$ 405,000.00	$ 1,620,000.00
STBG	Y240	RW PROTECTIVE BUY	$ 20,000.00	$ 20,000.00	$ 20,000.00	$ 20,000.00	$ 80,000.00
HSIP	YS30	SAFETY	$ 1,351,000.00	$ 1,351,000.00	$ 1,351,000.00	$ 1,351,000.00	$ 5,404,000.00
RRX	YS40	RAILROAD CROSSINGS	$ 155,000.00	$ 155,000.00	$ 155,000.00	$ 155,000.00	$ 620,000.00
TOTAL			**$ 79,637,043.00**	**$ 97,933,231.00**	**$ 11,163,853.00**	**$ 105,491,329.00**	**$ 294,225,456.00**

FY 2024-2027 Hall Area Transit Funding

FY 2024-2027 Hall Area Transit Funding					
Description	**2024**	**2025**	**2026**	**2027**	**Total**
Section 5303					
Metropolitan Planning	**$139,700.00**	**$141,097.00**	**$142,507.97**	**$143,933.05**	**$567,238.02**
Section 5307					
Urban Capital and Operating Expenses	**$4,685,442**	**$4,432,296**	**$3,976,619**	**$4,016,386**	**$17,110,743**

FY 2024-2027 Transportation Improvement Program

Appendix A: Project Worksheets

Project Name Sardis Road Connector from SR 60 to Sardis Road near Chestatee Road	**GHMPO No.** GH-016	**GDOT No.** 0003626
	County Hall	**City** Gainesville
Local Rd. Name Ledan Road, Sardis Road	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name n/a	**Map ID** 16	**RC** GMRC

Project Description

Construction of a new 4 lane road from the intersection of SR 60/Thompson Bridge Road and SR 283/Mt. Vernon Road to the intersection of Sardis Road and Chestatee Road.

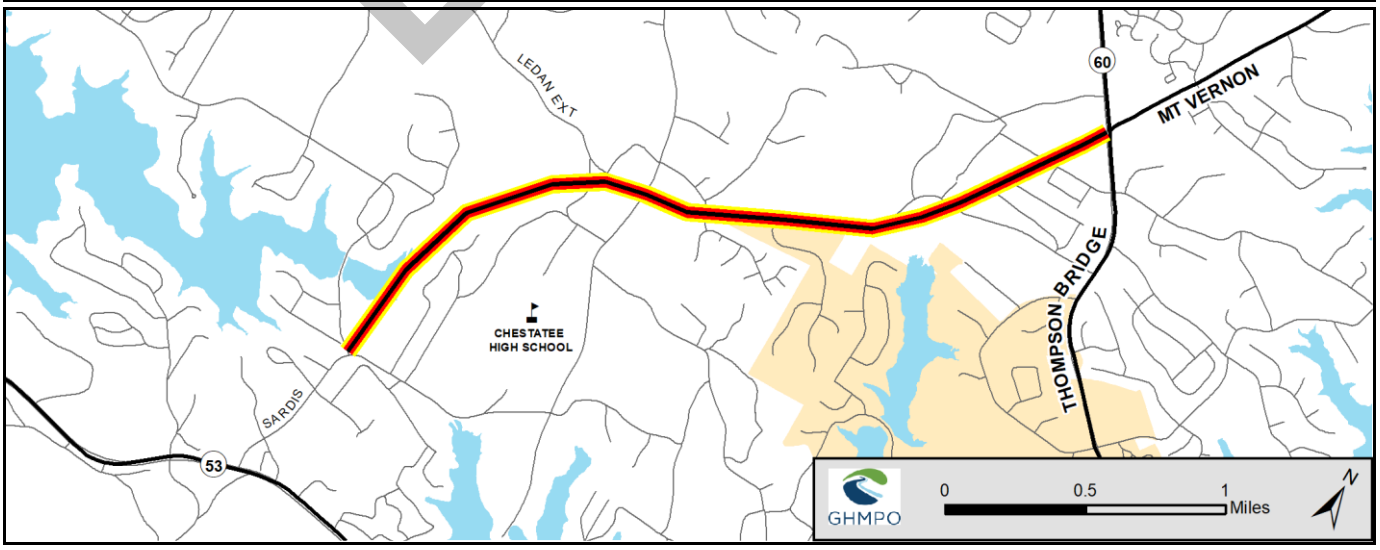
Improvement Type New **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** Split

Project Intent

To allow for improved connections between SR 60/Thompson Bridge Road and SR 53/Dawsonville Highway.

Project Termini **From** SR 60/Thompson Bridge Road **To** Sardis Road/Chestatee Road		**Length (miles)** 3.42
	Exist. Lanes 2	**Future Lanes** 4
Bike / Ped. Sidewalks, bike lanes recommended	**Exist. Vol.** 11,360 (2013)	**Design Vol.** 12,030 (2040)
Connectivity Dawsonville Highway/Thompson Bridge Road		
Network Year 2030 **LRTP Project Tier:** Band 1 (2020-2025)		**Open to Traffic Date** 2026

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
Auth.	Pre-Engineering	LOC	$1,300,000	$0	$0	$0	$1,300,000
Auth.	Pre-Engineering	L200	$0	$18,977	$75,908	$0	$94,885
Auth.	Right-of-Way	LOC	$0	$0	$0	$20,763,000	$20,763,000
2024	Construction	HB 170	$0	$0	$0	$36,637,685	$36,637,685
2024	Utilities	LOC	$1,242,514	$0	$0	$0	$1,242,514
		TOTAL	$2,542,514	$18,977	$75,908	$57,400,685	$60,038,084



Project Name SR 11/US 129 from Lakeview Street to south of Nopone Road (Phase I)	**GHMPO No.** GH-020A	**GDOT No.** 122060
	County Hall	**City** Gainesville
Local Rd. Name Cleveland Highway	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name US 129 / SR 11	**Map ID** 124	**RC** GMRC

Project Description

Widening of US 129 / Cleveland Highway from Lakeview Street to south of Nopone Road (Phase I)

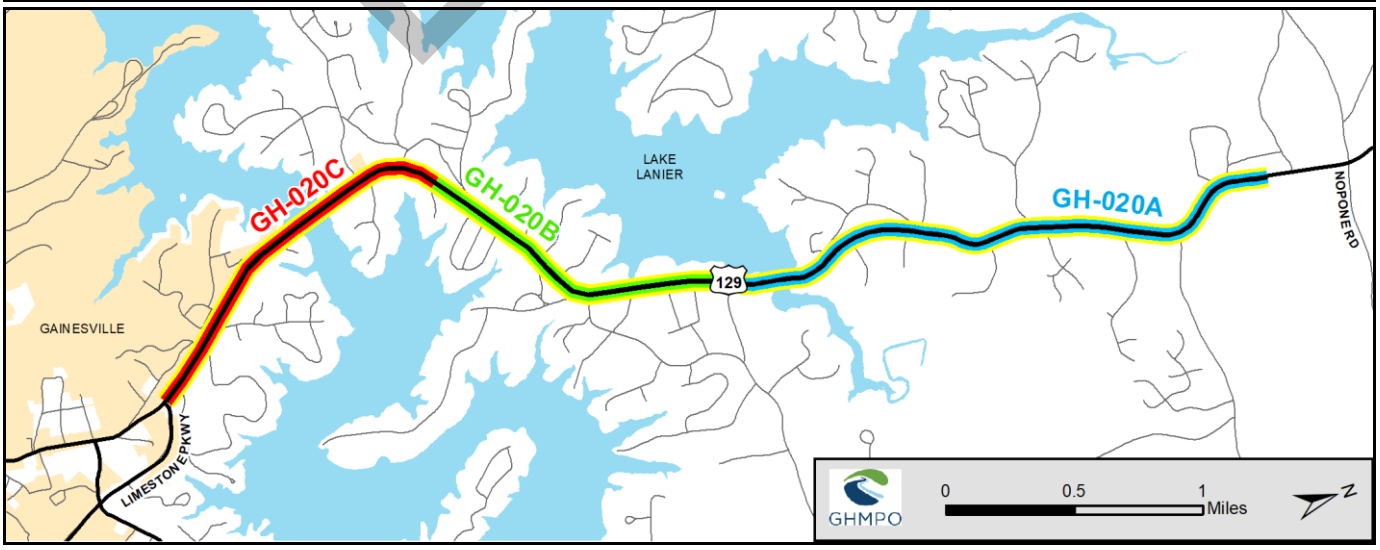
Improvement Type Widening **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

Create improved access and decrease congestion to the northern section of Hall County.

Project Termini **From** Lakeview Street **To** South of Nopone Road		**Length (miles)** 2.99
	Exist. Lanes 2	**Future Lanes** 4
Bike / Ped. signage recommended	**Exist. Vol.** 16,100 (2015)	**Design Vol.** 31,870 (2040)
Connectivity Widening of Cleveland Highway north		
Network Year 2030 **LRTP Project Tier:** Band 1 (2020-2025)		**Open to Traffic Date** 2027

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2025	Construction	HB 170	$0	$0	$0	$47,173,294	$47,173,294
2025	Utilities	HB 170	$0	$0	$0	$2,102,526	$2,102,526
Auth.	Right-of-Way	HB 170	$0	$0	$0	$18,390,000	$18,390,000
		TOTAL	$0	$0	$0	$67,665,820	$67,665,820



Project Name SR 11/US 129 FM Brittany Court to S of Lakeview St (Phase II)	**GHMPO No.** GH-020B	**GDOT No.** 0016862
	County Hall	**City** Gainesville
Local Rd. Name Cleveland Hwy	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name US 129 / SR 11	**Map ID**	**RC**

Project Description

This project proposes to widen US129/SR11/Cleveland Highway from two to four lanes with a 20 foot raised median. The project limits are from Brittany Court to approximately south of Lakeview Street. This is phase II of the widening along US129/SR11/Cleveland Highway. The project length is approximately 1.53 miles.

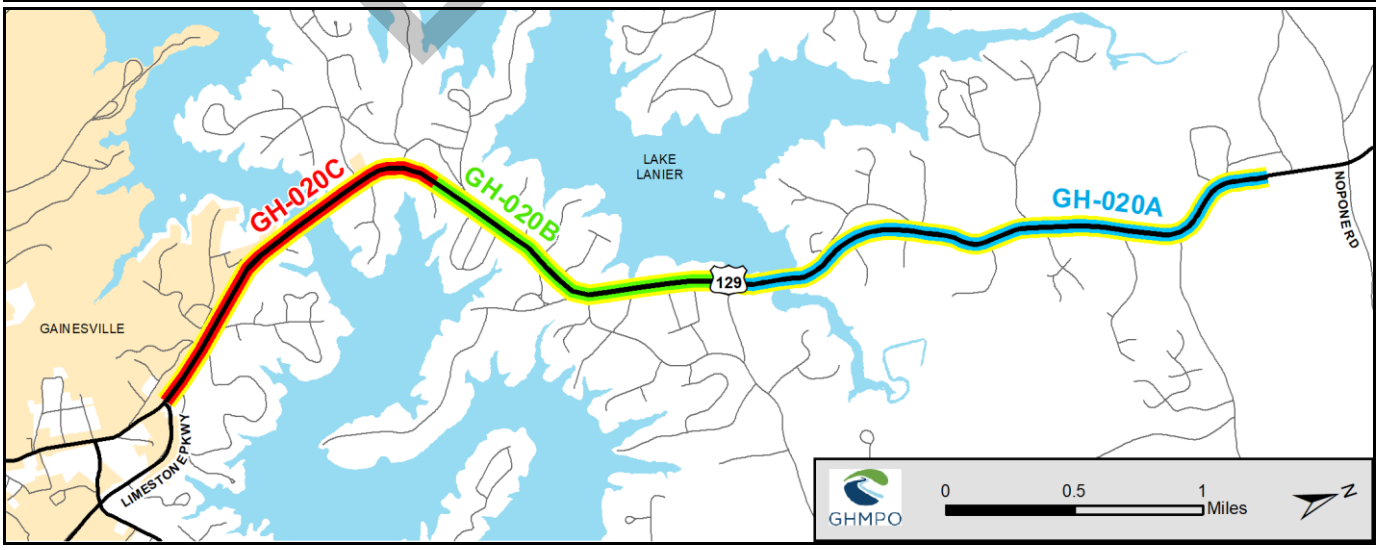
Improvement Type Widening **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

Create improved access and decrease congestion to the northern section of Hall County.

Project Termini **From** Brittany Court **To** Lakeview Street		**Length (miles)** 1.53
	Exist. Lanes 2	**Future Lanes** 4
Bike / Ped. N/A	**Exist. Vol.**	**Design Vol.**
Connectivity SR 11		
Network Year	**LRTP Project Tier:** Band 2 (2026-2030)	**Open to Traffic Date** 2031

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2026	Pre-Engineering	HB170	$0	$0	$0	$1,500,000	$1,500,000
2028	Right-of-Way	HB170	$0	$0	$0	$11,300,000	$11,300,000
2030	Utilities	HB170	$0	$0	$0	$2,714,600	$2,714,600
2030	Construction	HB170	$0	$0	$0	$11,976,737	$11,976,737
Auth.	Scoping	Y001	$0	$100,000	$400,000	$0	$500,000
		TOTAL	$0	$100,000	$400,000	$27,491,337	$27,991,337



Project Name SR 11/US 129 FM Limestone Pkwy to N of Brittany Court (Phase III)	**GHMPO No.** GH-020C	**GDOT No.** 0016863
	County Hall	**City** Gainesville
Local Rd. Name Cleveland Hwy	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name US 129 / SR 11	**Map ID**	**RC**

Project Description

This project proposes to widen US129/SR11/Cleveland Highway from two to four lanes with a 20 foot raised median. The project limits are from Limestone Pkwy to north of Brittany Court. This is phase III of the widening along US129/SR11/Cleveland Highway. The project length is approximately 2.06 miles.

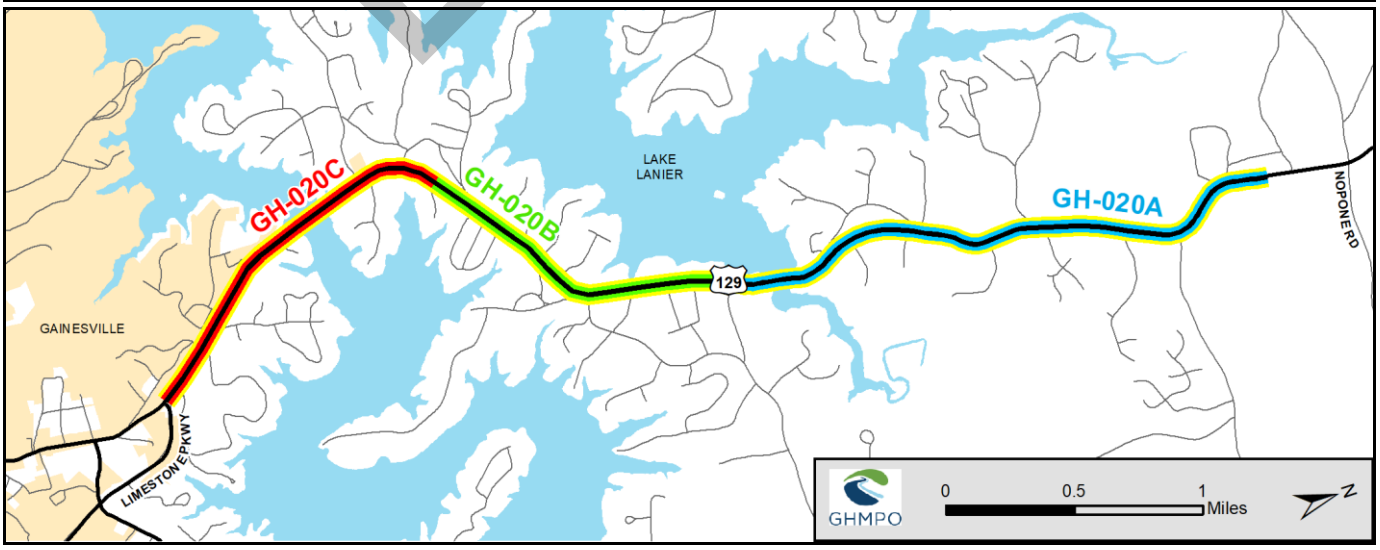
Improvement Type Widening **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

Create improved access and decrease congestion to the northern section of Hall County.

Project Termini **From** Limestone Parkway **To** Brittany Court		**Length (miles)** 2.06
	Exist. Lanes 2	**Future Lanes** 4
Bike / Ped. N/A	**Exist. Vol.**	**Design Vol.**
Connectivity SR 11		
Network Year	**LRTP Project Tier:** Band 2 (2026-2030)	**Open to Traffic Date** 2031

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2026	Pre-Engineering	HB170	$0	$0	$0	$1,500,000	$1,500,000
2028	Right-of-Way	HB170	$0	$0	$0	$9,260,000	$9,260,000
2030	Utilities	HB170	$0	$0	$0	$2,546,800	$2,546,800
2030	Construction	HB170	$0	$0	$0	$25,392,641	$25,392,641
Auth.	Scoping	Y001	$0	$100,000	$400,000	$0	$500,000
		TOTAL	$0	$100,000	$400,000	$38,699,441	$39,199,441



Project Name Spout Springs Road Widening From Union Circle to S of SR 347 - Phase II	**GHMPO No.** GH-023B	**GDOT No.** 0015280
	County Hall	**City** Braselton
Local Rd. Name Spout Springs Road	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name N/A	**Map ID** 23	**RC** GMRC

Project Description

Project P.I. no. 0015280 proposes to widen CR 1287 / Spout Springs Road from a 2-lane roadway to a 4-lane divided roadway with a 20 foot raised median and sidewalks. Median openings and intersections will be modified/removed accordingly. The project limits along Spout Springs Road are Union Circle to S. of SR 347 for a total distance of 2.51 miles.

