

## Pinellas County Metropolitan Planning Organization Goods Movement Study

### Scope of Work

The Pinellas County MPO desires a Goods Movement Study, which updates the 1998 Pinellas County Goods Movement Study and existing Truck Route Plan, and presents policy issues for consideration. The proposed study will provide information on the transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods. The study will evaluate roadway performance, identify alternatives, assess solution feasibility, provide implementation steps, and create measures of effectiveness.

The study will be conducted in coordination with the local governments in Pinellas County, the Florida Department of Transportation (FDOT), and in collaboration with private sector stakeholders. Through their participation, those entities will profit from having access to information on high priority freight mobility strategies that will promote a more prosperous economy as they are implemented.

This study will use the Florida Department of Transportation Freight Mobility - Tampa Bay Regional Goods Movement Study as a basis, but focus on the impact of trucking and goods movement specific to the County's local transportation network. HNTB Corporation, hereinafter referred to as the Consultant, will accomplish these tasks in coordination with MPO staff.

### Project Background

This study will identify concerns and the source of problems in relation to restricted vehicle movement in Pinellas County and will provide short-term, low-cost solutions which may or may not involve a change to current designations on the Pinellas County Truck Route Plan, as well as provide a framework to develop long-term solutions. In addition, the study will identify local and countywide freight activity centers and freight corridors used for local distribution and delivery activities, and restrictions on their operation that could impact the operation of regional freight mobility corridors.

The FDOT Regional Goods Movement Study recommends the establishment of a Goods Movement Management System (GMMS) for each county within FDOT District Seven and the MPO plans to utilize this plan as part of the Pinellas GMMS. The Regional Goods Movement Study identifies six existing and two potential Freight Activity Centers (FAC) in Pinellas County.

#### *Existing FACs*

- Dome Industrial Center
- South Central CSXT Corridor
- Gateway Triangle
- St. Petersburg – Clearwater International Airport
- West Pinellas Industrial Area, and
- Tampa Road Industrial Area

*Potential FAC*

- Clearwater Airport
- Northwest Tarpon Springs Industrial Area

Additionally, the FDOT Regional Goods Movement Study identifies eight Regional Freight Mobility Corridors located in and/or effecting Pinellas County.

- I-275 from the Sunshine Skyway Bridge to I-75/I-275 Interchange
- US 92 (Gandy Blvd) from US 19 to Lee Roy Selmon Expressway
- 118<sup>th</sup> Ave North from US 19 to I-275
- 49<sup>th</sup> St. North from SR 688 (Ulmerton Road) to 118<sup>th</sup> Avenue North
- Bryan Dairy Road from Starkey Road to 66<sup>th</sup> St North/US 19
- SR 686 (Roosevelt Blvd) from US19 to US 92 (Gandy Blvd)
- SR 688 (Ulmerton Road) from Seminole Blvd. to I-275, and
- US 19 from Gandy Blvd to Curlew Road

One Regional Rail Freight Mobility Corridor in Pinellas County is identified in the FDOT Plan. That corridor is the Clearwater Subdivision and Drew Spur from the “A” Line Tampa Terminal in Ybor City to St. Petersburg where the track ends at 7<sup>th</sup> Ave. S. and 31<sup>st</sup> St. S, via Oldsmar and Clearwater.

The movement of goods and services is a vital segment of a local jurisdictions economy. Having a logical restricted vehicle routing plan, consistent standards/ordinances, and clearly designated routes serves the public, law enforcement, and the goods and services industry. The Consultant understands that the Pinellas County MPO desires a Goods Movement Study that will accomplish the identified goal through the following tasks:

- Task I Documentation of the Existing Policy Context
- Task II Data Collections and Mapping
- Task III Stakeholder Group and Interviews
- Task IV Inventory of Freight Transportation Assets
- Task V Determining Designation Criteria and Community Values
- Task VI Identification of Candidate Roadways
- Task VII Road Performance and Traffic Count Database
- Task VIII Update Existing Truck Route Plan
- Task IX Recommendations
- Task X Final Report
- Task XI Project Management and Administration

**Goal:**

**To develop a logical, safe and cost-effective Goods Movement Routing Plan for Pinellas County and its agencies that presents the community consensus of acceptable standards and routes for restricted vehicles.**

## **Task I – Documentation of the Existing Policy Context**

The economic health of Pinellas County depends on the seamless flow of people, freight, services and information. In many instances, conflicting corridors and facilities are used for a variety of transportation modes. The potential conflict of competing for capacity, mobility and accessibility within a finite transportation network must be balanced so that the growing volume of commuter and freight movement within the region can be accommodated in a sustainable manner.

