PROPOSAL

City of Green Cove Springs

Develop a Mobility Plan

GANNETT FLEMING

RSG the science of insight

July 2022

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Gannett Fleming, Inc.

10161 Centurion Parkway North, Suite 300

Jacksonville, FL 32256

Jeanette Berk,

Senior Planning Manager

jberk@gfnet.com

904.254.8624

Carlos Cejas, P.E.

Vice President

Ccejas@gfnet.com

305.213.1474

MOBILITY PLAN

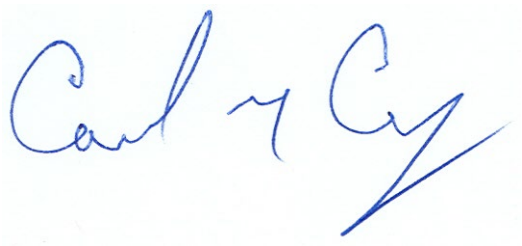
Gannett Fleming, Inc. And RSG are well known for their modeling and planning capabilities not only in the state of Florida but also nationwide. As such, we are eager to provide the City of Green Cove Springs with the needed technical modeling and planning activity support to develop a Mobility Plan. Our staff members have backgrounds in civil engineering, planning, economics, environmental science, policy, statistics, and computer science.

We wish to highlight our innovative use of the Northeast Regional Planning Model (NERPM) to provide a solid quantitative basis supporting the dual rational nexus requirement. RSG, under contract with the Northeast Florida Transportation Planning Organization (TPO), developed the NERPM, while Gannett Fleming has provided oversight in the development of the model for the Jacksonville Transportation Authority (JTA). As such our staff is intimately familiar with this advanced Activity Based Model. We believe the unique capabilities of NERPM can be harnessed to deliver the solid quantitative foundation the County's updated Roadway Impact Fees will require.

Jeanette Berk will serve as project manager, and will oversee the technical economic analysis, traffic and trip generation, and overall impact fee development, as well as the technical travel modeling effort that is central to our approach. Our team has the experience and quantitative skills, and a national perspective, providing the City a depth of resources.

We look forward to talking with you about our proposal.

Sincerely,



Carlos M. Cejas, PE
Vice President

INTRODUCTION

Gannett Fleming, Inc. and RSG are well known for their modeling and planning capabilities not only in the state of Florida but also nationwide.

As such we are eager to provide the City of Green Cove Springs with the technical modeling and planning support to develop a mobility fee and mobility. This effort would leverage the adjacent mobility plan project for Clay County and specifically harness the travel demand modeling synergies.

The mobility plan will define the need for additional transportation investment, specifically multimodal, document the standards of service and rational for additional capacity, and the nexus between the payees of the mobility fee and the beneficiaries.

The mobility fee will be based on the current North Florida Transportation Planning Organization (TPO) Year 2045 Long Range Transportation Plan (LRTP).

PROJECT MANAGEMENT

This project will be managed locally by Jeanette Berk of Gannett Fleming, Inc. She has a long history of successful delivery and coordination within North Florida and across the state. Jeanette will be the day to day point of contact and establish the schedule and milestones with the City and the project team. Jonathan Slason of RSG will be the technical lead for the analysis and development of the mobility fee.

The scope of work presented below describes tasks and activities that will be undertaken to deliver an effective 2045 Mobility Plan Study. Each task summarizes the general approach and the outcomes.

Agency Coordination

The project team will coordinate as necessary with several agencies, organizations, and ongoing city planning initiatives, including:

- Clay County
- North Florida Transportation Planning Organization (NFTPO)
- Jacksonville Transit Authority (JTA)
- Florida Department of Transportation (FDOT), District 2

Stakeholders and Public Engagement

Mobility plans have a focus that incorporates cars and multi modal mobility options into a suite of transportation choices. As a visionary 25-year document, it is important

to look forward and plan for transportation investments that can provide multimodal, person focused, travel capacity.

The city staff shall organize and facilitate any public outreach and create an initial list of stakeholders. Public outreach will be accomplished through City Council committees and hearings. The project team will work with the city staff and interested stakeholders to inform the range of potential investments to be considered in the mobility plan. It is anticipated in this scope that there will be three public/stakeholders' meetings and two presentations to the City Council.

Scope of Work

Goals and Objectives of Mobility Projects

Key goals and objectives from the latest Comprehensive Plan will guide the types of investments considered within the Mobility Plan.

Multimodal transportation investments to meet the mobility needs of the current and future residents and employees of the City of Green Cove Springs will be identified. Future users will contribute towards their portion of the capacity by allocating fees based on their generation of vehicle miles traveled (VMT) or person miles traveled (PMT). Moving users to non-motorized, or more efficient modes (more people per vehicle) can reduce the growth in VMT and decrease traffic congestion.

