## 2006 Arkansas State Highway Needs Study and Highway Improvement Plan

#### **ARKANSAS HIGHWAY COMMISSION**

Jonathan Barnett, Chairman Siloam Springs

Carl S. Rosenbaum, Vice Chairman Little Rock

> R. Madison Murphy El Dorado

John Ed Regenold Armorel

Cliff Hoofman North Little Rock

#### **DEPARTMENT OFFICIALS**

**Dan Flowers** 

Director

Frank Vozel
Deputy Director and Chief Engineer

Scott E. Bennett

Assistant Chief Engineer -Planning

> Robert Wilson Chief Counsel

Phil McConnell
Assistant Chief Engineer Design

Alan Meadors

Planning and Research Engineer Ralph Hall
Assistant to the Director

Allan Holmes
Assistant Chief Engineer Operations

Larry Dickerson Chief Fiscal Officer

**Updated February 2007** 

#### TABLE OF CONTENTS

Page I. Introduction\_\_\_\_\_1 National Highway System\_\_\_\_\_3 II. Arkansas State Highway System\_\_\_\_\_5 III. Arkansas Primary Highway Network\_\_\_\_\_\_9 IV. Condition and Needs \_\_\_\_\_11 V. Historic Funding and Current Financial Information 25 VI. VII. Funding Options 33 Stewardship of the System\_\_\_\_\_40 VIII. IX. Public Involvement Summary\_\_\_\_\_\_45 Χ. Highway Plan Development\_\_\_\_\_47 2006 Highway Improvement Plan\_\_\_\_\_51 XI. Appendix - 2006 Highway Improvement Plan Project Listing .......55 Addendum .......57 Shrinking Highway Dollar......A-2

## **LIST OF FIGURES**

	Page
Figure 1—National Highway System	3
Figure 2—Congressionally-designated High Priority Corridors	4
Figure 3—National Highway System in Arkansas	5
Figure 4— Congressionally-designated High Priority Corridors in Arkansas	7
Figure 5—Arkansas State Highway System	8
Figure 6—Arkansas Primary Highway Network	10
Figure 7—Capacity Needs	14
Figure 8—1999 Interstate Pavement Condition Pie Chart	15
Figure 9—2006 Interstate Pavement Condition Pie Chart	15
Figure 10—2016 Interstate Pavement Condition Pie Chart	16
Figure 11—2006 Interstate Condition Map	16
Figure 12—2016 Interstate Condition Map	17
Figure 13—System Preservation Needs	20
Figure 14— Economic Development Connectors	22
Figure 15—State General Revenues vs. AHTD Net Highway Revenues	27
Figure 16—Total Federal Funds vs. Commission Discretionary Federal Funds	29
Figure 17—2006 Highway Improvement Plan	52

Figure A-1 – Fiscal Year 2006 State Revenue Sources	A-1
Figure A-2 – Shrinking Highway Dollar (Overlay Program)	A-2
Figure A-3 – Shrinking Highway Dollar (Widening Program)	A-3
Figure A-4 – Shrinking Highway Dollar (Bridge Program)	A-3

## LIST OF TABLES

Pa	ige
Table 1— Shoulder Improvement Needs1	8
Table 2— Arkansas' Congressionally-designated High Priority Corridors2	21
Table 3—2006 Arkansas State Highway Needs Study Summary2	23
Table 4—Summary of Needs and Improvements2	24
Table 5—History of Motor Fuel Tax Rates2	26
Table 6—Estimated Average Annual Construction Funds Available for Commission Discretion (2005-2009)3	31
Table 7—Fiscal Year 2005 State Revenue Sources (See Addendum)3	32
Table 8—Summary of Public Comments4	15

# 2006 ARKANSAS STATE HIGHWAY NEEDS STUDY and HIGHWAY IMPROVEMENT PLAN

#### I. INTRODUCTION

The mission of the Arkansas State Highway and Transportation Department, adopted by the Arkansas Highway Commission in 1996, is "to provide a safe, efficient, aesthetically pleasing, environmentally sound intermodal transportation system for the user." The Department is responsible for the maintenance and improvement of 16,419 miles of roadway and 7,120 bridges.

In 1991, the Arkansas General Assembly enacted a combination of gasoline and diesel fuel taxes, commercial vehicle registration fees and other measures to help finance a 15-year road program for the State Highway Commission to build and make improvements to approximately 6,035 miles of State highways and approximately 560 bridges. This program was referred to as the 1991 Highway Improvement Program (HIP). Since 1991, the Commission has let to contract more than 8,800 miles of highway improvements. In addition, approximately 1,400 bridges have been constructed, rehabilitated or replaced.

On June 15, 1999, Arkansas voters approved the proposal to issue Grant Anticipation Revenue Vehicle (GARVEE) bonds to fund the 1999 Interstate Rehabilitation Program (IRP). The Interstate Rehabilitation Program exceeded \$1.0 billion, which included funds from GARVEE bonds, Federal-aid Interstate Maintenance funds, and other highway revenue sources. The program provided for major improvements to the Interstate System. The work was to be let to contract in three years and completed in five years.

In December 2005, Arkansas voters were presented with a ballot initiative asking the question regarding the continued use of bonding as a financing mechanism for future Interstate rehabilitation. The ballot initiative failed. As proposed, this mechanism would have allowed the Commission to build upon the success achieved under the 1999 IRP and to continue issuing GARVEE bonds to be retired using the existing revenue

streams. The Commission's bond debt would not have exceeded at any one time the \$575 million authorized in 1999, and new bonds could have been issued as the original bonds were retired.

With the progression of the HIP and the IRP, the Commission and Department must look toward addressing the future needs of Arkansas' highway system.

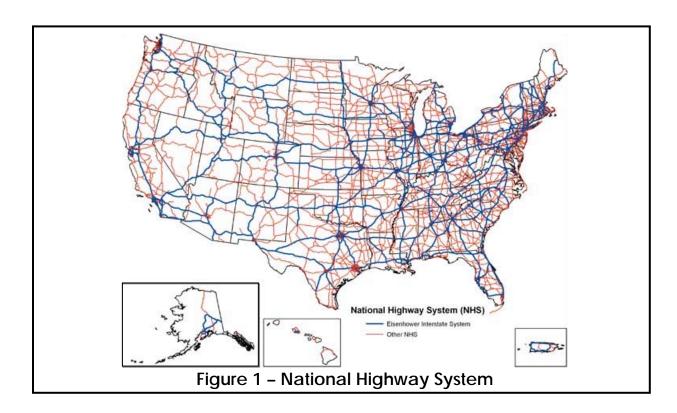
Future programs will continue to address the construction and maintenance needs of the highway system. This report identifies the condition, needs, and funding requirements necessary for preserving and improving Arkansas' highways. This report also presents a 2006 Highway Improvement Plan, which will serve as the Department's long-range plan. The Highway Improvement Plan utilizes a long range planning period of 20 years and an intermediate-range project planning period of 10 years. This plan is a fiscally constrained picture of improvements that can be reasonably expected over the next 20 years. In addition, this Highway Improvement Plan shows unfunded corridor needs to complete the development of a grid system of highways to serve regional traffic movement within the State as well as intrastate and interstate travel.

#### II. NATIONAL HIGHWAY SYSTEM

The National Highway System (NHS) (Figure 1) is a nationwide network of approximately 160,000 miles of roadways important to the nation's economy, defense, mobility, security, and safety.

The NHS includes the following subsystems:

- <u>Interstate</u> The Dwight D. Eisenhower System of Interstate and Defense Highways retains its separate identity within the NHS.
- Other Principal Arterials These are highways in rural and urban areas that provide mobility and access between major transportation facilities or other centers of activity such as Interstate highways, cities, major ports, airports, public transportation facilities, or other intermodal transportation facilities.
- <u>Strategic Highway Network (STRAHNET</u>) This is an important network of highways for the United States' strategic defenses and provides defense access, continuity, and emergency capabilities for defense purposes.
- <u>Intermodal Connectors</u> These highways provide access between major intermodal facilities and the other three subsystems that make up the National Highway System.



#### Congressionally-designated High Priority Corridors

Also included in the NHS are all of the Congressionally-designated High Priority Corridors (HPCs) (Figure 2).

Presently, 80 Congressionally-designated HPCs have been designated nationwide in Federal transportation legislation.

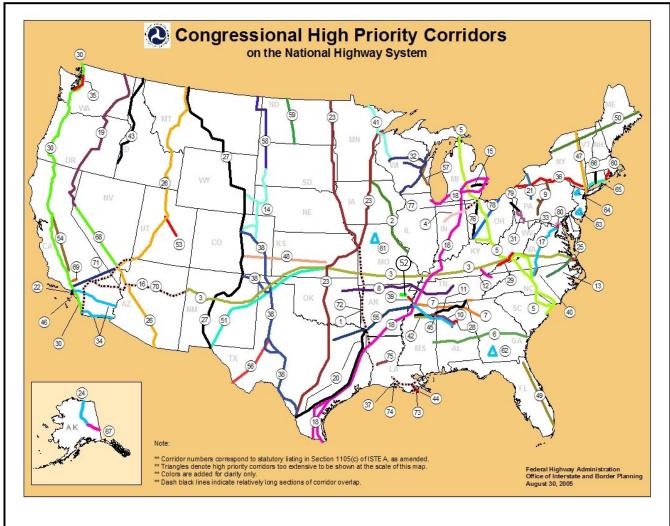


Figure 2 - Congressionally-designated High Priority Corridors

#### III. ARKANSAS STATE HIGHWAY SYSTEM

The State Highway System in Arkansas is composed of several elements, which together form a network that is extraordinarily large. It is the 12<sup>th</sup> largest state highway system in the nation (comparable in mileage to California, New York, Louisiana, Georgia, and Illinois). Inside this network are various subsystems that are important for safety, economic development, tourism, and statewide mobility.

The NHS shown in Figure 1 includes 2,693 miles in Arkansas which are shown in Figure 3. The subsystems of the Arkansas portion of the NHS are the same as those listed previously. They include Interstate, Other Principal Arterials, Strategic Highway Network, and Intermodal Connectors. In Arkansas the Interstate portion of the NHS includes the entire 655-mile Interstate Highway System. Future Interstate 555 from Interstate 55 to Highway 49 in Jonesboro will be added to the Interstate system and included in the mileage total upon completion of improvements bringing the route up to Interstate standards. This will result in a total of 705 miles of Interstate within the next few years.



Of the 80 Congressionally-designated High Priority Corridors shown in Figure 2, Arkansas has seven (7) such corridors. The seven designated corridors are listed below and shown in Figure 4. It should be noted that these corridors were not identified based on traffic conditions but were included by Congress in various pieces of Federal legislation.

- <u>Corridor 1</u> (Highway 71, future Interstate 49 overlapped by Corridor 72)
- Corridor 8 (Highway 412)
- Corridor 18 (future Interstate 69)
- <u>Corridor 39</u> (Highway 63, Interstate 55 to Marked Tree, future Interstate 555)
- <u>Corridor 52</u> (Highway 226, New Location of Highway 67 to Highway 49 in Jonesboro)
- <u>Corridor 55</u> (Interstate 30 from Dallas, Texas through Texarkana to Little Rock and Interstate 40 from Little Rock to the proposed Interstate 69 corridor)
- <u>Corridor 72</u> (The North-South corridor, along Interstate 49 North, from Kansas City, Missouri to Shreveport, Louisiana. This corridor overlaps Corridor 1 and will be designated as Interstate 49 once completed to Interstate standards.)

In addition to the NHS and the High Priority Corridors, the Department is responsible for the maintenance and improvement of a total State Highway System of 16,419 miles and 7,120 bridges. Figure 5 shows the Arkansas State Highway System.

The system size has continued to increase. When compared to funding and population, our State Highway System is extraordinarily large. The system mileage in 2005 was 16,419 miles, providing connections to cities and towns throughout the State.

The State Highway System in Arkansas has not always been this large. In 1923, the State Highway System mileage was 6,719 miles. By 1965, that mileage had doubled to 13,438 miles. At that time, Arkansas had the ninth largest highway system in the United States.

In Arkansas, the State Highway System constitutes only 17% of the total public roadway miles. However, the State Highway System carries 80% of

the total traffic and 95% of all heavy truck traffic that uses the public road system in Arkansas.

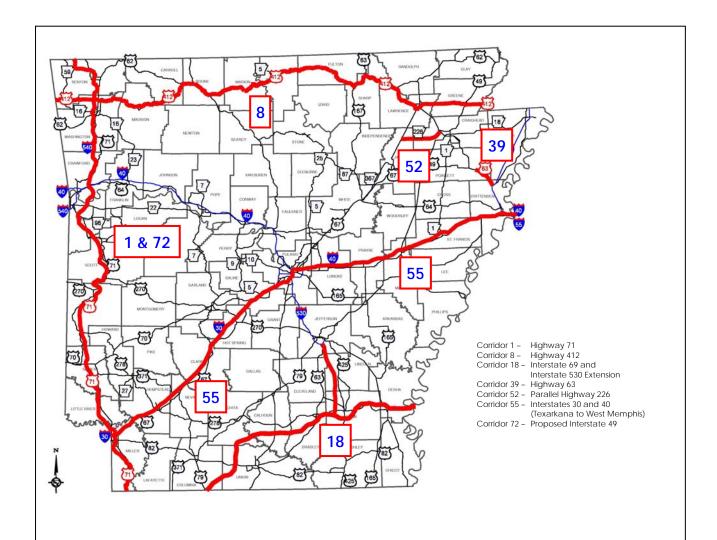
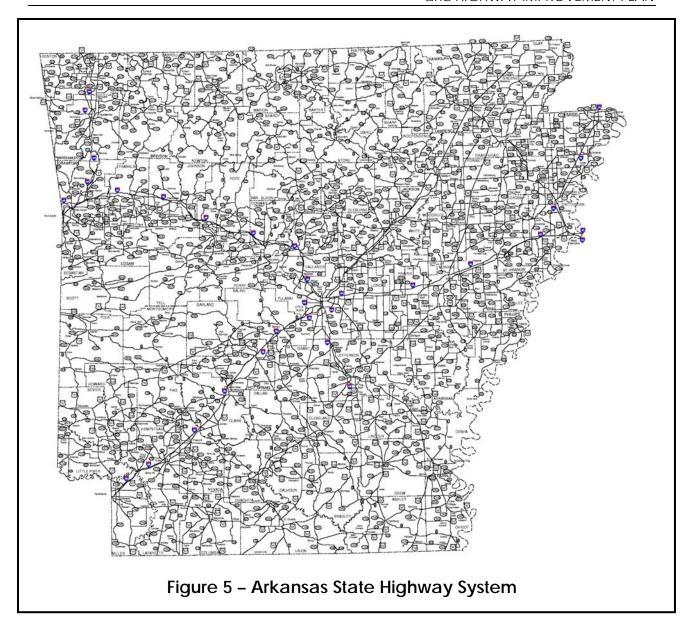


Figure 4 - Congressionally-designated High Priority Corridors in Arkansas



#### IV. ARKANSAS PRIMARY HIGHWAY NETWORK

In addition to the NHS, other significant routes have been identified as being important to the State's transportation service on the basis of their characteristics and performance. The Arkansas Primary Highway Network (APHN) is a system of 8,447 miles that carries approximately 92% of all travel on the State Highway System. This system accounts for over 50% of the total State Highway System. The APHN was developed and identified by Department staff to be a tool for long-range planning. This system carries no official signing or designation and does not receive any special or additional funding. However, the APHN was adopted by the Commission by Minute Order 2004-049 on April 14, 2004, as a grid system that provides interstate and regional movement, linkage to population centers, and critical service. It will be used as a tool to identify future highway improvements. The following components make up the APHN:

#### National Highway System (NHS) – 2,693 miles

- o These 2,693 miles are the backbone of Arkansas' Primary Highway Network and tie to the 160,000 miles that make up the nation's National Highway System.
- The NHS is made up of Interstate Highways, Other Principal Arterials, Strategic Highway Network (STRAHNET) routes, Intermodal Connectors, and Congressionally-designated High Priority Corridors.

#### Other Arterials – 4,223 miles

- o These 4,223 miles are functionally classified as "other" arterial highways and provide the following characteristics:
  - regional corridor movement
  - linkage of cities, larger towns, and other major traffic generators
  - spacing consistent with population density
  - connectivity with arterials in surrounding states

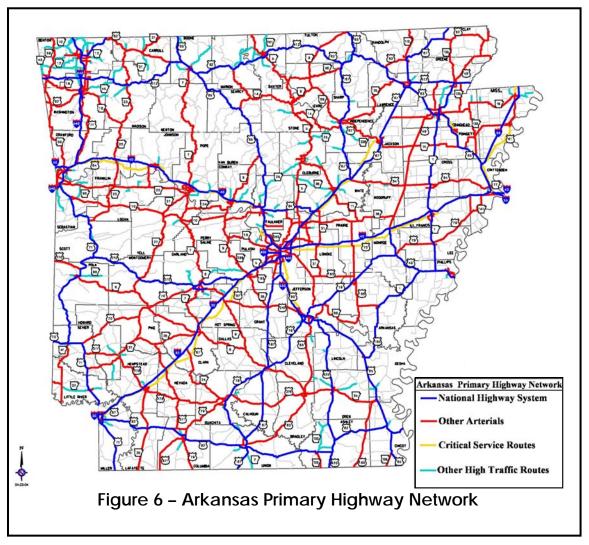
#### • Critical Service Routes – 516 miles

o These 516 miles parallel the existing freeway system and are critical routes when traffic must be detoured from the freeway during emergency situations.

#### Other High Traffic Routes – 1,015 miles

- o These 1,015 miles carry over 2,000 vehicles per day (vpd) and connect either to the National Highway System or to the other arterials.
- In general, to produce sufficient revenues for the operation and maintenance of a two-lane highway, a route must carry an Average Daily Traffic (ADT) of at least 2,000 vpd.