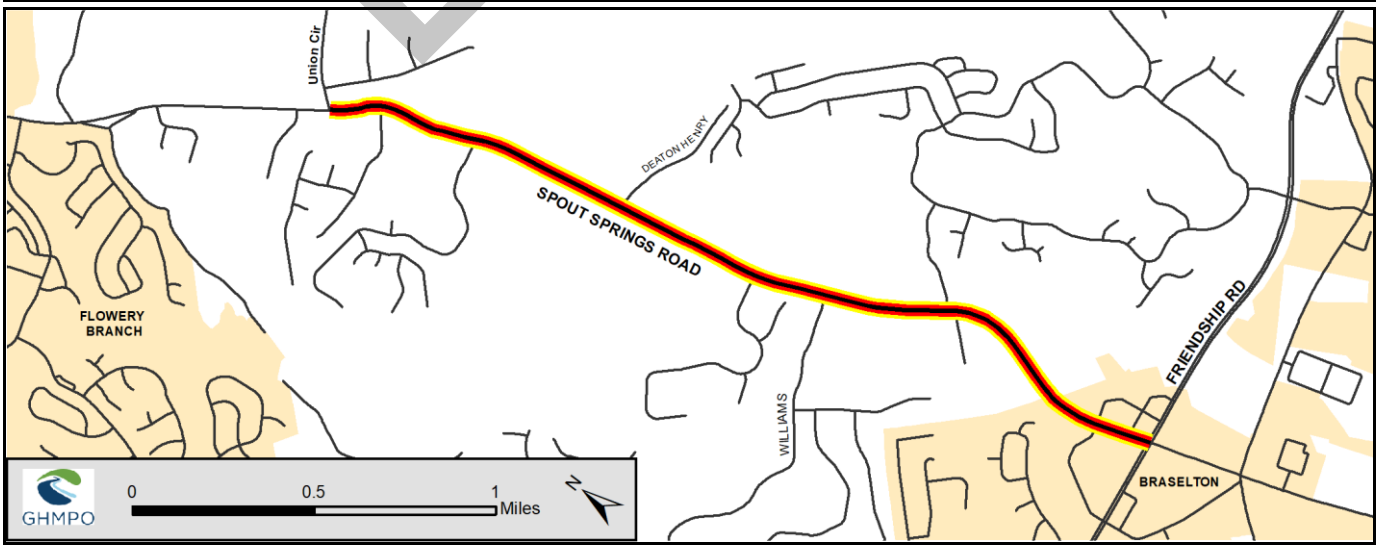
Improvement Type Widening **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** Hall Co

Project Intent

The need for improved mobility and decreased congestion along an important east/west link in south Hall.

Project Termini **From** Union Circle Road **To** South of SR 347/Friendship Road		**Length (miles)** 2.51
	Exist. Lanes 2	**Future Lanes** 4
Bike / Ped. Sidewalks / Bike and Pedestrian Path	**Exist. Vol.** 15,500 (2015)	**Design Vol.** 22,340 (2040)
Connectivity SR 347/Friendship Road, Union Circle Road		
Network Year 2030 **LRTP Project Tier:** Bands 1 - 2 (2020-2030)		**Open to Traffic Date** TBD

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2024	Construction	LOC	$26,492,340	$0	$0	$0	$26,492,340
2024	Utilities	LOC	$3,668,868	$0	$0	$0	$3,668,868
Auth.	Pre-Engineering	LOC	$0	$0	$0	$0	$0
Auth.	Right-of-Way	LOC	$12,570,000	$0	$0	$0	$12,570,000
		TOTAL	$42,731,208	$0	$0	$0	$42,731,208



Project Name SR 60/Thompson Bridge Road at Chattahoochee River	**GHMPO No.** GH-119	**GDOT No.** 0015551
	County Hall	**City** Gainesville
Local Rd. Name Thompson Bridge Rd	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name SR 60	**Map ID** 119	**RC** GMRC

Project Description

SR 60/Thompson Bridge Road at Chattahoochee River in Gainesville

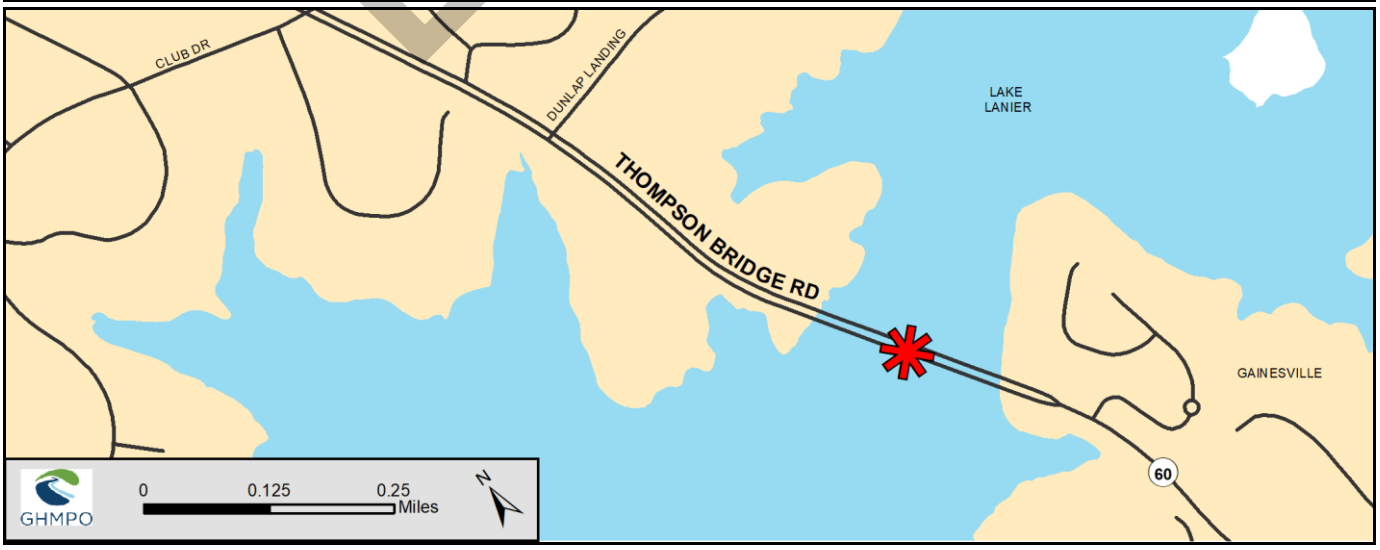
Improvement Type Bridge **Regionally Significant** Yes **Capacity Adding** No **Funding Source** GDOT

Project Intent

To replace bridge infrastructure

Project Termini **From** N/A **To** N/A	**Length (miles)** 0.72	
	Exist. Lanes 4	**Future Lanes** 4
Bike / Ped. N/A	**Exist. Vol.** 14,690 (2015)	**Design Vol.** 24,630 (2050)
Connectivity Regional		
Network Year N/A **LRTP Project Tier:** Band 2 (2026-2030)		**Open to Traffic Date** 2029

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2024	Right-of-Way	Y001	$0	$20,163	$80,652	$0	$100,815
2028	Utilities	Y001	$0	$85,250	$341,002	$0	$426,252
2028	Construction	Y001	$0	$7,875,618	$31,502,472	$0	$39,378,090
Auth.	Scoping	Z001	$0	$100,000	$400,000	$0	$500,000
Auth.	Pre-Engineering	Z001	$0	$200,000	$800,000	$0	$1,000,000
		TOTAL	$0	$8,281,031	$33,124,126	$0	$41,405,157



Project Name SR 11BU/SR 60 From CS 624/Academy St to CS 548/Glenwood Dr.	**GHMPO No.** GH-121	**GDOT No.** 0017392
	County Hall	**City** Gainesville
Local Rd. Name SR 11	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name SR 60	**Map ID** 121	**RC** GMRC

Project Description

Maintain four travel lanes. Install a center raised median between Academy Street and Glenwood Drive.

Improvement Type Roadway O **Regionally Significant** Yes **Capacity Adding** No **Funding Source** GDOT

Project Intent

Address existing traffic congestion and replaces existing utilities.

Project Termini **From** Academy Street **To** Glenwood Dr		**Length (miles)** 0.7
	Exist. Lanes 4	**Future Lanes** 4
Bike / Ped. 6' sidewalk	**Exist. Vol.** (2015) 15,920	**Design Vol.** (2050) 22,210
Connectivity		
Network Year N/A	**LRTP Project Tier:** Band 1 (2020-2025)	**Open to Traffic Date** 2026

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2024	Right-of-Way	HB170	$0	$0	$0	$5,109,780	$5,109,780
2026	Construction	HB170	$0	$0	$0	$14,856,912	$14,856,912
2026	Utilities	HB170	$0	$0	$0	$1,506,915	$1,506,915
Auth.	Pre-Engineering	LOC/HB170	$800,000	$0	$0	$25,000	$825,000
		TOTAL	$800,000	$0	$0	$21,498,607	$22,298,607

Project Name SR 53/Dawsonville Hwy from Ahaluna Dr to Shallowford	**GHMPO No.** GH-124	**GDOT No.** 0015702
	County Hall	**City** Gainesville
Local Rd. Name Dawsonville Hwy	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name SR 53	**Map ID**	**RC** GMRC

Project Description

The proposed project will improve congestion for through movements on SR 53/SR 53 Connector by connecting existing right-turn auxiliary lanes between Ahaluna Drive and Shallowford Road and installing R-CUT medians.

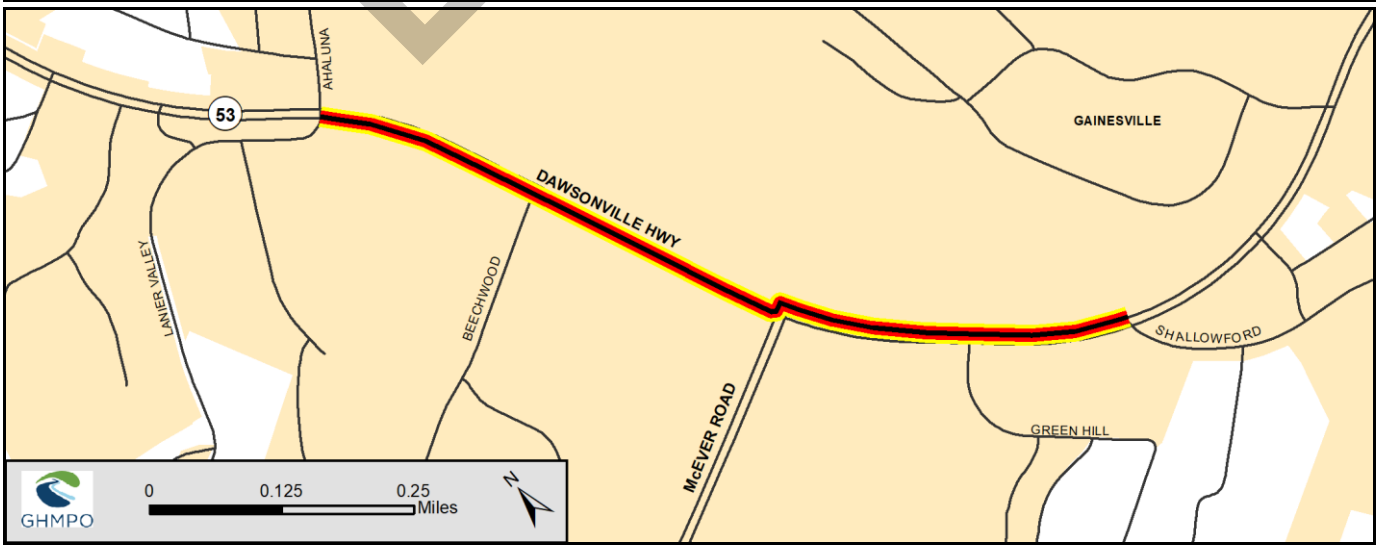
Improvement Type Operations **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

Address existing traffic congestion and improve mobility.

Project Termini **From** Ahaluna Dr **To** Shallowford Rd		**Length (miles)** .81
	Exist. Lanes 4	**Future Lanes** 4
Bike / Ped. N/A	**Exist. Vol.** (2015) 19,300	**Design Vol.** (2050) 28,750
Connectivity Regional		
Network Year N/A	**LRTP Project Tier:** Band 1 (2020-2025)	**Open to Traffic Date** 2025

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2024	Utilities	Y001	$0	$13,950	$55,799	$0	$69,749
2024	Construction	Y001	$0	$656,483	$2,625,932	$0	$3,282,415
Auth.	Pre-Engineering	Q05	$0	$0	$1,420,800	$0	$1,420,800
Auth.	Right-of-Way	Z001	$0	$102,000	$408,000	$0	$510,000
		TOTAL	$0	$772,433	$4,510,531	$0	$5,282,964



Project Name SR 60/Green street at CS 898/Academy Street	**GHMPO No.** GH-126	**GDOT No.** 0015918
	County Hall	**City** Gainesville
Local Rd. Name Green St/Academy St	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name SR 60	**Map ID**	**RC** GMRC

Project Description

The proposed project would replace the existing signalized intersection with a multi-lane roundabout for a project length of 0.3 miles.

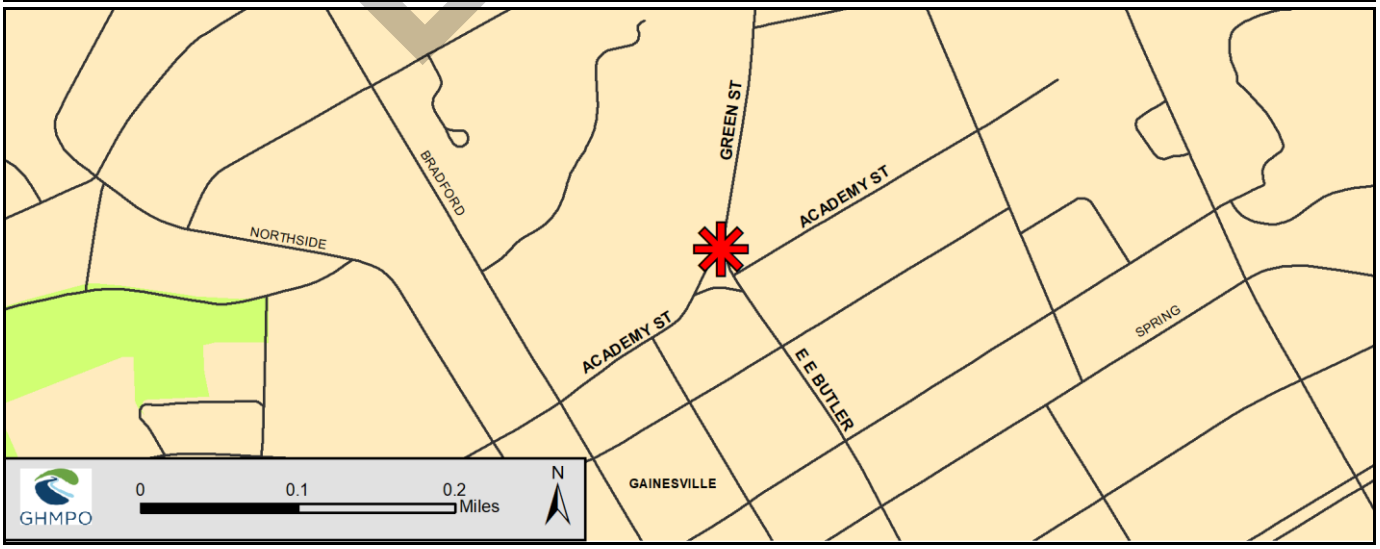
Improvement Type Roundabout **Regionally Significant** Yes **Capacity Adding** No **Funding Source** GDOT

Project Intent

Address existing traffic congestion and improve mobility.

Project Termini **From** N/A **To** N/A		**Length (miles)** N/A
	Exist. Lanes N/A	**Future Lanes** N/A
Bike / Ped. N/A	**Exist. Vol.** (2015) 15,550	**Design Vol.** (2050) 20,660
Connectivity Urban Area		
Network Year N/A	**LRTP Project Tier:** Band 1 (2020-2025)	**Open to Traffic Date** 2025

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2024	Utilities	YS30F	$0	$85,050	$340,200	$0	$425,250
2024	Construction	YS30F	$0	$450,992	$1,803,968	$0	$2,254,960
Auth.	Pre-Engineering	ZS30F	$0	$0	$1,300,000	$0	$1,300,000
Auth.	Right-of-Way	YS30F	$0	$234,000	$936,000	$0	$1,170,000
		TOTAL	$0	$770,042	$4,380,168	$0	$5,150,210



Project Name	GHMPO No.	GDOT No.
SR 365/Cornelia Highway At YMCA Drive/Lanier Tech Drive - New Interchange		
	County Hall	**City** Gainesville
Local Rd. Name YMCA Drive/Lanier Tech Drive	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name SR 365	**Map ID**	**RC** GMRC

Project Description

New interchange and overpass with tie-ins to right in and our on SR-365. The The purpose of this project is to address congestion and safety issues related to the new Lanier Technical College and the anticipated development in the surrounding area.

