



# Re-Evaluation

F.A.P. No. NHPP-030-22(68)

ARDOT Job NO. 061612

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I-530 – Hwy. 67 (Widening & Reconst.)

(I-30 & I-40) (F) P.E.

Pulaski County, Arkansas

May 2020



U.S. Department  
of Transportation  
**Federal Highway  
Administration**



## Re-Evaluation

I-530-Hwy. 67 (Widening & Reconst.) (I-30 & I-40)  
Pulaski County, Arkansas  
Federal Project Number ACNHPP-030-2(268)138

Submitted pursuant to:  
The National Environmental Policy Act (NEPA)  
42 U.S.C. §4332(2)(c) and 23 C.F.R. §771

U.S. Department of Transportation  
FEDERAL HIGHWAY ADMINISTRATION  
And  
ARKANSAS DEPARTMENT OF TRANSPORTATION

In cooperation with the United States Coast Guard and United States Army Corps of Engineers

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In compliance with the National Environmental Policy Act, this Re-Evaluation of the previously approved Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) describes proposed improvements to Interstate 30 from Interstate 530/Interstate 440 to Interstate 40 and along Interstate 40 from Highway 365 (MacArthur Drive) to Highway 67/167.

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# Chapter 1 – Purpose of Re-Evaluation

## What's in Chapter 1?

*Chapter 1 describes the current status of the project, and why the re-evaluation is needed.*

### 1.1 What Is The Purpose of the Re-evaluation of the 30 Crossing Project?

This re-evaluation is being prepared at the direction of the Arkansas Division office of the Federal Highway Administration (FHWA) to examine February 26, 2019, Environmental Assessment (EA) for the I-30 Crossing Project, which includes the improvement of a portion of Interstate 30 (I-30) from Interstate 530 (I-530) and Interstate 440 (I-440) to Interstate 40 (I-40), including the I-30 Arkansas River Bridge, and a portion of I-40 from Highway (Hwy.) 365 (MacArthur Drive) to US Highway (Hwy.) 67/167 including associated interchanges. This document is being prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), and all other applicable Federal and state laws and regulations, specifically 23 CFR § 771.129. The agency is required to complete a re-evaluation to update the analysis in prior NEPA documents when there are changes to the project which could affect the prior determination of potential environmental impacts. 23 C.F.R. § 771.129(c).

The Arkansas Department of Transportation (ARDOT) initiated this National Environmental Policy Act (NEPA) Study in June 2015, incorporating the results of the Planning and Environmental Linkages (PEL) Study begun in April 2014 by ARDOT. The EA was completed and approved by the FHWA in June 2018. A Public Hearing was held in July 2018, and a Finding of No Significant Impact (FONSI) for the Selected Alternative was approved on February 26, 2019.

The identified method of delivery of the project is Design-Build (DB). FHWA regulations for DB contracting are found in 23 CFR Part 636. In Design-Build, the design-builder is permitted to incorporate innovation into final design, as long as the project purpose and need, environmental commitments and contractual obligations are met. This allows for innovation and cost efficiency. Following the issuance of the EA and FONSI on February 26, 2019, ARDOT and the design-builder selected for the project entered into a period of

negotiation to ascertain what could be built with the \$631.7 million project budget available for immediate use. This period of negotiation was necessary because bids received for the project as described in the EA ranged from \$965 Million to \$1.1 Billion. On December 6, 2019, ARDOT and the design-builder agreed upon a revised design for the project that could be built within the available budget. The DB team also proposed certain modifications to the design of the Selected Alternative that would lower the ultimate cost of the project.

The project as approved in the EA/FONSI will be constructed in phases. Phase 1 will reflect the changes in the design from the Selected Alternative as approved in the EA/FONSI. The revised design focuses on work on an expanse of approximately 1.6 miles of the 7.3-mile project between the I-30/I-630 interchange and the I-30/East Broadway Street interchange, including the Arkansas River Bridge. North of the I-30/East Broadway Street interchange, there will be some limited improvements, primarily consisting of restriping of existing lanes and modifications within the I-30/I-40 interchange. . These design changes are described in more detail in Chapter 5 of this document.

ARDOT intends to increase funding for the project by adding an additional \$350 million from “Issue 1” if passed in November 2020. This work would constitute Phase 2 and complete funding for construction. Phase 2 would consist of improvements to the remaining 5.7 miles of the project as described in the EA/FONSI, including reconstruction of I-30 from the I-440/I-530/I-30 interchange to and including the I-630/I-30 interchange, widening and reconstruction of I-30 from the East Broadway interchange to the I-30/I-40 interchange, and widening of reconstruction of I-40. If “Issue 1” does not pass in November 2020, additional phases would be required over time to complete the construction of the project as approved in the EA/FONSI. Additional re-evaluations of the project may be required as this construction phasing occurs.

This re-evaluation focuses on design changes known at this point and reconsiders potential environmental impacts in light of these design changes to determine whether any additional NEPA documentation is warranted or if the previous findings described in the FONSI remain valid. In so doing, the re-evaluation describes the I-30 Crossing Project’s history, need and purpose, design modifications, operational analysis, environmental impacts, and commitments. Traffic forecasts prepared to assist in this effort were updated

with the most recent data available from Metroplan, the Metropolitan Planning Organization serving all of Faulkner, Pulaski, and Saline Counties, as well as portions of Lonoke County.

# Chapter 2- Project Description

## What's in Chapter 2?

*Chapter 2 describes the existing conditions in the project area.*

### 2.1 What Are the Existing Conditions In The Project Area?

#### **Project Area**

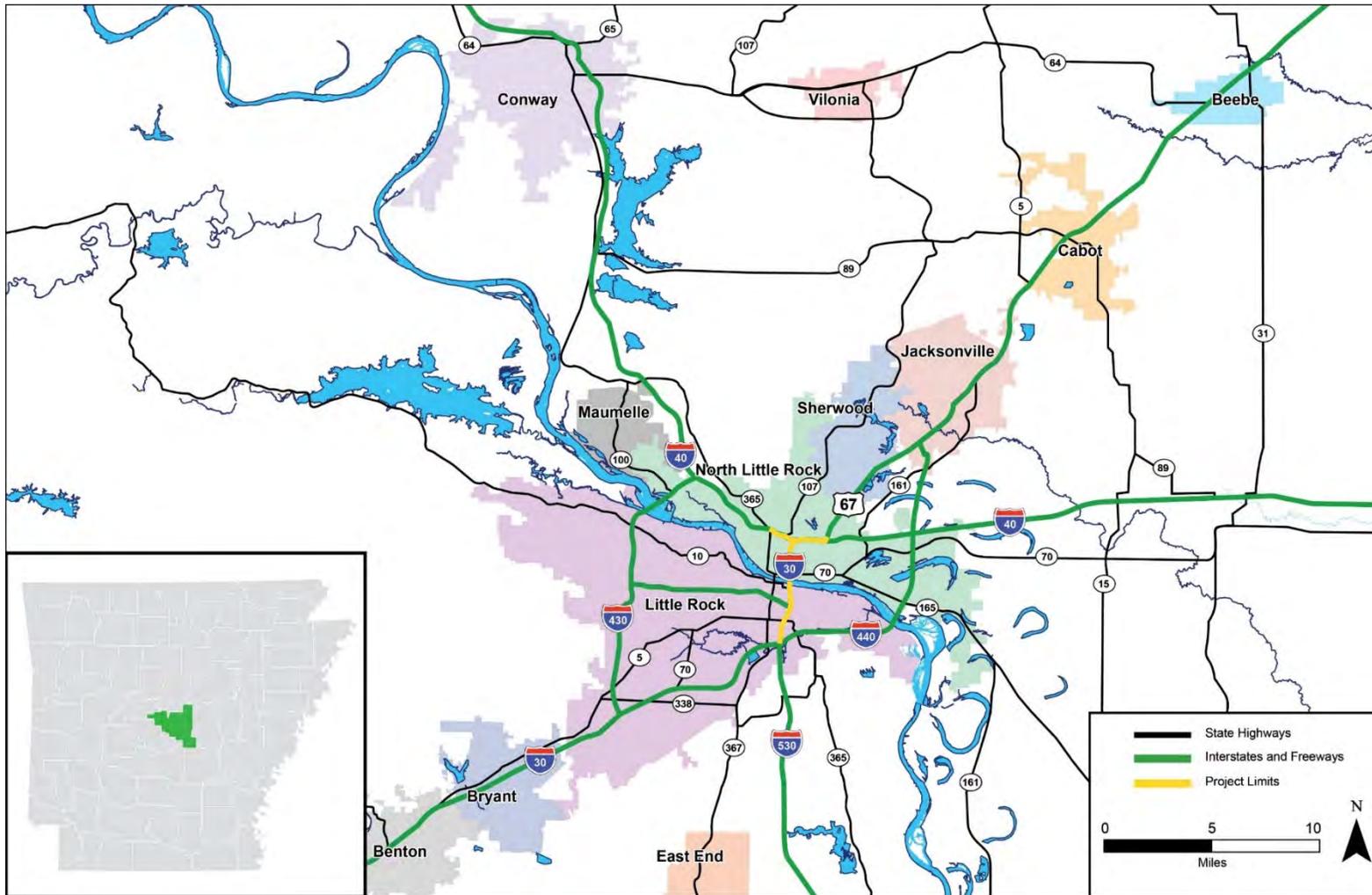
The project is located in central Arkansas, in Pulaski County, and within the cities of Little Rock and North Little Rock. The project, shown in **Figure 1**, consisting of portions of I-30 and I-40, is one of the critical links of the Central Arkansas Freeway System. It connects communities within the Central Arkansas Region and serves local, regional and national travelers with varied destinations and trip purposes.

Within Little Rock and North Little Rock, the I-30 corridor generally consists of three main lanes in each direction, running north and south, with parallel one-way discontinuous frontage roads on each side of the interstate within the right-of-way along the outer edge. In the northern portion of the project area, the I-40 corridor consists of three to four main lanes in each direction, running east and west, with parallel one-way frontage roads on each side of the interstate between the I-30/I-40 interchange and North Hills Boulevard (Blvd.). Within the project area, both I-30 and I-40 are classified as interstates, which are the highest classification of principal arterials. Within the 7.3-mile corridor, there are four system (connections between interchanges) interchanges:

- I-30 with I-530 and I-440
- I-30 with I-630
- I-30 with I-40
- I-40 with Hwy. 67/167

The logical termini of the project are the I-530/I-440/I-30 interchange on the south and the Hwy. 67/Hwy. 167/I-40 interchange on the north (**Figure 2**). These logical termini were determined to be rational end points for the project based on traffic modeling, which determined that capacity improvements were needed for both I-30 from the I-530/I-440 interchange on the south to the I-40 interchange on the north and on I-40 from the I-30 interchange to the Hwy. 67/Hwy. 167 interchange. A segment was added on I-40

Figure 1: Project Location Map



Source: Project Team, April 2017.

Figure 2: Project Area



Source: Project Team, June 2017.

westbound from I-30 to Hwy. 365 (MacArthur Drive) in order to continue both northbound lanes on I-30 onto I-40 westbound.

There are seven service interchanges providing access to the local streets, and multiple locations where I-30 crosses local streets without providing access. The Union Pacific Railroad (UPRR) crosses the project area at two locations.

The I-30 Arkansas River Bridge provides one of three vehicular crossings in downtown Little Rock/North Little Rock over the Arkansas River. The Arkansas River is an important shipping channel and is maintained by the United States Army Corps of Engineers (USACE). USACE commented on the EA/FONSI. USACE has no plans to construct new barge terminals or any other improvements for the Little Rock section of the Arkansas River. The United States Coast Guard (USCG) is responsible for navigation in the Arkansas River and for permitting of bridges on the Arkansas River. USCG is a cooperating agency.

# Chapter 3 - Purpose of the Project

## What's in Chapter 3?

*Chapter 3 describes why the project is needed.*

### 3.1 What Is The Purpose Of This Project?

The purpose of this project is to increase the safety of vehicular traffic on I-30 and I-40 by correcting geometric deficiencies, improve the condition of the roadway by modernizing infrastructure and maintaining a state of good repair, improve navigational safety on the Arkansas River, correct the I-30 Arkansas River Bridge deficiencies, and reduce traffic congestion by improving mobility on I-30 and I-40. The intent of the project improvements is to provide for increased travel speed and reduced travel time to downtown North Little Rock and Little Rock as traffic demand increases in the future. The I-30 Arkansas River Bridge would be replaced with a new structure, correcting the functional and structural deficiencies and navigation safety issues.

In addition, the goals of the project include:

- Improve opportunities for east-west connectivity, including bicycle and pedestrian connectivity;
- Improve local vehicle access to and from downtown Little Rock/North Little Rock;
- Accommodate existing transit and future transit;
- Improve system reliability;
- 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;
- Maximize cost efficiency;
- Optimize opportunities for economic development;
- Avoid and/or minimize impacts to the human and natural environment, including historic and archeological resources; and
- Sustain public support for the I-30 Corridor improvements.

# Chapter 4 – Project Needs

## What’s in Chapter 4?

*Chapter 4 details the project needs.*

The need for the project is based on:

- Existing and projected traffic conditions;
- Roadway safety;
- Roadway structural and functional deficiencies;
- Bridge structural and functional deficiencies; and
- Navigational safety

### 4.1 Existing and Projected Traffic Conditions

The EA/FONSI documented severe existing congestion within the corridor, and presented future traffic modeling results that showed continued deterioration in mobility without the project. In December 2018, Metroplan revised their growth forecasts based on updated demographic information, which showed slower growth trends in the Little Rock metropolitan area. Additionally, construction of the project is now expected to be completed in 2025, making a design year of 2045, rather than the 2041 design year used in the EA/FONSI, more appropriate for traffic forecasting. As a result, traffic forecasts for both the Action and No-Action alternatives have been lowered from those shown in Table 9 of the EA/FONSI. Revised 2045 traffic volumes for the Future No-Action and Selected Alternative are shown in **Table 1**.

**Table 1: Average Daily Traffic Forecast (Vehicles per Day)**

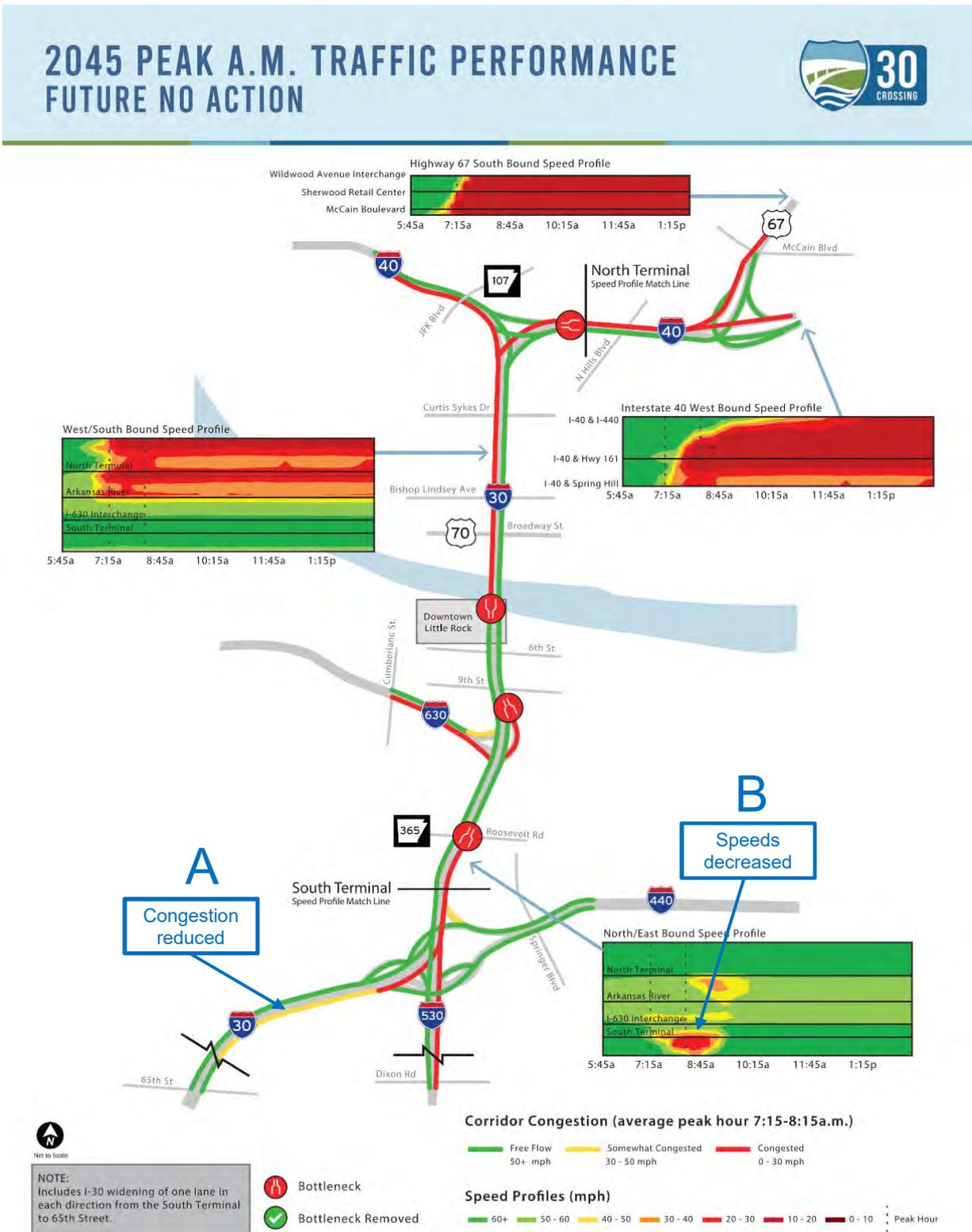
Location	EA/FONSI (2041)		Revised Forecast (2045)	
	Future No Action	Selected Alternative	Future No Action	Selected Alternative
<b>I-40 east of North Hills Blvd.</b>	153,000	159,000	143,000	147,000
<b>I-30 at Arkansas River Bridge</b>	153,000	182,000	152,000	167,000
<b>I-30 south of Roosevelt Blvd.</b>	119,000	133,000	114,000	118,000

*Source: IJR, 2018, and Traffic Noise Re-Evaluation Memorandum, April 2020*

To assist in evaluating traffic operations for the existing and future conditions in the project area, a traffic micro-simulation tool (VISSIM) was used. The team collected real time data on traffic movement through the corridor from traffic cameras. This data was used to calibrate the traffic simulation model and to make sure that it is valid, reasonable and accurately represents existing conditions. The calibrated model was then used to evaluate how the anticipated increases in traffic volumes would affect future traffic conditions in the design year, 2045. The future Action and No-Action traffic models were updated with the revised traffic volumes, and to include improvements to the adjacent segment of I-30 from 65<sup>th</sup> Street to the I-440/I-530 interchange. This project had become programmed in the Transportation Improvement Plan subsequent to the traffic analysis presented in the EA/FONSI. Finally, geometric revisions to the Selected Alternative proposed by the Design-Build team at the I-30/I-40 interchange (described in Chapter 6) were included in the modeling.

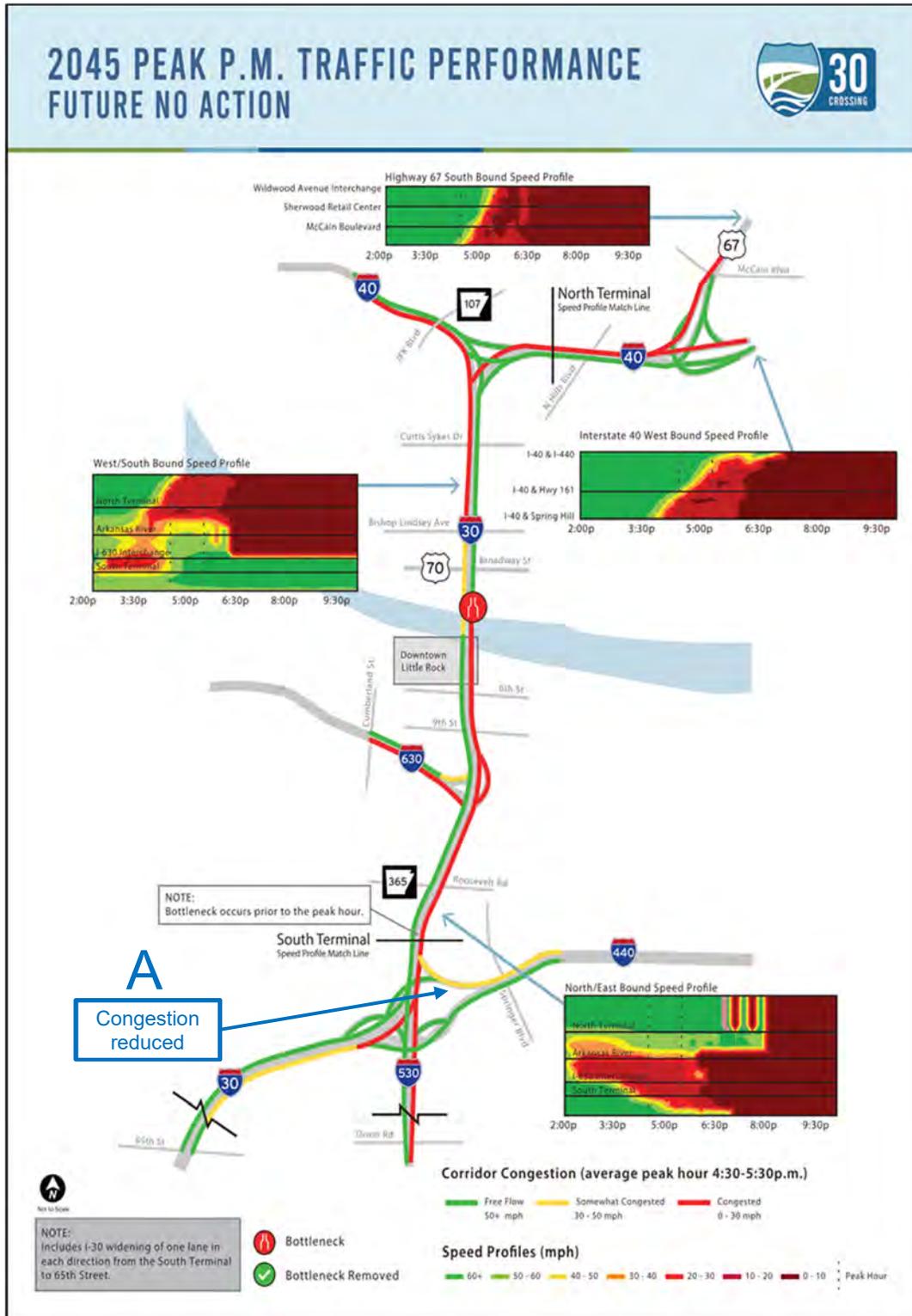
When comparing the future No-Action traffic modeling results in the EA/FONSI with the revised results, it is apparent that neither the reduction in future traffic volumes, nor the addition of a planned improvement to the adjacent segment of I-30, result in a significant reduction in traffic congestion in the 2045 No-Action condition. Using speeds and travel times as part of the measures of effectiveness (MOE's), the model shows that, during the morning peak hour of 7:15-8:15 AM, I-40 westbound between Hwy 67 and I-30; and I-30 southbound from I-40 to downtown Little Rock; have high levels of congestion, with speeds significantly reduced and long delays (**Figure 3**). I-30 northbound from the I-530/I-440 interchange to the I-630 interchange, is also highly congested in the morning peak hour. In the afternoon peak hour of 4:30-5:30 PM, I-30 northbound between the I-530/I-440 interchange and the Arkansas River Bridge is highly congested, with delays and reductions in speed (**Figure 4**). On the whole, the corridor remains significantly over capacity, causing motorists to experience long delays and to seek other routes during peak hours. The addition of a new bridge at Pike Street and Chester Street would still not divert enough traffic from the I-30 corridor to solve the congestion issues within the I-30 corridor.