This task will identify and document the existing policies, regulations, and laws governing restricted vehicles in Pinellas County. Code of ordinances, regulations, State of Florida statutes and policies, and common procedures will be reviewed to provide an overview of the current state of restricted vehicle routing. Additionally, this task will review existing constraints and policies concerning freight traffic restricted vehicle movement within Pinellas County.

Finally, related to existing policy content governing restricted vehicles, are land uses and the integration of land use policies and goods movement. The identification and recommendation of transportation and land use policies that support freight mobility and economic development and promote Pinellas County's intermodal capabilities and capacity is essential to the goods movement and land use process.

The consultant will review and identify deficient areas related to these policies.

**Task Deliverable:** The Consultant will provide Technical Memorandum #1 which documents existing goods movement, restricted vehicle, and related transportation land use policies that are in place, in Pinellas County.

## **Task II – Data Collection and Mapping**

### *Review of Existing/Projected Traffic Data and Level of Service*

The MPO staff, in coordination with the Consultant, will review available existing traffic data and level of service information on all truck routes, as identified in the Pinellas County Truck Route Plan, and the identified Regional Freight Mobility Corridors, and Freight Activity Centers identified in the FDOT Goods Movement Study.

The Pinellas County MPO will provide to the Consultant the 2005 Pinellas County Level of Service Report, existing classification traffic counts and smoothed heavy vehicles' percentages for the three most recent years of collected data, and other statistical information that may be relevant for this review.

### *Review of Existing Crash Data*

The Consultant will review available crash data involving restricted vehicles for the most recent three years available on all truck routes identified in the Pinellas County Truck Route Plan. The purpose of this review is to look for trends in causes of crashes taking place, as it relates to truck movement on the Pinellas County major roadway network.

The Pinellas County MPO will provide to the Consultant the crash data in the way of annual summaries of accidents and collisions of restricted vehicle traffic for the past three years.

### *Maps*

An important available tool in relation to the data obtained in this task is the mapping of this information. Mapping provides a visual for illustrating important trends and relationships between routes and can help to identify potential problem areas and provide solutions. The consultant will make use of the existing and future Pinellas County Land Use Maps, existing Level of Service map, and the existing Pinellas County Truck Route Plan map.

Additional GIS maps will be developed by the MPO staff, based on available information at the MPO and on GIS data files HNTB provides, that identify congested areas for restricted vehicle travel, high crash areas involving restricted vehicles, and a map that details level of service for restricted vehicle and goods movement along local and countywide truck routes and regional freight movement corridors. Each map produced by MPO staff will be provided to the Consultant in the format of shape files (shp, dbf, and shx) usable by ArcMap v. 9.1. These maps, in combination with the information on classification traffic counts, crash data, location of operational hot spots, problem routes, and levels of service, will help the Consultant in conducting trend analyses to help identify truck routes and sections that are problem sources. Shape files and other databases used by the Consultant to conduct the trend analyses must be provided to MPO staff for verification and concurrence with the results. Shape files provided by the Consultant to MPO staff must include the unique geographic identification code, and the original data fields used by the Pinellas County MPO staff, as well as the new analyses fields added by the Consultant.

### *Carriers*

Contact will be made with a minimum of ten carriers to seek additional information regarding their local transportation concerns. Carriers, logistics service providers and wholesale distributors will be sought out, including those who supply the targeted industry sectors, and others who serve the food and consumer retail channels. Support services with significant transportation requirements like construction and waste disposal can also be included.

Field observations will also be undertaken and conducted as detailed below.

- Consultant study team members will conduct windshield surveys of the major industrial parks and retail centers and observe major freight facilities. General site conditions including ingress and egress patterns will be noted
- Photographic records will be taken as appropriate.