Figure 6 shows the Arkansas Primary Highway Network. It should be noted that at this time, mileages are not included for the segments of the new location future Interstate 49, future Interstate 69, and future Interstate 69 Connector that have not been constructed. Mileage for these and other new location improvements on the State Highway System will be added to the APHN on the appropriate level after the projects are completed. The APHN will also be updated periodically to account for changes in traffic volumes and travel patterns.



#### V. CONDITION AND NEEDS

#### Arkansas Highway Profile, Condition and Needs (1998)

In January 1997 (updated January 1998), the Department developed the "Arkansas Highway Profile, Condition and Needs." That report identified \$7.2 billion in Capacity and System Preservation needs over the next ten years. These projects included widening, reconstruction, resurfacing, bridge improvements, and new location needs.

In addition to the needs mentioned above, it was estimated that \$3.6 billion would be required for the development of the then four Congressionally-designated High Priority Corridors. These corridor improvements, along with another \$3.4 billion for improvements statewide, were identified by the public during 16 regional meetings held in 1998 to discuss transportation needs in Arkansas. This resulted in total needs and other identified improvements of \$14.2 billion. At the time, available funds were estimated to be \$3.9 billion over the next 10 years resulting in a funding shortfall of \$10.3 billion.

#### 2003 Arkansas State Highway Needs Study

The 1998 study was updated in the 2003 Arkansas State Highway Needs Study. At that time, the total needs were estimated to be \$16.1 billion. Capacity Needs were \$3.1 billion for New Location and Major Widening improvements. System Preservation Needs included Rehabilitation of the Interstate, Reconstruction, Resurfacing, Shoulder Improvements, and Bridge Rehabilitation or Reconstruction. System Preservation Needs totaled \$7.0 billion. Additionally, improvements to the then four Congressionally-designated High Priority Corridors were \$4.7 billion, and \$1.3 billion in improvements were identified to provide Economic Development Connectors.

While the outstanding needs in 2003 were \$16.1 billion, the Department's ability to fund those needs were only \$4.3 billion resulting in an \$11.8 billion fund shortfall. This information was presented to the public through a series of 10 statewide meetings.

2006 Arkansas State Highway Needs Study & Highway Improvement Plan The information contained in the 2003 report has been updated for 2006. Several aspects of the State Highway System were examined, including the need for highways as a tool for economic development, the need for

establishing a grid system of highways to serve regional traffic movement within the State as well as intrastate and interstate travel, and the role of the APHN in the identification of needs.

Improvements for the State Highway System are represented as Capacity Needs, System Preservation Needs, Congressionally-designated High Priority Corridor Development, and Economic Development Connectors. Each of these categories defines either a need or a system of corridor development for the State Highway System.

These costs include \$3.4 billion for New Location and Widening, \$8.8 billion for System Preservation, \$5.2 billion for the Congressionally-designated High Priority Corridors, and \$1.7 billion for Economic Development Connectors. Total 10-year needs on the State Highway System are \$19.1 billion. Table 3 shows a summary of the updated anticipated needs.

Of the Capacity and System Preservation Needs, Capacity Needs represent 28% and System Preservation Needs represent 72%.

The following provides a more detailed description of the information which will be summarized in Table 3.

Capacity Needs are identified as New Location and Major Widening. These proposed improvements address urban and rural needs related to congestion and safety. With growth in traffic volumes, continued improvements to the infrastructure are necessary. When appropriate, interchanges and intersections will be improved.

New Location Needs are typically identified as a result of individual planning studies. These studies are conducted to address congestion and safety concerns on existing facilities and to address new development and the resulting changes in traffic patterns.

Current needs are approximately \$1.8 billion to construct 250 miles of new location facilities. This includes two- and four-lane construction.

Major Widening Needs were determined by comparing existing traffic volumes along each segment to the highway capacity of that segment. The capacity of individual routes is determined by several physical

characteristics including the number of lanes, the lane width, and shoulder characteristics.

Rural routes with an Average Daily Traffic (ADT) of 9,000 or more vehicles per day on two-lane sections are considered congested. In urban areas, 13,000 ADT along two-lane sections is considered congested. All four-lane freeway sections are considered congested when daily traffic volumes exceed 50,000 vehicles per day (vpd). Six-lane freeway sections are considered congested when daily traffic volumes exceed 80,000 vpd.

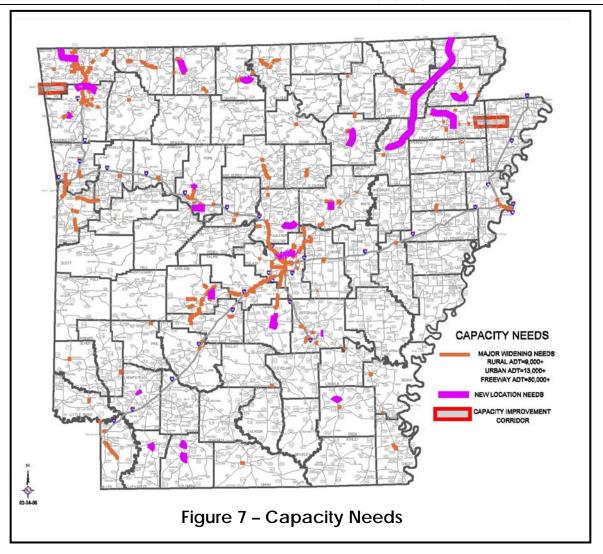
The capacities were developed using the Transportation Research Board's Highway Capacity Manual Software 2000. The traffic volumes, truck percentages, and physical characteristics along the routes were compared to the volumes necessary to warrant widening and to determine areas in need of improvement.

It is anticipated that approximately 516 miles will need to be widened within the next ten years at an estimated cost of \$1.6 billion.

Total Capacity Needs for the State Highway System are estimated to cost approximately \$3.4 billion. Figure 7 shows the location of anticipated Capacity Needs.

*System Preservation* is defined as Rehabilitation of Interstate highways, Reconstruction, Resurfacing and Shoulder Improvements on highways off the Interstate System, and Bridge Improvements.

Interstate Rehabilitation is defined as work required on sections of the Interstate System that will need pavement improvement by the year 2016. The improvements for Interstate Rehabilitation are based on information from the Department's Automatic Road Analyzer (ARAN). The ARAN contains sensors that measure the actual roughness and rutting of a pavement. A video of the pavement is collected from which technicians can identify and measure the number and severity of cracks and other distresses of the pavement. When this is combined with the automatic measure of roughness and rutting, an accurate assessment can be obtained of the overall pavement condition.



The State of Arkansas currently has approximately 655 Interstate miles. The Interstate System in Arkansas is expected to increase to 705 miles with the inclusion of future Interstate 555 (currently Highway 63). Under the 1999 Interstate Rehabilitation Program (IRP), 355 miles of Arkansas Interstates were improved.

Although there has been significant progress under the 1999 IRP, there will be additional needs in the future.

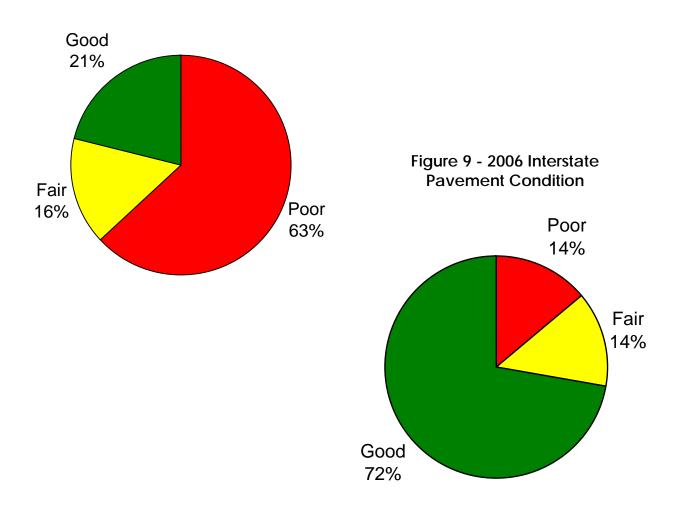
Figure 8 shows the Interstate Pavement Condition mileage percentages for categories of poor, fair, and good in 1999. Figure 9 shows the Interstate Pavement Condition upon completion of the IRP in 2006. Figure 10 shows the projected Interstate Pavement Condition in 2016. Figure 11 shows the

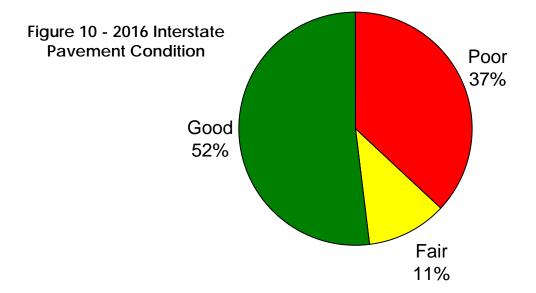
Interstate System pavement condition by location upon completion of the IRP in 2006.

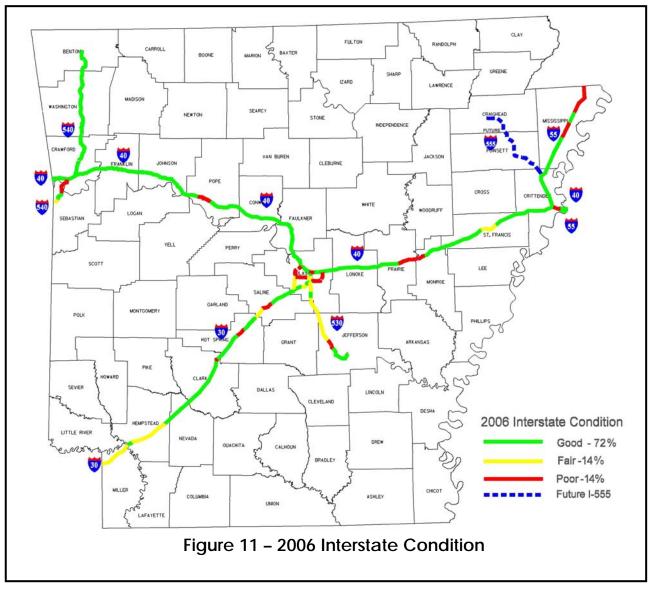
Based on the Department's Pavement Management System and projections of pavement condition, by 2016 roughly 340 miles will likely need some type of improvement. The cost for improving the 340 miles is approximately \$1.0 billion. This projected improvement location information is displayed in Figure 12.

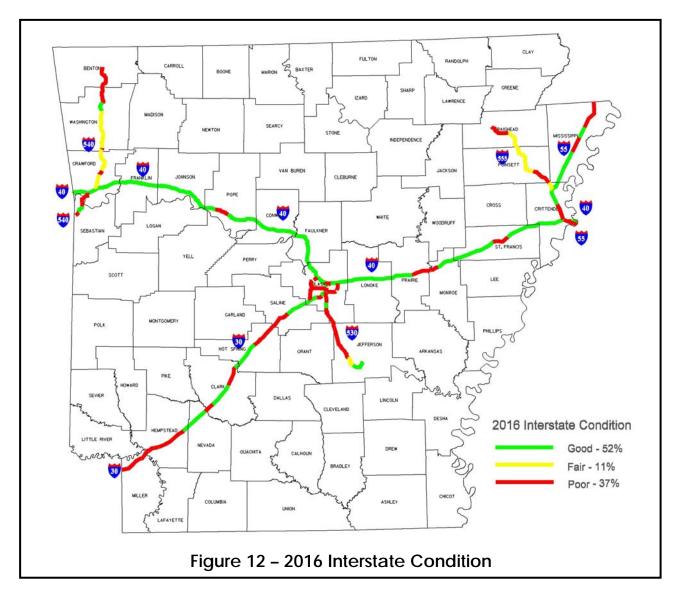
Nationwide over the last several years, Interstate pavement conditions have averaged 67% good, 17% fair, and 16% poor. Just to maintain the Arkansas Interstates over the next 10 years to be on par with the recent national average conditions would require approximately \$390 million.

Figure 8 - 1999 Interstate Pavement Condition









Reconstruction and Resurfacing Needs were determined by the Pavement Condition Rating (PCR), which reflects the drivability and visual condition of the roadway. The condition ratings range from 0.0 for unpaved facilities to 5.0 for new, superior pavements with a smooth surface, free of any distresses. A PCR rating between 0.0 and 2.8 is considered poor, 2.9 to 3.7 is fair, and a PCR of 3.8 and above is considered good.

 Reconstruction Needs for the next 10 years were estimated by identifying those routes considered "poor" based on the PCR. This yielded a Reconstruction Need of approximately 3,187 miles at a cost of approximately \$4.8 billion over the next ten years. Of these 3,187 miles, 1,026 miles (32%) are on the APHN and 2,161 miles (68%) are off the APHN.

Resurfacing Needs for the next 10 years were estimated by identifying those routes considered "fair" based on the PCR. This yielded Resurfacing Needs of approximately 6,155 miles at a cost of \$1.0 billion over the next ten years. Of these 6,155 miles, 2,376 miles (39%) are on the APHN and 3,779 miles (61%) are off the APHN.

Shoulder Improvements are needed to improve areas for driver recovery, to increase roadway capacity, to accommodate stopped vehicles, for bicycle routes, and for emergency use. Shoulders also serve to support the roadway materials.

- Shoulder Improvement Needs were determined using the AASHTO Policy on Geometric Design of Highways and Streets 2004. Routes needing shoulder improvements were determined by comparison of the ADT and existing shoulder width to the minimum required listed below:
  - Routes with an ADT greater than 2,000 vpd; minimum shoulder width of 8';
  - Routes with an ADT between 400 and 2,000 vpd;
     minimum shoulder width of 6'; and
  - Routes with an ADT less than 400 vpd; minimum shoulder width of 4'.
- A summary of Shoulder Improvement Needs is presented in Table 1.

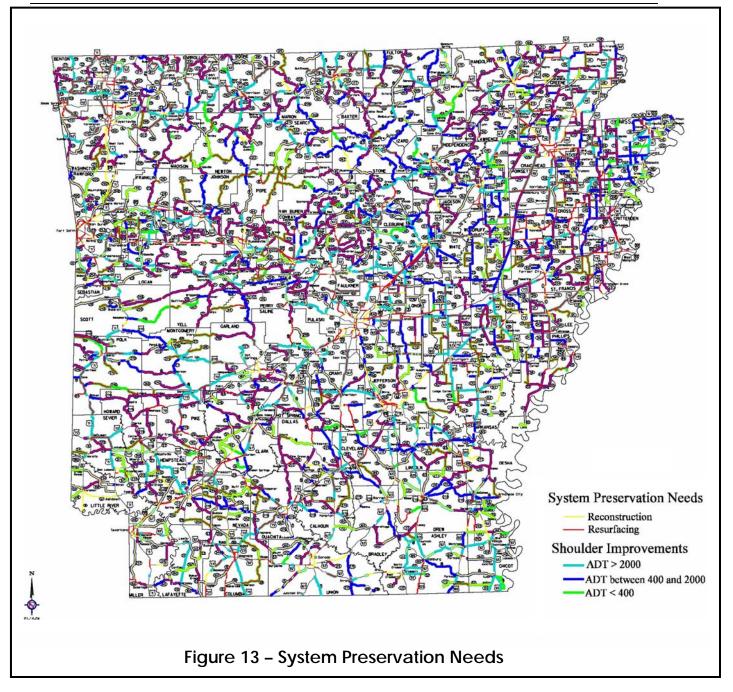
TABLE 1 SHOULDER IMPROVEMENT NEEDS								
SHOULDER IMPROVEMENTS								
Widen to 8 feet	1,557	\$171	1,445	93%	112	7%		
Widen to 6 feet	1,824	\$157	522	29%	1,302	71%		
Widen to 4 feet	345	\$24	15	4%	330	96%		
TOTAL	3,726	<i>\$352</i>	1,982	53%	1,744	47%		

Bridge Improvements Needs were determined from an inventory that the Department maintains on all bridges in the State. The information collected from inspections is used to calculate a sufficiency rating from 0.0 (worst) to 100.0 (best) for each bridge. The sufficiency rating is based upon structural adequacy and safety, serviceability and functional obsolescence.

Structurally deficient bridges exhibit deterioration or a lack of structural capacity that causes the structure to be unable to continue carrying the current legal load limit. A functionally obsolete bridge cannot adequately handle the existing volume of traffic because of geometric constraints, such as the width of the bridge, the vertical clearance for vehicles crossing the bridge, or the horizontal clearance for a roadway that passes under the bridge.

- The Department is responsible for the maintenance and inspection of 7,120 bridges on the State Highway System.
- Current estimates reveal that there are approximately 1,257 bridges (17.7%) on the State Highway System that are substandard and need to be rehabilitated or replaced. Of the 1,257 bridges, 297 (23.6%) are structurally deficient and 960 (76.4%) are functionally obsolete.
- The cost to improve these bridges is approximately \$1.6 billion over the next ten years.
- Of these 1,257 bridges, 1,047 bridges (83%) are on the APHN and 210 bridges (17%) are off the APHN.
- Of the 297 structurally deficient bridges, 186 bridges (63%) are on the APHN and 111 bridges (37%) are off the APHN.
- Of the 960 functionally obsolete bridges, 861 bridges (90%) are on the APHN and 99 bridges (10%) are off the APHN.

The total anticipated System Preservation Needs for the next 10 years is approximately \$8.8 billion. These needs are shown in Figure 13.



<u>Congressionally-designated High Priority Corridor Development</u> is the improvement of corridors that were designated by Federal transportation legislation and is not based on traffic needs. Arkansas now has seven Congressionally-designated High Priority Corridors (HPCs). The HPCs are shown in Figure 4 on page 7.