Figure 3: Future (2045) No Action Morning Peak Traffic



Source: Re-Evaluation Traffic Analysis, April 2020.

Figure 4: Future No Action (2045) Afternoon Peak Traffic



Source: Re-Evaluation Traffic Analysis, April 2020

## **4.2 Roadway Safety**

I-30 and I-40 within the project corridor have some of the highest densities of crashes in central Arkansas on its interstates and freeways. This high incidence of crashes is due to congested conditions and to roadway characteristics that do not meet the minimum standard that is necessary for safe travel, also known as geometric deficiencies. Among the roadway geometric deficiencies that have been identified as contributing to an unsafe roadway corridor are:

- ramp lengths that are too short,
- interchanges that are too close together,
- curves that are too sharp,
- left exits,
- and shoulders that are missing or not wide enough.

These identified roadway geometric deficiencies will be addressed by the Selected Alternative, with the exception of one of the two left exits: I-40 eastbound at Hwy. 67. With the revised Selected Alternative, weaving associated with afternoon traffic moving across I-40 eastbound to enter the left exit for Hwy. 67 northbound will be eliminated through a revised design to the I-30/I-40 interchange, and the left exit will remain. A complete description of this change can be found in Chapter 6.

## **4.3 Structural and Functional Roadway Deficiencies**

Structural and functional roadway deficiencies that have been identified within the corridor will be addressed by the Selected Alternative.

## **4.4 Structural and Functional Bridge Deficiencies**

Structural and functional bridge deficiencies that have been identified within the corridor will be addressed by the Selected Alternative.

## **4.5 Navigational Safety**

The Selected Alternative will address the horizontal clearance issues with the Arkansas River Bridge.

# Chapter 5 – Project Design Modifications

## What's in Chapter 5?

*Chapter 5 describes changes to the design of the Selected Alternative.*

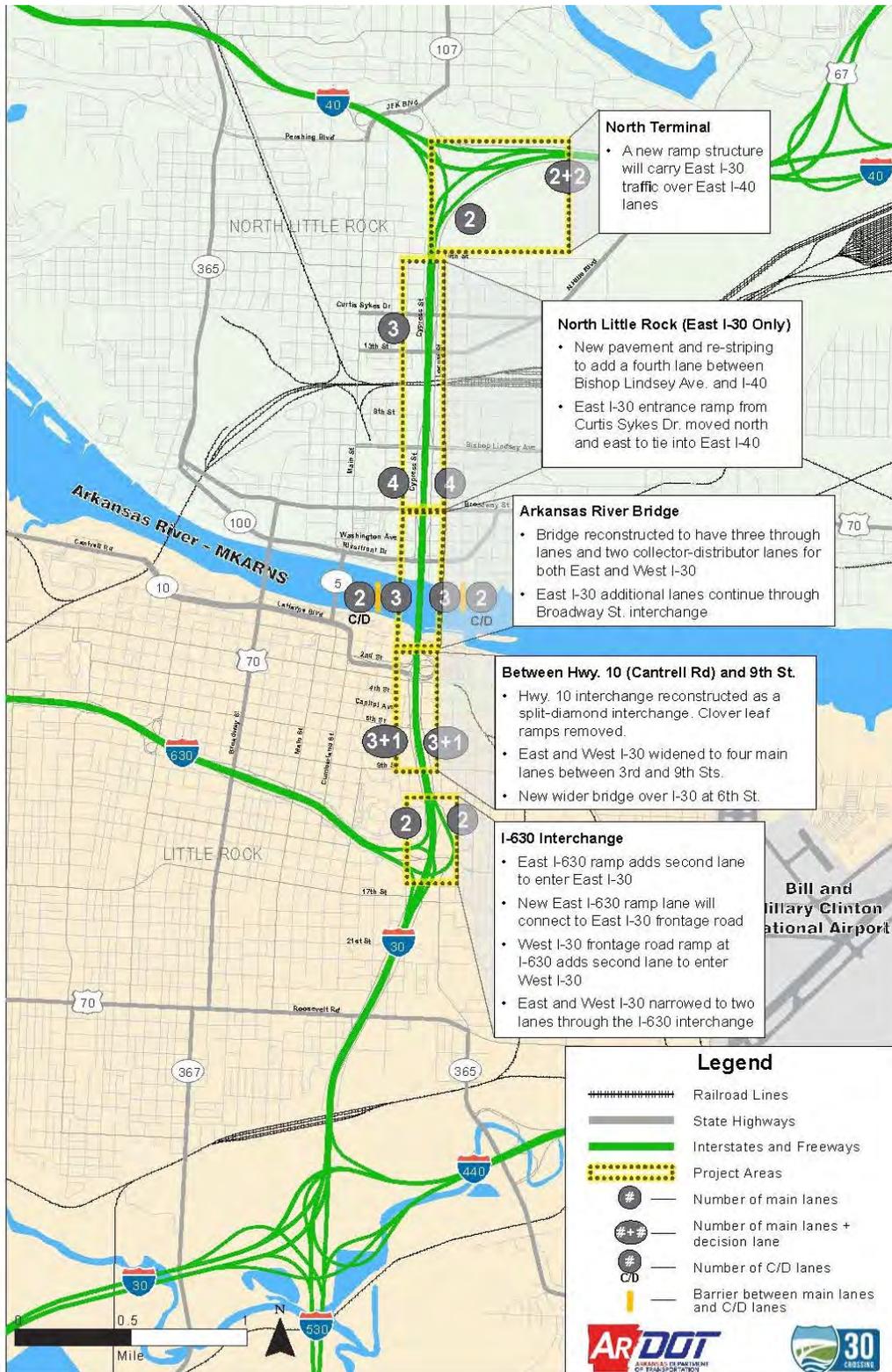
### 5.1 Interim (Phase 1) Modifications

The interim modifications differ principally from the Selected Alternative in the geographic limits of the proposed work (**Figure 5**). In Phase 1, no improvements are proposed south of the I-30/I-630 interchange, and limited improvements north of the I-30/East Broadway Street interchange. Within the limits of the Phase 1 improvements, the configuration is similar to the Selected Alternative: the 6-lane with C/D with the Split Diamond Interchange.

Between the I-630 interchange and East Broadway Street interchange, the improvements are similar to the Selected Alternative, with limited exceptions. Within the limits of the I-630 interchange, the interim condition varies from the Selected Alternative as follows:

- No widening of the northbound I-30 to westbound I-630 ramp to two lanes throughout;
- No widening of the southbound I-30 to westbound I-630 ramp to three lanes and no replacement of the ramp bridge, and;
- No addition of a westbound through lane to I-630 between I-30 and the South Commerce Street overpass.

Figure 5: Interim Improvements



Note: Within the text of this document, East I-30 is referred to as Northbound I-30 and West I-30 is referred to as Southbound I-30  
 Source: Project Team, February 2020

Two changes to the I-630 interchange will become a permanent change to the Selected Alternative, as shown in **Figure 6**:

- The eastbound I-630 to northbound I-30 ramp will be restriped to two lanes as in the Selected Alternative, however, the alignment of this ramp will not be shifted west, as in the Selected Alternative, and the ramp bridge will not be replaced; and
- The northbound I-30 to northbound frontage road ramp will be widened to two lanes as in the Selected Alternative, however, the alignment of this ramp will not be shifted west, as in the Selected Alternative.

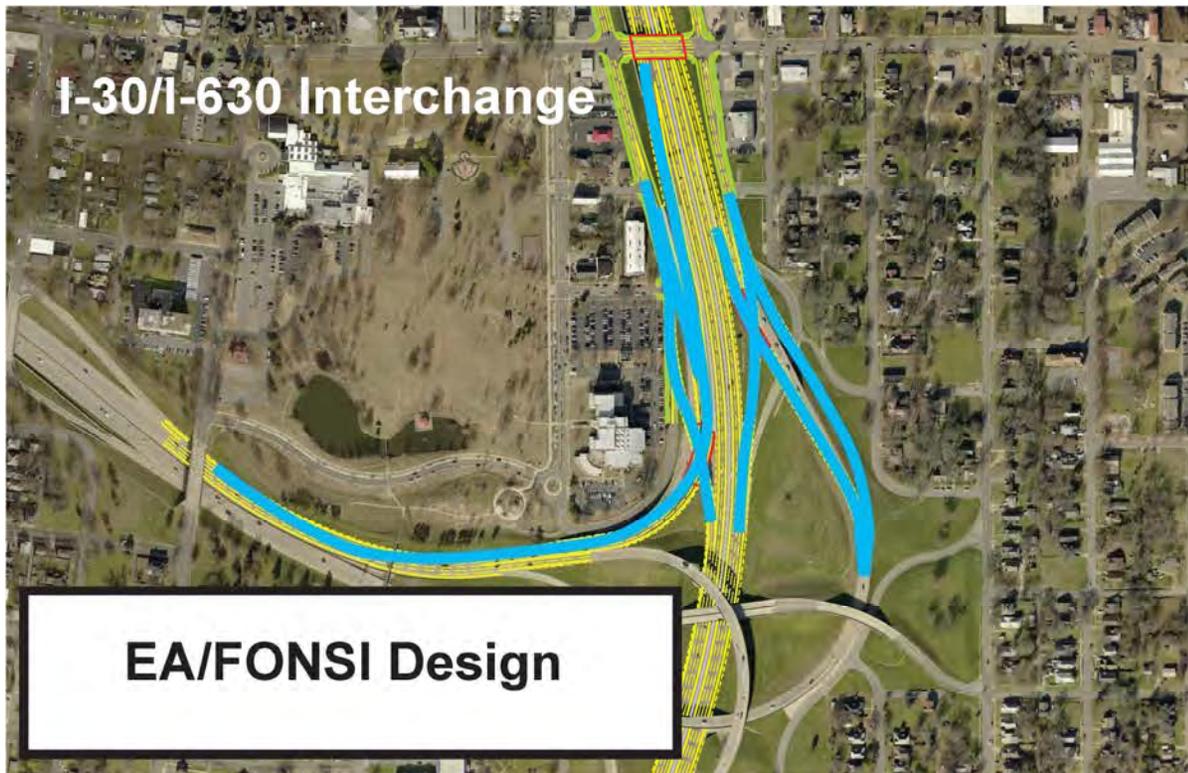
From the I-630 interchange to East 6<sup>th</sup> Street, the interim condition varies from the Selected Alternative as follows:

- The southbound frontage road will not be widened, and the proposed ramp between the southbound frontage road and the I-30 southbound to westbound I-630 ramp will not be constructed; and;

In downtown Little Rock, the proposed changes to the local streets under the Split Diamond interchange alternative are the same as the Selected Alternative.

The I-30 Arkansas River Bridge would still be replaced with a structure that meets navigational clearance requirements, as requested by USCG. As with the Selected Alternative, the existing navigational channel would be shifted to the north to align better with the channel in the adjacent upstream and downstream bridges and the horizontal clearance in the navigation channel would be increased to 320 feet.

Figure 6: Revisions to Selected Alternative Improvements at I-30/I-630 Interchange



Source: Project Team, May 2020

From the I-30/East Broadway Street interchange to the I-30/I-40 interchange, the following limited improvements are proposed in the interim condition:

- For approximately 500 feet north of East Broadway Street, full depth widening and reconstruction will be provided to taper out the three northbound through lanes and two northbound C/D lanes to a four-lane section. From that point northward to north of East 19<sup>th</sup> Street, the northbound lanes will be restriped to provide four northbound lanes.
- In the southbound direction, full depth widening and reconstruction will also be provided for approximately 500 feet north of East Broadway Street in order to transition into three southbound through lanes and two southbound C/D lanes. No restriping to create additional lanes will occur to southbound I-30 between East Broadway Street and East 19<sup>th</sup> Street.

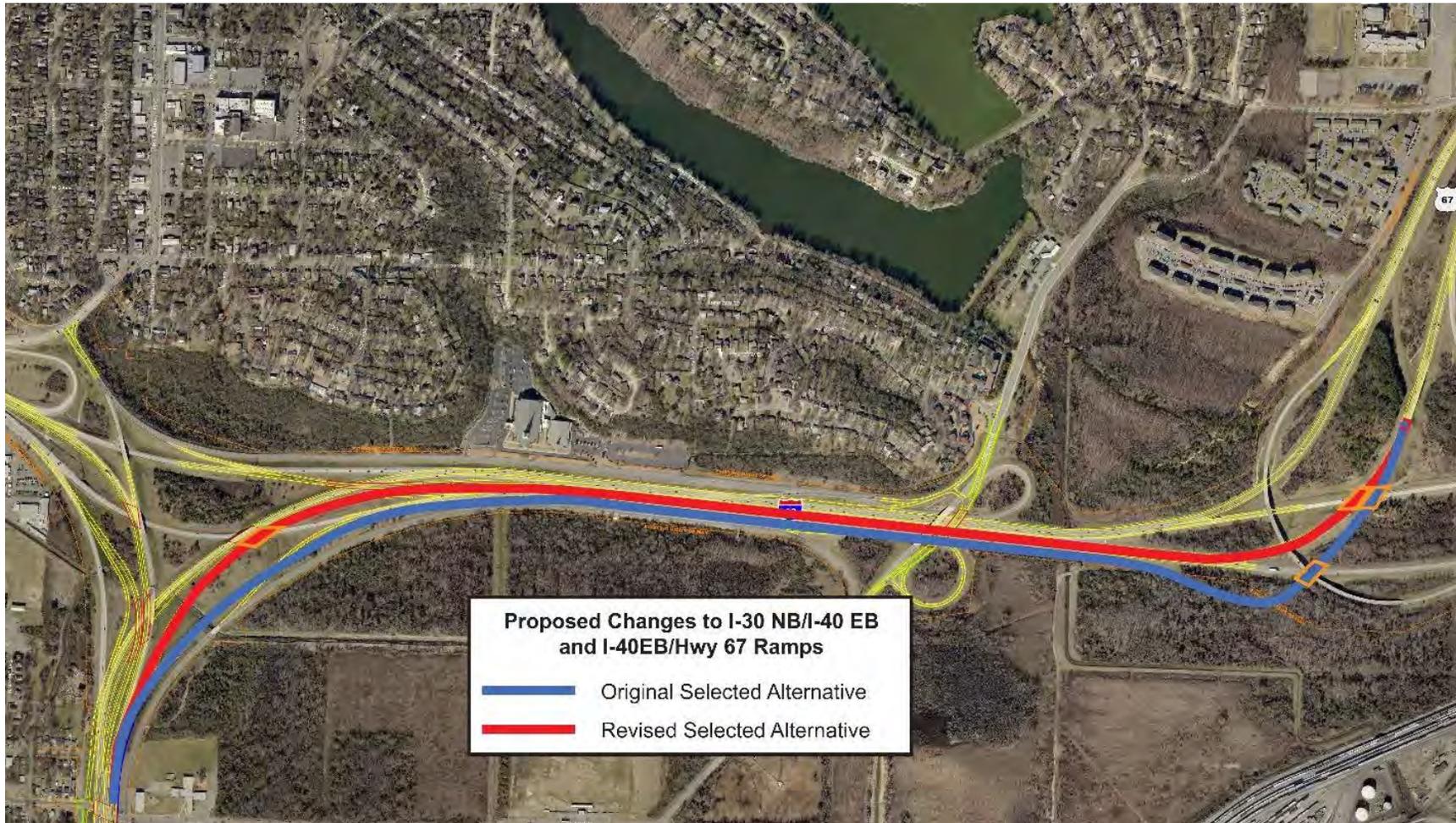
#### 5.2 Revisions to the Selected Alternative

In addition to the two revisions noted above to the Selected Alternative in the I-630 interchange, the Design-Build team has proposed a modification to the design of the I-30/I-40 interchange that is a permanent change to the Selected Alternative.

The Selected Alternative as shown in the EA/FONSI provides five lanes in the northbound direction of I-30 approaching the I-40 interchange. The two inside northbound I-30 lanes would transition to a two-lane ramp that would carry northbound I-30 traffic to I-40 westbound. The three outside I-30 northbound lanes would transition to a three-lane ramp that would merge onto the outside of the two existing I-40 eastbound lanes, creating five eastbound through lanes. Approaching the Hwy. 67 interchange, I-40 eastbound traffic intending to proceed north on Hwy. 67 would bear to the right and exit on a three-lane ramp which would then fly over I-40 eastbound and merge with Hwy. 67 northbound.

The permanent change to the Selected Alternative proposed by the Design-Build team would eliminate the right exit from I-40 eastbound to Hwy. 67 northbound, and maintain the current left exit (**Figures 7 and 8**). There would be five lanes in the northbound direction of I-30 approaching the I-40 interchange. The two inside northbound I-30 lanes would transition to a two-lane ramp that would carry northbound I-30 traffic to I-40 westbound. The three outside I-30 northbound lanes, which carry the heaviest traffic volume, would transition to a three-lane ramp that would land on the inside of the two

Figure 7: Revisions to Selected Alternative on I-40



Source: IJR Addendum 2, May 2020

Figure 8: Revised Selected Alternative



Source: Project Team, February 2020

existing I-40 eastbound lanes, creating five eastbound through lanes. An on-ramp from the northbound frontage road would add another lane. The six-lane section thus created would continue until the North Hills Boulevard interchange, where the outside lane would become an exit lane onto North Hills Boulevard. Five through lanes would continue toward the Hwy. 67 interchange, with three lanes exiting onto Hwy. 67 northbound and two lanes continuing as I-40 eastbound. The left exit ramp from I-40 eastbound to Hwy. 67 northbound would remain, as in the current condition, but the weave associated with the traffic destined for northbound Hwy. 67 (the heaviest movement) crossing eastbound I-40 to make a left exit would be eliminated, as northbound Hwy. 67 traffic would already be on the inside of I-40 and eastbound I-40 traffic would be on the outside.

The revisions to the Selected Alternative proposed by the Design-Build team are referred to as the Revised Selected Alternative.

# Chapter 6 – Operational Analysis

## What’s in Chapter 6?

*Chapter 6 describes how the Revised Selected Alternative will meet the project needs.*

### 6.1 How Would The Project Affect Traffic And Safety?

#### **How would traffic patterns and volumes in the 30 Crossing corridor change with the project?**

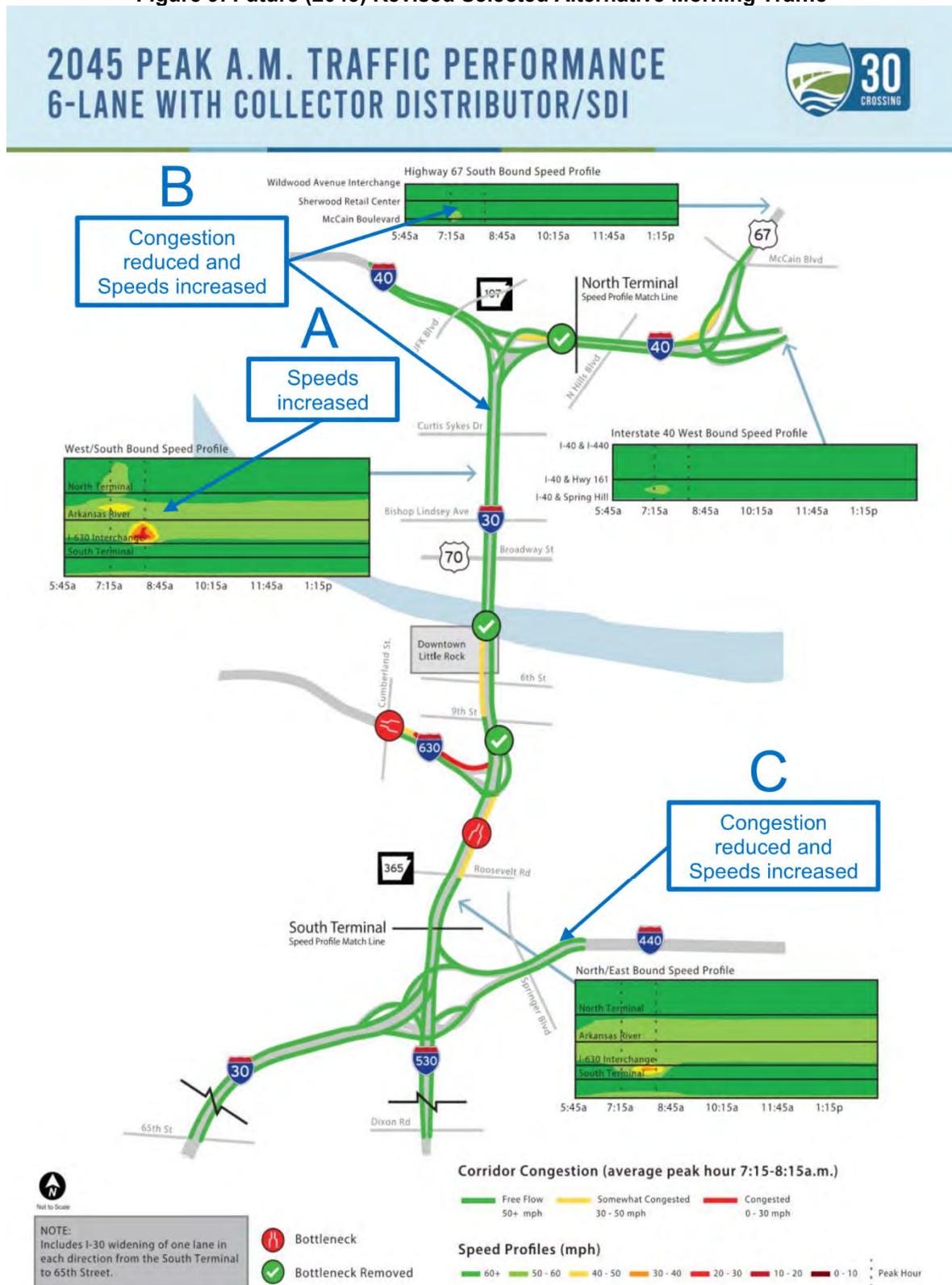
VISSIM (a traffic simulation software tool) modeling was used to evaluate future (2045) traffic conditions throughout the corridor for the No-Action and Revised Selected Alternative. Traffic volumes projected in the design year (2045) for the Revised Selected Alternative have been revised downward as shown in **Table 1**. The geometric changes proposed under the Revised Selected Alternative were included in the modeling.

#### **Revised Selected Alternative**

Traffic modeling performed for the Revised Selected Alternative shows an increase in mobility on I-30 and I-40 compared to the results shown in the EA/FONSI for the Selected Alternative as documented in the *Re-Evaluation Traffic Analysis (Appendix A)*. In the design year 2045, the Revised Selected Alternative provides higher travel speeds and lower congestion than what is shown in the EA/FONSI, due to the decrease in future traffic volumes shown in **Table 1**. The Revised Selected Alternative reduces the congested area that exists in the morning peak hour (**Figure 9**). Somewhat congested areas, defined as average speeds in the 30-50 mph range, are now shown only in the southbound direction in the segment between the Arkansas River Bridge and I-630, and in the northbound direction only in the segment just south of I-630.