### ***Task Deliverable:***

- Documentation of existing traffic data and level of service (Year 2005) for the Pinellas County Truck Route Major Road network
- Documentation of existing heavy vehicle crash data for the most recent three years available at major intersections on the Pinellas County Truck Route Major Road network
- One GIS Map detailing crashes and areas of high conflict for restricted vehicles by year for the last three years of available data (total of three maps)
- One GIS Map detailing congested areas for restricted vehicle travel

- One GIS Map depicting AADT and highlighting the percentages of restricted vehicles (heavy trucks) by year for the last three years of available data (total of three maps)
- One GIS Map depicting the location of operational hot spots
- One GIS Map depicting levels of service (existing conditions), and highlighting the percentages of restricted vehicles by year for the last three years of available data (total of three maps)
- Identification and summary of freight planning issues and concerns from the carriers by the Consultant
- Identification of problem routes by the Consultant, and
- Identification of freight activity centers by the Consultant

### **Task III – Stakeholder Group and Interviews**

Another key component of a GMMS is the establishment of a Goods Movement Advisory Committee. The Consultant will identify and recommend a representative group of 15 stakeholders to be included. The membership of the GMAC will include up to 75% of freight industry representatives and the remaining 25% will include representation from the state, county and local agencies who operate and maintain the transportation system in Pinellas County, as well as local enforcement and State regulatory agencies.

Upon formation of the GMAC, the Consultant will prepare a survey and conduct one-on-one meetings with the members. The purpose of these meetings will be to gain a comprehensive understanding of the desired objectives of each stakeholder. The interviews will be used to gather detailed information regarding the stakeholders concerns about restricted vehicles and designated truck routing.

Emphasis will be placed on the identification of local and countywide freight activity centers and local freight corridors in addition to the Regional Freight Mobility Corridors in Pinellas County identified in the Regional Goods Movement Study. The identification of freight forwarders who regularly use the assets of the County will be encouraged through the GMAC interviews.

A special emphasis will be placed on environmental justice populations to incorporate concerns and avoid disproportionate impact to these populations. The Consultant will also evaluate the economic impact truck route restrictions would have on the economic development and on the availability of industrial/commercial employment in the environmental justice areas.

The GMAC will meet as a group up to five (5) times throughout the course of the study. If additional meetings are desired they will be provided on a time & expenses basis using the rates included in Attachment B – Estimated Budget and Hours.

The Pinellas County MPO will be responsible for securing meeting locations and advertising costs associated with the GMAC.

**Task Deliverable:** The Consultant will prepare a Technical Memorandum #2 for submittal to the Pinellas County MPO. This memorandum will incorporate the following:

- Stakeholder database
- Summaries of interviews with each of the stakeholders
- Identification and summary of issues and concerns by the Consultant , and

- Identification of problem routes by the Consultant

#### **Task IV – Inventory of Existing Freight Transportation Assets**

This task is a component of a GMMS. An important aspect of the GMMS is the development of a Regional Freight Signage Plan. A signage plan should clearly indicate for operators the most direct and efficient route between Freight Activity Centers (FACs) and major corridors or routes accessing Pinellas County and the Region.

MPO staff will provide available information obtained from the County Public Works Department, and from local government sources. The Consultant will document an inventory of existing features used to govern freight transportation assets on County roads designated as truck routes. This inventory can assist in the eventual development of a Regional Freight Signage Plan for County and Local roads in the Truck Route Plan. Governed freight transportation assets are defined as designated routes, signage, and ITS assets (dynamic messaging) among others. These freight transportation assets will be documented in the appendices of the report and a brief description of the purpose of the existing designation, signage, and ITS assets will be included. The Consultant will identify deficient areas related to the existing signage on County roads designated as truck routes.

The Consultant will identify and document the general procedures used to implement a variety of transportation improvement measures available to Pinellas County. These procedures will include an overview of the implementing parties or regulatory agencies, conceptual steps for implementations, and typical duration for implementation. Reference to studies researched for restricted vehicle designation, signage, and ITS assets will be included.

**Task Deliverable:** The Consultant will prepare a Technical Memorandum #3 inventorying the existing freight transportation assets on County roads designated as truck routes, and the procedures used to implement transportation improvements.

#### **Task V – Determining Designation Criteria and Community Values**

A concern mentioned at the “Restricted Vehicle Enforcement” meeting held in June 2005, was the determination of what criteria is used to designate a road that limits restricted vehicle travel. This task will identify existing criteria within Pinellas County and recommend modifications to this criterion when a candidate road is identified as one with potential for limited restricted vehicle travel. The criteria will be a combination of planning, traffic engineering, community values, and economic concerns. Examples of potential community values or criteria to consider for restricted vehicle corridor travel can include:

- Location of noise sensitive land uses including homes, schools, and libraries
- Areas of high pedestrian or bicycle activities
- Engineering features including geometrics and condition assessments (in coordination with public works)
- Area of high congestion
- Compatibility with transit
- Restricted vehicle traffic volumes
- Location of businesses requiring restricted vehicle access

- Designation of local, county and regional freight mobility corridors
- Identification of highway corridors providing important connections to regional freight activity centers, and
- Other environmental features including the causes of crashes occurring at specific locations

As a component of this task, one (1) public meeting will be held at a central location in the County to allow the public the opportunity to comment on restricted vehicle concerns. The meeting will encourage the completion of the Community Values Survey to determine the opportunities for corridor improvement and constraints related to residential and pedestrian areas. A summary of concerns and information learned to date will be presented and public feedback will be solicited.

