

# Highway Project Delivery

## From Planning to Construction

Arkansas Asphalt Pavement Association  
Young Leaders Committee Meeting

October 21, 2015



**Scott E. Bennett, P.E.**  
Director of Highways and Transportation



# AHTD and AAPA

## Partnering Agreement



### PARTNERING AGREEMENT



Arkansas State Highway and Transportation Department  
and  
Arkansas Asphalt Pavement Association

January 5, 2012

We, the duly designated representatives of the Arkansas State Highway and Transportation Department (AHTD) and the Arkansas Asphalt Pavement Association (AAPA), do hereby agree to the following goals and objectives as a means of enhancing communication between our organizations, nurturing the working relationships between the parties, and providing quality Asphalt Pavements to meet the transportation needs of the citizens of the State of Arkansas:

- Ensure safety for the public and our employees.
- Promote Quality Asphalt Pavements through improvements in Design, Construction and Pavement Preservation practices.
- Communication and education through proactive information sharing.
- Professional relationships of mutual trust and respect.
- Continue to research and encourage the appropriate use of recycled materials and other sustainable practices by using sound science to analyze potential long term performance, environmental, and economic benefits.
- Recognize that Joint Committees and Task Forces are an established method of working together to achieve the previously stated mutually agreed upon goals and objectives.
- Continue to explore, implement, and utilize Joint Committees or Task Forces to help provide the State and the citizens of Arkansas with the best products and facilities possible.

Agreed to this 5<sup>th</sup> day of January, 2012 in Little Rock, Arkansas.

R. Madison Murphy, Chairman  
Arkansas State Highway Commission

Park Estes, Chairman  
Arkansas Asphalt Pavement Association

Scott E. Bennett, Director  
Arkansas State Highway & Trans. Department

Guy Washburn, Executive Director  
Arkansas Asphalt Pavement Association



# AHTD *Quick Facts*

**3rd Largest State Agency**  
(3,634 Employees)

**Maintains**  
16,411 miles of Highway  
7,335 Bridges

**Central Offices in Little Rock**

**10 Districts Statewide**

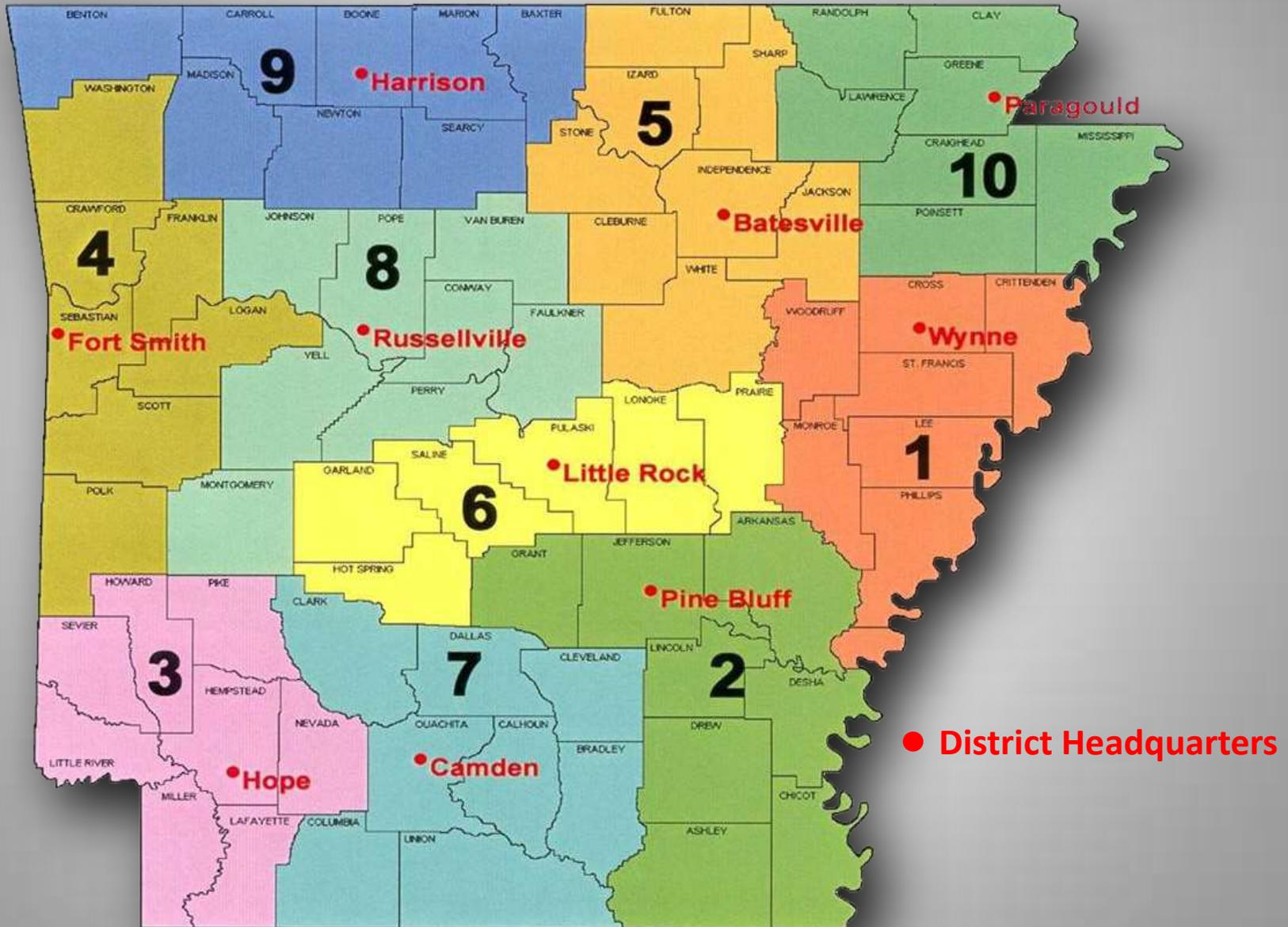
**Mission:**

Provide a safe, efficient, aesthetically pleasing and environmentally sound intermodal transportation system for the user.



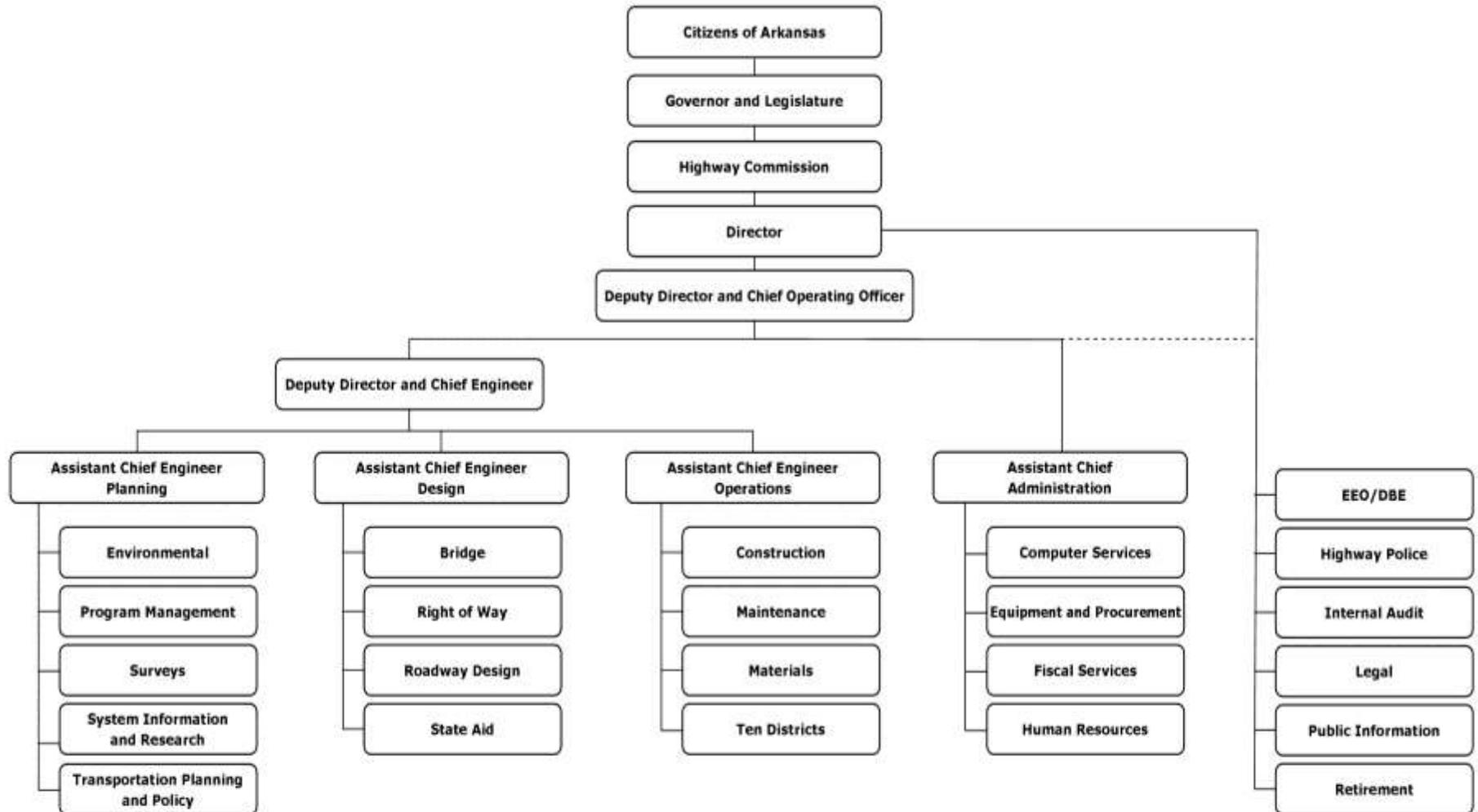


# Ten Highway Districts





# Arkansas State Highway and Transportation Department Organization Chart



*Scott G. Bennett*

Director of Highways and Transportation

March 13, 2015

Date



# Arkansas Highway Commission



**Dick Trammel**

**Chairman**

**Tom Schueck**

**Vice Chairman**

**Robert S. Moore, Jr.**

**Member**

**Frank D. Scott, Jr.**

**Member**

**Alec Farmer**

**Member**

# AHTD Administration



**Scott E. Bennett, P.E.**

Director of Highways and Transportation

**Lorie H. Tudor**

Deputy Director and Chief Operating Officer

**Emanuel Banks**

Deputy Director and Chief Engineer

**Kevin Thornton**

Assistant Chief Engineer-Planning

**Michael Fugett**

Assistant Chief Engineer-Design

**Tony Sullivan**

Assistant Chief Engineer-Operations

**Randy Ort**

Assistant Chief-Administration





# AHTD Administrative Staff



**Scott E. Bennett**

Director of Highways and Transportation

**Lorie H. Tudor**

Deputy Director and Chief Operating Officer

**Emanuel Banks**

Deputy Director and Chief Engineer

**Kevin Thornton**

Assistant Chief Engineer-Planning

**Michael Fugett**

Assistant Chief Engineer-Design

**Tony Sullivan**

Assistant Chief Engineer-Operations

**Randy Ort**

Assistant Chief-Administration

**Rita Looney**

Chief Legal Counsel

**Mike Boyd**

Chief Fiscal Officer

**Mike Sebren**

State Construction Engineer

**Joe Sartini**

State Maintenance Engineer

**Crystal Woods**

Division Head, Human Resources

**Ron Burks**

Chief, Highway Police

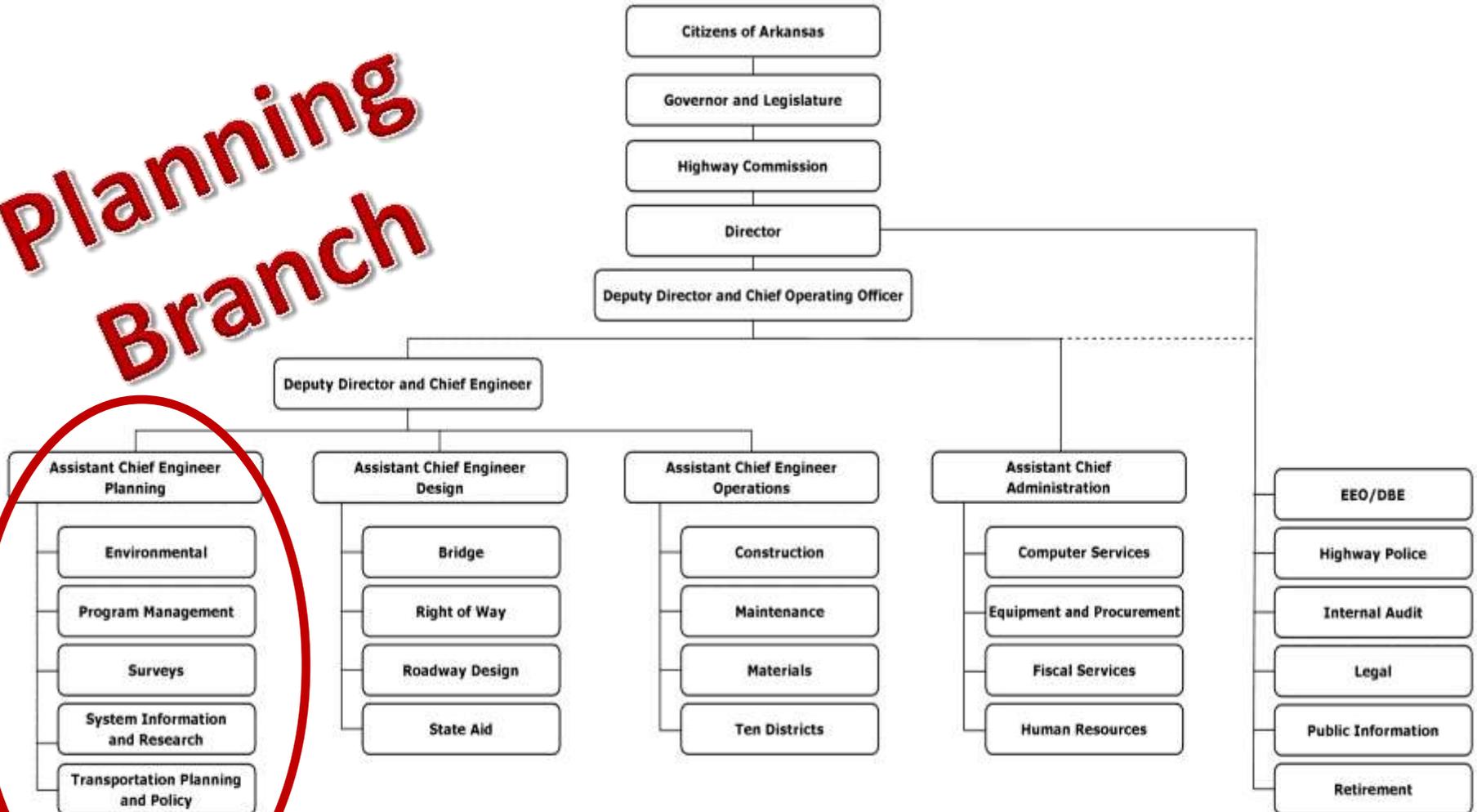
**Danny Straessle**

Public Information Officer



# Arkansas State Highway and Transportation Department Organization Chart

**Planning  
Branch**



*Scott G. Bennett*

Director of Highways and Transportation

March 13, 2015

Date

# PLANNING BRANCH

- Transportation Planning & Policy
- System Information & Research
- Environmental
- Surveys
- Program Management





