Arkansas State Highway and
Transportation Department
Regional ITS Architectures and Deployment Plans

West Memphis Region

Executive Summary

Prepared by:

Kimley-Horn
and Associates, Inc.

ConSysTec Corp

CAMBRIDGE SYSTEMATICS

April 28, 2006
068550000

Kimley-Horn and Associates, Inc.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

AD	Archived Data
AHTD	Arkansas State Highway and Transportation Department
AMBER	America's Missing: Broadcast Emergency Response
APTS	Advanced Public Transportation Systems
ATIS	Advanced Travel Information System
ATMS	Advanced Traffic Management System
CCTV	Closed-Circuit Television
CVISN	Commercial Vehicle Information Systems and Networks
CVO	Commercial Vehicle Operations
DMS	Dynamic Message Sign
EM	Emergency Management
EMS	Emergency Medical Services
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HAR	Highway Advisory Radio
ITS	Intelligent Transportation System
MAP	Motorist Assist Patrol
MC	Maintenance and Construction
MPO	Metropolitan Planning Organization
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
TDOT	Tennessee Department of Transportation
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TMC	Transportation Management Center
TOC	Traffic Operations Center

PROJECT APPROACH

Development of a regional intelligent transportation system (ITS) architecture is one of the most important steps in planning for and implementing ITS in a region. ITS architectures provide a framework for implementing ITS projects, encourage interoperability and resource sharing among agencies, identify applicable standards to apply to projects, and allow for cohesive long-range planning among regional stakeholders. The ITS architecture allows stakeholders to plan for what they want their system to look like in the long-term and then break out the system into smaller pieces that can be implemented in the short-term.

ITS architectures satisfy the conformity requirements first established in the Transportation Equity Act for the 21st Century (TEA-21) highway bill and continued in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) bill passed in 2005. In response to Section 5206(e) of TEA-21, the Federal Highway Administration (FHWA) issued a final rule and the Federal Transit Administration (FTA) issued a final policy that required regions implementing any ITS project to have an ITS architecture in place by April 2005. After this date, any ITS projects must show conformance with their regional ITS architecture in order to be eligible for funding from FHWA or FTA. Regions that had not yet deployed ITS were given four years to develop an ITS architecture after their first ITS project proceeded to final design.

In September 2005 the Arkansas State Highway and Transportation Department (AHTD) in coordination with the West Memphis Metropolitan Planning Organization (MPO) began development of the West Memphis Regional ITS Architecture. Four stakeholder meetings were held and a draft ITS architecture was developed. The ITS Architecture has geographic boundaries slightly larger than the MPO (the Architecture boundaries are extended northward along I-55 and westward along I-40 to accommodate possible future ITS coverage along those corridors) and focuses on a 20-year vision for ITS in the Region. A project website was developed which contains additional information that was not feasible to include in the report. In addition, a separate ITS Deployment Plan was developed to identify and prioritize specific ITS projects recommended for the Region in order to implement the ITS architecture. The process used to develop the plan is illustrated in **Figure 1**.

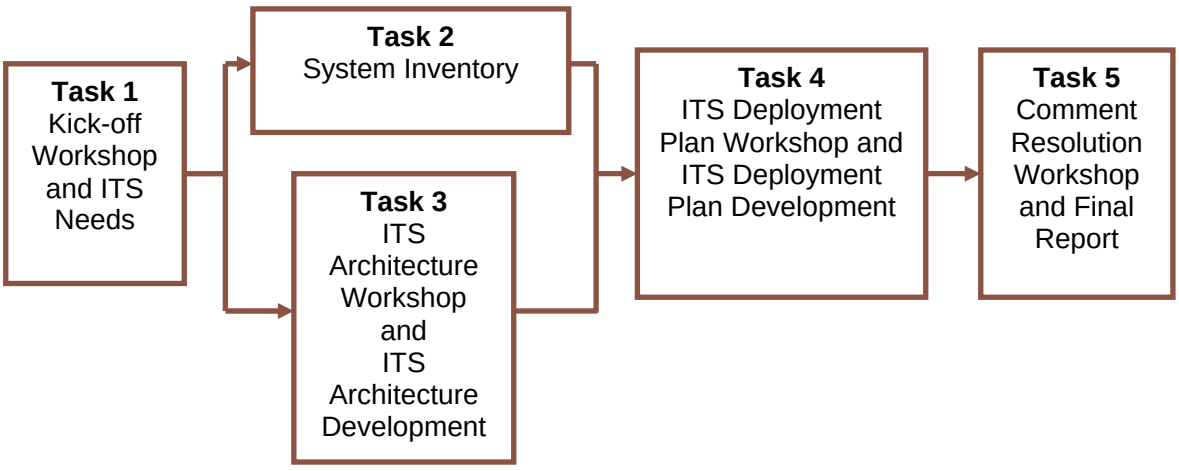


Figure 1 – West Memphis Regional ITS Architecture and Deployment Plan Development Process

The ITS Deployment Plan, while not required by FHWA and FTA, is a useful tool for Regions to identify specific projects that are able to be deployed in order to implement the architecture. The Regional ITS Deployment Plan builds on the architecture by outlining specific ITS project recommendations and strategies for the Region, and by identifying deployment timeframes so that the recommended projects and strategies can be implemented over time.