Comprehensive Plan Update

This task involves review and the development of proposed Comprehensive Plan language updates. For example, the shift to a Mobility Plan removes the concurrency requirements using Highway Capacity Manual (HCM) delay-based Level of Service (LOS) that can be replaced with multimodal LOS or walking or biking QLOS prioritized over vehicular LOS. The Capital Improvements Element retains the LOS "D" requirement for all streets in the city which may be reconsidered in order to determine a service standard that would support the multimodal investments expected to be funded with mobility fees.

Specifically, given the costs and the impacts to the community if the principal arterials were widened to accommodate a LOS D in the future there needs to be alternatives to the automobile developed to meet the mobility needs of the community.

The Mobility Plan will summarize the deterioration of the standards of service in the current transportation system due to additional growth and land use development and discuss how future conditions can be monitored and improved with subsequent mobility plan updates.

Update Regional Travel Demand Model

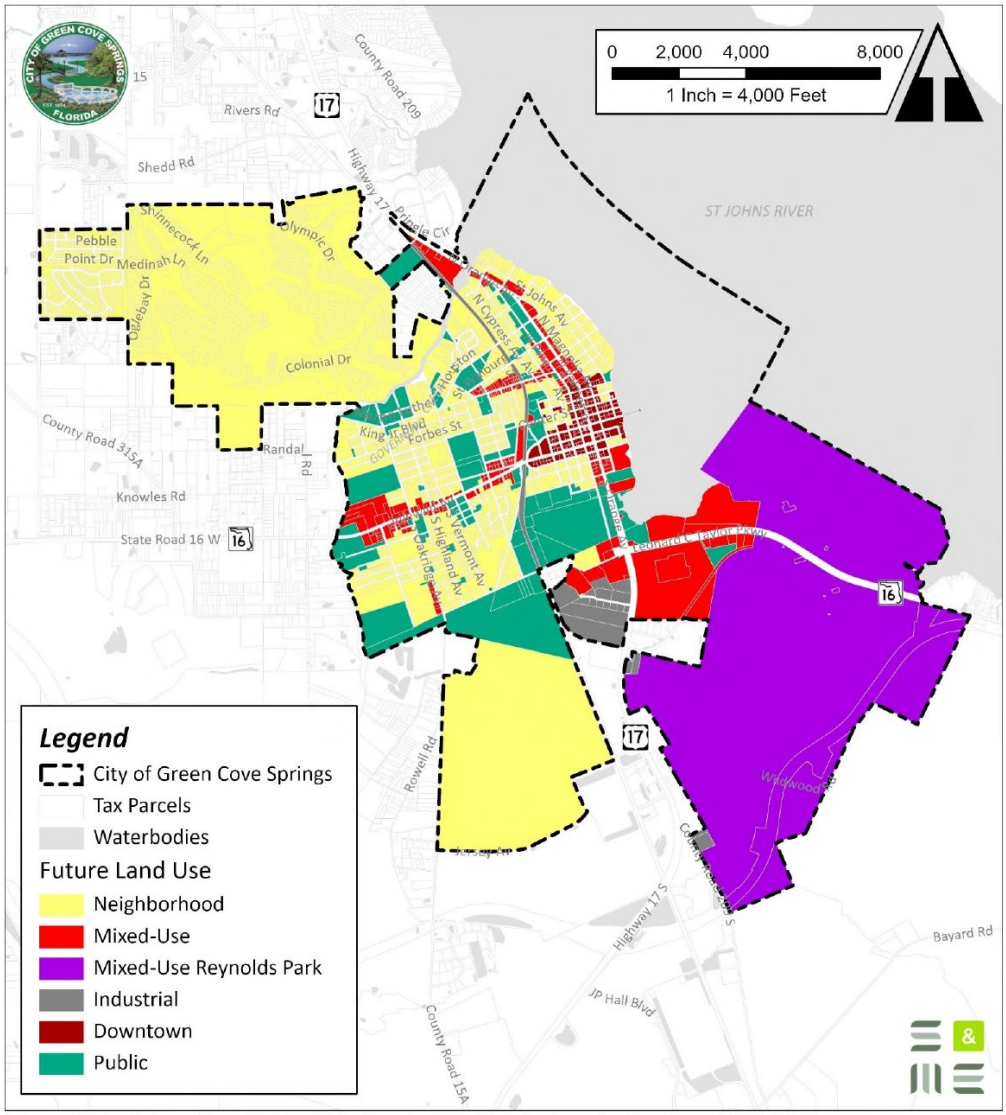
This task involves updating the zone and transportation system in the northwest portion of the city to account for the recently annexed land. The adopted Northeast

Florida Regional Model (NERPM) with a base year of 2015 and a horizon year of 2045 will be used for this study.

