

Citizens Advisory Committee

Thursday, July 27, 4:00 PM HR Training Room, 2nd Floor, Hall County Government Center 2875 Browns Bridge Road, Gainesville, GA 30504

<u>AGENDA</u>

- 1. Welcome Renee Gerrell, Chair
- 2. Election of CAC Chair and Vice Chair for FY 2024
- 3. Approval of April 27, 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 the 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

- MTP/Bike & Pedestrian Plan Updates
- Updates on SR 60 @ Lee Land Road
- Updates from the TCC Subcommittees

9. TCC Agency Report

10. Public Comment

- 11. Upcoming Meeting Date: October 26, 2023
- 12. Adjourn



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Citizens Advisory Committee

HR Training Room, 2nd Floor, Hall County Government Center Draft Minutes of April 27, 2023 Meeting

Voting Members Present:

Renee Gerrell, Chair Patrick O'Rouke, Hall County – Vice-chair Pat Jones, City of Oakwood Tony Millwood, City of Oakwood Billy Edwards, Town of Braselton John Rudio for Rick Marzano, City of Flowery Branch Chip McCallum, City of Flowery Branch Beverly Nordholz, City of Gainesville Berlinda Lipscomb, City of Gainesville Sammy Smith, City of Gainesville Brent Hoffman, Hall County

Voting Members Absent:

Toni Buffington, Hall County Nick Haynes, Hall County Joe Kennedy, Hall County Greg Simpson, Hall County Sloan Spivey, Hall County Michele Price, Jackson County William Bush, City of Gainesville

Others Present:

Adrienne Rice, Citizen Joseph Boyd, GHMPO Michael Haire, GHMPO

1. Welcome – Renee Gerrell, Chair

Ms. Gerrell opened the meeting at 4:00 PM.

2. Approval of November 3, 2022 and February 16, 2023 Meeting Minutes

MOTION: Mr. Smith made a motion to approve of the November 3, 2022 meeting minutes, with a second from Mr. Millwood, and the motion passed by unanimous vote.

MOTION: Mr. Smith made a motion to approve of the February 16, 2023 meeting minutes, with a second from Mr. Millwood, 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.

MOTION: Mr. Smith made a motion to recommend approval of Draft Amendment #1 to the FY 2024 Unified Planning Work Program (UPWP), which received a second from Ms. Jones, and 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 federal 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.

MPO staff received a question from Mr. Smith regarding which projects would be likely to stay in the TIP program years and which projects may be shifted out, to which Mr. Haire responded that all of them are anticipated to stay in the TIP with the exception of phase II of the Spout Springs Road widening. If a TSPLOST were to be approved in Hall County, that project may receive partial or total funding from the new funding source, and as that is not a state or federal source, the project would be moved out of the TIP program years. The Committee engaged in brief discussion of the pros and cons of locally funding the project.

5. Other

Mr. Boyd discussed the possibility of a TSPLOST later in the year in Hall County, and provided a map of counties and regions in Georgia that have instituted their own TSPLOST.

Mr. Haire discussed railroad crossing maintenance, explaining that the matter was discussed with the Technical Coordinating Committee, which overwhelmingly agreed that railroad crossing maintenance was the responsibility of railroad companies. The Committee discussed the potential of

reaching out to the railroad company in order to ask a representative about local issues relating to maintenance, safety, and train blockings. . Mr. Boyd said that the MPO would continue to try to engage with the railroad companies and he would see if they could find a contact to pass along the recently received maintenance concerns.

Mr. Boyd briefly discussed updates on the TCC subcommittees. The current priorities for the Trails Subcommittee are the Tumbling Creek and Gainesville Airport Connector Trails. The Tumbling Creek Trail is nearing completion. The Gainesville Airport Connector Trail is currently under design with an estimation construction completion range of 2024-2025. The McEver Road Subcommittee has been working to improve safety and mobility along the McEver Road corridor, and roundabouts at Lights Ferry Road and Gaines Ferry Road are currently underway.

Lastly, Mr. Boyd discussed the Metropolitan Transportation Plan and Bike and Pedestrian Plan. MPO staff are currently in the process of selecting a consultant and are anticipating kickoff later in the summer.

