

Request for Research Funding for FY 2018-2019

Requesting Office	Freight and Multimodal Operations Office	Priority	1 of 4
Anticipated timeframe for submitting project scope (if approved)		Immediately Upon Approval	
Proposed Title	Land Use Analysis to Enhance Successful Logistics Activity Center Development in Florida		
Justification	<p>Florida has surpassed New York as the third most populous state in the U.S., and according to the U.S. Census Bureau half of the growth in Florida comes from three metropolitan areas: Tampa, Orlando and South Florida. Therefore, this population growth brings a higher emphasis on the freight and logistics aspect in Florida.</p> <p>This study intends to build on the findings of the USF project titled, “Logistics Led Economic Development” funded by FDOT’s Central Office, which allowed the identification of success factors necessary for the development and fidelity of Logistics Activity Centers (LACs) such as Intermodal Logistics Centers (ILCs), inland ports, etc. as well as the FDOT D7 funded research project performed by USF “Land Use Analysis to Enhance Successful Logistics Activity Center Development in FDOT D7. The PI and co-PI of these two projects are the same as this prospective project.</p> <p>This project proposes to identify the areas that are most suitable for logistics activity to be located within Florida using the criteria determined in the FDOT D7 study and therefore maximizing on the economic development potential of Florida and keeping Florida’s premise to attract more companies to the state. This project is specifically beneficial, since no boundaries exist between regions in real life, therefore requiring a holistic analysis of the state rather than region by region (i.e. I-4 corridor rests on multiple FDOT districts, the I-75 corridor running from north to south through multiple FDOT districts, etc.). The project also intends to take into account Florida’s workforce population density, FDOT’s work on the Florida Department of Revenue (DOR) tax parcel data, and the shipper’s choice for port selection matrix from the previous FDOT study mentioned above. In addition, the Action Plan to alleviate Florida’s inbound and outbound freight imbalance, developed through another FDOT funded research study “Evaluation of Florida’s Inbound and Outbound Freight Imbalance” also calls for a research study, similar to this proposed study, to determine and optimize LAC locations for Florida, while taking into account land use compatibility.</p>		
Impact	<p>The major goal of this proposed research project is to identify the locations with high LAC development potential within Florida for future enhancement of successful Logistics Activity Center development while taking into account the above mentioned factors. The specific project objectives include:</p> <ol style="list-style-type: none"> 1. Review/revise the criteria for identifying successful LAC development determined through the FDOT D7 study 2. Identify locations with high LAC development potential within Florida 3. Develop GIS databases and maps for identified locations with high LAC development potential 4. Provide recommendations for enhancing identified locations with high LAC development potential <p>This project will result in a database of GIS maps for locations with LAC development potential within Florida. The GIS maps will include information on the following:</p> <ol style="list-style-type: none"> 1. Current land use 2. Utility and access issues at a broad/higher level (i.e., is there any existing infrastructure such as utilities and roadways to support the LAC development at the specific area of interest or is an investment for these infrastructure needed?) 3. Florida DOR tax parcel data and Florida’s workforce population density 4. Suitability/conflicts with current land use and LAC development potential 		
Affected Offices	This will be a statewide project, which will affect all of the FDOT offices.		
Existing Work	<ol style="list-style-type: none"> 1. Florida Department of Transportation FDOT “ Evaluation of Florida’s Inbound and Outbound Freight Imbalance”. Final Report and Action Plan. April 2018. 2. Florida Department of Transportation FDOT D7 “Land Use Analysis to Enhance Successful Logistics Activity Center Development”. Final Report. April 2017. 3. Florida Department of Transportation. Research Center. “Evaluation of Logistics Led Economic Development”. Final Report. January 2016. 		

