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# Introduction

This Update Report for the Florida District 5 Regional ITS Architecture (RITSA) identifies the revisions incorporated into the architecture. The purpose of this District 5 RITSA Update Report is to document revisions made to the District 5 RITSA to support Stakeholder input received through Architecture Change Requests as part of the Florida Intelligent Transportation Systems (ITS) Architecture Support and Maintenance Project.

The Florida ITS Architecture Support and Maintenance Project included the initial major update of the Statewide ITS Architecture (SITSA) and seven RITSAs. Following the major update phase, periodic updates are executed to maintain the architecture content. The FDOT Architecture Team coordinates with the FDOT Project Manager or designee and each applicable District Transportation Systems Management and Operations (TSM&O) Program Engineer or designee for the RITSAs.

# Description of Changes

One maintenance log item was addressed in the update. Table 1 provides descriptions for each change request that was implemented in the architecture update. A log reference number is provided for each change to relate it to the Architecture Maintenance Log that is provided in Appendix A. Each architecture change that is received is added to the maintenance log for tracking and disposition.

Information about stakeholders, elements, and services is provided to summarize the changes. Some architecture components such as interfaces, roles and responsibilities, functional requirements and standards are numerous and can be reviewed on the architecture website or in the Regional Architecture Development for Intelligent Transportation (RAD-IT) software tool to explore the details of each project.

Table 1 ARCHITECTURE Updates

| **Change** | **Log Ref #** | **Actions Taken / Changes Implemented** |
| --- | --- | --- |
| FDOT SR 40 ITS Safety Deployment Project: The objective of the SR 40 ITS Safety Deployment Project is to improve freight mobility, avoid fatal accidents, improve the quality of life of residents and protect critical wildlife. The project proposes to achieve this target by strategically designing the location of detection systems, connected vehicle devices, and signs along the route. The CV and ITS devices proposed in the project’s design are the following: • Dynamic Message Signs (DMS)• Roadside Units (RSU) – to broadcast Traveler Information Message (TIM) • Closed Circuit Television (CCTV) cameras• Microwave Vehicle Detection (MVDS)• Blue Tooth (BT)• Wildlife Detection system (Artificial Intelligence (AI) detection Cameras, Enhanced reporting signs, Flashing Beacon Signs) | 143 | Added new project: FDOT District 5 SR 40 ITS Safety Deployment (Wildlife Detection and Warning) Project* Included Stakeholders: FDOT CO, FDOT District 5, State of Florida, Travelers
* Added Element: FDOT District 5 Wildlife Detection System, Wildlife Animal
* Included Existing Elements: FDOT District 5 CAV Field Equipment, FDOT District 5 Field Equipment, FDOT District 5 RTMC, SunGuide Data Archiving System; Vehicles
* Added Services:
	+ TI07: In-Vehicle Signage (FDOT D5 Wildlife Detection and Warning)
	+ TM12: Dynamic Roadway Warning (FDOT D5 Wildlife Detection and Warning)
* Added Interfaces.
* Added Roles and Responsibilities.
* Added Functional Requirements.
* Selected Communications Solutions.
 |

Appendix A: Architecture Maintenance Log (District 5 RITSA)

The maintenance log in Table 2 provides the District 5 RITSA maintenance items considerations for the update.

Table 2 Architecture Maintenance Log (District 5 RITSA)

| **#** | **Date** | **Architecture** | **Source** | **Contact** | **Change** | **Disposition** | **Recommend Maintenance** | **Incorporated** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 143 | 11/4/2022 | D5 RITSA | Change Request Form: FDOT District 5 | Shellby Rivas / FDOT District 5 | FDOT SR 40 ITS Safety Deployment Project: The objective of the SR 40 ITS Safety Deployment Project is to improve freight mobility, avoid fatal accidents, improve the quality of life of residents and protect critical wildlife. The project proposes to achieve this target by strategically designing the location of detection systems, connected vehicle devices, and signs along the route. The CV and ITS devices proposed in the project’s design are the following: •Dynamic Message Signs (DMS) – includes front access DMS with structure and double-sided front access DMS with structure •Roadside Units (RSU) – to broadcast Traveler Information Message (TIM) •Closed Circuit Television (CCTV) cameras•Microwave Vehicle Detection (MVDS)•Blue Tooth (BT)•Wildlife Detection system (Artificial Intelligence (AI) detection Cameras, Enhanced reporting signs, Flashing Beacon Signs) | Add new project. | Yes | Yes |