The West Memphis Regional ITS Architecture and Regional ITS Deployment Plan were both developed with significant input from local, state, and federal officials. A series of four workshops were held to solicit input from stakeholders and ensure that the plans reflected the unique needs of the Region. Copies of the draft reports were sent to all stakeholders and the project website allowed stakeholders to submit comments directly to the project team. The Regional ITS Architecture and Deployment Plan developed reflects an accurate snapshot of existing ITS deployment and future ITS plans in the Region. Needs and priorities of the Region will change over time and, in order to remain effective, these documents should be periodically reviewed and updated.

OVERVIEW OF THE WEST MEMPHIS REGION

The West Memphis Region is defined by the boundaries of the West Memphis MPO with extensions of the MPO's boundaries northward along I-55 and westward along I-40 as shown by the dark line in **Figure 2**. These extensions were included to accommodate the possibility of future ITS equipment coverage along the two interstate highways. The eastern boundary of the Region follows the Arkansas – Tennessee state line. The regional architecture for Memphis addresses ITS needs in Tennessee. The Region encompasses approximately 500 square miles in eastern Arkansas. It includes the majority of Crittenden County, Arkansas. The Crittenden County population was 51,488 in 2004 and the largest city in the area is West Memphis.

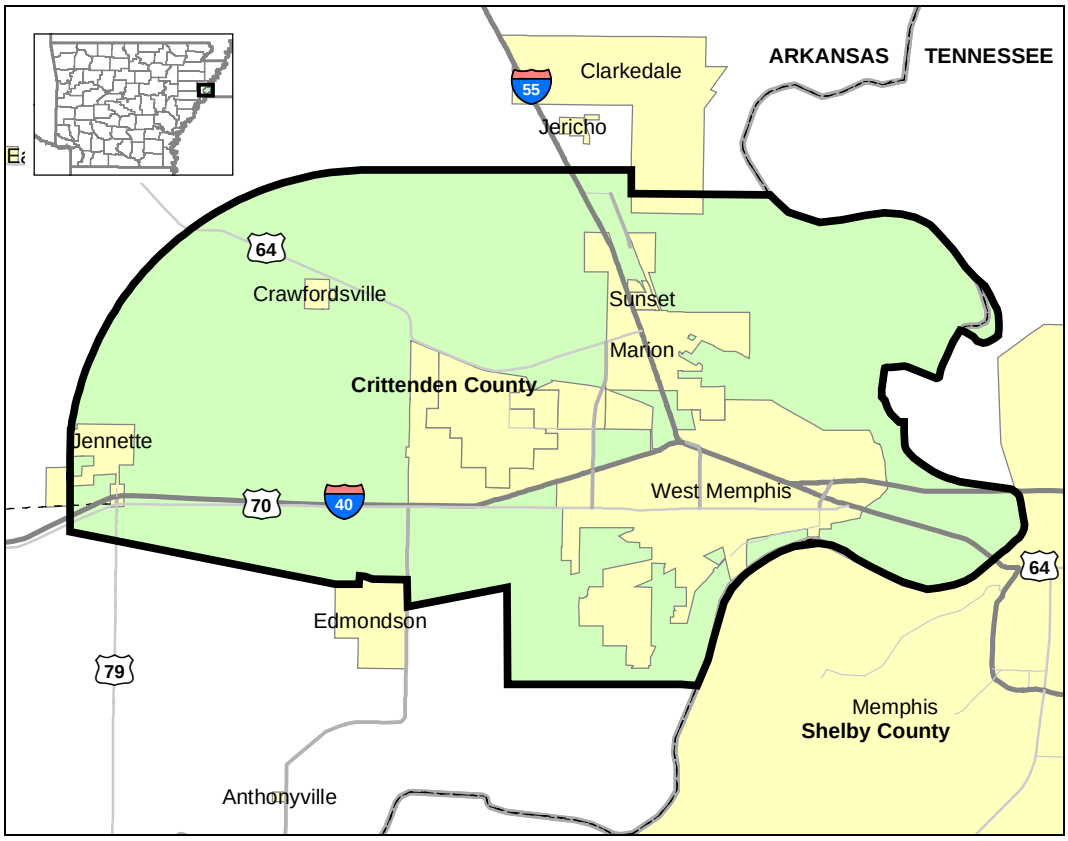


Figure 2 – West Memphis Regional Boundaries

The West Memphis Region is served by numerous State and Federal highways. The primary roadway facilities include I-40, I-55, US 64, US 70 (East Broadway Boulevard), and SR 77 (Missouri Street). Their effective operation is critical to the movement of goods and people throughout the States of Arkansas and Tennessee, as well the United States.

REGIONAL STAKEHOLDERS

Due to the fact that ITS often transcends traditional transportation infrastructure, it is important to involve non-traditional stakeholders in the Regional ITS Architecture and Deployment Plan development. Input from these stakeholders, both public and private, is a critical part of developing and documenting the overall vision for ITS in a region.

