

30 Crossing Presentation

11/16/2015



Agenda

- PEL Update
- NEPA Status
- Schematic Refinements



I-30 Project

The 6.7-mile corridor extends:

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

Convergence of six major interstates/highways:

I-30 I-530 I-440

I-630 I-40 Hwy. 67

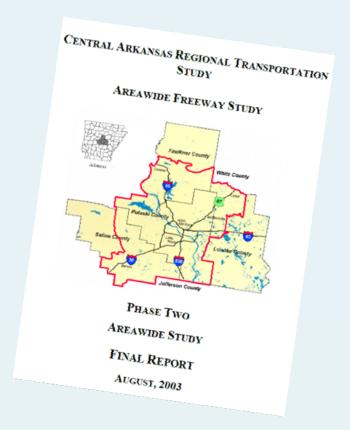
Major components

- River bridge replacement
- Interstate widening
- Interchange improvements
- Ramp modifications



Other Studies

- CARTS Areawide Freeway Study, Phase 2 Areawide Study, 2003
- River Rail Airport Study, Phase 1, 2008
- River Rail Airport Study, Phase 2, 2011
- I-630 Fixed Guideway Alignment Study, 2010
- The Six Bridges Framework Plan,
 6 Bridges Study, Late 1990s
- Metroplan 2030 Long Range Metropolitan Transportation Plan, 2010
- Imagine Central Arkansas: Blueprint for a Sustainable Region, 2014





PURPOSE & NEED

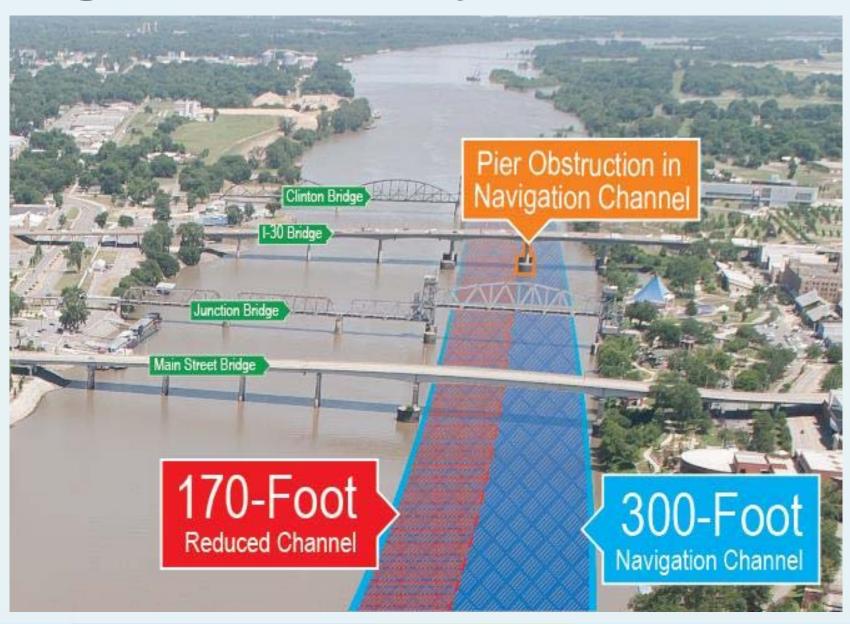


Needs (Problems)	Purpose (Solutions)	
Traffic Congestion	To improve mobility on I-30 and I-40 by providing comprehensive solutions that improve travel speed and travel time to downtown North Little Rock and Little Rock and accommodate the expected increase in traffic demand. I-30 provides essential access 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.



Navigational Safety



Roadway Safety - Crashes

Projected number of annual crashes along I-30 /I-40 under no action conditions.

2040



2012



528 CRASHES 2020



598 CRASHES

(70 or 13% increase)

729 **CRASHES**

(201 or 38% increase)

STUDY GOALS



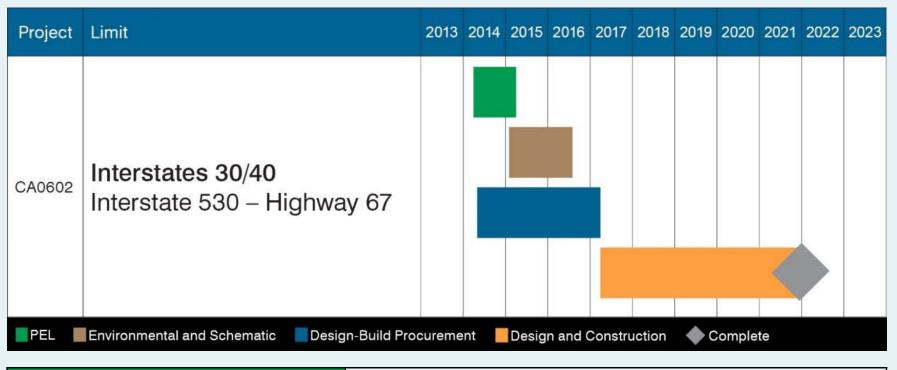
Improve opportunity for east-west connectivity	Enhance mobility
Improve local vehicle access to downtown Little Rock and North Little Rock	Connect bicycle/pedestrian friendly facilities
Accommodate existing transit and future transit	Minimize roadway disruptions during construction
Minimize river navigation 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.