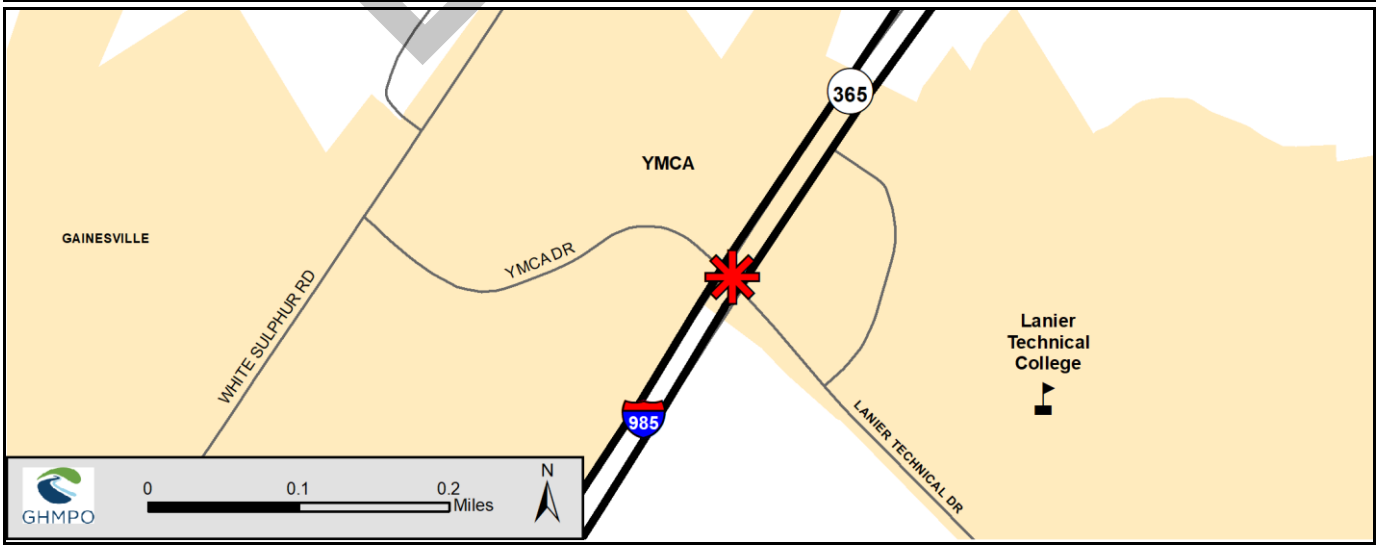
Improvement Type Interchange **Regionally Significant** Yes **Capacity Adding** No **Funding Source** GDOT

Project Intent

Address existing congestion and improve mobility in the region.

Project Termini **From** Lanier Tech Drive S of I-985 **To** YMCA Drive N of I-985	**Length (miles)** 0.80	
	Exist. Lanes 0	**Future Lanes** 2
Bike / Ped. N/A	**Exist. Vol.**	**Design Vol.**
Connectivity I-985		
Network Year 2030 **LRTP Project Tier:** Band 1 (2020-2025)		**Open to Traffic Date** 2027

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2024	Utilities	HB 170	$0	$0	$0	$583,695	$583,695
2024	Construction	HB 170	$0	$0	$0	$15,883,681	$15,883,681
Auth.	Pre-Engineering	HB 170	$0	$0	$0	$1,500,000	$1,500,000
Auth.	Right-of-Way	HB 170	$0	$0	$0	$2,094,000	$2,094,000
		TOTAL	$0	$0	$0	$20,061,376	$20,061,376



Project Name SR 283/Holly Springs Road at Flat Creek	**GHMPO No.** GH-141	**GDOT No.** 0017735
	County Hall	**City** Clermont
Local Rd. Name Holly Springs Road	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name SR 283	**Map ID**	**RC**

Project Description

This project replaces the existing bridge on SR 283 @ Flat Creek in Hall County.

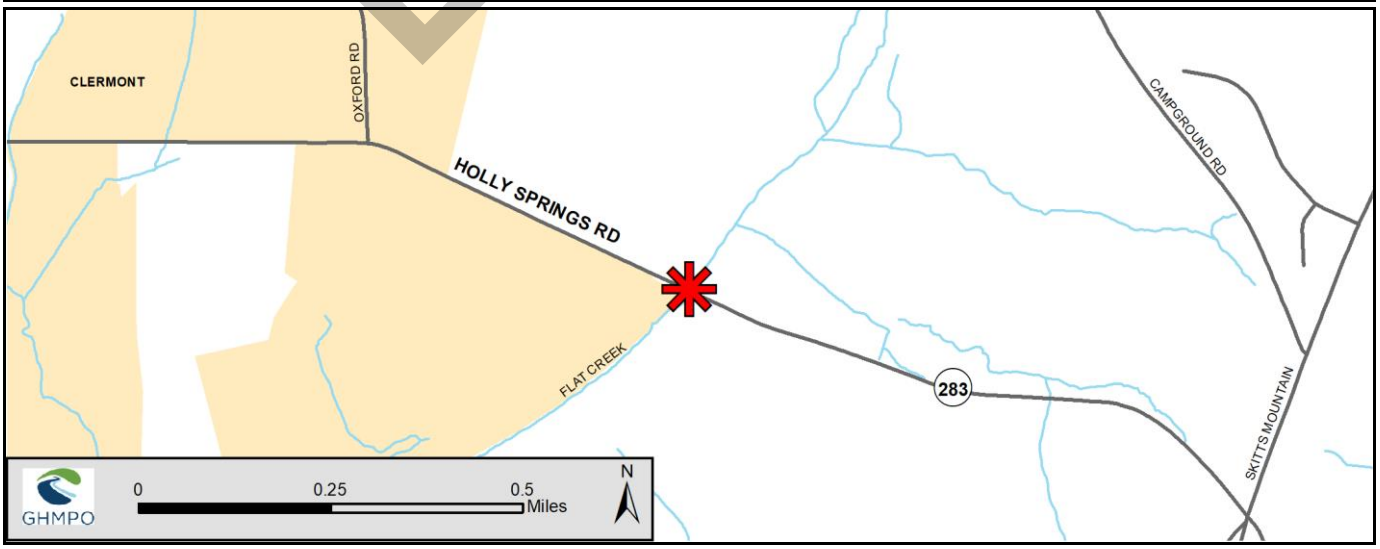
Improvement Type Bridge Repl **Regionally Significant** Yes **Capacity Adding** No **Funding Source** GDOT

Project Intent

To update bridge infrastructure.

Project Termini **From** Holly Springs Road, East of Flat Creek **To** Holly Springs Road, West of Flat Creek		**Length (miles)** .4
	Exist. Lanes 2	**Future Lanes** 2
Bike / Ped. N/A	**Exist. Vol.**	**Design Vol.**
Connectivity SR 283		
Network Year 2030 **LRTP Project Tier:** Band 2 (2026-2030)		**Open to Traffic Date** 2029

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2025	Right-of-Way	Z232	$0	$50,000	$200,000	$0	$250,000
2028	Utilities	Z232	$0	$17,119	$68,474	$0	$85,593
2028	Construction	Z232	$0	$168,288	$673,153	$0	$841,441
Auth.	Pre-Engineering	Y238	$0	$188,400	$753,600	$0	$942,000
		TOTAL	$0	$423,807	$1,695,227	$0	$2,119,034



Project Name SR 284/Shoal Creek Road at Eubank Creek	**GHMPO No.** GH-144	**GDOT No.** 0019079
	County Hall	**City** Clermont
Local Rd. Name Shoal Creek Road	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name SR 284	**Map ID**	**RC**

Project Description

This project proposes to replace the bridge on SR 284 crossing over Eubank Creek.

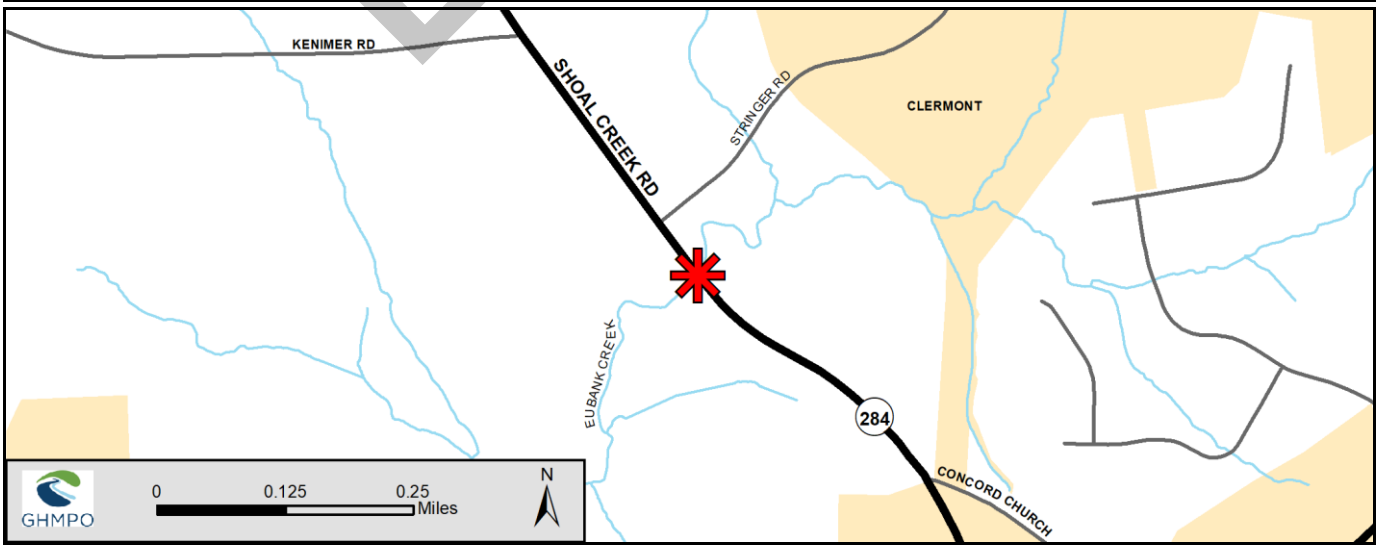
Improvement Type Bridge Repl **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

To replace the bridge on SR 284 over Eubank Creek

Project Termini **From** North of Eubank Creek **To** South of Eubank Creek		**Length (miles)** .40
	Exist. Lanes 2	**Future Lanes** 2
Bike / Ped. N/A	**Exist. Vol.**	**Design Vol.**
Connectivity SR 284		
Network Year	**LRTP Project Tier:** Band 2 (2026-2030)	**Open to Traffic Date** 2029

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2026	Right-of-Way	Y110	$0	$65,000	$260,000	$0	$325,000
2028	Construction	Y110	$0	$160,000	$640,000	$0	$800,000
2028	Utilities	Y110	$0	$12,000	$48,000	$0	$60,000
Auth.	Pre-Engineering	Y240	$0	$160,000	$640,000	$0	$800,000
		TOTAL	$0	$397,000	$1,588,000	$0	$1,985,000



Project Name SR 53 @ SR 369	**GHMPO No.** GH-145	**GDOT No.** 0016921
	County Hall	**City** Gainesville
Local Rd. Name McEver Road/Browns Bridge Road	**GDOT District** 1	**Cong. District** 9
US/State Rd. Name SR 53, SR 369	**Map ID**	**RC**

Project Description

The proposed project is intended to improve turn queuing and delays during peak traffic. The project would provide northbound and southbound dual left turn lanes on SR 53/McEver Road.

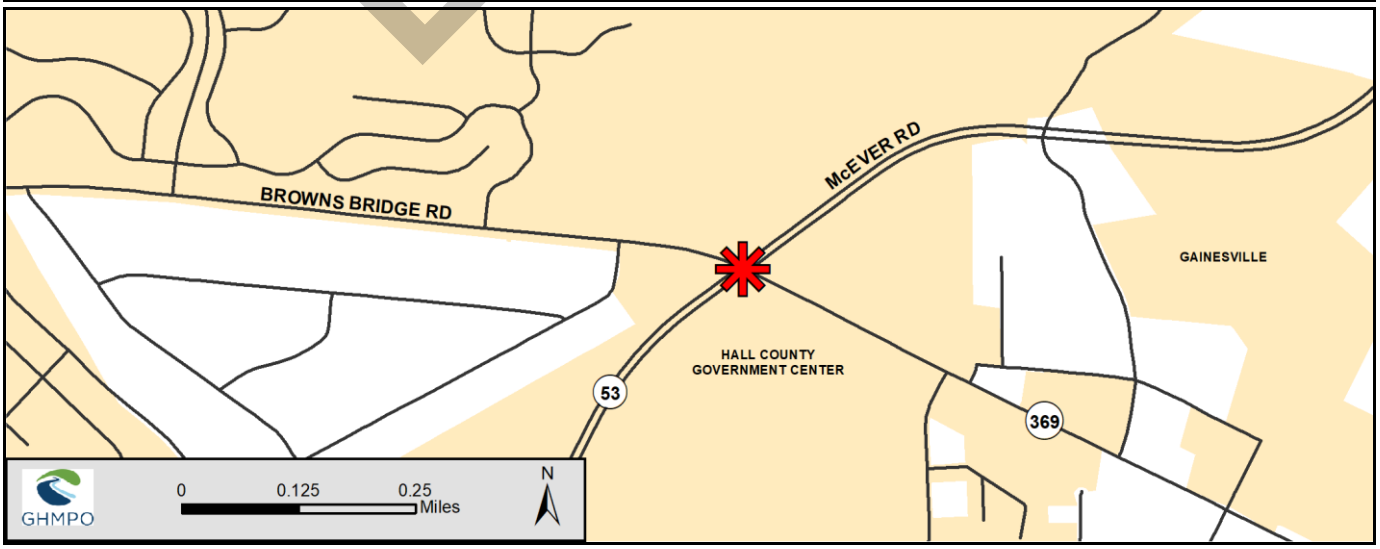
Improvement Type Intersection **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

To improve intersection mobility

Project Termini **From** N of McEver Road on Browns Br. Rd. **To** S of McEver Road on Browns Br. Rd.		**Length (miles)** .81
	Exist. Lanes 4	**Future Lanes** 4
Bike / Ped. N/A	**Exist. Vol.**	**Design Vol.**
Connectivity SR 369		
Network Year 2030 **LRTP Project Tier:** Band 1 (2021-2025)		**Open to Traffic Date** 2024

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	HB 170	TOTAL
2024	Construction	HB170	$0	$0	$0	$750,051	$750,051
Auth.	Pre-Engineering	HB170	$0	$0	$0	$575,000	$575,000
		TOTAL	$0	$0	$0	$1,325,051	$1,325,051



FY 2024-2027 Transportation Improvement Program

Appendix B: Transit Funding

Hall Area Transit Fleet Inventory

	Shop Number	System	Model Year	Make	Description	Acquisition Date	Cost	Federal Percentage	Grant Number	Capacity	Location	Disposition Action (Active or In-Active)	If Active, Condition (Excellent, Good, Fair, Poor)	Vested Title	Useful Life
Trolleys	5242		2019		Villager 208 Gasoline FE	11/1/2020	$383,995.00	80%	GA-90-X309	24A/2L	Hall Area Transit	Active	EXCELLENT	City of Gainesville	100,000 miles/5 years
	5243		2019		Villager 208 Gasoline FE	11/1/2020	$383,995.00	80%	GA-2017-034-01-00	24A/2L	Hall Area Transit	Active	EXCELLENT	City of Gainesville	100,000 miles/5 years
OP's	SUV-4526	Support	2006	Chevrolet	Chevrolet- Trailblazer	1/4/2006	$20,814	80%	GA-90-0209	5	Hall Area Transit	Active	Good	City of Gainesville	100,000 miles/5 years
	Op's Truck-4951	Support	2015	Ford	FORD F150	6/23/2015	$30,813	80%	GA-96-x012	5	Hall Area Transit	Active	Good	City of Gainesville	100,000 miles/5 years
WEGO	5244 EMMA	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	11/16/2020	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	5245 JAZZ	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	11/16/2020	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	5246 LUCAS	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	11/16/2020	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	5247 LUNA	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	11/16/2020	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	5248 MILO	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	11/16/2020	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	5249 AMARI	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	11/16/2020	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	5254 BELLA	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	12/31/2020	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	5255 ALONZO	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	12/31/2020	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	TYLER 5229	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	1/25/2021	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	TASHA 5282	WEGO	2020	Dodge	Dodge Ram Promaster 1500 Conversion	1/25/2021	$68,702	100%	GA-2020-007-01-00	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	MAYA 5264	WEGO	2020	Dodge	Dodge Ram Promaster 3500 Conversion	2/19/2021	$79,832.00	100%	GA-2020-007-01-00	10A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	SOFIA 5263	WEGO	2020	Dodge	Dodge Ram Promaster 3500 Conversion	2/19/2021	$79,832.00	100%	GA-2020-007-01-00	10A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	JUDY 5265	WEGO	2020	Dodge	Dodge Ram Promaster 3500 Conversion	2/19/2021	$79,832.00	100%	GA-2020-007-01-00	10A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	FELIX 5266	WEGO	2020	Dodge	Dodge Ram Promaster 3500 Conversion	2/19/2021	$79,832.00	100%	GA-2020-007-01-00	10A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	OTIS 5267	WEGO	2020	Dodge	Dodge Ram Promaster 3500 Conversion	2/22/2021	$79,832.00	100%	GA-2020-007-01-00	10A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	Rudy 5181	WEGO	2019	Ford	Candidate II	9/23/2021	$67,379.00	80%	GA-90-X309	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
	Ivey 5182	WEGO	2019	Ford	Candidate II	9/23/2021	$67,379.00	80%	GA-90-X309	8A/2L	Hall Area Transit	Active	Excellent	City of Gainesville	100,000 miles/5 years
		WEGO	2022	BraunAbility	Voyager Rear Entry	3/28/2023	$75,345.00	80%	FY23 5307 Capital T006844		Hall Area Transit	Active	Excellent	City of Gainesville	
		WEGO	2022	BraunAbility	Voyager Rear Entry	3/27/2023	$75,345.00	80%	FY23 5307 Capital T006844		Hall Area Transit	Active	Excellent	City of Gainesville	
		WEGO	2022	BraunAbility	Voyager Rear Entry	3/29/2023	$75,345.00	80%	FY23 5307 Capital T006844		Hall Area Transit	Active	Excellent	City of Gainesville	
		WEGO	2022	BraunAbility	Voyager Rear Entry	3/29/2023	$75,345.00	80%	FY23 5307 Capital T006844		Hall Area Transit	Active	Excellent	City of Gainesville	
		WEGO	2022	BraunAbility	Voyager Rear Entry	3/27/2023	$75,345.00	80%	FY23 5307 Capital T006844		Hall Area Transit	Active	Excellent	City of Gainesville	

