

EXHIBIT A

TASK WORK ORDER 13: SR 7 MULTIMODAL MOBILITY STRATEGY ASSESSMENT

D/W MOBILITY & REGIONAL COORDINATION GPC CONTRACT

FM #419008-1-12-01

CONTRACT #C8L18

Scope of Services

Introduction

Broward and Palm Beach Metropolitan Planning Organizations (MPOs) are undertaking mobility studies analyzing the State Road 7 corridor from approximately Sample Road in Broward County to Glades Road in Palm Beach County, west of Florida's Turnpike to the edge of the urban area. (Map attached.) These studies are evaluating the land use and transportation strategies to support long term mobility as a result of removing University Drive from the Palm Beach County Thoroughfare Identification Map (TIM), associated with the annexation of "the Wedge" to Broward County.

Renaissance Planning Group (the Consultant) will work under contract to the Department to prepare a multimodal quality/level of service evaluation as well as conduct a multimodal mobility strategy assessment for the corridor and the surrounding areas. This analysis will be performed with data provided from the other concurrent mobility studies, the Network Needs Assessment previously performed by the Department, and in cooperation with the local agencies/governments. The study area is bounded by the urban edge to the west to approximately one mile east of Florida's Turnpike, from approximately one mile north of Glades Road in Palm Beach County to approximately one mile south of Sample Road in Broward County.

Project Purpose

The purpose of this project is to provide local agencies/government with the data and analysis necessary to identify specific multimodal improvements in and around the corridor aimed at balancing levels of service area-wide. This will involve an assessment of shifting travel demand to alternative modes (walking, biking and transit), reducing travel demand through land use strategies, and adding network capacity (only if feasible) through ITS and roadway improvements (additional lanes, new network connections, etc.). This project proposes a network level analysis that covers the entire planning area, inclusive of but not limited to the SR 7 corridor.

Proposed Work Tasks

TASK 1.0 –Multimodal Level of Service and Network Needs Assessments

TASK 1.1 – EXISTING MULTIMODAL CONDITIONS ASSESSMENT

The Consultant will perform necessary plan reviews, data collection, inventory and analysis to properly assess the existing and planned multimodal conditions for the study area. Data available from affiliated

studies will be used where available. In addition, the Consultant will work with other study partners to define the qualitative attributes of 'place' that make walking, bicycling and transit more attractive as transportation choices so that a qualitative inventory of conditions can also be documented. The Consultant will complete a field review for missing data necessary to establish baseline conditions sufficient to establish the existing multimodal quality/level of service (MMQOS) for the study area. For this task, the Consultant will quantify available roadway capacity, analyze existing multimodal QOS (bicycle, pedestrian, transit), and apply urban form and connectivity factors to derive modified QOS values for segments and the study area. This will include identification of bicycle, pedestrian and transit level of service, along with an analysis of street/path type and connectivity and urban form, and will be based on FDOT's Multimodal Handbook. With direction provided by the study partners, the analysis will reflect planned redevelopment impacts on the study area network. The Consultant will quantify capital improvement benefits based on the five-year CIPs of the respective jurisdictions.

TASK 1.2 NETWORK NEEDS AND TRAVEL FLOW ASSESSMENT

Concurrent with Task 1.1 (Multimodal Level of Service Analysis), the Consultant will also conduct a network needs assessment to identify area-wide Vehicle Miles of Travel (VMT) and Vehicle Miles of Capacity (VMC). This analysis will rely on existing data sets by utilizing the travel demand model data generated as part of the Network Needs Assessment project conducted previously by FDOT. Once the area-wide measures are summarized, the Consultant will identify system-wide deficiencies. This effort will result in the identification of overloads and under-loads in capacity for the entire transportation network within the study area.

In addition to the needs assessment, this task will also analyze traffic flows throughout the planning area. This assessment will rely on data from the travel demand model to identify the internal and external trip patterns. This analysis will quantify the percentage of internal vs. external trips for the study area.

Task 1.0 Deliverable – Technical Memorandum 1 describing results of the existing conditions analysis along with supporting mapping/GIS data sets.

