

I-30 Corridor Project Overview



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



September 21, 2015

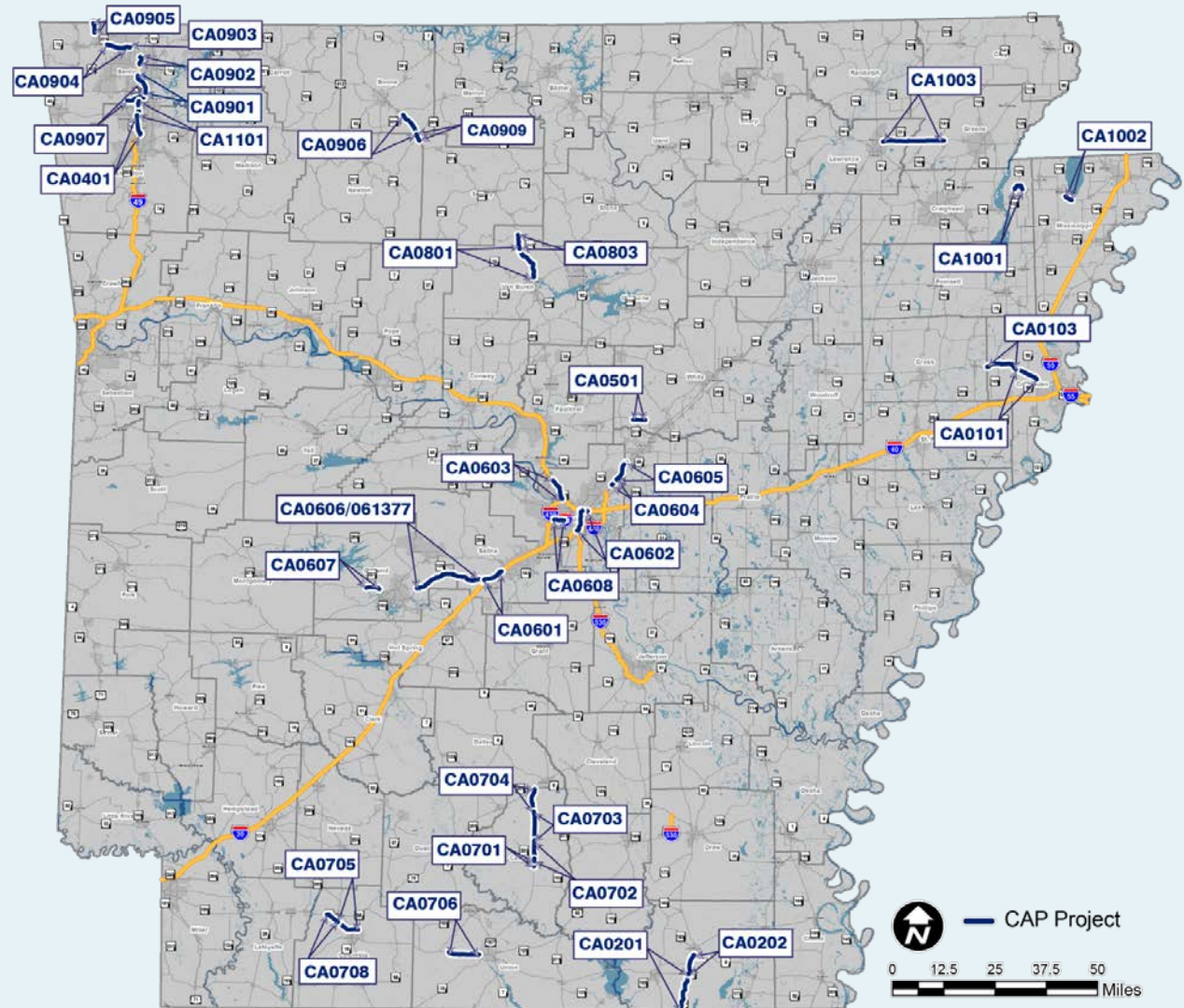
CAP Overview

Overview

35 projects in
19 corridors

Widening Projects

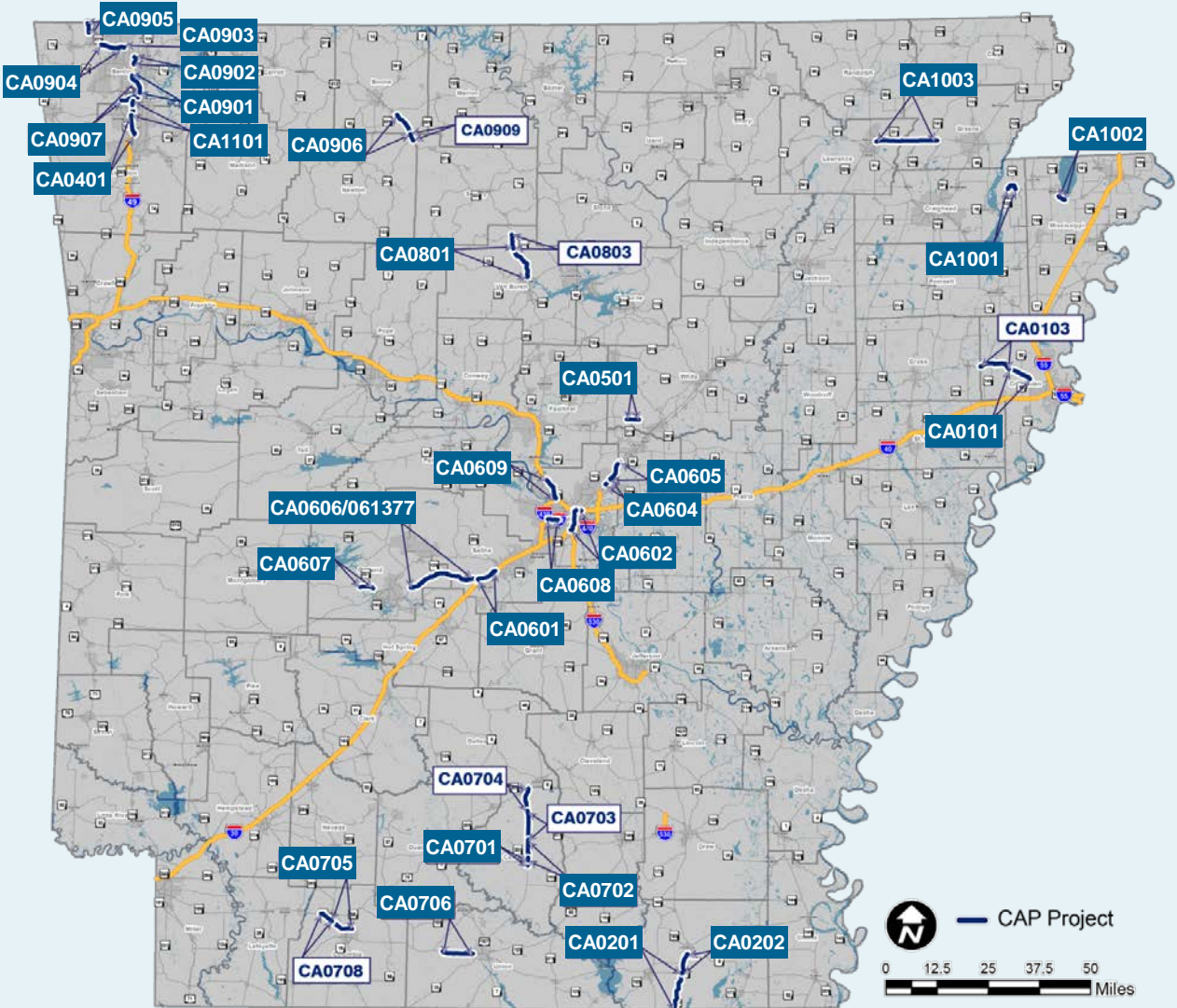
Funded through
½-cent sales tax



Design Status

Design

29 projects in design or have completed design

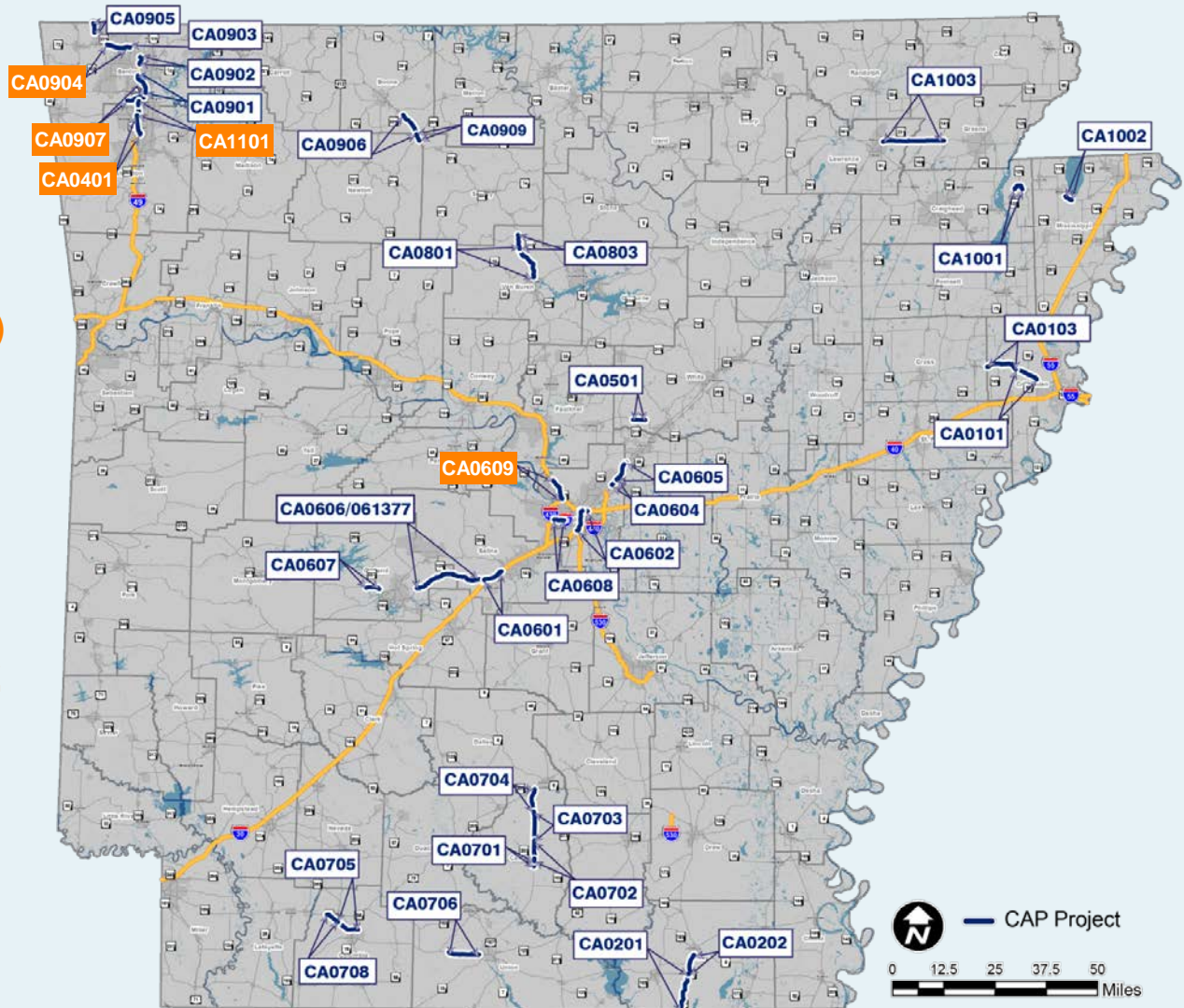


Construction Status

5 Projects

Under Construction

- **Bella Vista Bypass**
(Hwy. 549)
– Est. Comp: Mid '16
- **Hwy. 365 - I-430** (I-40)
– Est. Comp: Mid '16
- **Hwy. 412 - Wagon Wheel Road** (I-49)
– Est. Comp: Early '17
- **Hwy. 71B - Hwy. 412**
(I-49)
– Est. Comp: Early '17
- **Springdale Bypass**
(Hwy. 412)
– Est. Comp: Late '18