The future 2045 model will require updates to the forecast socio-economic data inputs. Refinements will need to be made to the base year and the future year zone structure and transportation network.

The model will then be required to be re-run with the changes in the 2015 and 2045 scenarios to produce the trip lengths and the PMT for Green Cove Springs. The 2045 Future Land Use map is shown below (figure from Comp Plan Update).

Map I - 8. Future Land Use Map, 2045



Sources: City of Green Cove Springs, Clay County, Clay County Property Appraiser, S&ME, 2021.

Trip Distribution analysis

Obtain person miles traveled from the NERPM, as well as vehicle miles traveled for internal to internal, external to external, and all external to internal/internal to external traffic flows. It is anticipated that the road network within the City of Green Cove Springs will be further defined, which would be assessed in a future model run for 2045.

The portion of PMT and VMT growth occurring within the overall Clay County region and that within the City of Green Cove Springs will be estimated. The travel model accounts for the anticipated changes in land use within the City and in the overall north Florida region. The model also includes a forecast mode share that will form the basis for any post processing to account for specific modal investments in the mobility plan.

The model can provide peak hours, such as the PM peak which is currently used in the concurrency or a daily estimate of travel demand. The period of analysis shall be confirmed by the City and project team. There are benefits and disadvantages of both, however, many communities have benefited from the simplicity of using the generalized Q/LOS tables on daily vehicle capacity (volume to capacity ratio) as a metric for assessing operations.

The trip lengths for trips originating and destinated for travel analysis zones (TAZs) within the City will be assessed for use within the mobility fee.

Deficiency analysis

The travel model will generate an estimate of new vehicle and person trip miles on the assessed travel network. For these roads an estimate of volume to capacity (VC) will be estimated for the period of analysis (PM peak or daily).

The existing base network in the calibrated 2015 travel demand model will have fewer roads than the refined future road network. It may be in the interest of the City to obtain some observed traffic counts throughout the City to estimate both the current peak hour and daily vehicle demands. These observed data can be compared to the same estimates of capacity from the FDOT Q/LOS manual. Some local streets are unlikely to have vehicle capacity issues, rather it is the case that some streets need to be upgraded to account for additional multimodal travel (i.e., sidewalks).

The current VC based LOS target of D will be reconsidered in the City's effort to shift away from concurrency and transition to a Mobility Fee. In this way the deficiency analysis will concentrate on the amount of person mile capacity offered today vs in the future. The deficiency will be addressed by identifying new capacity (i.e., new projects) that mitigate the deficiency and support the goals of the Comprehensive Plan.

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In addition to operational capacity, other elements can be considered in the identification of deficiencies to guide future improvements. These can include where capacity investment can improve other comprehensive plan goals such as health and

safety including crash risks, provide mobility for those with less income or may not have access to vehicles, and other related aspects to support multimodal travel. The City and Stakeholders can also identify where needs exist for additional transportation investment.

The Comprehensive Plan has maps and analysis showing the 2045 forecasts that include the effects of the First Coast Expressway. These forecasts will be reviewed in the new modeling done in this work as well as investigations of changing the land uses potentially in the south and north of downtown.

Project identification and Cost Estimates

The project team will work with the City and Stakeholders to identify transportation investments that will add multimodal capacity to the system. The project team will facilitate a meeting (remotely) to review any previously identified projects and engage with others who may have other concepts to consider. This process could involve incorporating previously planned projects, having the project team develop new concepts, and lastly, engaging with advocates and other stakeholders to develop a list of possible projects.

The project team will assess the projects for the degree of benefit to the system and the ability to provide mobility to the future city residents and employees. A basic prioritization system will be devised and reviewed with the City. Planning level costs will be developed for these projects using available FDOT, Clay County, and City information from recently completed projects and historical records. The City and FDOT will be asked to provide recent cost estimates to inform the development of the costs used in the mobility fee.

The task of any mobility plan often results in a needs list that is beyond the community's willingness to pass along as a cost to develop. However, it is further acknowledged that there is now a cost reduction due to the predictability in permitting and the removal of many concurrency requirements. The project team will confirm the legal requirements that no excess capacity is being funded than what is required to offset the impact of new land use development. Even still, there will likely have to be a prioritization and narrowing of the project list. This task is often time consuming and often iterative between the project team, the City, and stakeholders to arrive at a prioritized project list that will inform the base mobility fee.