- Corridor 1 (Highway 71, future Interstate 49 overlapped by Corridor 72)
- Corridor 8 (Highway 412)

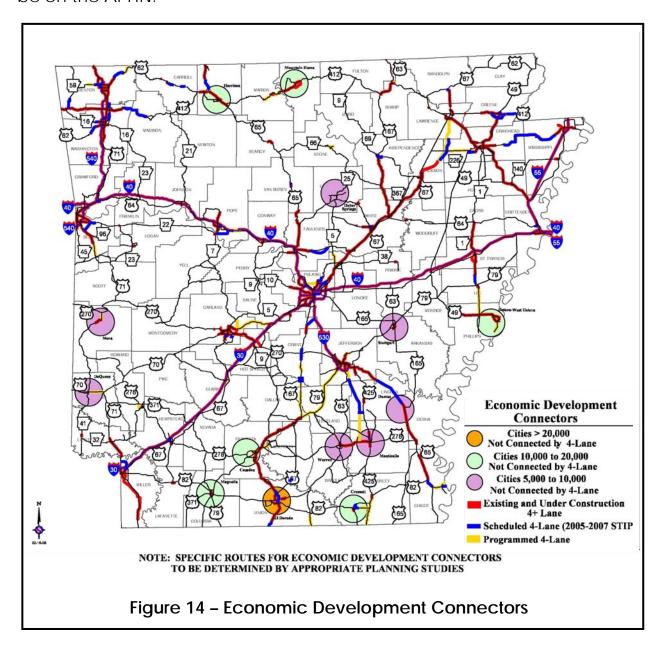
- Corridor 18 (future Interstate 69)
- <u>Corridor 39</u> (Highway 63, Interstate 55 to Marked Tree, future Interstate 555)
- <u>Corridor 52</u> (Highway 226, New Location of Highway 67 to Highway 49 in Jonesboro)
- <u>Corridor 55</u> (Interstate 30 from Dallas, Texas through Texarkana to Little Rock and Interstate 40 from Little Rock to the proposed Interstate 69 corridor)
- <u>Corridor 72</u> (The North-South corridor, along Interstate 49 North, from Kansas City, Missouri to Shreveport, Louisiana. This corridor overlaps Corridor 1 and will be designated as Interstate 49 once completed to Interstate standards.)

As shown in Table 2, the current estimated cost to complete the construction of these Congressionally-designated HPCs in Arkansas is approximately \$5.24 billion.

TABLE 2 ARKANSAS' CONGRESSIONALLY-DESIGNATED HIGH PRIORITY CORRIDORS						
MILES COST (billions						
CORRIDOR						
Corridor 1/72 (Highway 71, Future Interstate 49)	185	\$2.40				
Corridor 8 (Highway 412)	212	\$1.00				
Corridor 18 (Future Interstate 69)	185	\$1.70				
Corridor 39 (Highway 63, Future Interstate 555)	0*	\$0.00*				
Corridor 52 (Highway 226, Highway 67-Highway 49)	12	\$0.14				
Corridor 55 (Interstate 30 and 40, Texarkana to the Interstate 69 Corridor; any needed improvements will be included in the Capacity and System Preservation Needs)	N/A	N/A				
TOTAL	594	\$5.24				
*Note: All improvements are currently underway.						

<u>Economic Development Connectors</u> would connect cities with a population over 5,000 people to a freeway by a four-lane facility. This would provide improved transportation facilities for the movement of people and goods throughout the State. Economic Development Connectors for the State Highway System are estimated to cost approximately \$1.7 billion. Figure 14 shows cities with a population over 5,000 that would be connected.

This amount will provide widening improvements for approximately 450 miles, with the specific routes to be determined through appropriate planning studies and public involvement. Of these 450 miles, 100% would be on the APHN.



A summary of identified needs and proposed improvements by type is shown in Tables 3 and 4. Table 3 highlights the Construction, Engineering, and Right of Way Costs. Table 4 includes the percentage of miles and cost that are on or off the APHN.

TABLE 3 2006 ARKANSAS STATE HIGHWAY NEEDS STUDY SUMMARY								
Needs and Improvements	Construction Cost	Engineering and ROW Cost Total Cost		Percentage				
Capacity Needs								
New Location	\$1.4 billion	\$0.4 billion	\$1.8 billion					
Major Widening	\$1.3 billion	\$0.3 billion	\$1.6 billion					
Subtotal for Capacity Needs	\$2.7 billion	\$0.7 billion	\$3.4 billion	28%				
System Preservation Needs Interstate Rehabilitation Reconstruction Resurfacing Shoulder Improvements Bridge Rehabilitation or Reconstruction Subtotal for System Preservation Needs	\$0.9 billion \$3.9 billion \$0.9 billion \$0.3 billion \$1.3 billion <b>\$7.3 billion</b>	\$0.9 billion \$0.1 billion	\$4.8 billion \$1.0 billion \$0.4 billion \$1.6 billion					
Total for Capacity and System Preservation Needs	¥ 10 0 billob	\$2.2 billion	\$12.2 billion	100%				
Congressionally-designated High Priority Corridor Development Subtotal for Congressionally-designated	\$4.2 billion							
HPCs	\$4.2 billion	\$1.0 billion	\$5.2 billion					
Economic Development Connectors (Four-lane Connections to Cities with a Population Greater than 5,000)	\$1.4 billion	\$0.3 billion	\$1.7 billion					

Note: These costs are in 2006 dollars. The cost for Total Needs and Improvements could increase by as much as 79% by 2016. This is based on accounting for increases in the construction cost index.

\$1.4 billion

\$5.6 billion

\$15.6 billion

\$0.3 billion

\$1.3 billion

\$3.5 billion \$19.1 billion

\$1.7 billion

\$6.9 billion

Subtotal for Economic Development

Total for Congressionally-designated HPCs and Economic Development Connectors

Total Needs and Improvements

Connectors

TABLE 4 SUMMARY OF NEEDS AND IMPROVEMENTS										
	TOTAL MILES	MILES ON APHN	% MILES ON APHN	COST ON APHN (Billions)	MILES OFF APHN	% MILES OFF APHN	COST OFF APHN (Billions)	TOTAL COST (Billions)	% TOTAL MILES	% TOTAL COST
Capacity Needs										
New Location	250	250	100%	\$1.8	0	0%	\$0.00	\$1.8		
Major Widening	516	516	100%	\$1.6	0	0%	\$0.00	\$1.6		
Subtotal for Capacity Needs	766	766	100%	\$3.4	0	0%	\$0.00	\$3.4	5%	28%
System Preservation Needs										
Interstate Rehabilitation	314	314	100%	\$1.00	0	0%	\$0.00	\$1.0		
Reconstruction	3,187	1,026	32%	\$1.50	2,161	68%	\$3.30	\$4.8		
Resurfacing	6,155	2,376	39%	\$0.40	3,779	61%	\$0.60	\$1.0		
Shoulder Improvement	3,726	1,982	53%	\$0.25	1,744	47%	\$0.15	\$0.4		
Bridge Improvements (1,453)			67%	\$1.20		33%	\$0.40	\$1.6		
Subtotal for System Preservation Needs	13,382	5,698	43%	\$4.35	7,684	57%	\$4.45	\$8.8	95%-	72%-
Total for Capacity and System Preservation Needs	14,148	6,464	46%	\$7.75	7,684	54%	\$4.45	\$12.2	100%	100%
Congressionally-designated High Priority Corridor Development										
Corridor 1 (Hwy. 71/Future I-49)	185	185	100%	\$2.40	0	0%	\$0.00	\$2.40		
Corridor 8 (Hwy. 412)	218	218	100%	\$1.00	0	0%	\$0.00	\$1.00		
Corridor 18 (Future I-69)	185	185	100%	\$1.70	0	0%	\$0.00	\$1.70		
Corridor 39 (Hwy. 63/Future I-555)	0*	0	100%	\$0.00	0	0%	\$0.00	\$0.00*		
Corridor 52 (Hwy. 226 to Jonesboro)	12	12	100%	\$0.14	0	0%	\$0.00	\$0.14		
Corridor 55 (Interstates 30 and 40)**	0	0	100%	\$0.00	0	0%	\$0.00	\$0.00		
Subtotal for Congressionally- designated High Priority Corridors	594	594	100%	\$5.24	0	0%	\$0.00	\$5.24		
Economic Development Connectors										
Four-lane Connections to Cities with a Population Greater than 5,000	450***	450***	100%	\$1.7	0	0%	\$0.0	\$1.7		
Subtotal for Economic Development Connectors	450***	450***	100%	\$1.7	0	0%	\$0.0	\$1.7		
Total for Congressionally-designated HPCs and Economic Development Connectors	1,044	1,044	100%	\$6.94	0	0%	\$0.0	\$6.94		
* All improvements are current	15,192	7,508	49%	\$14.69	7,684	51%	\$4.45	\$19.14		

<sup>\*</sup> All improvements are currently underway.

Note: These costs are in 2006 dollars. The cost for Total Needs and Improvements could increase by as much as 79% by 2016. This is based on accounting for increases in the construction cost index.

<sup>\*\*</sup> Any needed improvements will be included in the Major Widening and Interstate Rehabilitation Needs.

<sup>\*\*\*</sup> For estimating purposes, representative route mileage of approximately 450 miles was assumed.

#### VI. HISTORIC FUNDING AND CURRENT FINANCIAL INFORMATION

#### **Historic Funding**

Arkansas has a State Gasoline Tax of 21.7¢ per gallon, which is below the national average of 23.48¢ per gallon. The current State Diesel Tax is 22.7¢ per gallon, which is below the national average of 23.79¢ per gallon.

The first State gasoline tax in Arkansas, of 1¢ per gallon, was levied in 1921. That was followed in 1923 with an increase to 4¢ per gallon. Additional increases resulted in a rate of 6¢ per gallon by 1931. The first State diesel tax was not levied until 1941 at 6.5¢ per gallon.

In 1932, the first Federal gasoline tax was levied. It fluctuated between 1¢ per gallon and 1.5¢ per gallon from 1932 until 1951 when it was increased to 2¢ per gallon. That same year, a 2¢ per gallon diesel tax was levied at the Federal level.

A complete history of both the State and Federal Motor Fuels Tax rates is provided in Table 5.

While both the State and Federal Motor Fuels Tax Rates have increased steadily in the last 70 years, these increases do not equate to an absolute increase in funding for several reasons. First, the motor fuels tax rates are assessed on each gallon of fuel sold unlike the traditional sales tax that is a percentage of the total sale. In addition, with increased fuel efficiencies for passenger vehicles in the last 15-20 years, the actual gallons of fuel purchased by an individual could decrease while the distance that is driven remains the same or increases.

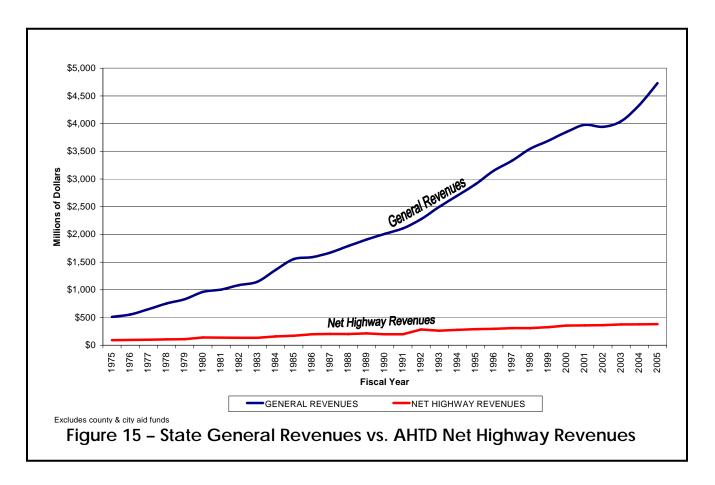
These and other factors have led to the low growth of motor fuels tax revenues in the State. This can best be demonstrated with the graph displayed in Figure 15. Department revenues have exhibited little growth when compared to the State General Revenues.

HISTO	TABLE 5 HISTORY OF MOTOR FUELS TAX RATES (CENTS PER GALLON)						
Year		ate	Federal				
real	Gasoline	Diesel	Gasoline	Diesel			
1921	1						
1924	4						
1927	5						
1931	6						
1932	6		1				
1933	6		1.5				
1934	6.5		1				
1940	6.5		1.5				
1941	6.5	6.5	1.5				
1951	6.5	6.5	2	2			
1956	6.5	6.5	3	3			
1959	6.5	6.5	4	4			
1965	7.5	8.5	4	4			
1973	8.5	9.5	4	4			
1979	9.5	10.5	4	4			
1983	9.5	10.5	9	9			
1984	9.5	10.5	9	15			
1985	13.5	12.5	9	15			
1987	13.5	12.5	9.1	15.1			
1989	13.7	12.7	9.1	15.1			
1990	13.7	12.7	14.1	20.1			
1991	18.7	18.7	14.1	20.1			
1993	18.7	18.7	18.4	24.4			
1996	18.6	18.6	18.3	24.3			
1997	18.6	18.6	18.4	24.4			
1999	19.6	20.6	18.4	24.4			
2000	20.6	22.6	18.4	24.4			
2001	21.7	22.7	18.4	24.4			

#### State Funding

The Department does not share in State General Revenues such as sales and property taxes. Highway improvements in Arkansas are funded only though highway user fees such as the fuel taxes and vehicle registrations. Of the highway user fees collected in Arkansas, the Department receives only 67.9% of what is collected. Three percent (3%) of the revenue goes to the Central Services Fund and the remaining 97% is distributed according to the Arkansas Highway Revenue Distribution Law. The Department receives 70% of the remaining funds and Cities and Counties both receive 15% of the remaining funds. This distribution results in the

Department receiving 67.9% of the total revenue, and Cities and Counties each receiving 14.5% of the total revenues collected.



Even though the State Sales Tax and the State General Revenues have increased substantially, this has not resulted in additional funds for highway improvements since the Highway and Transportation Department receives no State General Revenue.

In the past five fiscal years, State general revenue has increased over \$1 billion or an average of 4.2% annually. Highway revenue from motor fuels taxes (gasoline and diesel), vehicle registration fees, and miscellaneous sources has grown only \$55 million or an average of 1.4% annually over that same period. At the same time, construction costs have increased an average of nearly six percent annually. In 2005 alone, construction costs increased 31%.

#### Federal Funding

A similar trend is visible when comparing total Federal revenues to those Federal revenues over which the Commission has discretion. The current federal transportation act - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - authorizes \$295 billion nationwide for highways, highway safety, and public transportation. This represents a 35% funding increase nationwide over the previous act. However, only \$244 billion, or 83% of the authorized amount was guaranteed.

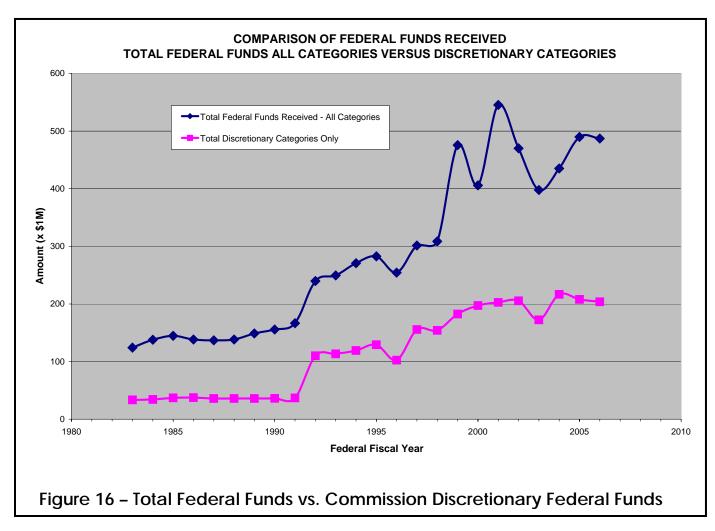
Although it has been reported that Federal-aid funds authorized for Arkansas would increase by 30%, apparently no additional Federal-aid funds will actually be received for construction. Federal-aid funds to the states are normally reduced through the annual appropriation and budgeting process to contain the deficit of the overall federal government budget or to pay for emergency relief for events such as the recent hurricanes. For Federal Fiscal Year 2006, Congress reduced Federal-aid highway funding through two rescissions and two direct takedowns, reducing Arkansas' Federal-aid funds by an estimated \$45 million.

Federal-aid funds are also limited by program requirements, meaning that the State does not have complete discretion over where to spend all of the funds. Certain funds must be passed through the Department to local entities for local projects; must be used for State non-construction programs (e.g. State Enhancements and State Planning and Research); must be used for categories that have specific requirements over which the Commission does not have total discretion (Interstate Maintenance, Bridge Replacement, Safety, etc.); and must be used as earmarked for Congressionally-designated projects or corridors.

On average in SAFETEA-LU, local projects will account for \$48 million annually, and State non-construction programs, non-discretionary programs and Congressionally-designated projects or corridors will account for \$224 million annually. This is a total of \$272 million annually over which the Commission has little or no discretion. These figures include Federal funds plus the required State match.

In addition, Federal-aid funds are further reduced by an obligation limitation, or a spending limit. In other words, States are not allowed to

spend all money that has been appropriated to them. In 2006, that obligation limitation is 85% of appropriated funds. By comparison, under the previous federal transportation act, this spending limit was a little over 91% of appropriated funds. The gap between total Federal-aid funds received by the Department and the funds over which the Commission has discretion has grown from \$90 million in 1983 to \$283 million in 2006. This trend is shown in Figure 16.



As that gap has grown, the Commission has also lost some discretion over State highway revenue. The majority of Federal-aid funds, unless they are dedicated to local projects, must be matched with State funds. As Congress has dedicated more and more Federal-aid funds to particular programs and projects, the Commission has had to dedicate more and more State funds to match these programs and projects. To compound the problem, as stated previously, State highway revenue growth has remained relatively flat.

When considering all these issues with Federal-aid and State funding, the Department's overall highway construction program will actually be somewhat smaller under SAFETEA-LU than it was under the previous transportation act. Based on these trends, the gap between identified needs and available funding will only increase.

#### **Current Financial Information**

Currently, the Department receives approximately \$505 million annually in Federal-aid funds. State revenues from the motor fuels tax and other highway user fees provide about \$393 million to the Department on an annual basis. This totals an annual average revenue of approximately \$898 million.

Of that \$898 million, approximately \$411 million is available for highway and bridge construction and of the \$411 million, only \$267 million is available for Commission discretion. Table 6 displays this and other information.