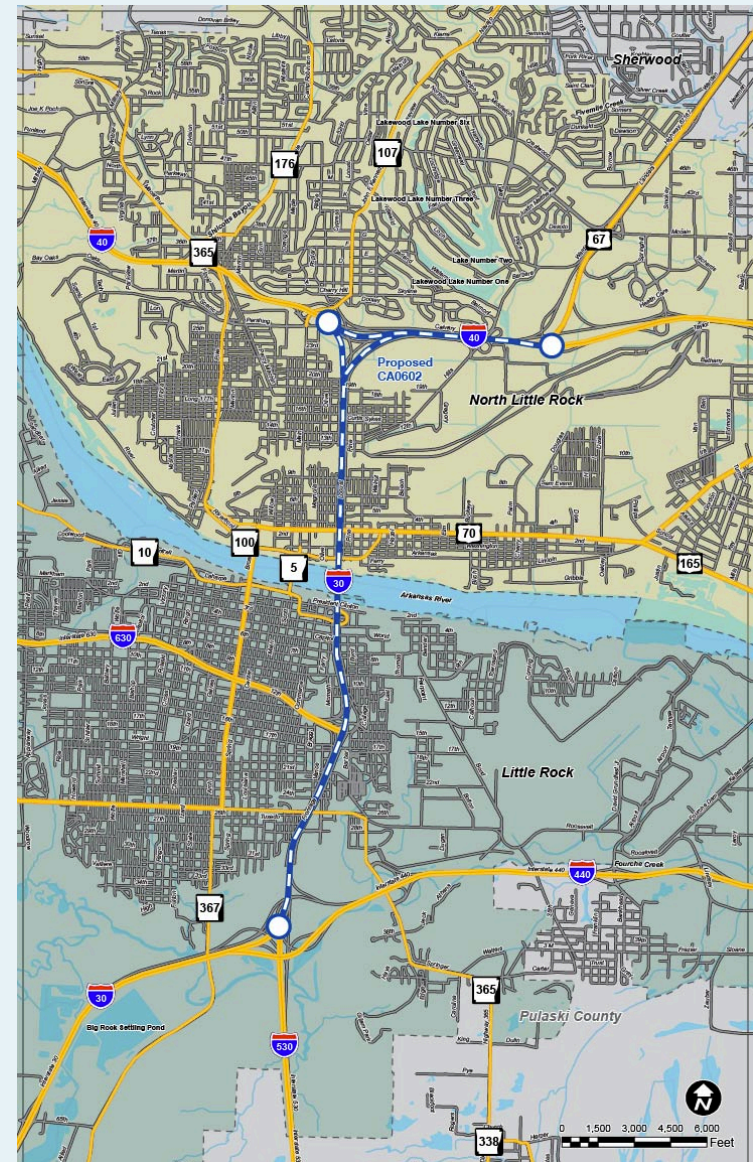
CAP Overview

30 Crossing

It is approximately 6.7 miles in length and extends through portions of Little Rock and North Little Rock in central Arkansas.

The corridor extends:

- along I-30 from I-530 to the south and I-40 to the north
- along I-40 to its interchange with US 67 in North Little Rock



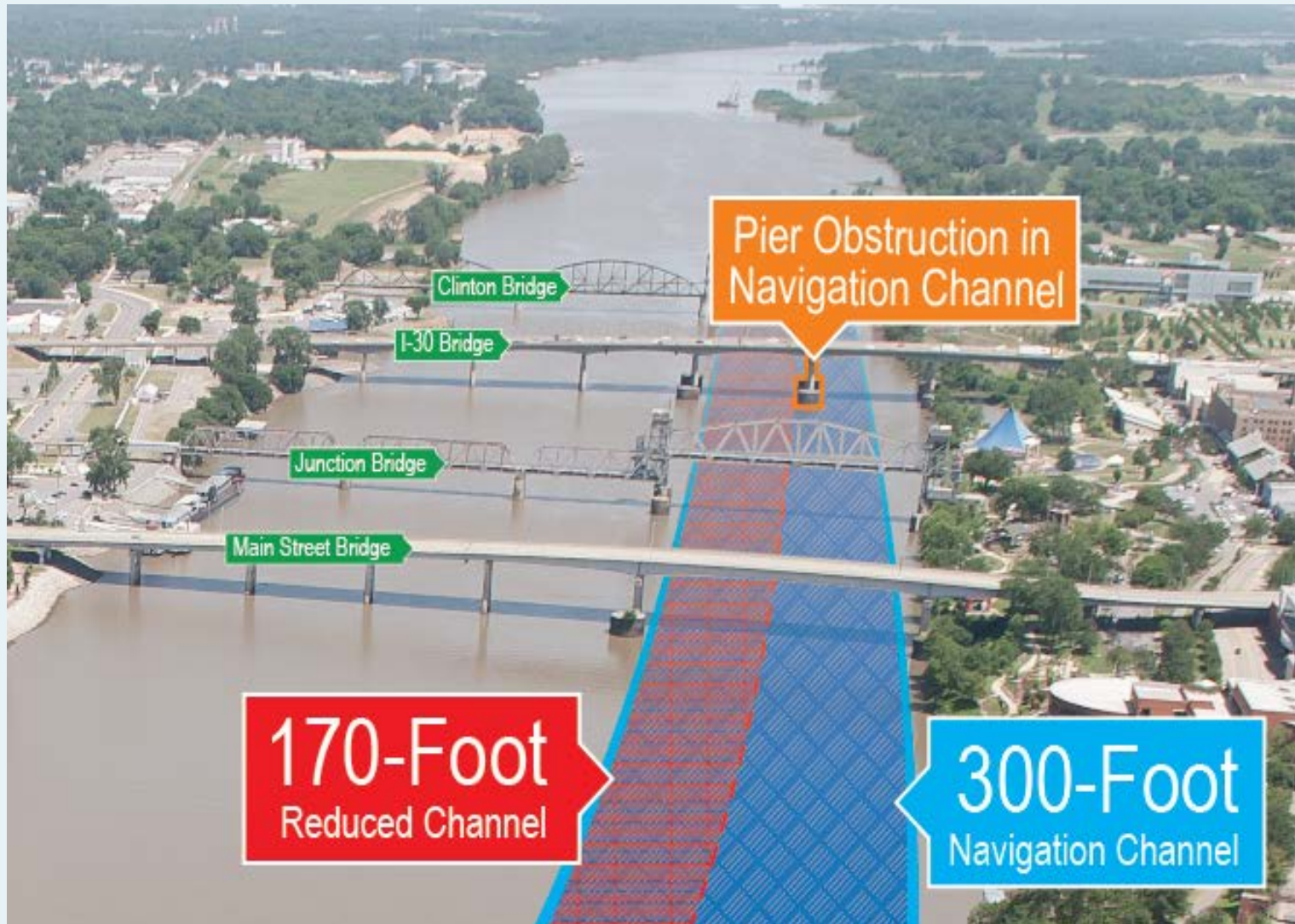
PURPOSE & NEED



Needs (Problems)	Purpose (Solutions)
Traffic Congestion	To improve mobility on I-30 and I-40 by providing comprehensive solutions that improve travel speed and travel time to downtown North Little Rock and Little Rock and accommodate the expected increase in traffic demand. I-30 provides essential access to other major statewide transportation corridors, serves local and regional travelers and connects residential, commercial and employment centers.
Roadway Safety	To improve travel safety within and across the I-30 corridor by eliminating and / or improving inadequate design features.
Structural and Functional Roadway Deficiencies	To improve I-30 roadway conditions and functional ratings.
Navigational Safety	To improve navigational safety on the Arkansas River Bridge by eliminating and / or improving inadequate design features.
Structural and Functional Bridge Deficiencies	To improve I-30 Arkansas River Bridge conditions and functional ratings.

Purpose & Need listed in no particular order. Purpose & Need developed in coordination with Project Partners (Cities of Little Rock and North Little Rock, Pulaski County, and Metroplan), the Technical Work Group, and the public.

Navigation Safety



STUDY GOALS



Improve opportunity for east-west connectivity	Enhance mobility
Improve local vehicle access to downtown Little Rock and North Little Rock	Connect bicycle/pedestrian friendly facilities
Accommodate existing transit and future transit	Minimize roadway disruptions during construction
Minimize river navigation disruptions during/after construction	Follow through on commitment to voters to improve I-30 as part of the Connecting Arkansas Program
Optimize opportunities for economic development	Avoid and/or minimize impacts to the human and natural environment, including historic and archaeological resources
Sustain public and agency input and support for the I-30 corridor improvements	Improve system reliability
Maximize I-30 cost efficiency	Improve safety

Study Goals listed in no particular order. Study Goals developed in coordination with Project Partners (Cities of Little Rock and North Little Rock, Pulaski County, and Metroplan), the Technical Work Group, and the public.

Coordination & Meetings

Project Partners

- Regular meetings with the city mayors, county judge, FHWA, Metroplan, and AHTD.

Technical Work Group (TWG)

- 35+ agencies (local, state, federal) provide technical input and expertise. Three coordination meetings held.

Stakeholder Meetings

- Coordination meetings are held with local groups with an interest or located within the study area.

Stakeholder Advisory Group (SAG)

- Pulaski County, Little Rock, and North Little Rock have each appointed four citizens to provide feedback on options being studied.

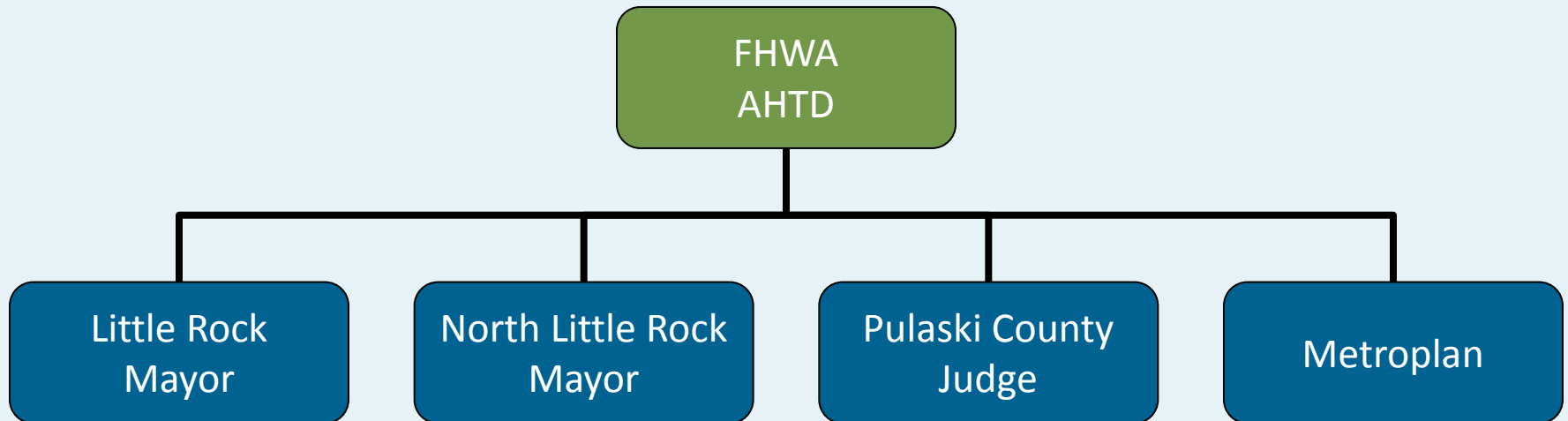
Visioning Workshops

- Pulaski County, Little Rock, and North Little Rock have each appointed citizens to the 30-member group. The first workshop was in November.



Project Partners

With AHTD and FHWA serving as lead agencies, local community officials provided expertise and input to help govern the project.