The following stakeholder agencies have participated in the West Memphis Region project workshops or provided input to the study team:

- AHTD District 1;
- AHTD Highway Police;
- AHTD Planning and Research Division;
- City of Marion;
- City of Marion Police Department;
- City of West Memphis;
- City of West Memphis Fire Department;
- Crittenden County;
- Crittenden County Sheriff's Department;
- FHWA Arkansas Division;
- Shelby County Department of Regional Services;
- Tennessee Department of Transportation Region 4; and
- West Memphis MPO.

A detailed list of stakeholders, including the individuals representing each agency, is provided in the Regional ITS Architecture report.

WEST MEMPHIS REGIONAL ITS ARCHITECTURE

The process for developing the Regional ITS Architecture for the West Memphis Region included several key steps:

- Preparing an inventory of planned and existing systems in the Region;
- Identifying needs in the Region that could be addressed by ITS deployment or integration;
- Customizing and prioritizing market packages to address the specific needs and services identified by stakeholders;
- Developing interconnects and interfaces for system elements to map out data flows and agency links;
- Preparing an operational concept to illustrate how the systems, components, and agencies will be integrated and function as a result of the architecture framework;
- Identifying high-level functional requirements;
- Identifying standards that could be applicable to the Region; and
- Outlining potential agreements that would be needed to facilitate information or resource sharing as a result of ITS implementation.

Inventory and Needs in the Region

The West Memphis Regional ITS Architecture began with a Kick-off Workshop in September 2005. At that workshop, stakeholders provided information about existing and planned ITS elements in the Region. A diverse range of needs were identified by stakeholders who attended. The inventory of planned and existing ITS infrastructure provided the basis for the architecture development. Needs that could be addressed by ITS technologies guided the selection of market packages, data flows, and integration requirements.

Market Packages

An ITS Architecture Workshop was held in West Memphis on October 18 and 19, 2005. At this workshop, stakeholders were provided with architecture training that included background information about the National ITS Architecture and the process that would be used to develop the West Memphis Regional ITS Architecture.

The next step in developing the West Memphis Regional ITS Architecture was to identify the services that would be needed to address the stakeholder needs. In the National ITS Architecture, services are referred to as market packages. Market packages can include several stakeholders and elements that work together to provide a service in the Region. There are a total of 85 market packages identified in Version 5.1 of the National ITS Architecture.

At the ITS Architecture Workshop, stakeholders selected the market packages that corresponded to the desired services and functions identified for the Region, and then customized these market packages. They included services and functions such as Network Surveillance, Traffic Information Dissemination, and Emergency Response as well as market packages to address coordination needs, including Traffic Incident Management and Regional Traffic Control and Coordination. Because market packages are groups of services and functions, they can be deployed incrementally and over time. Of the 85 market packages in the National ITS Architecture Version 5.1, 33 were selected and customized for deployment in the West Memphis

Region. The market packages outline the functions that stakeholders envision ITS to perform in coming years.

AHTD is leading a separate effort to develop and implement the Commercial Vehicle Information Systems and Networks (CVISN) program. CVISN addresses commercial vehicle operations, including ITS, on a statewide level and includes such applications as electronic clearance, safety enforcement, and registration. Unless a specific need was identified in the West Memphis Region that could be addressed locally, the commercial vehicle operations market packages were not selected and instead will be covered in the CVISN effort to ensure consistency.

Stakeholders were asked to prioritize the market packages into high, medium, and low priorities based on regional needs, feasibility, likelihood of deployment, and overall contribution of the market package to the goals and vision for ITS functionality in the Region. A summary of these prioritized market packages is shown in **Table 1**. Definitions for the ITS market packages are provided in Appendix A of the Regional ITS Architecture report.

Table 1 – West Memphis Market Package Prioritization by Functional Area

High Priority Market Packages	Medium Priority Market Packages	Low Priority Market Packages
Travel and Traffic Management		
ATMS01 Network Surveillance ATMS06 Traffic Information Dissemination ATMS07 Regional Traffic Control ATMS08 Traffic Incident Management System ATMS13 Standard Railroad Grade Crossing ATMS15 Railroad Operations Coordination	ATMS03 Surface Street Control	
Emergency Management		
EM01 Emergency Call-Taking and Dispatch EM04 Roadway Service Patrols EM05 Transportation Infrastructure Protection EM06 Wide-Area Alert EM07 Early Warning System EM08 Disaster Response and Recovery EM10 Disaster Traveler Information	EM02 Emergency Routing	EM09 Evacuation and Reentry Management
Maintenance and Construction Management		
MC07 Roadway Maintenance and Construction MC08 Work Zone Management MC10 Maintenance and Construction Activity Coordination	MC03 Road Weather Data Collection MC04 Weather Information Processing and Distribution	MC06 Winter Maintenance MC09 Work Zone Safety Monitoring