	<p>4. Florida Department of Transportation, Florida Chamber Foundation (June, 2013). Florida: Made For Trade. Florida Trade And Logistics Study 2.0. Retrieved from website: http://www.flchamber.com/wp-content/uploads/MadeForTrade-FINAL-Single-1.pdf (May 30, 2014).</p> <p>5. Florida Department of Transportation, Office of Freight, Logistics and Passenger Operations. (n.d.d). Florida Freight Mobility and Trade Plan: Policy Element. Retrieved from website: http://www.freightmovesflorida.com/docs/default-source/fmtp-freight-information/freight-mobility-and-trade-plan-policy-element_2013-06-19-web-%282%29.pdf?sfvrsn=0 (July 1, 2014).</p> <p>6. Florida Department of Transportation, Office of Freight, Logistics and Passenger Operations. (July, 2014). Florida Freight Mobility and Trade Plan: Investment Element.</p> <p>7. Florida Department of Transportation, District 7 (2009). Freight and Mobility: Tampa Bay Regional Goods Movement Study. Retrieved from website: http://www.tampabayfreight.com/pdfs/study-docs/Freight Mobility Tampa Bay Regional Freight Rail Study_05-09.pdf (July 1, 2014).</p> <p>8. Florida Seaport Transportation and Economic Development Council (2013). FL Seaport Mission Plan 2013-2017. Retrieved from website: http://www.flaports.org/Assets/514201352727AM_MissionPlan05132013final.pdf (July 1, 2014)</p> <p>9. Florida Department of Transportation (2010). The Florida Rail System Plan: Investment Element. Retrieved from website: http://www.stluciempo.org/pdf/A-2010FLRailPlan-InvestmentElement.pdf (July 1, 2014)</p> <p>10. Florida Department of Transportation, Office of Aviation (2013). 2012 Florida Air Cargo System Plan Update. Retrieved from website: http://www.dot.state.fl.us/aviation/cargo.shtm (July 1, 2014).</p> <p>11. MetroPlan Orlando. Current Regional Freight and Goods Flow Profile: Central Florida Regional Freight Study 2013. Cambridge Systematics.</p> <p>12. North Florida Transportation Planning Organization (TPO) and Supporting Partners. North Florida Freight, Logistics and Intermodal Framework Plan 2012. RS&H, Cambridge Systematics, and Martin Associates.</p> <p>13. Florida Department of Transportation, Office of Freight, Logistics, and Passenger Operations (2013). ILC Primer: Boosting Florida Economy through Freight Logistics. Retrieved from website: http://www.freightmovesflorida.com/docs/default-source/ilcdocs/ilc-primer.pdf?sfvrsn=10 (July 22, 2014).</p>		
Funding Request	\$ 285,000	Anticipated Duration	22 months
Project Manager	<p>FDOT: Rickey Fitzgerald – Freight and Multimodal Operations Manager</p> <p>PI: Dr. Seekin Ozkul, P.E. – University of South Florida</p>	Contracting Method	Seamless contract directly with USF using the existing “Master University Agreement” between FDOT and USF.
Urgency	<p>Score 1</p> <p>1= highest, most immediate need</p>	Economic development is directly tied to logistics and freight activities in a region. Taking Florida’s premise of “Florida is open for business”, it is highly urgent for Florida to determine the most suitable locations (while taking land use into account) to develop logistics activity centers throughout the state so that FDOT and its local partners (MPOs, counties, etc.) can make the necessary investments to attract these companies to Florida.	
Implementability	<p>Score 1</p> <p>1=greatest likelihood of and proximity to implementing results</p>	The results obtained from this study can directly be implemented by the central office as well as each district through district freight coordinators and local partners such as MPOs, counties and cities. The results of this study will highlight specific locations throughout the state with high freight/logistics potential. These areas can then go through further analysis by FDOT to make future investments for freight movement and to attract companies to enhance economic development in the state.	

Project Benefits (Select all that apply and explain)		
Project Benefits	Quantifiable Benefits (units, dollars, etc...if applicable)	Methodology or Data Sources Used to Determine Quantifiable Benefits. If not applicable, please give justification of project benefits
<input type="checkbox"/> Materials Enhancement		
<input type="checkbox"/> Materials Savings		
<input type="checkbox"/> Time Savings		
<input type="checkbox"/> Lives Saved/Injuries Prevented		
<input type="checkbox"/> Other (Explain)	Increased economic benefits for Florida will be a derivation of this research's results due to the determination of lands with high logistics activity center potential and land use compatibility throughout the state.	A logistics activity center "development potential" methodology developed by USF, which takes into account land use interactions with the freight network. This methodology was developed through a funded research project by FDOT D7. The project also intends to take into account Florida's workforce population density, FDOT's work on the Florida Department of Revenue (DOR) tax parcel data, and the shipper's choice for port selection matrix from another previous FDOT study "Evaluation of Florida's Inbound and Outbound Freight Imbalance". In addition, the Action Plan to alleviate Florida's inbound and outbound freight imbalance, developed through this previous study also calls for a research study, similar to this proposed study, to determine and optimize LAC locations for Florida, while taking into account land use compatibility.

*Comments should explain and support urgency, financial benefit, and implementability scores