# Transportation Planning & Policy



- Sections
  - ✓ GIS & Mapping
  - ✓ Policy & Legislative Analysis
  - ✓ Public Transportation Programs
  - ✓ Multimodal & Project Planning
  - ✓ Metropolitan Planning
  - ✓ Traffic Safety

Total Employees - 58

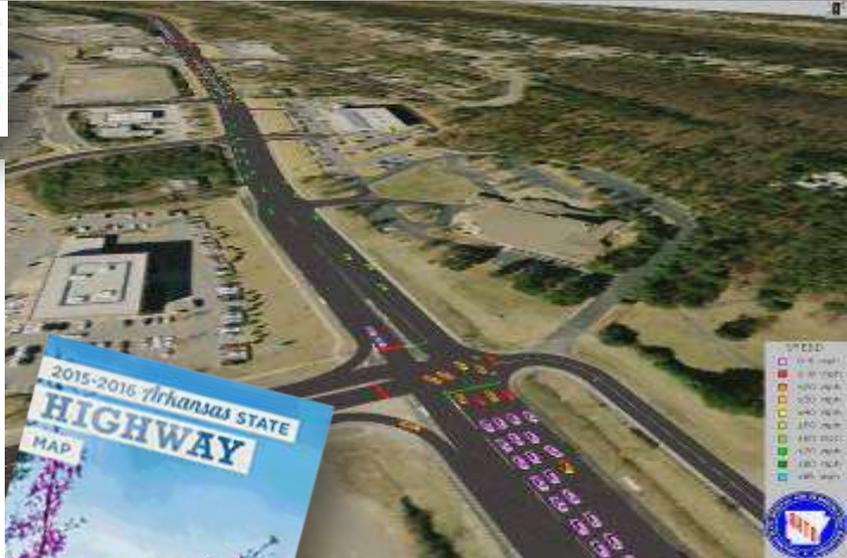
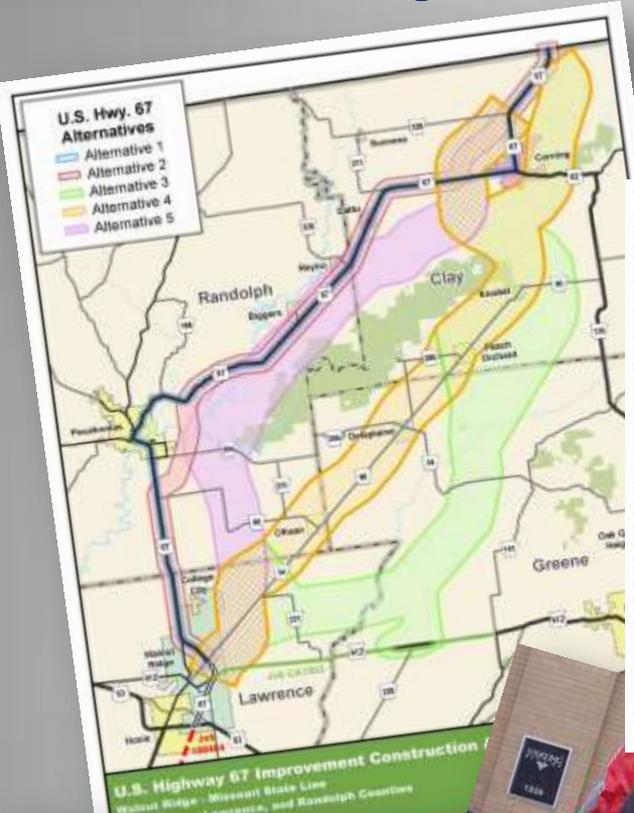
Total Engineers - 13

Other Professionals - 21



**Division Head  
Jessie Jones**

# Transportation Planning & Policy





# System Information & Research



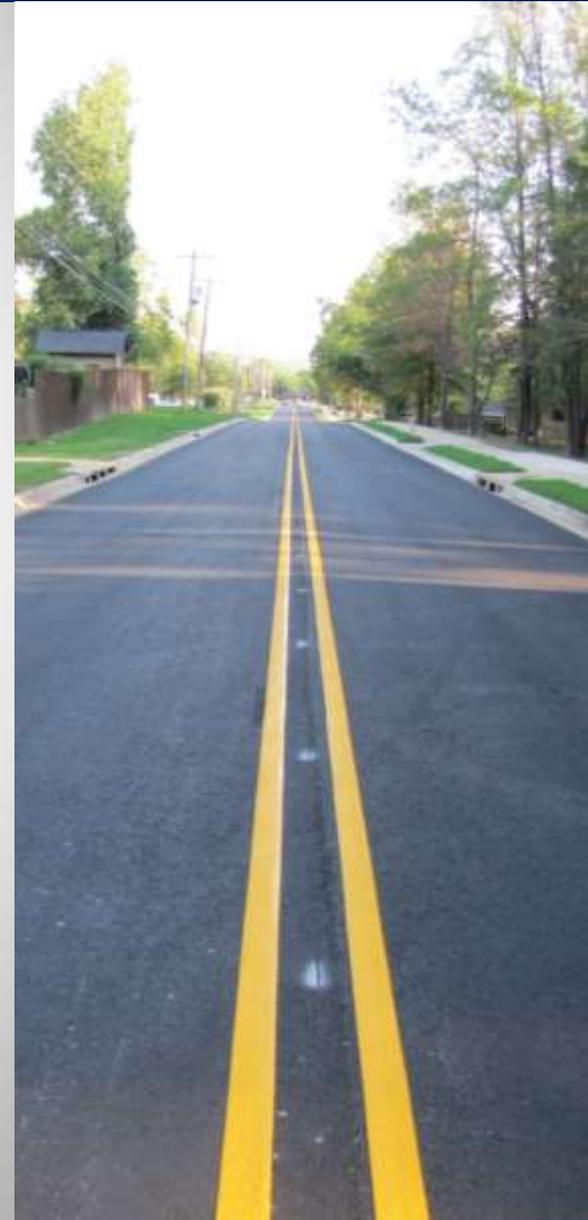
**Division Head  
Michael Kelly**

- **Sections**
  - ✓ **Asset Management**
  - ✓ **Research**
  - ✓ **Traffic Information Systems**

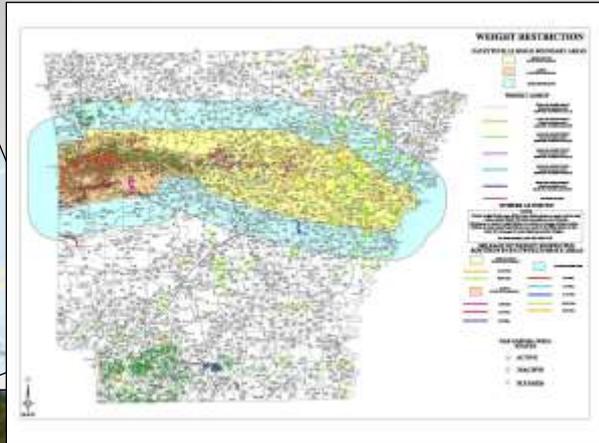
Total Employees - 64

Total Engineers - 17

Other Professionals - 8



# System Information & Research



**ARKANSAS**  
2014

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**ANNUAL AVERAGE DAILY  
TRAFFIC ESTIMATES**

**BY COUNTY**



**PUBLISHED APRIL 2015**



# Pavement Management

## ARAN (Automatic Road Analyzer)



# Multi-Media Highway Information System (MMHIS)

MMHIS - [Route 30 East, Section 11, Year 2012-3]

MMHIS - [Route 340 North, Section 4, Year 2012-3]

Route: 340 North

Category Item Value

GPS	Latitude	36.027710
	Longitude	-94.187332
Roadway	Roadway Data Date	3/12/2012
	Address	
	County	WASHINGTON
	Log Mile	60.095 mile
	Section	4
	Beginning Log Mile	59.990 mile
	Ending Log Mile	60.500 mile
	Length	0.500 mile
	Number of Lanes	4
	Rural/Urban	Large Urban
	Functional Classif...	1
	NHTS System Class...	On I-95 (stat)
	Surface Type	AC/P
	Surface Width	78 ft
	Lane Width	12 ft
	Median Width	70 ft
	Right Shoulder Sur...	Asphalt
	Right Shoulder Wid...	10 ft
	Left Shoulder Sur...	Asphalt
	Left Shoulder Widt...	5 ft
	Job Number	
	Year Built	1999
	Average Daily Tra...	29093
	PHS Data Code	3112-3
	RI - Left Wheel P...	63.36 inches
	RI - Right Wheel ...	77.30 inches
	Rutting - Left Whe...	0.079 inches
	Rutting - Right W...	0.079 inches
	Grade	-2.30
	Fault Count	0
	Average Fault	0.00
	Maximum Fault	0
Bridge	Bridge Data Date	N/A
	Structure Number	N/A
	Facility On Structure	N/A
	HighestMinimumW...	N/A
	Year Built	N/A
	Main Span Type	N/A
	Approach Span T...	N/A
	Number of Appro...	N/A
	Maximum Span Le...	N/A
	Structure Length	N/A
	Curto-Curb Width	N/A
	Out-to-Out Dedi...	N/A
	Deck Condition	N/A
	Substructure Con...	N/A
	Operating Rating	N/A
	Bridge Posting	N/A
	Routine Inspectio...	N/A
	Designated Inspe...	N/A
	Year Reconstructed	N/A
	Deck Type	N/A
	Surface Type	N/A
	Sufficiency Rating	N/A
	Replacement Fun...	N/A
Job Status	Job Status Data ...	3/2/2012
	Job Number	R40048
	Project Length	8.16 mile
	Minute Order Nu...	1971-207
	Minute Order Date	
	Let Date	01/1997
	Completion Date	04/1999
	Total Cost	\$16,641,599
	Location	New Location
	Type Work	BASE & CURB
	HEP Type Work	New Location
	Included In HEP 91	Y
	Year	1/2/12
Accident	Number of Accide...	303
	Number of Fatali...	3
	Number of Injurie...	198
	Number in Conco...	3
Layers	Layers Data Date	N/A
	Layer 1 Thickness	N/A
	Layer 2 Thickness	N/A

Route: 340 North Lane: 6429, File: Combined Image (Panoramic View)

Left Right

Left Right

Minute Order Nu... P19358  
Minute Order Date  
Let Date 03/1984



# Environmental

- **Sections**

- ✓ **Assessments**
- ✓ **Cultural Resources**
- ✓ **GIS** (Geographical Information Systems)
- ✓ **NPDES** (National Pollutant Discharge Elimination System)
- ✓ **Public Involvement**
- ✓ **Special Studies**

Total Employees – 50

Total Engineers – 0

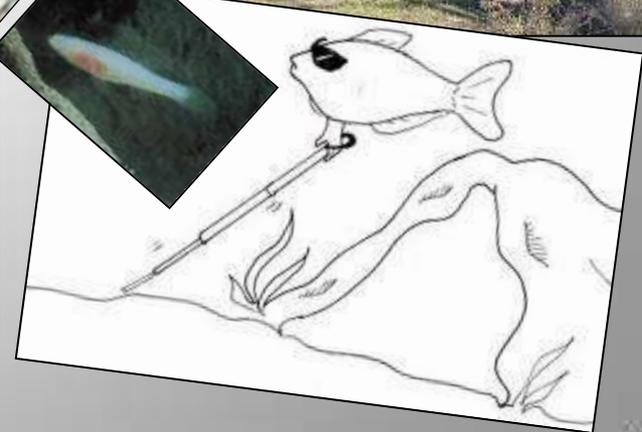
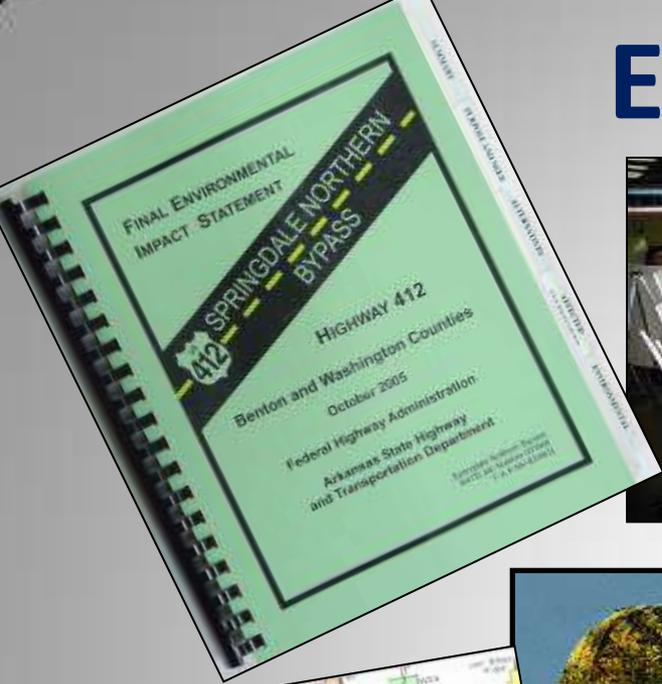
Other Professionals - 39