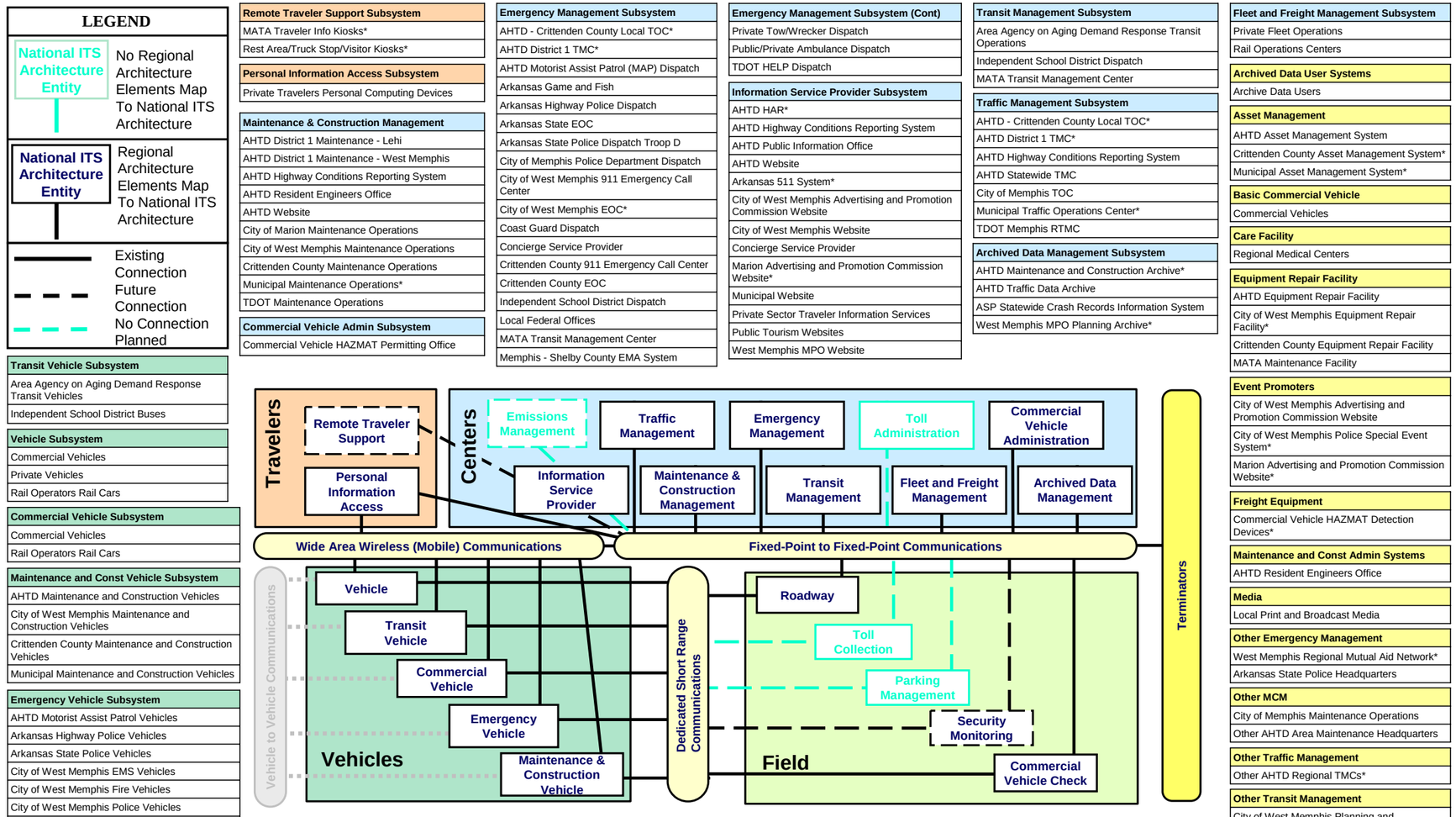
Table 1 – West Memphis Market Package Prioritization by Functional Area (continued)

High Priority Market Packages	Medium Priority Market Packages	Low Priority Market Packages
Public Transportation Management		
	APTS1 Transit Vehicle Tracking APTS2 Transit Fixed Route Operations APTS3 Demand Response Transit Operations	APTS5 Transit Security
Commercial Vehicle Operations		
CVO10 HAZMAT Management CVO11 Roadside HAZMAT Security Detection and Mitigation		
Traveler Information		
ATIS1 Broadcast Traveler Information	ATIS2 Interactive Traveler Information	
Archived Data Management		
AD1 ITS Data Mart	AD2 ITS Data Warehouse	

Interconnects, Interfaces and Data Flows

While customizing the Regional ITS architecture market packages, stakeholders mapped existing and planned ITS elements in the West Memphis Region to the subsystems in the National ITS Architecture. These elements included agencies, systems, and all of the ITS components in the Region. Subsystems are the highest level building blocks of the physical architecture, and the National ITS Architecture groups them into four major classes: Centers, Field, Vehicles, and Travelers. This mapping resulted in an interconnect diagram for the Region that is shown in **Figure 3**. This architecture diagram, also referred to as the "sausage diagram", shows the relationship of existing and planned systems in the West Memphis Region.

Interfaces have been identified for each element in the West Memphis Regional ITS Architecture, and each element has been mapped to those other elements with which it must interface. Architecture flows between the elements define the specific data that is exchanged. These data flows could be requests for information, alerts and messages, status requests, broadcast advisories, video images, or other information.



