



FDOT District One

Freight Mobility and Trade Study

> Executive Summary (Final)



August 2015

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) District One Office was tasked to conduct a districtwide Freight Mobility and Trade Study. This report defines an integrated and connected regional freight transportation network, identifies regional freight investment priorities needed to sustain economic growth in the region, provides input to the Florida Freight Mobility and Trade Plan Investment Element, and may be used to petition and secure federal and state funding for enhancements to the existing regional freight network system. In completing the study, District One undertook multiple, subordinate tasks for which results were documented in a series of memoranda beginning with Technical Memo 1 through Technical Memo 5.

This Executive Summary provides a synopsis regarding the purpose and findings for each of the Technical Memos prepared and submitted to FDOT officials. The specific information for each memo is provided below.

Technical Memo 1

The purpose of Technical Memo 1 involves the research and review of literature and documents from various sources that are associated with freight movement. The documents reviewed include federal transportation legislation (i.e. Moving Ahead for Progress in the 21st Century Act), statewide documents (i.e. Florida Freight Mobility and Trade Plan, Florida Transportation Plan, etc.), and district/regional/local documents (i.e. county comprehensive plans, county freight studies/plans, etc.), as well as pertinent freight policies and multi-modal transportation plans. The results of the memo indicate that although there are numerous statewide documents pertaining to freight movement, the local county comprehensive plans are not consistent with each other in terms of provisions for freight policies and plans. Based on this finding, each local plan accommodates freight in a different manner.

Technical Memo 2

The purpose of Technical Memo 2 includes the collection and analysis of relevant quantitative data using Geographic Information System (GIS) to visually display the data on a county-by county basis. The information collected involved overall Annual Average Daily Traffic (AADT), Truck AADT, Truck Percentage, Truck Crashes, Pavement Conditions, Rail-Highway Crossings, and both existing and future level of service (LOS) conditions. In addition, information pertaining to commodity flows by county and on a districtwide basis was used as well as stakeholder interviews and surveys regarding freight movement. The results of this memo indicated that a higher number of truck traffic and corresponding truck crashes occurred along interstate and other major state facilities, especially in the more urbanized counties of District One. In addition, the existing LOS analysis indicated most freight facilities are currently operating at or below capacity levels, but the future conditions analysis showed a significant number of state facilities, mainly in urban areas, as at or over capacity. Finally, the stakeholder interviews from both public agencies and private entities identified many existing and/or potential hot spots or areas within a county that may require improvements to allow freight movement to flourish or grow in the region.

Technical Memo 3

The purpose of Technical Memo 3 involves the identification of freight activity centers (FACs) or freight hubs and selection of major freight mobility corridors (FMCs) on a county-by-county basis. The FACs are either existing or future/emerging areas that have (or will have) significant volumes of industrial, warehousing, and/or distribution land uses. The FMCs are considered the main roadway arteries within the transportation freight network and are broken down into three categories (limited access facility, regional corridor, and distribution route), depending upon its role in freight movement. The results of this memo identified at least one FAC in each county, with Polk County having the highest number of FACs at nearly two dozen sites while Hardee County has the lowest number at one FAC. In addition, all three FMC categories were found within the coastal counties and Polk County. For example, in Polk County, I-4 is considered a limited-access facility due to its uninterrupted traffic flow capability (excluding congestion issues) and its connection throughout the region and beyond. SR 60 is a regional corridor because it connects with multiple counties within the district. SR 17 is considered a "local" distribution route because it is a facility that originates/ends within the county and operates as a "last mile" corridor for delivery of freight.

Technical Memo 4

The purpose of Technical Memo 4 includes an assessment and identification of needed improvements along FMCs on a county-by-county basis. The assessment involved the research and evaluation of numerous resources, including long-range transportation plans, public agency work programs, and future master plans for major freight hubs and facilities. The results of this memo identified recommended improvement projects for both short-term improvements (improvements expected to be constructed within a 10-year window) and longterm improvements (improvements to be constructed beyond a 10-year window). It should be noted that the project lists excluded projects already fully funded for construction as identified in the public agency work programs so as to avoid redundancy. However, the lists do include potential projects which do not have construction monies in the short-term 5-year horizon found in the work programs. In addition, improvement projects were categorized by improvement strategies (such as FAC access, Corridor Enhancement, Location Enhancement, Maintenance, and Safety and Security). This assessment identified at least one short-term improvement and one long-term improvement for each county with a grand total of 68 short-term projects and 105 long-term projects within District One. Although the identification of projects is the result of this memo, these findings should not be considered the only source of freight-related improvements considered within District One.

Technical Memo 5

The purpose of Technical Memo 5 involves the prioritization or ranking of the short-term and long-term improvement projects identified in Technical Memo 4. The prioritization used multiple GIS-based criteria from information shown in previous memos. In addition, preliminary construction costs were developed for each improvement project for informational purposes only.

The results of this memo identified recommended rankings for the short-term and long-term projects on a county-by-county basis as well as on a districtwide level. The top ranked projects were listed in the memo along with the associated construction costs. It should be noted that the recommended rankings were based solely upon the specific criteria discussed in this memo and any variations to the point system or additions/deletions to the factors considered will likely change the final rankings. Thus, individual counties could utilize these results, with adjustments to account for local policies, conditions, and circumstances, to determine appropriate future freight-related improvements within their jurisdiction.

In summary, the information developed in each of the above memorandums will be useful in the development of the District Freight Mobility Implementation Plan, including any further evaluation of freight mobility and the associated infrastructure needs. In addition, this study provides guidance to county and local government officials on future transportation planning regarding the identification of freight mobility improvement projects, and factors to consider in determining prioritization of appropriate improvements which will have a positive effect on freight mobility within their respective county as well as on a districtwide level.