#### Revenue Sources

The Department has identified various State revenue sources for funding highway improvements. Table 7 shows various sources along with the amount of revenue generated. This "menu" assumes that 3% of the revenue goes to the Central Services Fund, and the remaining 97% is distributed as described earlier in accordance with the current Arkansas Highway Revenue Distribution Law. The Department receives 70% of the remaining funds and Cities and Counties both receive 15% of the remaining funds. This distribution results in the Department receiving 67.9% of the total revenue, and Cities and Counties each receiving 14.5% of the total revenues collected.

Although State revenues have increased slightly, if inflation and other related increases in construction costs are considered, one dollar in 2006 will fund only about 75% of the improvements that one dollar would have funded in 2001. Additionally, a recent report from the Transportation Research Board revealed that, nationally, transportation officials are concerned about the future stability of existing tax funding structures and the current environment of limited support for future tax funding increases. This concern stems from improved fuel efficiency and the possibility of lower consumption, rising fuel prices, additional environmental regulations, and the growing use of traditional highway funding proceeds for non-highway uses.

# TABLE 6 ESTIMATED AVERAGE ANNUAL CONSTRUCTION FUNDS AVAILABLE FOR COMMISSION DISCRETION (FISCAL YEARS 2005-2009)

	Funds Available (Millions)
Federal Funds	
Est. Average Annual Revenue from SAFETEA-LU	\$505
Subtotal for Federal Funds	\$505
State Highway Funds	
Est. Avg. Annual Revenue 2005-2009	\$393
Subtotal for State Highway Funds	\$393
Total for Federal and State Highway Funds	\$898
<b>Deductions</b> Non-AHTD Federal Funds, Non-Construction Programs, Federal Obligation Limitation, Fixed State Expenditures, and State and Federal Commitment for IRP	(\$487)
Subtotal for Deductions	(\$487)
Total for Federal and State Highway Funds minus Deductions	\$411
Funds Specific to Categories - No Commission Discretion Subtotal for Funds Specific to Categories	(\$144) <b>(\$144)</b>
Total Highway Construction Funds Available for Commission Discretion	\$267

#### **TABLE 7**

## (See Addendum for Fiscal Year 2006 Information)

#### **FISCAL YEAR 2005 STATE REVENUE SOURCES**

(in millions of dollars for SFY 2005)

	·	Total Annual Amount <sup>1</sup>	Annual Amount to AHTD	Annual Amount to Cities	Annual Amount to Counties
CL	IRRENT SOURCES TO AHTD, CITIES, AND COUNTIES				
Α.	Motor Fuels Revenue <sup>2</sup>	403.40 M	282.38 M	60.51 M	60.51 M
	Gasoline (21.7¢ per gallon)	279.86 M	195.90 M	41.98 M	41.98 M
	Diesel (22.7¢ per gallon)	123.40 M	86.38 M	18.51 M	18.51 M
	LPG (16.5 ¢ per gallon) / CNG (5.0 ¢ per gallon)	0.14 M	0.10 M	0.02 M	0.02 M
В.	Motor Vehicle Registration Fees	107.62 M	75.34 M	16.14 M	16.14 M
	Automobiles & Pickups	42.87 M	30.01 M	6.43 M	6.43 M
	Heavy Trucks (includes In-State and Out-of-State IRP fees)	47.93 M	33.55 M	7.19 M	7.19 M
	Other Vehicles	16.82 M	11.78 M	2.52 M	2.52 M
C.	Miscellaneous Revenues 3	26.43 M	18.51 M	3.96 M	3.96 M
D.	Total Current Revenues	537.45 M	376.23 M	80.61 M	80.61 M
ОТ	HER REVENUE SOURCES				
Α.	Highway User Sources				
	Additional 1-cent Motor Fuel Tax				
	1-cent Motor Fuel Tax 4	19.78 M	13.84 M	2.97 M	2.97 M
	1-cent gasoline tax	13.93 M	9.75 M	2.09 M	2.09 M
	1-cent diesel tax	5.85 M	4.09 M	0.88 M	0.88 M
	Increase Registration Fees on: Autos and Pickups by \$10	20.95 M	14.67 M	3.14 M	3.14 M
	In-State Trucks by \$150 (except pickups)	20.95 M 10.50 M	7.36 M	3.14 M	3.14 IVI 1.57 M
	In and Out-of-State <u>Heavy</u> Trucks from \$1,350 to \$1,500 <sup>5</sup>	3.64 M	2.56 M	0.54 M	0.54 M
	Remove Sales Tax Exemption on Motor Fuels	3.04 101	2.50 111	0.54 101	0.54 111
	(wholesale price of \$1.50 per gallon) 6	133.53 M	93.45 M	20.04 M	20.04 M
	Gasoline	94.03 M	65.81 M	14.11 M	14.11 M
	Diesel	39.50 M	27.64 M	5.93 M	5.93 M
	Transfer 4.50% Sales Tax on: 7				
	New Vehicles	144.50 M	101.14 M	21.68 M	21.68 M
	Used Vehicles	84.10 M	58.86 M	12.62 M	12.62 M
	Auto Repair Parts and Service 8	164.63 M	115.25 M	24.69 M	24.69 M
	Retail Tire Sales 9	11.50 M	8.06 M	1.72 M	1.72 M
	Off Road Diesel Fuel	17.51 M	12.25 M	2.63 M	2.63 M
	Transfer Single State Registration	1.81 M	1.27 M	0.27 M	0.27 M
	Weight Distance Tax (1 cent per mile) 10	25.32 M	17.72 M	3.80 M	3.80 M
	\$1 Battery Fee \$1 Tire Fee	0.60 M 3.10 M	0.40 M 2.10 M	0.10 M 0.50 M	0.10 M 0.50 M
	\$1 He ree	3.10 101	2.10 101	0.50 101	0.50 101
В.	Non Highway-user Sources	2/0.00 14	250.00 **		FF FO . N.4
	Increase General Sales Tax - 1%	369.98 M	258.98 M	55.50 M	55.50 M
	Increase Income Tax – 1%	20.75 M	14.51 M	3.12 M	3.12 M
	Individual Income Tax	18.19 M	12.73 M	2.73 M	2.73 M
	Corporate Income Tax Transfer Severance Tax 11	2.56 M 18.59 M	1.78 M 13.01 M	0.39 M 2.79 M	0.39 M 2.79 M
<b>.</b>		IVI PC.01	13.0110	2.19 IVI	2.19 IVI

#### Notes

- 1 Total Yearly Amounts exclude 3% to the Central Services Fund. Amounts are distributed 70% to AHTD and 15% to Cities and 15% to Counties.
- $2\quad \text{Excludes \$9.3M of Motor Fuel Tax Refunds.} \ \ \text{Rate includes underground storage tank fee of 0.2$^{$}$ per gallon.}$
- 3 Includes OS/OW Permits, Title Transfer Fees, Driver Search Fees, Interest, and other Fees.
- 4 Motor Fuel means the combined amounts of Gasoline and Diesel.
- 5 Amounts are for SFY 2002. Data for International Registration Plan (IRP) no longer collected.
- 6 Assumes no change in point of collection. Price of fuel only. Does not include State and Federal taxes.
- Assumes only the General portion (4.5%) will be available to AHTD while the remainder is dedicated for special purposes.
- 8 Amounts are from SFY 2001. Estimates supplied by the Department of Finance and Administration.
- 9 Retail tire sales calculated by AHTD based on information provided by the Department of Finance and Administration.
- 10 Based on 2.61 billion qualifying miles (loaded miles for trucks registered over 73,280 pounds).
- 11 Based on all severance taxes collected from both special and general revenue sources.

#### VII. FUNDING OPTIONS

This study has identified approximately \$19.1 billion in Needs and Other Improvements over the next 10 years. To finance such a large amount, consideration needs to be given to new and innovative financing options in addition to current funding mechanisms.

It may be necessary to consider several funding options when addressing comprehensive transportation funding. The following provides information on various mechanisms in use by the Department and by other State Departments of Transportation gathered from a nationwide survey.

#### <u>Development Impact Fee/Driveway Permit Fee</u>

- A Development Impact Fee is similar to a building permit in that it is often associated with planning, zoning, and subdivision regulations. Residential, commercial, and industrial development impacts the road system at the state and local levels. Those persons or developments responsible for increasing the use of the road systems could be made responsible for offsetting the increased costs of improving, rehabilitating, and maintaining roads.
- A fee, based on the type of development, could be collected on a one-time basis when the development occurs, or on an on-going basis tied to the market value as the property is developed and collected as part of the annual property taxes.
- The Department presently controls access through its "Driveway Permit" program. A development impact fee could also be assessed at this point.
- A mechanism to distribute the money between local and state governments would likely be required. Functional classification of all public roads affected should be considered as a factor for developing the fee structure. An administrative fee, similar to the 3% directed to the State Central Services Fund, for the collecting agency should be considered.
- State legislation is needed to assess the fee and provide for the collection, use, and distribution of the revenue in Arkansas.

## Logo Signs

 The Department currently administers a Logo Sign program to assist the traveling public. Businesses such as service stations, restaurants,

- campgrounds, hotels, and attractions display their logos at interchanges along the Interstate Highways.
- Businesses purchase the right to display their logo.
- The Department receives approximately \$500,000 annually from the Logo Sign program. This revenue only recoups the cost of the program and does not generate additional revenue.

#### Mileage Based Road User Fee

- This type of a funding mechanism requires the reporting of miles traveled by individual vehicles at some point, for example as part of the vehicle registration process.
- A mileage-based fee would result in the high-mileage travelers in Arkansas paying higher fees.
- This type of funding mechanism also would not generate any fees on the mileage accrued by out-of-state vehicles traveling through Arkansas.
- The Oregon Department of Transportation began to test a mileage based road user fee in a Pilot Program in May 2006 that will last for one year.

#### Public/Private Partnerships

- State or local governments or transportation authorities would be authorized to enter into agreements with private businesses to issue bonds, assess fees, and use such revenues for warranted transportation projects. A transportation project could include improving or widening an existing facility, constructing a new facility, or supporting transit services.
- This program could allow development and/or assessment of fees within the State Highway right-of-way, including the Interstate. This program could also allow the sale of motor fuel and repair of motor vehicles within the right-of-way.
- This would require a constitutional change to allow private enterprise within the highway right-of-way.

# Public/Public Partnerships

 Cities, counties, or other state agencies can partner with each other or the Department to enhance the acceleration of a project, as authorized in Minute Order 2005-007 approved by the Commission on January 5, 2005.

- For Department participation, projects must be approved by the local governing body, be on the State Highway System, and be eligible for State and Federal funding.
- Contributing factors to determine possible partnering are need, whether the project is on the Arkansas Primary Highway Network, right of way acquisition and utility fees, which party assumes the ongoing maintenance costs after completion, and the percentage of the project cost that will be funded by the partnering entity.

#### Regional Mobility Authorities

- Under Act 2275 of the 2005 Arkansas General Assembly, local entities now have the opportunity to leverage State and Federal funds allowing the acceleration of the construction of critical infrastructure and the prioritization of locally-specific development strategies to meet those needs.
- Through a cooperative agreement, a Regional Mobility Authority (RMA)
  may impose a sales tax, a motor vehicle tax or toll, issue bonds, or
  borrow/receive turnback funds after approval of the vote of the
  people.
- There are checks and balances included in this proposal in that only a County can establish the RMA through a Quorum Court resolution. Cities of the first class may become part of the RMA by City Council resolution.
- With the basis of the RMAs at the county level, intra-county competition is eliminated. By allowing multiple counties to form a RMA, inter-county competition is reduced.
- RMAs would allow local jurisdictions to capture revenue from sales to non-residents.

# Revolving Loan for Advanced Construction

- To establish a revolving loan for transportation projects, a source for initial capitalization of the loan program would be required. State and local governments would be eligible to obtain low or no-interest loans. Funds would be repaid over an agreed time but not more than ten years. Annual payments would be based on the local government's ability to make payments.
- Anticipated Federal-aid (NHS or STP) and State transportation funds, directly available to the State or local governments, could be used as repayment of the loan. Central Arkansas and West Memphis presently receive STP suballocations.

- State funds ("Turnback Funds") for all local governments are available.
   Any of these funds could potentially be used under this option. This could be structured through the State or a private financing corporation.
- State legislation is necessary to determine program details (eligible participants, terms, etc.), to ensure any interest paid by the borrower be credited to the loan program, and to appropriate program funding.

# <u>State Sales Tax, State Sales Tax on New/Used Vehicles, and State Sales Tax on New/Used Vehicle Parts</u>

- This type of funding mechanism, if used in Arkansas, would generate a significant amount of revenue to the Department.
- However, in Arkansas, the State sales tax has traditionally been reserved for the General Fund with 2/3 being used for educational purposes.
- Additionally, changes would be required at the collection level to identify those items that qualify as vehicle parts when purchased at a discount/department store.
- A change in legislation would be required to provide the Department with this source of revenue.

#### Tourism Tax

A Tourism Tax is levied on activities related to tourism such as admissions to theme or water parks, excursion rides, dog or horse races, or historic sites; services of furnishing hotel and motel rooms, condominiums, and tourist camps; camping fees; or rentals of watercraft, skis, or oars and paddles. This tax is often collected in the same manner as a State sales tax.

- Arkansas currently has a 2% Tourism Tax that generates approximately \$9 million annually.
- This existing tax is dedicated to the Tourism Development Trust Fund.
- An additional tourism-based tax could be levied to offset the cost of park road maintenance thus allowing those highway funds currently used in the parks to be used for other highway system improvements.
- State legislation would be required to levy the additional tax and to dedicate it for park transportation improvements.

#### <u>Transportation Improvement Districts</u>

State law in Arkansas does allow the creation of rural Transportation Improvement Districts. A simplified explanation of the process for the use of Transportation Improvement Districts follows:

- Establish Transportation Improvement Districts for corridor or local transportation projects. Property owners along the corridor meet and jointly decide to form an improvement district. Fees, as determined by these property owners, would be assessed annually on the property within the district boundary until the improvement is made and paid for, at which point the fee could cease.
- Upon the approval of the property owners, the fee could continue and the revenues would then be available to the Transportation Improvement District or local governments for other transportation projects or for maintenance and operation of transportation systems.

#### Variable Motor Fuels and Motor Vehicle Taxes and Fees (Indexing)

- The taxes and fees could be indexed to the National Consumer Price Index (CPI), the Arkansas General Revenue Growth Rate, the Construction Cost Index, or some other mechanism. The taxes and fees could be adjusted annually.
- Preliminary analysis indicates that by using the National CPI, the Arkansas gasoline tax rate could be approximately 20% higher (an additional 4.4¢ per gallon) by 2015. Using Arkansas General Revenue projections based on a previous 10-year history, the Arkansas gasoline tax rate would be approximately 29% (an additional 6.3¢ per gallon) greater than its current rate. The analyses use 2005 as the base year.
- State legislation is needed to assess the tax or fee and provide for the collection and use of the revenue. A minimum annual base rate should be established to ensure against a loss of funds.
- It should be noted that in light of recent higher fuel costs, some states have opted to suspend the indexing of their motor fuel taxes until a later date. Therefore, it may be appropriate to consider a cap on the fuel tax increases resulting from indexing.

# Bond Financing

Currently, Federal and State revenues are insufficient to assume debt for a large (\$19.1 billion) program. However, bonding could be a feasible option for a portion of an improvement program.

- Bonds may be issued to improve existing public or private roads or to construct new facilities.
- The Arkansas Highway Commission has the authority to issue revenue bonds (bonds that require backing from a dedicated revenue source) for additional Interstate and other State Highway improvements.
- Local governments have the authority to issue and have used revenue bonds for local transportation projects.
- General Obligation Bonds which are dedicated for a specific purpose or program require a vote of the people.

#### <u>Transportation Finance Corporation</u>

Presently, there is no Federal legislation authorizing a transportation finance corporation, but the concept was discussed during the SAFETEA-LU authorization process. The Arkansas Development Finance Authority may have the authority to establish and operate a transportation finance corporation. Therefore, Federal and State legislation should be further reviewed to verify authority to establish a private financing corporation and to permit the use of Federal and State funds.

#### State Infrastructure Bank (SIB)

Arkansas currently has the option to use the State Infrastructure Bank as a funding mechanism for highway construction. Details of steps that would need to be taken to use this option are detailed below:

- SAFETEA-LU allows states to contribute up to 10% of their National Highway System, Surface Transportation Program, Congestion Mitigation/Air Quality, Bridge, or Bonus Equity annual apportionments to capitalize a SIB.
- Use of these funds would reduce the funds available for other existing construction programs and therefore is not a viable option.
- Local governments could use the SIB for local transportation priorities and then repay the bank over a period of time not to exceed ten years. Terms of repayment would be established on a case-by-case.
- State legislation would be needed to realize the full benefits of a SIB, specifically if SIB funds are to be used on local projects. Currently, Department revenues may not be used for local projects.
- State legislation would also be needed to establish the process by which the program is funded and to establish the distribution of any funds.

#### Toll Facilities

As with the SIB, Arkansas currently has the option to establish tolls and to collect fees. There are additional steps that must be taken for local governments or private entities to participate in this funding mechanism.

- The Arkansas Highway Commission currently has authority to levy and collect toll fees.
- A Regional Mobility Authority also has the power to levy and collect toll fees.
- Additional State enabling legislation would be needed to allow other local governments or private entities to levy and collect toll fees or enter into public/private partnerships.
- Tolls could be levied for improving existing public or private roads or constructing new facilities.

#### Pass-Through Tolls

Pass-through tolls, also known as shadow tolls, are an innovative financing tool where a public or private entity (developer/operator) receives reimbursement for the construction, maintenance, or operation of a toll or non-toll facility from the sponsoring agency, not the road users.

- The amount of compensation paid to the developer/operator is a negotiated periodic payment from the State based on either traffic volume or vehicle miles traveled instead of being paid by the motorist.
- The system is not real tolling in that it gets no fee from the motorist but still relies on the general pool of taxation to provide the funds for repayment of construction and/or maintenance.
- Additional State enabling legislation may be needed to allow the contracting with a third party for these purposes.