A summary of the Community Values Survey will be shared with the GMAC to help determine what characteristics can warrant signage to be posted related to restricted vehicle corridor travel.

The Pinellas County MPO will be responsible for securing meeting locations and advertising costs associated with the GMAC and with the public meeting.

***Task Deliverable:***

- The Consultant will prepare a Technical Memorandum # 4 which identifies criteria deemed to be useful in determining if a road can be identified as one which places limitations on restricted vehicle travel, and which documents the results of the Community Values Survey, and a summary of public involvement activities

**Task VI - Identification of Candidate Roadways**

The Consultant will develop Measures of Effectiveness and weights to evaluate low cost operational improvements and long term strategies/improvements.

The Consultant in coordination with MPO staff will use the research including carriers, stakeholder, and public involvement data to identify candidate roads to be considered for restricted vehicle informational signage which limits access. These roads will be reviewed based upon the Designation Criteria and Community Values information developed by the Consultant in a previous task. Priority will be placed on input received from law enforcement stakeholder members.

***Task Deliverable:***

- Development of a priority list of roads, by the Consultant, in coordination with MPO staff, to be further considered for restricted vehicle limited access regulatory signage

- Documentation on the Measures of Effectiveness and weights developed to evaluate improvements

### **Task VII – Road Performance and Traffic Count Database**

An effective database is an important component of the Pinellas County GMMS. The purpose here is to develop a database of current goods movement volume and activity on the road system in Pinellas County. The primary emphasis will be on truck movement. The most recent roadway data and traffic counts will be obtained from the Pinellas County MPO.

The Pinellas County MPO will provide the Consultant with all available socioeconomic data, traffic counts, information from recent surveys and other relevant data.

This scope of services includes up to 36 48-hour vehicle classification counts. The location of all vehicle classification counts will be coordinated with MPO staff. The classification counts will be bi-directional at 15-minute intervals, and will be converted to FDOT SPS text file format to ensure data compatibility with the MPO relational database. A sample file will be provided to the Consultant by the MPO staff.

The Consultant will review information provided on each Pinellas County freight mobility corridor identified in the FDOT Regional Goods Movement Study. All truck routes in the existing Pinellas County Truck Route Plan not identified as a freight mobility corridor, will be reviewed as well. This will be done to evaluate operational and capacity conditions.

The Consultant will evaluate performance of the Pinellas County Roadway network identified in Task II as it pertains to the restricted vehicles.

#### ***Task Deliverable:***

- The Consultant will identify major truck routes and corridors within the County. For each of the routes and corridors, the MPO staff will provide the Consultant with information on volumes of trucks by type, total traffic volumes, level of service and other relevant characteristics. The information will be developed for 24 hours. Time-of-day traffic count information will be provided by MPO staff as required, and as available. MPO staff will provide location studies depicting daily classification counts aggregated as percentages of medium, heavy vehicles, total of medium and heavy vehicles, and smoothed out percentages of the totals, as well as other hourly intervals to monitor nighttime carrier traffic, as requested and as available.
- Additionally, the Consultant will identify those roads heavily used for transporting hazardous materials.

### **Task VIII - Update Existing Truck Route Plan**

Based on the results of this study, the GMMS would recommend improvements, policies and other actions to address the identified needs and to promote the overall efficiency of the corridors. These can include both short-term “quick fix” types of improvements to address immediate operational and safety concerns and longer term, more complex strategies/improvements to address issues such as major capacity improvements. Intelligent

Transportation Systems (ITS) improvements may be a major component of these recommendations in order to optimize the ability to react to changing conditions and maintain efficient operations.

The Consultant will identify problem areas and needs relating to goods movement incorporating the Pinellas County Freight Mobility Corridors, truck routes, intermodal facilities, and major freight activity centers. To identify these problems and needs, the Consultant will review the database of information about the current goods movement system developed in previous tasks. The Consultant will also use the criteria and methods recommended in the Regional Goods Movement Study's "Freight Corridor Study Guidelines" to assess freight corridors, and to identify needs. The Consultant may be required to conduct site visits to verify conditions and determine if problems exist on some facilities.