**Division Head  
John Fleming**



# Environmental





# Surveys



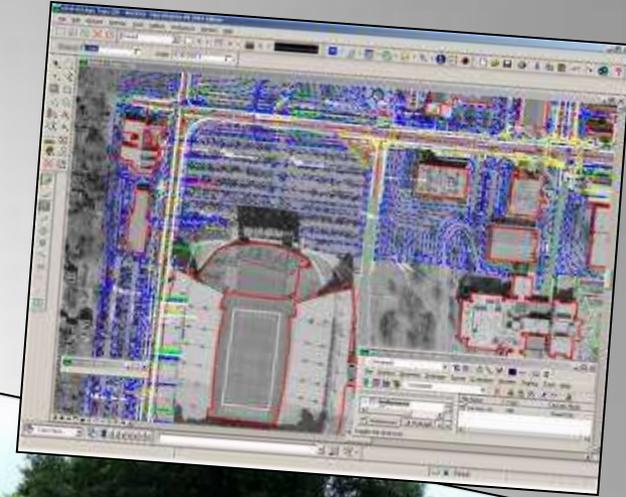
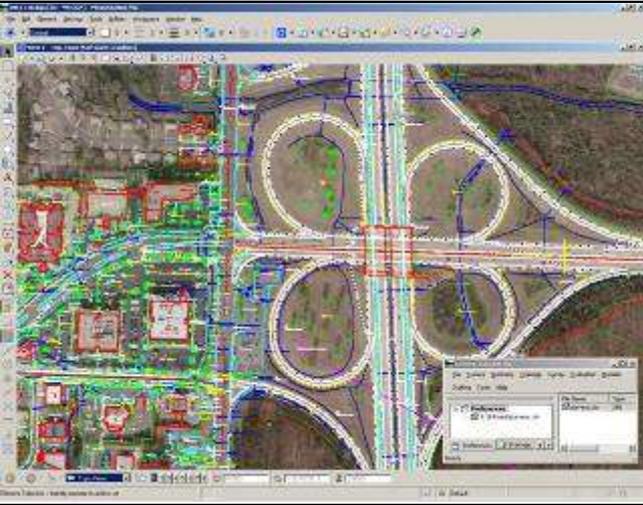
**Division Head  
David Hall**

- **Sections**
  - ✓ **Photogrammetry**
  - ✓ **Design Surveys**
  - ✓ **Land Surveys**

Total Employees – 68  
Total Engineers – 5  
Other Professionals – 14



# Surveys





# Program Management

- **Sections**

- ✓ **Program Support**

- ✓ **Construction Contract Procurement**

- ✓ **Local Federal-Aid Project Administration**

Total Employees – 23

Total Engineers – 9

Other Professionals – 7



**Division Head  
Jared Wiley**



# Program Management



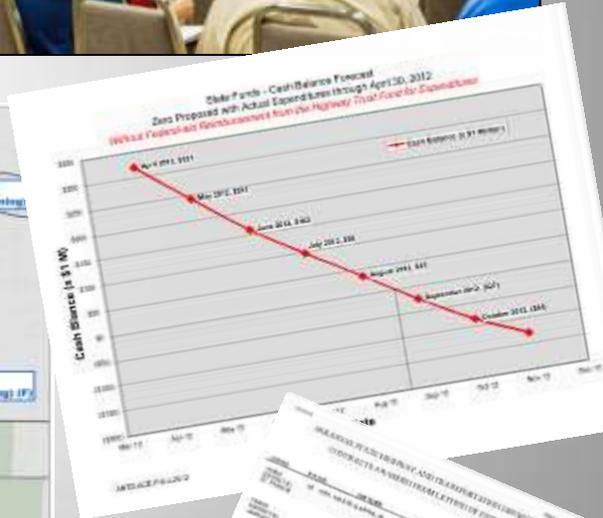
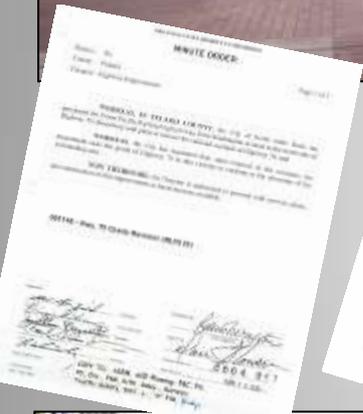
Arkansas State Highway and Transportation Department

**Statewide Transportation Improvement Program (STIP)**

**2013-2016**  
Federal Fiscal Years

In compliance with Title 23-United States Code-Section 135

Presented by the  
**Arkansas State Highway Commission**  
July 25, 2012



**Interstate 40 Widening**  
Conway to North Little Rock

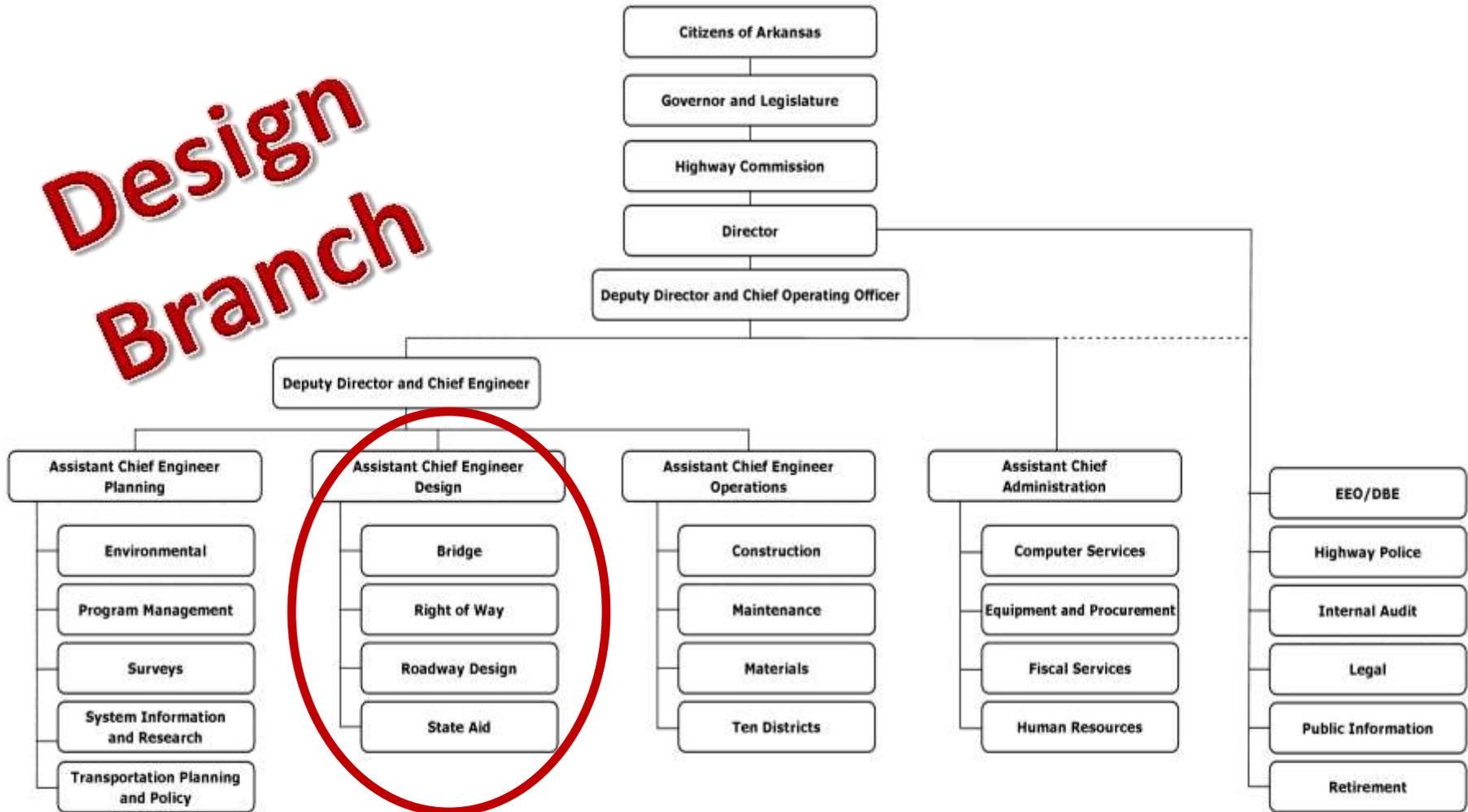
Faulkner & Pulaski Counties

Task	Start	End	Status
...	...	...	...



# Arkansas State Highway and Transportation Department Organization Chart

**Design  
Branch**



*Scott G. Bennett*

Director of Highways and Transportation

March 13, 2015

Date

# DESIGN BRANCH

- Bridge Design
- Roadway Design
- Right of Way
- State Aid





# Bridge Design

- **Sections**

- ✓ **Structural Inventory and Rating**
- ✓ **Design (4 squads)**



**Division Head  
Rick Ellis**

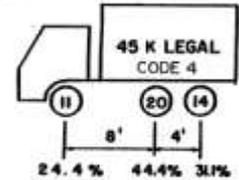
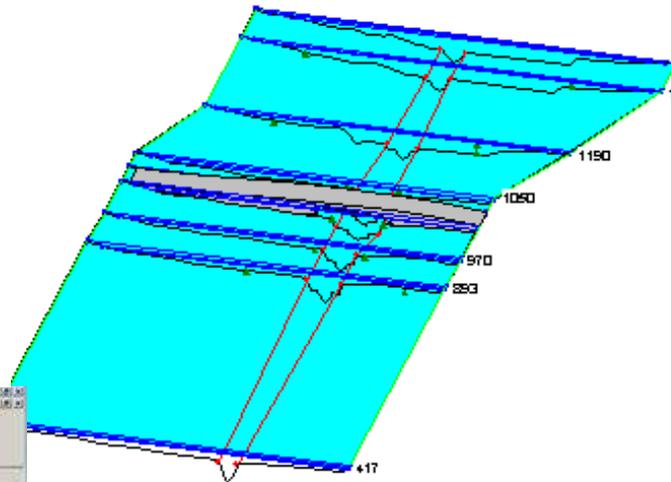
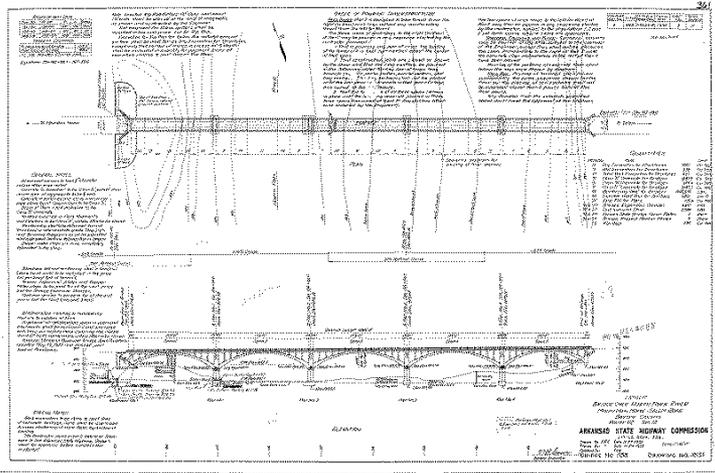
Total Employees – 26    Total Engineers - 24



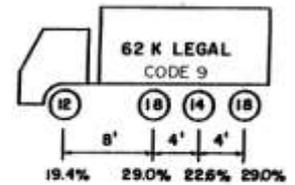
# Bridge Design



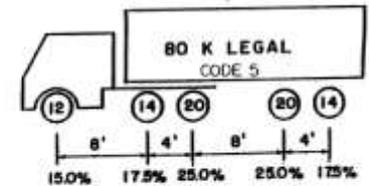
Job 050013, Tickleman Ditch (Ditch # 10) Plan: Plan 12 7/9/2004 7:28:26 AM  
Geom: New Model



Code 4 Vehicle

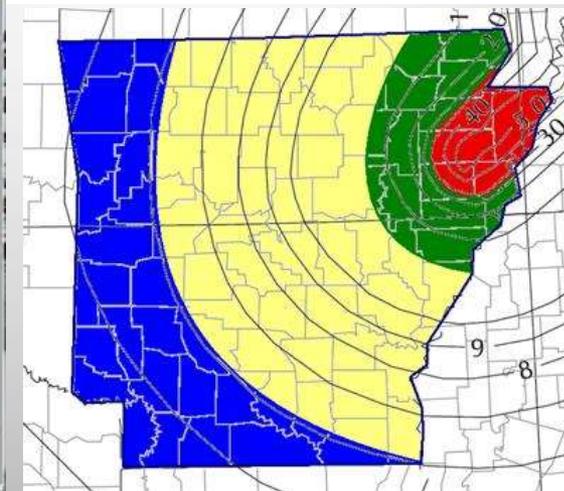
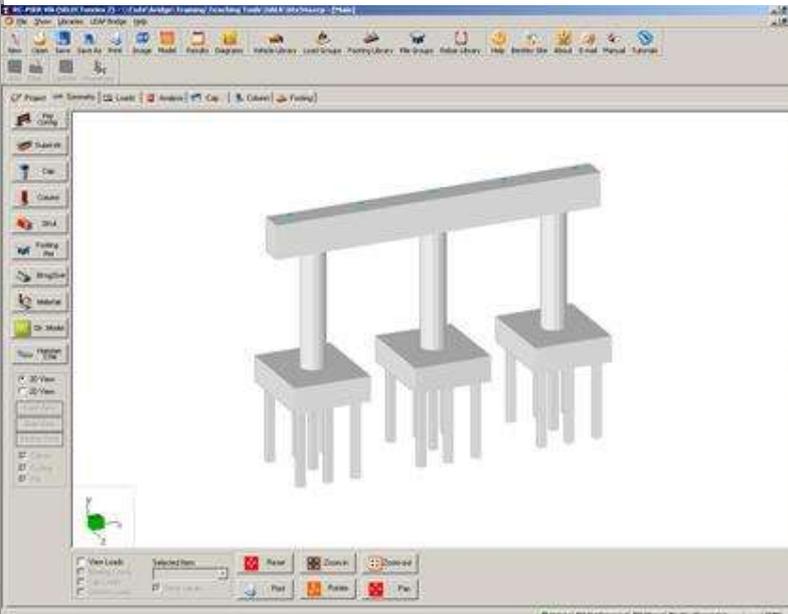