CA0602 Interstate 530 – Highway 67



Schedule Overview



PEL	Planning and Environmental Linkages study
Environmental &Schematic	NEPA clearance20% - 30% schematics
Design-Build Procurement	 D-B guidelines and procedures update RFQ development, response, evaluation, and short list RFP development, response, evaluation, and selection
Design and Construction	Final designConstruction

Coordination & Meetings

Public Meetings

Five public meetings have been held to discuss and present information for the 30 Crossing project. They were open house meetings with no formal presentations:

- August 2014: PEL introduction, study area, alternative screening process, purpose and need, and study area constraints
- November 2014: Universe of Alternatives and Preliminary Alternatives
- January 2015: Level 2 screening and Reasonable Alternatives
- April 2015: Level 3 screening and PEL Recommendation(s)
- October 2015: NEPA, 10-Lane with Downtown C/D, 8-Lane GP

Technical Work Group (TWG)

35+ agencies (local, state, federal) provided technical input and expertise. TWGs were held prior to the corresponding public meeting.





Coordination & Meetings

Project Partners

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

Stakeholder Meetings

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

Community Meetings

 Four community meetings held at minority churches to provide information in a more one-on-one atmosphere.



Stakeholder Advisory Group (SAG)

 Pulaski County, Little Rock, and North Little Rock each appointed four citizens to provide feedback on options being studied. Monthly meetings held.

Visioning Workshops

 Pulaski County, Little Rock, and North Little Rock each appointed citizens to the 30-member group. Two workshops held.



Coordination & Meetings

Stakeholder Advisory Group (SAG)

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

Little Rock Mayor Mark Stodola	North Little Rock Mayor Joe Smith	Pulaski County Judge Buddy Villines / Barry Hyde
Tony Curtis	Jerome Green	Sandra Brown
Chris East	Donna Hardcastle	Ronnie Dedman / Lisa Ferrell
Sharon Priest / Gabe Holmstrom	Terry Hartwick	Jeff Hathaway
Stephanie Streett	George Glover	Jimmy Moses



Universe of Alternatives



W Highway Build (14)



I-30 Arkansas River Bridge (3)



Other Modes (10)



Congestion Management (10)



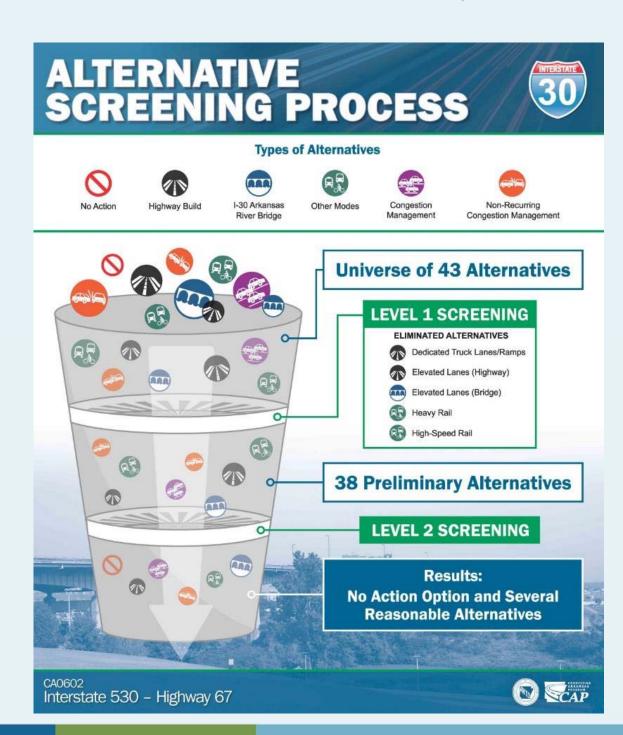
Non-Recurring Congestion (5)

Level 1 Screening

Level 1 screening eliminated 5 alternatives

- Dedicated Truck Lanes/Ramps
- Elevated Lanes (Highway)
- Elevated Lanes (Bridge)
- Heavy Rail
- High-Speed Rail

38 alternatives moved on to Level 2 screening



Level 2 Screening

Level 2 screening eliminated 8 alternatives

- Bypass Route
- I-30 River Bridge Rehabilitation
- Commuter Rail
- Light Rail
- Managed Lanes
- Reversible Lanes
- Hard Shoulder Running
- Land Use Policy

30 alternatives moved on to further screening

LEVEL 2 SCREENING METHODOLOGY



Level 2 Screening Process

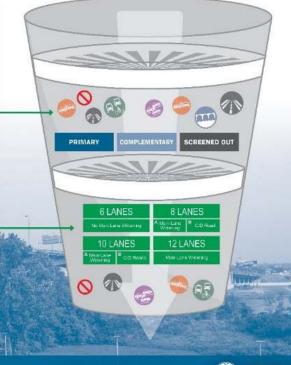
- Qualitative screening (with some quantitative analysis) of the 38 Preliminary Alternatives (from Level 1) based on the study goals
- Two-step process that produced the Reasonable Alternatives to be tested in Level 3

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



CA0602 Interstate 530 – Highway 67



Screened Out Examples

Highway Build Bypass Route

- Introduces significant new environmental and community impacts (new corridor, new river crossing)
- Removes relatively small amount of traffic, approximately 3.5% traffic from I-30 corridor peak demand
- Cost with no identified funding source.
 The estimated cost for a Chester Street bridge is \$80-100 million, including expenses associated with right of way, roadway, intersections, and the bridge.