Base mobility fee

The mobility fee is designed to be responsive to the type of land use, the underlying characteristics of the area that affect trip length as well as travel mode. The result is a vehicle or person miles traveled generated by each land use change. This quantity of growth, i.e., vehicle miles traveled is forecast for 2045 using the regional model.

The base mobility fee is simply the cost of the capacity divided by the unit of growth.

Mobility Fee = [(Cost of Applicable Infrastructure – Other Funding) / Change in PMT] - Credits

The team proposes that PMT is the unit of growth. Each land development proposal will generate PMT that will financially contribute to a multimodal suite of options that will provide options for all users to travel by the best means for them. This will inherently free up road capacity as some users are able to shift to non-road travel or to public transit.

Personal and vehicle trips can be monitored for any given land development site and trip lengths can be roughly estimated. Predictions for PMT can be estimated at the individual site level by using the Institute of Transportation Engineers Trip Generation manual to forecast the number of trips and this mobility fee analysis to assess the trip length.

Fee Paid by a Land Use Change = # of Daily Person Trips x Avg. Trip Length x Mobility Fee

The City of Green Cove Springs has a relatively small geographic footprint within Clay County which limits the actual length of travel any one resident or employee has within the City boundaries. As such, there will be an estimation based on land use and mode that may influence the amount of PMT that occurs with the City versus Clay County.

In the absence of any formal revenue sharing agreement, any land use development within the city might collect only a fraction of the total PMT estimated to be generated since the other portion would be impacting the county's transportation network. This also works in reverse, where any development occurring outside of the city may result in new traffic along the City of Green Cove Springs' streets, but that land would only be assessed the county specific mobility fee estimated.

This issue can be partially addressed by assessing what portion of new PMT in the general City of Green Cove Springs area is generated outside in the unincorporated county versus within the City of Green Cove Springs. The travel demand model can be used to develop a revenue sharing agreement to account for land use development in either jurisdiction and the related traffic. The project team assumes that this agreement would be of interest to the City and is part of this scope of work. This agreement is pragmatic yet remains uncommon among impact fee and mobility fee studies. The detailed use of the regional travel demand model in this case enables the greater degree of confidence in travel behavior to support such an agreement.

Credits

The project team will develop a mechanism for providing credits which can be offset from impact fees to reduce the possibility for users to pay for the same capacity more than once. There are three primary areas of credits to consider within this study:

- Concurrency and Developer Excise Fees.

- Revenue Credits.
- Possible Future Revenue Credits.

As the County is looking at a variety of methods to close the funding gap between identified infrastructure needs and anticipated future revenue it is important that not all funding sources are assessed in isolation.

Concurrency and Developer Excise Fees

This credit accounts for impact fee reductions if an individual development builds or pays for improvements that were slated for impact fee funds. If the cost of the infrastructure was less than anticipated through impact fees, then the developer would be able to recoup future impact fees from the County for the cost differential.

These credits are on a case-by-case basis and coded into ordinance rather than in the impact fee methodology.

Existing Revenue Credits

The project team will meet with City officials to confirm their use of collected taxes and whether for the purposes of this study they anticipate that any existing revenue sources will be altered.

Local Government Infrastructure Surtax is currently the only County revenue used to fund new capacity. The project team will confirm how local fuel taxes are used, if at all, within Green Cove.

Possible Future Revenue Credits

The team will meet with officials to understand their funding intentions by 2045. It will be important to assess this likelihood and then a process can be identified within this study for the derivation of future credits, if any of these other funding options become allocated for infrastructure capacity. These future revenues and credits could include:

- Future Fuel Tax Credits: Second Local Option Fuel Tax (a tax of 1 to 5 cents per gallon of non-diesel motor fuel sold within the County).
- Charter County and Regional Transportation System Surtax: a sales tax to assist payment for transit improvements and possibly operations.
- Special Assessment Districts: Property tax fees in specified geographic zones used to fund bond payments, capital programs, and/or annual operations.

Deliverables

The team will provide the City of Green Cove Springs with a Mobility Plan and necessary ordinance language that will create a mobility fee that will replace the existing concurrency requirements.