Code 9 Vehicle



Code 5 Vehicle

Appendix B: Posting Vehicles/Arkansas Statute Vehicles





# Roadway Design

Total Employees – 36 Total Engineers - 33

## • Sections

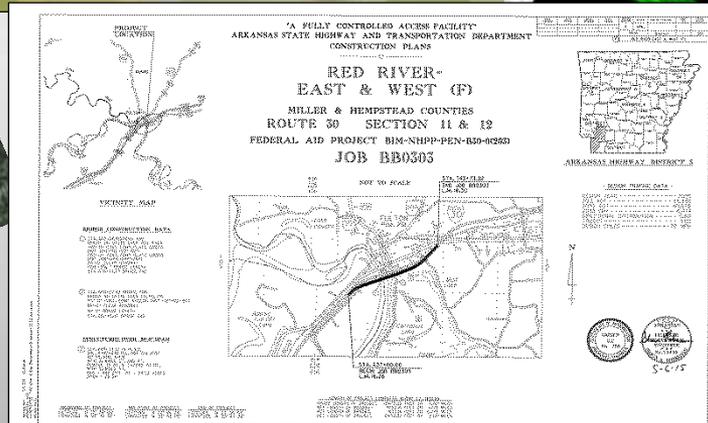
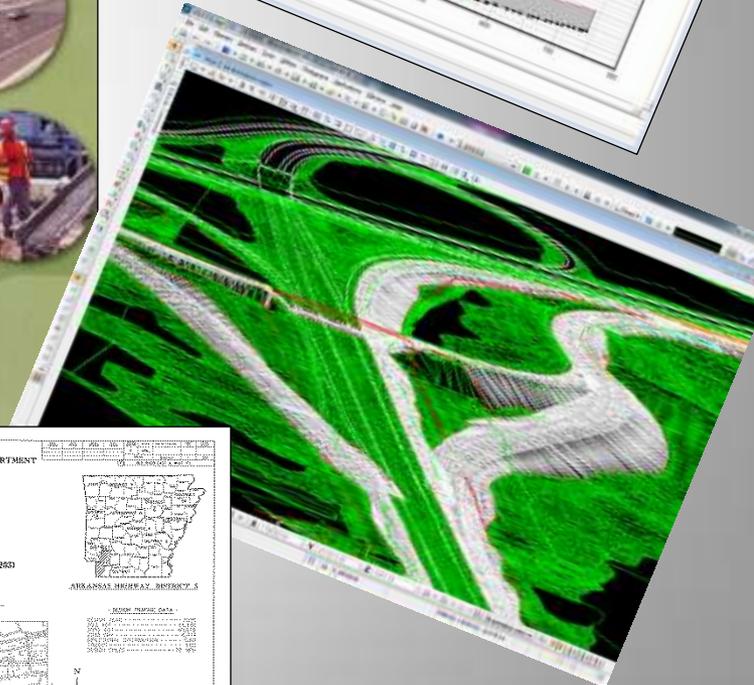
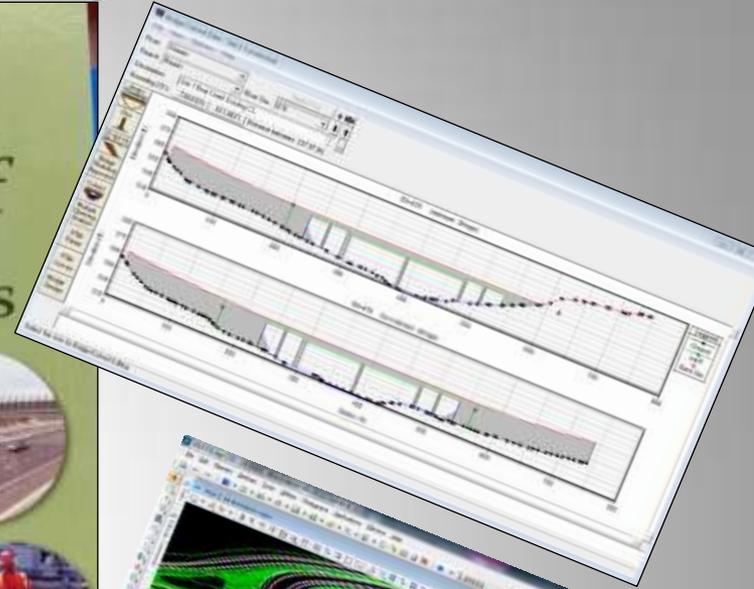
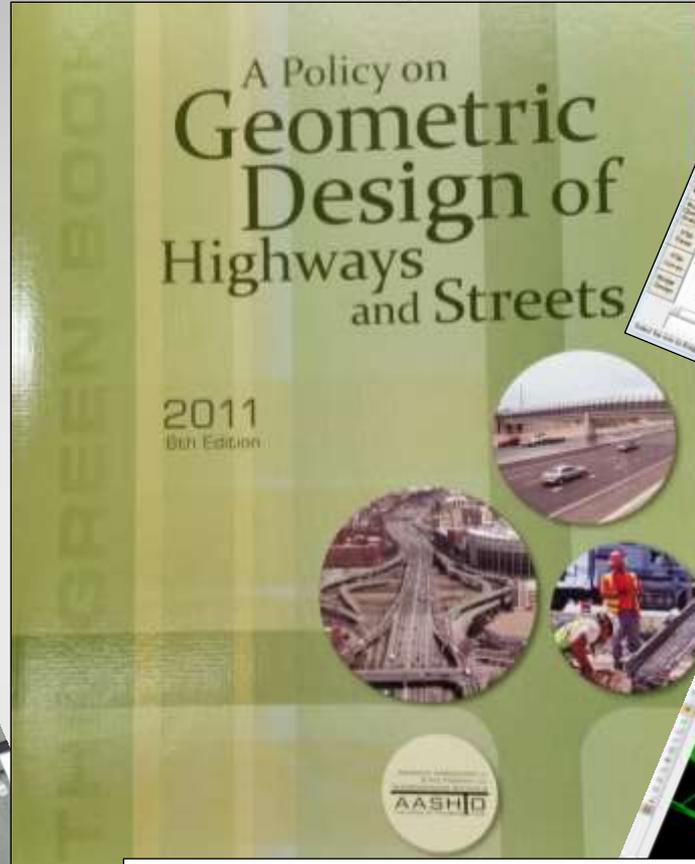
- ✓ Hydraulics
- ✓ Preliminary Engineering / Freeway Design
- ✓ Primary Design
- ✓ Urban Design
- ✓ Traffic Engineering
- ✓ Estimating



**Division Head  
Trinity Smith**



# Roadway Design





# Right of Way

Total Employees – 83

Total Engineers – 1

Other Professionals – 39



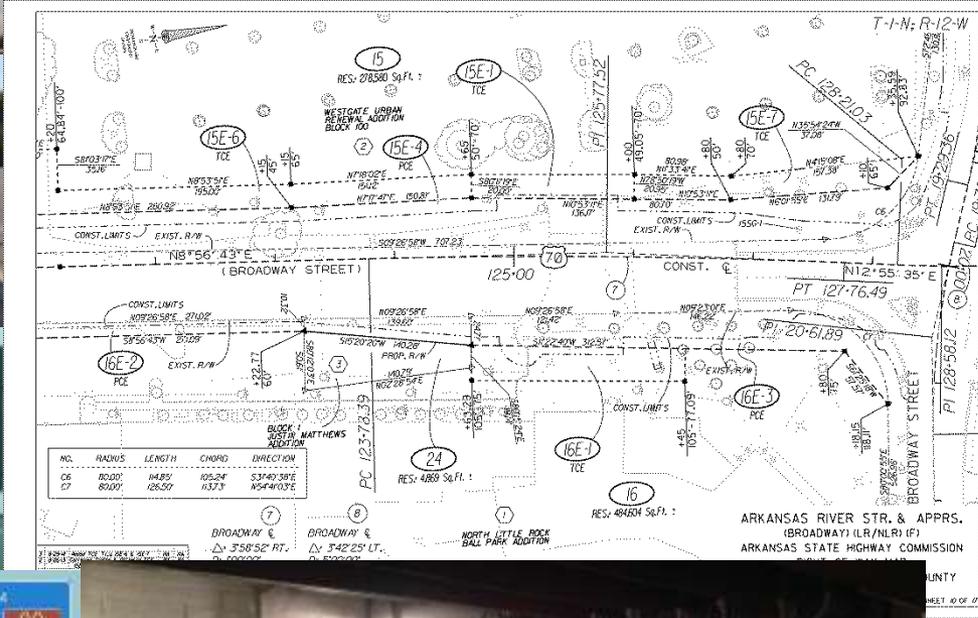
**Division Head  
Perry Johnston**

## • Sections

- ✓ Acquisition
- ✓ Administrative
- ✓ Appraisal
- ✓ Beautification
- ✓ Engineering
- ✓ Relocation
- ✓ Utilities



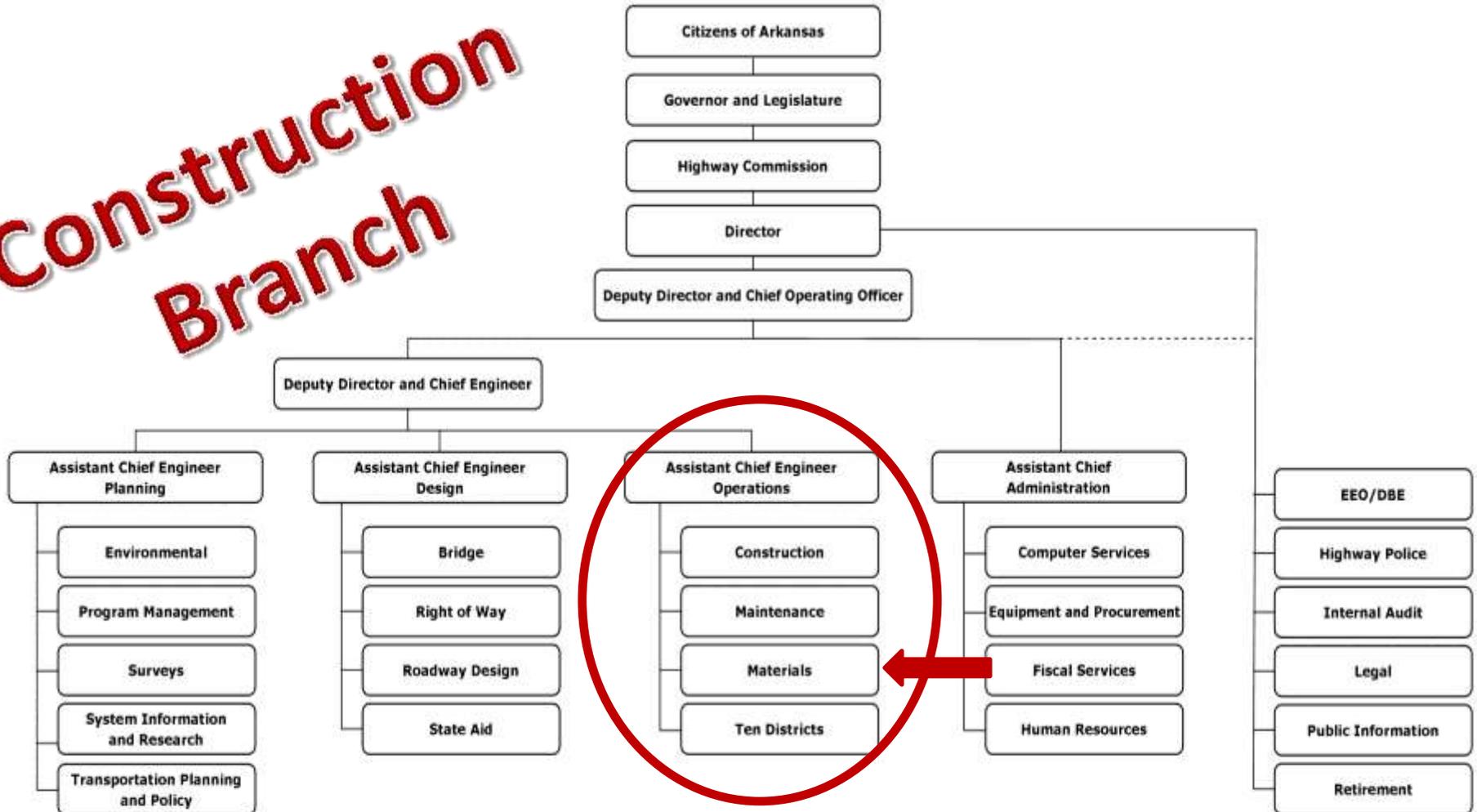
# Right of Way





# Arkansas State Highway and Transportation Department Organization Chart

**Construction  
Branch**



*Scott G. Bennett*

Director of Highways and Transportation

March 13, 2015

Date

# CONSTRUCTION BRANCH

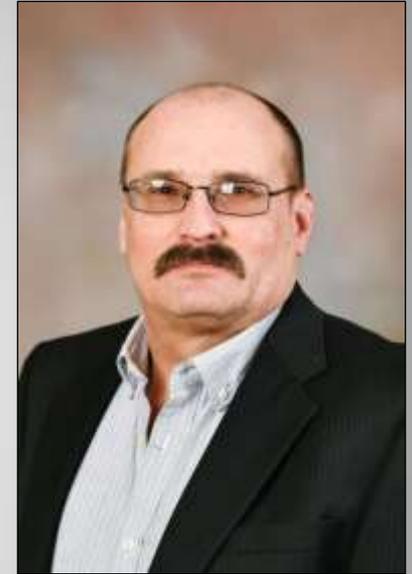
- Construction
- Maintenance
- Materials ←
- Ten Districts





# Materials

**Division Head  
Michael Benson**



Total Employees – 66  
Total Engineers – 13  
Other Professionals - 7

- **Sections**

- ✓ **Materials Laboratory**
- ✓ **Concrete & Steel  
Fabrication**
- ✓ **Geotechnical**



# Materials





# HIGHWAY PROJECT DELIVERY

- **Planning and Scheduling**
  - System Management Analysis
  - Planning Studies
  - Statewide Transportation Improvement Program (STIP)
- **Project Development**
  - Environmental Analysis and Report
  - Surveys
  - Design
  - Right-of-Way Acquisition
  - Utility Relocation
- **Award Contract**



**PROJECT  
DELIVERY**

**Award  
Contract**

**Right of Way  
&  
Utilities**

**Design**

**Surveys**

**Environmental**

**Planning  
&  
Scheduling**



**“A goal without a plan is just a wish.”**

~ Antoine de Saint-Exupery

**“Those who fail to plan, plan to fail.”**

~ Winston Churchill

**“If you don’t know where you are going, you’ll end up someplace else.”**

~ Yogi Berra

# Planning & Scheduling

**System Analysis**

**Feasibility  
Studies**

**Capital/Corridor  
Improvements**



**Strategic  
Goals**

**Performance  
Criteria**

**Establish  
Priorities**

**Evaluate Options**

**Allocate  
Resources**



# PLANNING AND SCHEDULING

- **System Preservation**
  - Pavement
  - Bridges
  - Congestion Relief
- **Safety Improvements**
  - System Wide
  - Site Specific
- **Corridor / Capital Improvements**
  - Planning Studies
  - Metropolitan Planning
  - Local Agencies / Public