Congestion Management



Hard Shoulder Running

- Safety issues
- Potential conflict with "Bus on Shoulder" operations

Other Modes

Light Rail



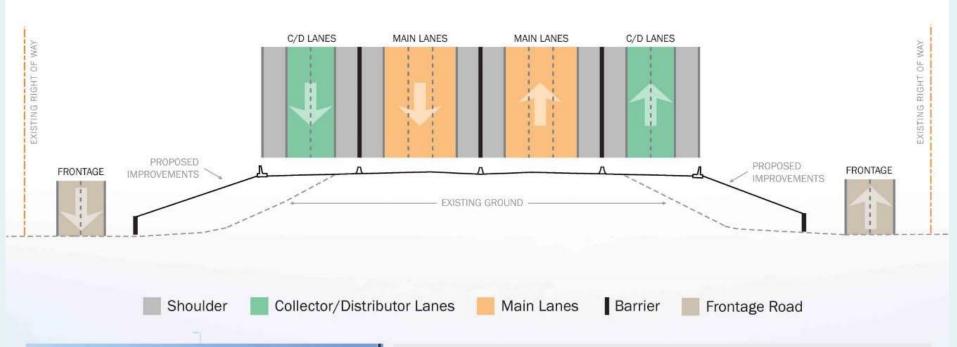
- · Not in CATA short-term plan
- Removes a small percentage of I-30 demand.
 Metroplan projected the fixed guideway ridership to be
 6,500 daily riders in 2040. The projected I-30 daily traffic forecast in 2040 is 165,000 vehicles.
- Lack of dedicated funding source

Basic Scenarios

Lanes

No Additional Lanes (With Complementary Alternatives) No Main Lane Widening Lanes Main Lane Widening (With Complementary Alternatives) Scenario 2 3 Main Lanes + 1 Main Lane Widening (each direction) Collector/Distributor (C/D) Roads (With Complementary Alternatives) Lanes 3 Main Lanes + 1 C/D Lane Widening (each direction) Main Lane Widening (With Complementary Alternatives) Scenario 3 3 Main Lanes + 2 Main Lane Widening (each direction) Collector/Distributor (C/D) Roads (With Complementary Alternatives) Lanes 3 Main Lanes + 2 C/D Lane Widening (each direction) Main Lane Widening (With Complementary Alternatives) 3 Main Lanes + 3 Main Lane Widening (each direction)

Collector / Distributor





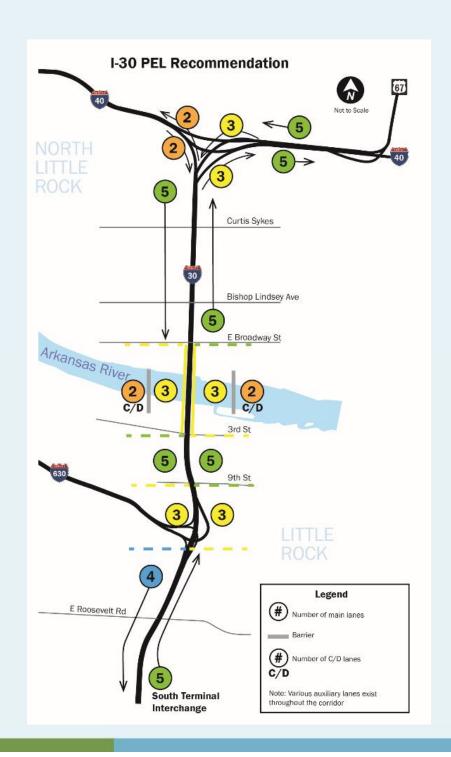
What is a Collector/Distributor?

- 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

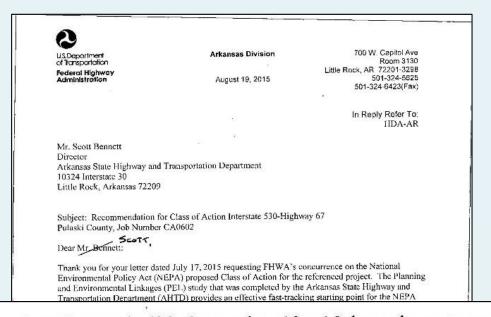
PEL Recommendation

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

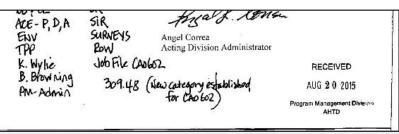
The PEL study is available to view or download at 30Crossing.com