FY 2024 – 2027 Section 5307 Funding

Section 5307 (Urban Operating Expenses)					
Description	**2024**	**2025**	**2026**	**2027**	**Total**
FY Operations	$3,885,442	$4,079,714	$4,283,700	$4,497,885	$16,746,741
PROJECT COST	**$3,885,442**	**$4,079,714**	**$4,283,700**	**$4,497,885**	**$16,746,741**
FEDERAL	$1,942,721	$2,039,857	$2,141,850	$2,248,942	$8,373,370
STATE	$0	$0	$0	$0	$0
LOCAL	$1,942,721	$2,039,857	$2,141,850	$2,248,942	$8,373,370

Section 5307 (Urban Capital Expenses)					
Description	**2024**	**2025**	**2026**	**2027**	**Total**
Replacement Vehicles	$0	$0	$0	$0	$0
ADA Vehicles	$0	$0	$0	$0	$0
Support Vehicles	$0	$0	$0	$0	$0
Expansion Vehicles	$800,000	$250,000	$0	$0	$1,050,000
Fareboxes	$0	$0	$0	$0	$0
Passenger Shelters	$0	$0	$0	$0	$0
Passenger Benches	$0	$0	$0	$0	$0
Parking Lot & Bldg. Improvements	$0	$0	$0	$0	$0
Hydraulic Staking System	$0	$250,000	$0	$0	$250,000
PROJECT COST	**$800,000**	**$500,000**	**$0**	**$0**	**$1,300,000**
FEDERAL	$640,000	$400,000	$0	$0	$1,040,000
STATE	$80,000	$50,000	$0	$0	$130,000
LOCAL	$80,000	$50,000	$0	$0	$130,000

Capital Purchases

FY 2024 - 2027 Urban Capital Purchases					
Description	**2024**	**2025**	**2026**	**2027**	**Total**
Buy <30 Ft Bus For Expansion	$800,000	$0	$0	$0	$800,000
Rehab/renovate Administrative Facility	$190,000	$0	$0	$0	$190,000
Operating Assistance up to 50% Federal Share	$2,470,799	$0	$0	$0	$2,470,799
5 Braunablity Voyager Vans	$376,725	$0	$0	$0	$376,725
2 Additional Trollies	$336,268	$0	$0	$0	$336,268
Preventative Maintenance	$160,000	$0	$0	$0	$160,000
PROJECT COST	**$4,333,792**	**$0**	**$0**	**$0**	**$4,333,792**
FEDERAL	$3,467,034	$0	$0	$0	$3,467,034
STATE	$433,379	$0	$0	$0	$433,379
LOCAL	$433,379	$0	$0	$0	$433,379

FY 2024-2027 Transportation Improvement Program

Appendix C: Public Comments

2024-2027 Transportation Improvement Program (TIP)

The public participation effort for the 2024-2027 Transportation Improvement Program (TIP) was uniquely designed to obtain local input through stakeholder discussions. Building on the experience of previous success in public outreach efforts, GHMPO developed a process consistent with the adopted Participation Plan to:

- ***Involve*** the stakeholders with early opportunities for participating in the decision-making process, particularly minority and low-income persons;
- ***Listen*** to the concerns and issues of the stakeholders living in the community;
- ***Inform*** the stakeholders in a timely manner of progress and recommendations;
- ***Learn*** from the stakeholders ideas for solutions to transportation problems;
- ***Consult*** with stakeholders and provide reasonable opportunity to comment; and
- ***Develop*** an effective outreach process that includes an integrated feedback process for evaluation and improvement.

Throughout the TIP update process, opportunities for citizen input through staff, elected officials, and stakeholders have not only been encouraged but also institutionalized. The 2024-2027 TIP went through the minimum required public comment period, per the Participation Plan, before it was adopted by the GHMPO Policy Committee.

FY 2024-2027 Transportation Improvement Program

Appendix D: Lump Sum Narrative

Lump Sum Funding

A portion of the STIP funding is set aside for certain groups of projects that do not substantially increase roadway capacity. The Lump Sum projects program is intended to give the Department and MPOs flexibility to address projects of an immediate concern while fulfilling the requirements of the STIP. Funds are set up in lump sum banks to undertake improvements that emerge and are developed after the STIP is approved. These lump sum banks are listed for each year for managing and accounting for the funding. They can be found in the statewide or "All Counties" section of the STIP. Lump sum banks are shown in the STIP with the words "Lump Sum" in the project description and contain an amount of funding for each year. Individual projects are programmed, and funds are drawn from these lump sums during the year. The individual projects may include work at one or several locations for letting and accounting purposes. Listed below are these groups and information about them. Except for rights-of-way protective buying, the total available funds are shown as construction for easy accounting, but preliminary engineering and rights-of-way may be drawn from this amount when required in that category.

Group: Transportation Alternative Program (TAP)

This group is for transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure for improving non-driver access to public transportation and enhanced mobility, community improvement activities, environmental mitigation, recreational trails and safe routes to school.

State DOTs and MPOs are not eligible entities to receive TAP funds as defined under 23 U.S.C. 133(h)(4)(B) and therefore are not eligible project sponsors. However, State DOTs and MPOs may partner with an eligible entity project sponsor to carry out a project. In accordance with 23 U.S.C. 133(h)(4), project selection for this program is achieved through a competitive process administered by Georgia DOT.

Group: Maintenance

This group is broken into two programs: Bridge Maintenance and Maintenance.

- Bridge Maintenance consists of Preservation (polymer overlays of bridge decks, joint replacements, debris removal and painting of the steel super and sub structure components) & Rehabilitation (bridge deck rehabilitation, spall repairs, strengthening, pile encasements, reconstruction of structural members, etc.).

- Maintenance consists of resurfacing, pavement preservation, pavement rehabilitation, median work, impact attenuators, signing, fencing, pavement markings, landscaping, rest areas, walls, guardrail and shoulder work.

Group: Lighting

This group is used to assist local municipalities with installing new or upgraded lighting systems and material reimbursement for repairs. This includes lighting to mitigate safety issues related to geometry or operation (e.g., high crash rates), security concerns, or planning for economic development and/or increased pedestrian usage.

Group: Rights of Way, Protective Buying, and Hardship Acquisitions

This group is for the acquisition of parcel(s) of rights-of-way (ROW) for future projects that are in jeopardy of development and for hardship acquisition. Qualifying projects are those that have preliminary engineering (PE) underway or have a PE, ROW or construction phase in the STIP.

Group: Safety

This group is broken into two programs: Railroad & Safety Improvements

- The Railroad program consists of railroad protection device projects & hazard elimination projects which includes the installation of new or upgraded train activated warning, signing and pavement marking upgrades, elimination of redundant or unnecessary crossings, vertical and horizontal geometric improvements, sight distance improvements, lighting, channelization and surface widening projects.
- Safety Improvements include cable barriers, guardrail, intersection improvements, pavement markings, roundabouts, rumble strips, safety equipment upgrades, signals, signing and turning lanes.

Group: Operations

This group is broken into two programs: Operational Improvements & Signal Upgrades.

- The Operational Improvement program consists of intersection improvements, turning lanes, ramp exit & interchange improvements, innovative intersection improvements like Diverging Diamond Intersections, Displaced Left Turn lanes, and Continuous Flow Intersections.
- The Signal Upgrades program consists of signal designs, specifications, upgrades, signal operations, maintenance and signal asset replacements.

Group: Low Impact Bridges

Candidates for this process will require minimal permits, minor utility impacts, minimal FEMA coordination, no on-site detour, and meet other low-impact characteristics as identified in this document. Projects that ultimately qualify for this expedited process also must not exceed established environmental impact thresholds and thus qualify as a Categorical Exclusion (CE) determinations in compliance with the National Environmental Policy Act (NEPA). The Program has been created with three major principles in mind – safety, stewardship and streamlining.

- The safety of the traveling public is of paramount importance. It is the intent of this program to reduce risk associated with structurally deficient, scour critical, temporarily shored, or fracture critical structures.
- Second only to safety, the program will foster stewardship of Georgia's environmental and financial resources. Projects developed under the Program will seek to minimize the impact to the natural environment while providing long-term cost-effective engineering solutions.
- The Program will result in accelerated, streamlined delivery of all phases of the bridge replacement including, planning, design, environmental approval and construction.

FY 2024-2027 Transportation Improvement Program

Appendix E: MPO Lump Sum Projects

MPO Lump Sum Projects – Gainesville

Hall

				PE		ROW		CST		UTL	
PROJ	**PROJ NO.**	**TIP NO.**	**DESCRIPTION**								
0013171			PEDESTRIAN UPGRADES @ 13 LOCS IN HALL COUNTY - VRU	PE	AUTHORIZED	ROW	PRECST	CST	PRECST	UTL	PRECST
0015702			SR 53 FROM CS 921/AHALUNA DRIVE TO CS 966/SHALLOWFORD ROAD	PE	AUTHORIZED	ROW	AUTHORIZED	CST	PRECST	UTL	PRECST
0015918			SR 60 @ CS 898/ACADEMY STREET	PE	AUTHORIZED	ROW	PRECST	CST	PRECST	UTL	PRECST
0016118			SR 369 FROM SR 53 TO SR 53 CONN - VRU	PE	AUTHORIZED			CST	PRECST	UTL	PRECST
0016869			CS 705/CHATTAHOOCHEE STREET @ NS #717810B IN FLOWERY BRANCH					CST	PRECST		
0018042			OFF-SYSTEM SAFETY IMPROVEMENTS @ 4 LOCS IN HALL COUNTY	PE	AUTHORIZED			CST	AUTHORIZED		
0018364			SR 369 @ I-985	PE	AUTHORIZED						
0019644			SR 60 @ CALVARY CHURCH ROAD/OLD CANDLER ROAD	PE	AUTHORIZED						
M006179			SR 11/US 129 FROM SR 323 TO CS 719/MONROE DRIVE								
M006182			SR 13 FROM SR 347 TO 0.10 MI N OF CS 630/CANTRELL ROAD								

Jackson

				PE		ROW		CST		UTL	
PROJ	**PROJ NO.**	**TIP NO.**	**DESCRIPTION**								
0015391			CS 751/CR 1317/DAVIS ST @ 1 LOC &CS 753/PINECREST LN @ 1 LOC	PE	AUTHORIZED	ROW	AUTHORIZED				
0016166			SR 124 @ SR 60 & CR 17/SAM FREEMAN ROAD	PE	AUTHORIZED	ROW	PRECST	CST	PRECST	UTL	PRECST
0019223			CR 147/JACKSON TRAIL ROAD OFF-SYSTEM SAFETY IMPROVEMENTS	PE	AUTHORIZED			CST	PRECST		
0019862			SR 53 FROM BRASELTON CITY LIMITS TO TWIN LAKES BLVD					CST	PRECST		

FY 2024-2027 Transportation Improvement Program

Appendix F: MPO Authorized Projects

MPO Authorized Projects - Gainesville

Barrow

PROJ	PROJ NO.	TIP NO.	DESCRIPTION	Phase Status	Phase Code	Program Year	MPO	Latest Cost Estimated Total	% in MPO	Amount
M006087			SR 53 @ MULBERRY RIVER - BRIDGE REHABILITATION	AUTHORIZED	MCST	2020	Gainesville	$598,116.08	50	$299,058.04
					MPE	2020	Gainesville	$2,135.18	50	$1,067.59

Hall

PROJ	PROJ NO.	TIP NO.	DESCRIPTION	Phase Status	Phase Code	Program Year	MPO	Latest Cost Estimated Total	% in MPO	Amount
0003626	STP00-0003-00(626)	GH-016	SARDIS RD CONN FM SR 60 TO SARDIS RD NEAR CHESTATEE RD	AUTHORIZED	PE	2023	Gainesville	$18,000.00	100	$18,000.00
					ROW	2021	Gainesville	$20,763,000.00	100	$20,763,000.00
0007170	CSBRG-0007-00(170)	GH-056	SR 136 @ CHESTATEE RIVER 8.3 MI SOUTHEAST OF DAWSONVILLE	AUTHORIZED	CST	2021	Gainesville	$9,422,741.35	50	$4,711,370.68
					ROW	2020	Gainesville	$1,330,000.00	50	$665,000.00
0007233	CSSTP-0007-00(233)	GH-025	SR 211 FROM SR 347 TO SR 53	AUTHORIZED	PE	2023	Gainesville	$1,523,365.44	100	$1,523,365.44
					SCP	2022	Gainesville	$700,000.00	100	$700,000.00
0013922		GH-116	I-985 @ CS 991/ELACHEE ROAD IN GAINESVILLE	AUTHORIZED	CST	2022	Gainesville	$7,235,385.73	100	$7,235,385.73
					ROW	2020	Gainesville	$180,000.00	100	$180,000.00
0013980			OVERSIGHT SERVICES FOR GAINESVILLE MPO CMAQ PROJECTS-FY 2020	AUTHORIZED	PE	2020	Gainesville	$70,000.00	100	$70,000.00
0013981			OVERSIGHT SERVICES FOR GAINESVILLE MPO CMAQ PROJECTS-FY 2021	AUTHORIZED	PE	2021	Gainesville	$70,000.00	100	$70,000.00
0013982			OVERSIGHT SERVICES FOR GAINESVILLE MPO CMAQ PROJECTS-FY 2022	AUTHORIZED	PE	2022	Gainesville	$70,000.00	100	$70,000.00
0013983			OVERSIGHT SERVICES FOR GAINESVILLE MPO CMAQ PROJECTS-FY 2023	AUTHORIZED	PE	2023	Gainesville	$70,000.00	100	$70,000.00
0015280			SPOUT SPRINGS ROAD FROM UNION CIRCLE TO S OF SR 347-PHASE II	AUTHORIZED	ROW	2023	Gainesville	$12,570,000.00	100	$12,570,000.00
0015551		GH-119	SR 60 @ CHATTAHOOCHEE RIVER IN GAINESVILLE	AUTHORIZED	PE	2020	Gainesville	$2,726,468.78	100	$2,726,468.78
0015702			SR 53 FROM CS 921/AHALUNA DRIVE TO CS 966/SHALLOWFORD ROAD	AUTHORIZED	ROW	2021	Gainesville	$510,000.00	100	$510,000.00
0016353				AUTHORIZED	CST	2021	Gainesville	$860,328.87	100	$860,328.87

			SR 365/US 23 FROM SR 52 TO SR 369		PE	2020	Gainesville	$3,122.13	100	$3,122.13
0016354			SR 365/US 23 FROM SR 52 TO SR 384	AUTHORIZED	CST	2021	Gainesville	$996,883.85	52	$518,379.60
					PE	2020	Gainesville	$300,000.00	52	$156,000.00
0016557			PL GAINESVILLE SFY 2020 UPWP	AUTHORIZED	PLN	2020	Gainesville	$206,712.41	100	$206,712.41
0016616			SR 13 @ I-985 & CR 3514/THURMON TANNER PKWY	AUTHORIZED	CST	2021	Gainesville	$832,237.67	100	$832,237.67
					PE	2020	Gainesville	$350,000.00	100	$350,000.00
0016862			SR 11/US 129 FM BRITTANY COURT TO S OF LAKEVIEW ST-PHASE II	AUTHORIZED	SCP	2022	Gainesville	$500,000.00	100	$500,000.00
0016863			SR 11/US 129 FM LIMESTONE PKWY TO N OF BRITTANY COURT-PH III	AUTHORIZED	SCP	2022	Gainesville	$500,000.00	100	$500,000.00
0016921			SR 53 @ SR 369	AUTHORIZED	PE	2020	Gainesville	$575,000.00	100	$575,000.00
0017119			SR 60 @ CR 757/ROY PARKS ROAD	AUTHORIZED	CST	2020	Gainesville	$173,369.57	100	$173,369.57
0017159			PL GAINESVILLE - FY 2021	AUTHORIZED	PLN	2021	Gainesville	$186,445.65	100	$186,445.65
0017392		GH-131	SR 11BU/SR 60 FROM CS 624/ACADEMY ST TO CS 548/GLENWOOD DR	AUTHORIZED	PE	2021	Gainesville	$25,000.00	100	$25,000.00
						2022	Gainesville	$800,000.00	100	$800,000.00
0017735			SR 283 @ FLAT CREEK	AUTHORIZED	PE	2023	Gainesville	$942,000.00	100	$942,000.00
0017899			PL GAINESVILLE - FY 2022	AUTHORIZED	PLN	2022	Gainesville	$251,386.02	100	$251,386.02
0018013			SR 11BU/SR 60 @ SR 11/SR 369	AUTHORIZED	CST	2022	Gainesville	$75,600.00	100	$75,600.00
0018042			OFF-SYSTEM SAFETY IMPROVEMENTS @ 4 LOCS IN HALL COUNTY	AUTHORIZED	CST	2023	Gainesville	$1,044,382.72	100	$1,044,382.72
					PE	2022	Gainesville	$8,000.00	100	$8,000.00
0018276			SR 13 @ CR 3413/MEMORIAL PARK DRIVE	AUTHORIZED	CST	2023	Gainesville	$73,000.00	100	$73,000.00
0018364			SR 369 @ I-985	AUTHORIZED	PE	2022	Gainesville	$200,000.00	100	$200,000.00
0018421			PL GAINESVILLE - FY 2023	AUTHORIZED	PLN	2023	Gainesville	$305,749.20	100	$305,749.20
0019079			SR 284 @ EUBANK CREEK	AUTHORIZED	PE	2023	Gainesville	$800,000.00	100	$800,000.00
0019305			PL GAINESVILLE - SAFE & ACCESSIBLE TRANS OPTIONS - FY 2023	AUTHORIZED	PLN	2023	Gainesville	$7,421.04	100	$7,421.04
0019644			SR 60 @ CALVARY CHURCH ROAD/OLD CANDLER ROAD	AUTHORIZED	PE	2023	Gainesville	$1,072,727.00	100	$1,072,727.00
122060-	STP00-0002-06(048)	GH-020	SR 11/US 129 FROM LAKEVIEW STREET TO S OF NOPONE RD-PHASE I	AUTHORIZED	ROW	2023	Gainesville	$18,390,000.00	100	$18,390,000.00