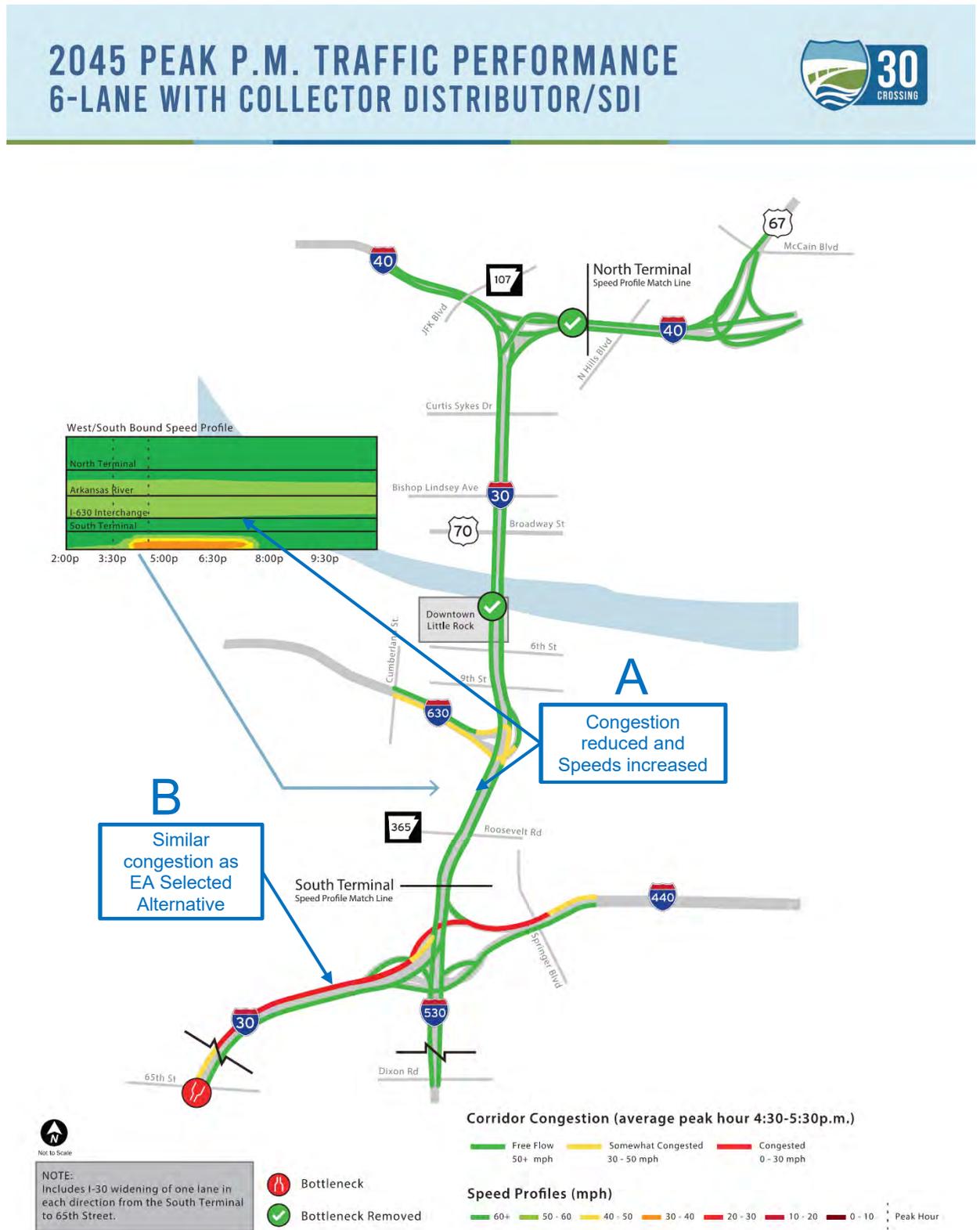
During the afternoon peak, congestion in both directions on I-30 and I-40 would be eliminated. The exception to this condition is for ramps entering the project from adjacent segments of I-630 and I-440, and exiting the project to the adjacent segment of I-30 to the south (**Figure 10**). This is due to ramp capacity restrictions and capacity restrictions on I-30 south of the project.

Figure 9: Future (2045) Revised Selected Alternative Morning Traffic



Source: Re-Evaluation Traffic Analysis, April 2020

Figure 10: Future (2045) Revised Selected Alternative Afternoon Traffic



Source: Re-Evaluation Traffic Analysis, April 2020

## How would the project affect safety?

The Revised Selected Alternative would address the roadway geometric deficiencies that contribute to the high amount of crashes. Documentation is provided in **Appendix B-IJR Addendum 2**.

In order to evaluate the effects of the geometric revisions under the Revised Selected Alternative, a predictive safety analysis was performed using the methods in the *Highway Safety Manual* (Source: AASHTO) for the Future No-Action and Revised Selected Alternative. For the entire project area, the analysis of crashes on the main lanes shows a reduction in the predicted crash rate compared to the EA/FONSI for both the Future No-Action Alternative and Revised Selected Alternative. As in the EA/FONSI, the main lane crash results continue to show that the project improvements would result in a reduction in the crash rate compared to the Future No-Action Alternative (**Table 2**). For the entire project area, the predicted total number of main lane crashes under the No-Action Alternative, is 373 in 2045, with 8 fatalities. For the Revised Selected Alternative, the predicted total number of main lane crashes in 2045 is 261, with 6 fatalities.

**Table 2: Crash Rate<sup>1</sup> Results of Predictive Crash Analysis**

Location	EA/FONSI (2041)		Revised Forecast (2045)	
	Future No Action	Selected Alternative	Future No Action	Revised Selected Alternative
<b>I-40 from I-30 to Hwy. 67</b>	1.31	0.63	0.73	0.69
<b>I-30 from Broadway St. to I-40</b>	2.89	1.13	2.68	0.89
<b>Entire Project</b>	1.95	1.01	1.24	0.82

Source: IJR Addendum 2

1. Crash rates are all severity types of crashes per Million Vehicle Miles

Because of the predicted reduction in crashes with the Revised Selected Alternative, as well as the improvement in incident clearance time due to reduced congestion, the Revised Selected Alternative would have a higher reliability index than the No-Action Alternative. The Revised Selected Alternative would also correct the navigational safety issues on the Arkansas River.

# Chapter 7 – Environmental Impacts

## What's In Chapter 7?

*Chapter 7 identifies changes to the permanent and construction impacts that were evaluated in the EA/FONSI as a result of changes to the design of the Selected Alternative.*

### 7.1 How Would Economic Conditions In The Little Rock And North Little Rock Communities And Surrounding Areas Be Affected?

There are no changes proposed to the Selected Alternative that would affect the economic impacts evaluated in the EA/FONSI.

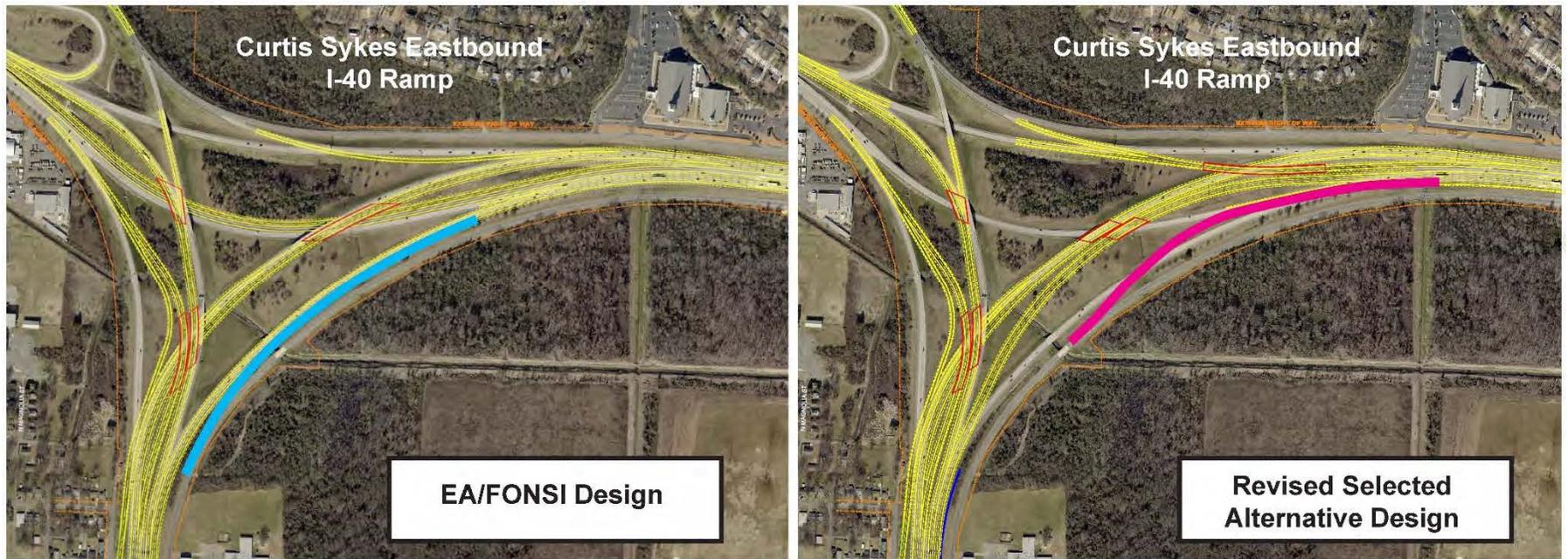
### 7.2 How Would The Project Affect Communities In The Area?

#### Access and Travel Patterns

For safety reasons, the Selected Alternative relocated the existing entrance ramp from Curtis Sykes Road to northbound I-30 further to the north (**Figure 11**), so that access from Curtis Sykes Road occurred through a connection between the northbound frontage road and the I-30 northbound to I-40 eastbound ramp. The current access directly onto I-30 northbound requires traffic bound for I-40 westbound and entering at Curtis Sykes Road to weave across I-40 eastbound traffic in a distance of less than 1000 feet, which creates a very unsafe condition.

The Revised Selected Alternative changes the location of the ramp from the northbound frontage road. Instead of connecting to the I-30 northbound to I-40 eastbound ramp, as in the Selected Alternative, the ramp will connect directly to I-40 eastbound, approximately 1300 feet further north of the location in the Selected Alternative.

Figure 11: Relocated Slip Ramp



Source: Project Team May 2020

## Right of Way (ROW) Acquisitions and Displacements

**Table 3** compares the ROW requirements shown in the EA/FONSI with the ROW required for the Revised Selected Alternative. **Figures 12 -15** show the new ROW takings identified for the Revised Selected Alternative.

**Table 3: ROW Impacts**

Impact	EA/FONSI	Revised Selected Alternative
Acreage of acquisition	11.1	5.9
Number of Affected Parcels	61	72
Commercial Displacements	5	4
Residential Displacements	6	6

*Source: Project Team, April 2020*

The Selected Alternative evaluated in the EA/FONSI would have resulted in five commercial and six residential displacements, while the Revised Selected Alternative proposed by the Design Build team would require one less commercial displacement, a warehouse in downtown Little Rock on President Clinton Avenue (C3, which would have appeared on Figure 10).

The Revised Selected Alternative eliminates the right exit loop ramp from I-40 Eastbound to Hwy. 67 Northbound. This ramp was responsible for a large portion of the ROW requirement for the project, which is reflected in the lower acreage in Table 2. The average size of the acquisitions for the project is 4500 square feet, or 0.1 acres. Most (55 of the 72) of the acquisitions are very small (less than 0.1 acres) and are needed primarily for minor intersection improvements such as signal installation or replacement, sidewalk reconstruction, and providing smoother turning radii. Consequently, the number of affected parcels has increased, as shown in Table 2; however, these acquisitions are so small that the effect on the parcels is insignificant.

Figure 12: ROW/Permanent Easement Impacts from the Revised Selected Alternative



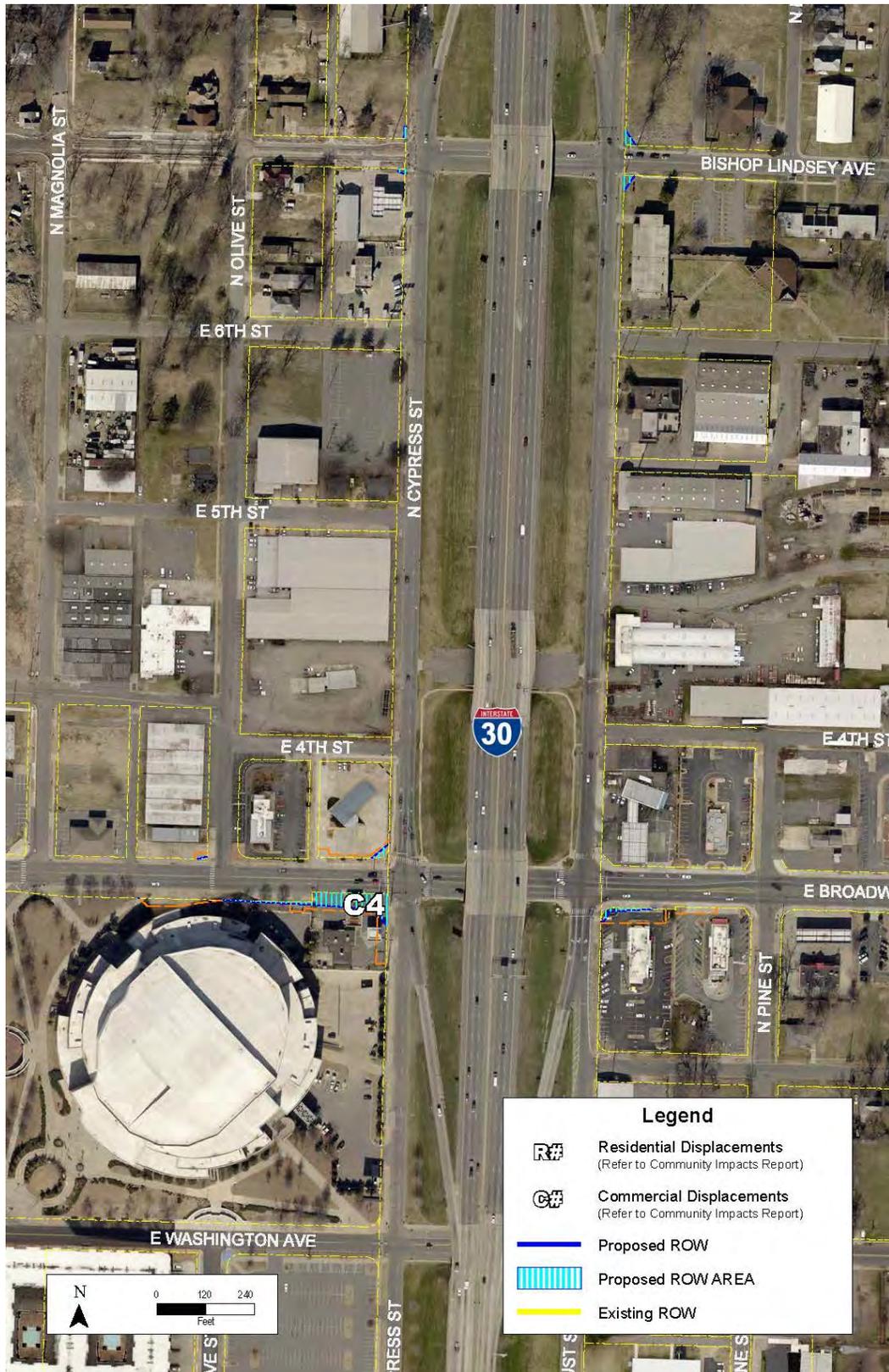
Source: Project Team, February 2020.

Figure 13: ROW/Permanent Easement Impacts from the Revised Selected Alternative



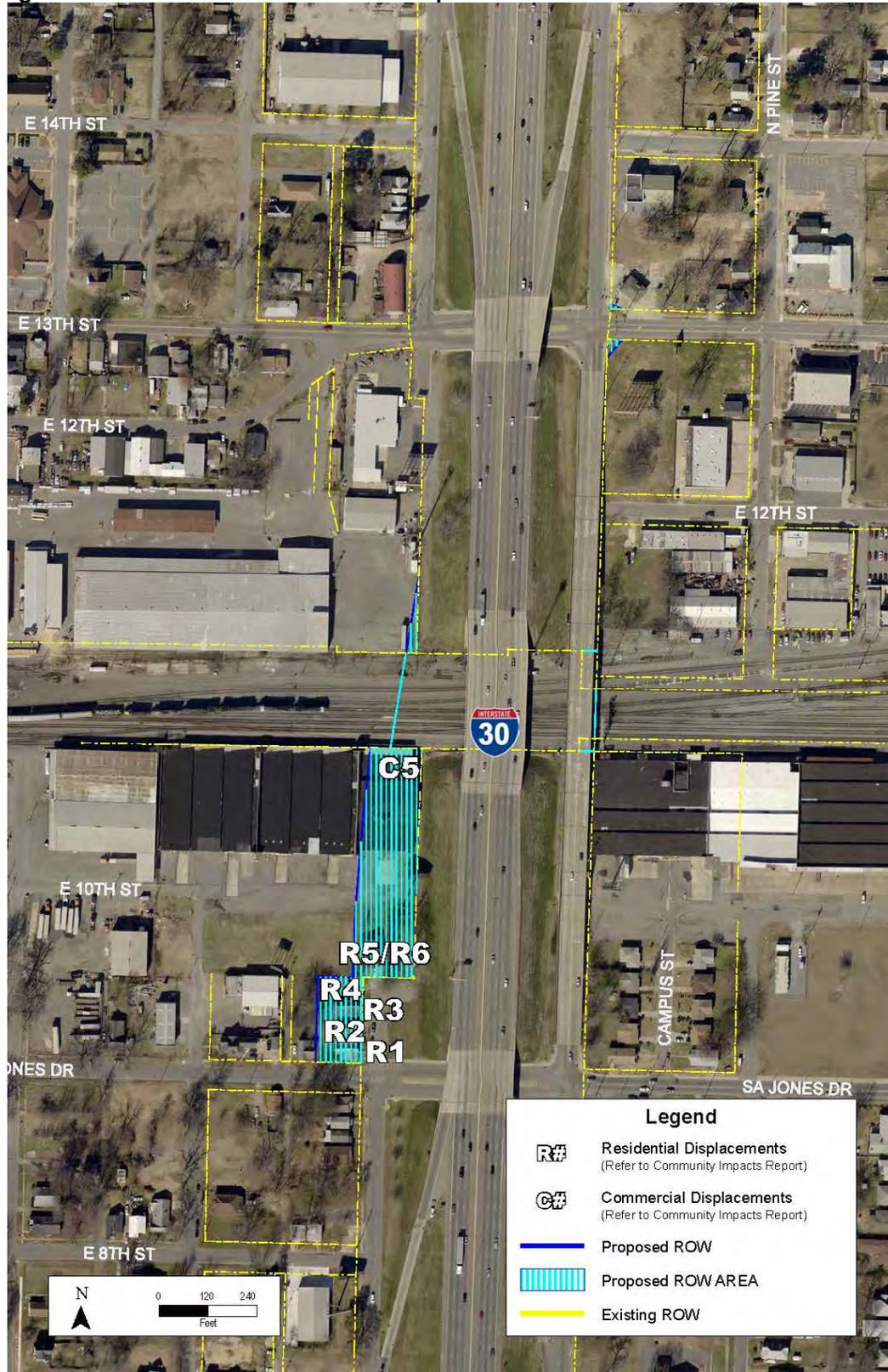
Source: Project Team, February 2020

Figure 14: ROW/Permanent Easement Impacts from the Revised Selected Alternative



Source: Project Team, February 2020

Figure 15: ROW/Permanent Easement Impacts from the Revised Selected Alternative



Source: Project Team, February 2020

### **Environmental Justice (EJ) and Limited English Proficiency (LEP) Populations**

All of the residential displacements and one commercial displacement are located in a census block with a minority population greater than 50% of the total population. All six residential displacements are located along Cypress Street in North Little Rock. In order to improve connectivity and access to businesses and residences in this minority neighborhood, the existing southbound frontage road (Cypress Street) would be extended over the UPRR between 9<sup>th</sup> and 13<sup>th</sup> Streets, causing six residences to be displaced. These displacements were evaluated in the EA/FONSI.

Noise impacts would potentially occur along the entire corridor, including the areas of minority and/or low-income populations, and would affect all users of the facility including EJ and non-EJ populations. To address these impacts, potential noise abatement measures could include construction of traffic noise barriers, which would minimize and mitigate the potential noise impacts resulting from the proposed project alternative. Traffic noise barriers are discussed in Section 7.5.

The access changes with the Revised Selected Alternative discussed above in the area of the Curtis Sykes Drive and the Hwy. 10 Interchange would occur in areas of high minority and/or low-income populations. Access would not be eliminated, merely shifted in location.

