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|  | Florida ITS Architecture Support and Maintenance ProjectSITSA Update Report(ARC-IT Version 9.3) |

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# Introduction

This Architecture Update Report for the Florida Statewide Intelligent Transportation Systems (ITS) Architecture (SITSA) identifies the revisions incorporated into the architecture. Revisions made to the SITSA are documented in this report to support Stakeholder input received through Architecture Change Requests as part of the Florida ITS Architecture Support and Maintenance Project.

The Florida ITS Architecture Support and Maintenance Project included the initial major update of the SITSA and seven Regional ITSA Architectures (RITSA). 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

Two maintenance log items were 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 DIVAS Truck Video Integration project added | 192 | * Added project
	+ FDOT DIVAS Truck Video Integration
* Assigned Elements:
	+ FDOT District Maintenance Vehicle
	+ FDOT DIVAS
	+ FDOT Statewide Transportation EOC (TEOC)
	+ Florida Statewide EOC/Warning Point (SEOC)
* Added Services:
	+ Broadcast Traveler Information (FDOT DIVAS Truck Video Integration)
	+ Infrastructure-Based Traffic Surveillance (FDOT DIVAS Truck Video Integration)
* Added User Needs.
* Added Roles and Responsibilities.
* Added Functional Requirements.
* Added Interfaces.
* Added Communications.
 |
| FDOT DIVAS UAV Video Integration project added | 192 | * Added project
	+ FDOT DIVAS UAV Video Integration
* Assigned Elements:
	+ FDOT DIVAS
	+ FDOT Statewide Transportation EOC (TEOC)
	+ Florida Statewide EOC/Warning Point (SEOC)
* Added Unmanned Aerial Vehicles (UAVs) element
* Added Services:
	+ Broadcast Traveler Information (FDOT UAV Video Integration with DIVAS)
	+ Infrastructure-Based Traffic Surveillance (FDOT DIVAS UAV Video Integration)
* Added User Needs.
* Added Roles and Responsibilities.
* Added Functional Requirements.
* Added Interfaces.
* Added Communications.
 |
| SunGuide Software GIS and AI NextGen Enhancements (GANE) project added | 198 | * Added project
	+ FDOT SunGuide Software GIS and AI NextGen Enhancements (GANE)
* Assigned Elements:
	+ FDOT District Field Equipment
	+ FDOT District Road Ranger Service Patrol Vehicles
	+ FDOT District Transportation Management Centers using SunGuide
	+ FHP Statewide CAD
* Added Services:
	+ Emergency Call-Taking and Dispatch (SunGuide GANE)
	+ Roadway Service Patrols (SunGuide GANE)
	+ Traffic Incident Management System (SunGuide GANE)
* Added User Needs.
* Added Roles and Responsibilities.
* Added Functional Requirements.
* Added Interfaces.
* Added Communications.
* Added Agreements.
 |

Appendix A: Architecture Maintenance Log (SITSA)

The maintenance log in Table 2 provides the SITSA maintenance items considerations for the update.

Table 2. Architecture Maintenance Log (SITSA)

| **#** | **Date** | **Architecture** | **Source** | **Contact** | **Change** | **Disposition** | **Recommend Maintenance** | **Incorporated** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 192 | 9/3/2024 | SITSA | Change Request Form: FDOT CO | James Landini / FDOT CO | New Project - UAV Video Integration with DIVAS: Add Project: UAV Video Integration with DIVAS. Add: Service Package TM01: Infrastructure-Based Traffic Surveillance (modified for UAV). This Service is not currently in the SITSA. Description: FDOT is using video images from Unmanned Aerial Vehicles (UAVs or Drones) to support emergency response and management. UAV video images will connect directly to DIVAS via wireless internet and become available to FDOT emergency managers and others through DIVAS. Electronically tethered UAV are deployed and controlled in the vicinity of the emergency conditions being surveilled. All other video images that input to DIVAS come from FDOT or local agency traffic management centers. This is the first time video images will come directly (through third-party) from the camera to DIVAS. | Revise architecture as requested.Create a UAV project and a Truck-mounted Video project with the same services and functionality. | Yes | Yes |
| 198 | 2/18/2025 | SITSA | Change Request Form: FDOT CO | Steve Bahler / FDOT/HNTB | Add new project: SunGuide® Software GIS and AI NextGen Enhancements (GANE): GANE will replace the existing SunGuide Databus with a commercial-off-the-shelf (COTS) component to facilitate expanded throughput and responsiveness and with an industry standard centralized interface. GANE will also replace the existing user interface map control with a GIS provider system and artificial intelligent (AI) capabilities to improve system performance, functionality, responsiveness, and user interface. GANE will convert control of devices and event data to a GIS-based system. GANE will modify the SunGuide system to support a cloud-based deployment in the future. This element is preparing SunGuide for a future cloud-based deployment.  | Add project to architecture | Yes | Yes |