#### VIII. STEWARDSHIP OF THE SYSTEM

The Department has traditionally had one of the lowest administrative costs per mile in the country as compared to other state highway agencies.

# Maintenance or Capacity Improvements

In the last 10 years, the Department has spent approximately 48% of its funds on Capacity Improvements and 52% on System Preservation. The identified needs from the <u>2006 Arkansas State Highway Needs Study and Highway Improvement Plan</u> show 28% of the needs are related to Capacity while 72% are related to System Preservation.

When examining the system as a whole it is important to consider the following:

- The Department is ranked 12<sup>th</sup> in the nation in the number of State Highway miles (comparable in mileage to California, New York, Louisiana, Georgia, and Illinois).
- Arkansas is the lowest in the nation (50th) in Administrative Costs Per Mile with only \$1,749. Administrative costs, which are primarily attributable to the Central Office and its employees, include salaries, expenses, and benefits (supplies, insurance, maintenance of buildings, etc.), which were only \$28.6 million in 2005, or about 3.3% of the Department's budgeted annual expenditures.

The Department is ranked 34th in the nation in Capital Outlay Per Mile and ranked 43rd in Maintenance Expenditures Per Mile. The actual annual expenditures of Federal and State funds per mile are \$48,503 for Capital Outlay and \$9,157 for Maintenance. The similar rankings (34th and 43rd) indicate relatively balanced construction and maintenance programs for the Department in relation to other State Highway Agencies. This program balance is achieved through the systematic consideration of maintenance/system preservation and capacity needs on the State Highway System.

To improve the State's ranking in terms of State and Federal expenditures for Capital Outlay, the State funds and some of the Federal funds spent would have to be redirected from maintenance expenditures to Capital Outlay.

If the entire amount being spent on maintenance (\$9,157/mile) could be diverted to Capital Outlay, it would only improve the State's ranking from 34th to 27th. While the diversion of these State Highway funds might improve Arkansas' standing for Capital Outlay as compared to the other states, it would have substantial negative impacts on the maintenance and preservation of the State Highway System.

It must be noted that Federal law states that it is "...the duty of the State transportation department to maintain ... any project constructed under the provisions of [Title 23] or constructed under the provisions of prior Acts." This equates to a maintenance responsibility of roughly 14,000 Federal-aid miles (85%) of the 16,419-mile State Highway System.

In addition to the Federal law, there is a similar State law that specifies, "It shall be the duty of the State Highway Commission to ... continue maintenance of all roads that are properly designated as state highways..." This includes the entire 16,419-mile System.

For almost 20 years, the Department's routine maintenance needs identified by the Department's Maintenance Management System have exceeded the available funding. In Fiscal Year 2004, only 62% of the routine maintenance needs were met, or \$43 million of \$69 million.

The portion of the State capital funds that are not used to match Federal-aid apportionments or allocations (approximately \$30 million annually) could be shifted and spent on maintenance. The amount of funds available to be shifted is relatively small because capital expenditures are closely tied to the Federal-aid apportionments and allocations (core programs such as Interstate, National Highway System, Bridge) and necessary matching State funds.

This redirection of \$30 million from Capital Outlay to Maintenance funds could change the Department's ranking for Maintenance Cost Per Mile from 43rd to 38th, which reflects a relatively small per mile increase for maintenance expenditures of approximately \$1,800 per mile. While this possible shift from Capital Outlay to Maintenance would meet the current outstanding routine maintenance needs, the reduction in Capital Outlay would mean that fewer capacity and reconstruction/rehabilitation needs would be met. The amount of funds that potentially could be shifted is small when compared to the Department's total Capital Program.

Because the amount of funds that could be shifted is relatively small, this potential shifting of funds would not make a significant impact on our ranking for Capital Outlay when compared to the other State Highway Agencies.

To appropriately balance expenditures on the System, the Department uses a Bridge Management System, Pavement Management System, Safety Management System, and Maintenance Management System. These systems, along with the close coordination with District Engineers and systems developed and maintained in the central offices, provide guidance in addressing the need for increased capacity versus the need for system preservation and in determining a balanced approach and appropriate expenditure of funds.

When determining the appropriate use of funds on the System, it is important to note that current needs outweigh available resources in categories other than maintenance. The 2006 Arkansas State Highway Needs Study and Highway Improvement Plan identifies \$3.4 billion in Capacity Needs and another \$8.8 billion in System Preservation Needs, totaling \$12.2 billion over the next ten years. Also identified in the 2006 Arkansas State Highway Needs Study and Highway Improvement Plan are \$6.9 billion in improvements for the seven High Priority Corridors and the Economic Development Connectors, bringing the total to \$19.1 billion for Capacity Needs, System Preservation, and Other Improvements. This amount is significantly greater than the approximate \$898 million in State and Federal funds available each year. Also, of the total \$898 million, only approximately \$411 million is available for highway and bridge construction and of that, only \$267 million is available for the Commission's discretion.

# New Technology

Although Intelligent Transportation System (ITS) improvements have not been identified as specific needs, the Department published the <u>Arkansas Statewide Intelligent Transportation Systems (ITS) Strategic Plan</u> (Arkansas Plan) in September 2002. The vision of the Statewide ITS Program in Arkansas is to create an integrated program that coordinates operations and incident management activities on the State Highway System; links traffic operations agencies, emergency response agencies, and transit agencies; provides real time travel information to the public; and conforms to the National ITS Architecture and applicable standards.

Additionally, the Department has initiated the development of Regional ITS Architectures and Deployment Plans for the following metropolitan areas: Northwest Arkansas, Fort Smith-Van Buren, West Memphis-Marion, Pine Bluff, Jonesboro, and Hot Springs. Both the Central Arkansas and Texarkana Regional ITS Architecture and Deployment Plans have been completed.

Planned improvements coordinated under the ITS Plan will generally include, but not be limited to, planning for the organized and efficient deployment of projects. Each metropolitan area will work within the framework of the Arkansas Plan and its individual architecture. Potential projects will be the responsibility of the Department working in conjunction with area stakeholders and metropolitan planning officials.

Traveler information can be provided in a variety of ways such as the posting of signs with emergency telephone numbers; Internet sites; links to closed circuit television cameras that monitor the freeway system; environmental sensors to indicate weather conditions; variable message signs to convey information to travelers; and highway advisory radio broadcasts. The Plan identifies the concept of operations but does not identify locations for implementation. The cost for implementing these ITS improvements is not included in the summary of costs for needs shown in this study.

# Value Engineering

The Department also continues to use Value Engineering as a potential cost saving method. This concept uses a team approach to define, analyze, and assign values to different design alternatives. Value Engineering studies allow the Department to implement the most cost efficient designs that still meet the goals of the overall project.

# <u>Design-Build</u>

Act 460 of the 2003 Regular Session of the 84<sup>th</sup> General Assembly authorized the Arkansas Highway Commission to enter into Design-Build contracts for highway construction projects. The objective of Design-Build is to improve project delivery over the conventional Design-Bid-Build method, and provide an alternate method of delivery for transportation projects in Arkansas. Currently, the Department has developed Design-Build Guidelines and Procedures for procuring and administering highway

design and construction services for a transportation facility within one contract.

Design-Build is a project delivery method that encompasses both project design and construction under one contract. One firm, or team of firms, is responsible for a project in its entirety. Because of coordinated efforts between the designers and the builders, Design-Build can be used for emergency projects where design and construction need to be expedited for the public benefit, projects with complex constructability issues, and/or unusual projects that do not lend themselves to traditional project delivery methods.

#### <u>Summary</u>

The question of the appropriate use of funds, whether for capacity improvement or system preservation, is not a new one. The previous comparison of capacity versus preservation needs indicates that priorities could be shifted from capacity improvement to system preservation.

To improve the State's ranking in terms of State and Federal expenditures for Capital Outlay, the State funds and some of the Federal funds spent would have to be redirected from maintenance expenditures to Capital Outlay. At this time, the benefits of shifting funds between these categories shifts would not be of adequate significance in either category to justify the reduction in funds.

Based on the results of the <u>2006 Arkansas State Highway Needs Study and Highway Improvement Plan</u>, the Department has estimated the cost for our 10-year Capacity Needs and Other Improvements to be \$19.1 billion. Current funding for the same period is expected to be approximately \$4.1 billion. The Commission is currently able to meet only 21% of the State's highway needs, including the cost of Economic Development Connectors and Congressionally-designated High Priority Corridors.

## IX. PUBLIC INVOLVEMENT SUMMARY

The preliminary findings of the 2003 Arkansas State Highway Needs Study were presented to the public in the spring of 2004 through a series of ten regional meetings. There were 1,302 attendees and 408 responses to a public information survey. The following table shows the responses to five questions asked in the survey.

Table 8 - Summary of Public	: Comme	nts	
Question	YES	NO	NO ANSWER
Are you satisfied with the existing progress being made to improve the State Highway System?  Would you support a new highway program that would generate additional revenue?  Do you agree that we should develop a statewide grid of four-lane highways?  Do you agree with the concept of Economic Development Connectors?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highways?  If you would support a new highways?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highways?  If you would support a new highway program, how do you recommend that additional revenue be generated?  If you would support a new highway program, how do you recommend to you recommend to you you you you you you you you you yo	9%		
3 11	82%	14%	4%
,	76%	18%	6%
Question  Are you satisfied with the existing progress being made to improve the State Highway System?  Would you support a new highway program that would generate additional revenue?  Do you agree that we should develop a statewide grid of four-lane highways?  Do you agree with the concept of Economic Development Connectors?  If you would support a new highway program, how do you recommend that additional revenue be			
do you recommend that additional revenue be	115 Toll 66 Bor 44 Sali 36 Spe imp 14 Inc 13 Lot 7 Rel 5 Cig 5 Pro 5 Ca 4 Imp Loc 4 Co 4 Loc Mo 3 Inc 2 Rer Exe 2 Tou 1 Rer	nds es Tax Increas ecial Use Fees pact fees) rease License tery ated Items Sa parette and Lic perty Tax sinos provement Dis cal Tax Author modity Hau bby Congress re Money ome Tax move Sales Ta	te (trucks & Fees lles Tax quor Tax strict with ity ling Fee for

These responses and other written comments received at the Regional Meetings reveal common themes around the State.

Support exists for a four-lane grid system.

• Seventy-six percent of the responders to the survey indicated they would support a four-lane grid system. This was echoed by several of the speakers as they highlighted the need for widening Principal Arterials and other corridors throughout the State.

Continue partnerships with local governments including the funding of projects with local revenue mechanisms.

 The concept of partnerships was mentioned frequently at the Springdale meeting. Local revenue mechanisms were suggested by three of the Metropolitan Planning Organizations and by speakers in El Dorado.

Improve links between the transportation system and adjacent land development.

 This concept was presented by several speakers and on comment forms. In Clarksville, the problem revolved around adequate capacity as it relates to adjacent development. In Texarkana, there were requests for access roads adjacent to the Interstate. In Jonesboro, there were questions about access relating to the future Interstate 555 corridor.

#### X. HIGHWAY PLAN DEVELOPMENT

#### <u>History</u>

In 1991, the Arkansas General Assembly enacted a combination of gasoline and diesel fuel taxes, commercial vehicle registration fees and other measures which, when combined with existing Federal and State revenue, would help finance a 15-year highway construction program referred to as the 1991 Highway Improvement Program (HIP).

The HIP was to build and make improvements to approximately 6,035 miles of State Highways and approximately 560 bridges. Since 1991, the Department has let to contract more than 8,800 miles of highway improvements. In addition, approximately 1,400 bridges have been constructed, rehabilitated or replaced.

Act 1027 of 1999 authorized the Arkansas Highway Commission to issue Grant Anticipation Revenue Vehicle (GARVEE) bonds, subject to approval of the citizens of Arkansas, in an amount not to exceed \$575 million. On June 15, 1999, Arkansas' voters overwhelmingly approved the proposal to issue bonds to fund the Interstate Rehabilitation Program (IRP).

The IRP exceeded \$1.0 billion, including funds from GARVEE bonds, Federal-aid Interstate Maintenance funds and other highway revenue sources. The program provided major improvements to approximately 50% of Arkansas' Interstate Highway System.

In 2005, Arkansas voters were presented with a ballot initiative asking the question regarding the continued use of bonding as a financing mechanism for future Interstate rehabilitation. The ballot initiative failed by a vote of the people. As proposed, this would have allowed the Commission to build upon the success achieved under IRP and to continue using GARVEE bonds for Interstate rehabilitation. These bonds would have been retired using existing revenue streams. The Department's bond debt would not have exceeded the \$575 million authorized in 1999, and could have been issued as the original bonds were retired.

With the progression of the HIP and IRP, and without the authority to issue bonds for further Interstate rehabilitation, the Commission and the

Department must look toward addressing the future needs of Arkansas' highway system.

# <u>Findings of the 2006 Arkansas State Highway Needs Study and Highway Improvement Plan</u>

The questions of funding new capacity versus the maintenance of existing facilities, the prioritization of funds between immediate needs and long-term corridor development, and the uncertainty surrounding the reduced 'buying' power of traditional funding methods are not new. Since 1998, the Department has addressed these questions many times in various arenas including needs studies, funding analyses, and improvement programs. The following findings of the 2006 Arkansas State Highway Needs Study and Highway Improvement Plan highlight these and other issues. These issues will continue to impact the decision-making process as transportation needs across the state are considered.

- Changes in traffic patterns and economic development occur continually.
- With the increase in vehicle miles traveled, average daily traffic, and truck percentages on the system, congestion and roadway and bridge deterioration will follow.
- Highway "needs" may be identified in three basic categories: Capacity Improvement, System Preservation and Other. Other may include Safety, Economic Development, Intermodal Connections, National Corridors, etc.
- Department expenditures over the last ten years have been approximately 48% for Capacity and 52% for System Preservation Improvements.
- Over the next ten years, 28% of Arkansas' identified highway needs are for Capacity Improvements and 72% are for System Preservation. This does not include the Congressionally-designated High Priority Corridors (HPCs) or Economic Development Connectors. The total cost for Capacity and System Preservation Needs, High Priority Corridors, and Economic Development Connectors is approximately \$19.1 billion.

- Over the past five years, construction costs increases have averaged approximately 6% annually, further deteriorating the Commission's ability to address Arkansas' highway needs.
- The anticipated available funding for the next ten years is expected to be insufficient to meet the State's highway improvement needs. Anticipated funding for this period is expected to be approximately \$4.1 billion – resulting in unfunded needs of approximately \$15.0 billion.

#### Improvement Plan Horizons

Three major program horizons – long-range planning, intermediate-range project planning, and short-range construction project scheduling – relate to the fact that over time, conditions that affect the transportation system change. These changing conditions include traffic patterns, land use development trends, and employment.

The *long-range planning period* required by Federal law for States and Metropolitan Planning Organizations (MPOs) is 20 years. This period is accepted and used extensively by the Department as the forecast period for planning and design activities.

Within that time frame the focus is primarily on corridor development and capacity improvements. Funding is allowed for system preservation and safety activities. Some specific system preservation and safety projects are identified for the intermediate-range construction program and included in the first 10 years of the long-range planning period. However, specific system preservation and safety projects are not identified for the last 10 years of the long-range planning period to allow for changing conditions.

The State and MPO long-range plans are required to be updated at least every five years. The long-range plans also have to be fiscally constrained and include a financial plan that shows the identified funding sources. Likewise, the 2006 Highway Improvement Plan will be updated at least every five years and will be fiscally constrained.

An *intermediate-range project planning period* of 10 years allows adequate time for development and funding of major projects. Capacity improvements, major system preservation, and safety projects are identified in this period. Typically, the identified projects are often phases

of ultimately larger projects in major corridors. The intermediate-range plan, or the first 10 years of the 2006 Highway Improvement Plan, will also be updated at least every five years as part of the update of the Highway Improvement Plan.

A short-range construction project scheduling period of three years has traditionally been adopted by the Department. However, the new guidelines included in SAFETEA-LU require the development of a four-year Statewide Transportation Improvement Program (STIP) and MPO Transportation Improvement Programs (TIP).

Specific projects are identified and proposed letting schedules are established. The STIP and TIPs will be updated at least every four years.

