Florida Department of Transportation 2015 Performance Report

Economy

Economic Competitiveness and Growth



Produced by the Florida Department of Transportation
Office of Policy Planning
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This report is part of the Performance-Based Planning and Programming Process used by the Florida Department of Transportation (FDOT). For a description of that process, updates to this report and other transportation performance reporting initiatives of FDOT, go to FDOTPerforms.org.

INTRODUCTION

Florida's economy reflects evolving local and regional economies that continuously adapt to a dynamic global economy. Because transportation supports economic competiveness, FDOT strives to adapt in meeting the mobility and access needs of our businesses, citizens, and visitors. Investments in Florida's transportation assets are investments in the backbone of the state's economy. As travel demand increases and changes, Florida continues to improve the planning and management of our multimodal transportation system.

Vibrant economies, like Florida's, rely on vibrant transportation systems to satisfy user needs. Our road and bridge network is key to moving people and goods on a daily basis. Public transportation provides essential mobility for many as well as a transportation choice that strengthens our communities and regions. Our aviation facilities align with an economy that functions in real time to rapidly move both people and goods domestically and across the globe. And our seaports and spaceports are a strategic cornerstone to Florida's place in a global economy. Freight movement—using all modes—has become an increasingly important factor in a fiercely competitive economy that is logistics driven. Providing facilities for walking and bicycling also bolsters community mobility, vibrancy, and health—strengthening local economies. Diversity is another strength of Florida's transportation system. Our Strategic Intermodal System (SIS) for example, is designed to provide connectivity across modes and facilitate the speed of longer distance travel for people and goods. Conversely, our non-SIS transportation facilities serve many vital transportation roles while meshing with the values, priorities, and aspirations of our communities.

FDOT's core measures of economic competiveness include the return on investment (ROI) of transportation improvements (the level of benefit for every dollar spent) and the degree to which construction projects get completed on-time and on-budget.



2015 PERFORMANCE HIGHLIGHTS

Supporting economic competitiveness is a strategic FDOT priority. Key performance highlights are:

- The impact of transportation investments is a robust \$4.40 in economic benefits for every dollar spent—in addition to direct construction employment, transportation improvements support thousands of long-term jobs.
- Florida exports have increased over 77 percent since 2005.
- Florida had a larger share of U.S. trade in 2014 than in 2006, which is a significant factor in fueling growth, supporting jobs, and diversifying the state's economy. Transportation underpins trade.
- Florida's total value of freight began to decline prior to the national recession, then began rebounding in 2011—and remains slightly lower than 2005 levels.
- Over 87 percent of FDOT's construction projects in 2015 were completed on-time, avoiding any delay of the associated economic benefits.
- Over 91 percent of FDOT's construction projects in 2015 were completed within budget, which allows more project investments to be made along with the associated economic benefits.

Performance Profiles are included to highlight specific strategies and programs that support these performance measures.

SIS Highlights Report The value of Florida's imports and exports has increased significantly since the designation of the SIS in 2003. FDOT is making SIS investments that reflect the evolution of air, water, land and space transportation to accommodate new technologies for moving people and cargo, and related changes in types of hubs. The SIS continues to help FDOT focus significant attention and resources on the state's most strategic transportation facilities. The SIS Highlights Report summarizes the Performance Measures for the SIS.



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FDOT has identified a series of core and supporting measures related to the economic competiveness of Florida's transportation system. Economy, as a broad measure, encompasses several non-transportation (context-based) measures that impact transportation and that transportation impacts, such as Florida's share of U.S. trade. FDOT also uses several transportation specific measures that demonstrate our contribution to economic well-being. FDOT and other transportation system operators primarily support economic competitiveness by providing access, mobility, and travel options. Below are the core measures and supporting measures that support Florida's economic competiveness:

Core Measures

- Return on Investment (ROI)
- Projects Completed On-Time
- Projects Completed Within Budget

Supporting Measures

- Capacity Funds for the SIS
- Florida-Originating Exports
- Florida Share of U.S. Trade
- Florida Value of Freight
- Jobs by Transportation-Intensive Sector

Florida's Economy Depends on Transportation Excellence

Florida's economy is the 4th largest in the United States. If Florida were a country, its economy would rank as the 19th largest. Florida's infrastructure, talent, and business-friendly tax policies are consistently recognized among the nation's best and have attracted many nationally ranked companies. Florida is also a global leader in international trade and foreign investment, and is home to the 2nd largest Free Trade Zone in the nation. And yes, Florida is still a tourism powerhouse, attracting 98.9 million visitors in 2014 who spent \$82 billion. Transportation keeps this vast activity moving.





