

**Request for Research Funding for FY 2023-2024**

**Project Number** (Research Center Use Only): RDO-24-01

<b>Requesting Office</b>	CO Roadway Design	<b>Priority</b>	1 of 2
<b>Proposed Title</b>	Stated Preference Survey of Pedestrian Street Crossings and Big Data Analysis of Suppressed Pedestrian Trips		
<b>Justification</b>	FDOT designs pedestrian crossings and pedestrian bridges to safely accommodate pedestrian trips across roadways on the State Highway System. Nonetheless, these crossings are sometimes seen to be underutilized. In addition, we see many residents and visitors using a vehicle to reach destinations that are within a proximity that is considered within walking distance adding to increased vehicular demand on the State Highway System. This study looks at pedestrian preferences and behavior using both preference surveys and big data.		
<b>Impact</b>	The outcomes of this research can help the design office better understand what designs and conditions result in greater use and attract more individuals to walk versus drive. Without this study, FDOT will miss an opportunity to understand which facility design and conditions create the largest benefit in terms of use.		
<b>Affected Offices</b>	Tiffany Gehrke, Roadway Design, State Complete Streets Coordinator  DeWayne Carver, Roadway Design, State Criteria Publications Manager		
<b>Existing Work</b>	Related but not directly connected or affected by this proposed project, the Driver Mental Frameworks (DMF) Research indicates that the Predicted Presence of People is a major factor in a motorist’s determination of appropriate driving speed. Better understanding of how pedestrians choose to cross a roadway and where and how to design these crossings could reinforce and build on the findings of RDO’s Driver Mental Frameworks research. DeWayne Carver is the PM for the DMF and will be engaged in an advisory capacity on the proposed project as well.		
<b>Keywords Used In Existing Work Search</b> <b>(Cannot leave blank)</b>	Pedestrian, Behavior, Preference		
<b>Related Contracts</b> <b>(Give contract numbers)</b>			
<b>Funding Request</b>	\$150,000	<b>Anticipated Duration</b>	18 months
<b>Project Manager</b>	Tiffany Gehrke, FDOT State Complete Streets Coordinator	<b>Contracting Method</b>	Direct with Florida Atlantic University (FAU)
<b>Equipment</b>	\$500	The project will require purchases of materials required for research, including technology needed to support the research such as video cameras and safety equipment	
<b>Urgency</b>	2	By understanding pedestrian behavior and the type of roadway crossings and roadway conditions that appear to be barriers by the users of the State Highway System, FDOT may modify practices and criteria to prioritize designs and infrastructure that the traveling public are willing to use which may result in better use of the crossings that are constructed as well as less vehicular demand on the SHS by converting short driving trips into walking trips.	
<b>Implementability</b>	2	The results of the research will allow FDOT to understand the roadway designs and pedestrian crossings and treatments that pedestrians consider to be welcoming and accessible. By understanding which treatments and conditions result in greater use, FDOT can modify practices and criteria to create pedestrian crossing that will result in greater use.	

**Project Benefits (Succinct, complete explanation)**

**This effort will allow FDOT to better understand roadway conditions and respective pedestrian crossings and treatments that will result in the greatest use by the travelling public which can act to encourage more walking trips and less illegal pedestrian crossing.**

<b>Project Benefits</b> (Select all that apply and explain)	<b>Quantifiable Benefits</b> (units, dollars, etc...if applicable)	<b>Methodology or Data Sources Used to Determine Quantifiable Benefits. If not applicable, please give justification of project benefits</b>
<input type="radio"/> Materials Enhancement		
<input type="radio"/> Materials Savings		
<input type="radio"/> Time Savings		
<input type="radio"/> Lives Saved/Injuries Prevented		
<input type="radio"/> Other (Explain)	Increased Pedestrian Volumes, Lower AADT	Nonmotorized traffic monitoring program and traffic counts over time to verify increased pedestrian use and mode shift

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