Technical Work Group (TWG)

Invited Agencies

Ark. State Highway and Transportation Dept.	Ark. Archeological Survey	Ark. Commissioner of State Lands
Ark. Dept. of Emergency Management	Ark. Dept. of Environmental Quality	Ark. Dept. of Health
Ark. Dept. of Parks and Tourism	Ark. Economic Development Commission	Ark. Forestry Commission
Ark. Game and Fish Commission	Ark. Geological Survey	Ark. Historic Preservation Program
Ark. Natural Heritage Commission	Ark. Natural Resources Commission	Ark. State Police
Ark. Waterways Commission	Central Ark. Transit Authority	City of Little Rock - Planning and Development
City of Little Rock - Public Works	City of Little Rock Parks and Recreation	City of North Little Rock
City of North Little Rock Parks and Recreation	Federal Highway Administration	Federal Railroad Administration, SW Region
Housing & Urban Development	Little Rock District Corps of Engineers	Little Rock School District
Metroplan	North Little Rock A&P Commission	North Little Rock Visitors Bureau
North Little Rock School District	Pulaski County Planning & Development	Pulaski County Special School District
Union Pacific Railroad	US Army Corps of Engineers	US Coast Guard - Western Rivers
US Dept. of the Interior - National Park Service	US Environmental Protection Agency Region 6	US Fish and Wildlife Service
US Geological Survey - Ark. Water Science	Federal Emergency Management Agency	US Natural Resources Conservation Service
Federal Transit Administration		

Coordination Meetings



Coordination meetings are being held with business owners, political representatives, community groups and senior staff of local agencies who are adjacent to the project area.

- Argenta Boosters
- North Little Rock City Board
- NLR Kiwanis Club
- Downtown Little Rock Partnership
- Clinton Foundation
- Little Rock Chamber of Commerce
- Central Arkansas Transit Authority
- Little Rock Chamber of Commerce – Fifty for the Future
- Little Rock Historic District Commission
- Coalition of Greater Little Rock Neighborhoods
- Little Rock City Board
- Park Hill Neighborhood Association
- FUMC Lent Lunch Series

Stakeholder Advisory Group (SAG)

Pulaski County, Little Rock, and North Little Rock each appointed four citizens to the group.

Appointed by the city mayors and county judge, members provide local perspective to areas of interest within the community during project development.



Jerome Green—Shorter College



Stephanie Streett—Clinton Foundation



Sandra Brown—Verizon Arena Board



Bruce Moore—Little Rock City Manager

Visioning Workshop

First Visioning Workshop

This first Visioning Workshop invited appointed stakeholders in the community to provide input and prioritize their ideas for the I-30 corridor.

Purpose

This included insight into preserving and enhancing aesthetic, historic, and community resources.

Attendees

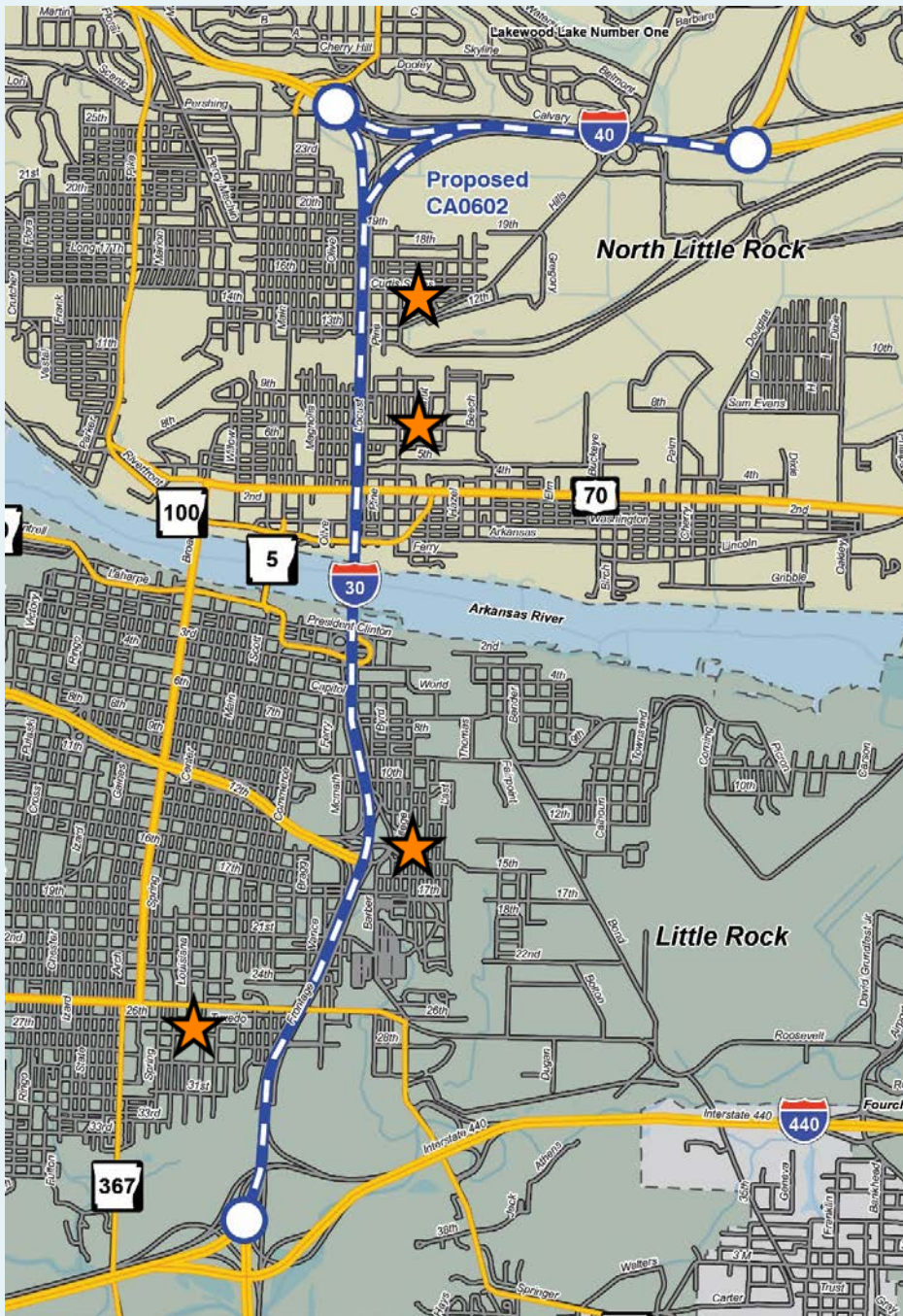
Invited 30 participants representing Little Rock, North Little Rock and Pulaski County.



Public Meetings

Public Meetings	Content
<p>PM #1 August 2014</p>	<ul style="list-style-type: none"> • PEL Introduction • Study Area • Alternative Screening Process • Public Comment on Purpose and Needs, and Study Area Constraints
<p>PM #2 November 2014</p>	<ul style="list-style-type: none"> • Universe of Alternatives • Preliminary Alternatives
<p>PM #3 January 2015</p>	<ul style="list-style-type: none"> • Level 2 Screening Results • Reasonable Alternatives
<p>PM #4 April 2015</p>	<ul style="list-style-type: none"> • Level 3 Screening Results • PEL Recommendation(s)

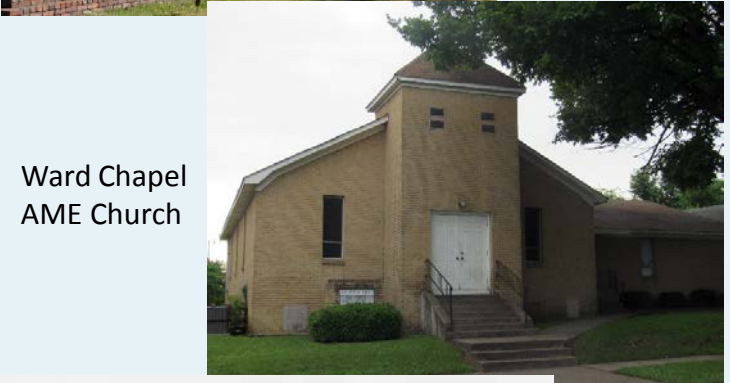




King Solomon Baptist Church



Shorter College



Ward Chapel AME Church



St. John Missionary Baptist Church

Community Meetings

Minority Churches

Universe of Alternatives



Highway Build (14)



I-30 Arkansas River Bridge (3)



Other Modes (10)



Congestion Management (10)

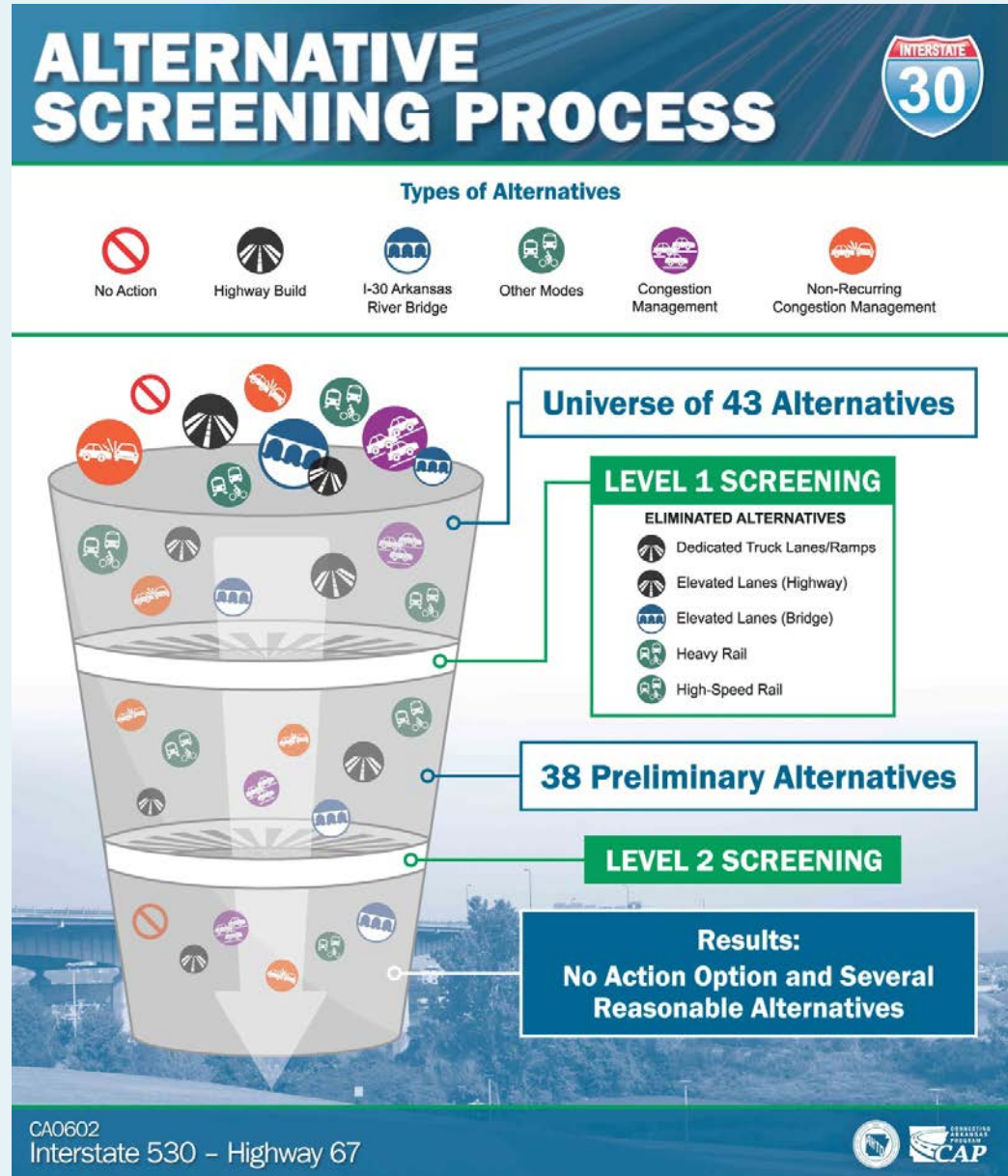


Non-Recurring Congestion (5)