FHWA - Alternatives in EA Phase

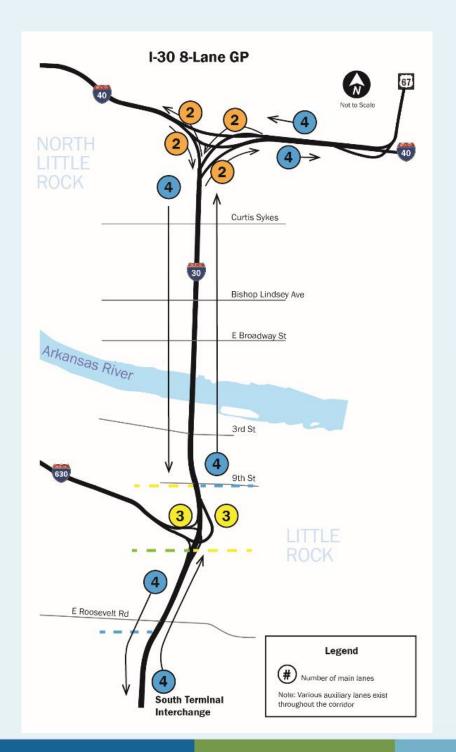


The PEL study recommends only one build alternative (the 10-lane downtown C/D alternative) to be carried forward in the NEPA phase which will be compared with the no-build alternative. Based on concerns received from project partners, I ask that you include the 8-lane general purpose alternative in the EA phase. Therefore, possible impacts of the alternative can be analyzed, compared and documented along with those of the 10-lane downtown C/D alternative and the no-build.





8-Lane GP



Screening Matrix

Reasonable Alternatives (8-Lane GP, 8-Lane C/D, 10-Lane C/D)

5.55/120 22/12 23/24 1 Brandest of Condendal Street, by Lee h to we know he 2 harredge dat and No-compling recultives of reference access

Qualitative Legend

++	Substantial positive effects
+	Some positive effects
0	Neutral effects
-	Some negative effects
	Substantial negative effects