### **River Rail Streetcar**

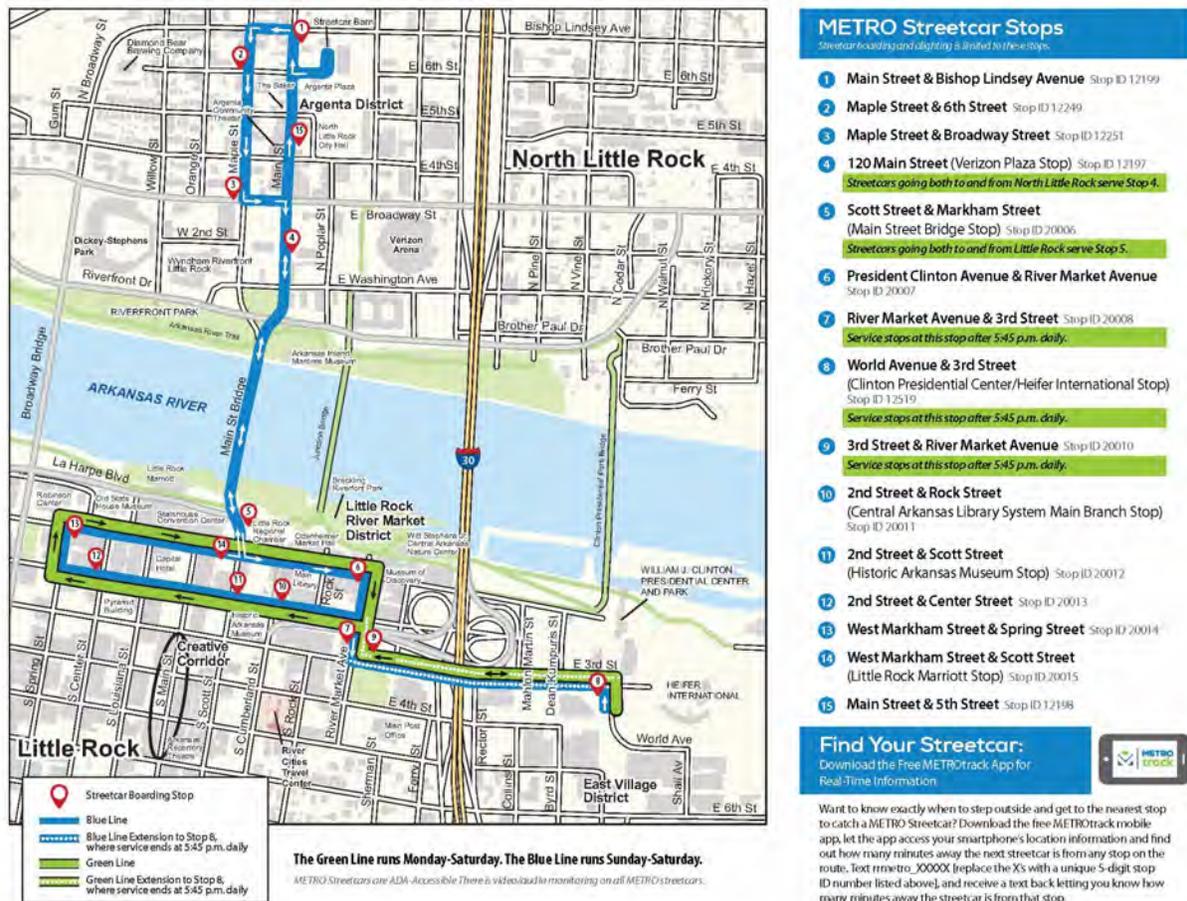
Rock Region Metro (RRM), the transit authority serving Little Rock, oversees the operation of the River Rail Streetcar or Metro Streetcar, “a 3.4-mile streetcar system connecting the cities of Little Rock and North Little Rock.”<sup>1</sup> “METRO Streetcar operates on two routes throughout the Little Rock and North Little Rock downtown areas seven days a week, except for New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.”<sup>2</sup> The Streetcar operates on two lines (**Figure 16**). The Blue Line operates in a loop that crosses the Arkansas River to connect the downtown Little Rock area to the Argenta District of North Little Rock. The Green Line stays in Little Rock where it shares a loop from approximately South Spring Street to River Market Avenue and has a spur that extends east from River Market Avenue, passing

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<sup>1</sup> <https://rrmetro.org/services/streetcar/>

<sup>2</sup> <https://rrmetro.org/services/streetcar/maps-schedules/>

Figure 16: River Rail Streetcar



Source: [https://rrmetro.org/wp-content/uploads/2016/04/RRM\\_StreetcarBrochure\\_0619.pdf](https://rrmetro.org/wp-content/uploads/2016/04/RRM_StreetcarBrochure_0619.pdf)

under the I-30 Bridge to World Avenue and East 3rd Street. The last stop at World Avenue and East 3rd Street provides access to the Clinton Presidential Center and Heifer International. Service on this spur or branch line does not operate on Sundays and ends at 5:35 pm on days it does operate.<sup>3</sup> The infrastructure for the Streetcar was built within ARDOT ROW from 2004 to 2007. RRM operates the Streetcar system within ARDOT’s ROW at no charge. RRM describes the Streetcar system as “a fun and inexpensive way to take in the downtown sights of central Arkansas’ “twin cities,” and get to downtown destinations and events without parking hassles.”<sup>4</sup> According to RRM, “the system serves 100,000 riders annually and covers 1,080 miles weekly.”<sup>5</sup>

<sup>3</sup> [https://rrmetro.org/wp-content/uploads/2016/04/RRM\\_StreetcarBrochure\\_0619.pdf](https://rrmetro.org/wp-content/uploads/2016/04/RRM_StreetcarBrochure_0619.pdf)

<sup>4</sup> <https://rrmetro.org/services/streetcar/maps-schedules/>

<sup>5</sup> <https://rrmetro.org/services/streetcar/>

In order to construct the Revised Selected Alternative, improvements to East 2<sup>nd</sup> Street, East 3<sup>rd</sup> Street, and River Market Avenue are required. These improvements will require the removal infrastructure associated with the River Rail Streetcar trolley system on those roadways and temporary shutdown of the system for a variable period of time.

- The trolley along East 2<sup>nd</sup> Street from River Market Avenue to Cumberland Street will be completely shut down for approximately two months, and service will be affected for an additional six months. During this time, there will be intermittent, short-term suspensions of service.
- The trolley along River Market Avenue between East 2<sup>nd</sup> Street and East 3<sup>rd</sup> Street, and along East 3<sup>rd</sup> Street between River Market Avenue and the eastern terminus at World Avenue will be completely shut down for approximately 41 months.

In accordance with the ARDOT Utility Accommodation Manual, ARDOT and Rock Region Metro (RRM) will enter into an agreement concerning replacement of the infrastructure needed for the trolley system. While the details of the agreement have not been finalized, ARDOT intends to provide financial support to RRM to modify and reconstruct the trolley system as needed to accommodate the I-30 project. In return, the Cities of Little Rock and North Little Rock, and Pulaski County, will assume maintenance responsibility for certain roadways on the state highway system for a period of time on behalf of RRM.

The temporary closures of the Streetcar system are not considered to be a significant environmental impact. The closures are temporary and will not prevent operation of a portion of the Streetcar from operating between downtown Little Rock and North Little Rock even during construction. The longest closure affects only the Green Line branch extending from downtown Little Rock to the Clinton Presidential Center and Heifer International. Visitors will still be able to reach both points of interest by other means. The Streetcar system, which features three historic, replica streetcars, does not appear to be a means of transportation to and from work.<sup>6</sup> In April 2020, RRM stopped operation of the Streetcar as non-essential. ARDOT has permitted operation of the Streetcar within its ROW at no charge and even though it is not obligated to do so, has committed to entering into an agreement with RRM that will provide for funding to replace Streetcar infrastructure and enable the Streetcar branch serving the

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<sup>6</sup> ARDOT attempted to obtain more detailed information about ridership but it is not available

Clinton Presidential Center and Heifer International to subsequently resume operations after relevant portions of construction of the I-30 Crossing Project are complete.

### **7.3 How Would The Project Affect Cultural Resources?**

#### **Historic Resources**

No changes to the effects on historic resources evaluated in the EA/FONSI are proposed.

#### **Archeological Resources**

No changes to the effects on archaeological resources evaluated in the EA/FONSI are proposed. FHWA developed a Programmatic Agreement (PA) in consultation with the State Historic Preservation officer (SHPO) and the Advisory Council on Historic Preservation (ACHP). The PA includes an Unanticipated Discovery Plan (UDP) that specifies procedures to be followed if cultural resources are discovered during construction. If prehistoric sites are impacted, FHWA-led consultation with the appropriate Native American Tribe(s) will be conducted and the site(s) evaluated to determine if Phase II testing is necessary. Phase II testing involves excavation to confirm the existence of archaeological resources and define the limits of the site. Should any of the sites be determined as eligible or potentially eligible for the National Register of History Places (NRHP) and avoidance is not possible, the PA includes procedures for the preparation of site-specific treatment plans and data recovery. Off-site areas, such as borrow pits, waste areas, and work roads, will be surveyed for cultural resources, as appropriate, when locations become available. FHWA and ARDOT developed a Design Coordination Plan to establish procedures for coordination with SHPO and other interested parties should design changes occur that may affect historic properties. A Mitigation Measures Plan has also been developed to resolve any adverse effects resulting from unanticipated effects on historic properties.

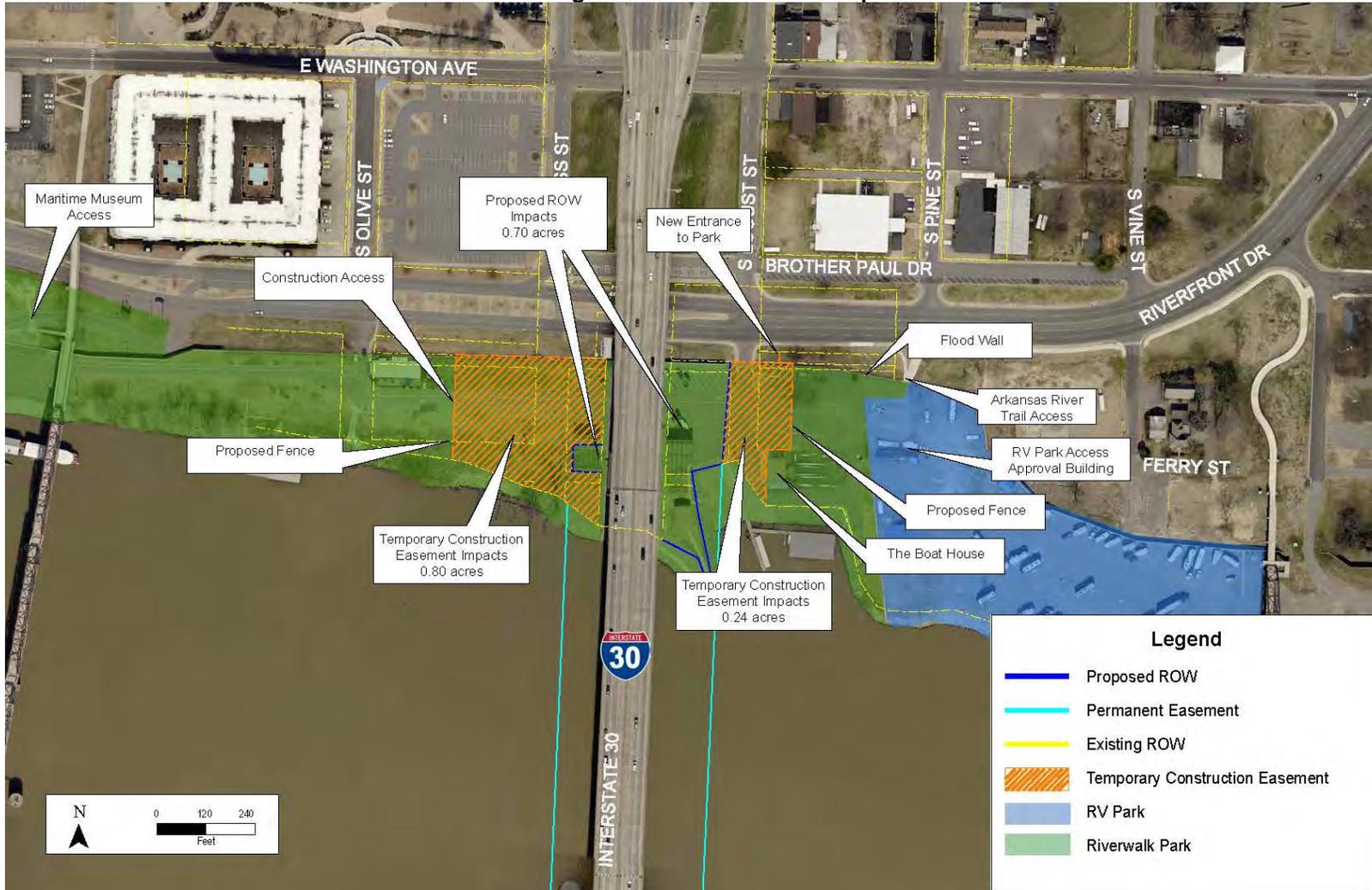
#### 7.4 How Would The Project Affect Parks And Recreation Areas?

Impacts to the three parks along the Arkansas River have changed as a result of modifications to the design proposed by the Design Build team. Two parks are owned by the City of Little Rock, both on the south bank of the Arkansas River: William J. Clinton Presidential Center and Park (Clinton Center), and Julius Breckling Riverfront Park (Riverfront Park). On the north bank of the River, the City of North Little Rock owns the Northshore Riverwalk Park (Riverwalk Park).

Within Riverwalk Park, the Revised Selected Alternative involve changes to both the temporary construction impacts and permanent ROW proposed in the EA/FONSI. During preparation of the final ROW requirements, it was discovered that there are three private land holdings within the park boundary that will have to be acquired, either permanently or temporarily, and that platted City of North Little Rock Streets (Ferry Avenue and Locust Street) extend into the park. Use of these City streets within the park is not considered a taking from the park as the use of the land is not affected (**Figure 17**).

Changes in temporary impacts to park property occur on the both sides of I-30. The temporary construction easement on the east of I-30 will be extended approximately 78 feet east of where it was proposed in the EA/FONSI. The change will require relocation of the existing Locust Street entrance to Riverwalk Park. The entrance will be shifted to the east, requiring a new opening in the flood wall and closure of the existing Locust Street entrance. The new temporary construction easement will coincide with the west face of the Boat House. Access to the Boat House and to the docks along the River to the south of the Boat House will be maintained. The proposed temporary construction easement on the west of I-30 will be extended approximately 30 feet west of the location proposed in the EA/FONSI. The expanded area will not impact any park facilities, but will temporarily reduce the parking available for the River House. These changes do not affect the conclusions of the EA/FONSI regarding impacts to Riverwalk Park. There will be temporary impacts to fishing and boating activities during the duration of construction. There will be no permanent impacts to activities, features or attributes that make Riverwalk Park eligible for Section 4(f) protection.

Figure 17: Riverwalk Park Impacts



Source: Project Team, February 2020.

Within the Clinton Center, the Revised Selected Alternative involve changes to both the temporary construction impacts and permanent ROW described in the EA/FONSI. Along the east of Mahlon Martin Street, 0.74 acres of ROW, and two temporary construction easements of 0.01 acres each are proposed in order to widen the roadway between East 3<sup>rd</sup> Street and President Clinton Avenue (**Figure 18**). Twenty trees will be removed, and the existing sidewalk will be relocated to the east of the proposed roadway. Along the north of the sidewalk that parallels the Arkansas River, the proposed temporary construction easement will be extended north an additional 30 feet for a new total of 1.81 acres. The area involved includes wetlands within the Bill Clark Presidential Wetlands Park. The area underneath the proposed Arkansas River bridge, which was shown in the EA/FONSI as 0.6 acres of proposed ROW, will instead be acquired as a permanent construction easement north of the Riverbank. Coordination with the Clinton Center is continuing with the goal of minimizing impacts and accommodating any requests.

Within Riverfront Park, the Revised Selected Alternative also involve changes to both the temporary construction impacts and permanent ROW described in the EA/FONSI. The 0.1-acre strip of ROW shown in the EA/FONSI along the west property line will no longer be needed. This change also avoids one of the commercial displacements identified under the Selected Alternative. A new temporary construction easement of 0.39 acres will be needed over an open area lying to the east of the Arkansas Game and Fish Commission building and extending from the Arkansas River Trail to the Promenade. The temporary construction easement will not restrict access to the Arkansas Game and Fish Commission building from the west, or to the back of the three businesses that front President Clinton Avenue. The temporary construction easement would involve temporary closures of the Promenade and of the Arkansas River Trail. These impacts are not new and were addressed in the EA/FONSI. ARDOT would work with Riverfront Park and the City of Little Rock to minimize temporary disruption to these resources due to construction activities.

These changes do not affect the conclusions of the EA/FONSI regarding impacts to the Clinton Center and Riverfront Park. There will be temporary impacts during the duration of construction. There will be no permanent impacts to activities, features or attributes that make the Parks eligible for Section 4(f) protection. A summary of the revised takings from the parks is provided in **Table 4**.

Figure 18: Clinton Center and Riverfront Park Impacts



Source: Project Team, February 2020.

Table 4: Acquisition from Parks

Location	Permanent ROW		Temporary Construction Easement	
	EA/FONSI	Revised Selected Alternative	EA/FONSI	Revised Selected Alternative
<b>Clinton Center</b>	0.7 Acres	0.7 Acres	1.6 Acres	1.8 Acres
<b>Riverfront Park</b>	0.1 Acres	None	None	0.4 Acres
<b>Riverwalk Park</b>	1.3 Acres	0.7 Acres	1.0 Acres	1.0 Acres

Source: Project Team, December 2019.

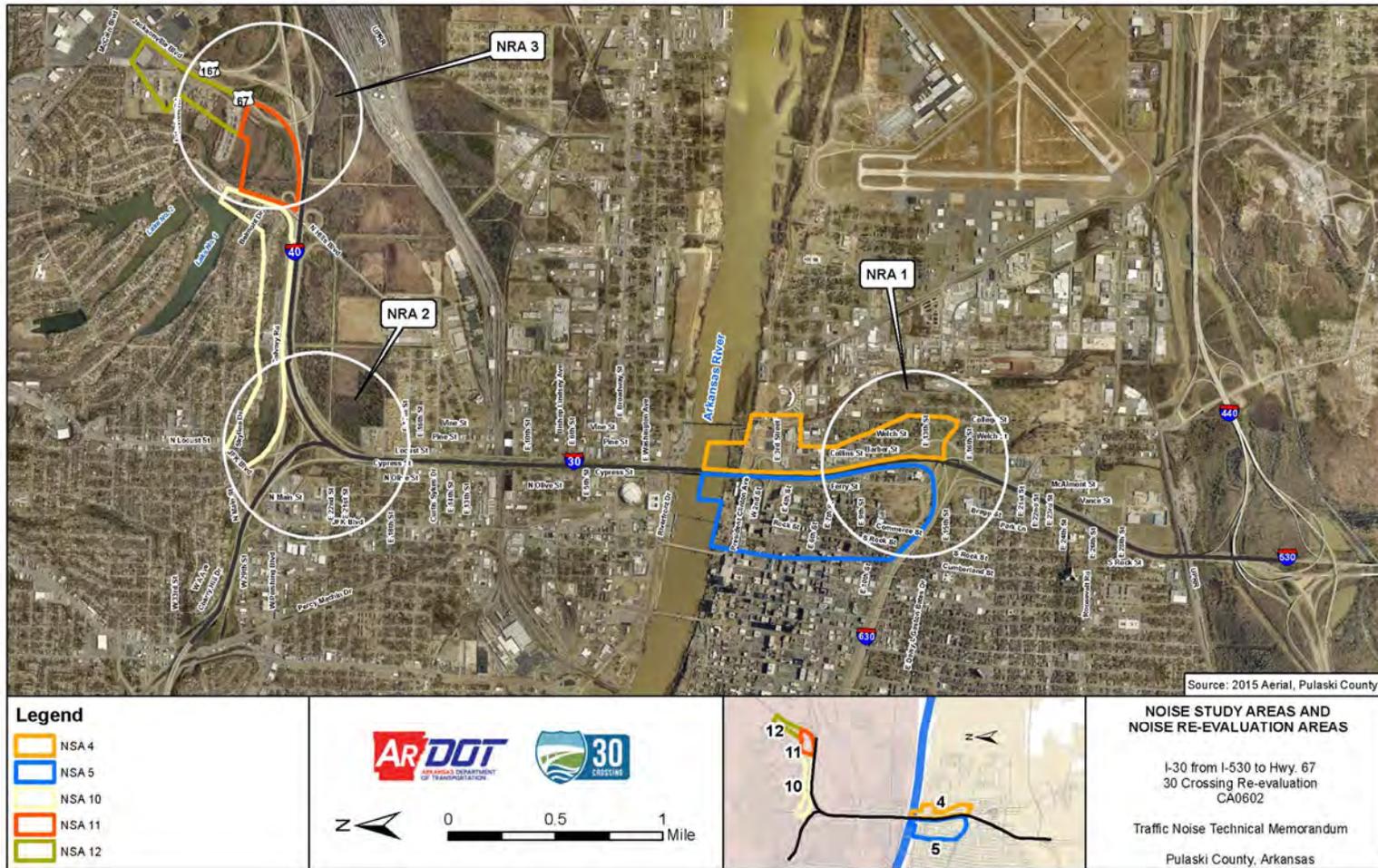
FHWA has determined that the project will not adversely affect the protected features, assets, or activities that make the Parks important for recreation under Section 4(f), thus qualifying for a de minimis Section 4(f) finding. The Cities of Little Rock and North Little Rock have concurred in writing with FHWA's proposed finding that the Revised Selected Alternative will not adversely affect the activities, features or attributes that make the properties eligible for Section 4(f) protection. Prior to concurring in writing, the officials with jurisdiction over the Parks in Little Rock and North Little Rock were apprised of FHWA's intent to make a *de minimis* finding and provided copies of public comments regarding these proposed findings. Documentation is provided in **Appendix C**.

The Arkansas River is an important recreational resource, with boating and fishing being the most common activities. The Revised Selected Alternative would require closure of all spans, except the navigational span, of the Arkansas River Bridge for the duration of construction, approximately four years. For safety reasons, passage through the navigational channel of the Arkansas River Bridge would be temporarily prohibited during certain phases of construction. These closures would be of short duration, not to exceed 30 minutes, and would be announced at least 15 days in advance.

### 7.5 Would Noise Levels Change?

The changes to the design of the Selected Alternative proposed by the Design Build team have the potential to change previously evaluated noise impacts at two locations: the I-30/I-630 interchange area and the I-40 area (**Figure 19**). These changes are described in Chapter 6. In addition, since the EA/FONSI was prepared, a multi-family residential development (The Pointe) has begun to be constructed in the northwest quadrant of the

Figure 19: Re-Evaluated Noise Study Area Locations



Source: Traffic Noise Re-Evaluation Memorandum, March 2020.

I-40/ Hwy. 67 interchange, which requires a new analysis of noise impacts at that location. Consequently, noise was re-evaluated at three Noise Re-evaluation Areas (NRA's): the I-630/I-30 interchange, NRA 1 (Noise Study Areas 4 and 5 in the EA/FONSI); the I-40 area, NRA 2 (Noise Study Area 10 in the EA/FONSI); and at the I-40/Hwy. 67 interchange, NRA 3 (Noise Study Areas 11 and 12 in the EA/FONSI). Detailed information on the analysis is found in **Appendix D**.

No changes were made to the traffic used in the original noise analysis. The re-evaluation utilized the traffic data from the EA/FONSI to represent the worst-case scenario and to maintain consistency with the rest of the areas along the project corridor not being re-evaluated. This approach was approved by FHWA and is detailed in **Appendix D**.

For the receptors within the noise re-evaluation areas, the difference in noise levels due to design changes decreased by a maximum of 2 dB(A) and increased by a maximum of 1 dB(A). Because changes that are less than 3 dB(A) may be considered negligible or unimportant under the National Environmental Policy Act (NEPA) because they are barely perceptible, these differences are considered to be minor. No substantial increases in noise levels occurred due to the design changes.

NRA 1 involves the I-30/ I-630 interchange area, which includes Noise Study Area (NSA) 4, on the east of I-30 (**Figure 20**), and NSA 5 on the west of I-30 (**Figure 21**). The alignment of the eastbound I-630 ramp tying into the northbound I-30 frontage road has changed, along with the alignment of the I-30 northbound to I-30 northbound frontage road ramp. Within NSA 4, the noise evaluation in the EA/FONSI indicated that one residence would experience noise levels above the Noise Abatement Criterion (NAC). The re-evaluation determined that this residence no longer experienced noise levels above the NAC and was no longer impacted. Therefore, noise abatement is no longer being considered for NSA 4. Within NSA 5, the noise evaluation in the EA/FONSI indicated that eight receptors would experience noise levels above the NAC. The noise re-evaluation indicated that these eight receptors would continue to experience noise levels above the NAC. The noise barrier at this location (NB-5) was re-evaluated and found to not meet the design goal of a reduction in noise of 8 dB(A) or greater at a benefited receiver, the same conclusion reached in the EA/FONSI. Therefore NB-5 continues to not be reasonable and is not recommended.

Figure 20: Re-Evaluated NB-4 Location in Little Rock



Source: Traffic Noise Re-Evaluation Memorandum, March 2020.