Level 1 Screening

Level 1 screening eliminated 5 alternatives

38 alternatives moved on to Level 2 screening



Level 2 Screening

Level 2 screening eliminated 8 alternatives

30 alternatives moved on to further screening

LEVEL 2 SCREENING METHODOLOGY



Level 2 Screening Process

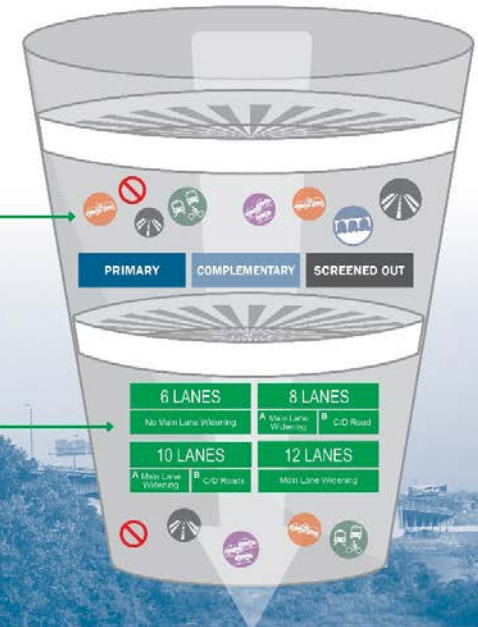
- Qualitative screening (with some quantitative analysis) of the 38 Preliminary Alternatives (from Level 1) based on the study goals
- Two-step process that produced the Reasonable Alternatives to be tested in Level 3

LEVEL 2A SCREENING

- Test 38 Preliminary Alternatives against project goals and measures (qualitative)
- Group into 3 categories
 1. Primary
 2. Complementary
 3. Screened Out

LEVEL 2B SCREENING

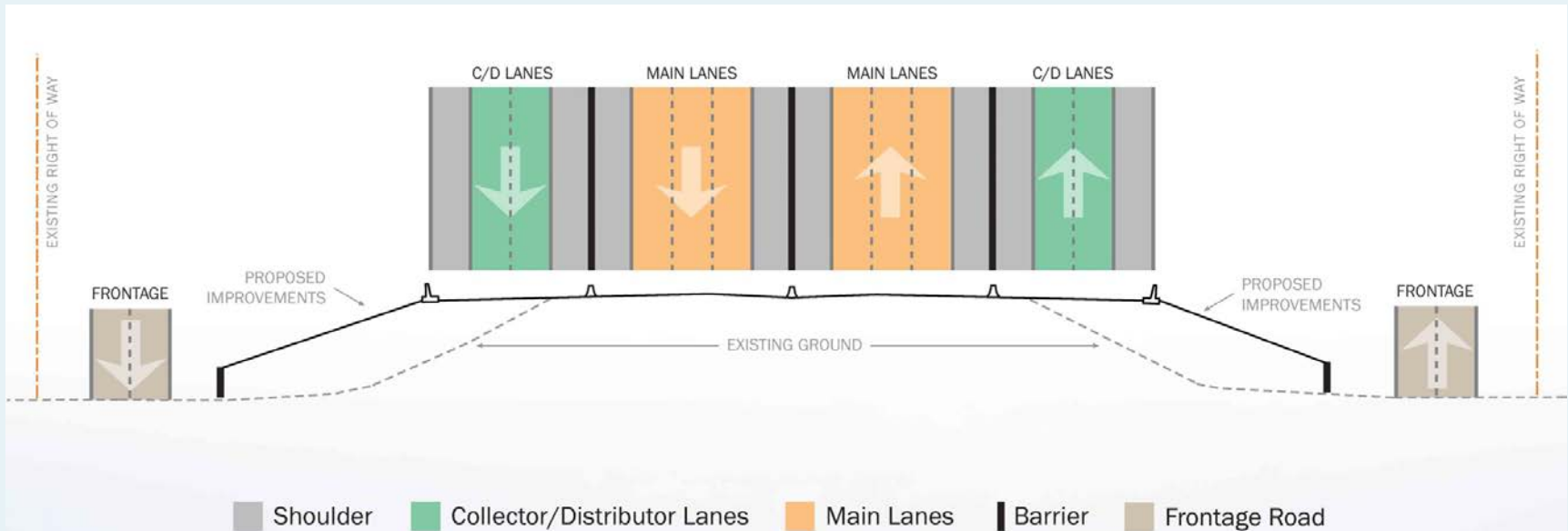
- Group remaining Preliminary Alternatives as Basic Scenarios
- Test Basic Scenarios against project goals and measures (qualitative with some quantitative)
- Identify Reasonable Alternatives for further refinement and analysis in Level 3



Basic Scenarios

Scenario 1	6 Lanes	No Additional Lanes (With Complementary Alternatives) No Main Lane Widening
Scenario 2	8 Lanes	A Main Lane Widening (With Complementary Alternatives) 3 Main Lanes + 1 Main Lane Widening (each direction)
		B Collector/Distributor (C/D) Roads (With Complementary Alternatives) 3 Main Lanes + 1 C/D Lane Widening (each direction)
Scenario 3	10 Lanes	A Main Lane Widening (With Complementary Alternatives) 3 Main Lanes + 2 Main Lane Widening (each direction)
		B Collector/Distributor (C/D) Roads (With Complementary Alternatives) 3 Main Lanes + 2 C/D Lane Widening (each direction)
Scenario 4	12 Lanes	Main Lane Widening (With Complementary Alternatives) 3 Main Lanes + 3 Main Lane Widening (each direction)

Collector / Distributor



What is a Collector/Distributor?

- C/D lanes are separated from main lanes by a barrier
- C/D lanes parallel and connect the main lanes of a highway with interchange ramps
- C/D lanes operate at lower speeds than main lane speeds and higher speeds than frontage road speeds



I-30 – 10 Lanes with Downtown Collector/Distributor Roads
2041 Traffic Showing the Morning Peak Hour 7:15-8:15 a.m
Public Meeting April 16, 2015
ConnectingArkansasProgram.com



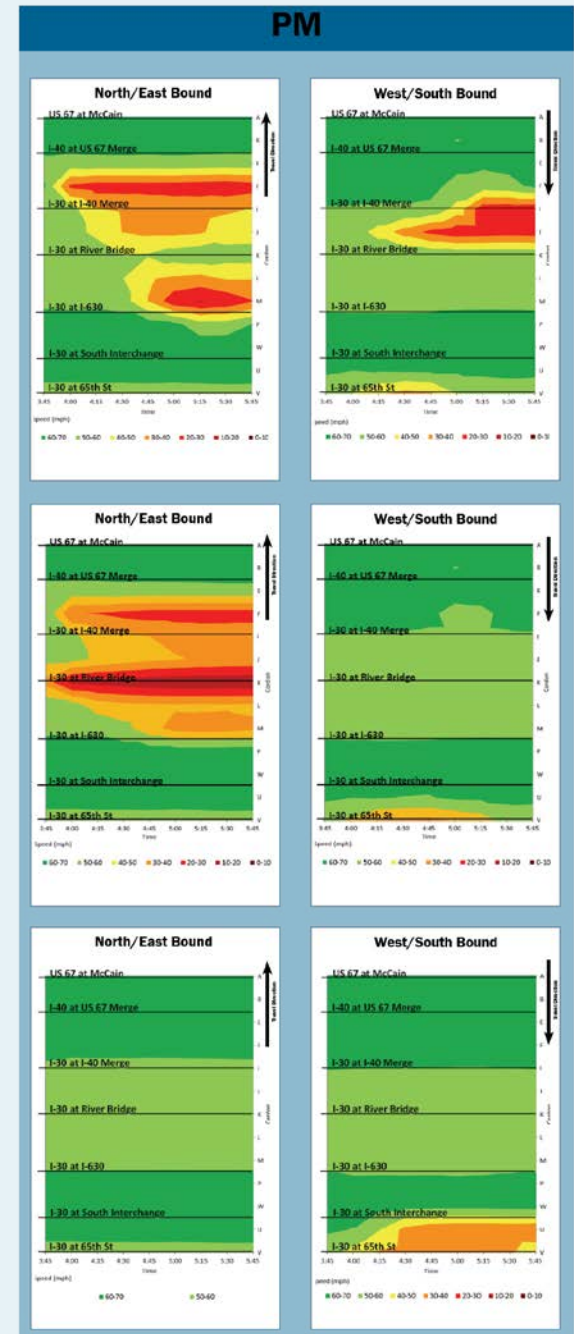
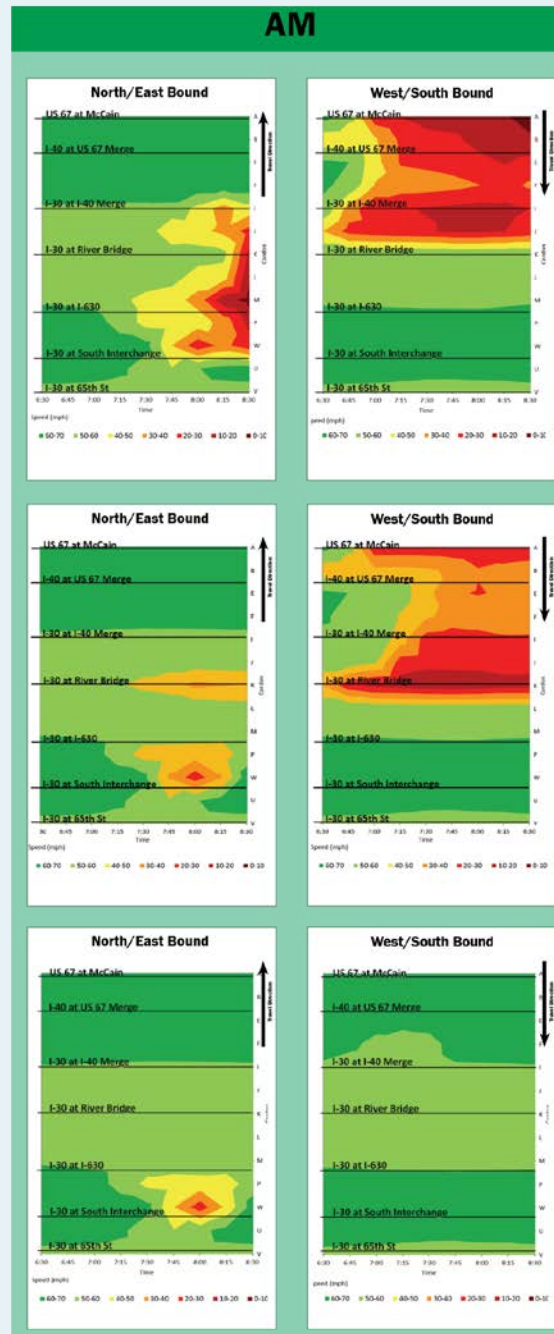
Speed Profiles

Assumes other
Improvements outside
the PEL Study Area

8-LANE
C/D
(2041)

8-LANE
GP
(2041)

10-LANE
C/D
(2041)



Level 3 Screening

Level 3 screening tested the three Reasonable Alternatives and No Action against project goals and objectives

LEVEL 3 SCREENING METHODOLOGY

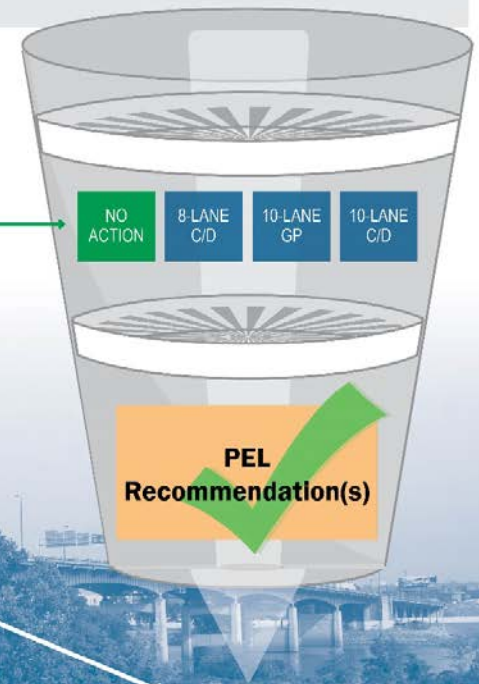


Level 3 Screening Process

A quantitative screening of mobility, safety, cost, and environmental measures, with some qualitative analysis.