TASK 2.0 Multimodal Strategy Development

Based on the previous task analysis, travel flow assessments and transportation demand considerations, the consultant will apply a multimodal mobility strategy assessment to identify opportunities to balance travel demand across the network, increase the percentage of internal trips and shift travel patterns to alternative modes (bicycle, walking and transit). This strategy assessment will include the full range of considerations such as potential land use changes, ITS/signalization, additional travel lanes (not anticipated), provision of transit, provision of better walking and biking conditions through streetscape and infrastructure improvements, etc. The Consultant will consult with study partners to conduct this assessment and to determine several strategy alternatives for consideration. This assessment phase will be an iterative process of: a) presenting alternatives, b) refining alternatives, and c) illustrating the quantifiable improvements in the transportation system performance. This will be expressed by

showing how the various strategies can improve the multimodal levels of service as well as how the VMT/VMC ratio can be reduced systemwide.

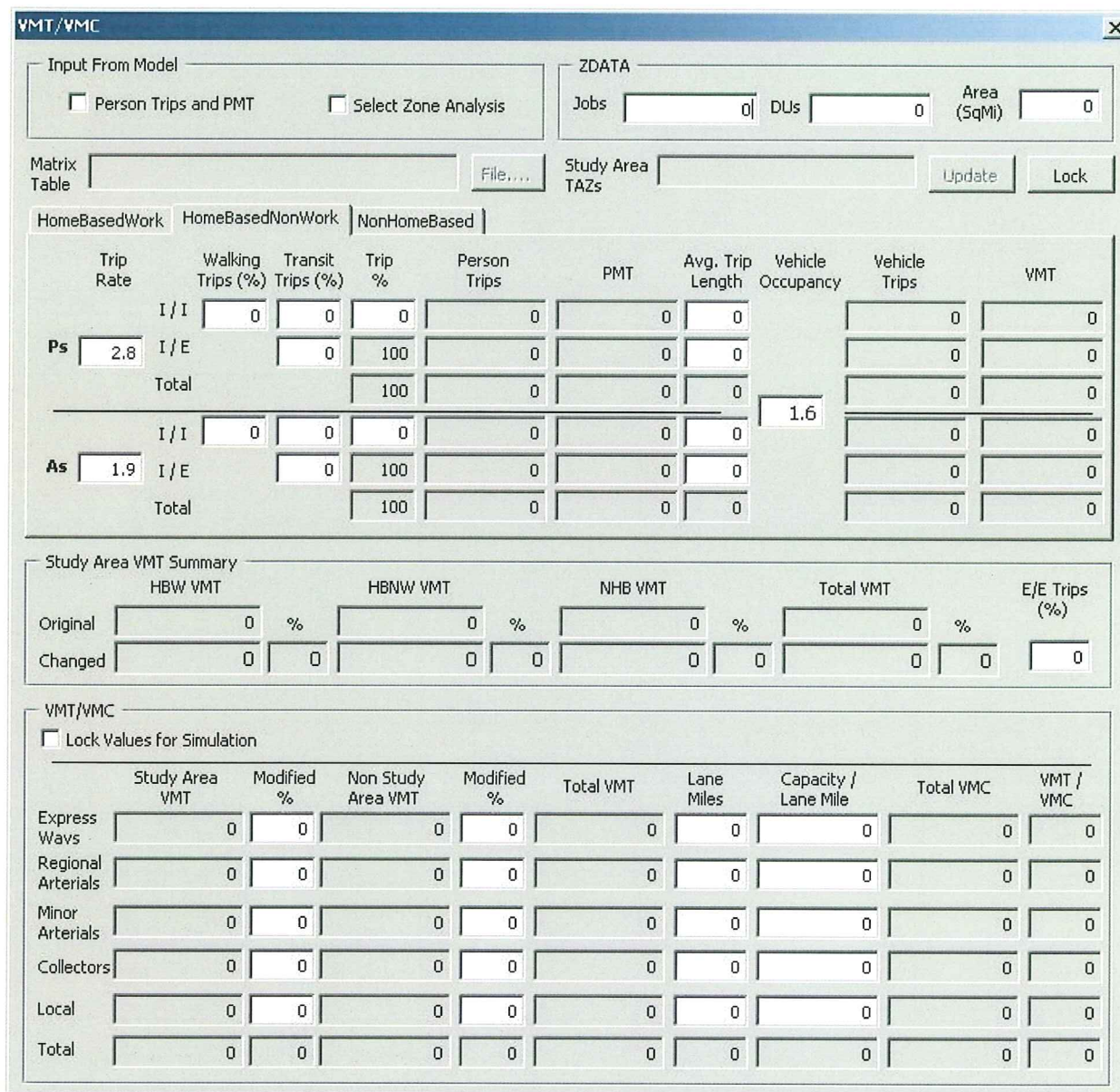


Figure 1 - Multimodal Evaluation Tool

The evaluation tool imports travel demand model data, including information for trip tables, travel time tables and network assignments, to provide a snapshot of travel conditions within the corridor. Figure 1 illustrates the user interface for the tool. The white boxes in the screen are the key variables that can be modified by users to change outcomes. The key variables include:

- trip rates,
- the percentage of walking and bicycle trips,
- the percentage of local and regional transit trips,

- average trip lengths,
- vehicle occupancies,
- the distribution of vehicle miles traveled by facility type
- lane miles by facility type, and
- per lane capacities.

Changing the variables allows users to quickly evaluate which strategy or combination of strategies can improve travel conditions in a study area. For example, a user can input a percentage of trips shifted to transit to determine how such a shift can both reduce overall vehicle miles traveled in the study area but to also determine its influence on VMT/VMC ratios on the study area network.

Strategies will be identified by modifying the key variables in the model based on the likely influence of each strategy. The types of adjustments made will include:

- Walking and bicycle percentages – compact urban form and transit oriented development will encourage more people to walk and use their bikes because of the proximity of uses. Weighted walking/bike trip percentages, based on research of how urban form influences travel demand, will be entered to determine the influence of such forms on total demand.
- Transit percentages – the influence of both local and regional transit service in the study area will be estimated by entering transit percentages based on mode split results for similar corridors and transit modes.
- Average trip lengths – jobs / housing balance and a greater mix of uses will shorten trip lengths. Adjustments will be made to study area trip lengths, based on research data, to determine the impact of this strategy on overall travel demand.
- Average lane capacity – management and operations strategies, such as ITS, can add capacity to travel corridors. Per lane capacities will be increased by facility type to determine the influence of M&O strategies on overall travel conditions

Adjustments will be made to determine which strategies are likely to provide needed reductions in vehicle travel demand or roadway capacity. To confirm the expected benefits from the specified strategies are possible, the traffic demand model will be run with the proposed strategies incorporated. Based on the multimodal mobility strategy preferences identified in this task, the Consultant will provide proposed QOS standards or targets and develop cost estimates for necessary capital and/or service improvements using local and/or regional data. Unit costs for recommended projects will reflect local average costs for recently completed comparable projects or current operations; otherwise, statewide average costs will be used. The possible application of strategies and their costs will be listed and mapped for consideration by the more detailed studies being conducted by Broward and Palm Beach Counties.

It is anticipated that the technical analysis and data provided by Task 1 & 2 will provide the study partners with valuable information that can support the Data, Inventory and Analysis (DIA) that is required to establish the Multimodal Level of Service Standards, and provide guidance for more detailed

station area planning and transit system development as follow on activities. In particular, it is envisioned that the study partners will undertake additional efforts to address funding and implementation of identified improvements and strategies.

Task 2.0 Deliverable – Technical Memorandum 2 - Summary of Preferred Multimodal Mobility Strategies including associated project tables/planning level cost estimates.

TASK 3.0 Meetings/Work Sessions

In addition to one-on-one coordination meetings necessary to conduct the technical work tasks, the Consultant will participate and lead a series of team meetings to review assumptions, summarize key findings and determine preferred strategies. A steering committee approach will be used, with the coordinating committee for the studies serving that function. No direct public involvement is planned. Close coordination with the activities of the affiliate studies is required to ensure information is made available at appropriate times. As such, the following outlines the estimated number of meetings required to support this effort.

- Meeting 1 – Project Kick-off meeting with FDOT Staff to review data needs, proposed methodologies, schedule and scope.
- Meeting 2 – SR 7 Coordinating team Kick-off meeting to review proposed approach, schedule and scope.
- Meeting 3 – Summary Presentation to SR 7 Coordinating Committee on the major findings from Task 1.0 and discussion of approach to Task 2.0 in light of these findings.
- Meeting 4 – SR 7 Coordinating team meeting to present the preliminary alternatives and gain feedback on potential refinements and additional strategy considerations
- Meeting 5 – SR 7 Coordinating team meeting to review preferred alternatives.
- Meeting 6 – SR 7 Coordinating team meeting to review final alternatives.