6. TCC Agency Reports

Mr. Boyd provided a brief recap of the local jurisdiction project updates provided at the Technical Coordinating Committee meeting on April 19, 2023.

7. Public Comment

There were no public comments.

8. Upcoming Meeting Date: July 27, 2023

Ms. Gerrell reminded the Committee of their upcoming meeting on July 27, 2023.

9. Adjourn

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

Renee Gerrell, Chair

Michael Haire, GHMPO



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MEMORANDUM

To:Citizens Advisory Committee MembersFrom:Joseph Boyd, GHMPODate:July 20, 2023Re: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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MEMORANDUM

To: Citizens Advisory Committee Members

From: Phillippa Lewis Moss, Hall Area Transit

Date: July 20, 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 kickoff 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



Zero Emission Vehicle Transition Plan

JUNE 2023

PREPARED BY









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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).

Fleet Overview

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



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.

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



> 22 VEHICLES



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.

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.

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.

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	\$O	\$O	\$600,000	\$1,900,000
Expansion Vehicles	Section 5307 (Urban Capital)	\$O	\$O	\$625,000	\$200,000	\$825,000
Parking Lot & Building Improvements	Section 5307 (Urban Capital)	\$O	\$O	\$O	\$50,000	\$50,000
Replacement Vehicles	Section 5311 (Rural Capital)	\$0	\$O	\$O	\$50,000	\$50,000
Buy <30 Foot Bus For Expansion	Transit Funds for the Atlanta Urbanized Area in Hall County	\$O	\$O	\$O	\$800,000	\$800,000
Rehab/renovate Administrative Facility	Transit Funds for the Atlanta Urbanized Area in Hall County	\$O	\$O	\$O	\$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	Federal Funding Sources				
United States Department	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 			
of Transportation (USDOT)	Transportation Infrastructure Finance and Innovation Act (TIFIA) Ioans, Ioan 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. 			

	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.
Federal Transit Administration (FTA)	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 So	urces	
Georgia Environmental	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.
Finance Authority	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
	Vehicle Cost	\$72,621	\$200,000
JL	Vehicle Incentives	n/a	25% of cost
CAPIT	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
ATIONAL	Fuel (Fleet Cost/yr)	\$103,979	Electricity rate (\$/kWh) = \$0.11571 Demand charges (\$/kW) = \$8.47 Monthly charge: \$141
OPER	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.



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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.



Emissions Factors (EFs)	CO₂e	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.

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) (20210	 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	

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

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

A microgrid is a local, selfsufficient 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.

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.

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.

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

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.



Figure 4-5: Social Vulnerability Index & Flooding Map



Figure 4-6: Social Vulnerability Index & Heat Map

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.

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.

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 indepot 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.



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.

Appendix A: Justice40 Screening











Citizens Advisory Committee

Thursday, July 27, 4:00 PM HR Training Room, 2nd Floor, Hall County Government Center 2875 Browns Bridge Road, Gainesville, GA 30504

<u>AGENDA</u>

- 1. Welcome Renee Gerrell, Chair
- 2. Election of CAC Chair and Vice Chair for FY 2024
- 3. Approval of April 27, 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
- Recommend Approval of the 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

- MTP/Bike & Pedestrian Plan Updates
- Updates on SR 60 @ Lee Land Road
- Updates from the TCC Subcommittees



MEMORANDUM

To: Citizens Advisory Committee Members

From: Michael Haire, GHMPO

Date: July 20, 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 Citizens Advisory 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.

FY 2024-2027 Transportation Improvement Program

		\$ Thousands																				
GHM PO No.	GDOT No.	Project Name			FY 2024					FY 2025					FY 2026					FY 2027	7	
			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 Parkw ay 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/Daw sonville Hw y from Ahaluna Dr to Shallow ford 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 Hw y 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	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	\$ 31,403,722.00	\$ -	\$ -	\$-	\$ 31,403,722.00
State	HB170	HB170	\$ 58,694,292.00	\$ 49,275,820.00	\$ 19,363,827.00	\$-	\$ 127,333,939.00
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			\$ 101,209,011.00	\$ 60,364,673.00	\$ 30,527,680.00	\$ 10,838,853.00	\$ 202,940,217.00



