I-75 ATCMTD Integrated Corridor Pilot Project

Florida Department of Transportation (FDOT) Advanced Transportation Congestion Management Technology Deployment (ATCMTD) grant application is requesting for \$(TBD) million grant support in FFY 2017 to deploy a program within Florida's megaregion¹ and consistent with the ATCMTD Focus Areas. See Table 1. This builds upon the Florida's Regional Advanced Mobility Elements (FRAME) vision of providing mobility centric Transportation Systems Management and Operations (TSM&O) throughout the State of Florida.

The 75 miles long I-75 corridor between Wildwood and Alachua experiences congestion and safety issues due to weather and traffic crashes. This project will help with the following:

- Manage congestion by deploying integrated corridor management technologies such as Multi Modal Intelligent Traffic Signal Control (MMITSS), Freight Signal Priority, Transit Signal Priority, and Emergency Vehicle Fleet Preemption
- Provide real-time traveler information using probe data, freeway and arterial Intelligent Transportation System (ITS) and connected vehicle road side units (CV RSU) and MMITSS
- Operate US 301/US 441 and routes connecting with I-75 as detour corridor for I-75 incident management
- Collect and use advanced freight data from Weigh-In-Motion stations for freight operation though the corridors
- Deploy advanced pedestrian and bicyclist crossing technologies at key signals, especially along the three mid-block crossings
- Deploy grade crossing notification systems for active traffic demand management at the three railroad grade crossings

Figure 1. Project Deployment Area

- 7. Upgrade communication infrastructure along US 301 south of Ocala to connect roadside units and traffic signals to the Regional Transportation Management Centers (RTMC) for active arterial management
- 8. Develop and implement Integrated Corridor Management (ICM) Decision Support System (DSS) for Active Traffic Demand Management (ATDM)



¹ <u>https://www.transportation.gov/BeyondTraffic</u>

- 9. Establish partnerships with University of Florida, Alachua County, and City of Gainesville to develop solutions for dynamic ridesharing using private partners such as Uber, Lyft, etc.
- 10. Establish partnerships with a private agencies to access data for providing unified fare collection solutions for all mobility options available inside and between the cities of Gainesville and Ocala
- 11. Provide real-time road weather information dissemination to the drivers via connected vehicle roadside units along Payne's Prairie and other rural segments of I-75 and US 301

Table 1 provides the information on USDOT priority project elements the FDOT's FRAME (see Figure 2) will address.

Table 1.	ATCMTD	Pro	iect '	Types
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1.Transportation elements associated with Smart CitiesX2.Systemic applied pedestrian crossing technologyX3.Multimodal Integrated Corridor Management (ICM)X4.Traffic signal data acquisition, analysis, and managementX5.Unified fare collection and payment system across transportation modes and jurisdictionsX6.Incorporation of connected vehicle (CV) technology in public sector and first responder fleetsX7.Weigh-in-Motion (WIM) facilities for advanced data collectionX8.Dynamic ridesharingX	S. No.	ATCMTD Priority Areas	Active via ATCMTD Deployment	Passive via Local Agency Initiatives
 Systemic applied pedestrian crossing technology X Multimodal Integrated Corridor Management (ICM) X Traffic signal data acquisition, analysis, and management X Unified fare collection and payment system across transportation modes and jurisdictions X Incorporation of connected vehicle (CV) technology in public sector and first responder fleets Weigh-in-Motion (WIM) facilities for advanced data collection X Dynamic ridesharing X 	1.	Transportation elements associated with Smart Cities		Х
 Multimodal Integrated Corridor Management (ICM) X Traffic signal data acquisition, analysis, and management X Unified fare collection and payment system across transportation modes and jurisdictions X Incorporation of connected vehicle (CV) technology in public sector and first responder fleets Weigh-in-Motion (WIM) facilities for advanced data collection X Dynamic ridesharing X 	2.	Systemic applied pedestrian crossing technology	X	
 4. Traffic signal data acquisition, analysis, and management X 5. Unified fare collection and payment system across transportation modes and jurisdictions 6. Incorporation of connected vehicle (CV) technology in public sector and first responder fleets 7. Weigh-in-Motion (WIM) facilities for advanced data collection 8. Dynamic ridesharing 	3.	Multimodal Integrated Corridor Management (ICM)	Х	
 5. Unified fare collection and payment system across transportation modes and jurisdictions 6. Incorporation of connected vehicle (CV) technology in public sector and first responder fleets 7. Weigh-in-Motion (WIM) facilities for advanced data collection 8. Dynamic ridesharing 	4.	Traffic signal data acquisition, analysis, and management	Х	
transportation modes and jurisdictions ^ 6. Incorporation of connected vehicle (CV) technology in public sector and first responder fleets X 7. Weigh-in-Motion (WIM) facilities for advanced data collection X 8. Dynamic ridesharing X	5.	Unified fare collection and payment system across	v	
 6. Incorporation of connected vehicle (CV) technology in public sector and first responder fleets 7. Weigh-in-Motion (WIM) facilities for advanced data collection 8. Dynamic ridesharing X 		transportation modes and jurisdictions		Λ
7.Weigh-in-Motion (WIM) facilities for advanced data collectionX8.Dynamic ridesharingX	6.	Incorporation of connected vehicle (CV) technology in public sector and first responder fleets	х	
8. Dynamic ridesharing X	7.	Weigh-in-Motion (WIM) facilities for advanced data collection	x	
	8.	Dynamic ridesharing		Х