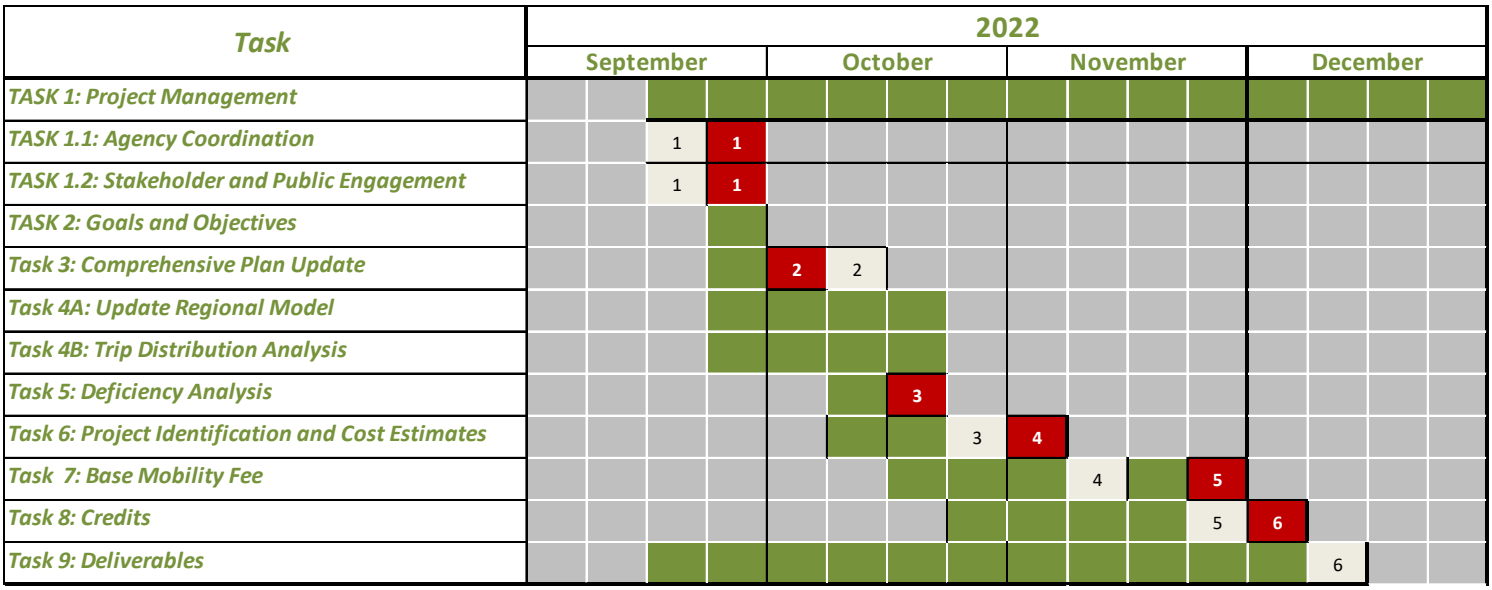
The ordinance will be based around Florida impact fee statutes and be consistent with the Clay County shift to Mobility Fees. The City shall organize a review and approval by the City attorney. Several deliverables will be produced as part of this study:

- Summary of the data collected and used
- Memo on methodology
- Improvement cost for all the mobility fee projects
- Mobility Fee Schedule by land use types
- Draft and Draft Final Impact Fee Ordinance
- Draft and Final Mobility Plan and Fee Study Report

Proposed Project Budget

	Hours / Task	Cost / Task
TASK 1: Project Management	20	$5,099
TASK 1.1: Agency Coordination	10	$2,550
TASK 1.2: Stakeholder and Public Engagement	25	$6,074
TASK 2: Goals and Objectives	8	$1,895
TASK 3: Comprehensive Plan Update	14	$2,733
TASK 4A: Update Regional Travel Model	70	$12,913
TASK 4B: Trip Distribution Analysis	26	$5,376
TASK 5: Deficiency Analysis	26	$5,135
TASK 6: Project Identification and Cost Estimates	16	$3,550
TASK 7: Base Mobility Fee	20	$4,378
TASK 8: Credits	20	$4,378
TASK 9: Deliverables	68	$14,917
Labor and Cost		$68,999
Direct Expenses		$100
Total Project Budget		**$69,099**

Proposed Schedule



Meeting

Project Deliverable

In-Process Task

#	List of Deliverables
1	Final Scope of Work
2	Draft Goals & Objects and Comprehensive Plan Update
3	Draft Project Identification & Cost Estimates
4	Draft Impact Fee Report
5	Draft Final Impact Fee Report
6	Final Impact Fee Report

#	List of Meetings
1	Kick-Off Meeting
2	Meetings with City Departments
3	Stakeholders Meeting - Growth Projections & Deficiencies
4	Stakeholders Meeting-Project & Cost Estimates
5	Planning Board City Council - Base Mobility Fee
6	Planning Board City Council Stakeholders - Final Fee