LEGEND

National ITS Architecture Entity	No Regional Architecture Elements Map To National ITS Architecture
National ITS Architecture Entity	Regional Architecture Elements Map To National ITS Architecture
———	Existing Connection
- - -	Future Connection
— — —	No Connection Planned

Transit Vehicle Subsystem
Area Agency on Aging Demand Response Transit Vehicles
Independent School District Buses

Vehicle Subsystem
Commercial Vehicles
Private Vehicles
Rail Operators Rail Cars

Commercial Vehicle Subsystem
Commercial Vehicles
Rail Operators Rail Cars

Maintenance and Const Vehicle Subsystem
AHTD Maintenance and Construction Vehicles
City of West Memphis Maintenance and Construction Vehicles
Crittenden County Maintenance and Construction Vehicles
Municipal Maintenance and Construction Vehicles

Emergency Vehicle Subsystem
AHTD Motorist Assist Patrol Vehicles
Arkansas Highway Police Vehicles
Arkansas State Police Vehicles
City of West Memphis EMS Vehicles
City of West Memphis Fire Vehicles
City of West Memphis Police Vehicles
Crittenden County EMS Vehicles
Crittenden County Fire Vehicles
Crittenden County Sheriff Vehicles
Municipal EMS Vehicles
Municipal Fire Vehicles
Municipal Police Vehicles
Private Tow/Wrecker Vehicles
Public/Private Ambulance Vehicles

***** Elements are *planned*

Remote Traveler Support Subsystem
MATA Traveler Info Kiosks*
Rest Area/Truck Stop/Visitor Kiosks*

Personal Information Access Subsystem
Private Travelers Personal Computing Devices

Maintenance & Construction Management
AHTD District 1 Maintenance - Lehi
AHTD District 1 Maintenance - West Memphis
AHTD Highway Conditions Reporting System
AHTD Resident Engineers Office
AHTD Website
City of Marion Maintenance Operations
City of West Memphis Maintenance Operations
Crittenden County Maintenance Operations
Municipal Maintenance Operations*
TDOT Maintenance Operations

Commercial Vehicle Admin Subsystem
Commercial Vehicle HAZMAT Permitting Office

Emergency Management Subsystem
AHTD - Crittenden County Local TOC*
AHTD District 1 TMC*
AHTD Motorist Assist Patrol (MAP) Dispatch
Arkansas Game and Fish
Arkansas Highway Police Dispatch
Arkansas State EOC
Arkansas State Police Dispatch Troop D
City of Memphis Police Department Dispatch
City of West Memphis 911 Emergency Call Center
City of West Memphis EOC*
Coast Guard Dispatch
Concierge Service Provider
Crittenden County 911 Emergency Call Center
Crittenden County EOC
Independent School District Dispatch
Local Federal Offices
MATA Transit Management Center
Memphis - Shelby County EMA System

Emergency Management Subsystem (Cont)
Private Tow/Wrecker Dispatch
Public/Private Ambulance Dispatch
TDOT HELP Dispatch

Information Service Provider Subsystem
AHTD HAR*
AHTD Highway Conditions Reporting System
AHTD Public Information Office
AHTD Website
Arkansas 511 System*
City of West Memphis Advertising and Promotion Commission Website
City of West Memphis Website
Concierge Service Provider
Marion Advertising and Promotion Commission Website*
Municipal Website
Private Sector Traveler Information Services
Public Tourism Websites
West Memphis MPO Website

Transit Management Subsystem
Area Agency on Aging Demand Response Transit Operations
Independent School District Dispatch
MATA Transit Management Center

Traffic Management Subsystem
AHTD - Crittenden County Local TOC*
AHTD District 1 TMC*
AHTD Highway Conditions Reporting System
AHTD Statewide TMC
City of Memphis TOC
Municipal Traffic Operations Center*
TDOT Memphis RTMC

Archived Data Management Subsystem
AHTD Maintenance and Construction Archive*
AHTD Traffic Data Archive
ASP Statewide Crash Records Information System
West Memphis MPO Planning Archive*

Roadway Subsystem
AHTD - Crittenden County ITS Field Equipment
AHTD CCTV
AHTD Field Sensors
AHTD ITS Field Equipment
AHTD Security Monitoring Field Equipment*
City of West Memphis Field Equipment
Crittenden County ITS Field Equipment
Municipal ITS Field Equipment*

Security Monitoring Subsystem
AHTD Security Monitoring Field Equipment*

Commercial Vehicle Check Subsystem
AHTD Weigh Stations
Arkansas Highway Patrol Dispatch

Wayside Equipment
Rail Operators Wayside Equipment

Weather Service
National Weather Service
Private Weather Services

Fleet and Freight Management Subsystem
Private Fleet Operations
Rail Operations Centers

Archived Data User Systems
Archive Data Users

Asset Management
AHTD Asset Management System
Crittenden County Asset Management System*
Municipal Asset Management System*

Basic Commercial Vehicle
Commercial Vehicles

Care Facility
Regional Medical Centers

Equipment Repair Facility
AHTD Equipment Repair Facility
City of West Memphis Equipment Repair Facility*
Crittenden County Equipment Repair Facility
MATA Maintenance Facility