# PLANNING AND SCHEDULING

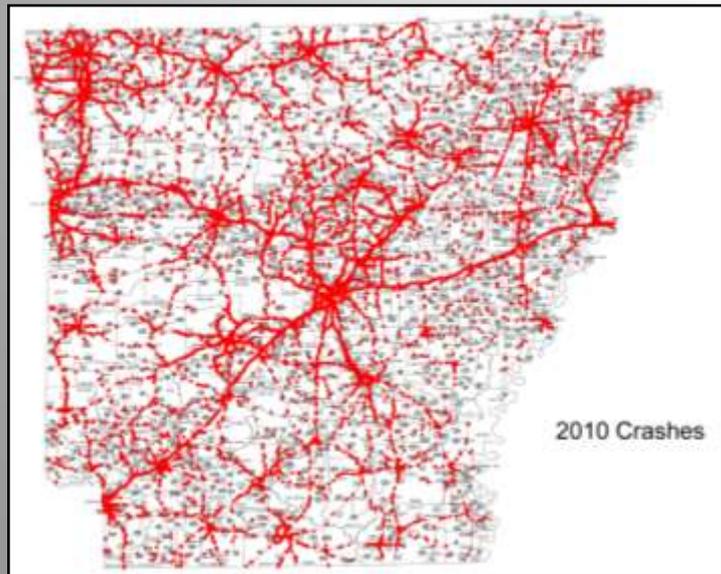
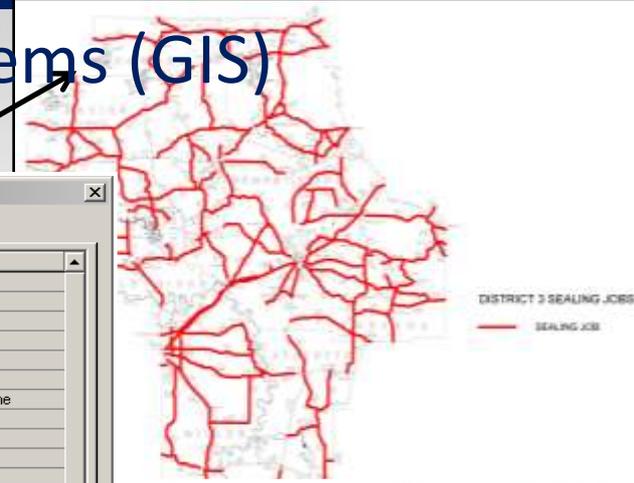
## Geographic Information Systems (GIS)

### Asset Management

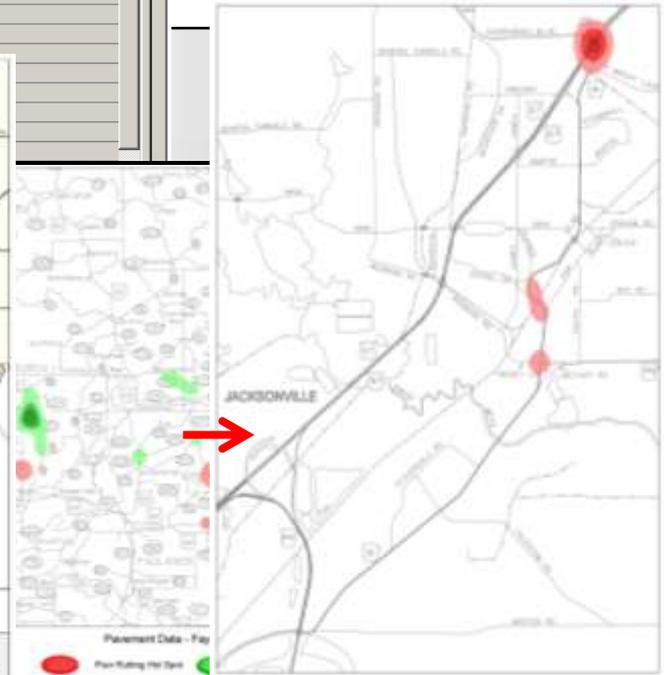


Overlay_Jobs Properties	
General	
Name	Value
ID	
Year	2012
Job_Number	030421
County	Pike
County_Number	55
Location	Hwy 29 - Delight (Overlay) (S)
Route	19
Section	060
Begin_LM	2.41
End_LM	6.88
Length_Miles	4.50
Contract_Amount	\$1,125,000.00

Sealing_Jobs Properties	
General	
Name	Value
ID	240
Job_Number	3-417
County_Number	31
County_Name	Howard
Route	369
Section	010
Description_Location	Jct. 26 to Pike Co. Line
Begin_Logmile	0
End_Logmile	11.3
Length	11.3
Surf_Width_ft	22
S_Y_Project	145845
GSY_Rate	0.35
GSY_Cost	60610



Data Management

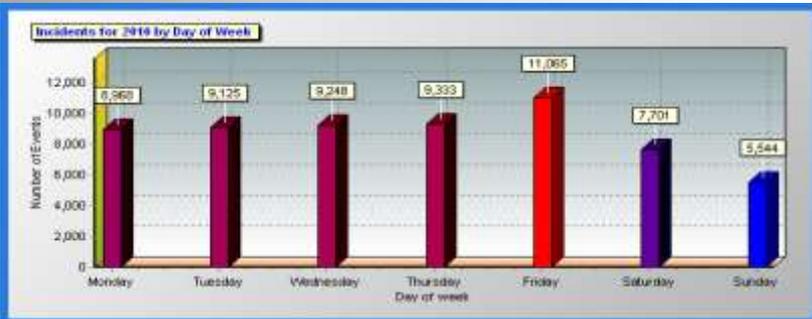
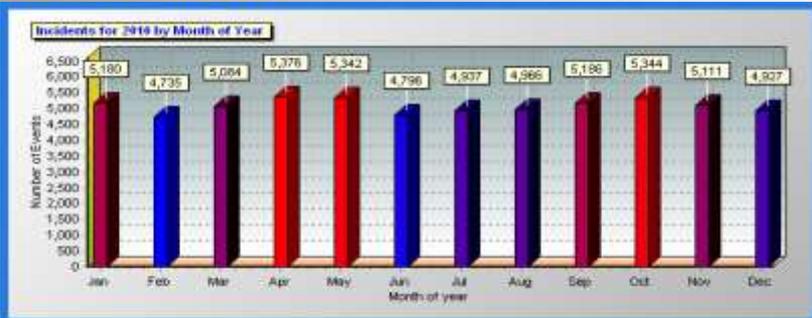


Analysis



# PLANNING AND SCHEDULING

## Virtual Integrated Safety User Assisted Location Tool (VISUAL-T)



AHTD_District	06
CountyName	SALINE
County_Number	62
Route	30
Section	220
Logmile	110.886
Longitude	-92.6764303
Latitude	34.5345085
Rural_Urban	Rural
FuncClass	Interstate
AvgDailyTraffic	34000
YearADT	2012
TypeRoad	Main Lane
RouteSign	Interstate
APHN	NHS
Access	Full Control
TypeOperation	Multi-Lane Divided
MedianType	Cable Barrier
NumberLanes	4
road_id	62x00030x220
ID1	2903

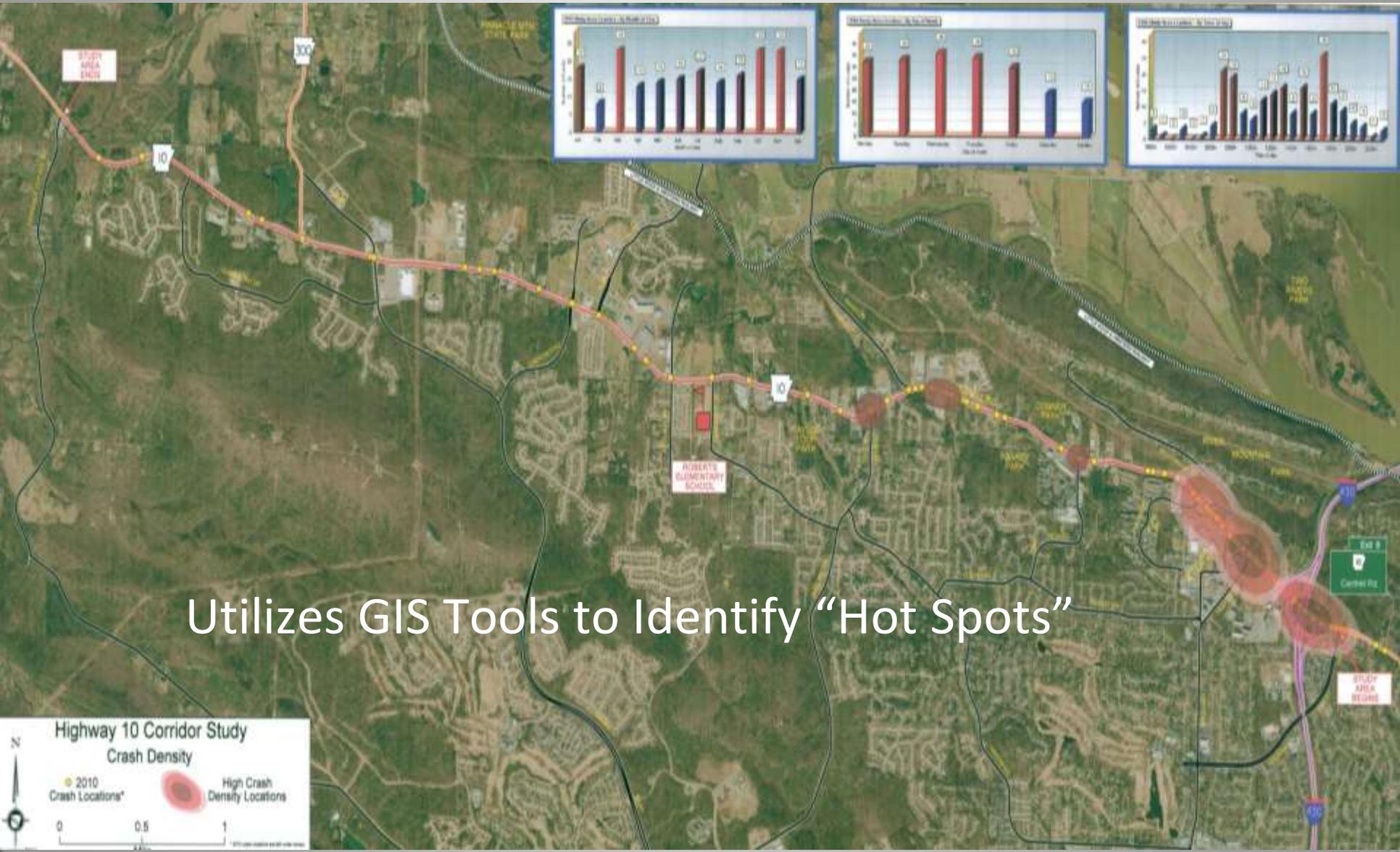
Directions: [To here](#) - [From here](#)

AHTD_District	06
CountyName	SALINE
County_Number	62
Route	00030
Section	328
Logmile	0.494
Longitude	-92.6786638
Latitude	34.5290381
Rural_Urban	Rural
FuncClass	Local
AvgDailyTraffic	44
Name	EB FRONTAGE RD AT CR F0023
TypeRoad	Frontage Road - Log Direction
RouteSign	Interstate
APHN	Not on APHN
Access	No control
TypeOperation	Two-Way Undivd
MedianType	No Median
NumberLanes	2
road_id	62x00030x328
ID1	123

Directions: [To here](#) - [From here](#)



# PLANNING AND SCHEDULING



Utilizes GIS Tools to Identify “Hot Spots”



# PLANNING AND SCHEDULING

## Utilizes GIS Tools to Visualize Crash Locations





# PLANNING AND SCHEDULING

## Project Prioritization / Selection

- **Pavement Preservation Project Selection Criteria**
  - ✓ Pavement Condition Rating
    - Roughness
    - Rutting
    - Cracking
  - ✓ Average Daily Traffic
  - ✓ Arkansas Primary Highway Network
  - ✓ Truck Percent

Pavement Preservation Goals		
System	Current Grade	Goal Grade
Interstate System	B	A
National Highway System	C+	B
Other Arkansas Primary Highway Network	C-	C+
Non Arkansas Primary Highway Network	D-	C-



# PLANNING AND SCHEDULING

## Project Prioritization / Selection

- **Bridge Preservation Project Selection Criteria**
  - ✓ Substandard Structural Condition Rating
  - ✓ Weight Restricted
  - ✓ Average Daily Traffic
  - ✓ Arkansas Primary Highway Network
  - ✓ Safety
  - ✓ Connectivity
  - ✓ Truck Percent
- **Capacity (Congestion Relief) Project Selection Criteria**
  - ✓ Level of Service E or F
    - Definition: Extremely Congested with Poor System Reliability
  - ✓ Safety
  - ✓ Partnering with Local Agencies