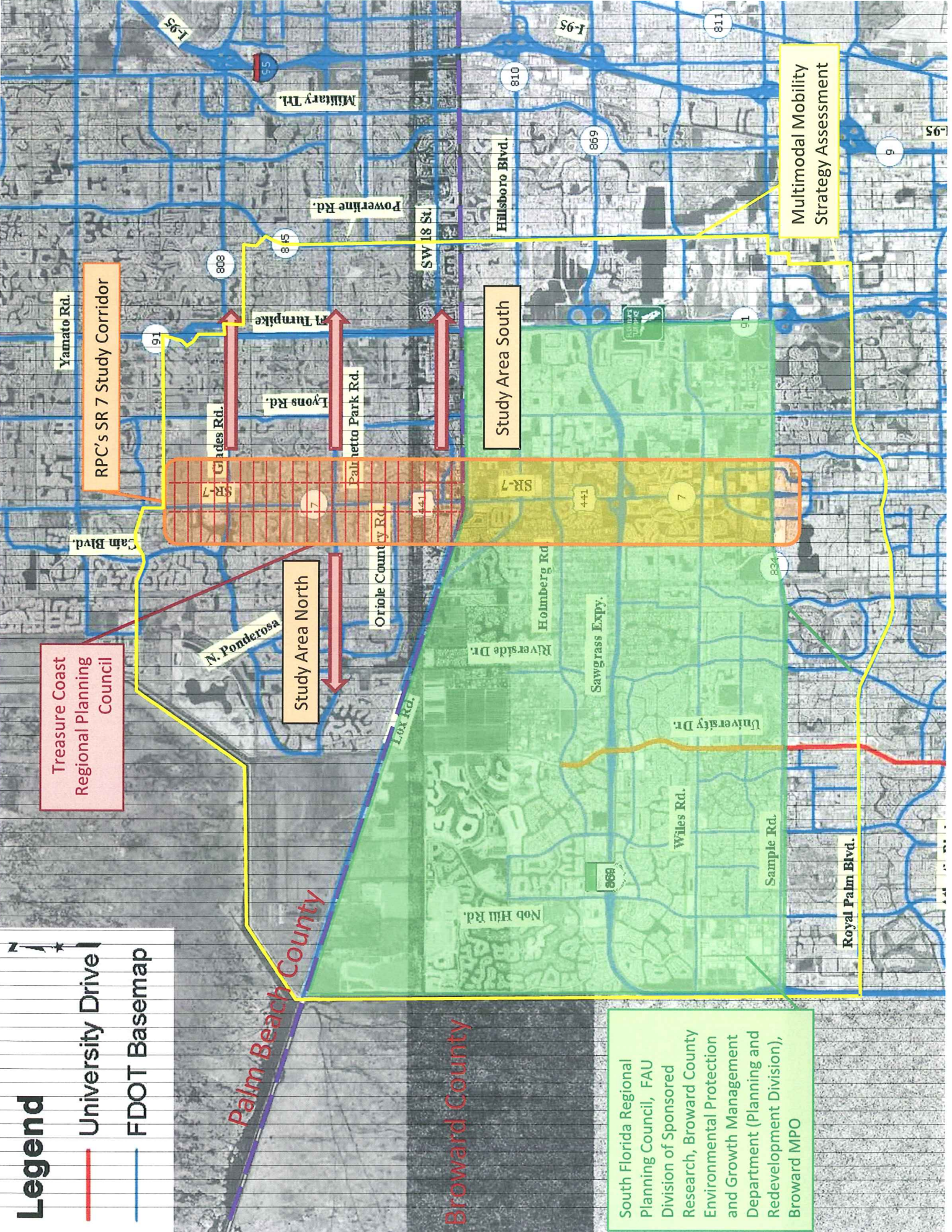
ESTIMATED COST

The lump sum fee for this work order was developed using the staff hourly rates prescribed in the contract as identified in the attached fee schedule. The total lump sum amount for this Task Work Order is \$178,497.89.

Prior to beginning work, the RPG project manager will receive authorization from the FDOT project manager.

Legend

- University Drive
- FDOT Basemap



South Florida Regional Planning Council, FAU Division of Sponsored Research, Broward County Environmental Protection and Growth Management Department (Planning and Redevelopment Division), Broward MPO

Multimodal Mobility Strategy Assessment

RPC's SR 7 Study Corridor

Study Area South

Study Area North

Treasure Coast Regional Planning Council