With assistance from the GMAC, the Consultant will identify implementable improvements, operational changes, or other actions which will effectively address identified problems or needs. The Consultant will evaluate the effectiveness of proposed actions in meeting the identified needs.

The consultant will develop generalized cost estimates for each of the proposed actions. The MPO staff in coordination with the Consultant will investigate whether the proposed projects are included in the adopted Local Government Capital Improvement Programs, the State Work Program, corridor studies, and/or MPO Congestion Management System.

**Task Deliverable:** Using the input from the public involvement, data collection activities and FDOT's "Regional Goods Movement Study" as a base, the Consultant will evaluate the existing Pinellas County "Truck Route Plan" and identify areas that require improvement or further study. Those areas will be evaluated using a combination of traffic engineering, transportation planning, and community values to determine recommendations for modifications. The Consultant will provide a Technical Memorandum #5, which will be an evaluation of operational and capacity conditions and needs for the proposed County Truck Route Plan

## **Task IX – Recommendations**

The Consultant will provide a Technical Memorandum # 6. A summary of recommendations will be provided in this section. The Consultant will identify problem areas and needs relating to goods movement incorporating the Pinellas County Freight Mobility Corridors, truck routes, intermodal facilities, and major Freight Activity Centers. The recommendations will include general cost estimates. Recommendations will be differentiated as to whether they are short term or long term improvements. Recommendations made will be in relation to the safe and effective movement of restricted vehicles and goods within Pinellas County.

**Task Deliverable:** Technical Memorandum # 6 that includes:

- Identification of areas of high conflict
- Identification of areas/routes needing implementable improvements, operational changes, and/or other actions
- Identification of short term and low cost improvements
- Identification of Long Term strategies
- Cost Estimate of low cost improvements and long term improvements/alternatives

- Recommendation of proposed changes to existing County Truck Route Plan
- Recommendation of changes to related regulatory polices
- Identification of deficient areas related to transportation land use policies
- Identification of deficient areas related to existing signage on designated truck routes, and
- Recommended modifications to designation criteria to deem a roadway restricted or unrestricted

## **Task X – Final Report**

### **A. Draft Final Report**

A Final Report will be prepared based on combining all technical memorandums and information compiled, as well as comments received from Pinellas County MPO staff and committee structure, as well as from the GMAC during the course of the study. The draft report will be submitted with an anticipated review period of four weeks.

### **B. GMAC/Stakeholder Forum**

The Consultant will coordinate and schedule a half-day GMAC/Stakeholder forum that would involve many of the same private and public sector parties interviewed in Task # 3. The purpose of the forum is to allow stakeholders the opportunity to review and comment on the study findings and recommendations.

### **C. Final Report and Executive Summaries**

The study findings and recommendations will be presented in a Final Report and Executive Summary. The final report will include an appendix of all tables, maps, and charts developed. Fifteen (15) copies of the Final Report and fifteen (15) copies of the Executive Summary will be provided, along with electronic versions of all reports in MS Word and PDF formats suitable for additional printing. MPO staff will provide further direction regarding the number of copies of the Final Report toward the end of the project. If additional copies of the Final Report are desired, they will be provided on a time & expenses basis.

## **Task XI – Project Management and Administration**

### **A. Managing and Coordinating the Study**

The Consultant will manage and coordinate the diverse efforts of the Pinellas County MPO Goods Movement Study requirements, and will provide an efficient, well-organized and high-quality study deliverable. The Consultant will provide the necessary management and coordination of the Study consultant team. Initially, the Consultant will develop a one-page overview of the study goals and objectives to assist in getting stakeholder cooperation.

## **B. Meetings and Progress Reports.**

The Consultant will attend up to six staff meetings with Pinellas MPO staff to coordinate study activities, report on progress, and make preparations for upcoming activities. These meetings will be coordinated, scheduled, and documented by the Consultant, including preparation of the agenda, meeting materials, and other items needed to augment discussion.

The Consultant will provide the Pinellas County MPO Project Manager bi-weekly status reports including a narrative description of the status of the schedule and cost control areas of the project.

## **C. Quality Control**

The Consultant will develop and document a quality control plan for the project, which includes review of all major work efforts prior to submittal. This plan will be submitted to the Pinellas County MPO Project Manager for review and approval.