Event Promoters
City of West Memphis Advertising and Promotion Commission Website
City of West Memphis Police Special Event System*
Marion Advertising and Promotion Commission Website*

Freight Equipment
Commercial Vehicle HAZMAT Detection Devices*

Maintenance and Const Admin Systems
AHTD Resident Engineers Office

Media
Local Print and Broadcast Media

Other Emergency Management
West Memphis Regional Mutual Aid Network*
Arkansas State Police Headquarters

Other MCM
City of Memphis Maintenance Operations
Other AHTD Area Maintenance Headquarters

Other Traffic Management
Other AHTD Regional TMCs*

Other Transit Management
City of West Memphis Planning and Development

Rail Operations
Rail Operations Centers

Storage Facility
AHTD Storage Facilities
City of West Memphis Storage Facility
Crittenden County Storage Facility
Municipal Storage Facility*

Transit Vehicle Operator
Independent School Bus Operator

Figure 3 – West Memphis Regional System Interconnect Diagram

Standards

With the required interfaces and interconnections identified, standards that could potentially be applied to the West Memphis Region were identified. Standards are an important tool that will allow efficient implementation of the elements in the West Memphis Regional ITS Architecture over time. They facilitate deployment of interoperable systems at local, regional, and national levels without impeding innovation as technology advances, vendors change, and as new approaches evolve.

Operational Concept

An Operational Concept documents each stakeholder's current and future roles and responsibilities in the operation of the regional ITS. The operational concept included in the West Memphis Regional ITS Architecture documents these roles and responsibilities across a range of transportation services. The services covered are:

- Traffic Signal Control;
- Highway Management;
- Incident Management;
- Transit Management;
- Traveler Information;
- Emergency Management;
- Maintenance and Construction Management;
- Archive Data Management; and
- Commercial Vehicle Operations.

Agreements

The Regional ITS Architecture for the West Memphis Region has identified several agency interfaces, information exchanges, and integration strategies that would be needed to provide the ITS services and systems identified by the stakeholders in the Region. Interfaces and data flows among public and private entities in the West Memphis Region will require agreements among agencies that establish parameters for sharing agency information to support traffic management, incident management, provide traveler information, and other functions identified in the Regional ITS Architecture.

With the implementation of ITS technologies, the integration of systems from one or more agencies, and the anticipated level of information exchange identified in the architecture, it is likely that formal agreements between agencies will be needed in the future. These agreements, while perhaps not requiring a financial commitment from agencies in the Region, should outline specific roles, responsibilities, data exchanges, levels of authority, and other facets of regional operations. Some agreements will also outline specific funding responsibilities, where appropriate and applicable.

The following is a list of potential agreements for the West Memphis Region based on the interfaces identified in the Regional ITS Architecture and recommended ITS projects in the Deployment Plan:

- Joint operations/shared control agreements among public agencies;
- Joint operations/shared control agreements between public agencies and private media and information service providers;
- Data sharing and usage agreements among public agencies;
- Data sharing and usage agreements among public agencies and private media and information service providers; and
- Mutual aid agreements among public agencies.

It is important to note that as ITS services and systems are implemented in the Region, part of the planning and review process for those projects should include a review of potential agreements that would be needed for implementation or operations.

ITS Architecture Documentation

The Regional ITS Architecture for the West Memphis Region is documented in a final report. Stakeholders were brought together to review the Regional ITS Architecture and provide feedback. The final architecture report was not prepared until after completion of the West Memphis Regional ITS Deployment Plan to allow for modifications based on information and input received for the Regional ITS Deployment Plan recommendations.

A website with the Regional ITS Architectures was also maintained. The website allowed stakeholders to review the architecture and provide comments directly to the project team through the website. At the time this report was published, the West Memphis Regional ITS Architecture website was being hosted at www.consystec.com. The site can be accessed by selecting the link to Arkansas, and then the link to the West Memphis Region.

WEST MEMPHIS REGIONAL ITS DEPLOYMENT PLAN

Although development of an ITS deployment plan was not required by the FHWA Final Rule for the architecture, the Final Rule does request a sequence of projects required for implementation. Capitalizing on the momentum and interagency dialogue established during the development of the Regional ITS Architecture, AHTD chose to expand on the project sequence requirement to develop a formal ITS deployment plan for the Region.

The West Memphis Regional ITS Architecture provided the framework and prioritized the key functions and services desired by stakeholders in the Region. The West Memphis Regional ITS Deployment Plan builds on the architecture by outlining specific ITS project recommendations and strategies for the Region and identifying deployment timeframes so that the recommended projects and strategies can be implemented over time. Agency responsibilities for implementing and operating the systems are also a key component of the Regional ITS Deployment Plan.

ITS Project Recommendations for the West Memphis Region

Using the needs, market package priorities, and any planned projects identified by the stakeholders during the architecture process, a list of recommended ITS projects for the West Memphis Region was developed. These projects were refined and additions and deletions were made by the Regional stakeholders at the ITS Deployment Plan Workshop on December 7, 2006.