Figure 21: Re-Evaluated NB-5 Location in Little Rock



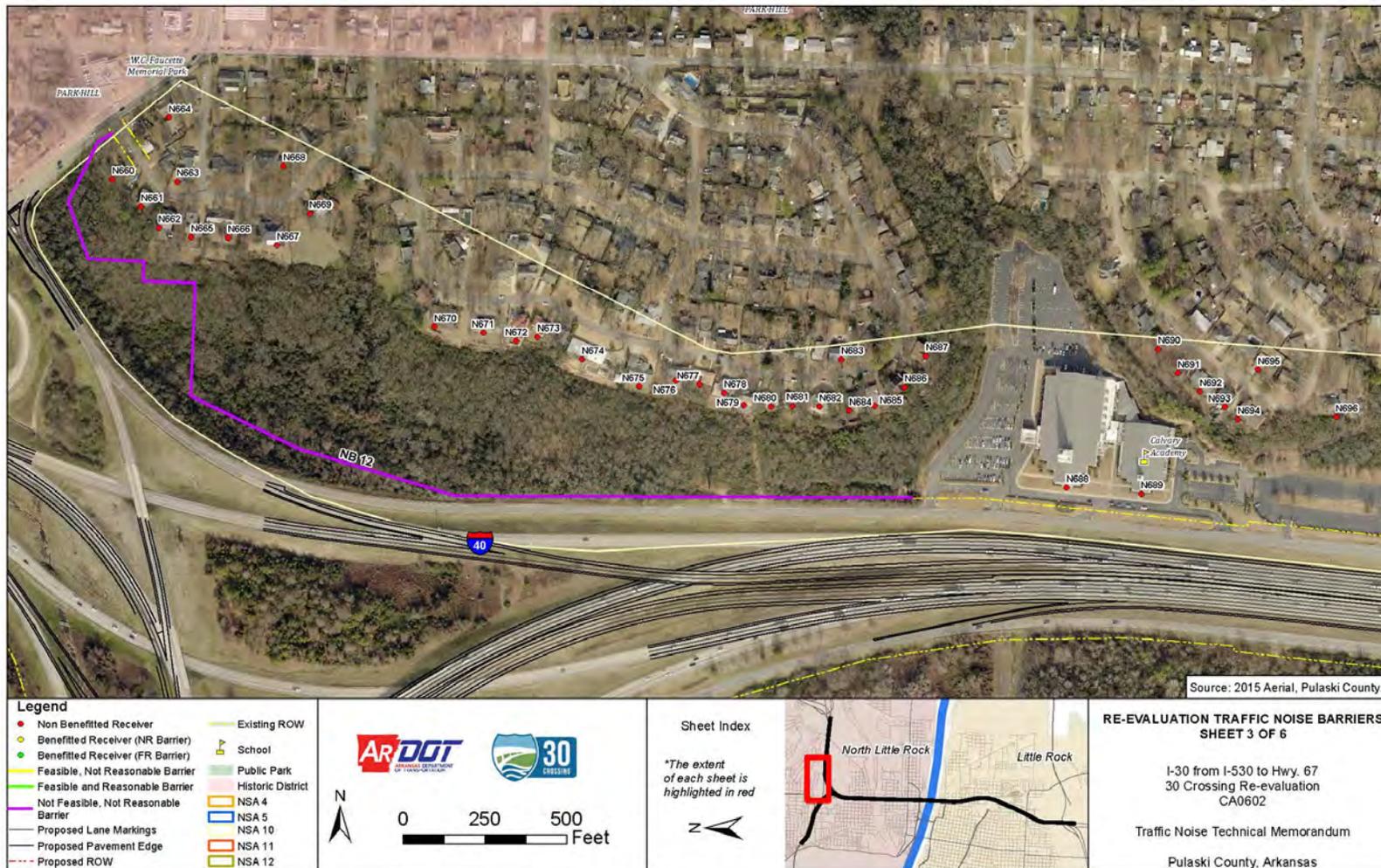
Source: Traffic Noise Re-Evaluation Memorandum, March 2020.

NRA 2 involves the I-40 area, which includes NSA 10, to the north of I-40, and extending from the I-30/I-40 interchange to the I-40/North Hills Boulevard interchange. Within this area, the traffic movement from I-30 northbound to I-40 eastbound has been reconfigured. Within NSA 10, the noise evaluation in the EA/FONSI indicated that 57 residential receptors would experience noise levels above the Noise Abatement Criterion (NAC). The re-evaluation determined that these 57 receptors would continue to experience noise levels above the NAC. The noise barriers evaluated in the EA/FONSI within NSA 10 (NB-12, NB-13, and NB-14) were re-evaluated. NB-12 (**Figure 22**) was determined in the EA/FONSI to be feasible; however, the re-evaluation found that NB-12 could not provide a substantial noise reduction, and was therefore not feasible. NB-14 (**Figure 23**) does not meet the design noise reduction goal of 8 dB(A) for a benefit receiver, and therefore continues to be not reasonable for noise abatement. NB-13 (**Figure 23**) was found to meet the reduction goal, the same conclusion that was reached in the EA/FONSI. NB-13 was determined not reasonable based on a cost per benefited receptor of \$58,062, the same conclusion reached in the EA/FONSI.

NRA 3 involves the I-40/Hwy. 67 interchange area, which includes NSA's 11 and 12, to the west of Hwy. 67 between I-40 and McCain Boulevard. A noise barrier (NB-15) was previously evaluated for NSA 12. NB-15 (**Figure 24**) was determined to be feasible, but not reasonable due a cost per benefited receptor of \$54,082. Subsequent to the evaluation, but prior to approval of the EA/FONSI, part of a new residential development at The Pointe North Hills was permitted for construction. A re-evaluation of the feasibility and reasonability of extending NB-15 south to reduce noise impacts at The Pointe is therefore required. The design change to NB-15 did not change its reasonability, which is \$56,258 per benefited receptor.

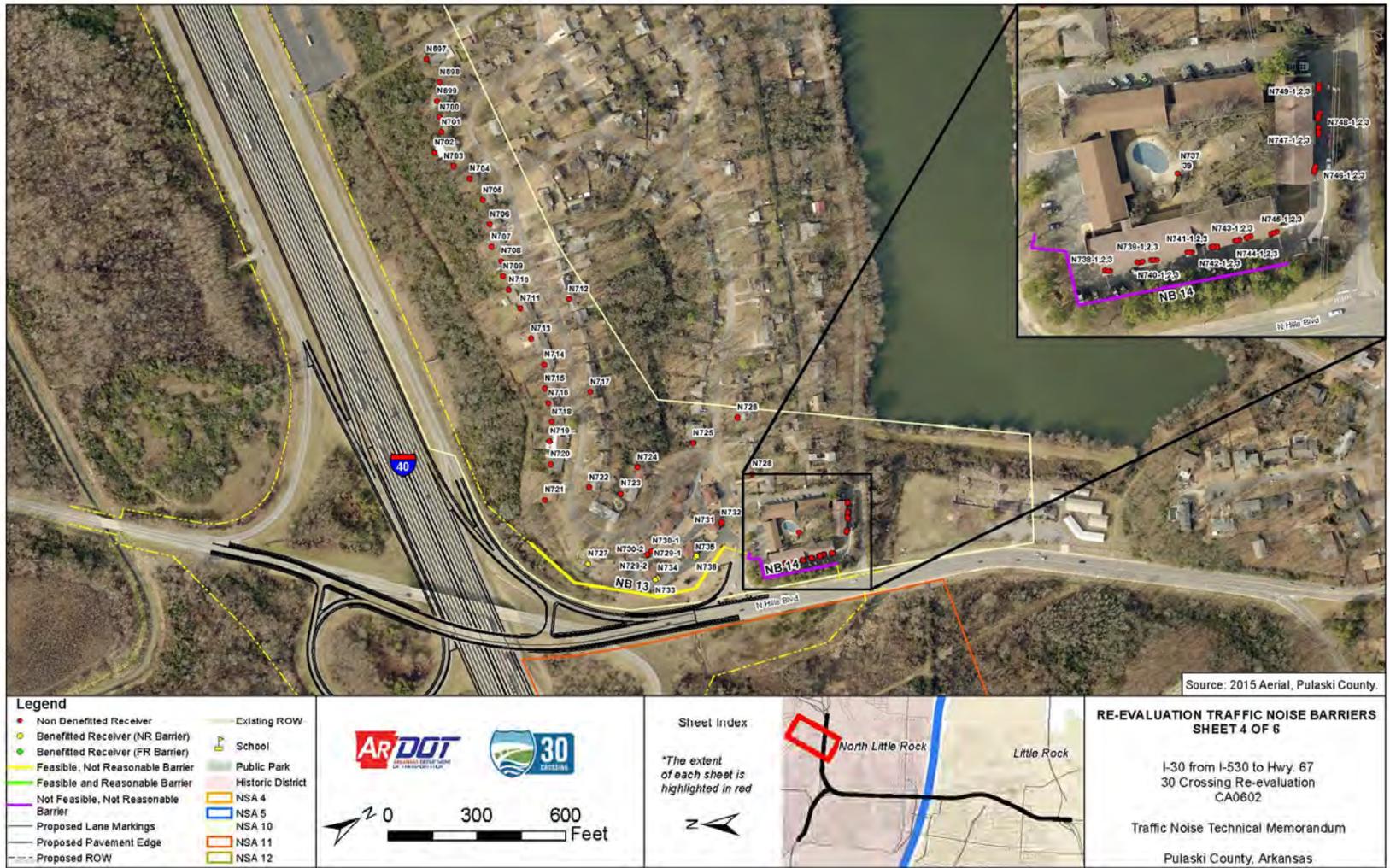
An additional noise barrier (NB-16) was analyzed for NSA 11, which lies to the south of NSA 12, in the northwest quadrant of the I-40/Hwy. 67 interchange, and also includes the permitted portion of The Pointe. NB-16 (**Figure 25**) was determined to be feasible but not reasonable, and is not recommended.

Figure 22: Re-Evaluated NB-12 Location in North Little Rock



Source: Traffic Noise Re-Evaluation Memorandum, March 2020

Figure 23: Re-Evaluated NB-13 and NB-14 Locations in North Little Rock



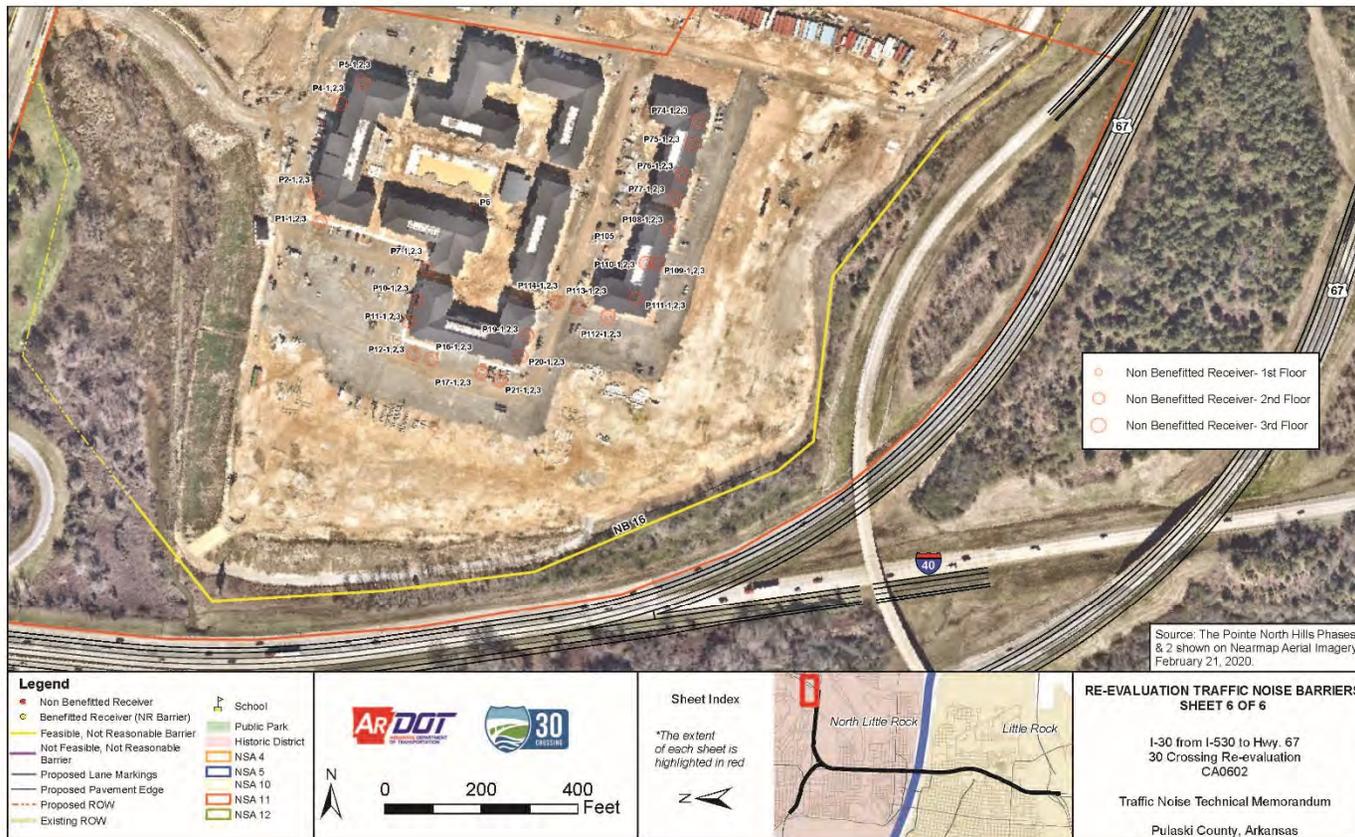
Source: Traffic Noise Re-Evaluation Memorandum, March 2020

Figure 24: Re-Evaluated NB-15 Location in North Little Rock



Source: Traffic Noise Re-Evaluation Memorandum, April 2020.

Figure 25: New NB-16 Location in North Little Rock



Source: Traffic Noise Re-Evaluation Memorandum, April 2020

**Table 5** shows the barriers that were re-evaluated and the results of those re-evaluations. NB-4 was eliminated from consideration as noise levels were reduced to the point it no longer qualifies for abatement.

**Table 5: Re-Evaluated Noise Barriers**

<b>Barriers re-evaluated</b>	<b>Feasible</b>	<b>Reasonable</b>
<b>NB-5</b>	Yes	No
<b>NB-12</b>	No	No
<b>NB-13</b>	Yes	No
<b>NB-14</b>	No	No
<b>NB-15</b>	Yes	No
<b>NB-16</b>	Yes	No

*Source: Traffic Noise Re-Evaluation Memorandum, March 2020.*

In the EA/FONSI, three barriers were found to be both feasible and reasonable:

- NB-2, west of I-30 from 21st St. to UPRR in Little Rock, benefiting 84-86 residences
- NB-3, west of I-30 between 17th St. and 21st St. in Little Rock, benefiting 30-33 residences
- NB-7, east of I-30 between 13th St. and 19th St. in North Little Rock, benefiting 87-139 residences

If further design changes are made during the design-build process that have the potential to impact traffic noise, the traffic noise study report shall be further re-evaluated to document all considered and proposed noise abatement measures. Final design of design-build noise abatement measures shall be based on the noise abatement design developed in the latest re-evaluation of the traffic noise study report. Noise abatement measures shall be considered, developed, and constructed in accordance with this standard (23 CFR 772) and in conformance with the provisions of 40 CFR 1506.5(c) and 23 CFR 636.109.

Based on the traffic noise study report, ARDOT is likely to incorporate the feasible and reasonable noise barriers into the project. A final decision on the installation of abatement measures will be made upon completion of the public involvement process, which will

solicit the viewpoints of residents and property owners benefited by the construction of the feasible and reasonable noise barriers and in accordance with 23 CFR 772.13(i).

#### **7.6 Would Utilities Be Affected?**

No changes to the effects on utilities evaluated in the EA/FONSI are proposed.

#### **7.7 How Would The Project Affect Railroads?**

No changes to the effects on railroads evaluated in the EA/FONSI are proposed.

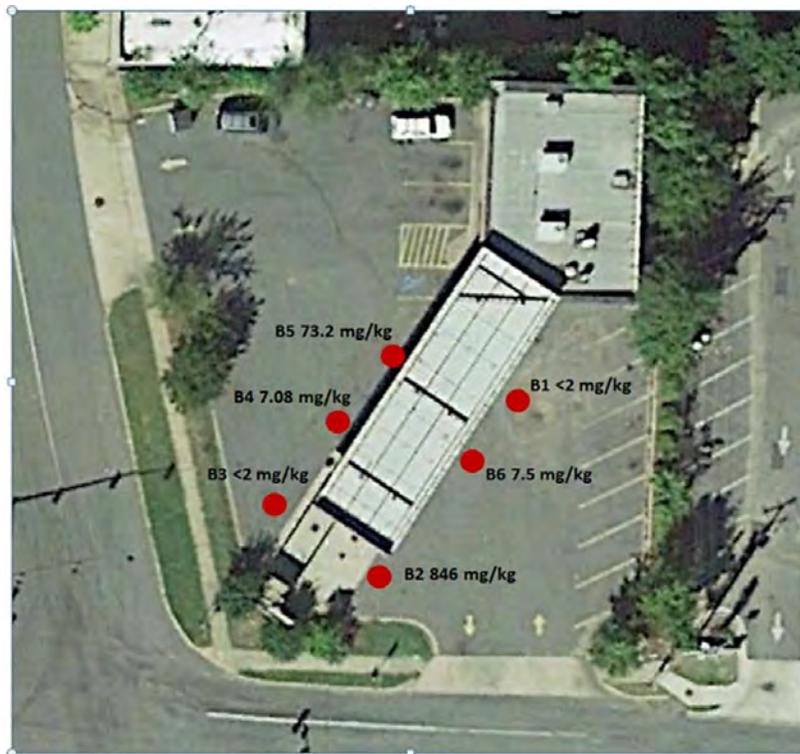
#### **7.8 How Would The Project Affect Views?**

No changes to the effects on viewsheds evaluated in the EA/FONSI are proposed.

#### **7.9 Would Any Hazardous Materials Be Created Or Affected?**

The property owner has conducted a Phase 2 investigation of a Superstop gas station being partially acquired for project improvements at the intersection of East 6<sup>th</sup> Street and the Northbound Frontage Road in Little Rock (**Figure 26**). The investigations revealed elevated levels of petroleum contamination in one soil sample (B5) out of six. No evidence of surface spills or leaking underground storage tanks was discovered. At this time, the source of the contamination is not known. A comprehensive investigation for soil and ground water cleanup is underway. The property owner is responsible for any remediation required prior to acquisition of the property.

**Figure 26: Contaminated Site in Little Rock**



Source: Arkansas Department of Environmental Quality Case File # 60-0925

### 7.10 How Would Water Resources, Such As Streams, Be Affected?

Revisions to the design of the Selected Alternative in the Dark Hollow area will affect stream impacts. The change proposed by the Design-Build team to the design of the I-30/I-40 interchange, specifically, to the design of the northbound I-30 to eastbound I-40 traffic movement, eliminates the need for the eastbound I-40 to Hwy. 67 northbound flyover loop ramp, which impacted a stream south of I-40. Stream impacts are now reduced to an estimated at 1257 linear feet.

### 7.11 Would The Project Cause Flooding In Surrounding Areas?

Revisions to the design of the Selected Alternative in the Dark Hollow floodplain will reduce floodplain impacts. The change proposed by the Design-Build team to the design of the I-30/I-40 interchange, specifically, to the design of the northbound I-30 to eastbound I-40 ramp, eliminates the need for the right exit from eastbound I-40 to Hwy. 67 northbound and the associated flyover loop ramp. Elimination of this ramp reduces the floodplain fill volume in the 100-year floodplain of Dark Hollow by approximately 2.13 Ac-ft of fill. The amount of floodplain compensation available in the Dark Hollow floodplain exceeds the amount of fill placed in the floodplain.

### **7.12 Would Any Wetlands Be Impacted By The Project?**

Revisions to the design of the Selected Alternative in the Dark Hollow area will affect wetland impacts. The change proposed by the Design-Build team to the design of the I-30/I-40 interchange, specifically, to the design of the northbound I-30 to eastbound I-40 ramp, eliminates the need for the eastbound I-40 to Hwy. 67 northbound flyover loop ramp, which impacted wetlands south of I-40. Wetland impacts requiring mitigation have been reduced from 6.6 acres of permanent impacts and 2.1 acres of temporary impacts to 0.5 acres of permanent impacts, with 1.6 acres of temporary impacts to wetlands.

### **7.13 Would Any Protected Species Be Impacted By The Project?**

No changes to the effects on protected species evaluated in the EA/FONSI are proposed. The construction contract will include a Special Provision that specifies procedures to prevent impacts during construction to birds protected under the *Migratory Bird Treaty Act*.

### **7.14 How Would The Project Affect Other Natural Resources?**

No changes to the effects on landforms or geological features evaluated in the EA/FONSI are proposed.

### **7.15 Will The Project Have An Effect On Air Quality?**

As a result of lower traffic forecasts for the Revised Selected Alternative, vehicle miles traveled (VMT) within the Affected Transportation Network will be reduced from the levels used to calculate emissions volumes in the EA/FONSI. Consequently, the future emissions volumes for the Revised Selected Alternative will be lower than those documented in the EA/FONSI. The EA/FONSI documented that the Selected Alternative would have lower emission volumes than the No-Action condition; consequently, the project will continue to have no adverse effect on air quality.

## 7.16 Does The Project Have Any Indirect And Cumulative Effects?

### Indirect Effects

The time frame evaluated for indirect effects was extended to 2045, to match the new traffic forecasts. The Selected Alternative provides improved access and mobility improvements, which would have the potential to induce growth. To determine if any planned development or redevelopment projects along the corridor which had not been identified at the time of the EA/FONSI may be affected by the project, planners from the cities of Little Rock and North Little Rock were interviewed in January 2020. Results of those interviews are found in **Appendix E**. Additional developments were identified by the planners; however, those developments are located within the same areas that were identified in the EA/FONSI as potential growth areas.

Traffic volume forecasts for both the future No Action and Revised Selected Alternative have been reduced from those shown in the EA/FONSI, as shown in **Table 1**. The reduction in forecast traffic volumes could result in a lower rate of development along the corridor.

Travel times to two important destinations in downtown Little Rock: the River Market area, and the Clinton Presidential Center/Heifer International, were re-evaluated to determine if the travel time benefits shown in the EA/FONSI were still valid (**Table 6**). In summary, travel times remained relatively constant between the EA/FONSI and the re-evaluation. The majority of travel times under the Revised Selected Alternative are lower than the Future No-Action travel times. Although the changes are slight, these differences continue to illustrate the increase in accessibility to downtown destinations as a result of the Revised Selected Alternative.

After review of the new information on planned development in the area, revised traffic volumes, and revised travel times, it was determined that conclusions made in the EA/FONSI regarding indirect effects remain valid. Although the Revised Selected Alternative may increase the rate of development, there is very limited area available for growth within the project corridor, and regulatory controls will reduce the potential for impacts to sensitive resources in undeveloped areas.