132610-	STP00-0198-01(020)	GH-038	SR 60 FROM S OF SR 136 TO N OF CR 158/YELLOW CREEK ROAD	AUTHORIZED	PE	2023	Gainesville	$5,739,120.32	100	$5,739,120.32
M005744			SR 52 FROM W OF CR 932/JULIAN BAUGH RD TO CS 620/SHORT ST	AUTHORIZED	MCST	2021	Gainesville	$3,922,375.31	63	$2,471,096.45
M006020			I-985 SB & NB @ SR 53 CONN - BRIDGE REHAB	AUTHORIZED	MCST	2020	Gainesville	$1,604,630.93	100	$1,604,630.93
					MPE	2020	Gainesville	$35,000.00	100	$35,000.00
M006268			SR 53 FROM SR 53 CONN TO SR 369	AUTHORIZED	MCST	2022	Gainesville	$1,785,274.33	100	$1,785,274.33
M006269			SR 53 FM CS 656/CEDAR RIDGE DR TO S OF SR 211/TANNER MILL RD	AUTHORIZED	MCST	2023	Gainesville	$3,411,889.51	100	$3,411,889.51
M006270			SR 53 FROM CS 630/MCEVER ROAD TO CS 656/CEDAR RIDGE DRIVE	AUTHORIZED	MCST	2022	Gainesville	$2,829,008.74	100	$2,829,008.74
M006318			SR 11/US 129 FROM S OF JIM HOOD RD/NOPONE RD TO S OF SR 283	AUTHORIZED	MCST	2023	Gainesville	$3,046,084.92	100	$3,046,084.92
M006322			SR 60 FROM SR 332 TO I-985	AUTHORIZED	MCST	2023	Gainesville	$3,862,842.63	100	$3,862,842.63
S015278			extend Rht turn lane on SR369 at inters. with EE Butler Pkwy	AUTHORIZED	TSA	2020	Gainesville	$161,222.00	100	$161,222.00
S015280			EEE ADDL LMIG ROUNDABOUT @ UNG CAMPUS @MATHIS DR & CAMPUS DR	AUTHORIZED	PR	2020	Gainesville	$75,000.00	100	$75,000.00
S015374			CONSTRUCT RCUT ON SR 347 AT REUNION WAY/NAPA RIDGE ROAD	AUTHORIZED	TSA	2020	Gainesville	$82,256.03	100	$82,256.03
S015393			Ped crossing on SR 11/Park Hill Drive just S. of Roper Hill	AUTHORIZED	TSA	2020	Gainesville	$64,673.39	100	$64,673.39
S015460			INSTALLATION OF SIDEWALK ON SR 13 OVER FLAT CREEK	AUTHORIZED	TSA	2021	Gainesville	$109,855.00	100	$109,855.00
S015707			extend the eastbound left turn lane at SR 369 and Prior St	AUTHORIZED	TSA	2022	Gainesville	$116,632.38	100	$116,632.38
S015730			Install a RHPL on SR 60/Candler Rd at Cottrell Driveway	AUTHORIZED	TSA	2022	Gainesville	$165,297.23	100	$165,297.23
S015731			Extend Left Turn Lanes on SR 60 btw Pearl Nix & Industrial	AUTHORIZED	TSA	2022	Gainesville	$152,710.20	100	$152,710.20

S015772			Extend the EB Left Turn Lane along SR 53 Connector & SR 369	AUTHORIZED	TSA	2022	Gainesville	$164,001.43	100	$164,001.43
S015773			Extend Turn Lane on SR 365 for NB U-Turn A Jaemor Farms	AUTHORIZED	TSA	2023	Gainesville	$175,160.50	100	$175,160.50
S015776			Install a RCUT on SR 365 at Mud Creek Road	AUTHORIZED	TSA	2023	Gainesville	$150,010.64	100	$150,010.64
S015783			Install a U-Turn near SR 365 & Mud Creek Road.	AUTHORIZED	TSA	2023	Gainesville	$197,165.05	100	$197,165.05
S015812			INSTALL DUAL LTL ON WB APPROACH AT SR 11/369 & SR 60 BUS	AUTHORIZED	TSA	2023	Gainesville	$60,827.41	100	$60,827.41
S015862			Extending the Thru Lane on SR 347 EB @ I-985 SB	AUTHORIZED	TSA	2023	Gainesville	$170,039.07	100	$170,039.07
S015863			Install a Dual Left Turn Lane on SR 347 EB at I-985 NB ramp	AUTHORIZED	TSA	2023	Gainesville	$196,486.80	100	$196,486.80
S015872			Install Medians & Striping on SR 52 @ Old Gillsville Rd	AUTHORIZED	TSA	2023	Gainesville	$48,919.47	36	$17,611.01

Jackson

PROJ	PROJ NO.	TIP NO.	DESCRIPTION	Phase Status	Phase Code	Program Year	MPO	Latest Cost Estimated Total	% in MPO	Amount
0013545		GH-109	I-85 FROM N OF SR 53 TO N OF SR 11/US 129	AUTHORIZED	CST	2020	Gainesville	$109,510,090.94	94	$102,939,485.48
0013609		GH-028	SR 332 @ WALNUT CREEK & OVERFLOW 1.5 MI S OF PENDERGRASS	AUTHORIZED	CST	2020	Gainesville	$3,900,977.86	44	$1,716,430.26
0015391			CS 751/CR 1317/DAVIS ST @ 1 LOC &CS 753/PINECREST LN @ 1 LOC	AUTHORIZED	PE	2020	Gainesville	$300,000.00	100	$300,000.00
					ROW	2022	Gainesville	$580,000.00	100	$580,000.00
0016065			SR 53 @ CR 433/NEW CUT ROAD	AUTHORIZED	CST	2023	Gainesville	$4,992,480.29	100	$4,992,480.29
					ROW	2022	Gainesville	$1,470,000.00	100	$1,470,000.00
0017120			SR 53 @ I-85	AUTHORIZED	CST	2020	Gainesville	$134,205.00	100	$134,205.00
0018300			SR 53 MOBILITY STUDY - SCOPING ONLY	AUTHORIZED	SCP	2022	Gainesville	$1,000,000.00	70	$700,000.00
0019223			CR 147/JACKSON TRAIL ROAD - OFF-SYSTEM SAFETY IMPROVEMENTS	AUTHORIZED	PE	2023	Gainesville	$8,000.00	63	$5,040.00
M005243			SR 332 FROM SR 11/JACKSON TO SR 60/HALL	AUTHORIZED	MCST	2021	Gainesville	$1,200,752.48	47	$564,353.67

M005367			I-85 @ 7 LOCS IN BARROW & JACKSON - BRIDGE PRESERVATION	AUTHORIZED	MCST	2020	Gainesville	$1,023,230.37	12	$122,787.64
M006226			SR 60 FROM SR 124/JACKSON TO SR 332/HALL	AUTHORIZED	MCST	2022	Gainesville	$1,884,987.54	82	$1,545,689.78
S015409			CONSTRUCT LEFT TURN LANE ON SR 124 AT SR 60	AUTHORIZED	TSA	2020	Gainesville	$177,647.63	100	$177,647.63
S015459			SR 53 AT WEST JACKSON ROAD NBLTL TO SBLTL	AUTHORIZED	TSA	2021	Gainesville	$69,683.29	100	$69,683.29
S015645			Intersection Improvements on Skelton Rd @ SR332 and SR124	AUTHORIZED	PR	2022	Gainesville	$450,000.00	100	$450,000.00
S015716			Install RH passing lane at SR 53 & New Liberty Church Rd	AUTHORIZED	TSA	2022	Gainesville	$142,724.99	100	$142,724.99

FY 2024-2027 Transportation Improvement Program

Appendix G: References

Below is a list of definitions, abbreviations, funding and phase codes, and acronyms used within the text of the Transportation Improvement Program:

Abbreviations

AADT	Average Annual Daily Traffic
CAC	Citizens Advisory Committee
CE	Categorical Exclusion
DOT	Department of Transportation
FAST	Fixing America's Surface Transportation Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GDOT	Georgia Department of Transportation
GHMPO	Gainesville-Hall Metropolitan Planning Organization
GHPA	Gainesville-Hall Planning Area
HB 170	State Funds
HRRR	High Risk Rural Roads
LOC	Local
LRTP	Long Range Transportation Plan
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
RTP	Regional Transportation Plan
STIP	State Transportation Improvement Program
STP	State Transportation Plan
TAP	Transportation Alternatives Program
TE	Transportation Enhancement
TCC	Technical Coordinating Committee
TIP	Transportation Improvement Program
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation

GDOT Project Phase Code

AVIA	Aviation
CST	Construction
MCST	Maintenance Construction
MPE	Maintenance Preliminary Engineering
PE	Preliminary Engineering
PLN	Planning
ROW or RW	Right-of-Way
SCP	Scoping
TCAP	Transit Capital
TOPR	Transit Operating
TPLN	Transit Planning
UTL	Utility

FHWA Fund Code	Program Description
Z001	National Highway Performance Program (NHPP)
Z002	National Highway Performance Program (NHPP) Exempt
Z240	Surface Transportation Program (STP) Flex
Z400	Congestion Mitigation & Air Quality Improvement (CMAQ)
Z940	Recreational Trails Program (RTP)
ZS30	Highway Safety Improvement Program (HSIP)
ZS40	Railway-Highway - Hazard Elimination

State Fund Code	Program Description
HB170	Transportation Funding

Urbanized Area Formula Program: 5307

The Urbanized Area Formula Funding program (49 U.S.C. 5307) makes Federal resources available to urbanized areas and to Governors for transit capital and operating assistance in urbanized areas and for transportation related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census.

Transportation for Elderly Persons and Persons with Disabilities (5310)

This program (49 U.S.C. 5310) provides formula funding to States for the purpose of assisting private nonprofit groups in meeting the transportation needs of the elderly and persons with

disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. Funds are apportioned based on each State's share of population for these groups of people.
Funds are obligated based on the annual program of projects included in a statewide grant application. The State agency ensures that local applicants and project activities are eligible and in compliance with Federal requirements, that private not-for-profit transportation providers have an opportunity to participate as feasible, and that the program provides for coordination of Federally-assisted transportation services assisted by other Federal sources. Once FTA approves the application, funds are available for state administration of its program and for allocation to individual sub-recipients within the state.

Formula Grants for Other than Urbanized Areas (5311)

The Formula Grants For Other than Urbanized Areas is a rural program that is formula based and provides funding to states for the purpose of supporting public transportation in rural areas, with population of less than 50,000. The goal of the program is to provide the following services to communities with population less than 50,000:

- Enhance the access of people in non-urbanized areas to health care, shopping, education, employment, public services, and recreation.
- Assist in the maintenance, development, improvement, and use of public transportation systems in non-urbanized areas.
- Encourage and facilitate the most efficient use of all transportation funds used to provide passenger transportation in non-urbanized areas through the coordination of programs and services.
- Assist in the development and support of intercity bus transportation.
- Provide for the participation of private transportation providers in non-urbanized transportation.

FY 2024-2027 Transportation Improvement Program

Appendix H: Performance Management Targets

Gainesville-Hall Metropolitan Planning Organization Metropolitan Transportation Plan (MTP)/Transportation Improvement Program (TIP) System Performance Report (Updated May 2023)

Background

Pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21) Act enacted in 2012 and the Fixing America's Surface Transportation Act (FAST Act) enacted in 2015, state Departments of Transportation (DOT) and Metropolitan Planning Organizations (MPO) must apply a transportation performance management (TPM) approach in carrying out their federally-required transportation planning and programming activities. The process requires the establishment and use of a coordinated performance-based approach to transportation decision-making to support national goals for the federal-aid highway and public transportation programs.

To help transportation agencies take the necessary steps toward achieving the national goals, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) promulgated a series of rulemakings between 2016 and 2019 that established performance measures (PM) for the federal-aid highway and public transportation programs. Part of that series of rulemakings was the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule (The Planning Rule)[1] issued on May 27, 2016, that implemented the transportation planning and TPM provisions of MAP-21 and the FAST Act.

On November 15, 2021, President Joe Biden signed into law The Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL). The BIL (or IIJA) delivers generational investments in our roads and bridges, promotes safety for all road users, helps combat the climate crisis, and advances equitable access to transportation. The TPM approach from MAP-21 and the FAST Act is carried forward to this current law.

In accordance with National Performance Management Measures[2], the Planning Rule, as well as the Georgia Performance Management Agreement between the Georgia DOT (GDOT) and the Georgia Association of Metropolitan Planning Organizations (GAMPO), GDOT and each Georgia MPO must publish a System Performance Report (SPR) for applicable performance targets in their respective statewide and metropolitan transportation plans and programs.

- A System Performance Report (SPR) and subsequent updates is a federal requirement as part of any Metropolitan Transportation Plan (MTP) to evaluate the condition and performance of the transportation system with respect to the established performance targets;
- While the implemented Transportation Improvement Program (TIP) shows progress towards meeting the established performance targets.

[1] 23 CFR Part 450, Subpart B and Subpart C
[2] 23 CFR 490.107

The SPR presents the condition and performance of the transportation system with respect to required performance measures, documents performance targets and progress achieved in meeting the targets in comparison with previous reports. This is required for the following:

- In any statewide or metropolitan transportation plan or program amended or adopted after May 27, 2018, for Highway Safety/PM1 measures;
- In any statewide or metropolitan transportation plan or program amended or adopted after October 1, 2018, for transit asset measures;
- In any statewide or metropolitan transportation plan or program amended or adopted after May 20, 2019, for Pavement and Bridge Condition/PM2 and System Performance, Freight, and Congestion Mitigation and Air Quality/PM3 measures; and
- In any statewide or metropolitan transportation plan or program amended or adopted after July 20, 2021, for transit safety measures.

The Gainesville-Hall Metropolitan Planning Organization 2020 Regional Transportation Plan (RTP)[3] was adopted on May 12, 2020. Per the Planning Rule and the Georgia Performance Management Agreement, the System Performance Report for the Gainesville-Hall Metropolitan Planning Organization 2020 RTP is included, herein, for the required Highway Safety/PM1, Bridge and Pavement Condition/PM2, and System Performance, Freight, and Congestion Mitigation and Air Quality/PM3 measures.

Highway Safety/PM1

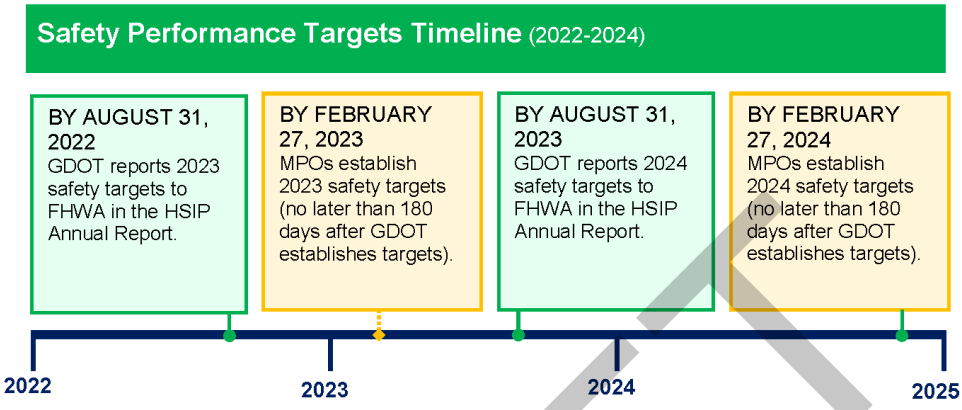
Effective April 14, 2016, the FHWA established the highway safety performance measures[4] to carry out the Highway Safety Improvement Program (HSIP). These performance measures are:

1. Number of fatalities;
2. Rate of fatalities per 100 million vehicle miles traveled;
3. Number of serious injuries;
4. Rate of serious injuries per 100 million vehicle miles traveled; and
5. Number of combined non-motorized fatalities and non-motorized serious injuries.