# PLANNING AND SCHEDULING

## Project Prioritization / Selection

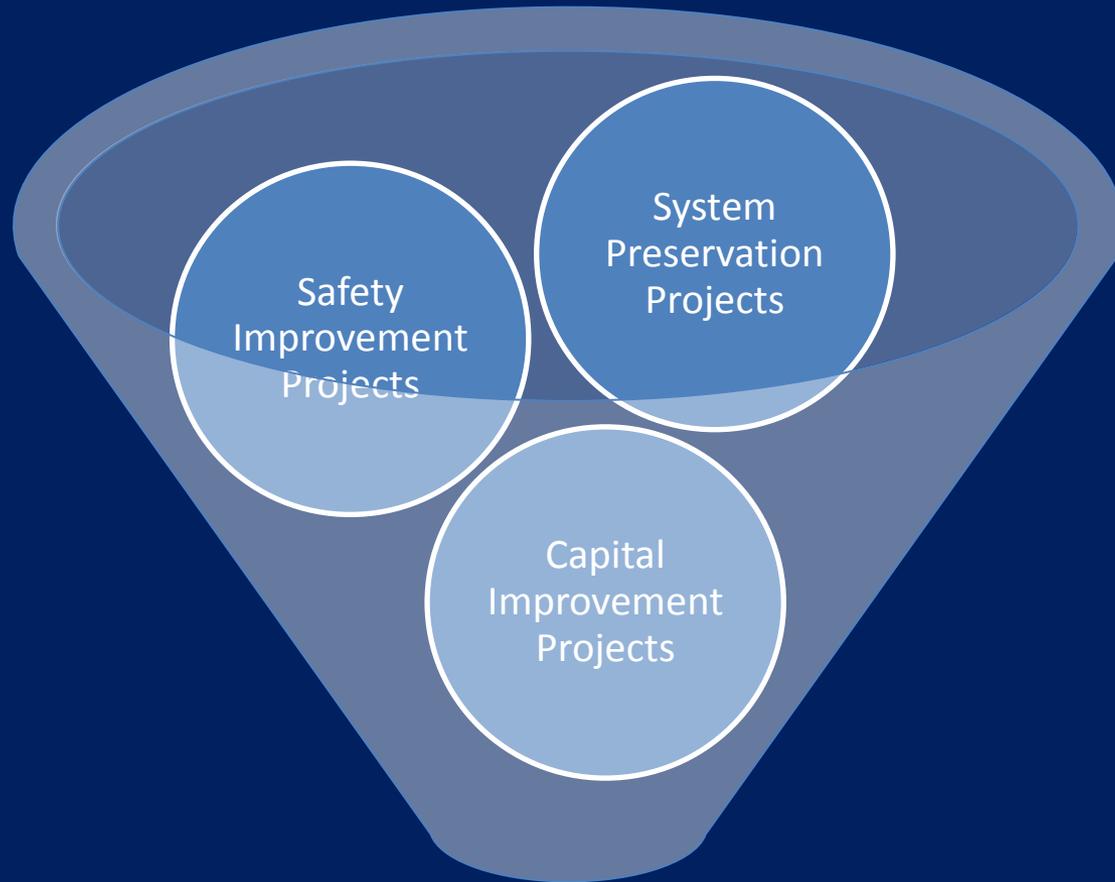
- **Safety Improvements**

- ✓ Systemic
- ✓ Location Specific



- **Capital Improvements**

- ✓ Arkansas Primary Highway Network
- ✓ Local Agencies
- ✓ Legislators
- ✓ Public
- ✓ Economic Development
- ✓ Partnering with Local Agencies



**Prioritized Within  
the Funding Available**





## ESTIMATED AVERAGE ANNUAL CONSTRUCTION FUNDS (FISCAL YEARS 2017-2019)

Federal Funds (Est. Average Annual Revenue from MAP-21) .....	\$ 490 million
State Highway Funds (Est. Avg. Annual Revenue 2015-2017).....	\$ 410 million
<hr/>	
<b>Total Federal and State Highway Funds.....</b>	<b>\$ 900 million</b>

**Less Federal Funds for:**

Fixed Budgeted Expenditures (Maintenance, Administration and Operations) .....	\$30.0 million
Non-AHTD Projects (Transportation Alternatives, Counties, Cities, Urban Attributable, Metro Planning) .....	\$45.0 million
Non-Construction Programs (State Planning & Research) .....	\$9.9 million
Obligation Limitation .....	\$49.0 million

**Total Reduction - Federal Funds (\$ 134) million**

**Less State Funds for:**

Fixed Budgeted Expenditures (Maintenance, Administration and Operations) .....	\$280.0 million
State Match for Non-Construction Programs (State Planning & Research) .....	\$2.5 million

**Total Reduction - State Funds (\$ 282) million**

**Less Federal and State Funds for IRP Commitment:**

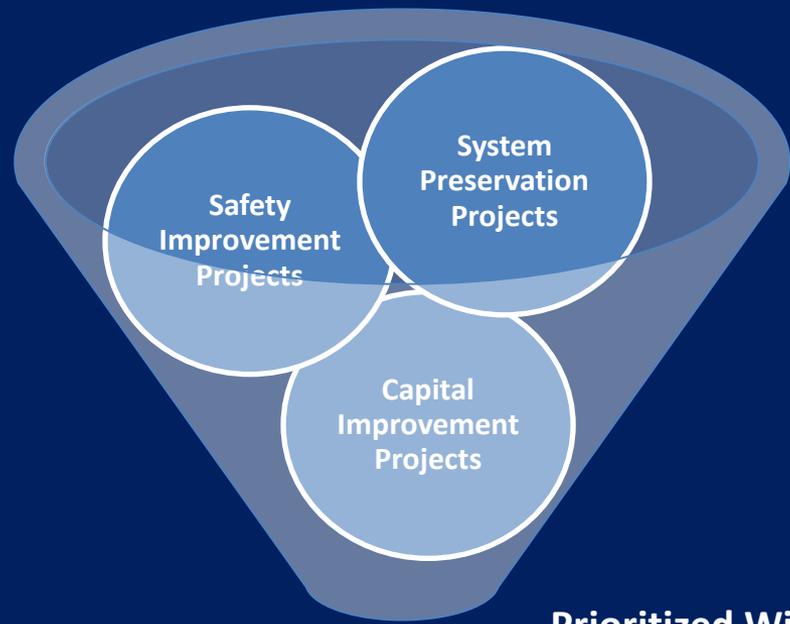
Federal Interstate Maintenance Funds.....	\$58.0 million
4¢ Diesel Fuel Tax.....	\$16.1 million

**Total Reduction - Federal and State Funds for IRP Commitment (\$ 74) million**

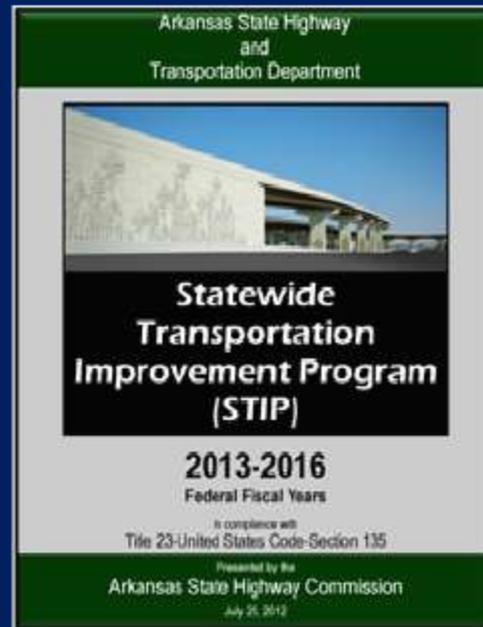
---

<b>Total Federal and State Funds Available for Highway Construction.....</b>	<b>\$ 410 million</b>
--	-----------------------





**Prioritized Within the  
Funding Available**





Arkansas State Highway  
and  
Transportation Department



**Statewide  
Transportation  
Improvement Program  
(STIP)**

**2013-2016**

Federal Fiscal Years

In compliance with  
Title 23-United States Code-Section 135

Presented by the  
Arkansas State Highway Commission

July 25, 2012



**PROJECT  
DELIVERY**

**Award  
Contract**

**Right of Way  
&  
Utilities**

**Design**

**Surveys**

**Environmental**

**Planning  
&  
Scheduling**



# Environmental

```
graph TD; A[Environmental] --- B[National Environmental Protection Act (NEPA)]; A --- C[Alternative Analysis Public Involvement]; A --- D[Impact Matrix Preferred Alternative]; A --- E[Resource Agency Coordination];
```

**National Environmental  
Protection Act (NEPA)**

**Alternative Analysis  
Public Involvement**

**Impact Matrix  
Preferred Alternative**

**Resource Agency  
Coordination**



# PROJECT DEVELOPMENT

- **Environmental Process**

- ✓ **National Environmental Policy Act (NEPA)**

- Purpose and Need
- Alternative Development and Analysis
- Public Involvement
- Impact Evaluation
- Preferred Alternative Identification
- Final Decision

- ✓ **Resource Agency Coordination**



**PROJECT  
DELIVERY**

**Let to  
Contract**

**Right of Way  
&  
Utilities**

**Design**

**Surveys**

**Environmental**

**Planning  
&  
Scheduling**



# Surveys

```
graph TD; Surveys[Surveys] --- Photogrammetry[Photogrammetry]; Surveys --- DesignSurveys[Design Surveys]; Surveys --- ParcelSurveys[Parcel Surveys];
```

**Photogrammetry**

**Design Surveys**

**Parcel Surveys**



# PROJECT DEVELOPMENT

- **Surveys**

- ✓ **Aerial Photography Obtained by Photogrammetry Section**
- ✓ **Design Surveys / Utility and Drainage Structure Data**
  - **Deliverables to Design:**
    - Design Surveys = Photogrammetry + Field Surveys
- ✓ **Parcel Surveys**
  - **Deliverables to Right of Way:**
    - Parcel Surveys = Existing Right of Way and Adjacent Property Owners

**PROJECT  
DELIVERY**

**Award  
Contract**

**Right of Way  
&  
Utilities**



**Design**

**Surveys**



**Environmental**



**Planning  
&  
Scheduling**



# Design

```
graph TD; Design[Design] --- A[Preliminary Layouts for Planning and Environmental]; Design --- B[Hydraulic Analysis and Traffic Engineering]; Design --- C[Roadway and Bridge Design]; Design --- D["Final Design Plans  
Standard Specifications / Special Provisions  
Engineer's Estimate"]
```

**Preliminary Layouts for  
Planning and Environmental**

**Hydraulic Analysis and  
Traffic Engineering**

**Roadway and Bridge Design**

**Final Design Plans  
Standard Specifications / Special Provisions  
Engineer's Estimate**



# PROJECT DEVELOPMENT

- **Design**
  - ✓ **Geometric and Pavement Design**
  - ✓ **Bridge Design**
  - ✓ **Hydraulic Analysis for Bridges, Culverts, Storm Drains, and Open Channel Flow**
  - ✓ **Design, Plan Preparation, and Traffic Signal Plans**
  - ✓ **Proposed Right of Way**
  - ✓ **Maintenance of Traffic, Permanent Striping, and Temporary Erosion Control Plans**
  - ✓ **Cost Estimates and Construction Time**

**PROJECT  
DELIVERY**



**Award  
Contract**

**Right of Way  
&  
Utilities**

**Design**

**Surveys**

**Environmental**

**Planning  
&  
Scheduling**

# ROW & Utilities

```
graph TD; A[ROW & Utilities] --- B[Right of Way Plans]; A --- C[Acquisition and Relocation]; A --- D[Utility Relocation];
```

**Right of Way Plans**

**Acquisition and Relocation**

**Utility Relocation**



# PROJECT DEVELOPMENT

- **Right of Way**

- Right of Way Plans
- Appraisals
- Negotiations / Acquisition
- Relocations

- **Utilities**

- Right of Way Plans
- Coordinate with Utility Companies
- Relocate Utilities

# PROJECT DELIVERY

Award Contract



Right of Way  
&  
Utilities

Design

Surveys

Environmental

Planning  
&  
Scheduling

# Award Contract

**Assemble Plans,  
Specifications, Estimate**

**Advertise**

**Award**

**Execute Contract  
Issue Notice to Proceed**



# AWARD CONTRACT

- **Plans, Specifications, and Estimates**
- **Obligate Federal Funds (if applicable)**
- **Projects Advertised**
- **Bid Documents Sold Electronically**
- **Bid Letting**
- **Bid Analysis**
- **Award**
- **Contract Execution**
- **Notice to Proceed**



# Project Delivery – Case Study

ARKANSAS STATE HIGHWAY & TRANSPORTATION DEPARTMENT

## MINUTE ORDER

Washington County Page 1 of 1 Pages  
Docket Number 4

WHEREAS, a U.S. 412 Bypass through Springdale is a proposed project listed on both the Springdale Master Street Plan and the Northwest Arkansas Regional Transportation Study Long-Range Plan; and

WHEREAS, four-lane improvements will soon be constructed along U.S. 412 east and west of Springdale; and

WHEREAS, there is a congestion problem along the existing U.S. 412 through Springdale; and

WHEREAS, vacant land that may be available for a future bypass is rapidly becoming developed;

NOW THEREFORE, the Director is authorized to proceed with location studies, plan development, corridor preservation and construction as funds become available.

This action is subject to appropriate approval by the Federal Highway Administration.

November 10, 1992

Approved: *Paul Hancock* Chairman  
*Robert E. Hester* Vice-Chairman  
*Steve Plante* Member  
*Bobby Hopper* Member  
*Herby Brannocum* Member  
Form D-45

Submitted by: *Roger Almond*  
Asst. Chief Engineer for Planning  
Approved: *Manson Sauer* Director  
Minute No. 10-2075  
Date Passed: NOV 10 1992

# Springdale Northern Bypass

## Concept to Groundbreaking

April 15, 2015





# Project Delivery – Case Study

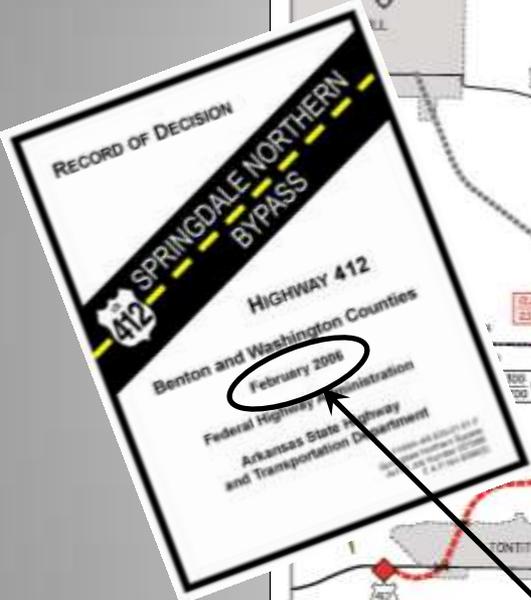
## Springdale Northern Bypass

Date	Action
1992	Feasibility Study First Authorized
1998	Environmental Process Began <ul style="list-style-type: none"><li>✓ Public Involvement / Scoping Meetings</li><li>✓ Notice of Intent for Environmental Impact Statement (EIS) Published</li></ul>
2002	Draft EIS - FHWA Approved for Public Dissemination
2002	Location Public Hearings
2004	Supplemental Draft EIS – FHWA Approved for Public Dissemination
2004	Location Public Hearings
2005	Final EIS – FHWA Approved for Public Dissemination
2006	FHWA Approved Record of Decision