**Table 6: Peak Hour Travel Times to Downtown Little Rock Destinations**

Destination	Existing 2014	Future No Action		2045 Revised Selected Alternative
		2041 <sup>2</sup>	2045 Traffic <sup>3</sup>	
<b>To River Market (AM<sup>1</sup>)</b>				
A. From Wildwood Avenue Interchange on Hwy 67	18:07	30:26	35:00 <sup>4</sup>	13:38
B. From I-40 and I-440 Interchange	16:09	31:47	30:11	14:42
C. From the McArthur Bridge on I-40	10:42	23:00	24:55	9:58
D. From Dr. Martin Luther King Drive on I-630	05:17	8:09	8:52	7:22
E. From the Dixon Interchange on I-530	08:25	20:05 <sup>4</sup>	17:03	11:38
F. From the 65th Street Interchange on I-30	08:15	13:37	11:57	10:26
G. From the Bankhead Drive Interchange on I-440	07:28	5:59	05:59	11:32
<b>To Clinton Presidential Center / Heifer International (AM<sup>1</sup>)</b>				
A. From Wildwood Avenue Interchange on Hwy 67	17:46	29:21	34:20 <sup>4</sup>	10:51
B. From I-40 and I-440 Interchange	15:47	30:43	29:31	11:55
C. From the McArthur Bridge on I-40	10:21	21:56	24:15	6:11
D. From Dr. Martin Luther King Drive on I-630	04:19	7:07	7:46	5:09
E. From the Dixon Interchange on I-530	07:27	19:03 <sup>4</sup>	15:56	8:24
F. From the 65th Street Interchange on I-30	07:16	12:35	10:50	8:12
G. From the Bankhead Drive Interchange on I-440	06:29	7:51	7:22	8:18
<b>From River Market (PM<sup>1</sup>)</b>				
A. To Wildwood Avenue Interchange on Hwy 67	11:05	54:40	1:03:40	10:50
B. To I-40 and I-440 Interchange	11:28	55:40	1:04:40	11:43
C. To the McArthur Bridge on I-40	06:54	51:45	1:00:46	7:40
D. To Dr. Martin Luther King Drive on I-630	03:57	17:27	24:31	9:41
E. To the Dixon Interchange on I-530	07:18	22:32	28:19	12:28
F. To the 65th Street Interchange on I-30	07:24	23:45	29:19	17:43
G. To the Bankhead Drive Interchange on I-440	07:41	22:03	28:10	12:56
<b>From Clinton Presidential Center / Heifer International (PM<sup>1</sup>)</b>				
A. To Wildwood Avenue Interchange on Hwy 67	12:00	30:56	37:27	7:58
B. To I-40 and I-440 Interchange	12:23	31:56	38:27	8:50
C. To the McArthur Bridge on I-40	07:49	28:02	34:32	4:47
D. To Dr. Martin Luther King Drive on I-630	04:44	8:30	10:40	6:47
E. To the Dixon Interchange on I-530	08:06	13:34	14:27	9:35
F. To the 65th Street Interchange on I-30	08:11	14:48	15:27	14:50
G. To the Bankhead Drive Interchange on I-440	08:28	13:06	14:19	10:02

<sup>1</sup>AM Peak = 7:15 AM to 8:15 AM; PM Peak = 4:30 PM to 5:30 PM

<sup>2</sup>2041 volumes from the EA, with additional capacity on I-30 between 65<sup>th</sup> Street and South Terminal

<sup>3</sup>Updated 2045 volumes, with additional capacity on I-30 between 65<sup>th</sup> Street and South Terminal

<sup>4</sup>Travel time increased by 15% or more from EA

NOTE: Speeds are inbound to downtown to Little Rock in the AM and outbound in the PM

Travel times between 10:00 minutes and 25:00 minutes are highlighted in light red

Travel times greater than 25:00 minutes are highlighted in dark red

Travel times that are unusually low due to a bottleneck upstream are highlighted in blue

Source: Re-Evaluation Traffic Analysis, April 2020

### **Cumulative Effects**

Land resources, community resources, air quality, water resources, ecological resources, and historic resources were evaluated for cumulative impacts in the EA/FONSI. Direct and indirect impacts (**Appendix E**) to these resources were re-evaluated. Because the project would not result in adverse direct or indirect impacts to land resources, air quality, and ecological resources, there is no potential cumulative impact to those resources. The only resources with potential for cumulative impacts were determined to be community resources, water resources, and historic resources.

Interviews with local planners, documented in **Appendix E**, were held to determine if additional developments have been planned subsequent to the EA/FONSI that may have cumulative effects on community, water, or historic resources. Updates to the Transportation Improvement Plan (2019-2022) for the Little Rock area were reviewed to determine if additional projects have been added subsequent to the EA/FONSI. One additional transportation project was identified: the improvement of I-40 from Hwy. 161 to Lonoke County. This project is outside the Resource Study Areas (RSA) for historic and water resources, but within the RSA for community resources.

It was determined that the project would continue to have the beneficial effects on communities that were identified in the EA/FONSI. These benefits are due to increased accessibility, safety and mobility, increased community cohesion, and visual enhancements and have not been reduced by the changes in the Revised Selected Alternative. Provision of new bicycle and pedestrian features and the removal of the circular ramps at the Hwy. 10 interchange, would strengthen east-west connectivity in downtown Little Rock. There are relatively few adverse impacts to community resources. The improvements would occur primarily within existing ROW and there would be very few displacements: four commercial and six residential displacements are anticipated. With the Revised Selected Alternative, there would be a change in travel patterns and loss of parking in downtown Little Rock. The determinations previously made in the cumulative impacts analysis for community resources in the EA/FONSI remain valid: that the proposed project would not contribute to the cumulative impacts to the community.

Changes to the direct and indirect impacts to water resources with the Revised Selected Alternative are discussed in Sections 7.10, 7.11 and 7.12. The project would involve less

fill in wetlands and floodplains than was originally anticipated in the EA/FONSI. Impacts would be mitigated through a wetland mitigation bank and onsite compensation for replacement of lost floodplain volume. Best Management Practices would be used to avoid temporary impacts to water quality during construction. All projects occurring in the watershed in the future, would be subject to permitting under Section 404 of the CWA. New developments and water features within the indirect development areas were discussed and evaluated in the EA/FONSI; therefore, no additional analysis or changes to the water resource impacts determinations are warranted.

Direct and indirect impacts to cultural resources have not changed since the EA/FONSI was approved. The Locust Street Overpass, which will be removed and replaced, is the only historic resource that would be adversely impacted by the project. Mitigation measures for this impact would be coordinated with the SHPO under the previously approved PA. Local ordinances enacted by the Arkansas Historic Preservation Program (AHPP) and City of Little Rock Historic District Commission would prevent indirect effects to historic resources as a result of growth induced by the project. These ordinances have been effective in preserving historic resources and are expected to continue to prevent impacts in the future. No substantial cumulative impact to historic resources as a result of the project is anticipated.

Documentation of these findings is presented in **Appendix F**.

# Chapter 8 – Commitments

## What's In Chapter 8?

*Chapter 8 contains the summary of the recommendations resulting from the NEPA process that were incorporated into the EA/FONSI.*

### 8.1 What Commitments Have Been Made?

The ARDOT's standard commitments regarding relocation procedures, cultural resources discovery, impacts to parks, traffic noise abatement, hazardous waste abatement, water quality impact controls, wetland mitigation, floodplain compensation, and revegetation have been made for this project. They are as follows:

- Based on construction plans provided by the Design-Build team, six residential and four business relocations, and takings from 73 parcels, will occur as a result of this project. Relocations will be conducted in accordance with *The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended.
- An intensive cultural resources survey has been conducted for all Action Alternatives. In accordance with the approved PA, if archaeological sites are affected, a report documenting the site and stating the ARDOT's recommendations will be prepared and submitted for SHPO review. If prehistoric sites are impacted, FHWA-led consultation with the appropriate Native American Tribe(s) will be conducted and the site(s) evaluated to determine if Phase II testing is necessary. Should any of the sites be determined as eligible or potentially eligible for the NRHP and avoidance is not possible, site-specific treatment plans will be prepared and data recovery conducted at the earliest practicable time. All borrow pits, waste areas, and work roads will be surveyed for cultural resources when locations become available.
- The ARDOT has reached agreements with the City of North Little Rock and the City of Little Rock, regarding minimization and mitigation of impacts to North Shore Riverwalk Park, Riverfront Park, and the Clinton Center. These measures are discussed in **Appendix C**.
- Noise walls outlined as reasonable and feasible in the *Traffic Noise Re-Evaluation*

*Memorandum (Appendix D)* will be constructed.

- If hazardous materials, unknown illegal dumps, or underground storage tanks are identified or accidentally uncovered by ARDOT personnel or its contractors, ARDOT will determine the type, size, and extent of the contamination according to the ARDOT's response protocol. The ARDOT, in cooperation with the Arkansas Department of Environmental Quality (ADEQ), will determine the appropriate containment, remediation and disposal methods suited for that particular type of contamination.
- An asbestos survey will be conducted by a certified asbestos inspector on each building slated for acquisition and demolition. If the survey detects the presence of any asbestos-containing materials, plans will be developed to accomplish the safe removal of these materials prior to demolition. All asbestos abatement work will be conducted in conformance with the ADEQ, EPA, and Occupational Safety and Health Administration (OSHA) asbestos abatement regulations.
- The ARDOT will comply with all requirements of the *Clean Water Act, as amended*, and *Section 10 of the Rivers and Harbors Act of 1899*, for the construction of this project. This includes obtaining the following: Section 401 Water Quality Certification; Section 402 National Pollutant Discharge Elimination Permit; Section 404 Permit for Dredged or Fill Material; and approval under Policy and Procedural Guidance for Processing Requests to Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408 (Section 408).
- Stream and wetland mitigation will be offered at an approved mitigation bank site at a ratio approved during the Section 404 permitting process.
- The construction contract will include a Special Provision that specifies procedures to prevent impacts during construction to birds protected under the *Migratory Bird Treaty Act*.
- A Water Pollution Control Special Provision would be incorporated into the contract to minimize potential water quality impacts.
- Floodplain encroachment in Dark Hollow and Fourche Creek will be mitigated by

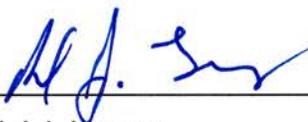
creating floodplain compensation areas in the I-30/I-40 interchange and I-30/I-440/I-530 interchange.

- In accordance with the ARDOT Utility Accommodation Manual, ARDOT commits to enter into an agreement with Rock Region Metro regarding the replacement of the infrastructure for the RRM trolley system that will be affected by the roadway construction along East 2<sup>nd</sup> Street and East 3<sup>rd</sup> Street in Little Rock.

# Chapter 9 - Conclusion of the Re-Evaluation

An Environmental Assessment (EA) for this project was previously approved in June 2018. A Finding of No Significant Impact (FONSI) was issued in February 2019. These documents have been reviewed and examined for content, accuracy, and overall scope of work regarding the project. This re-evaluation then examined the current project and the potentially affected environment since the issuance of the EA and FONSI. After a thorough review and reconsideration of these documents based on additional environmental studies and approvals, FHWA determines that all previous findings and decisions remain valid and that no new or additional significant impacts will result from the project. Based on this determination the subject project may continue to proceed.

Approval: June 1, 2020  
Date

  
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Randal J. Looney  
Environmental Coordinator  
Federal Highway Administration

## Appendix A: Re-Evaluation Traffic Analysis



# 30 Crossing Re-Evaluation Traffic Analysis

ARDOT JOB NO. CA0602

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I-30 (From I-530/I-440 to I-40) and  
I-40 (From Hwy. 365/MacArthur Dr. to Hwy. 67)  
Pulaski County, Arkansas  
April 24, 2020



U.S. Department  
of Transportation  
**Federal Highway  
Administration**



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## 1.0 INTRODUCTION

In February 2019, an Environmental Assessment (EA) was submitted for the 30 Crossing Project. Included in the EA was a detailed traffic analysis of the existing conditions, future No-Action, and multiple Build Alternatives. The EA selected the 6-Lane + C/D SDI (Alt 2B) as the Selected Alternative.

At the request of FHWA, an environmental re-evaluation was desired to address questions that arose after the EA was approved. In the I-30 Re-Evaluation, the traffic questions that were to be addressed included:

- In December 2018, Metroplan adopted new demographic data based on updated metropolitan demographic information and trends in Little Rock. Demographic growth rates were lowered from previous Metroplan forecasts used in the EA. Based on the new data, annual freeway growth rates were reduced which reduced daily traffic forecasts. Peak hour traffic in the study area increased in some areas and decreased in others; overall, peak hour traffic slightly decreased.
- A new capacity project on I-30 between the South Terminal and 65<sup>th</sup> Street was added to the Metroplan Transportation Improvement Program (TIP) in 2018. As a result, this capacity project should be added to the No-Action alternative.
- Adjustments were made to the geometry at the North Terminal as part of the Revised Selected Alternative, including the realignment and relocation of several ramps.

Due to these changes, a re-evaluation of the traffic analysis was completed for the No-Action and Revised Selected Alternative. This document provides details of the traffic analysis re-evaluation, including:

- Updated Traffic Forecasts
- Updated Future No-Action Traffic Results
- Revised Selected Alternative – 6-Lane with C/D Traffic Results

## 2.0 TRAFFIC FORECAST

### 2.1 Background

In January 2015, the *CA0602 Traffic Count Plan, Traffic Projection Plan and Traffic Forecast* was completed. This document (EA page 381/7100) developed the traffic forecast methodology and results for the 30 Crossing Project and described how a number of available data sources were used to develop that traffic forecast.

One important data set used in the traffic forecasting process was Metroplan's Long Range Transportation Plan's demographic data forecast, which was used in their regional travel demand model, referred to as the 2040 CARTS Travel Demand Model.

In December 2018, Metroplan adopted new demographic data based on new information and trends in Little Rock. In summary, new demographic data, and ultimately traffic forecasts, were lowered from what was previously provided and used to develop the I-30 EA traffic.



**Figure 1 – Main Lane Control Locations**

The new Metroplan 2050 CARTS Travel Demand Model produces 2050 No-Action and 2050 Build traffic forecasts using the updated demographic data.

As part of the I-30 Environmental Assessment Re-Evaluation, the compound annual growth rate was reanalyzed to determine if the growth rates used in the EA were still appropriate. In the EA, an annual growth rate of 0.5% was used on the arterial roadways in the study area and an annual 1.0% growth rate was used for the 8-Lane alternative (assumed to be the base build condition during the PEL study) at the three main lane freeway control locations listed below and shown in **Figure 1**.

- A1 - I-40 West of US 67/US 167
- A2 - I-30 North of Arkansas River
- A3 - I-30 North of I-440

To account for the effects of induced demand, the base 8-Lane forecast volumes in the

EA were adjusted. Interstate induced demand adjustments were derived using the 2040 CARTS Travel Demand Model. Volumes for the Selected Alternative, the 6L + C/D, were increased by 2%, 6%, and 3% at A1, A2, and A3, respectively. The 2040 CARTS travel demand model was also used to derive future No-Action traffic forecasts. For the No-Action, traffic volumes were decreased by 4%, 12% and 5% from the base 8-Lane forecast at A1, A2, and A3, respectively. These factors are summarized in **Table 1** below along with the effective annual growth rates calculated for the Selected Alternative, the 6L + C/D.

**Table 1. EA Induced Demand Factors**

<b>Study Location</b>	<b>6-Lanes<sup>1</sup></b>	<b>8-Lanes<sup>1</sup></b>	<b>6-Lanes + CD<sup>1</sup></b>	<b>6-Lanes + CD Effective Annual Growth Rate</b>
A1	-4%	Base	2%	1.09%
A2	-12%	Base	6%	1.36%
A3	-5%	Base	3%	1.27%

<sup>1</sup>Source: EA Table 2, 2041 Induced Demand Adjustment Factors (pdf page 297/7100)

For the 30 Crossing Re-Evaluation, the 2050 CARTS model produced No-Action and Revised Selected Alternative 6L + C/D forecasts that were used in the development of the updated growth rates.

## **2.2 Re-Evaluation of Growth Rates and Design Year**

Based on discussions with Metroplan regarding the updated 2018 demographic data and the 2050 CARTS Travel Demand Model, the study team reviewed annual growth rates from a variety of available sources at each of the three “A” locations. This is the same methodology that was previously used.

The original ARDOT base traffic counts used in the traffic forecasting were collected in 2014. Comprehensive 2014 counts were obtained at intersections, ramps, and main lane locations in the study area. Additional 2-week main lane counts were taken in 2019 at various locations in the region as part of a separate project, including counts at A2 and directly adjacent to A1. These volumes were examined to determine if adjustments to the base year data were necessary. As shown in **Table 2** below, the 2019 counts were less than 3.5% different at A1 and A2 from a calculated 2019 ADT using the 2014 data and the previously used 1% annual growth rate. The comprehensive count data from 2014 was considered to be still valid and used as the base to which apply future growth rates to.

**Table 2. 2014 vs 2019 Counts**

	<b>A1</b>	<b>A2</b>	<b>A3</b>
2014 2-Day Count <sup>1</sup>	119,000	126,000	95,000
Calculated 2019 Count <sup>2</sup>	125,000	133,000	100,000
Actual 2019 2-Week Count <sup>1</sup>	129,000 <sup>3</sup>	136,000 <sup>4</sup>	N/A
Difference	3.4%	2.5%	-

<sup>1</sup>Seasonally adjusted ADTs

<sup>2</sup>1% growth rate applied from 2014 counts to 2019

<sup>3</sup>Average of Tuesday, Wednesday, and Thursday (13,000 ADT reduction applied from 142,000 ADT count west of North Hills Blvd based on ARDOT 2018 ADTs)

<sup>4</sup>Average of Tuesday, Wednesday, Thursday

The original design year of the I-30 EA was 2041. With the completion of Phase 1 now anticipated to occur in early 2025, a design year of 2045 was determined to be more appropriate for the re-evaluation analysis. New Metroplan forecasts in addition to new ARDOT historical traffic volumes through 2018 were placed into updated traffic forecast graphs shown in **Attachment A**. These forecast graphs were the basis of the original determination of the annual traffic growth rate in the study area.

In addition, the 2050 CARTS Travel Demand Model was evaluated at the Cantrell, Broadway, and Roosevelt arterials where they cross I-30 as well as other arterials that cross I-30 and I-40. Historical traffic volumes were reviewed at approximately 25 arterial locations since 2012. Growth rates were calculated from both sources.

## **2.3 Revised Annual Growth Rates**

For the re-evaluation analysis, a variety of new data points and tools were available throughout the study area. The methodologies used to develop revised annual growth rates for the Build Freeway Main Lane, No-Action Freeway Main Lane, and Build Arterial Streets are described in the following sections.

### **2.3.1 Build Freeway Main Lane**

The data points and tools used to develop Build Freeway Main Lane growth rates included ARDOT historical traffic data, ARDOT's statewide travel demand model, ARDOT's projected growth rates in Pulaski County, and multiple versions of Metroplan's 2050 models. Each location had a relatively consistent forecast in all data points examined; therefore, it was agreed upon by the study team consisting of FHWA, ARDOT, Metroplan and the consultant team to use the average of these projections to determine the updated growth rates<sup>1</sup>. This method calculated growth rates within +/-0.21% of any projection at

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<sup>1</sup> Metroplan concurrence documented in 1/27/2020 e-mail from Casey Covington RE: I-30/I-40 Revised Traffic Forecasts.

all locations. A summary of the projected annual growth rates for the various data points is shown in **Table 3** below. The traffic forecast graphs in Attachment A give a visual comparison of the information utilized to establish these rates.

**Table 3. Build Model Annual Growth Rates**

	<b>A1</b>	<b>A2</b>	<b>A3</b>
Pulaski County (Urban Interstates, 2018-2038)	0.91%	0.91%	0.91%
ARDOT Historical Growth 1998 - 2018	0.60%	0.80%	0.60%
2050 CARTS Travel Demand Model (without Network Wide Freeway Improvements)	0.66%	0.92%	0.53%
2050 CARTS Travel Demand Model (with Network Wide Freeway Improvements)	0.81%	1.04%	0.79%
ARDOT Statewide Travel Demand Model (2040 AR TDM – TransCAD 6.0 64-bit, Build Version 9020)	0.68	0.84	0.61
<b>Updated Annual Growth Rate</b>	<b>0.7%</b>	<b>0.9%</b>	<b>0.7%</b>

The 2045 Freeway Build Model traffic volumes resulting from the updated annual growth rates are shown in **Table 4** below along with the 2041 EA volumes for the 6L + C/D Selected Alternative (Table 4, Average Daily Traffic, pdf page 300/7100). Because the VISSIM simulation model uses peak hour volumes, the annual growth rates were applied to the 2014 base year peak hour traffic volumes and grown to the 2045 design year. For VISSIM to operate properly, peak period traffic volumes need to be balanced throughout the entire freeway system, so that the number of vehicles in a given freeway segment is equal to the sum of the volume of the roadways feeding that segment. Peak period volumes at A1 and A3 control points were balanced to the central control point, the river crossing at A2, which caused both A1 and A3 traffic forecasts to increase nominally. A2 was also used as the control point for peak hour volume balancing in the EA.

**Table 4. Build Model Summary**

<b>Study Location</b>	<b>Base 2014 ADT</b>	<b>Build Model Growth Rate</b>	<b>2045 Build ADT</b>	<b>EA 2041 Build ADT 6L + C/D</b>
A1	118,725	0.7%	147,000	159,000
A2	126,258	0.9%	167,000	182,000
A3	94,693	0.7%	118,000	133,000

- **A1 - I-40 West of US 67/US 167**

At location A1, an updated **0.7%** annual growth rate was used to develop 2045 design volumes. The 0.7% growth rate provided a 2045 ADT of 147,386. This represents a reduction of 11,614 ADT (7%) from the 2041 EA traffic forecast, which had an effective annual growth rate of 1.09%.

- **A2 - I-30 North of Arkansas River**

At location A2, an updated **0.9%** annual growth rate was used to develop 2045 design volumes. The 0.9% growth rate provided a 2045 ADT of 166,681. This represents a reduction of 15,319 ADT (8%) from the 2041 EA traffic forecast, which had an effective annual growth rate of 1.36%.

- **A3 - I-30 North of I-440**

At location A3, an updated **0.7%** annual growth rate was used to develop 2045 design volumes. The 0.7% growth rate provided a 2045 ADT of 117,552. This represents a reduction of 15,448 ADT (12%) from the 2041 EA traffic forecast, which had an effective annual growth rate of 1.27%.

### **2.3.2 No-Action Freeway Main Lane**

The 2045 No-Action annual growth rates were developed using the same methodology as the Build growth rates described above. New, updated data points were used where available for projecting No-Action growth rates and ADTs. These tools included ARDOT historical traffic data, ARDOT's statewide travel demand model, ARDOT's projected growth rates in Pulaski County, and multiple future year Metroplan models. The average of these five projections was calculated to develop a revised updated No-Action growth rate. A summary of the projected annual growth rates for the various data points are shown in **Table 5** below, along with updated annual growth rates used for forecasting.