Measures

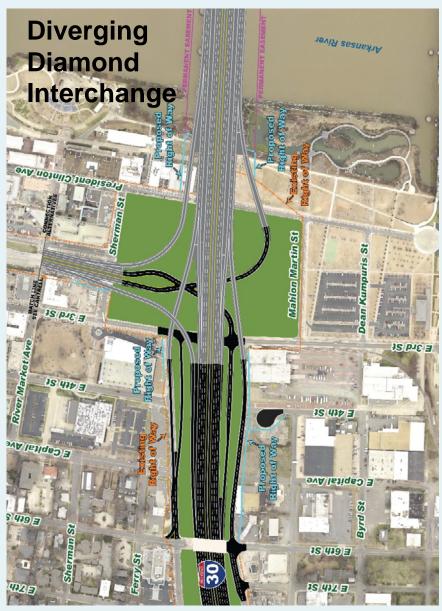
Mobility

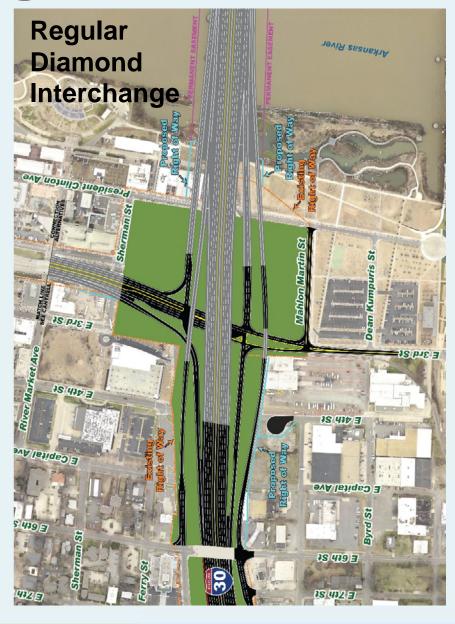
Safety

Cost

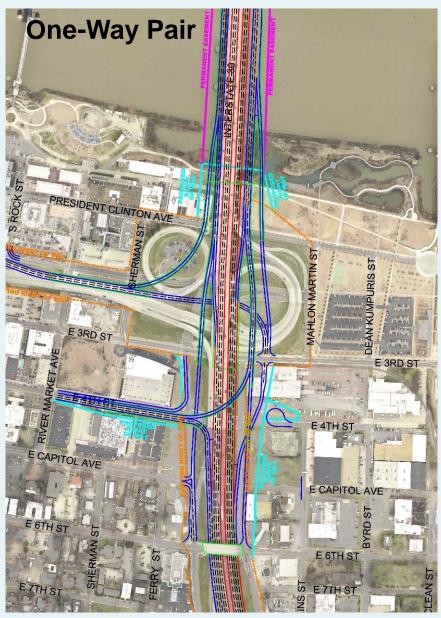
Environmental

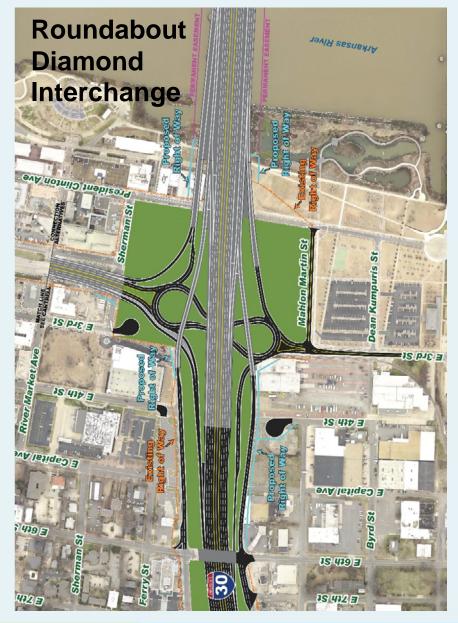
Cantrell Interchange - Alternatives





Cantrell Interchange - Alternatives





Cantrell Interchange - Alternatives



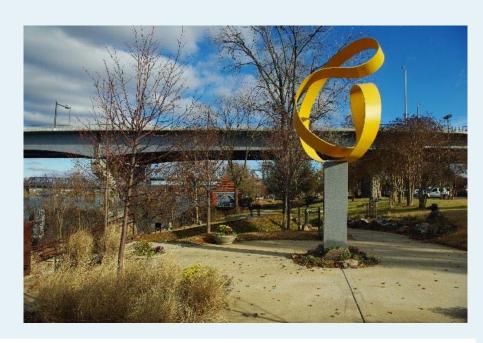
PEL to NEPA

- PEL to NEPA Transition Report
- U.S. Coast Guard and U.S. Army Corps of Engineers invited to be cooperating agencies



Park Land Impacts

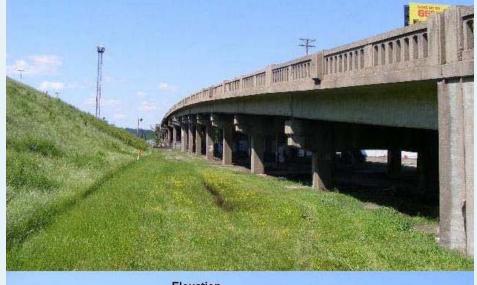
- Evaluating effects to properties:
 - Clinton Presidential Center and Park
 - Julius Breckling Riverfront Park
 - Riverwalk Park
- Coordination to occur with park owners
- Avoidance, minimization, and mitigation analysis underway

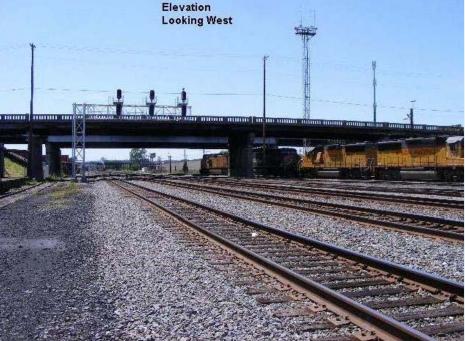




Cultural Resources

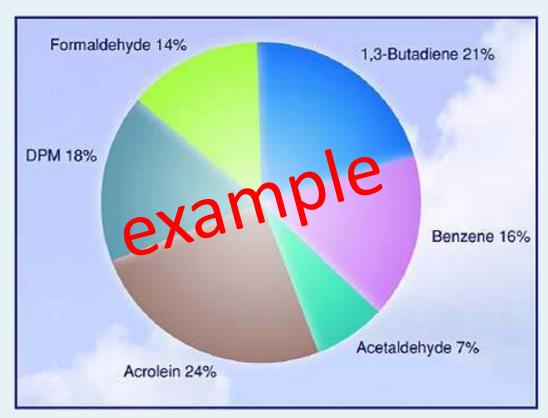
- 45 historic sites in Study Area:
 - Locust Street Bridge impacted
- >5,000 shovel tests
- 80 auger tests
- 7 archeological sites identified; none National Register of Historic Places (NRHP) eligible
- Early findings are pending State Historic Preservation Office (SHPO) review





Air Quality

- Will prepare analyses in accordance with Clean Air Act
 - Carbon Monoxide (qualitative)
 - Mobile Source Air Toxics (MSAT)
 - Quantitative analysis of pollutants



EPA graphic



Traffic Noise

- Noise Work Plan has been developed and approved by AHTD
- Field Noise measurements completed
- Modeling of build alternatives in progress
- Additional updates at future meetings





Waters of the U.S.

- Field work completed; wetland report drafted
- Coordination with USACE and USCG ongoing
- Permitting requirements will be determined as design is refined







Community Assessment

Assessing a wide array of demographics:

- Minority
- Low-income
- Disabled
- Limited English
- Elderly



Right of Way/Displacements

- ~9 Acres of ROW to be acquired
- 5 residential displacements
- 7 commercial displacements



I-30 & I-530 Interchange

 Increased number of lanes for operational improvement



Roosevelt Road Ramps

- Longer ramps to increase safety
- Northbound exit ramp expands to two lanes



I-30 & I-630 Interchange

- Improved southbound I-30 entrance ramp angle
- Increased number of lanes for operational improvement



Cantrell

- Single Point
 Urban Interchange
 (SPUI)
- Increased eastwest pedestrian connectivity
- Increased eastwest vehicular connectivity
- Increased greenspace