Safety performance targets are provided annually by the States to FHWA for each safety performance measure. GDOT submits the HSIP report annually to FHWA. The HSIP 2022 annual report was submitted to FHWA by August 31, 2022 and established the statewide safety targets for year 2023 based on an anticipated five-year rolling average (2019-2023). Georgia statewide safety performance targets for 2023 are included in Table 1, along with statewide safety performance for the two most recent reporting periods[5]. MPOs have 180 days after the states (GDOT) submit their targets to FHWA to either adopt the state targets or set their own PM1 targets; The 2023 MPO PM1 targets must be set by February 27, 2023.[6] The Gainesville-Hall MPO adopted/approved the Georgia statewide safety performance targets on February 21, 2023.

[3] The 2020 Regional Transportation Plan was adopted on May 12, 2020, and serves as the Metropolitan Transportation Plan for the Gainesville-Hall MPO. https://www.ghmpo.org/planning-documents/regional-transportation-plan/gainesville-hall-regional-transportation-plan-2020/
[4] 23 CFR Part 490, Subpart B
[5] https://safety.fhwa.dot.gov/hsip/spm/state_safety_targets/
[6] https://safety.fhwa.dot.gov/hsip/spm/timeline.cfm

System Performance Report



The latest safety conditions will be updated annually over a rolling 5-year window and reflected within each subsequent System Performance Report, to track performance over time in relation to baseline conditions and established targets.

Table 1 shows the Georgia statewide safety performance and targets and five-year rolling averages over the last three years.

Table 1. Statewide Highway Safety/PM1, System Conditions and Performance Targets (Due August each year to FHWA)

Performance Measures	2021 Georgia Statewide Performance Target (Five-Year Rolling Average 2017-2021)	2022 Georgia Statewide Performance Target (Five-Year Rolling Average 2018-2022)	2023 Georgia Statewide Performance Target (Five-Year Rolling Average 2019-2023)
Number of Fatalities	1,715	1,671	1,680
Rate of Fatalities per 100 Million Vehicle Miles Traveled	1.23	1.21	1.36
Number of Serious Injuries	6,407	8,443	8,966
Rate of Serious Injuries per 100 Million Vehicle Miles Traveled	4.422	4.610	7.679
Number of Combined Non-Motorized Fatalities and Non-Motorized Serious Injuries	686.5	793.0	802

Source: GDOT's HSIP reports.

The Gainesville-Hall MPO recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the

achievement of national transportation goals and statewide and regional performance targets. As such, the 2020 RTP directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, the Georgia Strategic Highway Safety Plan (SHSP), the Georgia Highway Safety Improvement Program (HSIP), and the Georgia 2050 Statewide Transportation Improvement Plan (SWTP)/2021 Statewide Strategic Transportation Plan (SSTP).

- The Georgia SHSP is intended to reduce the number of fatalities and serious injuries resulting from motor vehicle crashes on public roads in Georgia. Existing highway safety plans are aligned and coordinated with the SHSP, including (but not limited to) the Georgia HSIP, MPO and local agencies' safety plans. The SHSP guides GDOT, the Georgia MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out across Georgia.

- The GDOT HSIP annual report provide for a continuous and systematic process that identifies and reviews traffic safety issues around the state to identify locations with potential for improvement. The ultimate goal of the HSIP process is to reduce the number of crashes, injuries and fatalities by eliminating certain predominant types of crashes through the implementation of engineering solutions.

- The 2021 SSTP/2050 SWTP combines GDOT's strategic business case for transportation investment with the long-range, comprehensive transportation planning considerations under Federal law. The SSTP/SWTP is organized into three investment categories, reflecting three major ways people and freight move in Georgia; statewide freight and logistics, people mobility in Metro Atlanta, and people mobility in emerging metros and rural Georgia. The plan identifies strategies to bring about Foundational, Catalytic, and Innovation investments for the above mentioned categories.[7]

- The Gainesville Hall MPO 2020 RTP increases the safety of the transportation system for motorized and non-motorized users as required by the Planning Rule. The RTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements. The Gainesville-Hall MPO has several initiatives focused on increasing safety. Specifically, the RTP identifies roadways with the highest frequency of crashes, fatalities, and injuries in order to identify where improvements need to be made to increase safety within the GHMPO planning boundary. To increase pedestrian safety, the MPO has been working collaboratively with local jurisdictions to expand the Highlands to Islands Trail, providing multimodal transportation options to all Hall County residents. Additionally, the MPO is assisting Hall County in managing their Safe Streets for All (SS4A) grant, which is currently being used to develop an Action Plan and identify projects that would increase safety for vehicles, cyclists, and pedestrians. These recommendations will then be taken into consideration as Hall County utilizes the plan to apply for implementation grants. Lastly, the MPO publishes a crash profile of both Hall and Jackson Counties on a yearly basis. This crash profile provides maps of crashes throughout both counties and identifies high accident intersections, which local jurisdictions use to assist in planning safety improvement projects.

- PI 0015702/GH-124 (Roadway Operations – Dawsonville Highway at McEver Road) was specifically identified in the 2020 RTP as the highest overall crash rate intersection, which will be mitigated by the planned operational improvements listed in the TIP. Further, this intersection, alongside Dawsonville Highway's intersections with Beachwood Blvd and Green

[7] 2021Statewide Strategic Transportation Plan/2050 Statewide Transportation Plan

Hill Circle, were all listed as sites with the highest number of collisions in the 2022 Hall County Crash Profile. Additionally, PI 0017392/GH-121(Green Street Operational Improvements) and PI 0015918/GH-126 (Academy Street Roundabout) are specifically listed as Band 1 projects recommend by the 2020 RTP. Lastly, the intersection of Browns Bridge Road and McEver Road was identified in the GHMPO 2022 Crash Profile for Hall County as the intersection with the fourth highest number of collisions, prompting improvements to increase operational safety (PI 0016921/GH-145). All of these projects are anticipated to improve safety for both automobiles and pedestrians.

Table 2: Gainesville-Hall MPO TIP Projects, 2024-2027

			PM1	PM2		PM3		
PI#	Cost	Work Type	Safety	Bridges	Pavement	System Reliability	Truck Reliability	CMAQ
0017392	$18,550,000	Roadway Operations	✓					
0015702	$5,282,964	Roadway Operations	✓					
0015918	$5,150,210	Roundabout	✓					
0016921	$1,284,790	Intersection Improvement	✓					

These projects and improvements serve to fulfill the stated goals of the MPO's 2020 Regional Transportation Plan:

- Increase the safety of the transportation system for motorized and non-motorized and no-motorized users
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation systems, across and between modes, for people and freight
- Achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- Achieve a significant reduction in congestion on the National Highway System
- Improve safety
- Relieve congestion
- Improve the environment

Pavement and Bridge Condition/PM2

Effective May 20, 2017, FHWA established performance measures to assess pavement condition[8] and bridge condition[9] for the National Highway Performance Program. This second FHWA performance measure rule (PM2) established six performance measures:

1. Percent of Interstate pavements in good condition;
2. Percent of Interstate pavements in poor condition;
3. Percent of non-Interstate National Highway System (NHS) pavements in good condition;
4. Percent of non-Interstate NHS pavements in poor condition;
5. Percent of NHS bridges by deck area classified as in good condition; and
6. Percent of NHS bridges by deck area classified as in poor condition.

Pavement Condition Measures

The pavement condition measures represent the percentage of lane-miles on the Interstate or non-Interstate NHS that are in good condition or poor condition. FHWA established five metrics to assess pavement condition: International Roughness Index (IRI); cracking percent; rutting; faulting; and Present Serviceability Rating (PSR). For each metric, a threshold is used to establish good, fair, or poor condition.

Pavement condition is assessed using these metrics and thresholds. A pavement section in good condition if three metric ratings are good, and in poor condition if two or more metric ratings are poor. Pavement sections that are not good or poor are considered fair.

The pavement condition measures are expressed as a percentage of all applicable roads in good or poor condition. Pavement in good condition suggests that no major investment is needed. Pavement in poor condition suggests major reconstruction investment is needed due to either ride quality or a structural deficiency.

Bridge Condition Measures

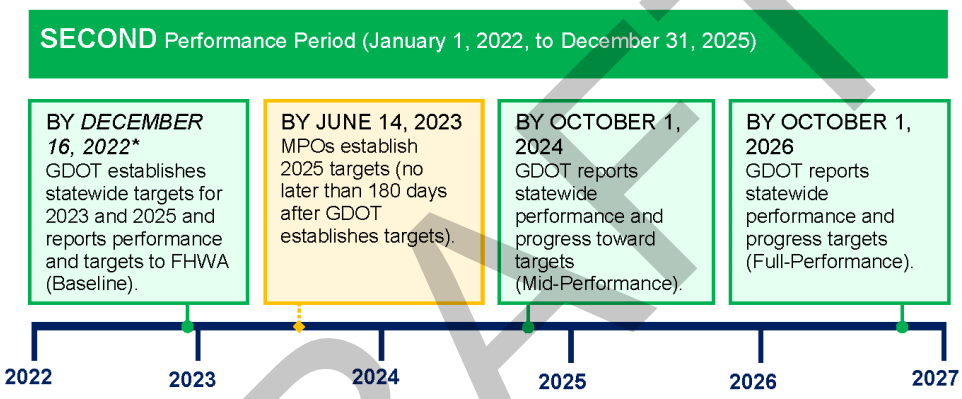
The bridge condition measures represent the percentage of bridges, by deck area, on the NHS that are in good condition or poor condition. The condition of each bridge is evaluated by assessing four bridge components: deck, superstructure, substructure, and culverts. FHWA created a metric rating threshold for each component to establish good, fair, or poor condition. Every bridge on the NHS is evaluated using these component ratings. If the lowest rating of the four metrics is greater than or equal to seven, the structure is classified as good. If the lowest rating is less than or equal to four, the structure is classified as poor. If the lowest rating is five or six, it is classified as fair.

To determine the percent of bridges in good or in poor condition, the sum of total deck area of good or poor NHS bridges is divided by the total deck area of bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width. Good condition suggests that no major investment is needed. Bridges in poor condition are safe to drive on; however, they are nearing a point where substantial reconstruction or replacement is needed.

[8] 23 CFR Part 490, Subpart C
[9] 23 CFR Part 490, Subpart D

Pavement and Bridge Targets

Pavement and bridge condition performance is assessed and reported over a four-year performance period. The first performance period began on January 1, 2018, and runs through December 31, 2021. GDOT reported baseline PM2 performance and targets to FHWA on October 1, 2018, and will report updated performance information at the midpoint and end of the performance period. The second four-year performance period covers January 1, 2022, to December 31, 2025, with additional performance periods following every four years. The PM2 rule requires states and MPOs to establish two-year and/or four-year performance targets for each PM2 measure. Current two-year targets under the second four-year performance period represent expected pavement and bridge condition at the end of calendar year 2023, while the current four-year targets represent expected condition at the end of calendar year 2025.



** FHWA changed the due date from October 1, 2022, due to a technical issue with the reporting system.*

States establish targets as follows:

- Percent of Interstate pavements in good and poor condition – four-year targets;
- Percent of non-Interstate NHS pavements in good and poor condition – two-year and four-year targets; and
- Percent of NHS bridges by deck area in good and poor condition – two-year and four-year targets.

MPOs have 180 days after the states (GDOT) submit their targets to FHWA to establish four-year targets for each measure by either agreeing to the statewide targets or setting quantifiable targets for the MPO's planning area that differ from the state targets.

GDOT established current statewide two-year and four-year PM2 targets on December 16, 2022. MPOs have 180 days from December 16, 2022 to adopt the state PM2 targets or set their own PM2 targets; The MPO second performance period PM2 targets must be set by June 14, 2023. The Gainesville-Hall MPO adopted/approved the Georgia statewide PM2 targets on February 21,

2023. Table 2 presents statewide baseline performance for each PM2 measure as well as the current two-year and four-year statewide targets established by GDOT.

On or before October 1, 2024, GDOT will provide FHWA with a detailed mid-performance report of pavement and bridge condition performance covering the period of January 1, 2022, to December 31, 2023, for the second performance period. GDOT and the Gainesville-Hall MPO will have the opportunity at that time to revisit the four-year PM2 targets.

Table 3. Pavement and Bridge Condition/PM2 Performance and Targets

Performance Measures	Georgia Performance (Baseline 2021)	Georgia 2-year Target (2023)	Georgia 4-year Target (2025)
Percent of Interstate pavements in good condition	67.4%	50.0%	50.0%
Percent of Interstate pavements in poor condition	0.1%	5.0%	5.0%
Percent of non-Interstate NHS pavements in good condition	49.2%	40.0%	40.0%
Percent of non-Interstate NHS pavements in poor condition	0.6%	12.0%	12.0%
Percent of NHS bridges (by deck area) in good condition	79.1%	50.0%	60.0%
Percent of NHS bridges (by deck area) in poor condition	0.5%	10.0%	10.0%

The Gainesville-Hall MPO recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the 2020 RTP directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, Georgia's Transportation Asset Management Plan (TAMP), the Georgia Interstate Preservation Plan, and the current SSTP/2050 SWTP.

- MAP-21 initially required GDOT to develop a TAMP for all NHS pavements and bridges within the state. In addition, BIL requires considering extreme weather and resilience as part of the life-cycle planning and risk management analyses within a State TAMP process and evaluation. GDOT's TAMP describes Georgia's current bridge (bridge culverts) and pavement asset management processes for improving and preserving the condition of the National Highway System (NHS), which comprised of approximately 7,200 miles of roadway within the State which includes interstates, state routes and local roads as well as 4,300 structures of both bridges and bridge culverts. GDOT has recently developed TAMP for FY 2022-2031, which uses life-cycle planning and outlines the priorities and investment strategies leading to a program of projects that would make progress toward achievement of GDOT's statewide pavement and bridge condition targets and cost effectively manage and preserve these assets over the next 10 years.

- The Georgia Interstate Preservation Plan applied a risk profile to identify and communicate Interstate preservation priorities; this process leveraged a combination of asset management techniques with risk management concepts to prioritize specific investment strategies for the Interstate system in Georgia.

- The 2021 SSTP/2050 SWTP combines GDOT's strategic business case for transportation investment with the long-range, comprehensive transportation planning considerations under Federal law. The SSTP/SWTP is organized into three investment categories, reflecting three major ways people and freight move in Georgia; statewide freight and logistics, people mobility in Metro Atlanta, and people mobility in emerging metros and rural Georgia. The plan identifies strategies to bring about Foundational, Catalytic, and Innovation investments for the above mentioned categories.[10]

- The Gainesville-Hall MPO RTP addresses infrastructure preservation and identifies pavement and bridge infrastructure needs within the metropolitan planning area, and allocates funding for targeted infrastructure improvements. The RTP specifically identifies several bridges that require replacement, and funds have been programmed to replace them over fiscal years 2024 through 2027. The Gainesville-Hall MPO is committed to maintaining bridges and pavements throughout the MPO planning boundary, and is working with local jurisdictions to identify where paving improvements and bridge replacements are necessary or will become necessary over the MPO's long-range planning horizon. PI 0015551/GH-119, or the Thompson Bridge Road bridge replacement over the Chattahoochee River, is specifically identified as a Band 1 recommended project in the 2020 RTP. PI 0017735/GH-141 and PI 0019079/GH-144 are both bridge replacement projects that stemmed from GDOT's Bridge Replacement Program, which identifies bridges across the State that are in need of repair or replacement based upon their safety score.

Table 4: Gainesville-Hall MPO TIP Projects, 2024-2027

			PM1	PM2		PM3		
PI#	Cost	Work Type	Safety	Bridges	Pavement	System Reliability	Truck Reliability	CMAQ
0015551	$41,910,587	Bridge Replacement		✓				
0017735	$1,827,034	Bridge Replacement		✓				
0019079	$1,985,000	Bridge Replacement		✓				

These projects and improvements serve to fulfill the stated goals of the MPO's 2020 Regional Transportation Plan:

- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Emphasize the preservation of the existing transportation system
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation

[10] 2021Statewide Strategic Transportation Plan/2050 Statewide Transportation Plan

- Maintain the highway infrastructure asset system in a state of good repair
- Improve reliability

System Performance, Freight, and Congestion Mitigation & Air Quality Improvement Program/PM3

Effective May 20, 2017, FHWA established measures to assess performance of the National Highway System[11], freight movement on the Interstate system[12], and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program[13]. This third FHWA performance measure rule (PM3) established six performance measures, described below.

National Highway System Performance:

1. Percent of person-miles on the Interstate system that are reliable;
2. Percent of person-miles on the non-Interstate NHS that are reliable;

Freight Movement on the Interstate:

3. Truck Travel Time Reliability Index (TTTR);

Congestion Mitigation and Air Quality Improvement (CMAQ) Program:

4. Annual hours of peak hour excessive delay per capita (PHED);
5. Percent of non-single occupant vehicle travel (Non-SOV); and
6. Cumulative two-year and four-year reduction of on-road mobile source emissions for CMAQ funded projects (CMAQ Emission Reduction).

The CMAQ performance measures apply to states and MPOs with projects financed with CMAQ funds whose boundary contains any part of a nonattainment or maintenance area for ozone, carbon monoxide or particulate matter. The Gainesville-Hall MPO meets air quality standards, therefore, the CMAQ measures do not apply and are not reflected in the System Performance Report.