**Table 5. No-Action Model Annual Growth Rates**

	<b>A1</b>	<b>A2</b>	<b>A3</b>
Pulaski County (Urban Interstates, 2018-2038)	0.91%	0.91%	0.91%
ARDOT Historical Growth 1998 - 2018	0.60%	0.80%	0.60%
2050 CARTS Travel Demand Model (without Network Wide Freeway Improvements)	0.26%	0.11%	0.28%
2050 CARTS Travel Demand Model (with Network Wide Freeway Improvements)	0.45%	0.15%	0.41%
ARDOT Statewide Travel Demand Model (2040 AR TDM – TransCAD 6.0 64-bit, Build Version 9020)	0.61%	0.81%	0.58%
<b>Updated No-Action Annual Growth Rate</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.6%</b>

The 2045 No-Action traffic volumes are shown in **Table 6** below along with No-Action volumes from the EA (Table 4, Average Daily Traffic, pdf page 300/7100). A volume balancing process was applied to the volumes using A2 as the base point.

**Table 6. No-Action Summary**

<b>Study Location</b>	<b>Base 2014 ADT</b>	<b>No-Action Annual Growth Rate</b>	<b>2045 No-Action ADT</b>	<b>EA 2041 No-Action ADT</b>
A1	118,725	0.6%	143,000	153,000
A2	126,258	0.6%	152,000	153,000
A3	94,693	0.6%	114,000	119,000

**2.3.3 Build Arterial Streets**

Table 3, Select Cross-Street Annual Growth Rates from the I-30 EA (pdf page 403/7100) was updated and expanded with the updated Metroplan travel model data as shown in **Table 7** below.

**Table 7. Select Cross-Street Annual Growth Rates**

<b>Available Data</b>	<b>Cantrell</b>	<b>Broadway</b>	<b>Roosevelt</b>	<b>Other Corridor Arterials</b>
ARDOT Historical Data (2002-2012)	N/A	0.7%	0.0%	0.4%
ARDOT Historical Data (2011-2018)	1.3%	1.1% <sup>1</sup>	1.0%	0.3%
ARDOT Historical Data (1987-2018)	N/A	0.5%	-0.4%	0.5%
2050 CARTS Travel Demand Model	0.4%	0.4%	1.3%	N/A
<b>Recommended Growth Rate</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>

<sup>1</sup> Growth rate from 2010-2018 was used due to temporary drop in traffic in 2011

The new Metroplan model projected annual growth of 0.4% for Cantrell and Broadway and 1.3% for Roosevelt. Historical data shows that growth has been slightly higher at Cantrell and Broadway and lower at Roosevelt. The historical data also shows growth at 0.3% to 0.5% for other I-30 study area arterials. Historical data was available for a number of other corridor arterials in the study area including Curtis Sykes Dr., Bishop Lindsey Ave., Cumberland St., Scott St., College St., JFK Blvd., Springhill Dr., N Hills Blvd., McCain Blvd., Dixon Rd., and 65<sup>th</sup> St. that were averaged together.

The **0.5%** average annual growth rate used in the I-30 EA for the arterials connecting to I-30 and I-40 remained constant for the re-evaluation.

## 2.4 Summary

In December 2018, Metroplan adopted new demographic data based on updated metropolitan demographic information and trends in Little Rock. In summary, demographic growth rates were lowered from previous Metroplan forecasts. Based on this new data, traffic growth rates and ultimately traffic forecasts were reviewed during the 30 Crossing Re-Evaluation. Based on the new data, annual freeway growth rates were reduced which reduced traffic forecasts. The consultant team applied the adjustments identified above to the VISSIM microsimulation O/D matrices for freeways for the future No-Action and 6-Lane + C/D Revised Selected Alternative.

## 3.0 MODEL ROADWAY UPDATES

In addition to traffic forecasts, geometric roadway adjustments have been made since the EA was completed. **Table 8** shows the roadway enhancements of the Revised Selected Alternative. The North Terminal enhancements included in the Revised Selected Alternative are shown in **Figure 2**.

**Table 8. Roadway Enhancements of Revised Selected Alternative**

	<b>EA Re-Evaluation</b>
2041 (EA Design Year)	<ul style="list-style-type: none"> <li>• Added I-30 capacity of an additional lane in each direction between 65<sup>th</sup> Street and the South Terminal.</li> </ul>
2045 (EA Re-Evaluation Design Year)	<ul style="list-style-type: none"> <li>• Added I-30 capacity of an additional lane in each direction between 65<sup>th</sup> Street and the South Terminal.</li> <li>• North Terminal Enhancement (See Figure 2)</li> </ul>

Figure 2 – 30 Crossing EA Re-Evaluation Concept



### 4.0 Future No-Action Traffic Results

#### 4.1 Original EA with I-30 Capacity Improvement

The future No-Action alternative was modeled in the EA Re-Evaluation using the 2041 EA traffic and the added I-30 capacity of an additional travel lane in each direction between 65<sup>th</sup> Street and the South Terminal. This new EA Re-Evaluation model run was compared to the No-Action AM Peak Hour traffic results in the EA.

The change from the EA to the EA Re-Evaluation is summarized below and the letters correspond to notes shown on the EA Re-Evaluation graphic to the right.

- A. Traffic on I-30 EB approaching the South Terminal is slightly less congested as a result of the increased capacity on I-30.
- B. Traffic on I-30 EB approaching Roosevelt Rd is slower during the AM peak period because there are more vehicles getting through the South Terminal to the weave area.

Figure 3 – Future 2041 No-Action, EA, AM Traffic

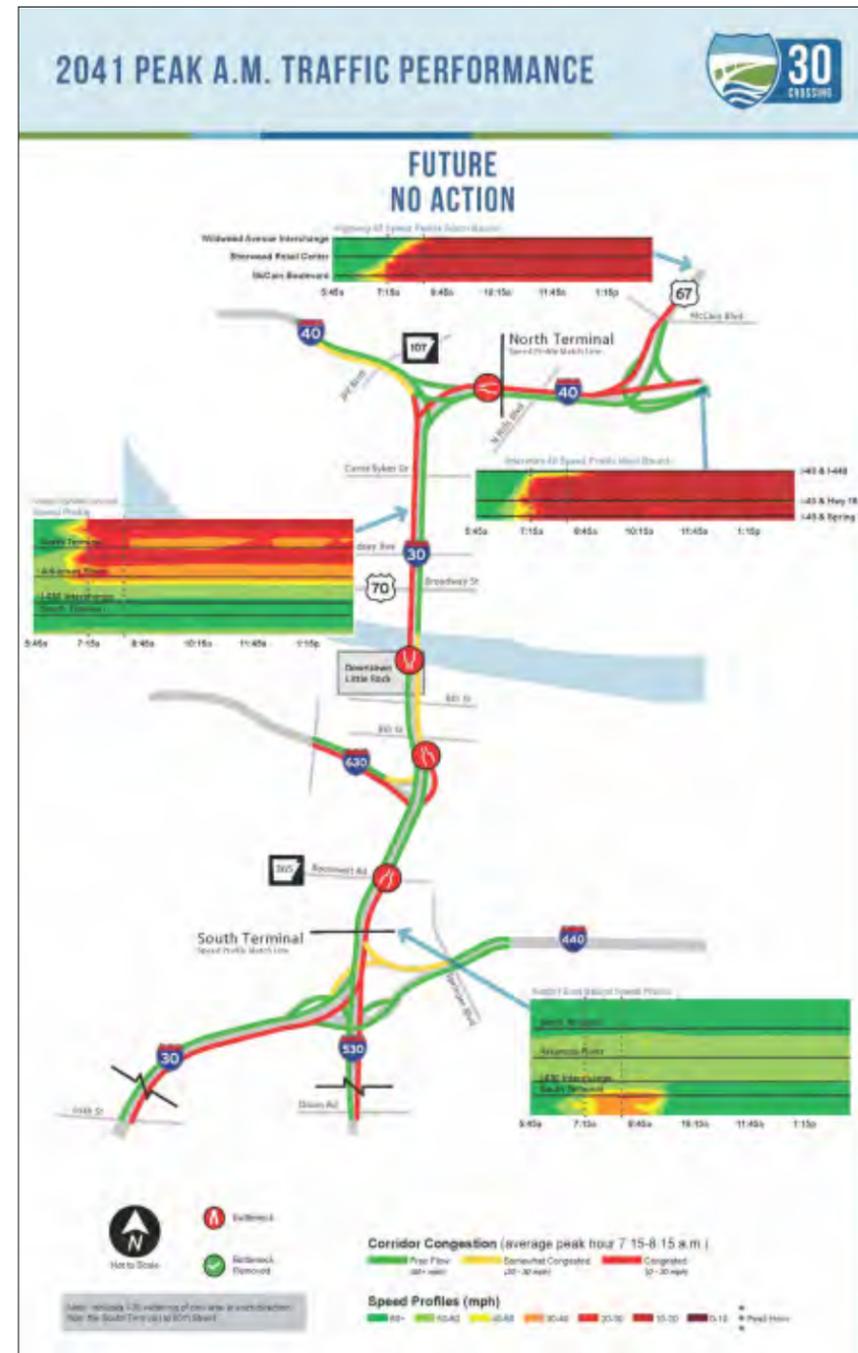
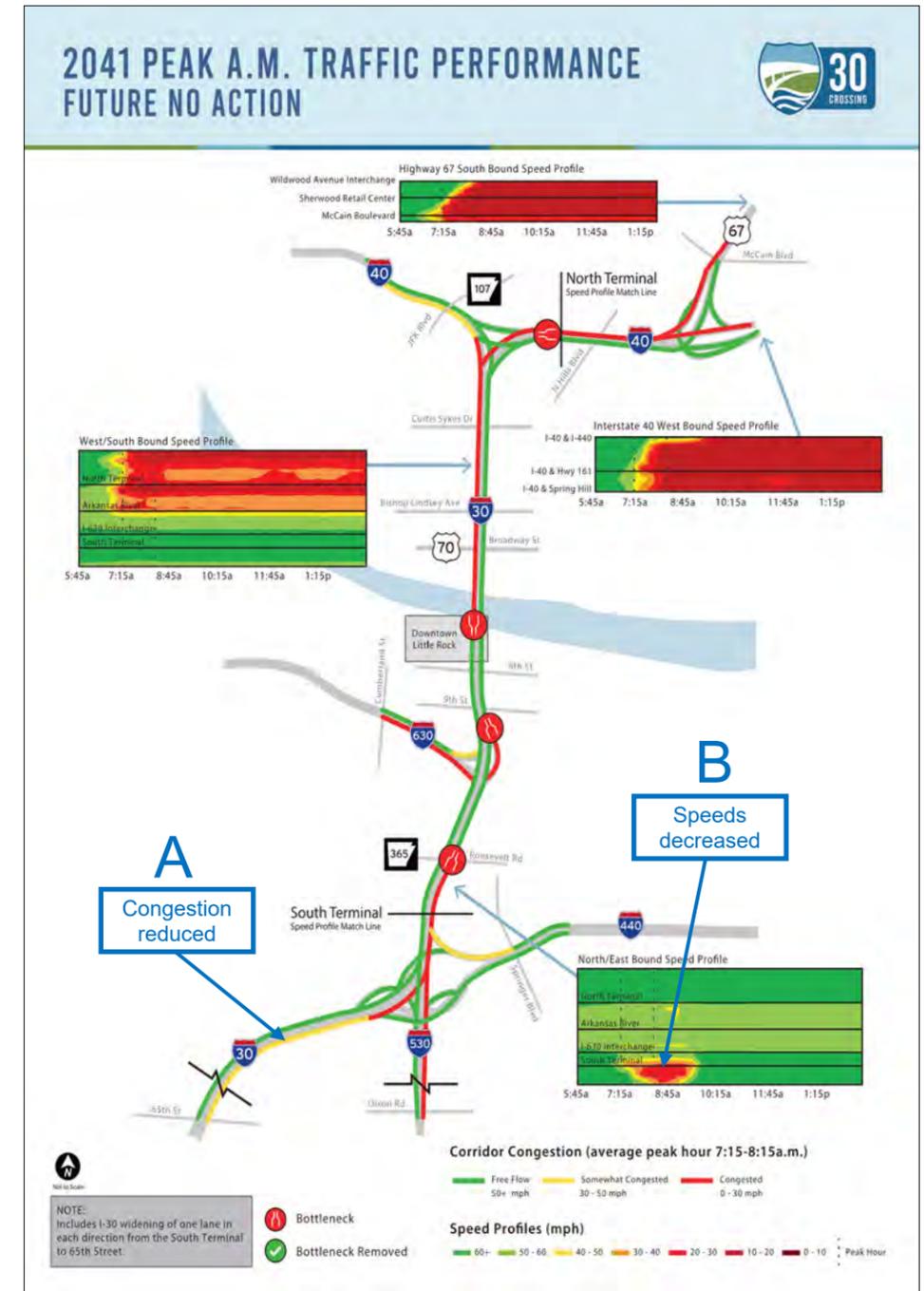


Figure 4 – Future 2041 No-Action, EA Re-Evaluation, AM Traffic with I-30 Capacity Enhancement



The new EA Re-Evaluation model run was compared to the No-Action PM Peak Hour traffic results in the EA.

The change from the EA to the EA Re-Evaluation is summarized below and the letters correspond to notes shown on the EA Re-Evaluation graphic to the right.

- A. Traffic in the EA Re-Evaluation operates very similarly to the EA. The I-440 WB to I-30 SB entrance ramp is slightly less congested than previously as a result of the increased capacity on I-30.

Figure 5 – Future 2041 No-Action, EA, PM Traffic

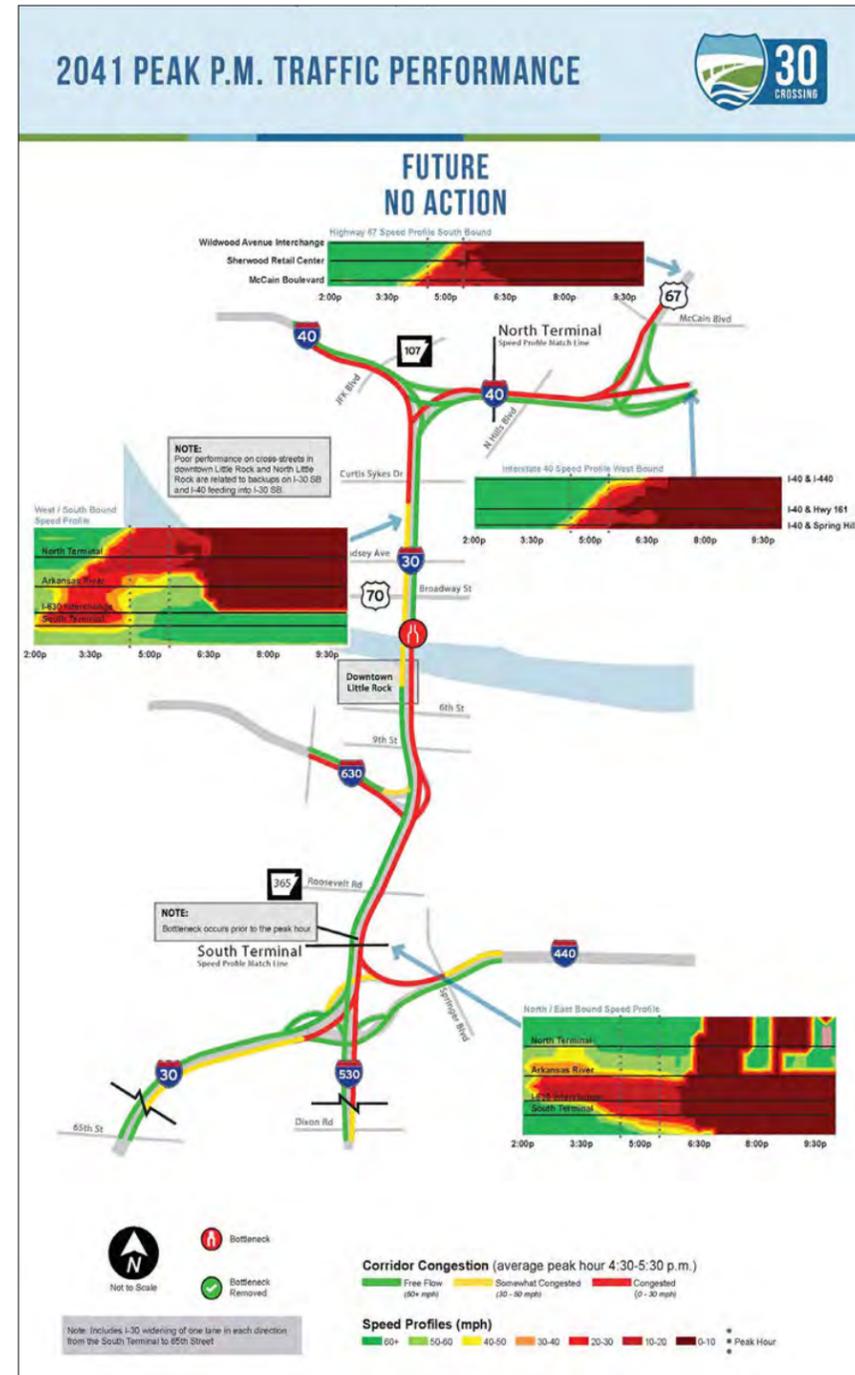
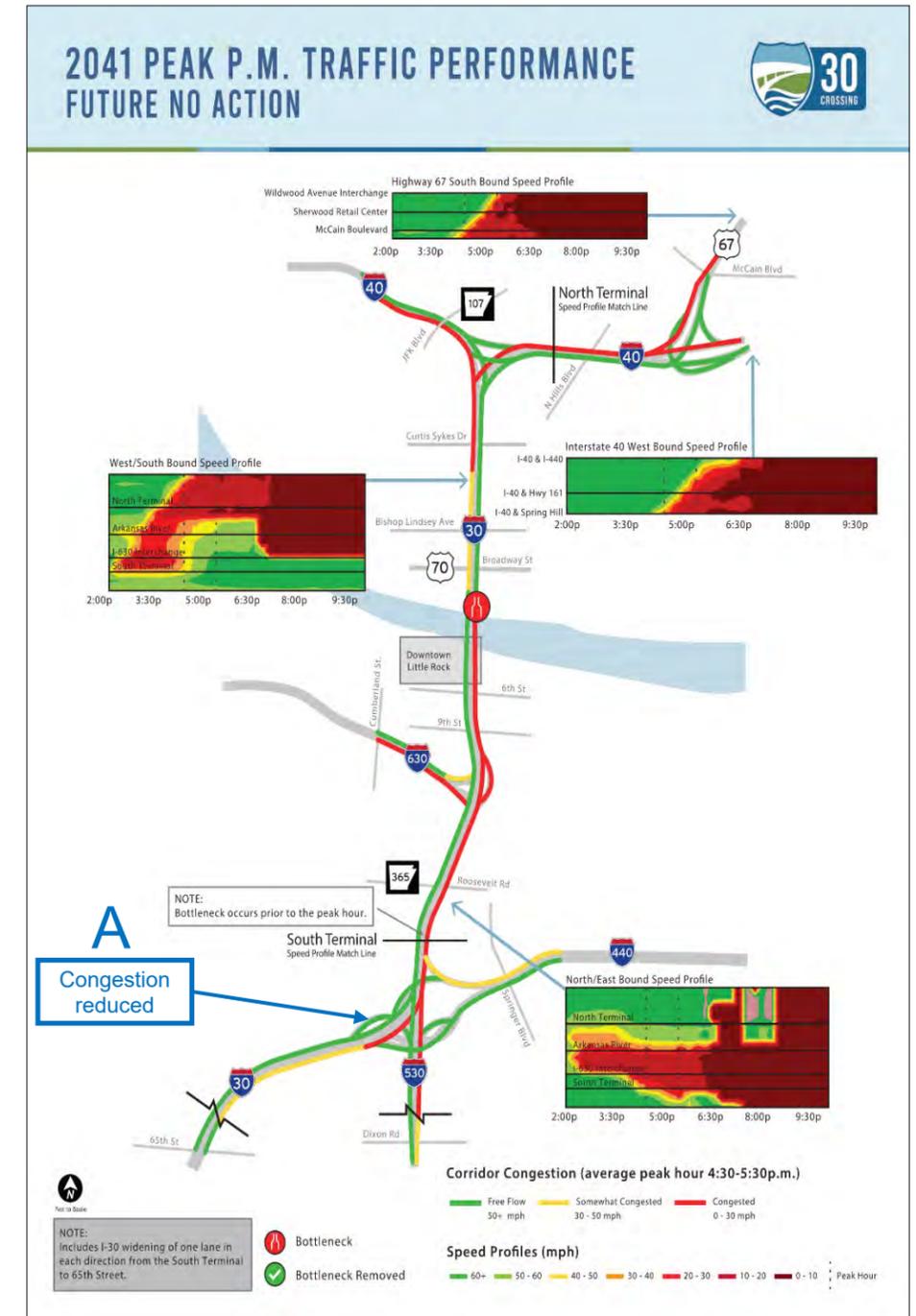


Figure 6 – Future 2041 No-Action, EA Re-Evaluation, PM Traffic with I-30 Capacity Enhancement



### 4.2 EA Re-Evaluation with I-30 Capacity Improvement

The future No-Action alternative for the EA Re-Evaluation was modeled using the updated 2045 traffic and the added I-30 capacity of an additional lane in each direction between 65<sup>th</sup> Street and the South Terminal. This new EA Re-Evaluation model run was compared to the No-Action AM Peak Hour traffic results in the EA.

The change from the EA to the EA Re-Evaluation is summarized below and the letters correspond to notes shown on the EA Re-Evaluation graphic to the right.

- A. Traffic on I-30 EB approaching the South Terminal is slightly less congested as a result of the increased capacity on I-30.
- B. Traffic on I-30 EB approaching Roosevelt Rd is slower during the peak period as a result of more vehicles getting through the South Terminal to the weave area to the north.