LEVEL 3 SCREENING

Test three Reasonable Alternatives and No Action against project goals and objectives



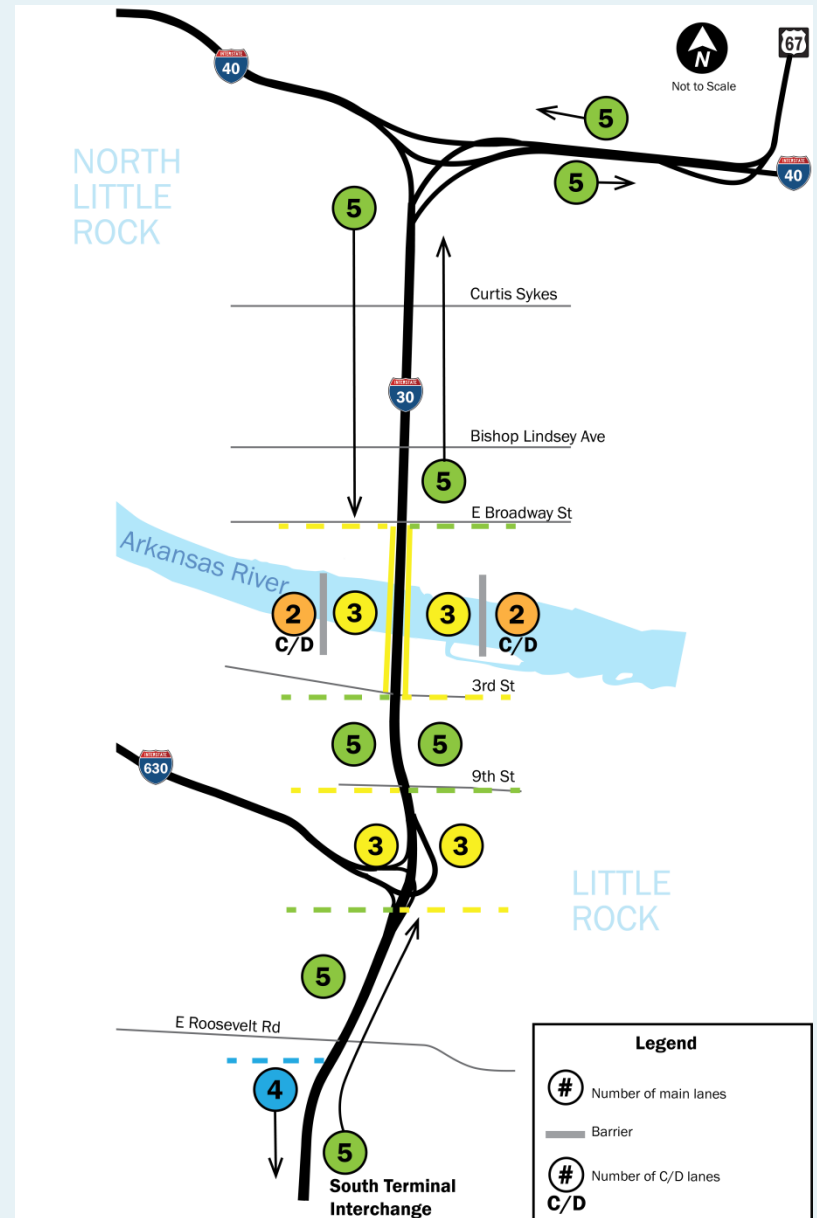
NEPA

Further refinement during the NEPA process

NEPA

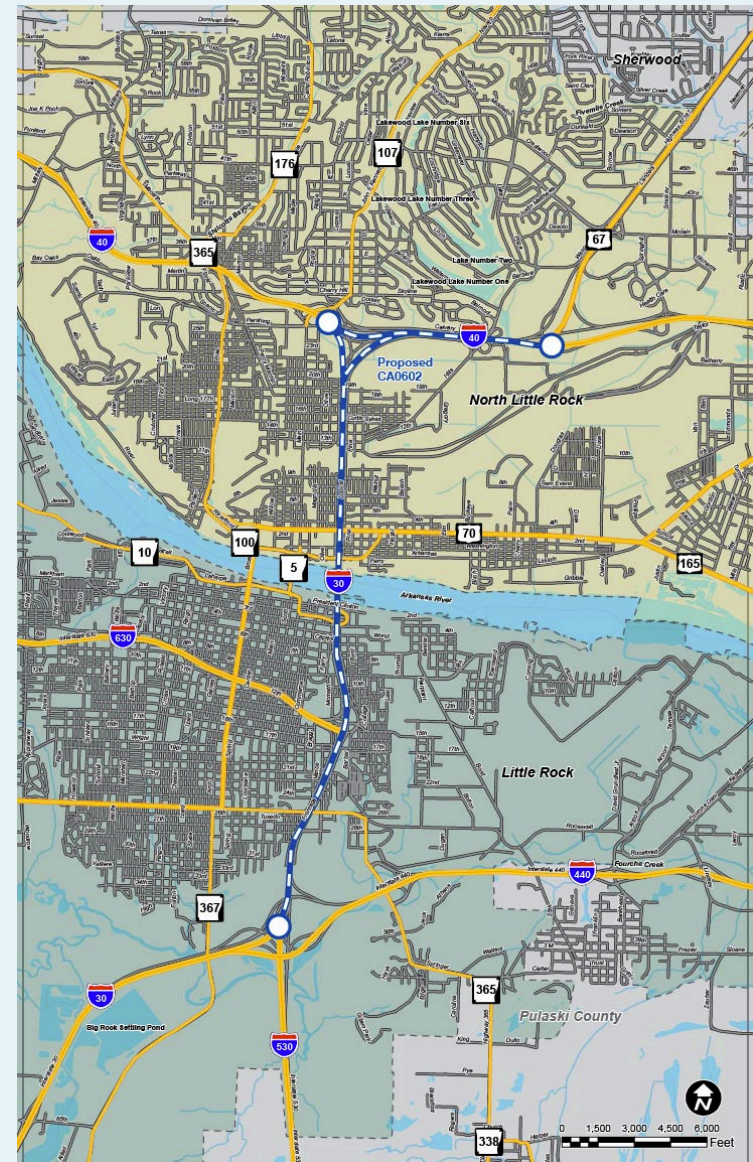
Recommendation

The study team proposed that the **10-Lane with Downtown C/D** be advanced to NEPA as the PEL Recommendation.

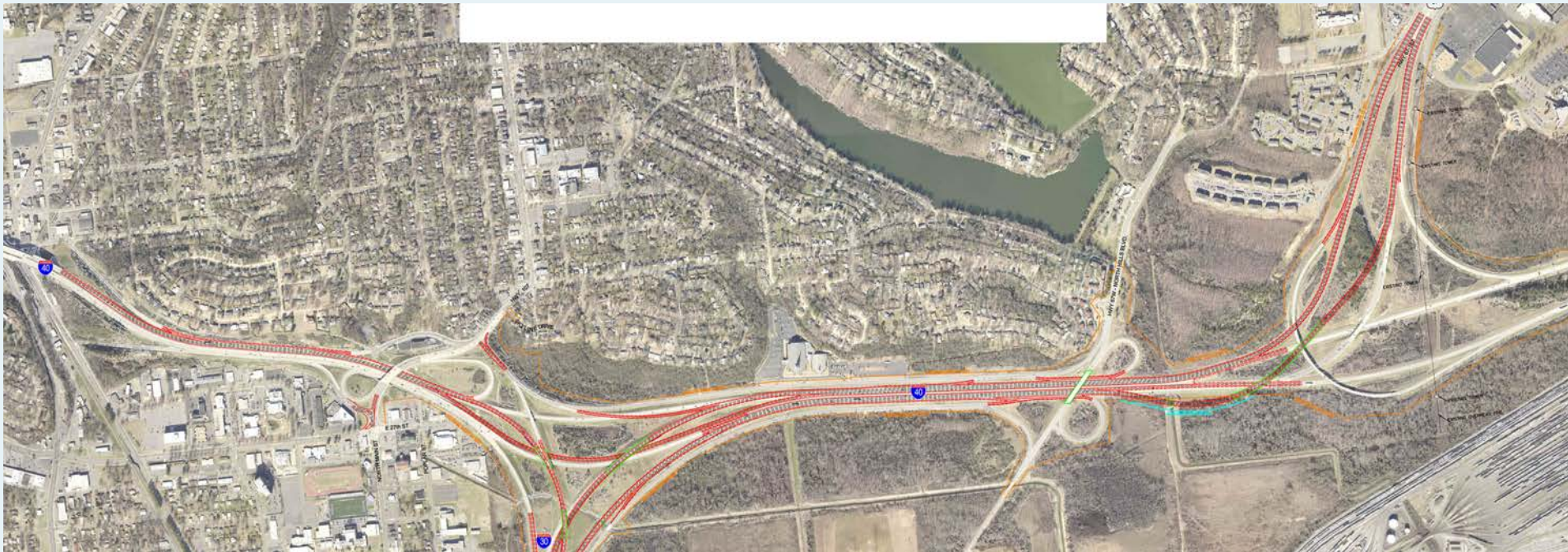


PEL to NEPA Transition

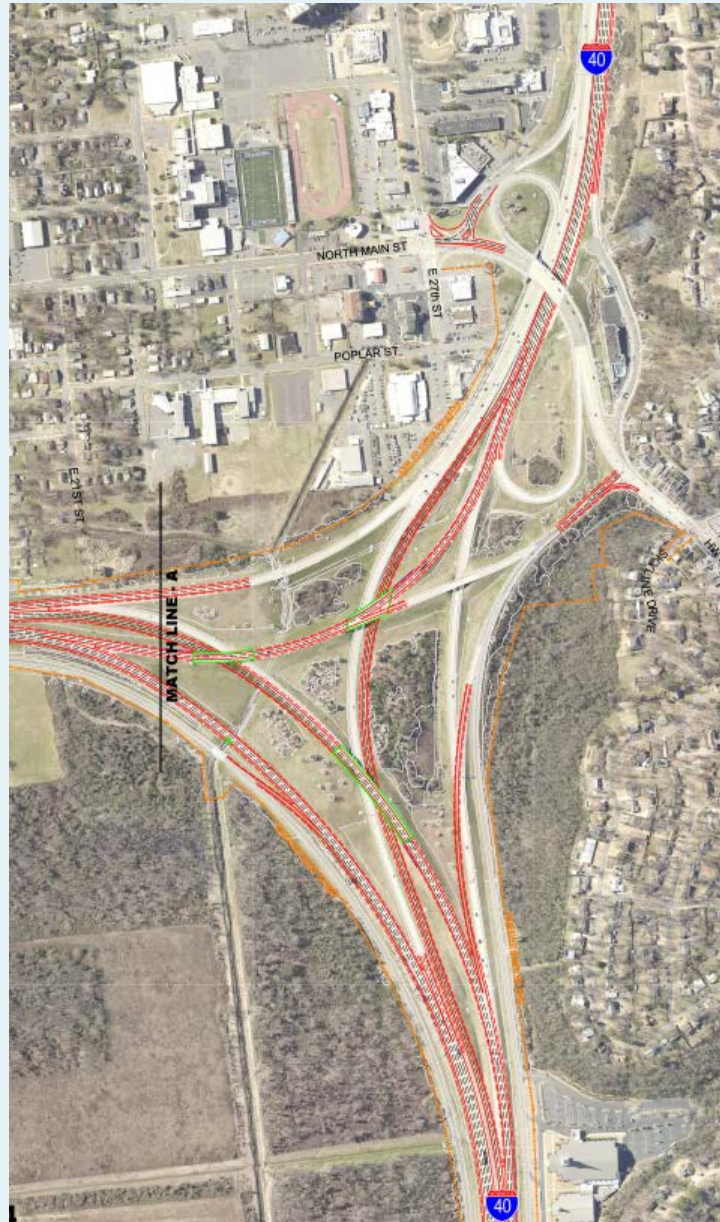
- Air quality
- Indirect and cumulative impacts
- Intersection (Cantrell / 2nd / Cumberland)
- I-30 Bridge construction phasing
- East-West connectivity
- Bike/pedestrian access
- Vissim of new layouts



