

Executive Summary

Clarksville Regional Intelligent Transportation System (CRITS) Architecture *Version 1.0*

On January 8, 2001, section 5206(e) of the Transportation Equity Act for the 21st Century (TEA-21) became effective, pertaining to conformance with the National Intelligent Transportation Systems Architecture and Standards. This Final Rule of the FHWA requires that all ITS projects conform to the National ITS Architecture as defined by the Final Rule. Additionally, it requires the National ITS Architecture be used to develop a regional ITS architecture, and the subsequent adherence of all ITS projects to that regional ITS architecture. It also recommends that development of the regional ITS architecture be consistent with the transportation planning process for Statewide and Metropolitan Transportation Planning.

In order to steer the creation of a functional ITS program that satisfies the demands of local and regional transportation stakeholders and to formulate a realistic vision for the future of the ITS network of Clarksville, Tennessee, Version 1.0 of the CRITS architecture has been developed. A secondary aim is to bring the region into compliance with the 2001 FHWA Final Rule on ITS Architecture and Standards Conformity.

This 25-year planning document defines the future of intelligent transportation technologies in the Clarksville. Its geographic scope is the planning area of the Clarksville Urban Area Metropolitan Planning Organization (CUAMPO) which includes all of the Cities of Clarksville, Tennessee and Oak Grove, Kentucky and portions of Montgomery County, Tennessee and Christian County, Kentucky. In addition, the Fort Campbell Military Reservation which straddles the Tennessee-Kentucky border is included.

In development of this architecture, 28 local, regional, state, and federal stakeholders have been consulted for input and assistance in defining the operation of the CRITS networks. Through this process, the system of inventory, services, and lines of communication have been stored in an electronic database that allows facilitated documentation and graphic analysis. This database is maintained by the CUAMPO and will be updated regularly by the organization.

A major component of this document is the implementation forecast for ITS technologies. Prior to the development of CRITS, several ITS strategies were developed for the region, but required the structured plan provided by this architecture development process. A map and project detail table describe the major near and long-term defined ITS projects in the region.

Detailed architecture information is included in the appendices of this document.

Map ID	Project	Route	Direction	Location	Jurisdiction	Plan Horizon (yrs)	Cost
1	DMS and CCTV Site 1	US 41A	Northbound	Near Tobacco Road	Clarksville, TN	0-5	\$2,140,000 ¹
2	DMS and CCTV Site 2	US 41A	Southbound	Near Herndon Oak Grove Road	Christian County, KY	0-5	
3	DMS and CCTV Site 3	TN 236	Westbound	Near Arbor Drive	Clarksville, TN	0-5	
4	DMS and CCTV Site 4	KY 911	Westbound	Near US 41A	Christian County, KY	0-5	
5	CCTV Site 5	US 41A	Northbound	South of Airport Road	Clarksville, TN	0-5	
6	CCTV Site 6	US 41A	Northbound	Between State Line Road and Ft. Campbell	Christian County, KY	0-5	
7	System Expansions/Technology updates		Unknown	Dunlop Lane area	Clarksville, TN	0-5	\$280,000 ²
	System Expansions/Technology updates		Various		Clarksville, TN	5-10	\$275,000 ³
	System Expansions/Technology updates		Various		Christian County, KY	5-10	\$555,000 ³
	System Expansions/Technology updates		Various		Clarksville, TN	10-25	\$2,442,000 ³
	System Expansions/Technology updates		Various		Christian County, KY	10-25	\$2,442,000 ³
	Traveler Information - Weather			Various		5-10	\$50,000
	Traveler Information - Natural Disaster			Various		5-10	\$50,000
	Traveler Information - Homeland Security			Various		5-10	\$50,000
	Traveler Information - Incident/Accident			Various		5-10	\$50,000
8	DMS and CCTV I-24 Corridor	I-24		Various		10-25	\$2,500,000
Total Years 0 - 5							\$2,420,000
Total Years 5 - 10							\$980,000
Total Years 10 - 25							\$7,384,000
Grand Total							\$10,784,000

¹ From "Clarksville/Fort Campbell Intelligent Transportation System Study". TDOT. August 2003.

² Estimated. Study on I-24, proposed hospital, and Clarksville-Montgomery County Industrial Park under development.

³ Estimated from "Clarksville Area 2030 Long Range Transportation Plan". Clarksville Urban Area MPO. June 2005.