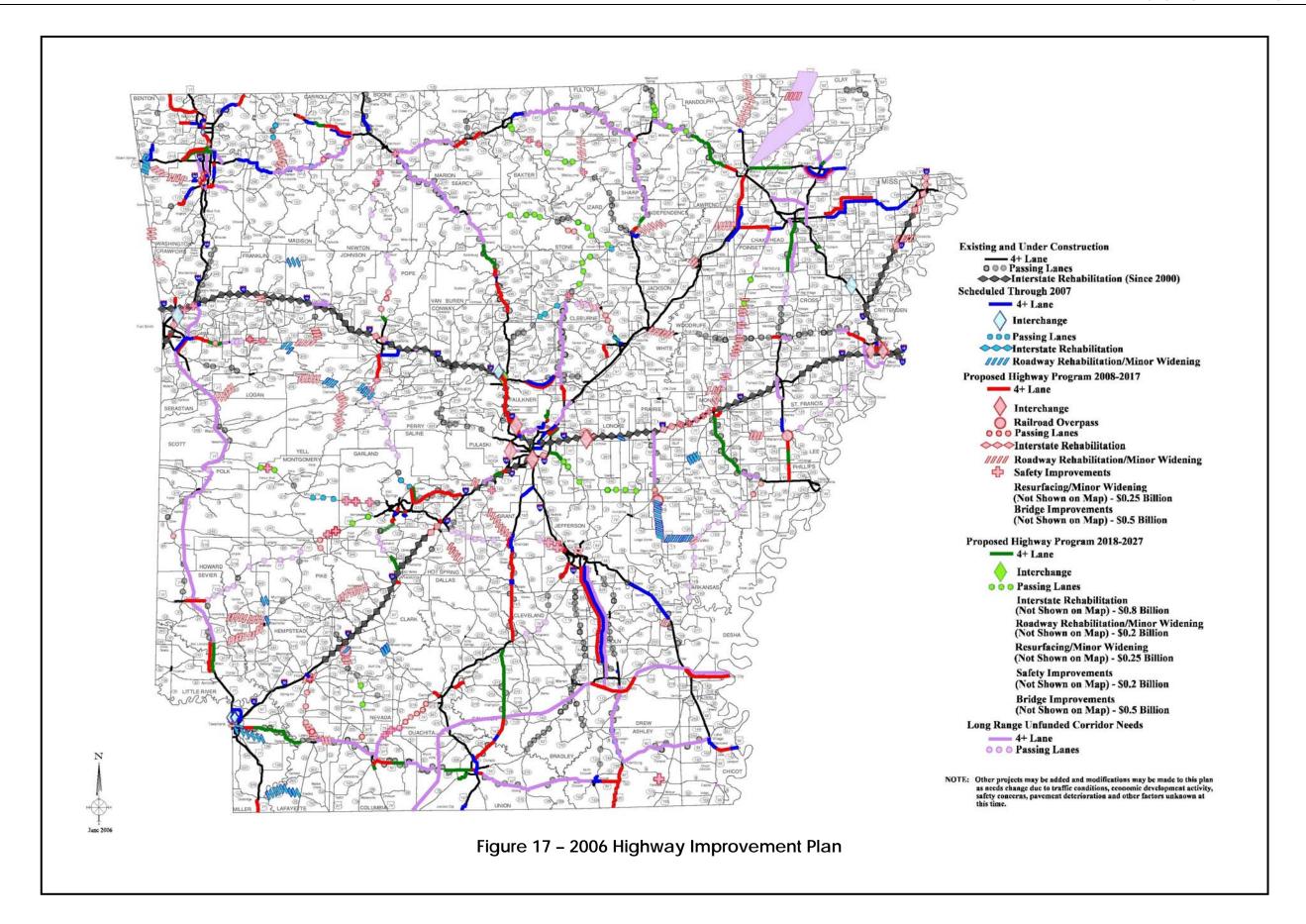
#### XI. 2006 HIGHWAY IMPROVEMENT PLAN

Projects have been identified that address both the capacity improvement and system preservation needs on the State Highway System. These proposed projects are shown in Figure 17 and are listed in Appendix A.

As stated earlier, a 10-year horizon allows the prioritization of projects during the intermediate-range project planning period as well as the development of larger-scale projects. Additionally, the further identification of projects beyond the 10-year horizon allows the development of these future projects as the current projects are completed.

Projects for the 2006 Highway Plan were selected based on need and available funding and serve as a guide for the development of future improvements. These proposed improvements provide for the further development of a four-lane transportation grid throughout the State with major widening and new location improvements. Passing lanes in selected corridors will serve as interim improvements prior to the ultimate widening to four lanes.

Associated with each project is a preliminary cost estimate for construction, right of way acquisition, preliminary engineering, and construction engineering. Inflation has also been considered when estimating the funds available within the Highway Improvement Plan period. Some of the proposed projects that are identified to address safety concerns are shown on Figure 17. Funds dedicated to statewide bridge and resurfacing improvements will be distributed according to the future needs and are not identified in this plan.



# **Appendix**

COUNTY	ROUTE	V TERMINI	TYPE WORK	LENGTH (MILES)	TOTAL FUNDS
		nay be added and modifications may be made to this plan as needs change due to traffic con, n, and other factors unknown at this time.	onditions, economic development activity, safety	concerns,	
Phillips	1	■ Arkansas Co. Line - Marvell (Passing Lanes)	Passing Lanes	2.0	\$3,000,000
Phillips	1	■ Highway 49 - Lee Co. Line	Major Widening (4+ lanes)	6.0	\$12,250,000
Lee	1	Phillips Co. Line - North	Major Widening (4+ lanes)	3.9	\$7,800,000
Lee	1	■ Marianna - South	Major Widening (4+ lanes)	4.0	\$10,000,000
Poinsett	1	Highway 14 - Craighead Co. Line (Phase I)	Major Widening (4+ lanes)	9.9	\$9,000,000
Craighead	1	Poinsett Co. Line - Highway 1B	Major Widening (4+ lanes)	5.1	\$15,000,000
Saline	5	Pulaski Co. Line - West	Major Widening (4+ lanes)	2.8	\$11,000,000
Pulaski	5	Saline Co. Line - Otter Creek	Major Widening (4+ lanes)	1.2	\$4,000,000
Lonoke	5	■ Highway 89 - Highway 319	Major Widening (4+ lanes)	5.5	\$20,000,000
Stone	5	■ Little Raccoon Creek-Cove Prong Creek (Recon. & Passing Lanes)	Passing Lanes	5.0	\$5,000,000
Baxter	5	Mt. Home - South (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
Clark	7	Interstate 30 - Hot Spring Co. Line	Major Widening (4+ lanes)	5.0	\$18,000,000
Hot Spring	7	Garland Co. Line - South	Major Widening (4+ lanes)	3.0	\$12,000,000
Garland	7	Hot Spring Co. Line - Highway 290	Major Widening (4+ lanes)	2.1	\$8,000,000
Garland	7	■ Highway 290 - Ouachita River (Hot Springs)	Major Widening (4+ lanes)	1.7	\$3,400,000
Garland	7	■ Hot Springs East - West Arterial, Highway 70 - Highway 5 (Phase I)	New Location	5.5	\$10,625,000
Garland	7	Hot Springs East - West Arterial, Highway 70 - Highway 5 (Phase II)	New Location	5.0	\$25,800,000
Yell	7	Ola - Centerville (Passing Lanes)	Passing Lanes/Safety	2.0	\$2,000,000
Yell	7	■ Highway 154 - Dardanelle	Major Widening (4+ lanes)	6.7	\$20,000,000
Pope	7	Dover Bypass	New Location	1.3	\$5,000,000
Pope	7	Dover - North (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Newton	7	C.R. 46 - Buffalo River Passing Lanes	Passing Lanes/Safety	1.5	\$5,000,000
Newton	7	Mill Creek - Highway 7S Safety Improvements (Marble Falls)	Safety	0.6	\$3,000,000
Pike	8	Glenwood - South (Passing Lanes)	Passing Lanes	1.0	\$2,000,000
Ashley	8	Highway 8 Shoulder Improvements (Parkdale - West)	Safety	1.0	\$500,000
-	9	Highway 222 - North	•	6.0	\$7,200,000
Hot Spring	9B	Highway 64 - Highway 9	Roadway Rehab/Minor Widening Roadway Rehab/Minor Widening	3.0	\$3,000,000
Conway	95	Melbourne - Brockwell (Passing Lanes)		1.0	\$1,000,000
Izard	9	Brockwell - Fulton Co. Line	Passing Lanes/Safety	8.4	
Izard Yell	10	Diockwell - Lukoli Go. Elile	Roadway Rehab/Minor Widening	7.5	\$10,100,000 \$6,500,000
White	13	riigiiway 507 50aar (wavolana) Tiigiiway 507 Worar (navana)	Roadway Rehab/Minor Widening New Location	4.6	
Stone	14	riigiiway 50 riigiiway 207 (Souriector) (Scarcy)		3.0	\$7,500,000 \$3,000,000
	14	Mt. View - Independence Co. Line (Passing Lanes)	Passing Lanes	1.0	\$1,000,000
Independence		Stone Co. Line - Locust Grove (Passing Lane)	Passing Lanes	4.0	\$10,000,000
Union	15	Newell - Highway 82  Washington Co. Line - West	Major Widening (4+ lanes)		
Benton	16	rasimgon oc. zine rrest	Roadway Rehab/Minor Widening	6.6	\$7,900,000
Washington Washington	16 16	<ul> <li>Benton Co. Line - Wedington Woods</li> <li>Highway 71B - Stone Bridge Road</li> </ul>	Roadway Rehab/Minor Widening Major Widening (4+ lanes)	8.0 3.5	\$9,600,000 \$10,000,000
Cleburne	16	■ Highway 5 - Pangburn (Selected Sections)	Roadway Rehab/Minor Widening	12.2	\$14,600,000
White	16	Cleburne Co. Line - South (Passing Lanes) (Searcy - North)	Passing Lanes	3.0	\$3,000,000
White	16	Highway 67B - Sunny Hill	Major Widening (4+ lanes)	3.0	\$10,000,000
Craighead	18S	Highway 18 - Highway 63	Major Widening (4+ lanes)	1.2	\$3,000,000
Craighead	18	Lake City - Manila (Phase II)	Major Widening (4+ lanes)	12.1	\$30,000,000
Mississippi	18	Lake City - Manila (Phase II)	Major Widening (4+ lanes)	6.2	\$15,000,000
Sebastian	22	Highway 255 - Highway 255	Major Widening (4+ lanes)	4.8	\$22,500,000
Sebastian	22	Highway 255 - Franklin Co. Line	Major Widening (4+ lanes)	6.0	\$15,000,000
Sebastian	22	Highway 252 - West (Passing Lanes)	Passing Lanes	1.0	\$2,000,000
Logan	22	Franklin Co. Line - Subiaco (Passing Lanes)	Passing Lanes/Safety	4.0	\$4,000,000
Logan	22	Subiaco - Midway	Roadway Rehab/Minor Widening	6.0	\$7,200,000
Logan	23	■ Highway 71 - East	Roadway Rehab/Minor Widening	6.8	\$10,000,000
Franklin	23	Logan Co. Line - Logan Co. Line	Roadway Rehab/Minor Widening	1.2	\$1,400,000
	23	Franklin Co. Line - Caulksville	Roadway Rehab/Minor Widening	5.0	\$6,000,000
Logan Franklin	23	Highway 64 - Interstate 40	Roadway Rehab/Minor Widening	3.5	\$4,200,000
Madison	23	■ Huntsville - North	Roadway Rehab/Minor Widening	12.0	\$14,400,000
Cleburne	25 25	Highway 25 Spur - Independence Co. Line (Passing Lanes)	Passing Lanes	4.0	\$4,000,000
Cleburne	25B	Highway 110 - Sunny Meadow (Heber Springs)	Safety	0.7	\$3,100,000
		Batesville - East	•		\$9,600,000
Independence	25 26		Roadway Rehab/Minor Widening	8.0	
Clark	26	■ Pike Co. Line - Highway 53	Roadway Rehab/Minor Widening	12.0	\$14,400,000

COUNTY	ROUTE	2008-2017	TERMINI	TYPE WORK	LENGTH (MILES)	TOTAL FUNDS
			ded and modifications may be made to this plan as needs change due to traffic conc er factors unknown at this time.	ditions, economic development activity, safety	concerns,	
Sevier	27		Highway 317 - Howard Co. Line	Roadway Rehab/Minor Widening	2.5	\$2,750,000
Howard	27	-	Sevier Co. Line - Nashville	Roadway Rehab/Minor Widening	10.5	\$10,250,000
Yell	27	•	Highway 80 - Highway 314	Roadway Rehab/Minor Widening	12.0	\$11,200,000
Lafayette	29	•	Lewisville - Hempstead Co. Line (Passing Lanes)	Passing Lanes	2.0	\$3,000,000
Lafayette	29	•	Lewisville - North	Roadway Rehab/Minor Widening	5.9	\$6,475,000
Hempstead	29	•	Lafayette Co. Line - Hope (Passing Lanes)	Passing Lanes	2.0	\$3,000,000
Hempstead	29B	•	Highway 29 - Highway 67 Safety Improvements (Hope)	Safety	1.5	\$4,000,000
Hot Spring	I-30	-	Social Hill - Rockport (F)	Interstate Rehabilitation	4.22	\$19,690,000
Grant	35	-	Saline Co. Line - Highway 167	Roadway Rehab/Minor Widening	13.5	\$16,200,000
Woodruff	38	-	Highway 306 - Highway 49	Roadway Rehab/Minor Widening	4.6	\$5,500,000
Pope	I-40	•	Mill Creek - Highway 331 (F)	Interstate Rehabilitation	6.79	\$27,060,000
Faulkner	I-40		Highway 65 Interchange	Interchange Improvements		\$10,000,000
Faulkner	I-40	•	Highway 65 - Pulaski County Line	Major Widening (6+ lanes)	16.1	\$87,000,000
Pulaski	I-40	•	Faulkner Co. Line - Interstate 430	Major Widening (6+ lanes)	9.0	\$30,000,000
Pulaski	I-40	•	Maumelle Interchange	Interchange Improvements		\$1,955,000
Lonoke	I-40	•	Highway 89 Interchange (Lonoke)	Interchange Improvements		\$2,550,000
Prairie	I-40	•	Cache River - West (F)	Interstate Rehabilitation	10.86	\$39,490,000
Prairie	I-40	•	Interstate 40 Cable Median Barrier (Biscoe - Monroe Co. Line)	Safety	0.9	\$500,000
Monroe	I-40	•	Interstate 40 Cable Median Barrier (Prairie Co. Line - Brinkley)	Safety	7.5	\$8,000,000
Crittenden	I-40	•	Highway 77 - Highway 131 (F)	Interstate Rehabilitation	3.56	\$15,290,000
Crittenden	I-40	•	Highway 77 Interchange	Interchange Improvements		\$5,000,000
Crittenden	I-40	•	Interstate 40/Highway 118 Interchange (Phase II)	Interchange Improvements		\$5,000,000
Sebastian	45	•	Highway 255 - Phoenix Avenue	Major Widening (4+ lanes)	1.0	\$8,200,000
Greene	49		Paragould - North	Major Widening (4+ lanes)	3.5	\$11,000,000
Cross	49	•	Hickory Ridge - Poinsett Co. Line	Roadway Rehab/Minor Widening	1.5	\$1,800,000
Cross, Poinsett	49		Fair Oaks - Waldenburg (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
Cross	49	•	Woodruff Co. Line - Hickory Ridge (Sel. Sections)	Roadway Rehab/Minor Widening	6.0	\$7,200,000
Woodruff	49	•	Monroe Co. Line - Cross Co. Line (Sel. Sections)	Roadway Rehab/Minor Widening	6.0	\$7,200,000
Monroe	49	•	Woodruff Co. Line - South	Roadway Rehab/Minor Widening	6.0	\$7,200,000
Monroe	49	•	Highway 17 - Interstate 40 (Brinkley)	Major Widening (4+ lanes)	1.0	\$5,000,000
Monroe	49		Phillips Co. Line - Highway 70 (Brinkley)	Major Widening (4+ lanes)	23.5	\$57,000,000
Miller	1-49	-	Louisiana State Line - Doddridge	New Location	4.5	\$54,437,500
Little River, Sevier	I-49	•	Ashdown Bypass - Highway 27 (Phase I)	New Location	1.4	\$14,325,000
Little River, Sevier	I-49		Ashdown Bypass - Highway 27 (Phase II)	New Location	6.6	\$68,300,000
Sebastian	I-49	•	Jenny Lind - Highway 22	New Location	6.0	\$73,587,500
Benton	I-49	•	Bella Vista Bypass	New Location	13.0	\$39,775,000
Clark	51	•	Interstate 30 - Highway 67	Major Widening (4+ lanes)	2.0	\$5,000,000
Jefferson	54	•	Highway 79 - Pine Bluff City Limits	Major Widening (4+ lanes)	1.2	\$4,750,000
Desha	54	•	Cherry/Waterman Intersection - West (Dumas)	Roadway Rehab/Minor Widening	4.0	\$4,800,000
Crittenden	I-55	•	Interstate 55 Cable Median Barrier (So. of Hwy. 64 - James Mill Road)	Safety	2.6	\$800,000
Mississippi	I-55	•	Highway 14 - Highway 158	Interstate Rehabilitation	7.90	\$19,750,000
Mississippi	I-55	•	Missouri State Line - South	Interstate Rehabilitation	14.27	\$35,700,000
Izard	56		Highway 223 - Highway 9 (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Washington	59	•	Highway 45 - South (Selected Sections)	Roadway Rehab/Minor Widening	3.0	\$3,600,000
Crawford	59	•	Natural Dam - Washington Co. Line (Selected Sections)	Roadway Rehab/Minor Widening	2.0	\$2,400,000
Crawford	59	•	Van Buren - Figure Five	Major Widening (4+ lanes)	2.5	\$3,500,000
Washington	62	•	Prairie Grove Bypass	New Location	3.0	\$25,000,000
Benton	62	-	North Garfield - Gateway	Major Widening (4+ lanes)	4.1	\$16,500,000
Carroll	62	-	Highway 143 - Berryville	Major Widening (4+ lanes)	3.0	\$7,400,000
Carroll	62	•	West of Green Forest - Alpena	Major Widening (4+ lanes)	7.5	\$25,000,000
Carroll	62		East of Berryville - Highway 103 South	Major Widening (4+ lanes)	4.5	\$16,000,000
Marion	62	•	Yellville - East	Major Widening (4+ lanes)	4.3	\$11,000,000
Marion	62	•	White River - West	Major Widening (4+ lanes)	4.1	\$19,000,000
Fulton	63		Sharp Co. Line - North (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Sharp	63		Hardy - East (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
Lawrence	63	•	Ravenden - Walnut Ridge/Hoxie (Phase I)	Major Widening (4+ lanes)	6.8	\$13,800,000
Lawrence	63		Ravenden - Walnut Ridge/Hoxie (Phase II)	Major Widening (4+ lanes)	13.0	\$26,200,000
			· , ,	,		

