

**Request for Research Funding for FY 2019-2020**

<b>Requesting Office</b>	District One	<b>Priority 2</b>	2 of 4 (projects may not have the same ranking – no ties)
<b>Proposed Title</b>	Mobility Management Enhancement Opportunities Beyond Single Occupancy Vehicle (SOV) through I-4 Corridor.		
<b>Justification</b>	<p>The I-4 Corridor is the most significant transportation facility across the entire portion of Central Florida serving a Super Economic Region. Major vehicle capacity improvements are underway and planned east (Orlando Region) and West (Tampa Bay Region) of Polk County. The Polk County TPO is considering road system improvements in this corridor as well as studying the feasibility for SunRail expansion from the Orlando area. However, a comprehensive mobility management approach that considers maximizing public transportation and multi-passenger travel is not defined. Research is needed to identify practical mobility management policies and practices to increase corridor throughput and assess opportunities to access local transportation services as well as proposed rail services such as SunRail and Brightline in this corridor.</p>		
<b>Impact</b>	<p>The result of this research will provide known reasonable person capacity improvement strategies and alternative corridor operational practices that may be considered for future analysis and planning of future I-4 corridor improvements through Polk County. This may include the use of express lanes with incentives.</p>		
<b>Affected Offices</b>	<p>This research is proposed utilizing CUTR and will mainly involve oversight management and direction from FDOT One Staff with occasional involvement of Central Office for input and advice. Significant coordination and cooperation is anticipated with the Polk County TPO.</p>		
<b>Existing Work</b>	<p>The Transportation Research International Documentation (TRID) and the Research in Progress (RIP) online databases were reviewed for subject matter (TRID: <a href="https://trid.trb.org/Results">https://trid.trb.org/Results</a> RIP: <a href="https://rip.trb.org/">https://rip.trb.org/</a> )</p> <p>A brief review of the literature in this topic reveals a variety of applicable studies and work. At a broad level integrated corridor management (ICM) seeks to leverage intelligent transportation systems (ITS) with coordination with multiple modal activities. Studies from 2010 provide an overview of (ICM) as well as case studies, practices and methods. Additional developments in Active Traffic management system and specific case studies in Virginia may further illustrate opportunities. Other research efforts address corridor studies such as a Puget Sound Corridor project that looked to coordinate intercity and commuter rail in the Seattle area. Further, studies are seeking to provide multimodal access through suburban expressways provide further illustrations of the types of solutions that might help improve the I-4 corridor.</p> <p>This study will explore the opportunities to connect the transportation systems within the Polk TPO area to the planned transportation developments, which connect the Polk region with the Orlando and Tampa regions. Roadway and multimodal solutions will be explored to best illustrate how to effectively manage the growing traffic.</p>		
<b>Keywords Used In Existing Work Search</b> <b>(Cannot leave blank)</b>	<p>Alternative corridor capacity improvements, Interstate operational capacity techniques, enhancing public transportation use in major highway corridors, commuter services for bedroom communities.</p>		
<b>Related Contracts</b> <b>(Give contract numbers)</b>			
<b>Funding Request</b>	\$200,000	<b>Anticipated Duration</b>	24 months
<b>Project Manager</b>	Proposed technical manager to oversee research: Paul Simmons / Michelle Peronto	<b>Contracting Method</b>	Anticipated procurement method: Task Work Order issued to CUTR / USF utilizing existing FDOT Master Agreement (BDV25)
<b>Urgency</b>	Score = 2  1-5 1= highest , most immediate need	<p>I-4 is a significant portal to Polk county to / from employment and commerce in this central Florida super region. The travel demand on this corridor increases daily and establishes a priority need to optimize overall transportation investments.</p>	

<b>Implementability</b>	Score = 2  1-5 1=greatest likelihood of and proximity to implementing results	The essence of this research is to help define policies, procedures and practices that can be implemented in this I-4 corridor.
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**Project Benefits (Succinct, complete explanation)**

**This research will be designed to focus on the following specific objectives that inherently will seek to achieve related benefits:**

- 1) **Enhance I-4 Corridor travel mode alternatives by researching and defining policies and techniques that support multi-modal services development which will enhance accessibility to employment and commerce.**
- 2) **Analyze potential coordination of existing and proposed public transportation services in I-4 corridor including known future rail proposals.**
- 3) **Coordinate efforts with Polk County TPO and share research finding that may enhance overall transportation investments in this corridor.**

<b>Project Benefits (Select all that apply and explain)</b>	<b>Quantifiable Benefits (units, dollars, etc...if applicable)</b>	<b>Methodology or Data Sources Used to Determine Quantifiable Benefits. If not applicable, please give justification of project benefits</b>
○ Materials Enhancement		
○ Materials Savings		
○ Time Savings		
○ Lives Saved/Injuries Prevented		
○ Other (Explain)		The benefit of this research could provide travel alternatives to customers, coordinate public transportation services and optimize corridor improvement investments.

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