Geographic Information System (GIS) Development (IWAYS)	**FY2017 Request:** $1,500,000
	Reference No: 41539

AP/AL: Allocation	**Project Type:** Information Technology / Systems / Communication
Category: Transportation	
Location: Statewide	**House District:** Statewide (HD 1-40)
Impact House District: Statewide (HD 1-40)	**Contact:** Mike Vigue
Estimated Project Dates: 07/01/2016 - 06/30/2021	**Contact Phone:** (907)465-4070
Appropriation: Surface Transportation Program	

Brief Summary and Statement of Need:

This project supports the migration from the highway analysis system (HAS) to a geographic information system (GIS). Project activities include: GIS design and development, hardware and software acquisition, application design and development, and HAS to GIS data migration. The resulting GIS will directly support: The Highway Performance Monitoring System, The Traffic Data System, the Crash Data System, and the Transportation Asset Management System.

Funding:	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	Total
1002 Fed Rcpts	$1,500,000	$1,500,000					$3,000,000
Total:	$1,500,000	$1,500,000	$0	$0	$0	$0	$3,000,000

☑ State Match Required ☐ One-Time Project ☐ Phased - new ☑ Phased - underway ☐ On-Going	
9% = Minimum State Match % Required ☐ Amendment ☐ Mental Health Bill	

Operating & Maintenance Costs:

	Amount	Staff
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Prior Funding History / Additional Information:

Sec1 Ch38 SLA2015 P13 L15 SB26 $3,000,000
Sec1 Ch16 SLA2013 P90 L33 SB18 $1,500,000

Project Description/Justification:

This is a fairly large effort that covers many different aspects of our GIS development and implementation. This project is being handled as a multi-year effort due to the scope and complexity of the tasks. Timelines and or stages are difficult to define as this project builds on itself and one effort helps define the next.

As the Geographic Information System (GIS) and the Enterprise Geodatabase (EGDB) is developed, implemented and becomes established the effort will continue by integrating data from other databases and sources such as the Highway Analysis System (HAS) - an outdated Mainframe legacy database. One of the initial integration efforts will be that of the Highway Performance Monitoring System (HPMS). We are faced with a new Federal Highway Administration (FHWA) requirement to submit HPMS in GIS format, the scope of this project includes meeting this requirement by integrating HPMS into the GIS/GDB. On the heels of HPMS will be the need to integrate the Traffic data/system,

this is then followed by the Crash data/system. The end goal would be a full transition out of HAS and into a GIS/GDB - Highway Data Warehouse (HDW) Solution. There is also a need to expand this integration effort to other databases such as the Maintenance Management System (MMS) and the Bridge Database. This is crucial for improving efficiency, data sharing and to reduce duplications of effort. The GIS/GDB is also being developed to support Federal Highway Administration and State mandated programs, such as the various Transportation Plans, Highway Safety, Pavement Management, 511, Environmental, Road Network Services, etc.

Also reflected in this project is Data Collection Activities. This is the PhotoLog project that provides us a digital representation of our transportation network and the data necessary to capture road centerlines, features and assets.

Ultimately the decision was made to treat this project as an ongoing effort due to the scope and complexity of developing an Enterprise GIS/GDB, integrating data, supporting various programs, system transitions and the supporting data collection activities. It is anticipated that the duration of this effort to be from 5 to 10 years.