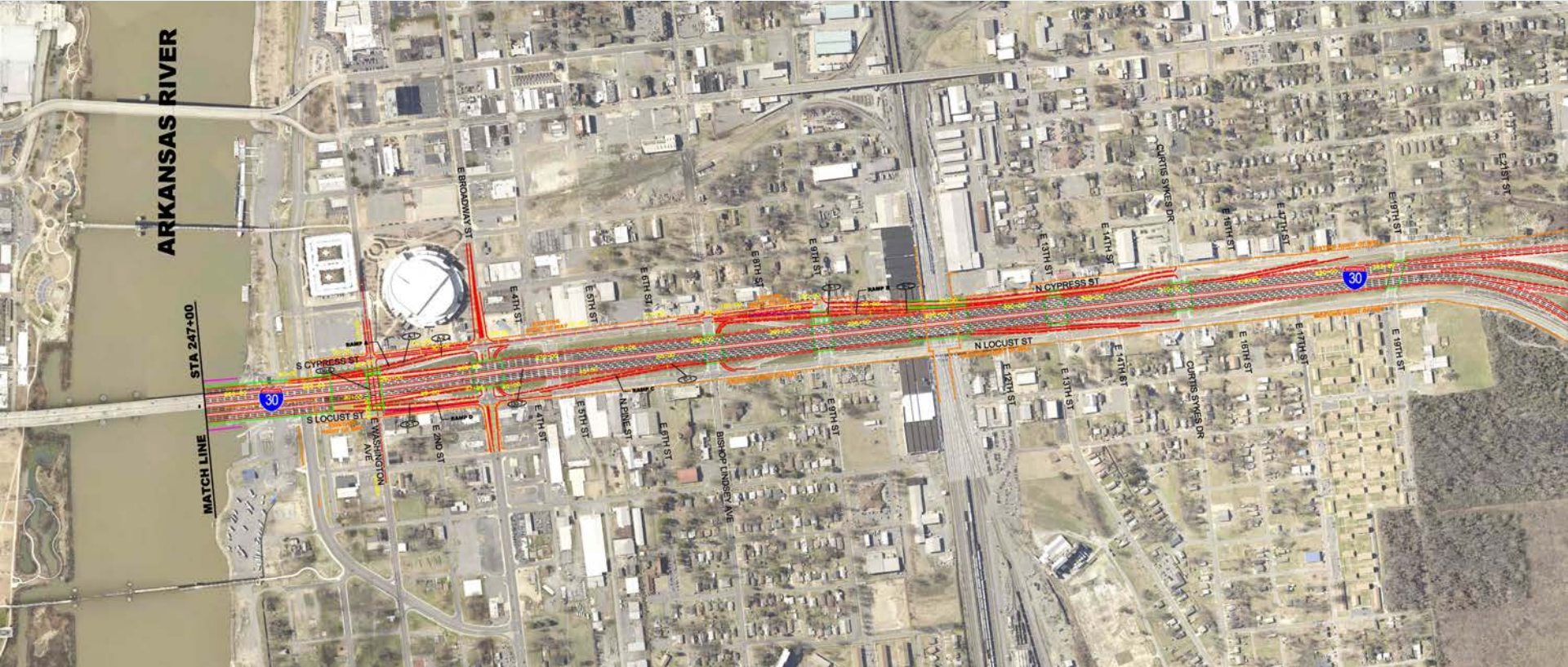
Draft Schematic – I-40 & Hwy. 67



Draft Schematic – NLR & I-40



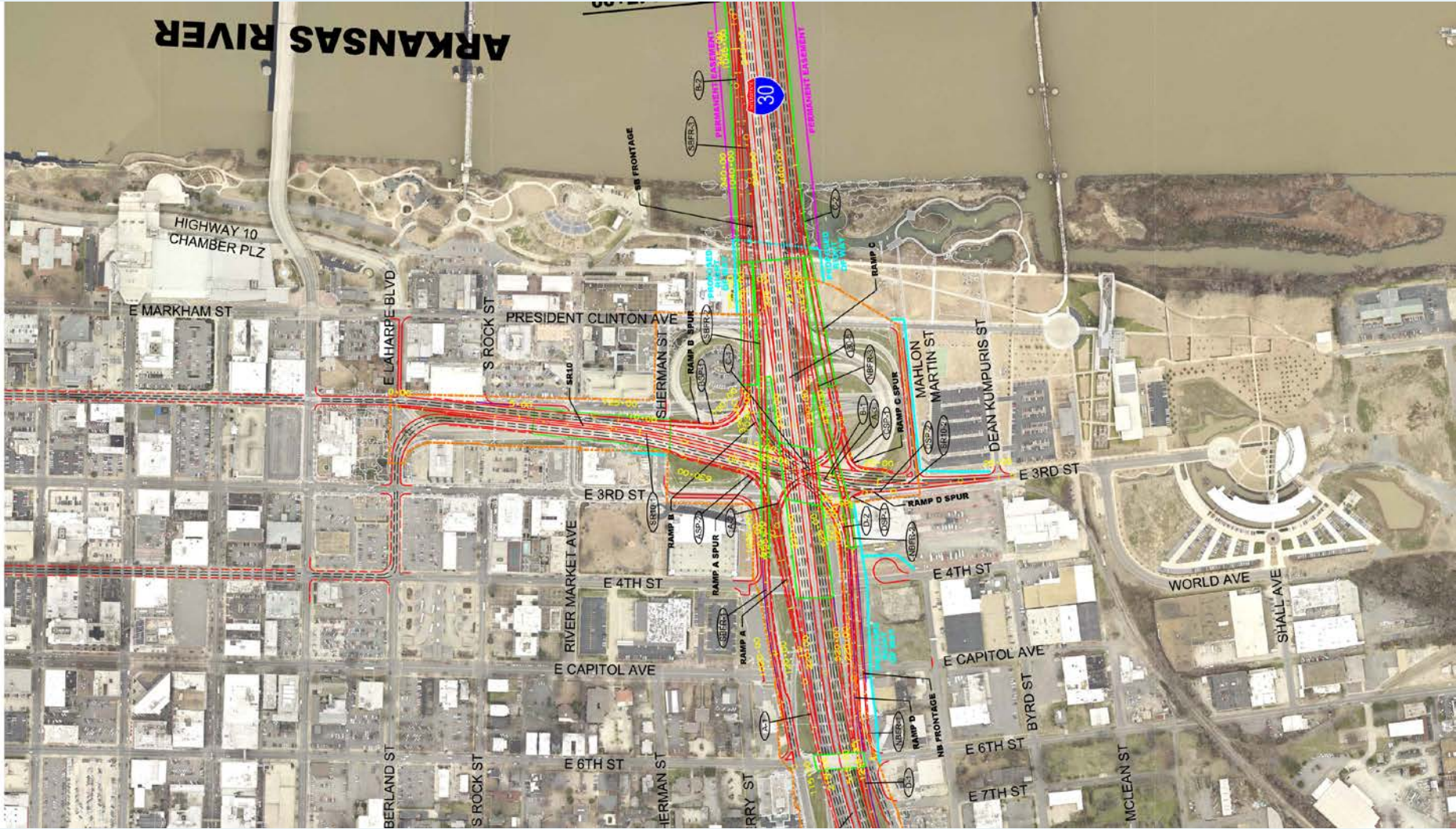
Draft Schematic – NLR & I-40



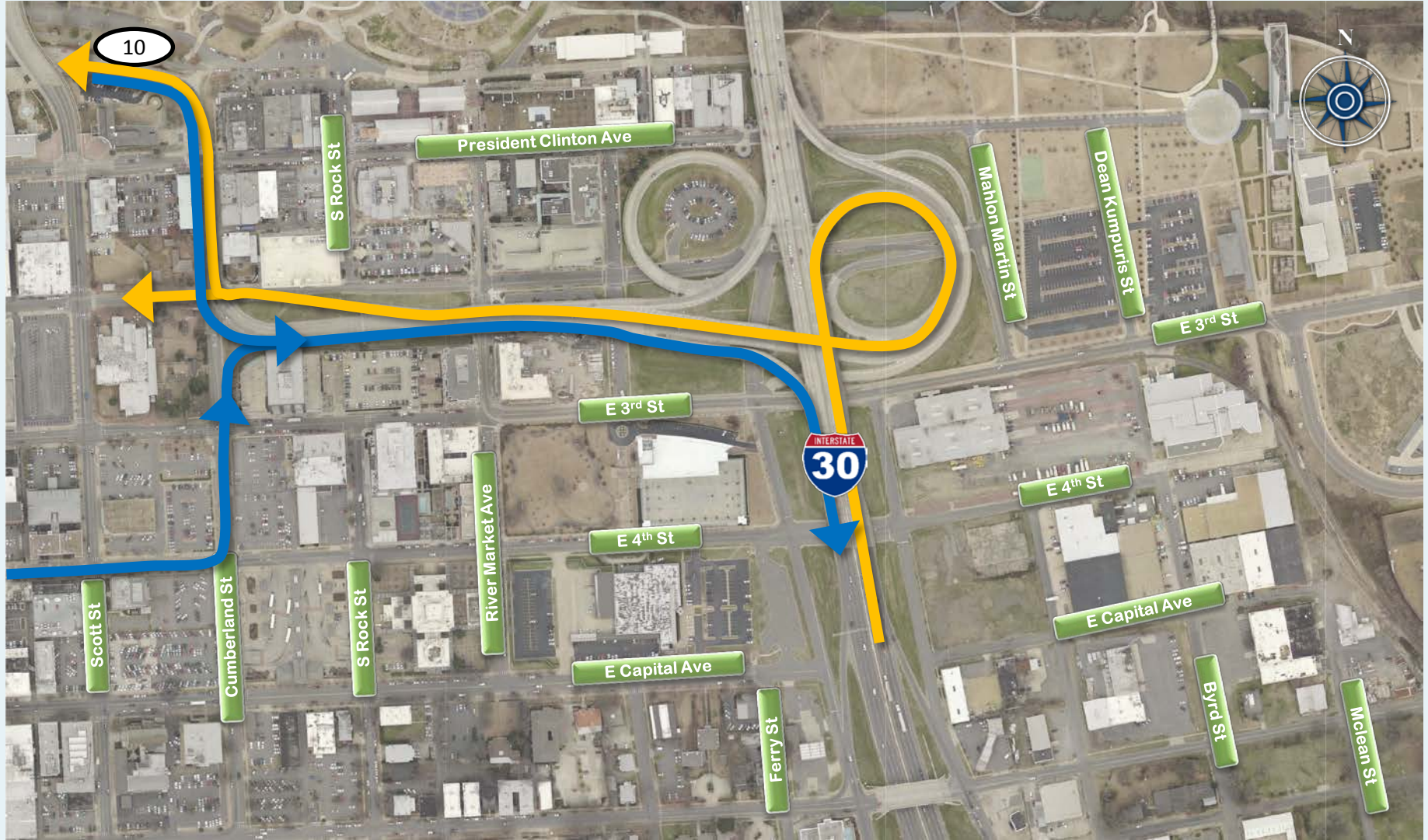
Draft Schematic – LR & I-630



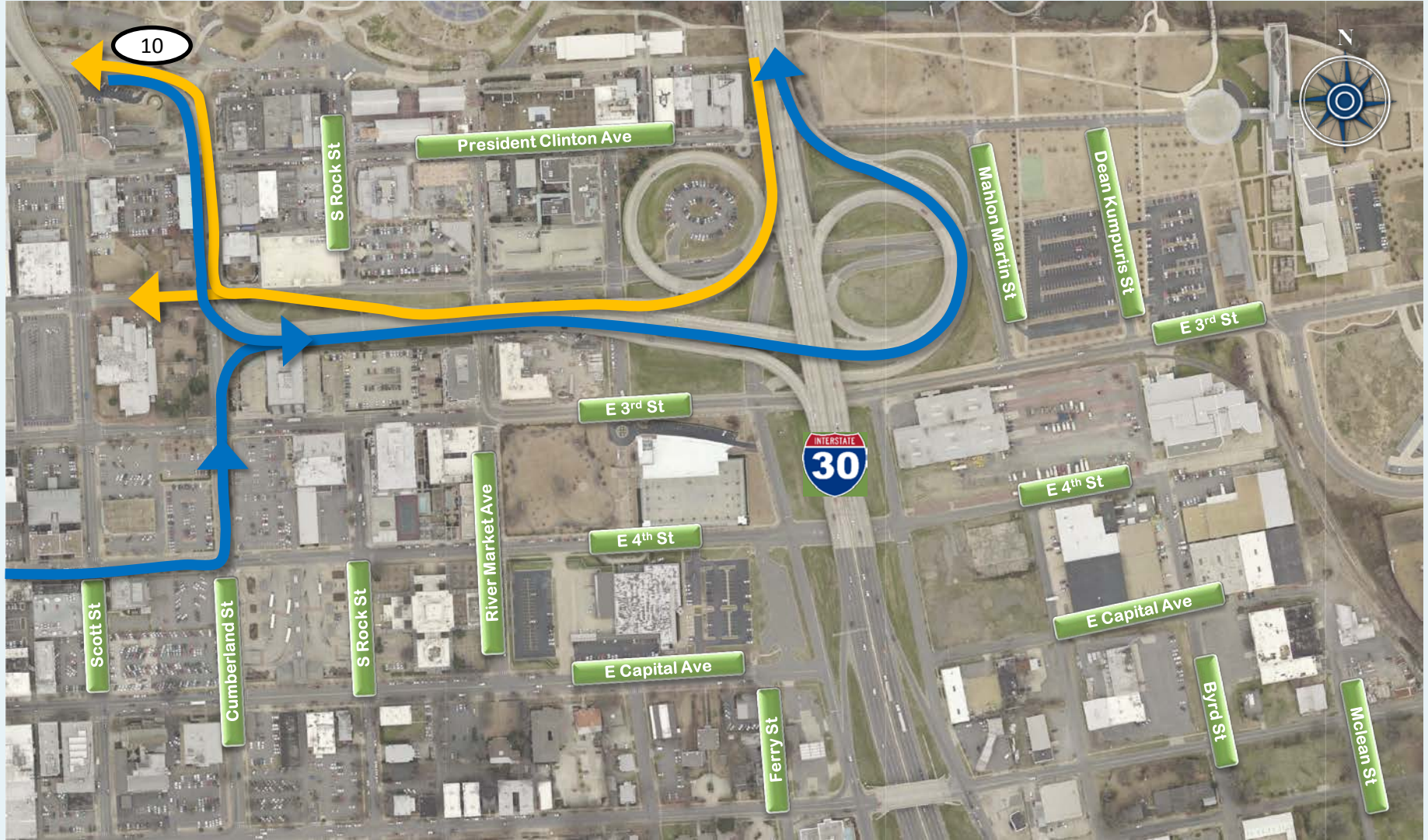
Draft Schematic – Highway 10



Traffic to/from South



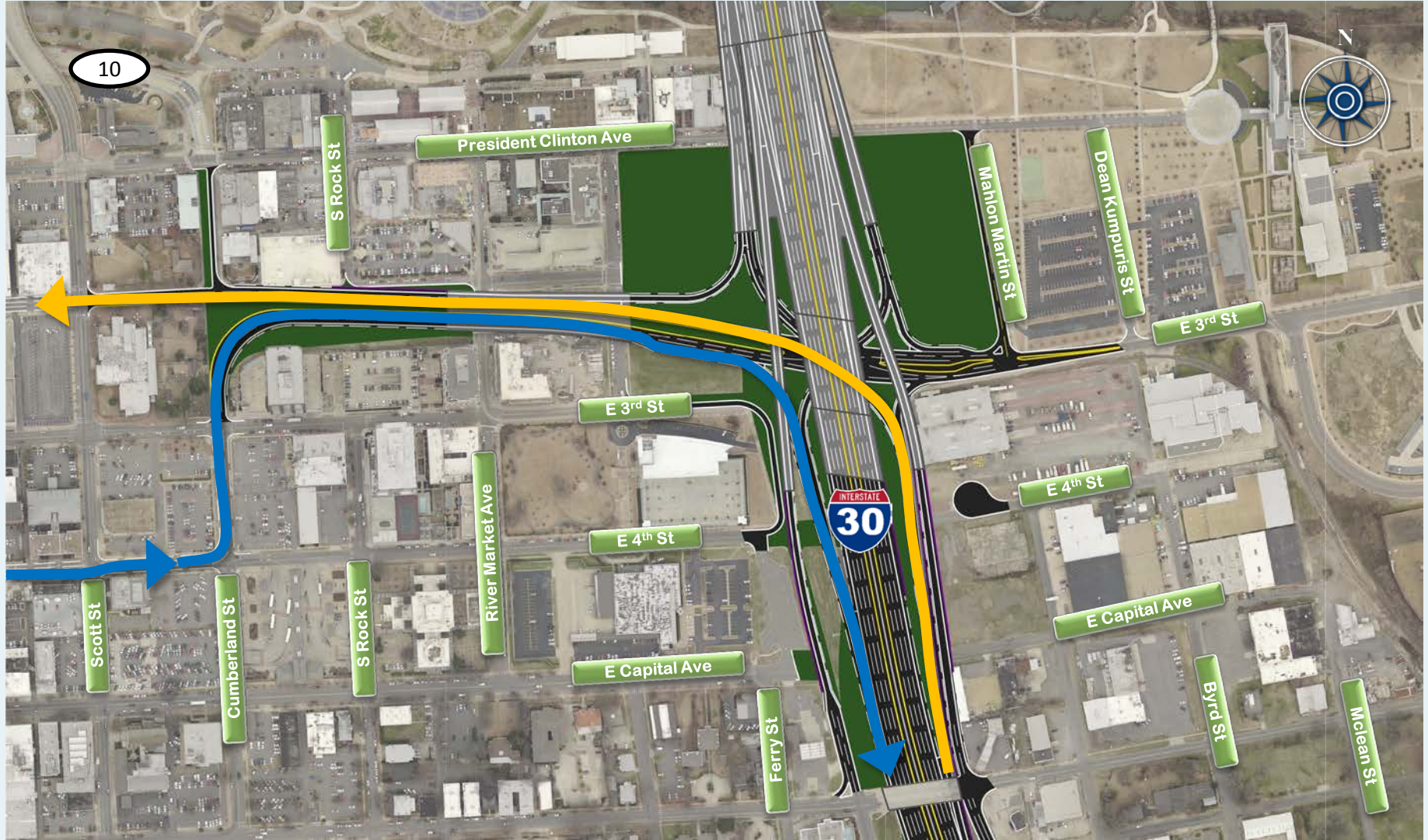