For each functional area, stakeholders grouped projects into timeframes for deployment based on priority, dependence on other projects, technology, and feasibility. The timeframes have been categorized as short-term projects (5-year deployment timeframe), mid-term projects (10-year deployment timeframe), and long-term projects (20-year deployment timeframe). Actual deployment timeframes will be dependent on inclusion in the Transportation Improvement Program (TIP) and identification of funding sources. Most projects for the Region are infrastructure based; however, there are some recommendations that focus more on institutional practices and interconnectivity to enhance coordination and communications.

Each recommended project for the West Memphis Region was included in a table of projects grouped by functional area and separated into priorities by approximate implementation timeframe. These tables provided the name of the project, a project description, primary responsible agency, a planning level estimate of probable cost, an indication of whether or not funding had been identified for that specific project, and a listing of applicable market packages.

Table 2 summarizes the ITS projects recommended for the West Memphis Region. This summary is divided into the major program areas and subdivided by timeframe.

Table 2 – Recommended ITS Projects for the West Memphis Region

Project Time Frame	Project Name (Responsible Agency)
Travel and Traffic Management	
Short Term Projects 5-year Horizon	▪ AHTD District 1 Transportation Management Center (TMC) ▪ AHTD-Crittenden County Traffic Operations Center (TOC) ▪ AHTD Closed-Circuit Television (CCTV) Cameras and Dynamic Message Signs (DMS) on I-40 and I-55 ▪ AHTD America's Missing: Broadcast Emergency Response (AMBER) Alert DMS on I-40 ▪ AHTD Speed Detection on I-40 and I-55 ▪ AHTD Highway Advisory Radio (HAR) on I-40 ▪ TDOT ITS Equipment on I-40 and I-55 ▪ AHTD West Memphis Regional Traveler Information Web Site ▪ AHTD/City of West Memphis Signal Study ▪ AHTD/City of West Memphis Signal System Coordination and Upgrades ▪ Regional Communications Master Plan ▪ Regional Communications Implementation Phase 1
Mid Term Projects 10-year Horizon	▪ AHTD CCTV Cameras and DMS Expansion ▪ AHTD DMS on Arterials ▪ AHTD Standard Railroad Grade Crossing Coordination ▪ Regional Communications Implementation Phase 2 ▪ Media Liaison and Coordination
Long Term Projects 20-year Horizon	▪ Regional Communications Implementation Phase 3
Emergency Management	
Short Term Projects 5-year Horizon	▪ AHTD Motorist Assist Patrol (MAP) Dispatch ▪ AHTD Infrastructure Security Monitoring Phase 1 ▪ West Memphis Regional Mutual Aid Agreements ▪ West Memphis AMBER Alert Dissemination
Mid Term Projects 10-year Horizon	▪ AHTD Infrastructure Security Monitoring Phase 2 ▪ City of West Memphis Fire/EMS Signal Preemption

Table 2 – Recommended ITS Projects for the West Memphis Region (continued)

Project Time Frame	Project Name (Responsible Agency)
Maintenance and Construction Management	
Short Term Projects 5-year Horizon	▪ Maintenance and Construction Activity Coordination ▪ AHTD Portable DMS
Mid Term Projects 10-year Horizon	▪ AHTD/City of West Memphis Road Weather Data Collection
Public Transportation Management	
Mid Term Projects 10-year Horizon	▪ Transit Information for 511
Archived Data Management	
Mid Term Projects 10-year Horizon	▪ AHTD West Memphis Regional Data Warehouse

