Geographic Information System (GIS) Development (IWAYS)	**FY2012 Request:**	**$1,000,000**
	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:** Pat Kemp
Estimated Project Dates: 07/01/2011 - 06/30/2018	**Contact Phone:** (907)465-3900
Appropriation: Surface Transportation Program	

Brief Summary and Statement of Need:
This amendment adds $450,000 federal funds for a new total of $1,000,000 due to project cost estimate increases. This project aims to develop the Highway Analysis System - Geographic Information System (HAS-GIS) concept of operations, systems architecture, and long-term systems deployment. Project work includes road centerline/inventory data collection and processing, business process development (data quality, linear reference system, highway data warehouse, HAS-GIS Interface), a spatial geodatabase, GIS software, network systems, GIS tools, a highway data warehouse, training, and technical support.

Funding:	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Total
Fed Rcpts	$1,000,000						$1,000,000
Total:	$1,000,000	$0	$0	$0	$0	$0	$1,000,000

☐ State Match Required	☐ One-Time Project	☐ Phased - new	☑ Phased - underway	☐ On-Going
0% = 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

Additional Information / Prior Funding History:
$250,000 - Ch 43 SLA 2010 Sec 7 pg 47 ln 13; $287,750 - Ch 29 SLA 2008 Sec 13 pg 169 ln 24; $531,300 - Ch 30 SLA 2007 Sec 4 pg 114 ln 4; $300,000 - Ch 82 SLA 2006 Sec 1 pg 100 ln 25; $700,000 - Ch 159 SLA 2004 Sec 1 pg 44 ln 17; $750,000 - Ch 82 SLA 2003 Sec 1 pg 48 ln 18.

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 phases 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effort will continue by integrating data from other databases and sources such as the Highway Analysis System (HAS) our outdated Mainframe legacy database.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

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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. We also 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 our 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.

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