RETURN ON INVESTMENT



FDOT's macroeconomic model estimates the long-term economic benefits associated with the capital projects in FDOT's Work Program. The model quantifies the benefits of investments in highway, transit, seaport and rail projects. These benefits translate into cost and time savings for Florida's businesses, workers and consumers.

For every \$1 invested through FDOT's Work Program, \$4.40 in economic benefits are generated (**Figure 1**). FDOT is also improving its ability to estimate return on investment for individual transportation projects. This will provide useful information for FDOT's Executive management and other decision makers throughout Florida.

Figure 1: Benefit-Cost Summary of FDOT Work Program (in present value)

BENEFITSPersonal Income Benefits\$76.00Non-Business User Benefits\$65.70Total Benefits\$141.70COSTSTotal Costs\$32.10Benefit-Cost Ratio\$4.40

SOURCE: Florida Department of Transportation; Macroeconomic Analysis of Florida's Transportation Investments (January 2015)

Every \$1 invested through FDOT's Work Program generates \$4.40 in economic benefits.

Corridor and Project Level Analysis

Which transportation improvements generate the greatest return on investment? How do you compare the relative benefits and costs of multiple project alternatives? FDOT's various economic tools facilitate the right type of analysis, depending on the size and complexity of the project, its stage in the planning process, the extent to which data is available, and which related engineering, environmental, safety and other analyses have already been performed.





Capacity Funds for the SIS



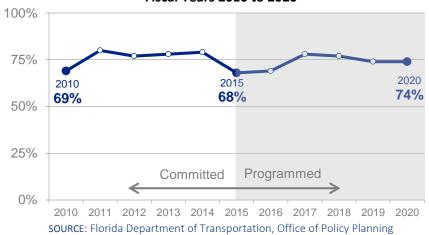
The Strategic Intermodal System (SIS) is Florida's primary network focus for ensuring a strong link between transportation and economic competitiveness. The SIS is a statewide network of high-priority transportation facilities, including the largest and most significant commercial service airports, spaceports, deep-water seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, urban-fixed guideway transit corridors, waterways and high-volume highways.

SIS facilities carry more than 99 percent of all commercial air passengers and cargo, virtually all waterborne freight and cruise passengers, all rail freight, and 89 percent of all interregional passengers. The SIS also accounts for more than 73 percent of Florida truck traffic and 56 percent of total traffic on the State Highway System. SIS improvements also receive extensive private and local investment—indicative of the importance of these facilities to communities and business.

State statute (s. 339.135) directs FDOT to allocate at least 50 percent of new discretionary highway capacity funds to the SIS. In addition, FDOT has set a target to allocate up to 75 percent of new discretionary capacity funds to the SIS. **Figure 2** shows that this policy assists the state in committing up to 75 percent of all capacity funds to the SIS from year to year.

Of the \$12.7 billion of SIS capacity funding in FDOT's Work Program covering fiscal years 2016 to 2020, \$11.4 billion has been programmed for highway improvements, \$490 million for aviation and spaceports, \$277 million for seaports, \$264 million for rail, \$149 million for intermodal projects, and \$110 million for Transit New Starts.

Figure 2: SIS Capacity Funds as a Percent of Total Capacity Funds – Fiscal Years 2010 to 2020





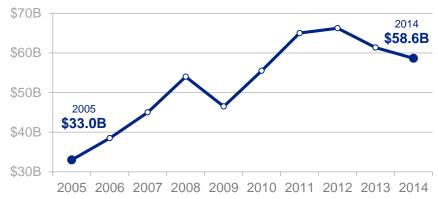
Florida-Originating Exports



There has been a major increase in Florida exports—over 77 percent growth since 2005—moved by Florida's transportation system.

Figure 3 shows that there was a major increase in exports from Florida between 2005 and 2014 from \$33 to \$58.6 billion. This trend underscores the importance of the state's surface transportation system connecting goods with seaports, airports, rail corridors, and the Interstate Highway System. Continued growth in exports and the jobs associated with them relies on a good, reliable transportation system.

Figure 3: Florida-Originating Exports



SOURCE: Florida International Business Highlights: Merchandise Trade, Florida-Origin Exports, Foreign Investments

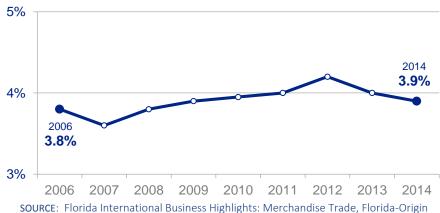
Florida Share of US Trade Flow



Florida has a larger share of U.S. trade now than it did in 2006, which is significant given the size of the U.S. economy.