Projects of Statewide Significance

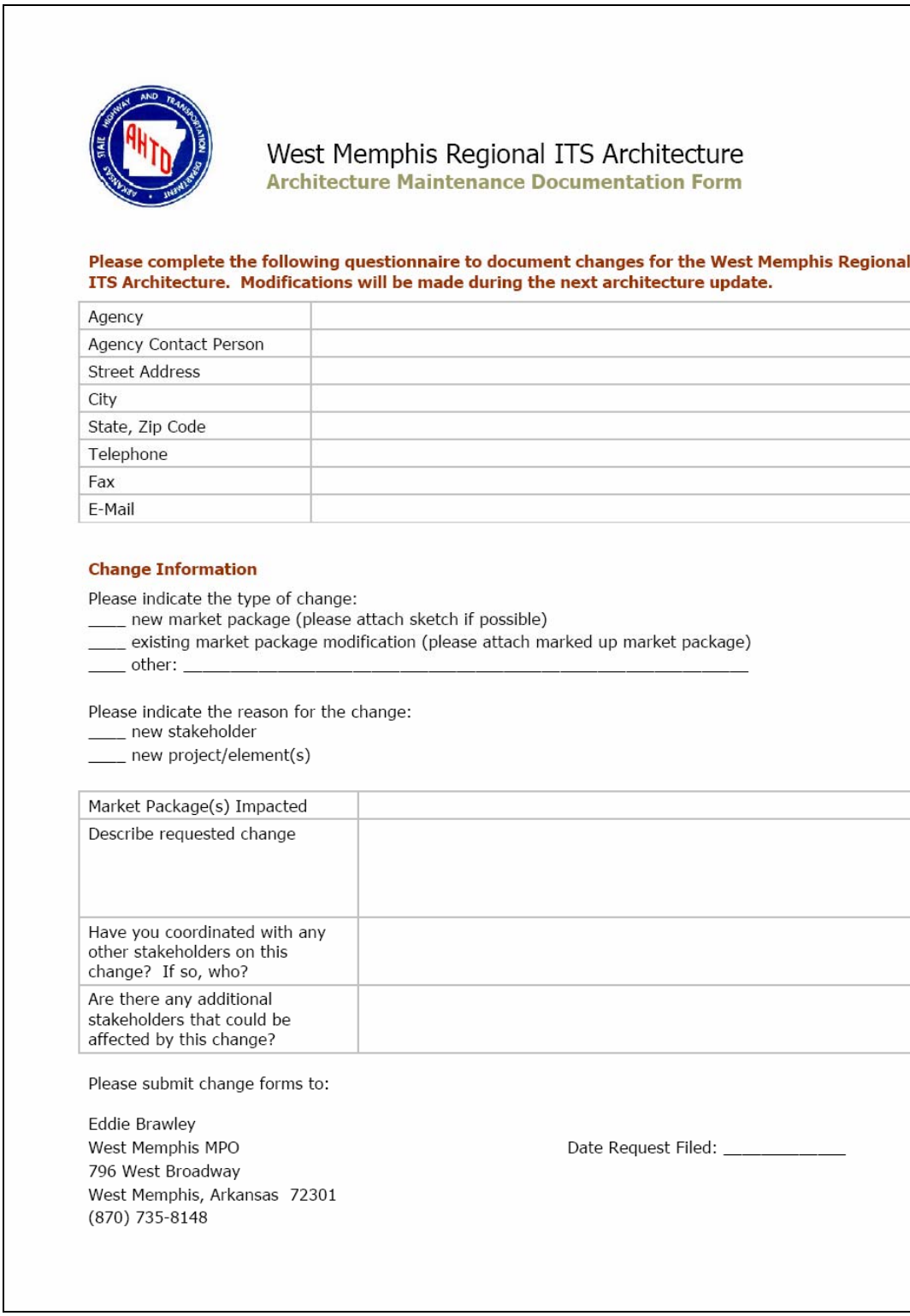
Projects of statewide significance are projects that the West Memphis Region felt were important to the Region, but that would most likely be implemented on a statewide level rather than a regional level. The stakeholders recommended that these projects be considered for deployment statewide and expressed a willingness to support the projects as needed. Because the implementation schedule for these projects will be driven at the state level and not the regional level, a timeframe for implementation has not been included. Costs have also not been included as further study will be needed to determine the costs on a statewide level and the costs should not have an impact on funding for the Region. These projects include:

- AHTD/TDOT Communications Connection;
- AHTD Statewide TMC;
- Arkansas 511 Implementation;
- DMS AMBER Alert Message Dissemination System; and
- CVISN Implementation.

MAINTAINING THE REGIONAL ITS ARCHITECTURE AND ITS DEPLOYMENT PLAN

The Regional ITS Architecture and ITS Deployment Plan developed for the West Memphis Region addresses the Region's vision for ITS implementation at the time the plan was developed. As the Region grows, needs will change and as technology progresses new ITS opportunities will arise. As an example, at the time this architecture was developed traffic congestion was not a major concern in the Region and therefore traffic management did not play a large role in this version. As more development occurs in the Region, traffic congestion on arterial streets could become a larger concern and may require a more significant focus. Shifts in regional focus as well as changes in the National ITS Architecture will necessitate that the West Memphis Regional ITS Architecture be updated to remain a useful resource for the Region.

At the December 2005 ITS Deployment Plan Workshop stakeholders outlined a procedure for documenting changes to the Regional ITS Architecture. Stakeholders also decided to hold a formal review of the Regional ITS Architecture and Deployment Plan every two years in coordination with the TIP update cycle and a major revision every four years to correspond with the Long Range Plan Update. As part of the reviews, the project listings in the Regional ITS Deployment Plan should be examined and updated as appropriate to reflect projects that have been implemented, changes in project priorities, and new projects that need to be added to the plan. In order to address changes that may occur between updates, stakeholders agreed to notify the West Memphis MPO of any changes so that all changes can be kept together and added to the Regional ITS Architecture during an update. A copy of the change documentation form has been included as **Figure 4**.



West Memphis Regional ITS Architecture
Architecture Maintenance Documentation Form

Please complete the following questionnaire to document changes for the West Memphis Regional ITS Architecture. Modifications will be made during the next architecture update.

Agency	
Agency Contact Person	
Street Address	
City	
State, Zip Code	
Telephone	
Fax	
E-Mail	

Change Information

Please indicate the type of change:
____ new market package (please attach sketch if possible)
____ existing market package modification (please attach marked up market package)
____ other: _____

Please indicate the reason for the change:
____ new stakeholder
____ new project/element(s)

Market Package(s) Impacted	
Describe requested change	
Have you coordinated with any other stakeholders on this change? If so, who?	
Are there any additional stakeholders that could be affected by this change?	

Please submit change forms to:

Eddie Brawley
West Memphis MPO
796 West Broadway
West Memphis, Arkansas 72301
(870) 735-8148

Date Request Filed: _____

Figure 4 – Architecture Maintenance Documentation Form