Cantrell - 2nd & 4th Street

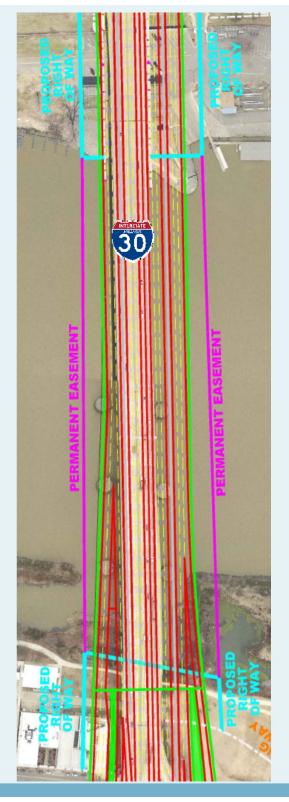


Cantrell – Maintain Existing



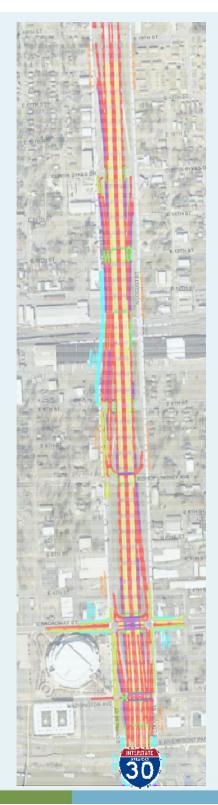
River Bridge

- Proposed bridge widened east and west
- Lanes each direction:
 3 GP lanes + 2 C/D lanes and an auxiliary lane
- Can travel from Cantrell to Broadway without entering main lanes
- Coast Guard will require:
 - Minimum horizontal navigation opening of 320 feet
 - Minimum vertical clearance of 63 feet above normal pool stage (EL 231.0).



North Little Rock

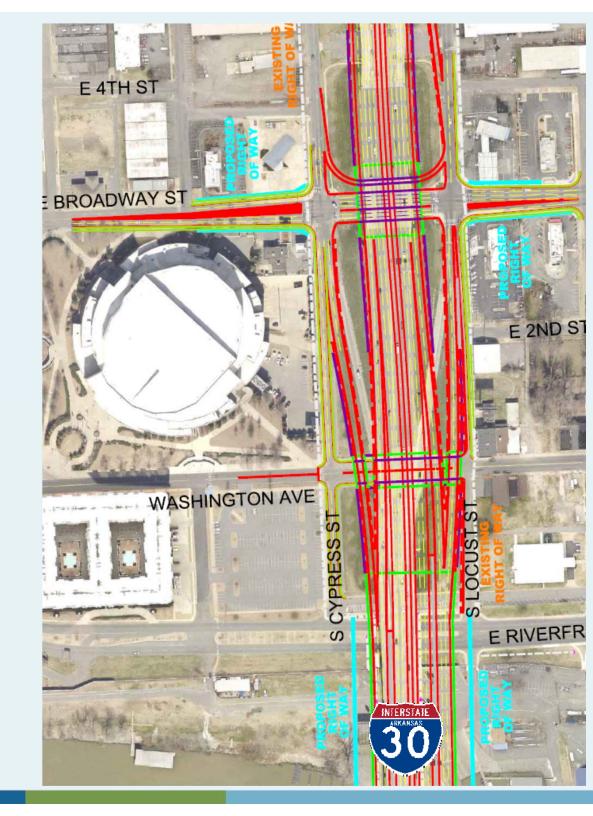
- New ramps improved to meet latest safety standards
- Texas U-turns allow free flow between frontage roads
- New southbound frontage road bridge over railroad. Enables one-way frontage roads.





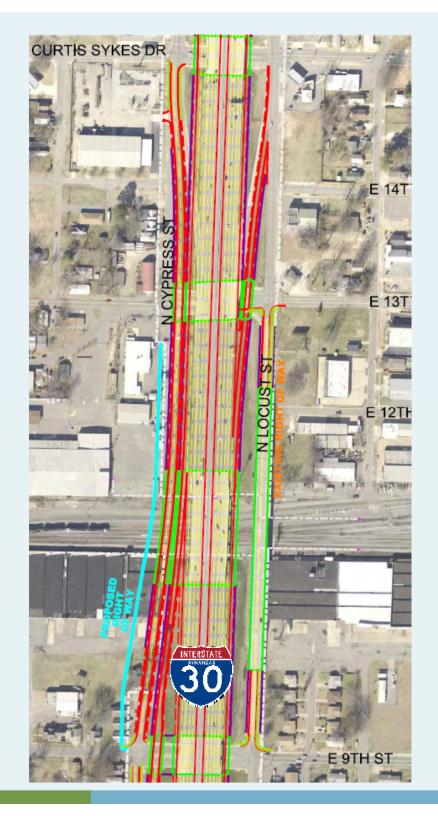
Broadway Area

- Longer southbound entrance ramp to I-30
- Longer northbound exit ramp to Broadway
- Texas U-turn allows free flow between frontage roads