COUNTY	ROUTE	2008-2017	TERMINI	TYPE WORK	LENGTH (MILES)	TOTAL FUNDS
			dded and modifications may be made to this plan as needs change due to traffic	conditions, economic development activity, safety o	concerns,	
	•		her factors unknown at this time.	5	1.0	44 000 000
Arkansas	63	•	Stuttgart - North (Passing Lane)	Passing Lanes	1.0	\$1,000,000
Arkansas Crawford	63 64		Prairie Co. Line - Stuttgart	Major Widening (4+ lanes)	2.0 5.4	\$4,080,000 \$7,500,000
			Interstate 540 - Highway 64B	Safety		
Faulkner	64		Vilonia Bypass (Phase II)	New Location	10.4	\$37,700,000
White	64	•	Bald Knob - White River	Roadway Rehab/Minor Widening	3.8	\$4,500,000
Cross	64	•	Highway 350 - Highway 1 North (Wynne)	Major Widening (4+ lanes)	2.1	\$8,000,000
Cross	64C		Highway 1 - East	Roadway Rehab/Minor Widening	0.8	\$1,000,000
Crittenden	64	•	Highway 147 - West	Major Widening (4+ lanes)	5.7	\$20,000,000
Boone	65	•	Highway 65/Highway 62 Intersection Improvements (Bellefonte)	Safety		\$95,000
Van Buren	65	_	North of Botkinburg - South	Major Widening (4+ lanes)	3.5	\$12,400,000
Van Buren	65	•	Clinton - North (Phase I)	Major Widening (4+ lanes)	4.6	\$25,600,000
Van Buren	65	_	Clinton - North (Phase II)	Major Widening (4+ lanes)	2.9	\$16,300,000
Van Buren	65	•	Highway 336 East - Highway 336 West	Major Widening (4+ lanes)	3.2	\$9,775,000
Van Buren	65	•	Damascus - Highway 336 East	Major Widening (4+ lanes)	10.9	\$30,000,000
Faulkner	65B	•	Highway 266 - Bruce Street (Conway)	Safety	1.3	\$3,000,000
Stone	66		Mt. View - West (Passing Lanes)	Passing Lanes	4.0	\$4,000,000
Hempstead	67	•	Hope - East	Roadway Rehab/Minor Widening	4.4	\$4,560,000
Pulaski	67	•	Kiehl Ave Highway 440 (Phase I)	Major Widening (6+ lanes)	1.5	\$7,950,000
Pulaski	67		Kiehl Ave Highway 440 (Phase II)	Major Widening (6+ lanes)	1.5	\$8,050,000
Pulaski	67	•	Highway 440 - Redmond Road (Phase II)	Major Widening (6+ lanes)	1.8	\$14,395,000
Pulaski	67		Highway 440 - Redmond Road (Phase III)	Major Widening (6+ lanes)	1.8	\$9,075,000
Pulaski	67	•	James Street Overpass and Associated Improvements	Interchange Improvements		\$13,600,000
Craighead	67	•	Highway 226 - Lawrence Co. Line	New Location	8.0	\$26,000,000
Lawrence	67	•	Craighead Co. Line - Highway 67	New Location	10.5	\$99,000,000
Clay	67	•	Corning - West	Roadway Rehab/Minor Widening	5.0	\$6,000,000
Jackson	69	•	Highway 18 - Highway 14	Roadway Rehab/Minor Widening	2.8	\$3,324,000
Poinsett	69		Highway 63 - Highway 463 (Trumann)	Major Widening (4+ lanes)	1.7	\$7,300,000
Various	I-69	•	I-530 - Hwy. 35	New Location	33.0	\$150,000,000
Desha	I-69	•	Great River Bridge - Right of Way*	New Location		\$3,400,000
Drew	I-69	•	Monticello Bypass - Design	New Location		\$6,800,000
Drew	I-69	•	Monticello Bypass (Phase I)	New Location	16.0	\$27,875,000
Pike	70	•	Glenwood - East (Passing Lanes)	Passing Lanes	1.0	\$2,000,000
Montgomery	70	•	Pike Co. Line - Hot Spring Co. Line (Passing Lanes)	Passing Lanes/Safety	2.0	\$3,000,000
Garland	70		Hempwallace - West (Passing Lanes)	Passing Lanes	5.0	\$5,000,000
Garland	70	•	Hot Springs - Saline Co. Line	Major Widening (4+ lanes)	12.4	\$35,300,000
Saline	70	•	Garland Co. Line - Interstate 30	Major Widening (4+ lanes)	7.6	\$21,700,000
Monroe	70	•	Highway 49 - East (Brinkley)	Major Widening (4+ lanes)	1.5	\$5,000,000
Miller	71	•	State Line Ave.	Roadway Rehab/Minor Widening	2.9	\$2,950,000
Sevier	71	•	Highway 70 - Red Wing	Major Widening (4+ lanes)	3.0	\$9,000,000
Sevier	71	•	Red Wing - DeQueen	Major Widening (4+ lanes)	4.0	\$16,250,000
Polk	71	•	Highway 84 - Highway 246 (Passing Lanes)	Passing Lanes	1.0	\$1,000,000
Benton	71	•	Hwy. 72 Interchange Short-Term Improvements (Bentonville)	Interchange Improvements		\$600,000
Washington	71B	•	Fayetteville - Economic Development Corridor	TBD		\$7,650,000
Washington		•	Fayetteville - U of A Technology Corridor			\$2,720,000
Crittenden	77	•	Marion Railroad Grade Separation	Safety	0.0	\$9,221,875
Columbia	79		Highway 82 - Walker	Major Widening (4+ lanes)	3.0	\$10,000,000
Columbia	79	•	Magnolia - Ouachita Co. Line (Passing Lanes)	Passing Lanes/Safety	2.0	\$3,000,000
Ouachita	79	•	Columbia Co. Line - Camden (Passing Lanes)	Passing Lanes	12.0	\$12,000,000
Jefferson	79	•	Pine Bluff - Highway 54	Major Widening (4+ lanes)	5.0	\$20,000,000
Jefferson	79B	•	Highway 65B - North	Roadway Rehab/Minor Widening	1.6	\$6,100,000
Lee	79	•	Moro - East	Roadway Rehab/Minor Widening	3.8	\$4,560,000
				- 3		

<sup>\*</sup> The balance of funds earmarked for the Great River Bridge will be \$7,800,000, including state match, in Arkansas. Total construction cost is estimated to be \$518 million in Arkansas (\$715 million total). SAFETEA-LU Section 1904 - Stewardship and Oversight requires a Financial Plan and a Project Management Plan for construction projects with an estimated total cost of \$500 million or more.

The balance of earmarked funds and the state match will be accounted for in any Financial Plan and Project Management Plan

23 CED 430.113 (c)(1) of the construction project state by the Average of Planting William Was a subject to the Construction Project Management Plan

23 CED 430.113 (c)(1) of the construction project state by the Average of Planting Was a subject for Plantin

<sup>23</sup> CFR 630.112 (c)(1) states that construction must start by the twentieth year following the year in which right of way acquisition was authorized, or the State Transportation Department must repay to the FHWA the Federal share of the authorized amount.

COUNTY	ROUTE	2008-2017	TERMINI	ī	TYPE WORK	LENGTH (MILES)	TOTAL FUNDS
			fications may be made to this plan as needs change due	e to traffic conditions, economic	development activity, safety o	concerns,	_
A 4111	,	on, and other factors unk			<i>(</i> , )	4.5	<b>#F 000 000</b>
Miller	82	0 ,	45 - Highway 237	Major Wideni	-	1.5	\$5,000,000
Miller	82	g		Major Wideni	- ·	3.5	\$9,000,000
Miller	82	,	Co. Line - West	Major Wideni		15.6	\$40,000,000
Lafayette	82 82	Miller Co. I	Line - East	Major Wideni	•	6.5 1.9	\$17,000,000
Lafayette Columbia		Otampo	Fact		hab/Minor Widening		\$1,950,000
	82	magnona		Major Wideni	- ·	2.0	\$6,000,000
Columbia	82 82	Highway 9		Major Wideni	-	7.3 7.5	\$25,000,000
Union Union	82 82	El Dorado  Fl Dorado	- vvest - Strong (Phase I)	Major Wideni		7.5 3.4	\$22,000,000
Ashley	82	■ Crossett -		Major Wideni Major Wideni	•	5.0	\$10,000,000 \$15,000,000
Ashley	82		25 - Hamburg	Major Wideni	- ·	5.3	\$15,000,000
				•	- ·	5.9	
Chicot	82 88	1 dil view	Mississippi River Bridge	Major Wideni	•	1.5	\$16,125,000
Garland Garland	88	i iiguoii i o	rry Road (Highway 270-South) 70 - Highway 7 North (Hot Springs)	Major Wideni Major Wideni	-	0.9	\$5,576,000 \$3,500,000
Lonoke	89	■ Furlow - Lo		,		5.5	\$6,600,000
					hab/Minor Widening	4.0	
Benton	102		79 North - Greenhouse Rd.	Major Wideni	- ·		\$15,200,000
Pulaski	107	oud.com.	le Cato Road - Bayou Meto	Major Wideni	- ·	0.9	\$3,200,000
Pulaski	107	Gravel Rid  Highway 1		Major Wideni	- ·	3.0	\$9,000,000
Washington	112		12 Spur - North (Garland Ave.)	Major Wideni	- ·	1.0	\$3,000,000
Randolph	115	1 ocanonic	s - Missouri State Line	•	hab/Minor Widening	18.1	\$21,700,000
Crittenden	118	merstate	40 - North (West Memphis)	Major Wideni	- ·	4.3 0.5	\$15,000,000
Garland	128	,	ve Road - South	Major Wideni	- ·	0.5	\$1,000,000
Garland	128		ve Road - Highway 270B	Major Wideni	- ·		\$3,000,000
Mississippi	140		81 North - Highway 61		hab/Minor Widening	4.0	\$4,800,000
Arkansas	165	20			hab/Minor Widening	3.0	\$3,600,000
Arkansas	165	2011111 01	uttgart (Selected Sections)	•	hab/Minor Widening	27.7	\$30,564,000
Arkansas	165		ific Railroad Overpass (Stuttgart)	Safety		0.0	\$11,259,375
Lonoke	165		mnoke (Passing Lanes)	Passing Lane		10.0	\$10,000,000
Pulaski	165	Interstate 4		Major Wideni	- ·	5.0 5.2	\$15,000,000
Union	167		- Highway 335	Major Wideni	- ·		\$27,500,000
Union	167	ga, o	35 - Ouachita River	Major Wideni	- ·	3.7	\$14,300,000
Calhoun	167	9	ugh - Highway 172	Major Wideni	- ·	4.4	\$16,500,000
Calhoun	167		72 - Fordyce	Major Wideni	- ·	28.0	\$86,900,000
Dallas	167	. o.ujoo	Cleveland Co. Line	Major Wideni	- ·	7.5	\$26,787,500
Cleveland	167		Line (South) - Dallas Co. Line (North)	Major Wideni		8.7	\$33,700,000
Dallas	167	Olevelaria	Co. Line - Grant Co. Line	Major Wideni	- ·	4.0	\$14,600,000
Grant	167	Dalias Co.	Line - Sheridan	Major Wideni	- ·	9.9	\$35,750,000
Grant	167	Shoridan E	Bypass (Phase II)	New Location		8.9	\$20,000,000
Independence	167		9 - Highway 394	Major Wideni	-	2.7	\$7,000,000
Independence	167	Highway 3		Major Wideni	- ·	3.9	\$18,000,000
Sharp	167		2 to Highway 354 (Ash Flat)	Major Wideni	- ·	1.0	\$3,000,000
Baxter	177	izara con z	Line - Highway 5 (Passing Lanes)	Passing Lane	-	2.0	\$3,000,000
Izard	177		Line - Highway 223 (Passing Lanes)	Passing Lane	2S	2.0	\$2,000,000
Saline	183		Removal (East of Bauxite)	Safety	1.00		\$1,900,000
Jackson	226		7 - Craighead Co. Line	-	hab/Minor Widening	9.3	\$11,112,000
Craighead	226		ion of Highway 67 - Jonesboro	Major Wideni	- ·	11.7	\$42,562,500
Washington	265	•	e City Limits - Highway 412	Major Wideni	- ·	1.0	\$4,700,000
Montgomery	270		Line - East (Passing Lanes)	Passing Lane	2S	2.0	\$2,000,000
Montgomery	270	,	Realignment (Blowout and Mauldin Mountains)	Safety	10. 6.1	1.0	\$2,297,000
Garland	270		s - West (Passing Lanes)	Passing Lane	-	3.0	\$3,000,000
Hot Spring	270		30 - Highway 270 West (Malvern Bypass)	New Location		2.0	\$5,000,000
Jefferson	270		Line - White Hall (Passing Lanes)	Passing Lane	-	3.0	\$3,000,000
Ouachita	274		78 - Calhoun Co. Line	Major Wideni	- ·	1.6	\$3,000,000
Calhoun	274		Co. Line - Highway 205	Major Wideni	-	1.0	\$2,000,000
Ouachita	278		78B - Highway 79 (Camden)	Major Wideni	- ·	2.1	\$4,000,000
Pulaski	365		ue - Broadway Bridge (North Little Rock)		and Approaches	0.5	\$7,200,000
Jefferson	365S	<ul> <li>Interstate !</li> </ul>	530 - Highway 365	Major Wideni	riy (4+ ianes)	2.1	\$5,000,000

COUNTY	ROUTE	2008-2017	TERMINI	TYPE WORK	LENGTH (MILES)	TOTAL FUNDS
			ided and modifications may be made to this plan as needs change due to traffic cond her factors unknown at this time.	ditions, economic development activity, safety	concerns,	
Howard	371	•	Sevier Co. Line - Nashville	Roadway Rehab/Minor Widening	11.3	\$11,750,000
Nevada	371	•	Prescott Railroad Grade Separation	Safety	0.0	\$561,000
Nevada	371	•	Terre Rouge Creek - Highway 24	Roadway Rehab/Minor Widening	6.0	\$6,355,000
Nevada	371		Rosston - North and South (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
Columbia	371	•	Highway 355 - Highway 98 (Passing Lanes)	Passing Lanes	1.0	\$1,000,000
Washington	412	•	Springdale Bypass (Highway 412 West - Interstate 540) (Phase I)	New Location	8.0	\$33,231,250
Benton	412		Springdale Bypass (Highway 412 West - Interstate 540) (Phase II)	New Location	3.5	\$57,550,000
Benton	412		Springdale Bypass (Interstate 540 - Highway 265) (Phase I)	New Location	8.0	\$67,450,000
Carroll	412	•	Dry Fork - Alpena (Passing Lanes)	Passing Lanes	2.0	\$5,000,000
Fulton	412	•	Missouri State Line - Mountain Home (Sel. Sections)	Major Widening (4+ lanes)		\$3,506,250
Lawrence	412		Highway 67 - Greene Co. Line	Major Widening (4+ lanes)	6.2	\$14,700,000
Greene	412		Lawrence Co. Line - Highway 141	Major Widening (4+ lanes)	8.5	\$20,000,000
Greene	412	•	Paragould Bypass (Phase II - remainder of initial 2-lane construction)	New Location	10.0	\$24,812,500
Ashley	425	•	Louisiana State Line - Highway 82	Major Widening (4+ lanes)	9.4	\$25,000,000
Pulaski	I-430	•	Interstate 430/Interstate 630 Interchange	Interchange Improvements		\$62,187,500
Pulaski	I-440	•	South Terminal Interchange	Interstate Rehabilitation	0.58	\$1,500,000
Pulaski	I-440	•	Frazier Pike - Arkansas River	Interstate Rehabilitation	4.31	\$14,500,000
Pulaski	440	•	North Belt Freeway (Highway 67 - Highway 107)	New Location	4.3	\$95,000,000
Jefferson	I-530	•	Highway 104 - Highway 65B	Interstate Rehabilitation	4.48	\$11,200,000
Pulaski	I-530/I-440/I-30	•	Lane Addition through South Terminal Interchange	Interchange Improvements	1.0	\$2,775,000
Sebastian, Crawford	I-540	•	Highway 22 - Interstate 40 (F)	Interstate Rehabilitation	8.10	\$45,650,000
Washington	I-540	•	I-540/Hwy. 62 Interim Interchange Improvements (Fayetteville)	Interchange Improvements		\$3,600,000
Washington	I-540	•	Hwys. 62/180 - Hwys. 16/112 Spur	Major Widening (6+ lanes)	2.0	\$7,000,000
Washington	I-540	•	Hwy. 16/Hwy. 112 Spur (Wedington Drive) Short-Term Improvements	Interchange Improvements		\$710,000
Washington	I-540	•	Porter Road Interchange Short-Term Improvements	Interchange Improvements		\$250,000
Washington	I-540	•	Hwy. 112/Hwy. 71B (Fulbright Expressway) Short-Term Improvements	Interchange Improvements		\$310,000
Washington	I-540	•	Hwy. 112/Hwy. 71B (Fulbright Expressway) Interim Improvements	Interchange Improvements		\$6,100,000
Benton	I-540	_	Washington County Line - Hwy. 264	Major Widening (6+ lanes)	3.8	\$15,000,000
Benton	I-540	•	Hwy. 264 (West Monroe Avenue) Short-Term Improvements	Interchange Improvements		\$130,000
Benton	I-540	•	Hwy. 264 - Hwy. 102	Major Widening (6+ lanes)	7.9	\$47,300,000
Benton	I-540	•	Highway 102 Interchange (Bentonville)	Interchange Improvements		\$4,500,000
Unfunded Corridors						
Arkansas	1		DeWitt - Monroe Co. Line (Passing Lanes)	Passing Lanes	7.0	\$7,000,000
Monroe	1		Arkansas Co. Line - Phillips Co. Line (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
St. Francis	1		Forrest City Bypass (Additional Lanes)	Major Widening (4+ lanes)	8.4	\$20,000,000
Cross	1		Highway 42 - Poinsett Co. Line (Passing Lanes)	Passing Lanes	1.0	\$1,000,000
Poinsett	1		Whitehall - North and South (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
Poinsett	1		Highway 14 - Craighead Co. Line (Phase II)	Major Widening (4+ lanes)	9.9	\$17,000,000
Craighead	1B		Highway 1 - Highway 18	Major Widening (4+ lanes)	4.0	\$13,000,000
Saline	5		Benton - East	Major Widening (4+ lanes)	4.3	\$15,000,000
Lonoke	5		Highway 319 - White Co. Line	Major Widening (4+ lanes)	1.0	\$2,500,000
White	5		Lonoke Co. Line - Cleburne Co. Line	Major Widening (4+ lanes)	22.0	\$43,900,000
Cleburne	5		White Co. Line - Highway 25	Major Widening (4+ lanes)	7.6	\$15,280,000
Hot Spring	7		Highway 128 - South	Major Widening (4+ lanes)	2.0	\$7,000,000
Hot Spring	7		Arkadelphia - Hot Springs (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Garland	7		Highway 298 - North (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
Garland	7		Hot Springs East - West Arterial, Highway 70 - Highway 5 (Add'l Lanes)	New Location	5.0	\$13,000,000
Perry	7		Fourche Junction - South (Passing Lanes)	Passing Lanes	6.0	\$6,000,000
Yell	7		Ola - South (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
Pope	7		Newton Co. Line - South (Passing Lanes)	Passing Lanes	4.0	\$4,000,000
Newton	7		Jasper - North and South (Passing Lanes)	Passing Lanes	7.0	\$7,000,000
Washington	16		Stone Bridge Road - Highway 74	Major Widening (4+ lanes)	8.9	\$25,000,000
Cleburne	16		White Co. Line - West (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Franklin	22		Sebastian Co. Line - Highway 217 North	Major Widening (4+ lanes)	2.3	\$14,000,000
Franklin	22		Highway 217 North - Highway 23 (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Logan	22		Highway 23 - Highway 309 (Passing Lanes)	Passing Lanes	4.0	\$4,000,000