System Performance Measures

The two System Performance measures assess the reliability of travel times on the Interstate or non-Interstate NHS system. The performance metric used to calculate reliability is the Level of Travel Time Reliability (LOTTR). LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) over all applicable roads during four time periods (AM peak, Mid-day, PM peak, and weekends) that cover the hours of 6 AM to 8 PM each day.

The LOTTR ratio is calculated for each segment of applicable roadway, essentially comparing the segment with itself. A segment is deemed to be reliable if its LOTTR is less than 1.5 during all four time periods. If one or more time periods has a LOTTR of 1.5 or above, that segment is unreliable.

The measures are expressed as the percent of person-miles traveled on the Interstate or non-Interstate NHS system that are reliable. Person-miles take into account the number of people traveling in buses, cars, and trucks over these roadway segments. To determine total person

[11] 23 CFR Part 490, Subpart E
[12] 23 CFR Part 490, Subpart F
[13] 23 CFR Part 490, Subparts G and H

miles traveled, the vehicle miles traveled (VMT) on each segment is multiplied by average vehicle occupancy. To calculate the percent of person miles traveled that are reliable, the sum of the number of reliable person miles traveled is divided by the sum of total person miles traveled.

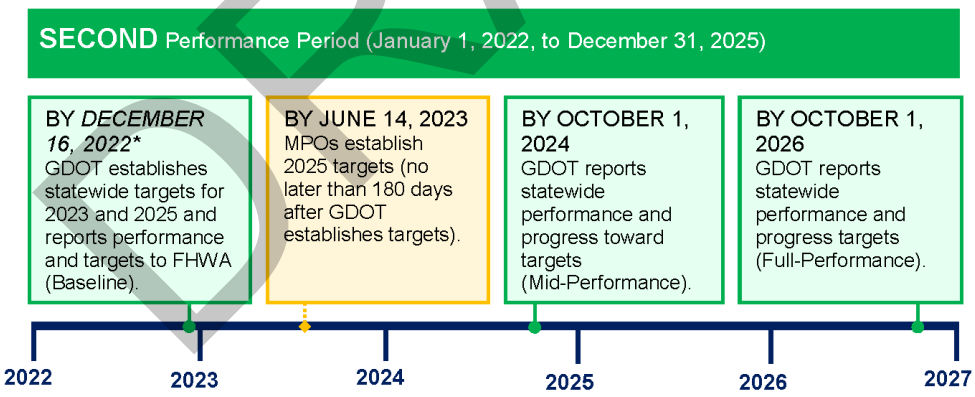
Freight Movement Performance Measure

The Freight Movement performance measure assesses reliability for trucks traveling on the Interstate. A TTTR ratio is generated by dividing the 95th percentile truck travel time by a normal travel time (50th percentile) for each segment of the Interstate system over five time periods throughout weekdays and weekends (AM peak, Mid-day, PM peak, weekend, and overnight) that cover all hours of the day. For each segment, the highest TTTR value among the five time periods is multiplied by the length of the segment. The sum of all length-weighted segments is then divided by the total length of Interstate to generate the TTTR Index.

PM3 Performance Targets

Performance for the PM3 measures is assessed and reported over a four-year performance period. For all PM3 measures, the first performance period began on January 1, 2018, and will end on December 31, 2021. GDOT reported baseline PM3 performance and targets (for First Performance Period) to FHWA on October 1, 2018, the baseline PM3 performance and targets (for Second Performance Period) to FHWA on December 16, 2022, and will report updated performance information at the midpoint and end of the performance period. The second four-year performance period will cover January 1, 2022, to December 31, 2025, with additional performance periods following every four years.

The PM3 rule requires state DOTs and MPOs to establish two-year and/or four-year performance targets for each PM3 measure. For all targets, the current two-year and four-year targets represent under the second four-year performance period expected performance at the end of calendar years 2023 and 2025, respectively.



** FHWA changed the due date from October 1, 2022, due to a technical issue with the reporting system.*

States establish targets as follows:

- Percent of person-miles on the Interstate system that are reliable – two-year and four-year targets;
- Percent of person-miles on the non-Interstate NHS that are reliable – four-year targets;
- Truck Travel Time Reliability – two-year and four-year targets;
- Annual hours of peak hour excessive delay per capita (PHED) – four-year targets;
- Percent of non-single occupant vehicle travel (Non-SOV) – two-year and four-year targets; and

MPOs establish four-year targets for the System Performance, Freight Movement, and PHED measures, and two-year and four-year targets for the Non-SOV measure. MPOs establish targets by either agreeing to program projects that will support the statewide targets, or setting quantifiable targets for the MPO's planning area that differ from the state targets.

GDOT established statewide PM3 targets and submitted to FHWA by December 16, 2022. The Gainesville-Hall MPO adopted/approved the Georgia statewide PM3 targets on February 21, 2023. Table 6 presents statewide baseline performance for each PM3 measure as well as the current two-year and four-year statewide targets established by GDOT.

On or before October 1, 2024, GDOT will provide FHWA with a detailed mid-performance report of PM3 performance covering the period of January 1, 2022, to December 31, 2023, for the second performance period. GDOT and the Gainesville-Hall MPO will have the opportunity at that time to revisit the four-year PM3 targets.

Table 5. System Performance/Freight Movement/CMAQ (PM3) Performance and Targets

Performance Measure	Georgia Performance (Baseline 2021)	Georgia 2-year Target (2023)	Georgia 4-year Target (2025)
Percent of person-miles on the Interstate system that are reliable	82.8%	73.9%	68.4%
Percent of person-miles on the non-Interstate NHS that are reliable	91.9%	87.3%	85.3%
Truck Travel Time Reliability Index	1.47	1.62	1.65
Annual hours of peak hour excessive delay per capita (PHED)	14.4 hours	23.7 hours	27.2 hours
Percent Non-SOV travel	25.7%	22.7%	22.7%

The Gainesville-Hall MPO recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the 2020 RTP directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, the Georgia Statewide Freight and Logistics Action Plan, and the current 2021 SSTP/2050 SWTP.

- The 2023 Georgia Freight Plan documents freight planning activities and investments in the state, identifies and assesses current and future freight needs and challenges incorporating both technical analysis and stakeholder engagement, and guides freight-related transportation decisions and investments. The plan integrates policy positions and strategies from existing documents to help identify and prioritize freight investments critical to the state's economic growth and global competitiveness. The Georgia Freight Plan establishes specific goals for freight transportation and addresses freight issues that are not covered in other statewide planning documents.[14]

- The 2021 SSTP/2050 SWTP combines GDOT's strategic business case for transportation investment with the long-range, comprehensive transportation planning considerations under Federal law. The SSTP/SWTP is organized into three investment categories, reflecting three major ways people and freight move in Georgia; statewide freight and logistics, people mobility in Metro Atlanta, and people mobility in emerging metros and rural Georgia. The plan identifies strategies to bring about Foundational, Catalytic, and Innovation investments for the above mentioned categories.[15]

- The Gainesville-Hall MPO 2020 RTP addresses reliability, freight movement, congestion, and emissions, and identifies needs for each of these issues within the metropolitan planning area and allocates funding for targeted improvements. The RTP has identified several roadways that would increase system and truck reliability if widened, and those projects have been added to the FY 2024-2027 Transportation Improvement Program. Additionally, a new roadway and a new interchange have been identified and programmed, which will increase mobility and reduce congestion. Due to several factors, such as the development of the Northeast Georgia Inland Port, the MPO is committed to improving system reliability to accommodate increased truck traffic and its impacts on congestion and reliability.

- The below projects in Table 6 are identified in various sources as necessary to maintain a functional level of service in the 2020 RTP's 2050 Traffic Demand Models. PI 0015280/GH-023B (Spout Springs Road Widening) was deemed necessary based on its designation as one of the top ten corridors operating at level-of-service F in the 2050 do-nothing model. Additionally, PI 0003626/GH-016 (Sardis Road Connector), PI 122060/GH-020A, PI 0016862/GH-020B, PI 0016863/GH-020C (all three phases of the Cleveland Highway Widening), and PI 0016074/GH-133 (SR 365's new interchange at Lanier Tech Dr.) are all identified in the 2020 RTP as high priority projects for improving operations and system reliability.

[14] https://www.dot.ga.gov/GDOT/Pages/Freight.aspx
[15] 2021Statewide Strategic Transportation Plan/2050 Statewide Transportation Plan

System Performance Report

Table 6: Gainesville-Hall MPO TIP Projects, 2024-2027

			PM1	PM2		PM3		
PI#	Cost	Work Type	Safety	Bridges	Pavement	System Reliability	Truck Reliability	CMAQ*
0003626	$59,062,933	New Roadway				✓	✓	
122060	$62,729,937	Widening				✓	✓	
0016862	$27,991,337	Widening				✓	✓	
0016863	$39,199,441	Widening				✓	✓	
0015280	$42,731,208	Widening				✓	✓	
0016074	$20,061,376	New Interchange				✓	✓	

- *Note: The CMAQ measures including PHED, Non-SOV, and Emission Reduction apply only within the boundaries of each U.S. Census Bureau-designated urbanized area (UZA) that contains an NHS road, has a population of more than 200 thousand, and contains any part of a nonattainment or maintenance area for ozone, carbon monoxide or particulate matter. Gainesville-Hall MPO does not have to track CMAQ measures on PHED, Non-SOV, or Emissions Reduction performance.*

These projects and improvements serve to fulfill the stated goals of the MPO's 2020 Regional Transportation Plan:

- Increase accessibility and mobility of people and freight
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system
- Improve the resiliency and reliability of the transportation system and reduce or mitigate the stormwater impacts of surface transportation
- Achieve a significant reduction in congestion on the National Highway System
- Improve the efficiency of the surface transportation system
- Maintain the highway infrastructure asset program in a state of good repair

Transit Asset Management Targets

GHMPO works with Hall Area Transit to meet the goals outlined in the Georgia Statewide Transit Plan:

- Provide a safe and sustainable public transit network
    - Hall Area Transit has been expanding their WeGo vehicle fleet, and is working with GHMPO and a consultant to develop a Zero Emission Vehicle Transition Plan. Once in place, Hall Area Transit seeks to create a more sustainable future with WeGo by expanding their fleet into zero-emission vehicles. Additionally, GHMPO and Hall County are working with a consultant and local jurisdictions to develop a Safe Streets for All Action Plan, which will allow the County to identify opportunities for safety improvements and increase safety for the public transit network.
- Optimize public transit programs to best meet public transit systems' and travelers' needs
    - Hall Area Transit has used WeGo to provide on-demand micro-transit throughout Hall County that is available as-needed, providing last-mile service to all users, tailored to their individual needs.
- Ensure public transit coverage across the state to support mobility and access for all
    - Hall Area Transit's WeGo service has expanded to service all of Hall County, providing equitable coverage to all Hall County residents.
- Connect rural transit to regional and urban centers
    - Hall Area Transit's WeGo service reaches the entirety of Hall County, from the center of the urbanized area to the rural sections to the north and east of the county. As a regional center, on-demand mobility throughout the Gainesville urbanized area is a crucial part of maintaining a healthy transportation network. While Hall Area Transit's service stops at the county line, there are opportunities for transportation beyond these limits, such as the Braselton Life Path section of the Highlands to Islands Trail.
- Leverage technology and innovation to support public transit ridership
    - Hall Area Transit has made use of WeGo, which utilizes smartphones to provide on-demand transportation.

Additionally, the FY 2024-2027 Transportation Improvement Program includes significant transit investment in the form of Section 5307 funds received by Hall Area Transit. Hall Area Transit will be receiving $8,373,370 in Urban Operating Funds, which will fund department operations, and $1,300,000 in Urban Capital Funds, which will be used to purchase new vehicles and renovate transit facilities.

Lastly, Transit Asset Management Targets are a part of the MPO's ongoing effort to meet the following goals outlined in the 2020 RTP:

- **Multimodal Connectivity:** Provide a more integrated multimodal and intermodal transportation system that includes increase travel options by prioritizing transit, pedestrian, and bicycle travel throughout the region.
- **Environment:** Develop a transportation system that conserves energy, promotes the attainment of air quality standards, protects the natural environment, and minimizes adverse impacts.
- **Mobility and Economic Vitality:** Provide a transportation system that provides for the movement of people and goods safely and efficiently and advances the region's economic competitiveness.

The following Transit Asset Management targets were adopted in fall of 2020:

Asset Class	Useful Life Benchmark	FY20 Actual Performance (% of vehicles over ULB)	FY21 Approved Performance Target (% of vehicles over ULB)
BU – Bus (35'-40')	14 yrs.	4%	10%
BU – Bus (29'-30')	12 yrs.	23%	30%
CU – Cutaway Bus	7 yrs.	2%	8%
VN - Van	8 yrs.	35%	35%
EB – Electric Bus (35'-40')	14 yrs.	n/a	0%
RT – Rubber Tired Vintage Trolley	14 yrs.	n/a	0%
AO - Automobile	8 yrs.	50%	55%
TR – Trucks and Other Rubber Tired Vehicles	10 yrs.	39%	50%

Asset Class	FY21 Performance Target (% of Facilities with Condition Rating Below 3.0)
Administration Facilities	25%
Maintenance Facilities	25%
Passenger/Parking Facilities	10%

Appendix A: Project Types

The matrix below is based on 2024-2027 STIP projects as general guidelines; In reality, individual projects may yield benefits to other PMs than shown here given specific project characteristics.

Table 4: Projects/Work Types That Support Each Performance Measure Targets

	PM1	PM2		PM3				
						CMAQ*		
Work Type	Safety	Bridges	Pavement	System Reliability	Truck Reliability	PHED	Non-SOV	Emissions Reduction
Bicycle / Pedestrian Facilities	✓						✓	✓
Bridges		✓						
Drainage Improvements			✓					
Grade Separation	✓			✓		✓		
Interchange	✓			✓	✓	✓		
Intersection Improvement	✓			✓		✓		
ITS	✓			✓		✓		✓
Lighting	✓							
Managed Lanes	✓			✓	✓	✓		✓
Operational Improvement				✓	✓	✓		
Pavement Rehabilitation			✓					
Railroad Crossing	✓			✓				
Transit							✓	✓
Truck Lanes					✓			
Widening				✓		✓		

** The CMAQ measures including PHED, Non-SOV, and Emission Reduction apply only within the boundaries of each U.S. Census Bureau-designated urbanized area (UZA) that contains a NHS road, has a population of more than 200 thousand, and contains any part of a nonattainment or maintenance area for ozone, carbon monoxide or particulate matter.*

Performance Management Targets

GAINESVILLE-HALL
Metropolitan Planning Organization

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ghmpo.org

A Resolution by the Gainesville-Hall Metropolitan Planning Organization Policy Committee Setting Performance Management Targets

WHEREAS, federal regulations require that the Long Range Transportation Plans and the Transportation Improvement Programs include Safety Performance Management Targets for urbanized areas; and

WHEREAS, the Gainesville-Hall Metropolitan Planning Organization (GHMPO), in coordination with the Federal Highway Administration, Federal Transit Administration, and the Georgia Department of Transportation (GDOT), has reviewed the requirement to adopt PM1 (Safety), PM 2 (Bridge and Pavement), and PM 3 (National Highway System, Freight, and CMAQ) Performance Management Targets for use in the transportation process; and

WHEREAS, the Technical Coordinating Committee (TCC) and the Citizens Advisory Committee (CAC) at their meetings on February 15, 2023 and February 16, 2023, respectively, recommended that GHMPO support the Bridge and Pavement Performance Management Targets approved by GDOT as follows:

PM 1 Targets for 2023

GHMPO supports the following Safety Performance Management Targets approved by the Georgia Department of Transportation for calendar year 2023:

- **Number of Fatalities: 1,680**
  - To maintain the 5-year moving average traffic fatalities under the projected 1,680 (2019-2023) 5-year average by December 2023
- **Number of Serious Injuries: 8,966**
  - To maintain the 5-year moving average serious traffic injuries under the projected 8,966 (2019-2023) 5-year average by December 2023
- **Fatality Rate: 1.36**
  - To maintain the 5-year moving average traffic fatalities per 100 million vehicle miles traveled under the projected 1.36 (2019-2023) 5-year average by December 2023
- **Serious Injury Rate: 7.679**
  - To reduce the 5-year moving average serious traffic injuries for every 100 million vehicle miles traveled under the projected 7.679 (2019-2023) 5-year average by December 2023
- **Total Number of Non-Motorized Fatalities and Serious Injuries: 802**
  - To maintain the 5-year moving average non-motorized fatalities and serious injuries under the projected 802 (2019 – 2023 rolling average) by December 2023

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PM 2 Targets

Table 1 Bridge Level of Service Measure

ASSET	PERFORMANCE MEASURE	DESCRIPTION	2-YEAR TARGET	4-YEAR TARGET
Bridge Structures	Percent of NHS Bridge in **Poor condition** as a percentage of total NHS bridge deck area	Bridge Conditions are based on results of inspection on all Bridge structures. Bridges rated as "Poor" are safe to drive on; however, they are nearing a point where it is necessary to either replace the bridge or extend its service life through substantial rehabilitations investments	≤ 10% (NHS) in Poor Condition	≤ 10% (NHS) in Poor Condition
Bridge Structures	Percent of NHS Bridges in **Good condition** as a percentage of total NHS bridge deck area	Bridges rated as "Good" will be evaluated as to cost of to maintain Good condition. Bridges rated as "Fair" will be evaluated as to cost of replacement vs. rehabilitation to bring the structure back to the condition rating of Good.	≥ 50% (NHS) in Good Condition	≥ 60% (NHS) in Good Condition