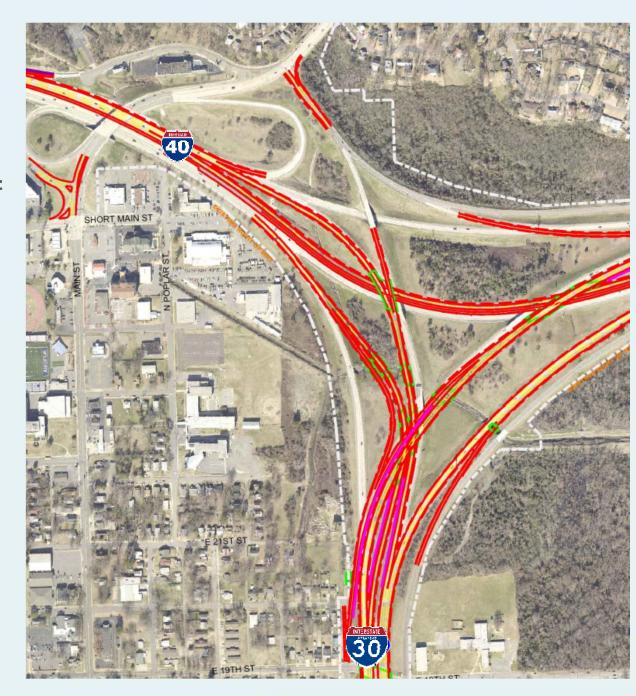
Curtis Sykes Area

- Existing frontage road bridge over railroad replaced and converted to northbound only
- Longer northbound exit ramp to Curtis Sykes



I-30 & I-40 Interchange

- Increased number of lanes for operational improvement
- Curtis Sykes/ 19th Street:
 - Two proposed I-40 to I-30 southbound exit ramps
 - One I-30 to I-40 eastbound entrance ramp