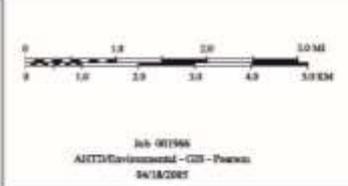
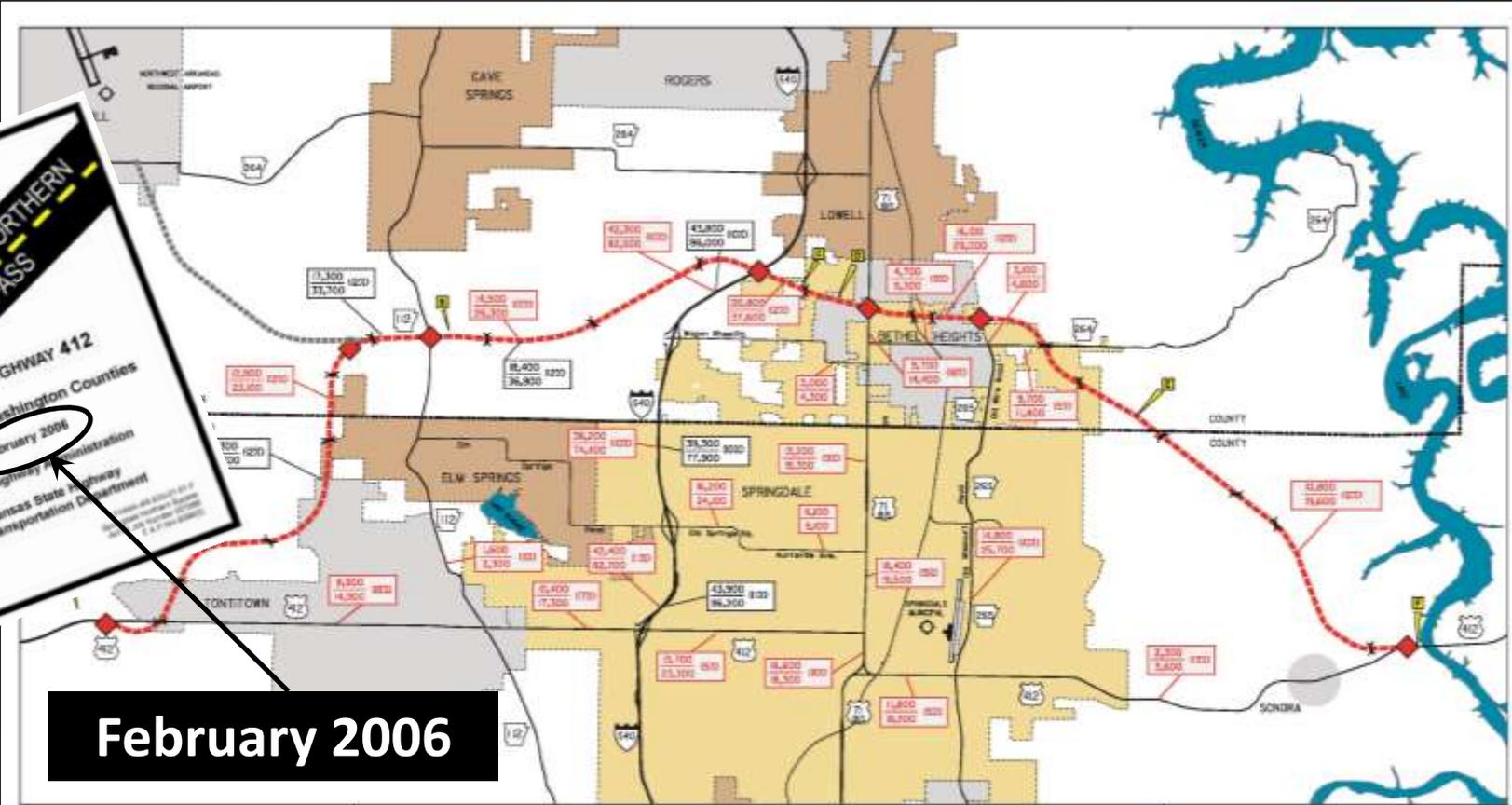


# Project Delivery – Case Study

## Springdale Northern Bypass Preferred Line



**February 2006**



**Legend**

- 2004 ADT  
2004 ADT Average Daily Traffic (ADT) Without NWARA Access Road
- 2004 ADT  
2004 ADT Average Daily Traffic (ADT) With NWARA Access Road
- Preferred Line
- Proposed Access Road to the Northwest Arkansas Regional Airport (NWARA)
- X Proposed Overpass
- ◆ Proposed Interchange

**Figure 2 - 8A**  
Preferred Line - Non-Toll  
Current and Projected Traffic Volumes

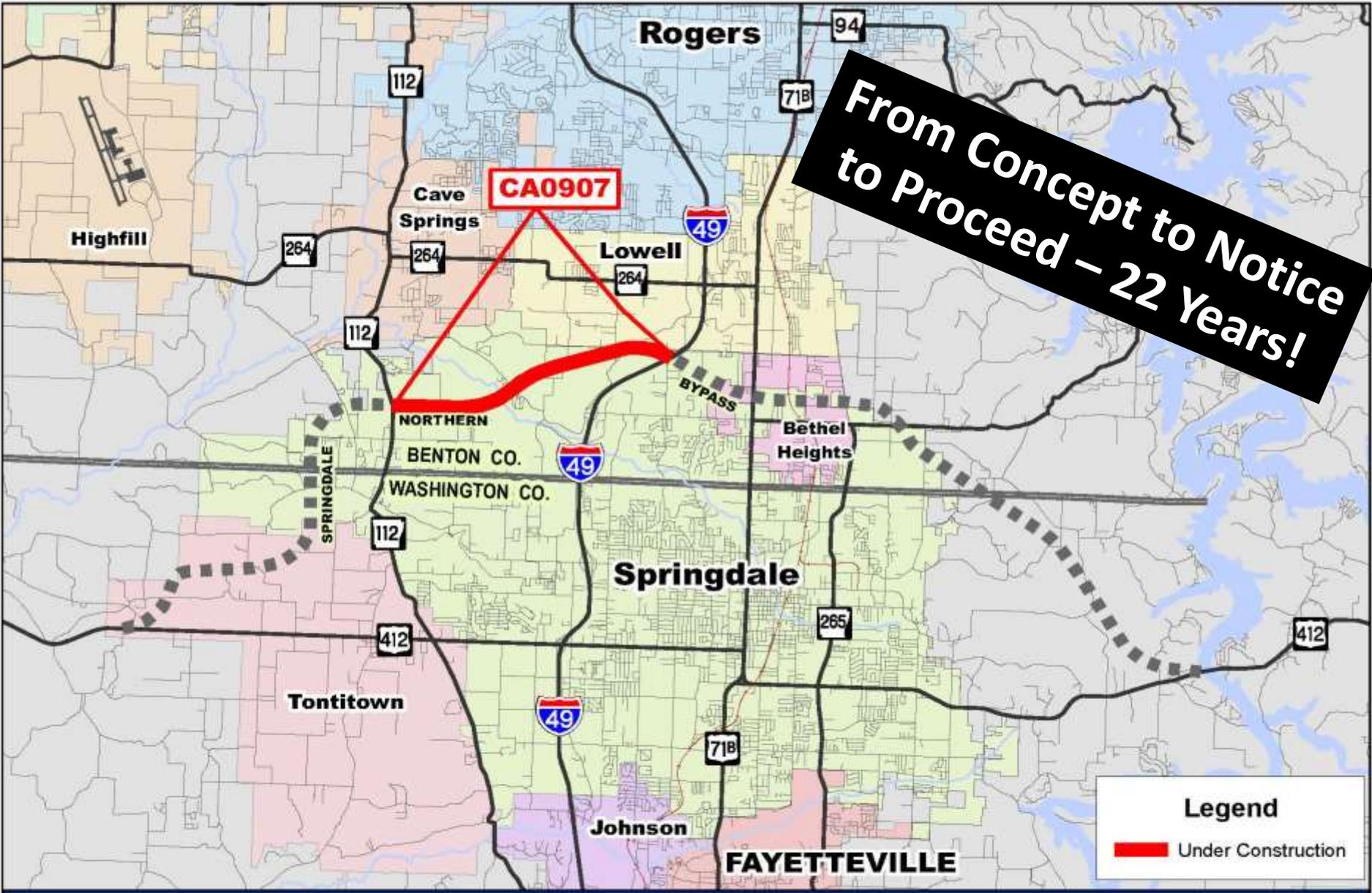


# Project Delivery – Case Study

## Springdale Northern Bypass

Date	Action
2006	Design Began (Work Performed by 2 Consultants)
2008	Design Public Hearing / Authority to Acquire Right of Way
2009	Funding for Right of Way Acquisition Added to the STIP
2012	Construction Funding identified as part of the Connecting Arkansas Program (1/2 cent sales tax) passed by Arkansas voters
2013	Utility Relocation Began
2015	Right of Way Acquisition Complete for Partial Western Leg
2015	Let to Contract and Notice of Proceed Issued - \$100.6 Million
2016	Utility Relocation End
2014	Let to Contract - \$100.6 Million
2019	Estimated Completion Date