Table 2 Pavement Level of Services

ASSET	PERFORMANCE MEASURE	DESCRIPTION	TARGET
Interstate NHS	Percent of Interstate NHS pavements in **Poor condition**	Pavement conditions are measured through field inspections. Pavements in "poor" condition are in need of work due to either the ride quality or due to a structural deficiency.	≤ 5% (NHS) in Poor Condition
Interstate NHS	Percent of Interstate NHS pavements in **Good condition**	Interstate pavement rated as "good" will be considered for potential pavement preservation treatments to maintain the "good" rating.	≥ 50% (NHS) in Good Condition
Non-Interstate NHS	Percent of NHS pavements in **Poor condition**	Non-interstate NHS pavements in "poor" condition are in need of major maintenance. These will be evaluated for potential projects.	≤ 12% (NHS) in Poor Condition
Non-Interstate NHS	Percent of NHS pavements in **Good condition**	Non-interstate NHS pavements in "good" condition will be evaluated for potential preservation treatments.	≥ 40% (NHS) in Good Condition

Note: *The 2-yr and 4-yr targets are the same. GDOT will have an opportunity to revisit and adjust (if necessary) the 4-year target in 2024*

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PM 3 Targets

Summary of the PM 3 Performance Measures

PERFORMANCE MEASURE	GEOGRAPHIC EXTENT	APPLICABLE ROADWAYS
Percentage of person-miles traveled on the Interstate that are reliable	Statewide	Interstate
Percentage of person-miles traveled on the non-Interstate NHS that are reliable	Statewide	Non-Interstate
Truck Travel Time Reliability (TTTR) Index	Statewide	Interstate
Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita*	Atlanta Urbanized Area	Entire NHS
Percent of Non-Single Occupancy Vehicle (SOV) Travel*	Atlanta Urbanized Area	All Roads
Total Emissions Reduction	Statewide	All Roads

**GDOT, Atlanta Regional Commission and Cartersville-Bartow Metropolitan Planning Organization are required to establish and report single targets for Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita and Percent of Non-Single Occupancy Vehicle (SOV) Travel for Atlanta urbanized area.*

PM 3 Targets

PERFORMANCE MEASURE	2-YEAR TARGET	4-YEAR TARGET
Percent of person-miles traveled on the Interstate that are reliable	73.9%	68.4%
Percent of person-miles traveled on the non-Interstate NHS that are reliable	87.3%	85.3%
Truck Travel Time Reliability (TTTR) Index	1.62	1.65
Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita*	23.7 hours	27.2 hours
Percent of Non-Single Occupancy Vehicle (SOV) Travel*	22.7%	22.7%
Total Emissions Reduction	VOC: 157.200 kg/day; NOx: 510.900 kg/day	VOC: 257.100 kg/day; NOx: 904.200 kg/day

Note: *GDOT will have an opportunity to revisit and adjust (if necessary) the 4-year target in 2024*

Performance Management Targets

GAINESVILLE-HALL
Metropolitan Planning Organization

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NOW, THEREFORE, BE IT RESOLVED that the GHMPO Policy Committee (PC) concurs with the recommendations of the TCC and CAC that GHMPO agree to support the Safety Performance Management Targets, Bridge and Pavement Performance Management Targets, and the Targets for Performance of the National Highway System, Freight, and Congestion Mitigation and Air Quality, as approved by GDOT.

A motion was made by PC member Commissioner Stowe and seconded by PC member Mayor Cowsillon and approved this the 21st of February, 2023.

Lamar Scroggs
Mayor Lamar Scroggs, Chair
Policy Committee

Subscribed and sworn to me this the 21st of February, 2023.

Notary Public

My commission expires 1-22-24

ANAEL DOMINGUEZ NOTARY PUBLIC HALL COUNTY, GEORGIA MY COMMISSION EXPIRES JANUARY 22, 2024

Transit Asset Management Targets

GHMPO

Gainesville - Hall Metropolitan Planning Organization

A Resolution by the Gainesville-Hall Metropolitan Planning Organization Policy Committee Setting Transit Asset Management Targets

WHEREAS, the Gainesville-Hall Metropolitan Planning Organization (GHMPO) is the designated Metropolitan Planning Organization (MPO) for transportation planning within the Gainesville-Hall Planning Area which includes entire Hall County and a western portion of Jackson County; and

WHEREAS, federal legislation and rulemaking under MAP-21 (Moving Ahead for Progress in the 21st Century) and the FAST Act (Fixing America's Surface Transportation) established new performance management requirements to ensure state Departments of Transportation (DOT) and MPOs focus the use of federal transportation funds on projects which address national transportation goals; and

WHEREAS, GHMPO, in coordination with the Federal Transit Administration and the Georgia Department of Transportation (GDOT), has reviewed the requirement to adopt a Group Transit Asset Management Plan for use in the transportation planning process; and

WHEREAS, transit providers are required to establish and assess state of good repair performance targets; and

WHEREAS, MPOs are required to establish state of good repair transit performance targets after the transit providers establish their initial targets; and

WHEREAS, in consultation with GDOT and transit providers, GHMPO may update its state of good repair targets annually; and

WHEREAS, the Technical Coordinating Committee (TCC) and the Citizens Advisory Committee (CAC) at their meetings on January 16th and January 31st respectively recommended that GHMPO support the Group Transit Asset Management Plan Targets approved by the GDOT as follows:

Transit Asset Management 2019-2022 Performance Targets:

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Gainesville, Georgia 30504

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www.ghmpo.org

Transit Asset Management Targets

GHMPO

Gainesville - Hall Metropolitan Planning Organization

Asset Category/Class	Total Number	Useful Life Benchmark (ULB)	Number Exceeding ULB [1] / 3.0 TERM Rating	% Exceeding ULB / 3.0 TERM Rating	Proposed FY19 Targets
Rolling Stock	**775**		**96**	**12.4%**	
BU-Bus (35' - 40')	82	14 yrs.	8	9.8%	15%
BU-Bus (29' - 30')	54	12 yrs.	21	38.9%	35%
CU-Cutaway bus	593	7 yrs.	52	8.8%	10%
MV-Minivan	1	8 yrs.	1	100.0%	50%
SB-School bus [2]	33	15 yrs.	8	24.2%	50%
VN-Van	12	8 yrs.	6	50.0%	50%
Equipment	**55**		**23**	**42.6%**	
AO - Automobile	18	8 yrs.	11	61.1%	55%
Trucks and other Rubber Tire Vehicles	31	10 yrs.	11	35.5%	55%
Equip. > $50,000 [3]	6	14 yrs.	n/a	n/a	n/a
Facilities	**83**		**7**	**8.4%**	
Administration	62	n/a	2	3.2%	25%
Maintenance	11	n/a	5	45.5%	25%
Passenger / Parking Facilities	10	n/a	0	0%	10%

[1] For facilities, number below 3.0 TERM rating is used
[2] Refers to vehicle type, not type of service operated
[3] For equipment, FTA requires performance targets to only be set for non-revenue or service vehicles

NOW, THEREFORE, BE IT RESOLVED that the GHMPO Policy Committee (PC) concurs with the recommendations of the TCC and CAC that GHMPO agree to support the Group Transit Asset Management Targets as approved by GDOT.

A motion was made by PC member Danny Dunagan and seconded by PC member Richard Higgins and approved this the 12th of February, 2019.

Mayor Mike Miller, Chair
Policy Committee

Subscribed and sworn to me this the 12th of February, 2019

Emily Foote
Notary Public
Hall County
State of Georgia
My commission expires July 31, 2022

Notary Public

My commission expires 7/31/2022

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Technical Coordinating Committee

Wednesday, July 19, 10:30 AM
Banquet Hall, 4th Floor, Hall County Government Center
2875 Browns Bridge Road, Gainesville, GA 30504

AGENDA

1. **Welcome – Adam Hazell, Chair**

2. **Election of TCC Chair and Vice Chair for FY 2024**

3. **Approval of April 19, 2023 Meeting Minutes**

4. **Update on GHMPO's Designation as a Transportation Management Area (TMA)**
   – Joseph Boyd, GHMPO

5. **Recommend Approval of Hall Area Transit's Zero Emission Vehicle Transition Plan**
   – Phillippa Lewis Moss, Hall Area Transit

6. **Recommend Approval of Draft FY 2024-2027 Transportation Improvement Program (TIP)**
   – Michael Haire, GHMPO

7. **Recommend Approval of Draft Amendment #2 to the FY 2024 Unified Planning Work Program (UPWP)**
   – Michael Haire, GHMPO

8. **Other**
   – Update from the Trails Subcommittee
   – Update from the McEver Road Subcommittee
   – MTP/Bike & Pedestrian Plan Updates

GAINESVILLE-HALL
Metropolitan Planning Organization

MEMORANDUM

To: **Technical Coordinating Committee Members**

From: **Michael Haire, GHMPO**

Date: **July 12, 2023**

Re: **Recommend Approval of Draft Amendment #2 to the FY 2024 Unified Planning Work Program (UPWP)**

In order to accommodate growing traffic and demand for parking, the City of Flowery Branch has requested that the Gainesville-Hall Metropolitan Planning Organization make Amendment #2 to the FY 2024 Unified Planning Work Program (UPWP), adding the following:

- **New FY 2024 Activities in Sub-Element 4.5 – MTP/Bike & Pedestrian Plan/Special Transportation Studies: "**Work with Flowery Branch and consultant to conduct a downtown parking and mobility study with the intent of determining optimal locations and implementation strategies for additional parking infrastructure, and strategies for directing and managing the growing traffic downtown."
    - This study will determine optimal locations for parking, implementation strategies for that infrastructure, and examine ways to improve traffic flow through a road diet.

RECOMMENDED ACTION: **Recommend Approval of Draft Amendment #2 to the FY 2024 Unified Planning Work Program**

Attachment: *Draft Amendment #2 to the FY 2024 UPWP*

GAINESVILLE-HALL METROPOLITAN PLANNING ORGANIZATION

FY 2024 Unified Planning Work Program

GHMPO

In accordance with Title VI of the Civil Rights Act of 1964 and other nondiscrimination laws, public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, familial, or income status.

Adopted: February 21, 2023
Amended: August 8, 2023

Prepared by the Gainesville-Hall Metropolitan Planning Organization
in coordination with
Hall Area Transit
the Georgia Department of Transportation
the Federal Highway Administration
the Federal Transit Administration
and Hall County Government

TCC 142

TASK # 4: SYSTEM PLANNING

Sub-Element 4.5: MTP/Bike & Ped Plan Update/Special Transportation Studies

Objective

- Integrate land use planning activities with transportation planning.
- Provide information and recommendations to member jurisdictions and other planning and design agencies.

FY 2023 Activities

- Applied for additional PL funds through the PL Funds Review Committee to conduct the Bike and Pedestrian Plan Update, in tandem with the Metropolitan Transportation Plan: 2025 Update
- Participated and assisted with the GDOT led State Route 365 Corridor Study and the State Route 53 Mobility Study. Provided data and feedback as needed.

FY 2024 Activities

- Kick-off and begin the Metropolitan Transportation Plan: 2025 Update / Bicycle and Pedestrian Plan Update, designated PI. 0019901.
- Complete required SE data development milestones for the MTP: 2025 Update.
- Complete any additional studies as needed (none identified at this time, but complete any small additional planning studies as they occur throughout FY 2024 with approval of MPO committees).
- Continue participating and providing assistance with the GDOT led State Route 365 Corridor Study and the State Route 53 Mobility Study. Provide any data and feedback as needed.
- Task # 4.5 will address GHMPO planning priority numbers 3 through 8.

Product

- Base and future year SE data for the Metropolitan Transportation Plan: 2025 Update finalized by agreed-upon timeline
- Additional studies and plans as needed.

TRANSPORTATION RELATED PLANNING ACTIVITY	
ORGANIZATION	ACTIVITY
GHMPO	MTP: 2025 Update / Bicycle and Pedestrian Plan Update

TARGET START AND END DATES	7/1/2023 – 6/30/2024	**LEAD AGENCY**	GHMPO

FUNDING SOURCE	AMOUNT	FUNDING SOURCE (PI. 00199901)	AMOUNT
FHWA (80%)	$80,000.00	FHWA (Additional Award) (80%)	$318,800.00
LOCAL IN-KIND MATCH (20%)	$20,000.00	LOCAL CASH MATCH (20%)	$79,700.00
TOTAL	**$100,000.00**	**TOTAL**	**$398,500.00**

TASK # 4: SYSTEM PLANNING

Sub-Element 4.5: MTP/Bike & Ped Plan Update/Special Transportation Studies

Objective

- Integrate land use planning activities with transportation planning.
- Provide information and recommendations to member jurisdictions and other planning and design agencies.

FY 2023 Activities

- Applied for additional PL funds through the PL Funds Review Committee to conduct the Bike and Pedestrian Plan Update, in tandem with the Metropolitan Transportation Plan: 2025 Update
- Participated and assisted with the GDOT led State Route 365 Corridor Study and the State Route 53 Mobility Study. Provided data and feedback as needed.

FY 2024 Activities

- Kick-off and begin the Metropolitan Transportation Plan: 2025 Update / Bicycle and Pedestrian Plan Update, designated PI. 0019901.
- Complete required SE data development milestones for the MTP: 2025 Update.
- Work with Flowery Branch and consultant to conduct a downtown parking and mobility study with the intent of determining optimal locations and implementation strategies for additional parking infrastructure, and strategies for directing and managing the growing traffic downtown.
- Complete any additional studies as needed.
- Continue participating and providing assistance with the GDOT led State Route 365 Corridor Study and the State Route 53 Mobility Study. Provide any data and feedback as needed.
- Task # 4.5 will address GHMPO planning priority numbers 3 through 8.

Product

- Base and future year SE data for the Metropolitan Transportation Plan: 2025 Update finalized by agreed-upon timeline
- Flowery Branch Downtown Parking and Mobility Study
- Additional studies and plans as needed.

TRANSPORTATION RELATED PLANNING ACTIVITY	
ORGANIZATION	ACTIVITY
GHMPO	MTP: 2025 Update / Bicycle and Pedestrian Plan Update
GHMPO / City of Flowery Branch	Flowery Branch Downtown Parking and Mobility Study

TARGET START AND END DATES	7/1/2023 – 6/30/2024	**LEAD AGENCY**	GHMPO

GAINESVILLE-HALL
Metropolitan Planning Organization

2875 Browns Bridge Road
Gainesville, GA 30504
Tel: 770.531.6809
Fax: 770.531.3902
ghmpo.org

A Resolution by the Gainesville-Hall Metropolitan Planning Organization Policy Committee Adopting Amendment #2 to the FY 2024 Unified Planning Work Program (UPWP)

WHEREAS, the Gainesville-Hall Metropolitan Planning Organization 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, the Policy Committee (PC) is the recognized decision making body for transportation planning with the Gainesville-Hall Metropolitan Planning Organization (GHMPO); and

WHEREAS, the Infrastructure Investment and Jobs Act (IIJA) requires the Metropolitan Planning Organization to develop and adopt a Unified Planning Work Program; and

WHEREAS, the Unified Planning Work Program is consistent with all plans, goals, and objectives of the Gainesville-Hall Metropolitan Planning Organization.

NOW, THERE, BE IT RESOLVED that the Gainesville-Hall Metropolitan Planning Organization adopts Amendment #2 to the FY 2024 Unified Planning Work Program, which adds language to Work Element 4.5 - "MTP/Bike & Pedestrian Plan/Special Transportation Studies" - that expresses the intent to work with the City of Flowery Branch to conduct the Flowery Branch Downtown Parking and Mobility Study in order to determine optimal locations and implementation strategies for additional parking infrastructure.

A motion was made by PC member _____ and seconded by PC member _____ and approved this the 8th of August, 2023.

_____
Mayor Ed Asbridge, Chair
Policy Committee

Subscribed and sworn to me this the 8th of August, 2023

_____
Notary Public

My commission expires _____

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Technical Coordinating Committee

Wednesday, July 19, 10:30 AM
Banquet Hall, 4th Floor, Hall County Government Center
2875 Browns Bridge Road, Gainesville, GA 30504

AGENDA

1. **Welcome – Adam Hazell, Chair**

2. **Election of TCC Chair and Vice Chair for FY 2024**

3. **Approval of April 19, 2023 Meeting Minutes**

4. **Update on GHMPO's Designation as a Transportation Management Area (TMA)**
   – Joseph Boyd, GHMPO

5. **Recommend Approval of Hall Area Transit's Zero Emission Vehicle Transition Plan**
   – Phillippa Lewis Moss, Hall Area Transit

6. **Recommend Approval of Draft FY 2024-2027 Transportation Improvement Program (TIP)**
   – Michael Haire, GHMPO

7. **Recommend Approval of Draft Amendment #2 to the FY 2024 Unified Planning Work Program (UPWP)**
   – Michael Haire, GHMPO

8. **Other**
   – Update from the Trails Subcommittee
   – Update from the McEver Road Subcommittee
   – MTP/Bike & Pedestrian Plan Updates

9. Jurisdiction and Agency Reports

- City of Flowery Branch
- City of Gainesville
- City of Oakwood
- City of Buford
- Town of Braselton
- Federal Highway Administration
- Georgia Department of Transportation
- Georgia Mountains Regional Commission
- Hall Area Transit
- Hall County
- Jackson County

10. Public Comment

11. Upcoming Meeting Date: October 18, 2023

12. Adjourn

9. Jurisdiction and Agency Reports

- City of Flowery Branch
- City of Gainesville
- City of Oakwood
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