I-30 & I-40 Interchange

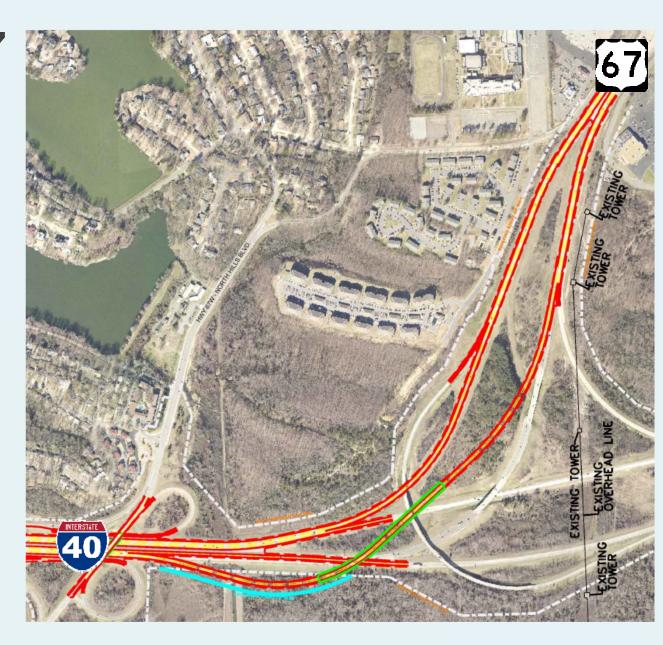


 Westbound I-40 shifted to create right-side exit to southbound I-30

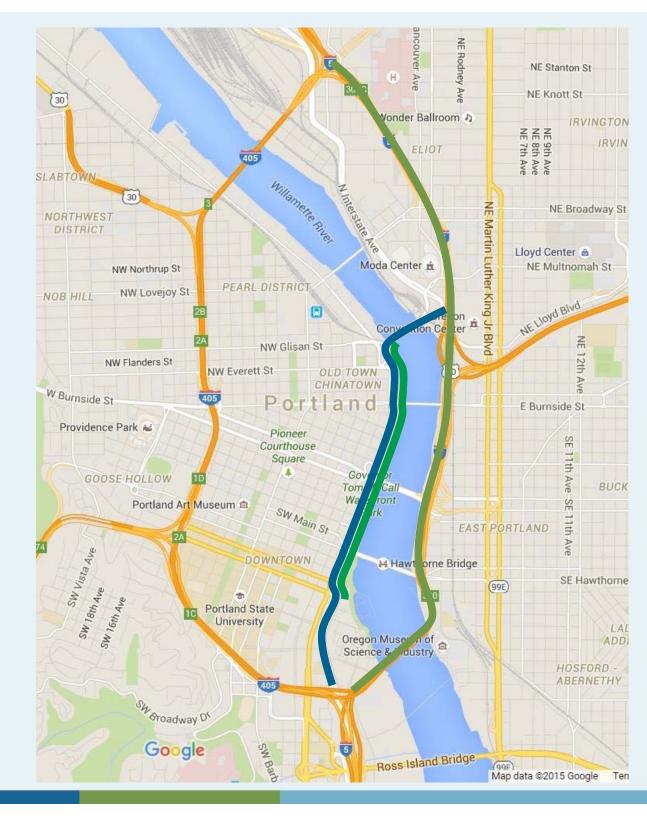


I-40 & US 67 Interchange

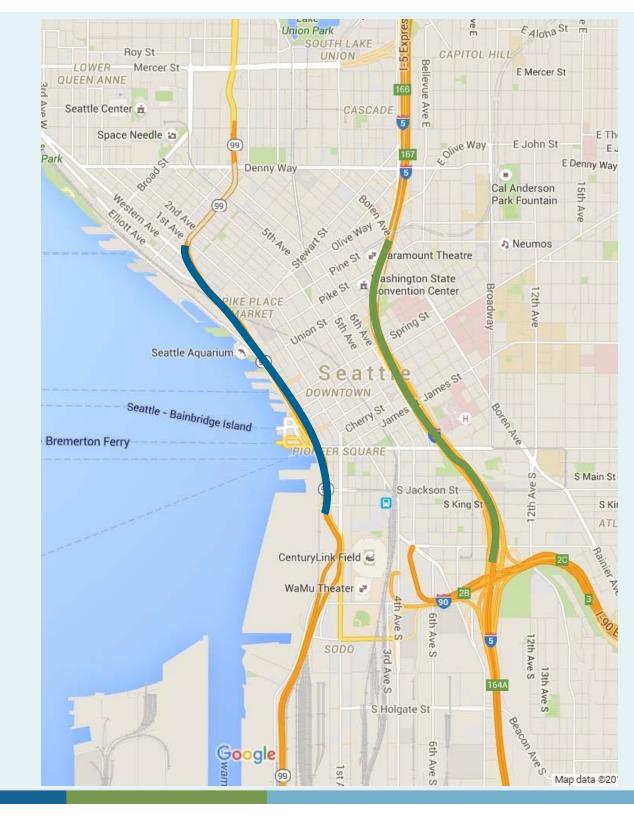
- Ramp from I-40 to U.S. 67 adjusted from left-side exit to right-side exit
- North Hills Blvd bridge replaced



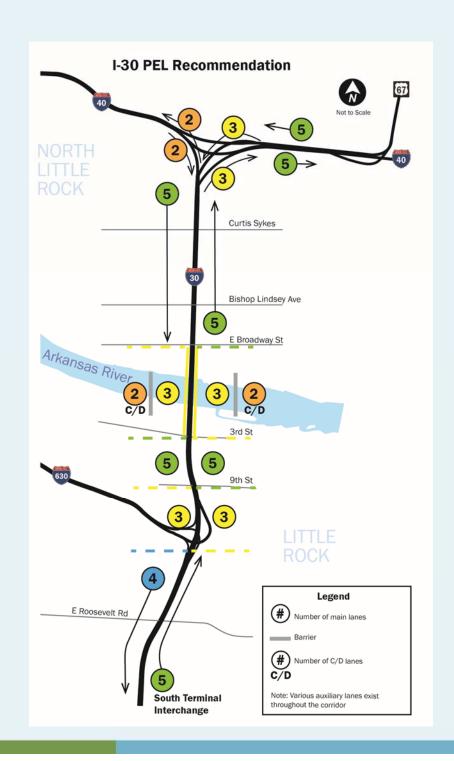
Portland



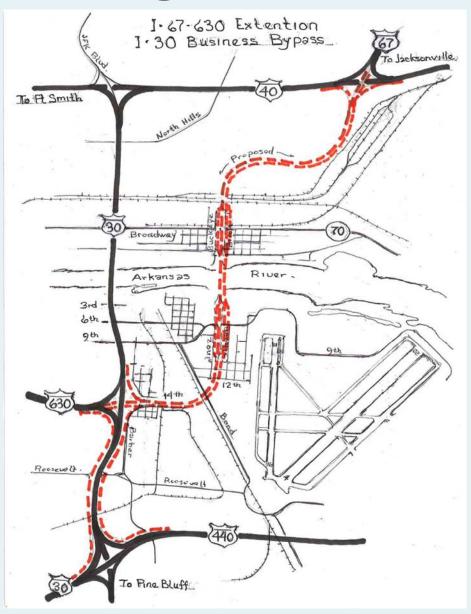
Seattle

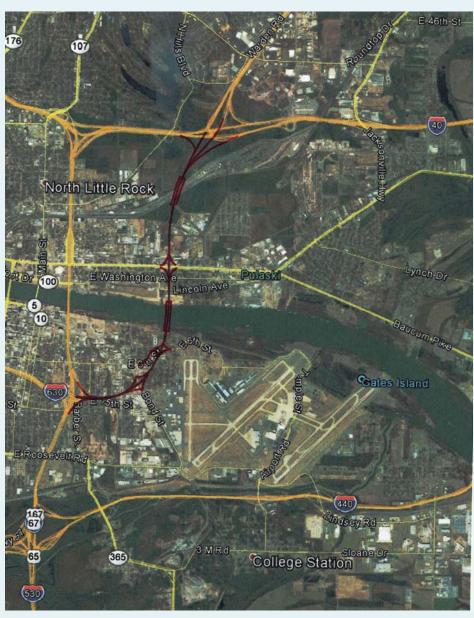


Through Traffic



Through Traffic – Alternate Route





Induced Demand



Questions?