Traffic to/from North



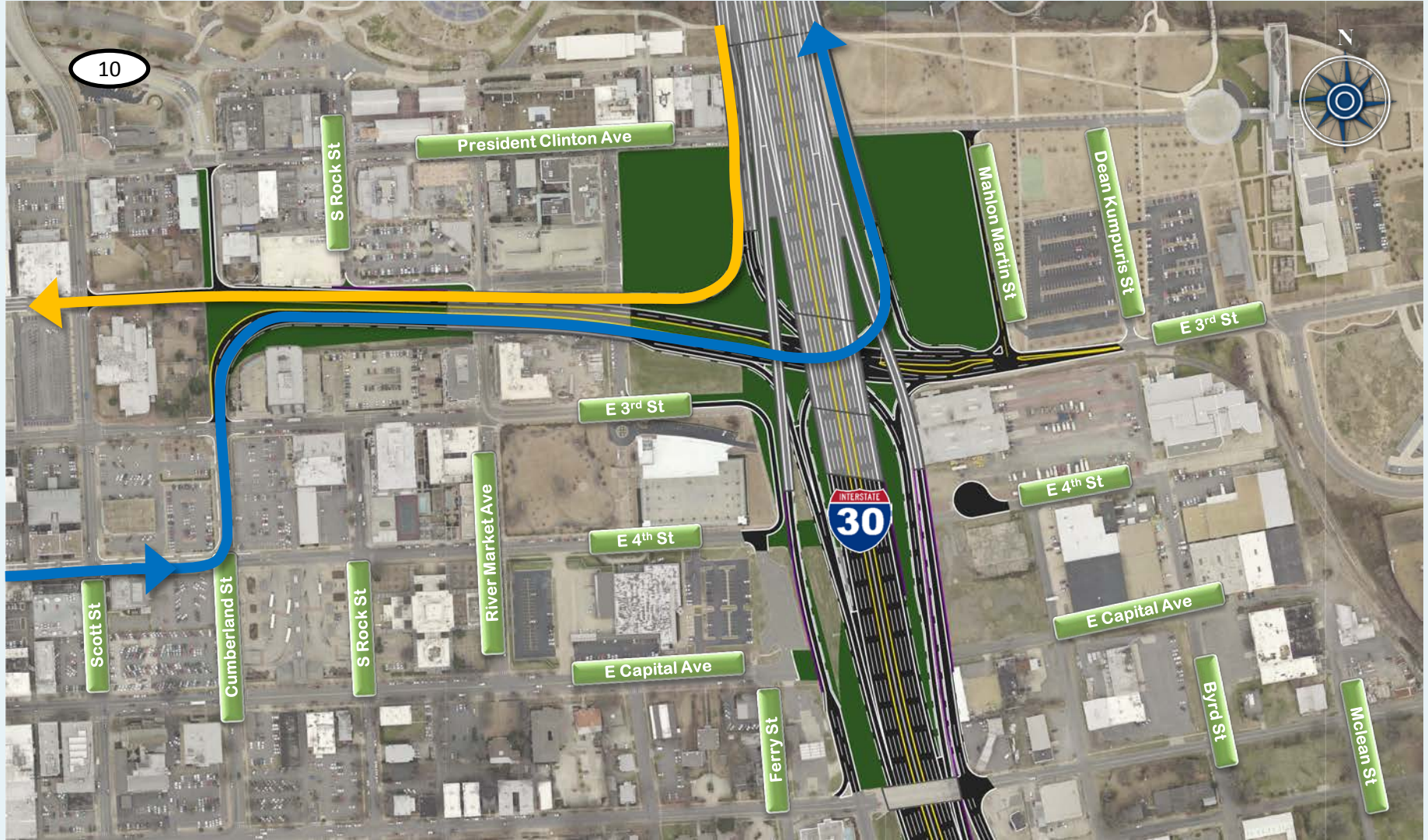
Proposed Movements Downtown Little Rock



Proposed Traffic to/from South

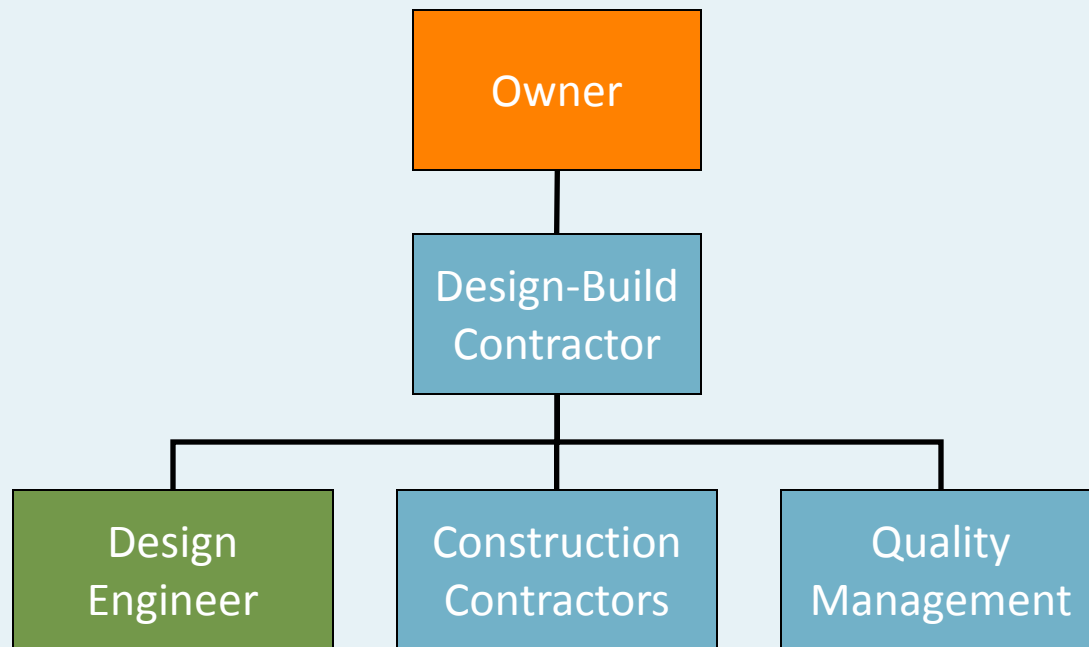


Proposed Traffic to/from North



Design-Build Delivery

Project delivery system involving a single contract between the project owner and a design-build contractor covering both the final design and construction of a project.