International trade and foreign investment makes up approximately one-sixth of Florida's economic output. They play a fundamental role in Florida's economy by fueling growth, supporting jobs, and diversifying the economic infrastructure. **Figure 4** shows that Florida's overall share of U.S. trade grew every year between 2007 through 2012, but has returned to its 2009 level. Despite the recent leveling off, Florida has a larger share of U.S. trade now than it did in 2006, which is significant given the size of the U.S. economy.

Figure 4: Florida Share of U.S. Trade



SOURCE: Florida International Business Highlights: Merchandise Trade, Florida-Origin Exports, Foreign Investments

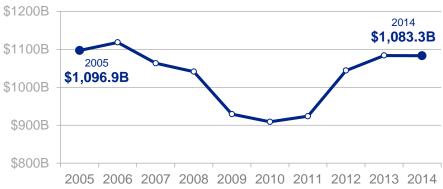


Total Value of Freight



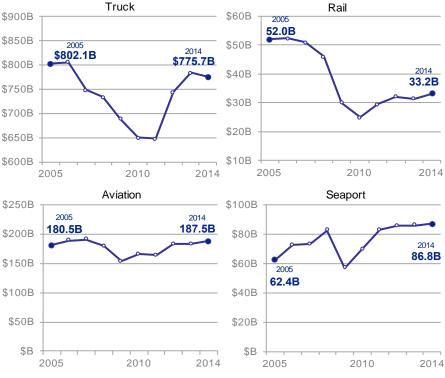
Figure 5a shows the total value of Florida freight movement. The "U" shaped trend reflects Florida's sharp rebound from the prolonged national recession. As importantly, this figure dramatically depicts the massive economic value of Florida freight. This is why FDOT has placed strategic importance on goods movement. **Figure 5b** breaks the economic value out by mode with most of the economic value associated with truck movement over Florida's highways. The increase in the value of goods that flow through seaports over the period is notable and affirms Florida's investments in these international connections.

Figure 5a: Florida Value of Freight



SOURCE: FDOT Multimodal Mobility Performance Measures Source Book

Figure 5b: Florida Value of Freight by Mode



SOURCE: FDOT Multimodal Mobility Performance Measures Source Book

250K

200K

150K

2010

202K

2010

2011

2012

2013



419K

Jobs by Transportation-Intensive Sectors



Figure 6 shows job growth in four sectors that are highly dependent on access and mobility to support Florida's long-term growth. FDOT and others need to pay attention to the transportation needs of these and other economic sectors. This, in turn, has implications for transportation demand and access. All four sectors shown are experiencing healthy growth and provide jobs to many Floridians. Florida's steady growth in manufacturing employment is both notable and encouraging. Construction has also seen a sharp increase (19 percent) in jobs since 2010.

Manufacturing Leisure and Hospitality 500K 1200K 400K 1000K 2014 2014 2010 **309K** 330K 1.05M 300K 800K 920K 200K 600K 2010 2011 2012 2013 2014 2010 2011 2012 2013 2014 Transportation Construction 300K 600K

450K

300K

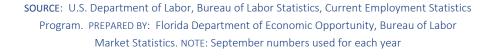
150K

2010

352K

2010 2011 2012 2013 2014

Figure 6: Jobs by Transportation-Intensive Sector



2014

232K

2014



CONSTRUCTION PROJECTS COMPLETED ON-TIME

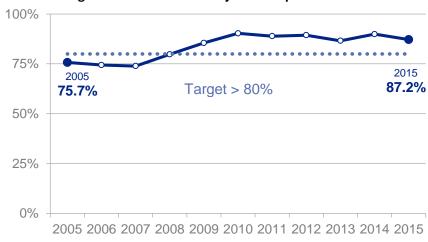


Over 87 percent of FDOT's construction projects in 2015 were completed on-time.

This core measure reflects the percent of highway and bridge construction contracts completed by FDOT within 20 percent of the original contract schedule. **Figure 7** shows that of the 376 construction contracts completed in 2015, 87.2 percent were completed within 20 percent of the original contract time, which surpassed FDOT's 80 percent target.

FDOT supports the economy by completing projects on time, which saves time and money for freight shippers and the industries that depend on them, as well as for passenger transportation. It also helps reduce the length of time delays related to construction work zones. FDOT strives to pay close attention to our customers in this area of importance to them. The eleven year improvement trend is especially noteworthy.

Figure 7: Construction Projects Completed On-Time



SOURCE: Florida Department of Transportation, Office of Work Program and Budget

AASHTO Grand Prize: Port Miami Tunnel

FDOT's \$666 million Port Miami Tunnel was constructed as a public-private partnership. The project involved successfully constructing the largest soft ground bored road tunnel in North America, decreasing traffic congestion in downtown Miami by providing a direct link between Port Miami and the Interstate Highway System, supporting freight and regional commerce.