Citizens Advisory Committee

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– Michael Haire, GHMPO

- Recommend Approval of Draft Amendment #2 to the FY 2024 Unified Planning Work Program (UPWP)
 - Michael Haire, GHMPO
- 8. Other
 - MTP/Bike & Pedestrian Plan Updates
 - Updates on SR 60 @ Lee Land Road
 - Updates from the TCC Subcommittees



MEMORANDUM

To:Citizens Advisory Committee MembersFrom:Michael Haire, GHMPODate:July 20, 2023Re: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



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

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 7/1/2023 - 6/30/2024 AND END DATES 7/1/2023 - 6/30/2024	LEAD AGENCY	GHMPO
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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

AND END DATES	TARGET START AND END DATES	7/1/2023 - 6/30/2024	LEAD AGENCY	GHMPO
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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.

А	motion	was	made	by	PC	member	and	seconded	by	PC	member
			and	аррі	rovec	d this the 8	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



Citizens Advisory Committee

Thursday, July 27, 4:00 PM HR Training Room, 2nd Floor, Hall County Government Center 2875 Browns Bridge Road, Gainesville, GA 30504

<u>AGENDA</u>

- 1. Welcome Renee Gerrell, Chair
- 2. Election of CAC Chair and Vice Chair for FY 2024
- 3. Approval of April 27, 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 the 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

<mark>8. Other</mark>

- MTP/Bike & Pedestrian Plan Updates
- Updates on SR 60 @ Lee Land Road
- Updates from the TCC Subcommittees

9. TCC Agency Report

10. Public Comment

- 11. Upcoming Meeting Date: October 26, 2023
- 12. Adjourn



Technical Coordinating Committee Jurisdiction and Agency Reports July 19, 2023

City of Gainesville – Mr. Tarver

- The City Park roundabout is currently under construction, and it is anticipated to open to traffic this fall. All other associated work on this project should be completed by the end of the year.
- The City of Gainesville is utilizing 2023 Local Maintenance & Improvement Grant (LMIG) funds to complete various street resurfacing projects.

City of Buford – Mr. Branch

• The City of Buford is replacing piping on New Bethany Road off Lanier Islands Parkway.

Town of Braselton – Ms. Scott

- Right-of-Way acquisition for Phase II of the State Route 211 widening is anticipated to begin soon. Phase I is well underway with utility relocation in progress.
- The roundabout on State Route 53 at New Cut Road is anticipated to begin construction soon.
- A road diet was recently implemented in downtown Braselton on Davis Street, which will increase safety for pedestrians.

Federal Highway Administration – Mr. Lombard

- Mr. Lombard briefly discussed several grant opportunities that are currently open to local governments:
 - Protect Resiliency Grants due August 18th
 - Mega Grant Program
 - Reconnecting Communities and Neighborhoods Program due September 28th
 - Bridge Investment Program
 - Railroad Crossing Elimination Program

Georgia Department of Transportation (GDOT) – Mr. Lott

- State Route 53 improvements from Ahaluna Drive to Shallowford Road let date has shifted back to mid-2024 due to procurement delays on the consultant contract.
- State Route 53 at State Route 369 turn lanes project is scheduled for a September 2023 let date.
- Right-of-Way funds for the new interchange at Lanier Tech Drive have been authorized.
- Construction on the New Cut Roundabout has been initiated.

<u>Hall Area Transit (HAT) – Ms. Moss</u>

• Hall Area Transit has been receiving funds from the Transit Trust Fund Program, which will be used to purchase additional We-Go transit vehicles and two more trolleys.

Hall County – Mr. Boyd

- The turn lane project on Jim Hood Road is anticipated to be completed before the school year begins.
- The McEver Road/Lights Ferry roundabout has been put out to bid, with bids due by July 27th.
- Right-of-Way acquisition for the Sardis Road Connector is almost complete, with one parcel left to be acquired.
- Hall County is currently working on some environmental aspects of Phase II of the Spout Springs widening with GDOT.

Jackson County – Ms. Roy

• Jackson County has also received some Transit Trust Fund Program funds that Hall Area Transit received and is using it to complete renovations on existing transit facilities.

9. TCC Agency Report

10. Public Comment

- 11. Upcoming Meeting Date: October 26, 2023
- 12. Adjourn