**From Concept to Notice  
to Proceed – 22 Years!**



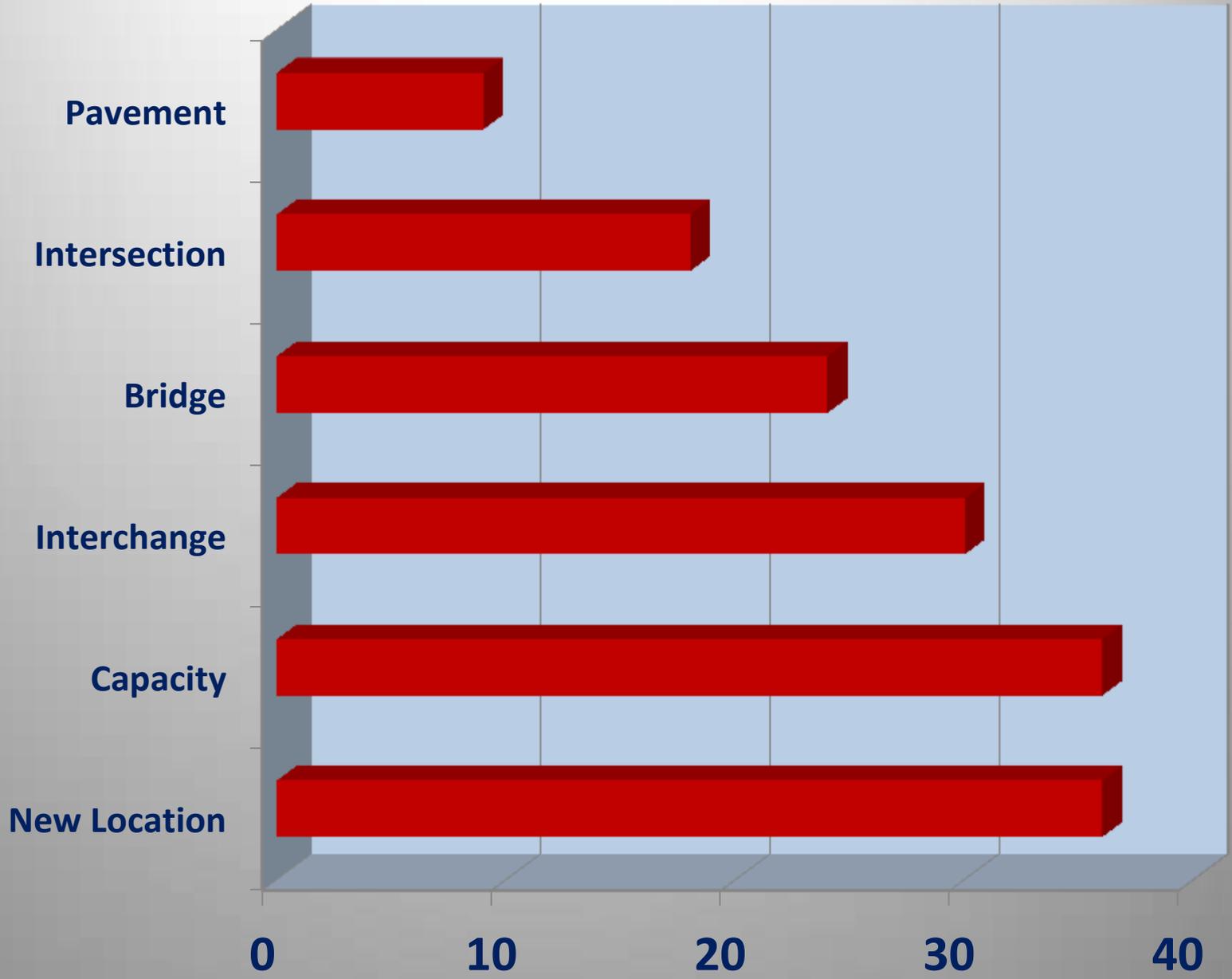
# Springdale Northern Bypass

Benton and Washington Counties



PRE. PS. CLD. 10-20-2015

# Timeline by Type Project



*Average Number of Months for Project Development*

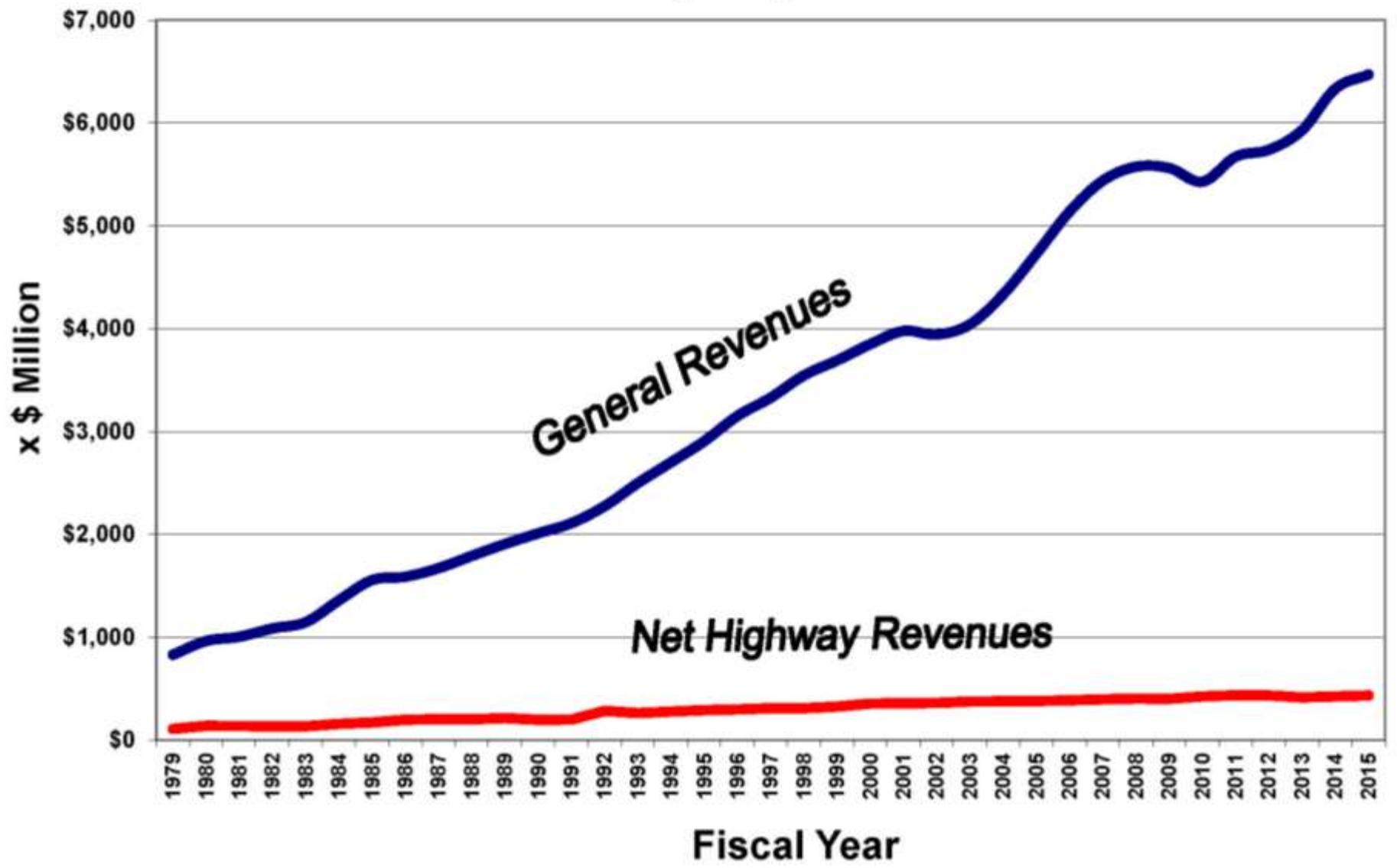




# Challenges

- ✓ **12<sup>th</sup>** largest system in the country
- ✓ **40<sup>th</sup>** in highway revenue per mile
- ✓ **\$20 billion** in needs
- ✓ **\$4 billion** in available revenue

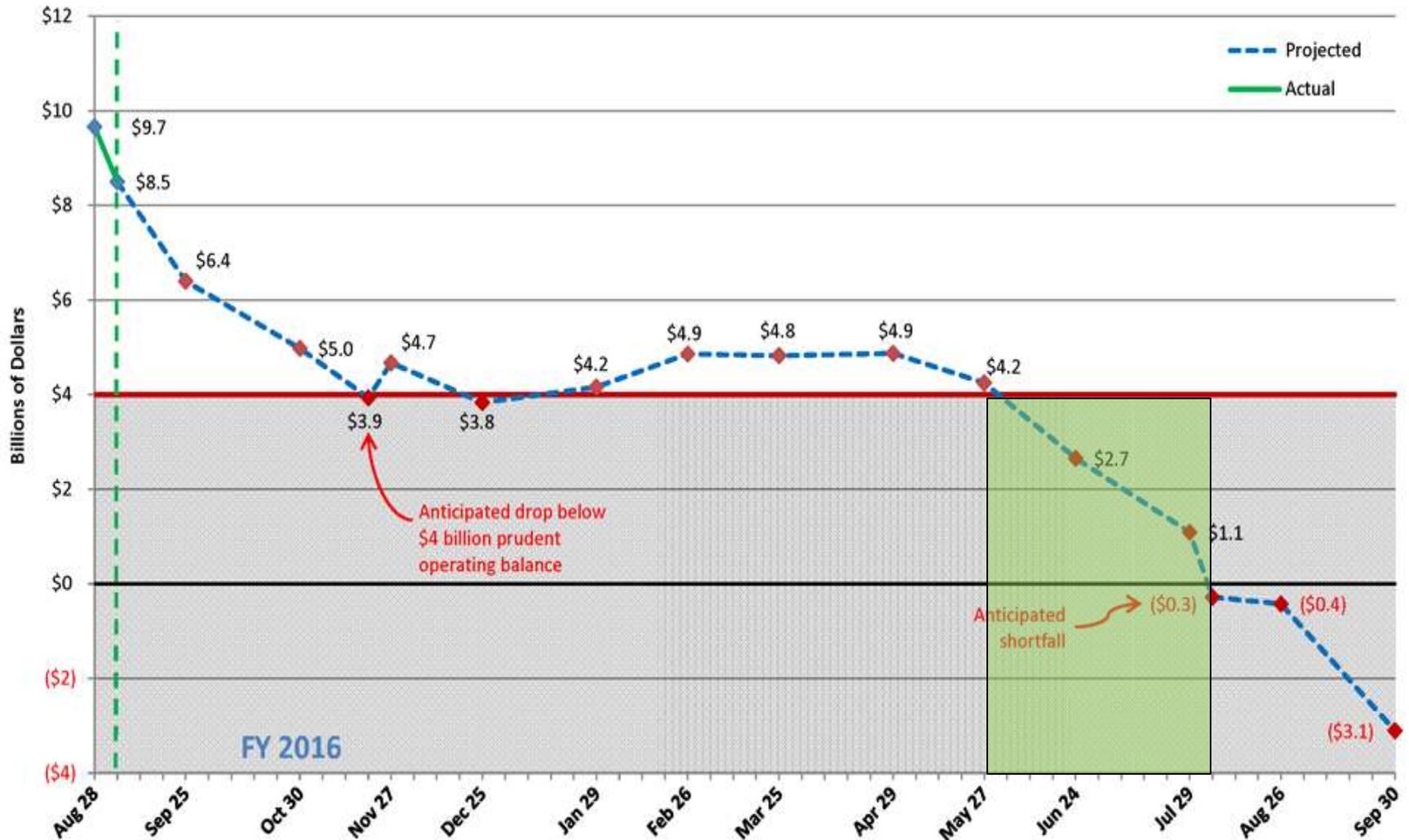
# Arkansas State General Revenues vs AHTD Net Highway Revenues



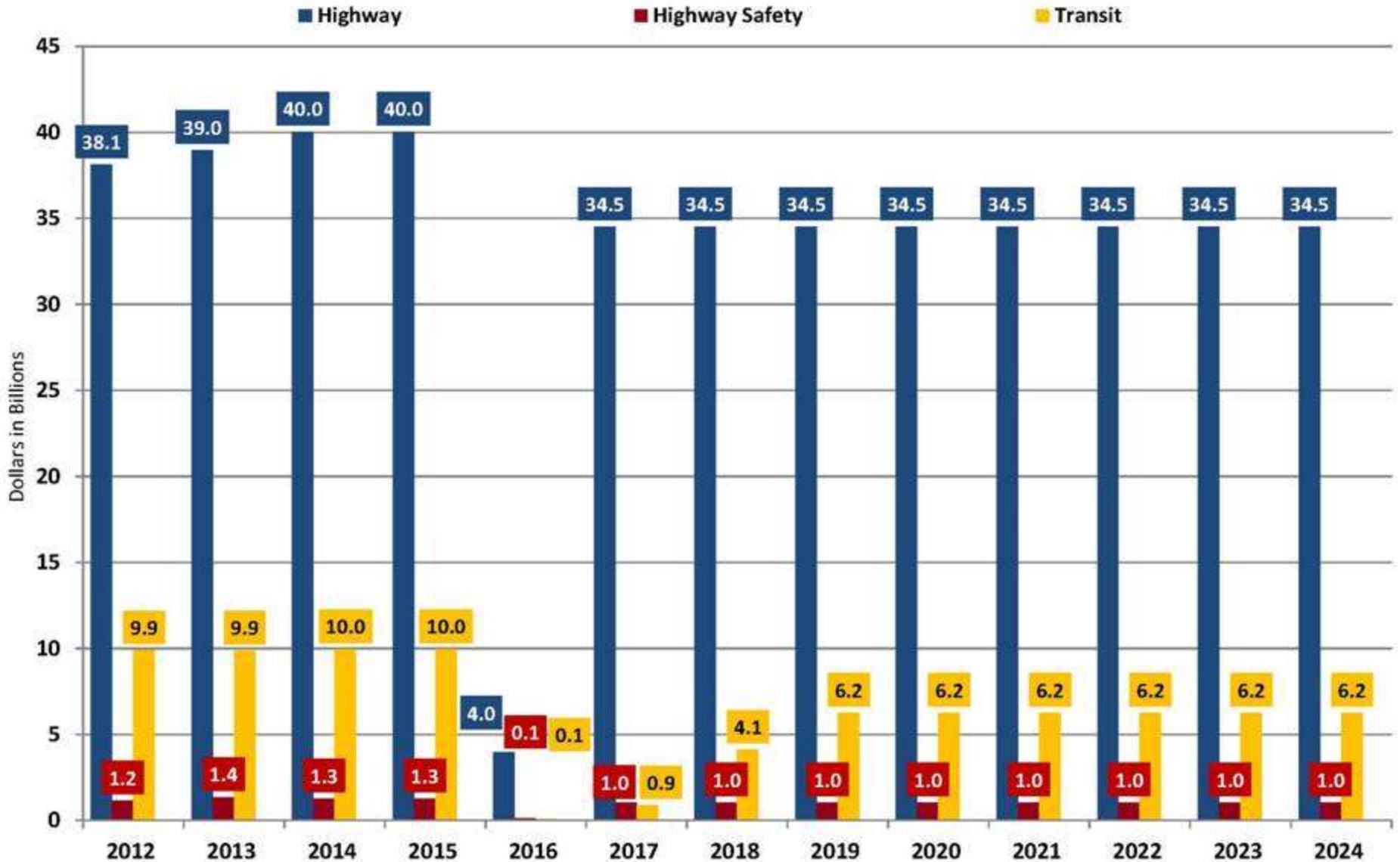
# Highway Trust Fund

FY 2015 & FY 2016 Projected Estimates for End-of-Month Cash Balances (as of 9/4/15) <sup>1/ 2/ 3/ 4/</sup>

Highway Account of the Highway Trust Fund (Includes FHWA, FMCSA & NHTSA)



# ESTIMATED FEDERAL HIGHWAY TRUST FUND OBLIGATIONS



This scenario assumes: 1. Additional deposit of \$6.429 billion into Highway Trust Fund in FY 2015 (\$5.414 billion to Highway Account; \$1.015 billion to Mass Transit Account); 2. Minimum prudence balance of \$4 billion for Highway Account and \$1 billion for Mass Transit Account maintained in all years, and; 3. Highway-to-Transit flex and highway safety obligations suspended in FY 2015.

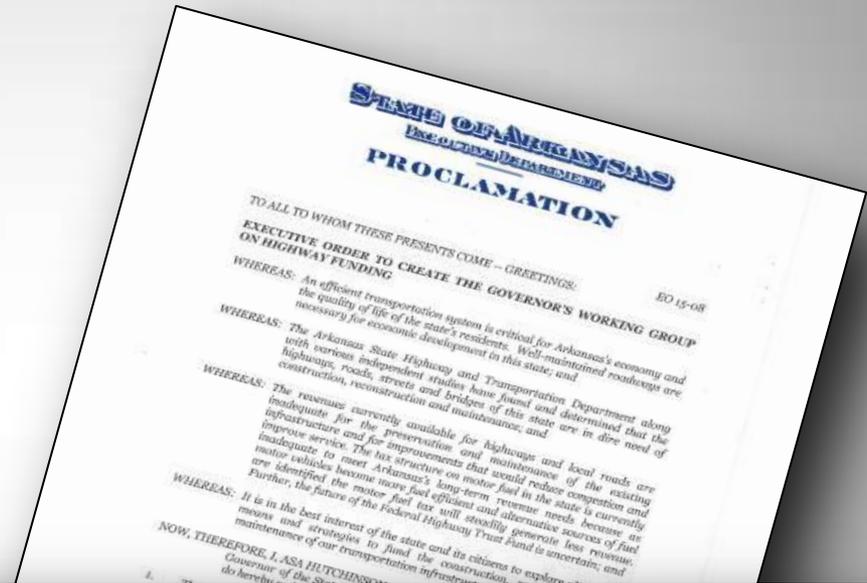


# Loss of Purchasing Power

Item	Description	1993	2010	Variance
Tuition	Tuition/Fees	\$3,517	\$9,136	160%
Gas	Per Gallon	\$1.12	\$2.73	144%
Movie	Avg. Ticket	\$4.14	\$7.89	91%
House	Median Price	\$126,500	\$221,800	75%
Bread	Per Pound	\$1.08	\$1.76	62%
Income	Avg. Household	\$31,272	\$49,167	57%
Stamp	1 <sup>st</sup> Class	29¢	44¢	52%
Beef	Per Pound	\$1.57	\$2.28	46%
Car	Avg. New Car	\$19,200	\$26,850	40%
Consumer Price Index	Avg. Purchases	144.48	218.08	51%
Construction	Const. Cost Index	99.50	237.60	139%
<b>Fed Gas Tax</b>	<b>Per Gallon</b>	<b>18.4¢</b>	<b>18.4¢</b>	<b>0%</b>



# Governor's Working Group on Highway Funding



**“An efficient transportation system is critical for Arkansas’ economy and the quality of life of the state’s residents.”**

The Chamber of Commerce;  
the State Department of Higher Education;  
the Department of Finance & Administration; and  
transportation and/or finance industries.



# Additional Information

- [ArkansasHighways.com](http://ArkansasHighways.com)
- [ConnectingArkansasProgram.com](http://ConnectingArkansasProgram.com)
- [Vimeo.com/AHTD](http://Vimeo.com/AHTD)
- [IDriveArkansas.com](http://IDriveArkansas.com)
- [Twitter.com @AHTD](https://twitter.com/AHTD)



@AHTD



# Highway Project Delivery

## Planning to Construction

# QUESTIONS?

**Scott E. Bennett, P.E.**

Director of Highways and Transportation