CONSTRUCTION PROJECTS COMPLETED WITHIN BUDGET

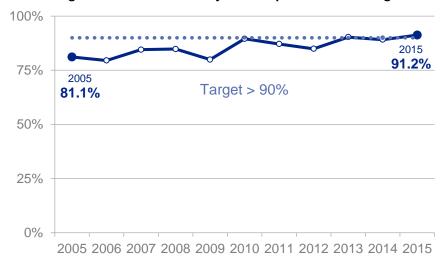


More than 91 percent of FDOT's construction projects in 2015 were completed within budget, exceeding the department's ambitious target.

This core measure is the percent of construction contracts completed by FDOT at a cost within 10 percent above the original contract amount.

Figure 8 shows that of the 376 construction contracts completed in 2015, 91.2 percent were completed within 10 percent of the original contract amount, exceeding FDOT's 90 percent target. The ability to complete projects within budget helps to ensure that FDOT can deliver more transportation projects overall, getting a greater "bang" out of every transportation dollar expended.

Figure 8: Construction Projects Completed within Budget



SOURCE: Florida Department of Transportation, Office of Work Program and Budget

AASHTO People's Choice Award: I-595 Corridor Improvements

FDOT's \$1.22 billion I-595 Corridor project relieved congestion and created a multimodal transportation network along I-595 in Southeast Florida. Through a public-private partnership, design and construction teams completed the project on time and \$275 million below the original cost estimate.



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KEY STRATEGIES TO IMPROVE FLORIDA'S ECONOMY

FDOT will help ensure continued progress to improve its core measures associated with supporting the economy through strategies such as those listed below:

- Support the development of Florida as a major international trade hub with targeted investments in the capacity of and connectivity among Strategic Intermodal System (SIS) hubs and corridors.
- Develop and streamline mechanisms for expedited funding and implementation of projects that meet economic growth criteria.
- Include economic development opportunities in setting priorities for transportation investment on the SIS and regionally significant transportation facilities.
- Enhance and refine methods for integrating engineering, environmental, safety and economic analyses that encompass community livability/quality of life/attractiveness to generate better estimates of return on investment (ROI) for major projects. Provide technical assistance to transportation partners seeking to enhance and expand their use of economic analysis to improve their own decision making processes.
- Provide options for raising sustainable local, regional, and state transportation resources and investing those resources in projects that have the greatest need and benefit.
- Promote funding flexibility to respond quickly to economic opportunities—particularly for industries that are transportation dependent.
- Identify transportation needs, revenues, and shortfalls across all modes — maintain this information and communicate it broadly to foster a greater understanding of transportation challenges and needs.
- Maximize the return of federal transportation funds to Florida and the flexibility to use those funds consistent with state, regional, and local priorities.
- Improve the efficiency and connectivity of the supply chain serving Florida's businesses.



FOR THE FUTURE



FDOT strives to be forward thinking in regards to performance measurement. Many measures can be valuably used year after year. But DOTs and the states they serve continue to both lead change and adapt to change. This year we are introducing a section in each performance chapter that identifies potential measurement considerations for the future.

Expanding Customer Focus

FDOT surveys customers on a regular basis—there may be opportunities for greater incorporation of customer feedback as part of performance reporting — an example would be how our customers view transportation construction. Social media may play a larger role in this area over time.

Florida Business Climate Survey

Because of the importance of transportation to the economy, enhancements to this important survey could be an invaluable source of contextual data—of note, the survey currently includes business climate information related to transportation workforce skills and also on public agency permitting.

Florida Transportation Plan Update

The new Florida Transportation Plan (FTP) will provide an opportunity to incorporate new or adjusted performance measures reflecting the Plan's goals and objectives—Florida's millions of visitors each year, for example, have been a focus of Plan development, having a major impact on travel demand, mobility, and access.

Further Refinements to Economic Analysis Tools

FDOT is striving to improve its benefit/cost methodologies. As it does, related performance measures may become even more robust and useful.

Use Economic Modeling to Better Determine FDOT's Role

Many performance measures are affected by the course of the overall U.S. economy, global trends and other factors beyond FDOT's control. By modeling performance measures through economic analyses, FDOT can get a better idea of which changes are the result of large scale trends and those that are more likely to be the result of specific FDOT programs, policies and projects.

Moving People/Improving Connections

The concept of "people moved" as an economic indicator is worth considering, particularly as the public perceives mobility strongly in terms of travel time/efficiency and increasingly choice-based. Potentially this could be incorporated into an enhanced benefit/cost methodology.