COUNTY	ROUTE	7008-3011 TERMINI	TYPE WORK	LENGTH (MILES)	TOTAL FUNDS
		ay be added and modifications may be made to this plan as needs change due to traffic co , and other factors unknown at this time.	nditions, economic development activity, safe	ty concerns,	
Pulaski	I-30	Interstate 30 River Bridge	Major Widening		\$47,000,000
Pulaski	I-40	Highway 67 - Highway 391	Major Widening (6+ lanes)	6.0	\$60,000,000
Washington	45	Highway 71B - White River	Major Widening (4+ lanes)	9.5	\$19,000,000
Greene	49	Halliday - South	Major Widening (4+ lanes)	2.0	\$9,000,000
Craighead	49	Poinsett Co. Line - Gibson	Major Widening (4+ lanes)	5.0	\$15,000,000
Poinsett	49	Waldenburg - North (Passing Lanes)	Passing Lanes	1.0	\$1,000,000
Cross	49	Fair Oaks - Hickory Ridge (Passing Lanes)	Passing Lanes	4.0	\$4,000,000
Woodruff	49	Brinkley - Fair Oaks (Passing Lanes)	Passing Lanes	6.0	\$6,000,000
Phillips	49	Monroe Co. Line - Marvell	Major Widening (4+ lanes)	8.1	\$16,000,000
Sebastian, Van Buren	I-49	Highway 22 - Interstate 40	New Location		\$221,900,000
Sebastian	I-49	Highway 22 - Interstate 40	New Location	10.0	\$65,000,000
Polk	1-49	Mena Bypass	New Location	16.0	\$25,000,000
Sebastian	I-49	De Queen - Jenny Lind	New Location	===	\$1,345,875,000
Sevier	1-49	Highway 27 - DeQueen	New Location	20.5	\$135,000,000
Sevier	1-49	Little River Co. Line - Highway 27	New Location	11.5	\$40,000,000
Crawford	59	Interstate 40 - Mt. Vista Blvd.	Major Widening (4+ lanes)	1.0	\$7,000,000
Boone	62	Highway 65 - Marion Co. Line	Major Widening (4+ lanes)	9.7	\$30,000,000
Prairie	63	Highway 70 - Arkansas Co. Line	Major Widening (4+ lanes)	18.3	\$73,160,000
Craighead	63	Jonesboro Northern Bypass (Highway 63 South - Highway 63 North)	New Location	13.0	\$152,000,000
Johnson	64	Interstate 40 - Highway 21	Major Widening (4+ lanes)	5.1	\$20,000,000
Faulkner	64	White Co. Line - West	Major Widening (4+ lanes)	1.2	\$4,000,000
White	64	Faulkner Co. Line - Highway 5	Major Widening (4+ lanes)	1.8	\$6,000,000
Cross	64	Highway 1 North (Wynne) - Highway 163 North	Major Widening (4+ lanes)	4.4	\$18,000,000
Crittenden	64	Highway 118 (Earle) - East	Major Widening (4+ lanes)	4.3	\$15,000,000
Boone	65	Newton Co. Line - Highway 412/62	Major Widening (4+ lanes)	3.8	\$10,000,000
Newton	65	Western Grove - Boone Co. Line	Major Widening (4+ lanes)	1.0	\$4,000,000
Searcy	65	Highway 74 - Western Grove	Major Widening (4+ lanes)	21.7	\$43,360,000
Searcy	65	Marshall - Highway 74	Major Widening (4+ lanes)	3.0	\$12,000,000
Searcy	65	Leslie - Marshall	Major Widening (4+ lanes)	8.0	\$30,000,000
Searcy	65	Van Buren Co. Line - Leslie	Major Widening (4+ lanes)	2.7	\$11,000,000
Van Buren	65	Searcy Co. Line - Botkinburg (Phase II)	Major Widening (4+ lanes)	3.0	\$12,700,000
Pulaski	67	Redmond Rd Lonoke Co. Line	Major Widening (6+ lanes)	8.3	\$52,225,000
Lonoke	67	Pulaski Co. Line - Highway 89 (Cabot)	Major Widening (6+ lanes)	3.5	\$29,700,000
Lawrence, Greene, Randolph,	07	Tulaski Co. Ellie - Highway 07 (Cabot)	wajor widening (o+ lanes)	5.5	\$27,700,000
Clay	67	Walnut Ridge/Hoxie - Missouri State Line	New Location	45.0	\$175,000,000
Crittenden	I-69	Interstate 69 Intermodal Connector (West Memphis)	New Bridge Location		\$900,000,000
Various	1-69	Mississippi State Line - Louisiana State Line (including connector)	New Location	185.0	\$1,550,000,000
Sevier	70	DeQueen - Dierks (Passing Lanes)	Passing Lanes	3.5	\$3,500,000
Pike	70	Kirby - North (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Polk	71	Highway 270 - Scott Co. Line (Passing Lanes)	Passing Lanes	1.0	\$1,000,000
Columbia	79	Highway 82 - Highway 98 East	Major Widening (4+ lanes)	6.5	\$23,000,000
Ouachita	79	Highway 98 East - Stephens	Major Widening (4+ lanes)	5.0	\$11,000,000
Cleveland	79	Fordyce - Rison (Passing Lanes)	Passing Lanes	7.0	\$7,000,000
Lee	79	Marianna - Crittenden Co. Line (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
St. Francis	79	Marianna - Crittenden Co. Line (Passing Lanes)	Passing Lanes	2.0	\$2,000,000
Lafayette	82	Lewisville - Columbia Co. Line	Major Widening (4+ lanes)	9.5	\$24,000,000
Columbia	82	Lafayette Co. Line - East	Major Widening (4+ lanes)	9.0	\$30,000,000
Columbia	82	Highway 82B - Highway 79 (Magnolia)	Major Widening (4+ lanes)	2.2	\$10,000,000
Columbia	82	Highway 98 - Union Co. Line	Major Widening (4+ lanes)	4.1	\$14,000,000
Union	82	Columbia Co. Line - East	Major Widening (4+ lanes)	9.8	\$32,000,000
Union	82	Highway 82 West - Highway 82 East (El Dorado)	Major Widening (4+ lanes)	5.4	\$25,000,000
Union	82	El Dorado - Strong (Phase II)	Major Widening (4+ lanes)	13.6	\$40,000,000
Union	82	Strong - Ashley Co. Line	Major Widening (4+ lanes)	13.9	\$29,000,000
Ashley	82	Union Co. Line - Crossett	Major Widening (4+ lanes)	7.0	\$15,000,000
Ashley	82	Hamburg - Chicot Co. Line	Major Widening (4+ lanes)	21.5	\$42,960,000
Chicot	82	Ashley Co. Line - Lake Village	Major Widening (4+ lanes)	10.0	\$19,920,000

		2017		LENGTH	
COUNTY	ROUTE	02-80 TERMINI	TYPE WORK	(MILES)	TOTAL FUNDS
		nay be added and modifications may be made to this plan as needs change due to traffi n, and other factors unknown at this time.	ic conditions, economic development activity, safet	y concerns,	
Johnson	103	Highway 103 Relocation (Claarksville)	New Location	2.0	\$13,000,000
Washington	112	Interstate 540 - Highway 412	Major Widening (4+ lanes)	11.0	\$20,000,000
Greene	135	Highway 49 - Highway 34	Major Widening (4+ lanes)	5.7	\$12,000,000
Crittenden	147	Highway 70 - Highway 64	Major Widening (4+ lanes)	4.3	\$17,120,000
Chicot	159	Eudora Bypass	New Location	1.0	\$5,000,000
Arkansas	165	DeWitt - South (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Independence	167	Cave City - South	Major Widening (4+ lanes)	6.3	\$25,000,000
Sharp	167	Highway 62 - South	Major Widening (4+ lanes)	23.2	\$46,480,000
Hot Spring	270	Highway 67 - Grant Co. Line (Passing Lanes)	Passing Lanes	3.0	\$3,000,000
Grant	270	Hot Spring Co. Line - Sheridan (Passing Lanes)	Passing Lanes	15.0	\$15,000,000
Grant	270	Sheridan - Jefferson Co. Line (Passing Lanes)	Passing Lanes	9.0	\$9,000,000
Benton	412	Springdale Bypass (Highway 412 West - Interstate 540)	New Location	3.5	\$28,000,000
Benton	412	Springdale Bypass (Interstate 540 - Highway 265) (Phase II)	New Location	4.0	\$17,550,000
Washington	412	Springdale Bypass (Highway 265 - Highway 412 East)	New Location		\$95,000,000
Madison and Carroll	412	Huntsville - Alpena	New Location		\$78,000,000
Marion	412	Highway 125 (South) - Yellville	Major Widening (4+ lanes)	11.0	\$22,000,000
Baxter, Fulton, Sharp, Lawrence, Greene	412	Missouri State Line - Mountain Home (Sel. Sections)	Major Widening (4+ lanes)		\$216,000,000
Greene	412	Paragould Bypass (Phase III) [add additional lanes]	New Location	10.0	\$25,000,000
Pulaski	440	North Belt Freeway (Interstate 40 - Highway 107)	New Location	8.0	\$150,000,000
Washington, Benton	I-540	Fayetteville - Bentonville (Remaining Sections)	Major Widening (6+ lanes)		\$264,000,000
Pulaski	I-630	University Avenue - Interstate 430	Major Widening (8+ lanes)	3.0	\$40,000,000

# **Addendum**

FISCAL YEAR					UR	CES			
(in n	TOTA STAT REVEN	L E	NET REVENUE AMOUNT <sup>1</sup>	YEARI AMOU TO AH (70%	NT TD	YEARI AMOUN TO CITI (15%)	NT ES	YEARLY AMOUNT TO COUNT (15%)	Г
CURRENT SOURCES TO AHTD, CITIES, AND COU	NTIES								
Motor Fuels Revenue <sup>2</sup>	430.07		417.17 M	292.02		62.58		62.58	
Gasoline (21.5¢ per gallon) Diesel (22.5¢ per gallon) LPG (16.5¢ per gallon) /	294.73 135.20		285.89 M 131.14 M	200.12 91.80		42.88 19.67		42.88 19.67	
CNG (5.0¢ per gallon)	0.14	M	0.14 M	0.10	M	0.02	M	0.02	N
. Motor Vehicle Registration Fees	111.03	M	107.70 M	75.39	M	16.15	M	16.15	N
Automobiles & Pickups Heavy Trucks (Includes In-state and Out-of	44.28	M	42.95 M	30.07	M	6.44	M	6.44	N
state IRP fees)	45.92		44.54 M	31.18		6.68		6.68	
Other Vehicles	20.83	M	20.21 M	14.14	M	3.03	M	3.03	N
. Miscellaneous Revenues <sup>3</sup>	26.81	M	26.22 M	22.56	M	1.83	M	1.83	N
. Total Current Revenues	567.91	M	551.09 M	389.96	M	80.56	M	80.56	N
THER REVENUE SOURCES									
A. Highway-user Sources									
Additional 1 cent Motor Fuel Tax									
1 cent motor fuel tax <sup>4</sup>	20.61		19.99 M	13.99		3.00		3.00	
1 cent gasoline tax	14.13		13.71 M	9.59		2.06		2.06	
1 cent diesel tax Increase Registration Fees on:	6.48	M	6.29 M	4.40	M	0.94	M	0.94	N
Autos and Pickups by \$10	21.90	M	21.24 M	14.87	M	3.19	M	3.19	N
In-State Trucks by \$150 (except pickups)	12.23	M	11.86 M	8.30	M	1.78	M	1.78	N
In and Out-of State $\underline{\text{Heavy}}$ Trucks from $\$1,350 \text{ to } \$1,500^5$	4.17	M	4.04 M	2.83	M	0.61	M	0.61	N
Remove Sales Tax Exemption on Motor									
Fuels (wholesale price of \$1.50 per gallon) 6	139.18	M	135.00 M	94.50	M	20.25	M	20.25	N
Gasoline	95.41		92.55 M	64.78		13.88		13.88	
Diesel	43.77	M	42.46 M	29.72	M	6.37	M	6.37	N
Transfer 4.50% Sales Tax on: <sup>7</sup>									
New Vehicles	142.90	M	138.61 M	97.03	M	20.79	M	20.79	N
Used Vehicles	86.90		84.29 M	59.01		12.64		12.64	
Auto Repair Parts and Service	189.40		183.72 M	128.60		27.56		27.56	
Retail Tire Sales 9	11.92		11.56 M	8.09		1.73		1.73	
Off Road Diesel Fuel	24.31		23.58 M	16.51		3.54		3.54	
Transfer Single State Registration	1.88		1.82 M	1.28		0.27		0.27	
Weight Distance Tax (1 cent per mile) 10	29.09		28.22 M	19.75	M	4.23	M	4.23	N
\$1 Battery Fee	0.60		0.58 M	0.41	M	0.09	M	0.09	N
\$1 Tire Fee	2.92	M	2.83 M	1.98	M	0.42	M	0.42	N
3. Non Highway-user Sources									
Increase General Sales Tax - 1%	399.51	M	387.52 M	271.27	M	58.13	M	58.13	N
Increase Income Tax - 1%	23.63		22.92 M	16.04		3.44		3.44	
Individual Income Tax	20.13		19.53 M	13.67		2.93		2.93	
Corporate Income Tax	3.50	M	3.40 M	2.38	M	0.51	M	0.51	N
Transfer Severance Tax 11	22.24	M	21.57 M	15.10	M	3.24	M	3.24	N

Figure A-1: Fiscal Year 2006 State Revenue Sources

#### NOTES

- These amounts reflect a 3% deduction to the Central Services Fund. Total net amount is distributed 70% to AHTD, 15% to both Cities and Counties.
- <sup>2</sup> Excludes \$9.3M of Motor Fuel Tax Refunds. Rate excludes underground storage tank fee of 0.3¢ per gallon.
- <sup>3</sup> Includes OS/OW Permits, Title Transfer Fees, Driver Search Fees, Interest, and Other Fees. Only Interest and Other Fees are distributed 70/15/15.
- Motor Fuel means the combined amounts for Gasoline and Diesel.
- Amounts are 2002 data for International Registration Plan (IRP) and projected to 2006. IRP data no longer collected.
- <sup>6</sup> Assumes no change in point of collection. Price of fuel only. Does not include State and Federal taxes.
- Assumes only the General portion (4.5%) will be available to AHTD while the remainder is dedicated for special purposes.
- 8 Estimates based on Department of Finance and Administration's 2001 data and projected to 2006.
- 9 Retail tire sales calculated by AHTD based on information provided by DFA.
- Based on 2.91 billion qualifying miles (loaded miles for trucks registered over 73,280 pounds).
- <sup>11</sup> Based on all severance taxes collected from both special and general revenue sources.

#### THE SHRINKING HIGHWAY DOLLAR

Figure A-2 shows that, in 1977, a \$10 million overlay program would have resulted in the improvement of over 400 miles of highways. In 1991, the same size program would have improved 167 miles of highways. Today, a \$10 million overlay program will improve only 55 miles of highways, which is 14% of what could have been improved in 1977 or 33% of what could have been improved in 1991.

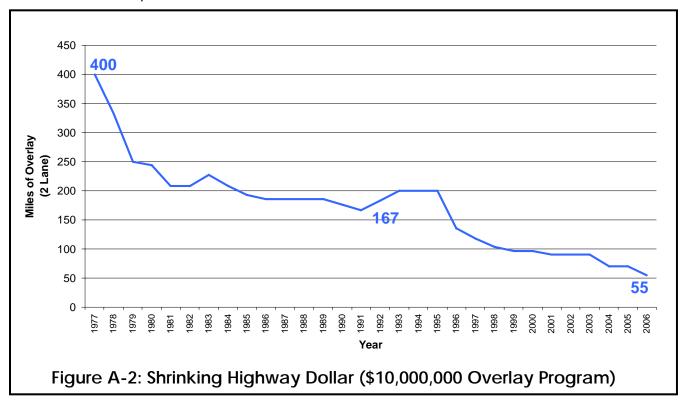


Figure A-3 shows that with a \$100 million program for widening highways, the Department could have improved 143 miles in 1977 but only 37 miles in 1991. Today, a \$100 million widening program will only improve 17 miles of highways, which is 12% of what could have been accomplished in 1977 or 46% of what could have been improved in 1991.

Likewise, Figure A-4 shows that in 1977, a \$25 million bridge replacement program would have replaced 136 bridges with an average length of 200 feet. In 1991, a \$25 million bridge program would have replaced only 78 bridges. Today, only 33 bridges can be replaced with a \$25 million bridge program, which is 24% of the number that could have been replaced in 1977 or 42% of the number that could have been replaced in 1991.

