



Members American Planning Association and American Institute of Certified Planners

March 30, 2026

PROPOSED SCOPE OF WORK
TO SUPPORT JOHNSON ENGINEERING, INC IN CHARLOTTE COUNTY, FL

Charlotte County Utilities Department
Disaggregated Population Analysis Modeling

Metro Forecasting Models, LLC., proposes to provide Population Forecasting Analysis Modeling.

Study Area

The study area shall consist of the area within the boundary of the Charlotte County Utilities Department Franchise Area including a portion of Lee County, Florida, existing at the time of execution of this contract.

Scope of Services

CCIGM is the Charlotte County Interactive Growth Model

CLIENT/CCU is the Charlotte County Utility Department

CONSULTANT is Metro Forecasting Models

Spatial Population and Non-Residential Projections

CCIGM Model: This model will deliver detailed forecasts for population, housing units, and non-residential development within the study area, utilizing either Traffic Analysis Zones (TAZs) or other specified GIS shapes/polygons in the CCU service areas. The projections encompass both permanent and seasonal populations as well as non-residential building areas. Forecasts will be presented annually for the period from 2026 to 2035, and in five-year intervals from 2035 through 2050, as well as buildout.

Collectively, the growth forecasts can be used to determine need for utility improvements and expansions, prioritize these improvements and expansions and determine system impacts from future development.

Precise Data | Expert Analytics | Optimal Solutions

Potable Water Service Area Projections

The CONSULTANT, with assistance from the CLIENT provided GIS shape files of potable water service areas, existing water mains and planned water mains for use in projections of various elements including housing units, population and non-residential development. The CONSULTANT will identify CCIGM zones to be aggregated and/or subdivided for conformity with CCU potable water service boundaries.

The CONSULTANT will examine the supplied GIS shape files and offer feedback on particular parcels or groups of parcels that CLIENT might consider including in the analysis. Where necessary, the CONSULTANT will further divide zones to accurately reflect the served parcels. For these subdivided zones, both baseline and forecast data will be separated according to actual developments—whether existing or planned—in each section of the zone defined by the provided shape files or boundaries.

Water Service Areas Deliverable: All data provided shall be separated (disaggregated) by potable water source/plant service area designation based on boundaries provided by CLIENT. Service areas include West Port, Rotonda, East Port, Burnt Store, Punta Gorda, Riverwood, Gasparilla Island, and other individual utility entities.

Potable Water Connection Projections

After compiling overall forecasts for potable water service areas, the CONSULTANT will estimate future residential connections based on anticipated construction of residential units and non-residential developments. Historical information regarding the placement of water meters into service—including years or month/year—will be utilized as essential data to improve analytical accuracy; however, specific dates are not necessary.

In Charlotte County regions with approved projects, projected residential connections will align with the housing unit forecast. Conversely, in pre-platted areas of the county, connection forecasts are expected to differ significantly—typically being lower than the housing unit projections. Projections for connections will also consider population statistics and either the square footage of non-residential buildings or estimated employment figures.

Water Connection Deliverable: All data provided shall be separated (disaggregated) by potable water source/plant service area designation based on boundaries provided by CLIENT. Service areas include West Port, Rotonda, East Port, Burnt Store, Punta Gorda, Riverwood, Gasparilla Island, and other individual utility entities.

Wastewater Service Area Projections

The CONSULTANT, assisted by the CLIENT, has received GIS shapefiles delineating gravity sewer sheds/service areas, existing gravity and force mains, as well as planned septic-to-sewer polygons for use in projecting various elements such as housing units, population, and non-residential development. The CONSULTANT will identify CCIGM zones that require aggregation or subdivision to align with CCU wastewater shed/service boundaries.

Additionally, the CONSULTANT will review the provided GIS shapefiles and offer recommendations regarding specific parcels or parcel groups that the CLIENT may wish to include in the analysis. Where necessary, the CONSULTANT will further subdivide zones to ensure all served parcels are accurately captured. For these subdivided zones, baseline and forecast data will be disaggregated to reflect actual existing or future development within each segment of the zone defined by the supplied shapefiles and boundaries.