Design-Build Delivery

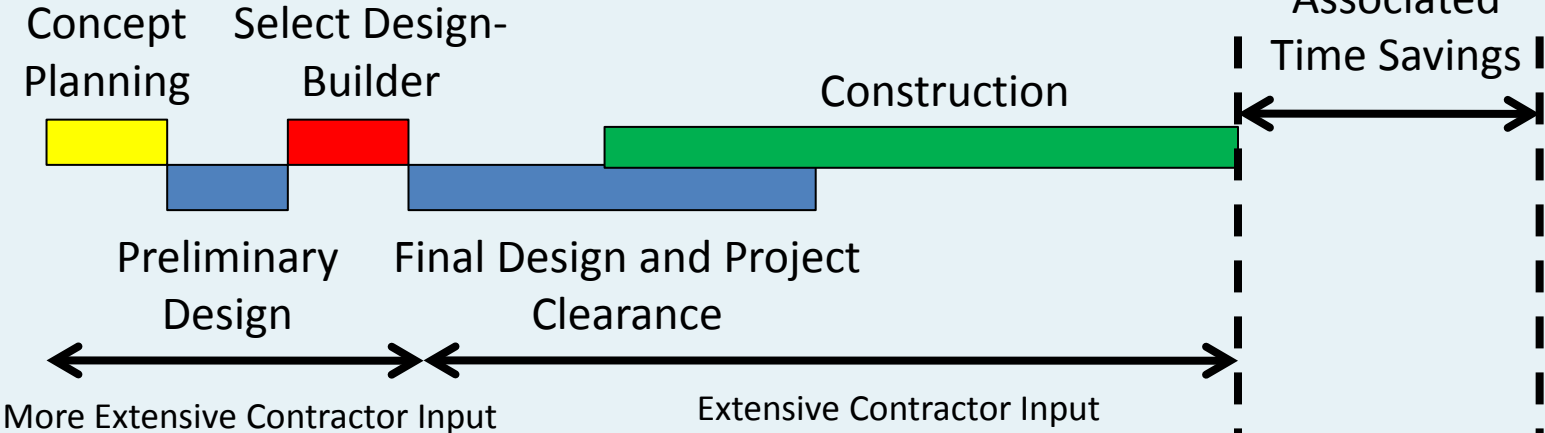
Design-Build delivery is a good delivery method for projects in which:

- Scope is large and complex
- Environmental activities are typically underway or complete
- Innovations are desired
- Project delivery schedule is a critical issue

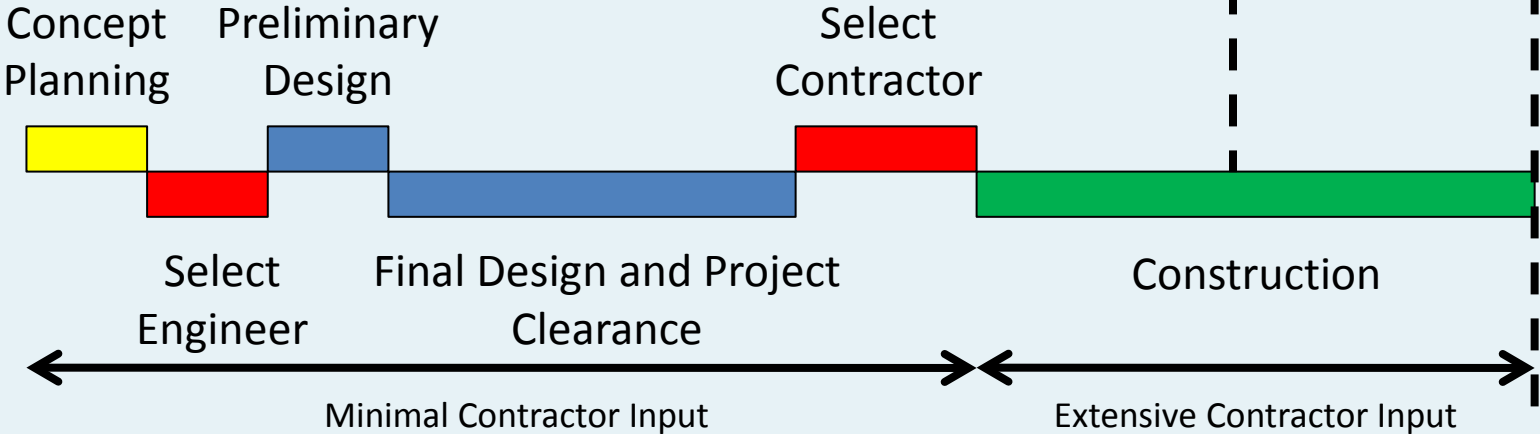


DB vs. DBB Schedule Comparison

Design-Build Delivery



Design-Bid-Build Delivery



What is Fixed Price – Best Design?

Fixed Price – Best Design is a method that establishes a maximum amount of funds available to the contractors bidding to win the contract.

Contractors are scored on, among other things, how much they can build for the dollars available.

This method encourages innovation and motivates contractors to provide high quality, time savings, and additional improvements while delivering all project goals and requirements.

Fixed Price – Best Design

**FIXED PRICE – BEST DESIGN
ENCOURAGES INNOVATION
AND MAXIMIZES BUDGET**



Regular Delivery Method Results

Contractor

$$\text{A} + \text{C} + \text{D} = \text{\$}\text{\$}\text{\$}$$

Fixed Price – Best Design Results

Contractor 1

$$\text{A} + \text{B} + \text{C} + \text{D} = \text{\$}\text{\$}\text{\$}$$

Contractor 2

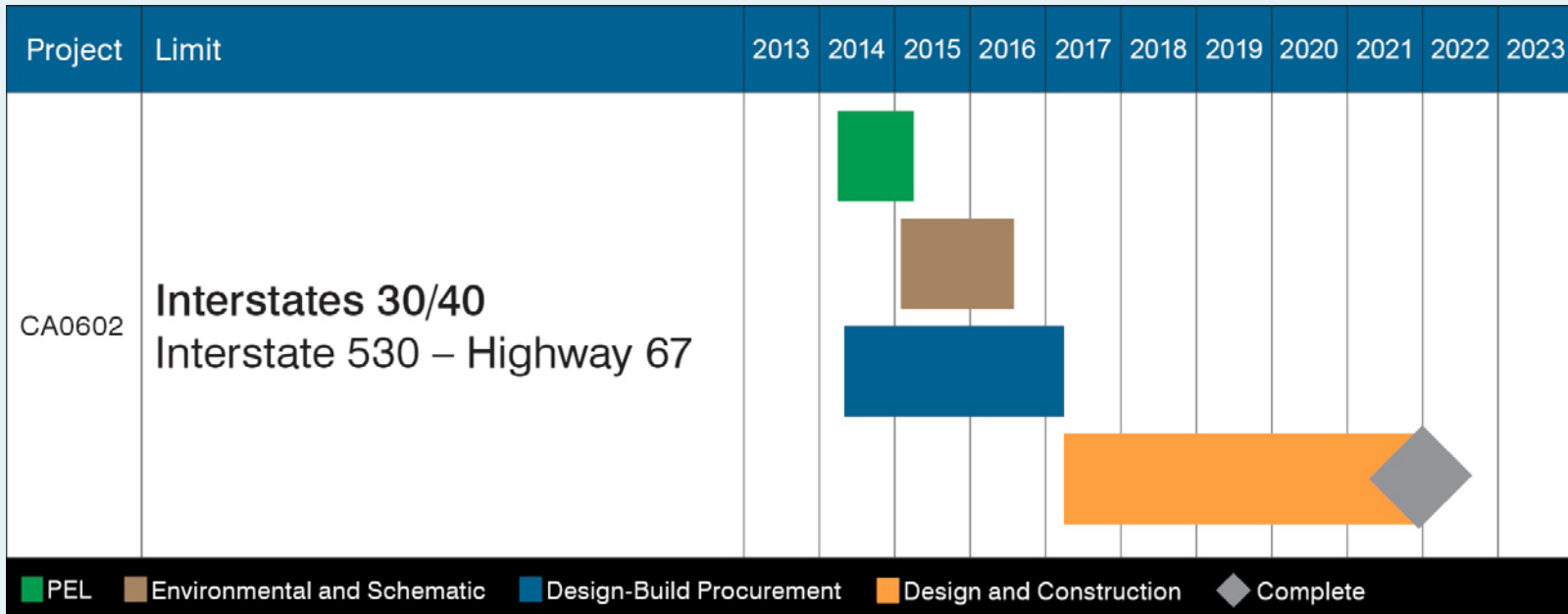
$$\text{A} + \text{B} + \text{C} + \text{D} + \text{F} = \text{\$}\text{\$}\text{\$}$$



= Build Options

\\$ \\$ \\$ = Budget

Schedule Overview

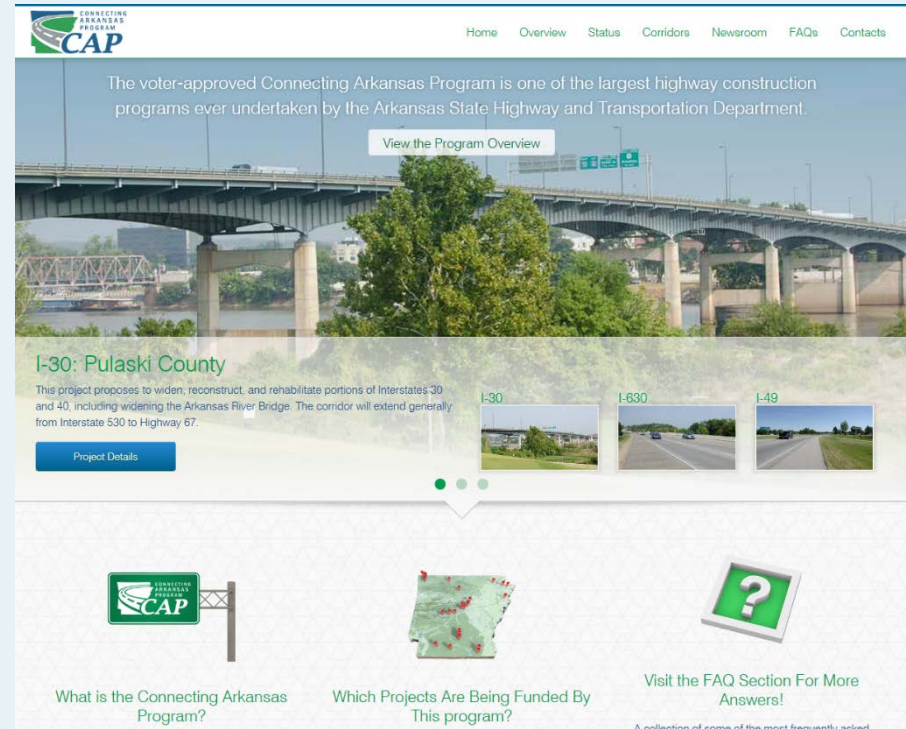


PEL	<ul style="list-style-type: none"> • Planning and Environmental Linkages study
Environmental & Schematic	<ul style="list-style-type: none"> • NEPA clearance • 20% - 30% schematics
Design-Build Procurement	<ul style="list-style-type: none"> • D-B guidelines and procedures update • RFQ development, response, evaluation, and short list • RFP development, response, evaluation, and selection
Design and Construction	<ul style="list-style-type: none"> • Final design • Construction

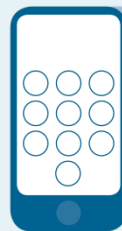
Questions/Comments?

CAP and 30 Crossing Website

- ConnectingArkansasProgram.com
- 30Crossing.com



Phone and Email



Contact us at
(501) 255-1519

or email at
Info@ConnectingArkansasProgram.com