Wastewater Service Area Deliverable: All data provided shall be separated (disaggregated) by wastewater treatment plant service area designation based on boundaries provided by CLIENT. Service areas include West Port, Rotonda, East Port, Burnt Store, and other individual utility entities.

Wastewater Connection Projections

After reviewing the overall forecasts and projections of the various sewer sheds/service areas, the CONSULTANT will proceed to estimate future residential connections based on anticipated new construction of both residential units and non-residential developments. Input from CLIENT will be essential for this analysis in order to accurately determine the timing of new structures connecting to the wastewater system.

In those areas of Charlotte County with approved projects, residential connection projections will correspond directly to the housing unit forecast. Conversely, in pre-platted sections of the county, the number of forecasted connections is expected to be notably lower than the housing unit forecast, primarily due to existing gravity sewer and force main infrastructure constraints. Projections will also incorporate population data along with either non-residential building area or projected employment figures.

Wastewater Connection Deliverable: All data provided shall be separated (disaggregated) by wastewater treatment plant service area designation based on boundaries provided by CLIENT. Service areas include West Port, Rotonda, East Port, Burnt Store, and other individual utility entities.

GIS Support and Scenario Planning (subject to budget): The CONSULTANT, assisted by the CLIENT, will supplement or create GIS polygons delineating potable water service areas, gravity sewer sheds/service areas, Low-Pressure Sewers and vacuum, and septic to sewer areas on an as needed basis to support the analysis.

The CONSULTANT will provide additional modeling for scenario planning to demonstrate the upper and lower boundaries of population/connections to the CLIENT's systems. Scenarios can be helpful to show the impact of lower or higher growth, by area/polygon, on service volumes/flows. Scenarios can also be used to show impacts of alternative land uses such as commercial areas converting to residential uses or reduction in residential units due to redevelopment as non-residential or mixed-use projects.

Technical Memorandum: CONSULTANT will draft document that will outline the basic data sources, assumptions and the perspective/line of thinking that led to the projection results.

Formal Presentation: CONSULTANT will prepare slides with graphics and data suitable for explaining to policymakers the inputs and results of the projections by type.

Follow-up Meetings

CONSULTANT will meet as needed, either in person or via video conference call, with the CLIENT’s task force and other key stakeholders to review the progress of the work tasks. The CONSULTANT will revise any component of the work, if necessary, based upon comments received during these meetings. Any additional services must be approved in writing via an Amendment to this Agreement prior to starting such services. The agreed upon scope, compensation, and schedule for Additional Services shall be set forth in the Amendment authorizing those Additional Services. The CLIENT will not be responsible for the costs of Additional Services commenced without such express prior written approval.

Schedule of Services

CONSULTANT shall complete the Scope of Services within one year of the commencement date identified in a written notice to proceed.

Proposed Fee Breakdown and Rates

Task	Metro Forecasting Project Personnel (Projected Hours)				
	Project Manager	Senior Data Analyst	GIS Data Analyst	Staff Planner	Totals
Team Meetings	24	24	0	0	\$ 8,040
Permanent and Seasonal Population with Non-Residential Building Area for Potable Water Projections	24	90	20	0	\$ 21,400
Housing units and Non-Residential Development Connections to Potable Water System.	20	60	20	0	\$ 15,900
Permanent and Seasonal Population with Non-Residential Building Area for Wastewater Projections	24	100	20	0	\$ 23,000
Housing units and Non-Residential Development Connections to Wastewater System.	20	60	20	0	\$ 15,900
Optional: GIS support to create service polygons and provide scenario planning subject to budget.	50	40	30	0	\$ 19,350
Population Projection technical memorandum.	60	8		10	\$ 13,030
Create and attend presentaiton for policymakers in a public hearing.	26	20	10	0	\$ 9,150
Total Hours	248	402	120	10	
Hourly Rate	\$ 175	\$ 160	\$ 140	\$ 125	
Labor Cost	\$ 43,400	\$ 64,320	\$ 16,800	\$ 1,250	\$ 125,770