Figure 7 – Future 2041 No-Action, EA, AM Traffic

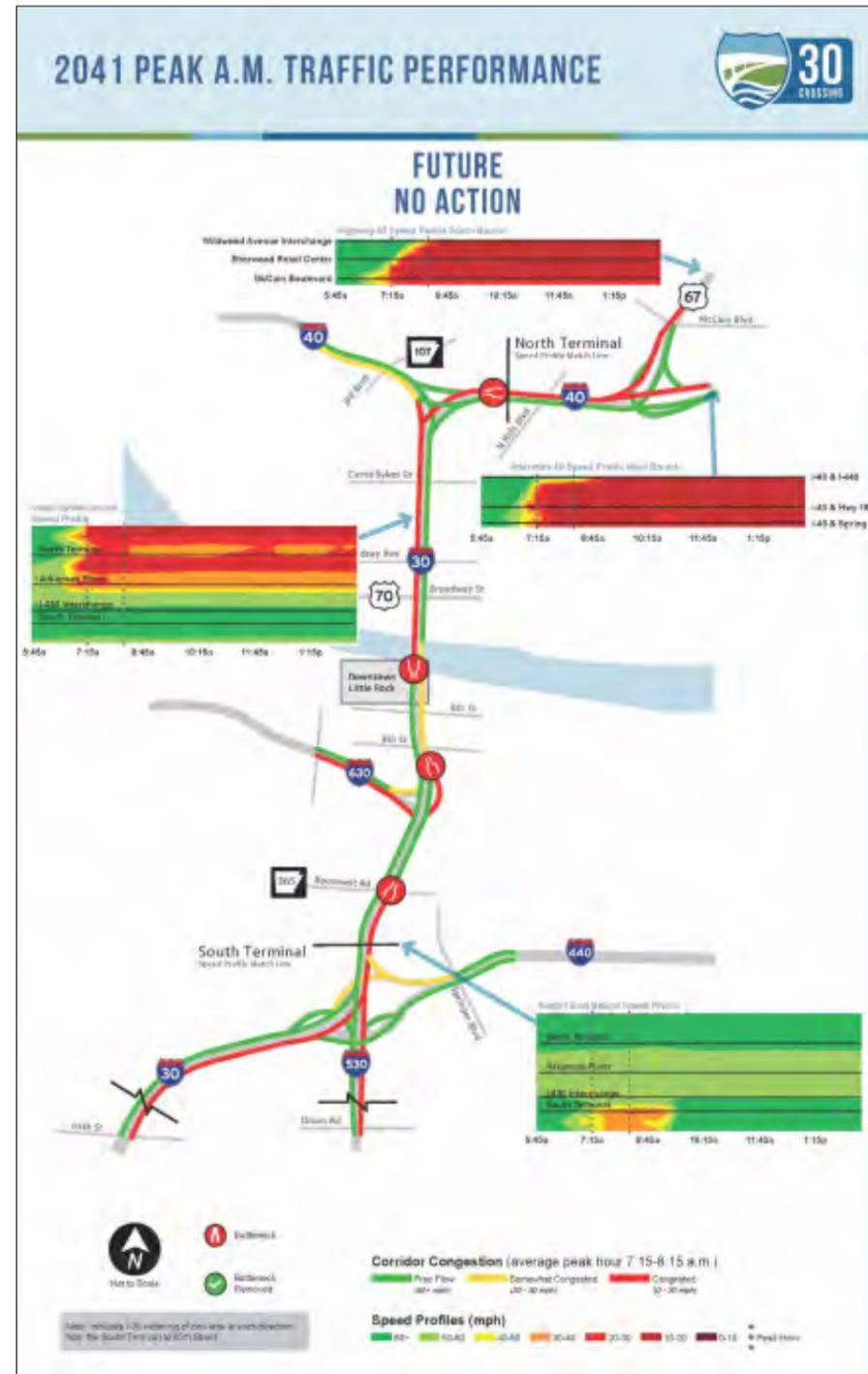
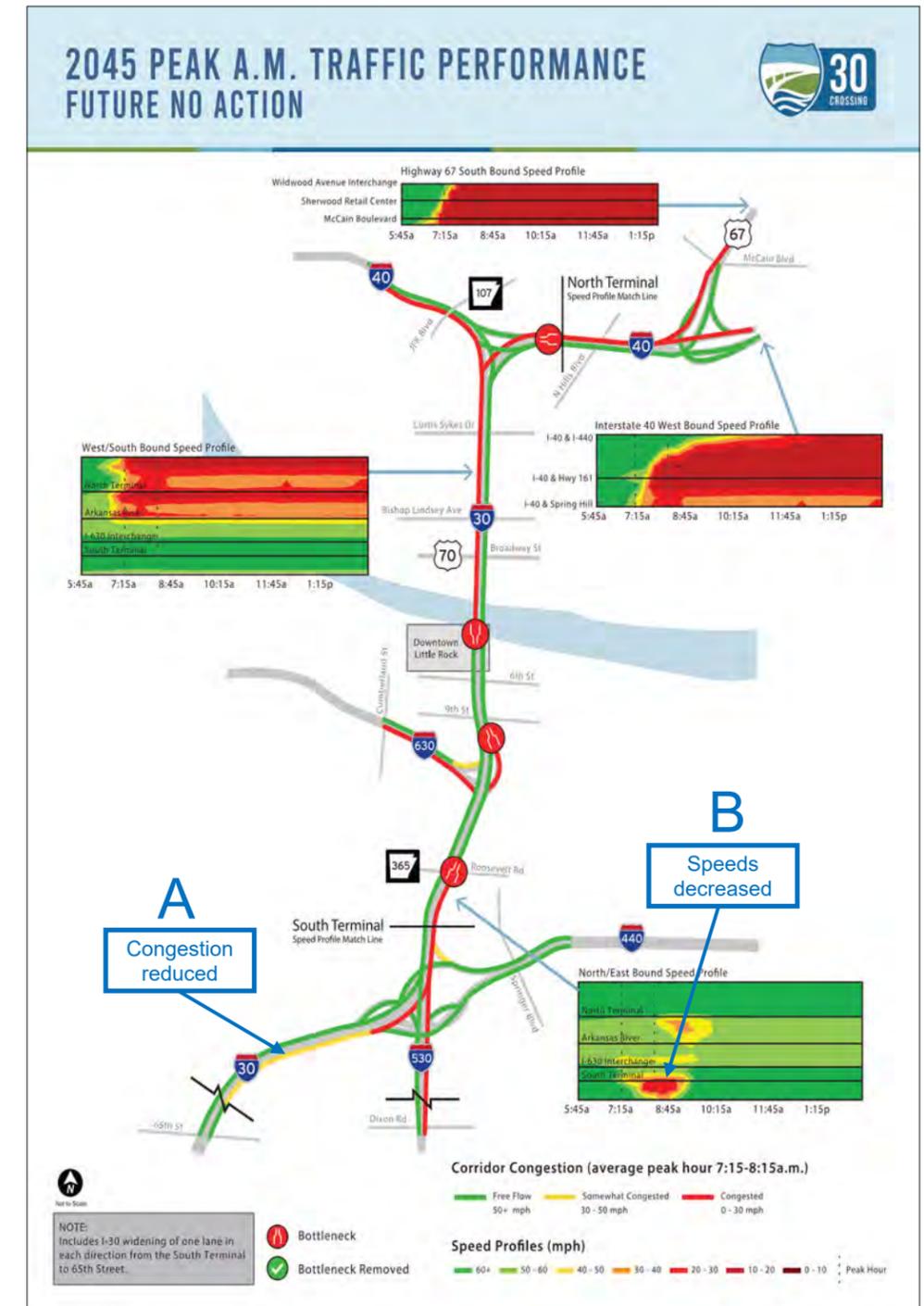


Figure 8 – Future 2045 No-Action, EA Re-Evaluation, AM Traffic with I-30 Capacity Enhancement



The new model run was compared to the No-Action PM Peak Hour traffic results in the EA.

The change from the EA to the EA Re-Evaluation is summarized below and the letters correspond to notes shown on the EA Re-Evaluation graphic to the right.

- A. Traffic operates very similarly between the EA Re-Evaluation and the EA. The I-440 WB entrance ramp is slightly less congested than previously as a result of decreased volumes.

Figure 9 – Future 2041 No-Action, EA, PM Traffic

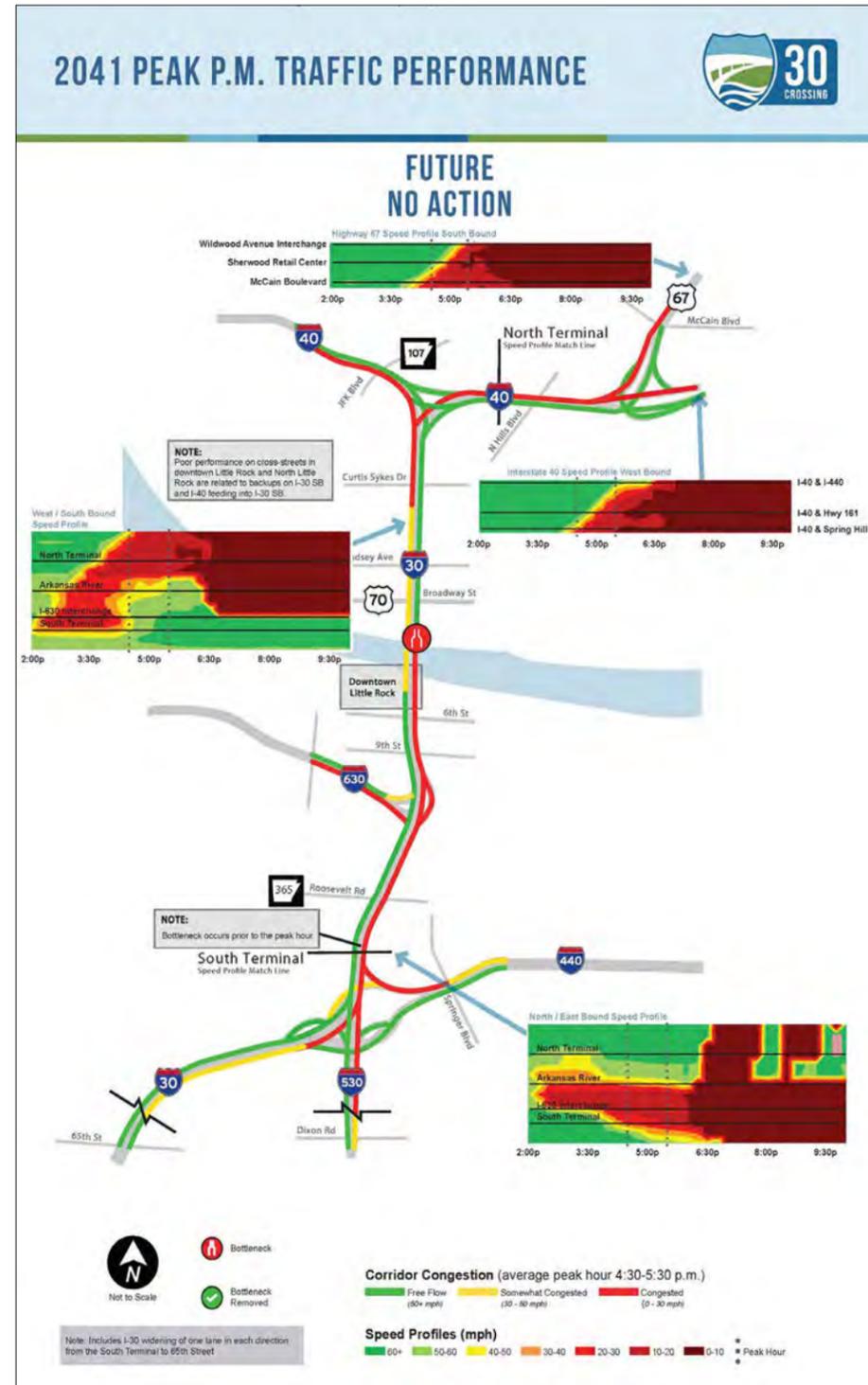
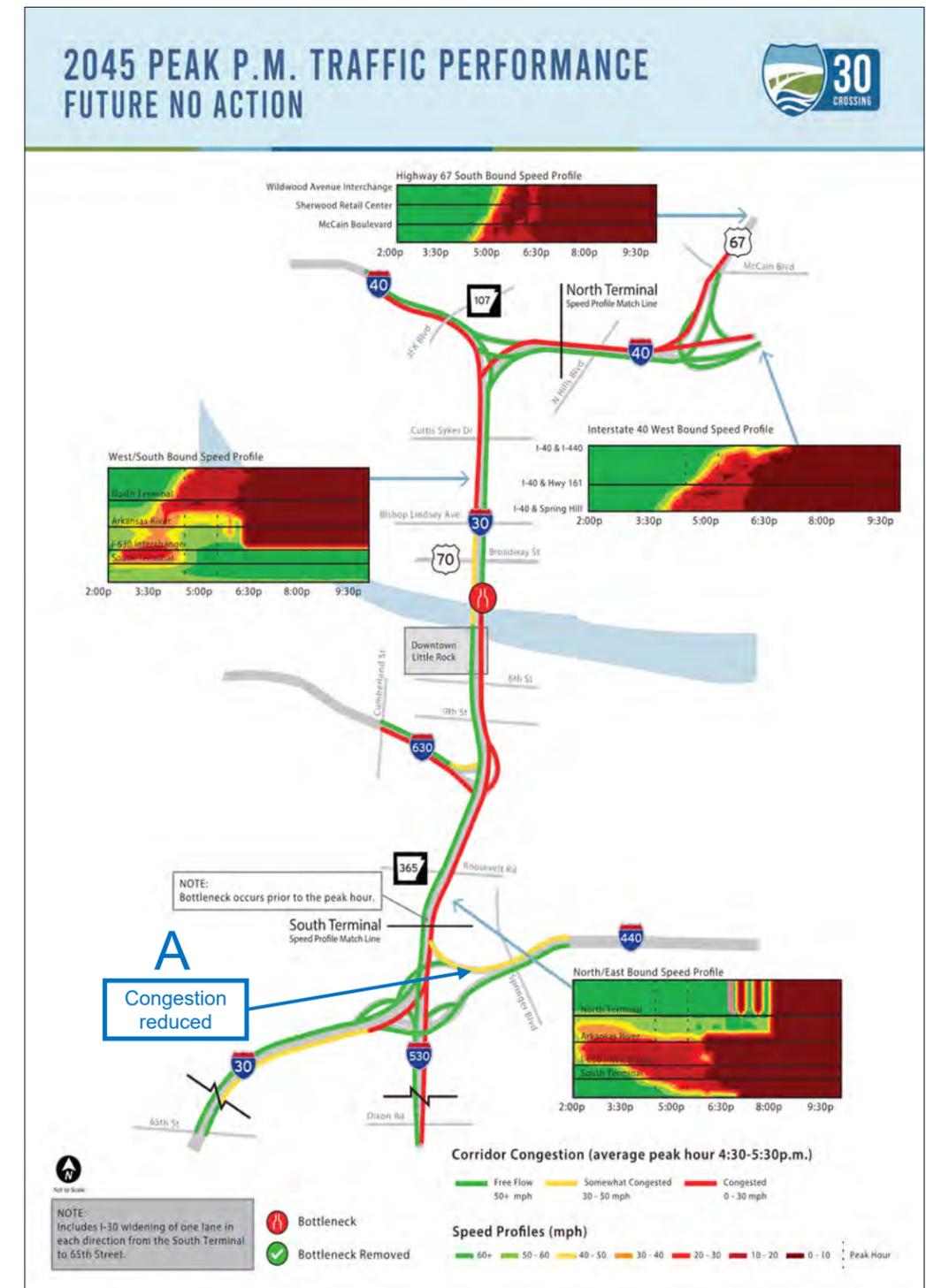


Figure 10 – Future 2045 No-Action, EA Re-Evaluation, PM Traffic with I-30 Capacity Enhancement



### 5.0 Revised Selected Alternative – 6-Lane with C/D Traffic Results

The Revised Selected Alternative (6-Lane with C/D Split Diamond) was modeled using the updated 2045 traffic, added I-30 capacity of an additional lane in each direction between 65<sup>th</sup> Street and the South Terminal, and the updated Revised Selected Alternative configuration at the North Terminal for the EA Re-Evaluation. This new model run was compared to the Selected Alternative results in the EA during the AM Peak Hour.

The change from the EA to the EA Re-Evaluation is summarized below and the letters correspond to notes shown on the EA Re-Evaluation graphic to the right.

- A. West/South traffic operations are improved significantly on the river bridge as a result of the reduced traffic forecast.
- B. Operations at the North Terminal are improved, and speeds are increased as a result of the reduced traffic forecast and revised geometry.
- C. Westbound I-440 and North/East I-30 operations south of the river are improved as a result of the reduced traffic forecast.

Figure 11 – Future 2041, EA, AM Traffic

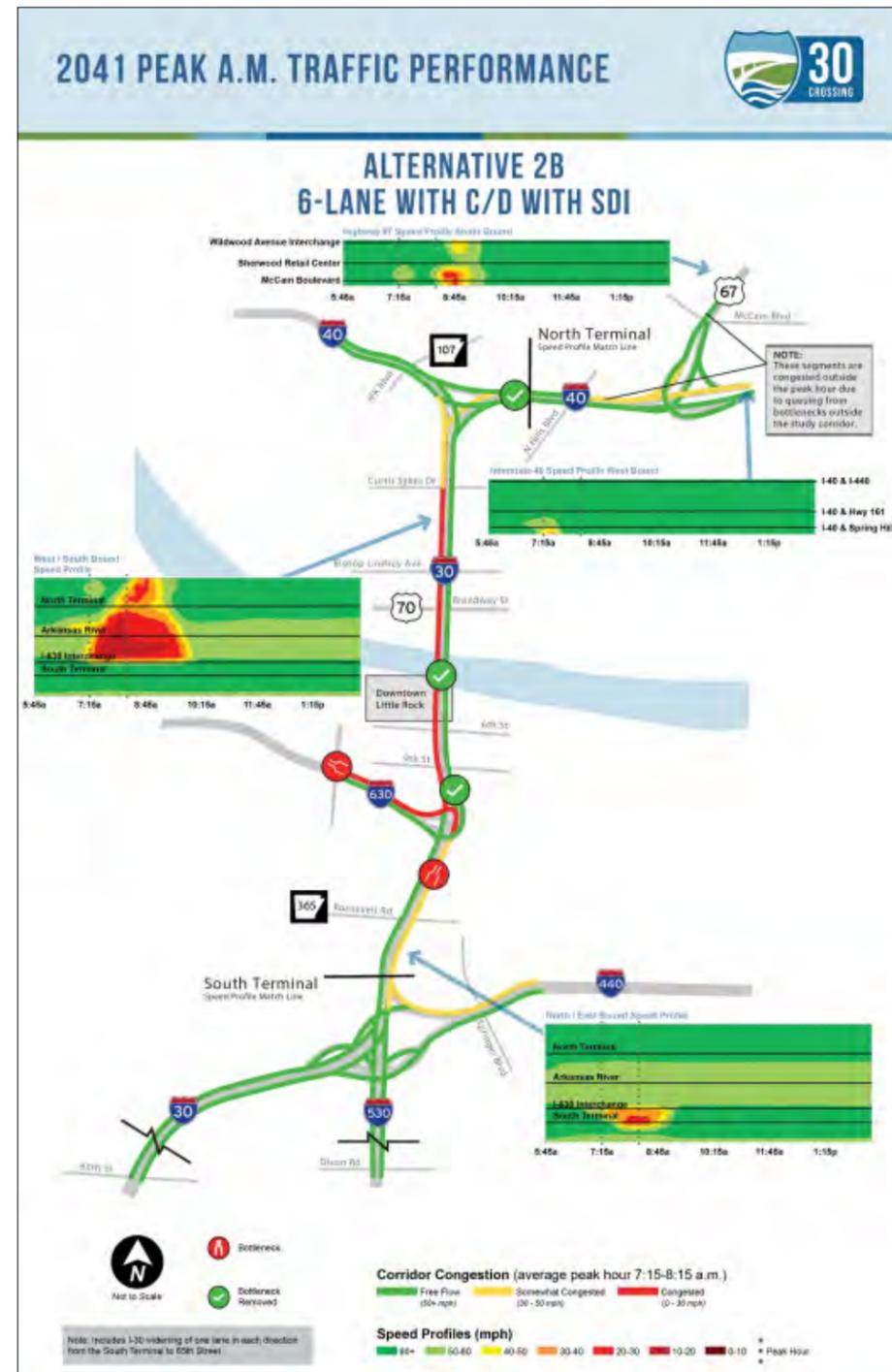
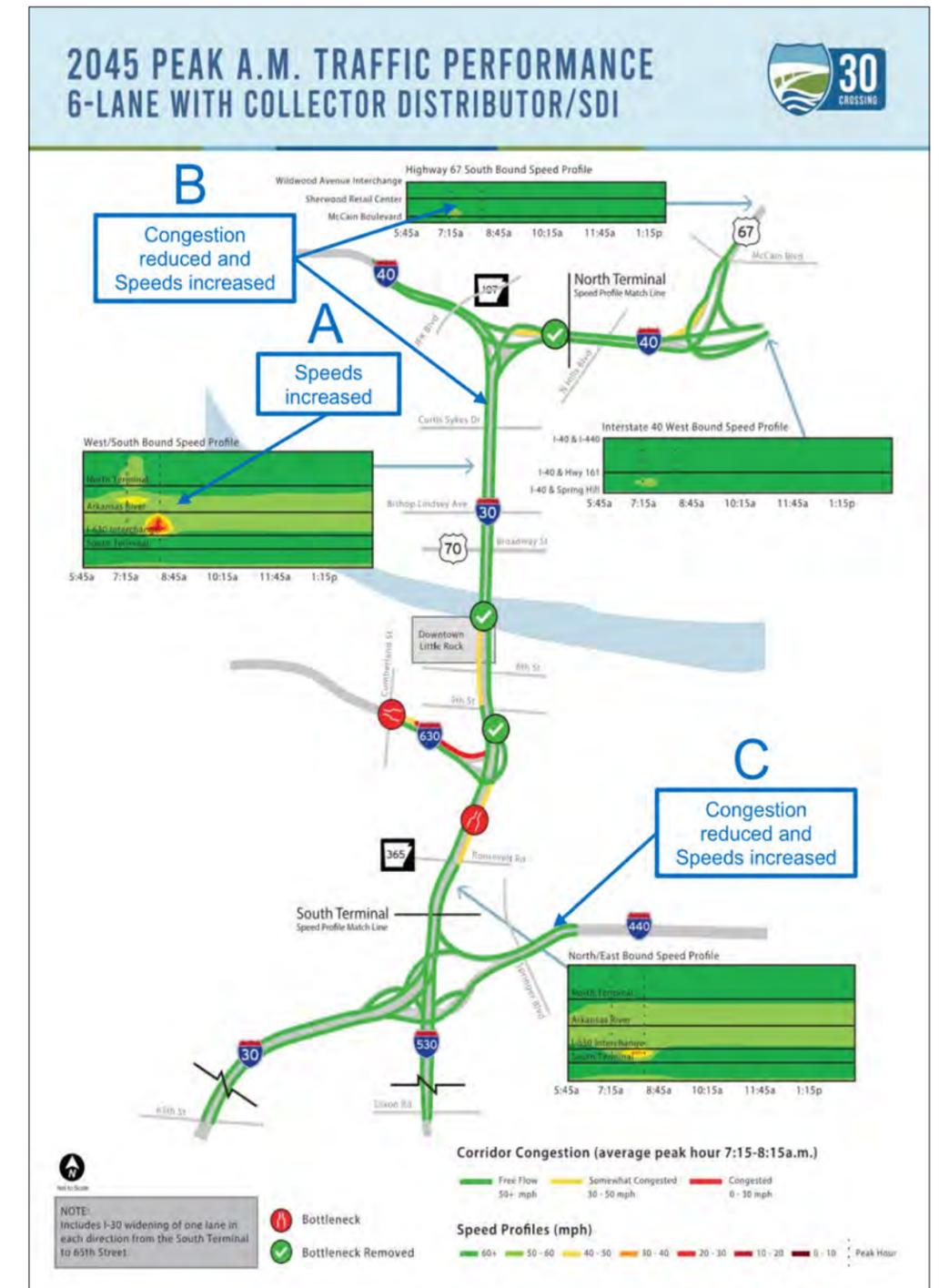


Figure 12 – Future 2045, EA Re-Evaluation, AM Traffic



The new model run was compared to the Selected Alternative results in the EA during the PM Peak Hour.

The change from the EA to the EA Re-Evaluation is summarized below and the letters correspond to notes shown on the EA Re-Evaluation graphic to the right.

- A. West/South traffic operations are improved significantly south of the river bridge as a result of the reduced traffic forecast.
- B. I-30 WB south of the project is congested as a result of the removal of bottlenecks upstream and the lack of capacity on I-30 south of 65<sup>th</sup> Street. An ARDOT I-30 Corridor Study (2019) from the South Terminal to Benton identifies capacity improvements for the I-30 corridor south of 65<sup>th</sup> Street.

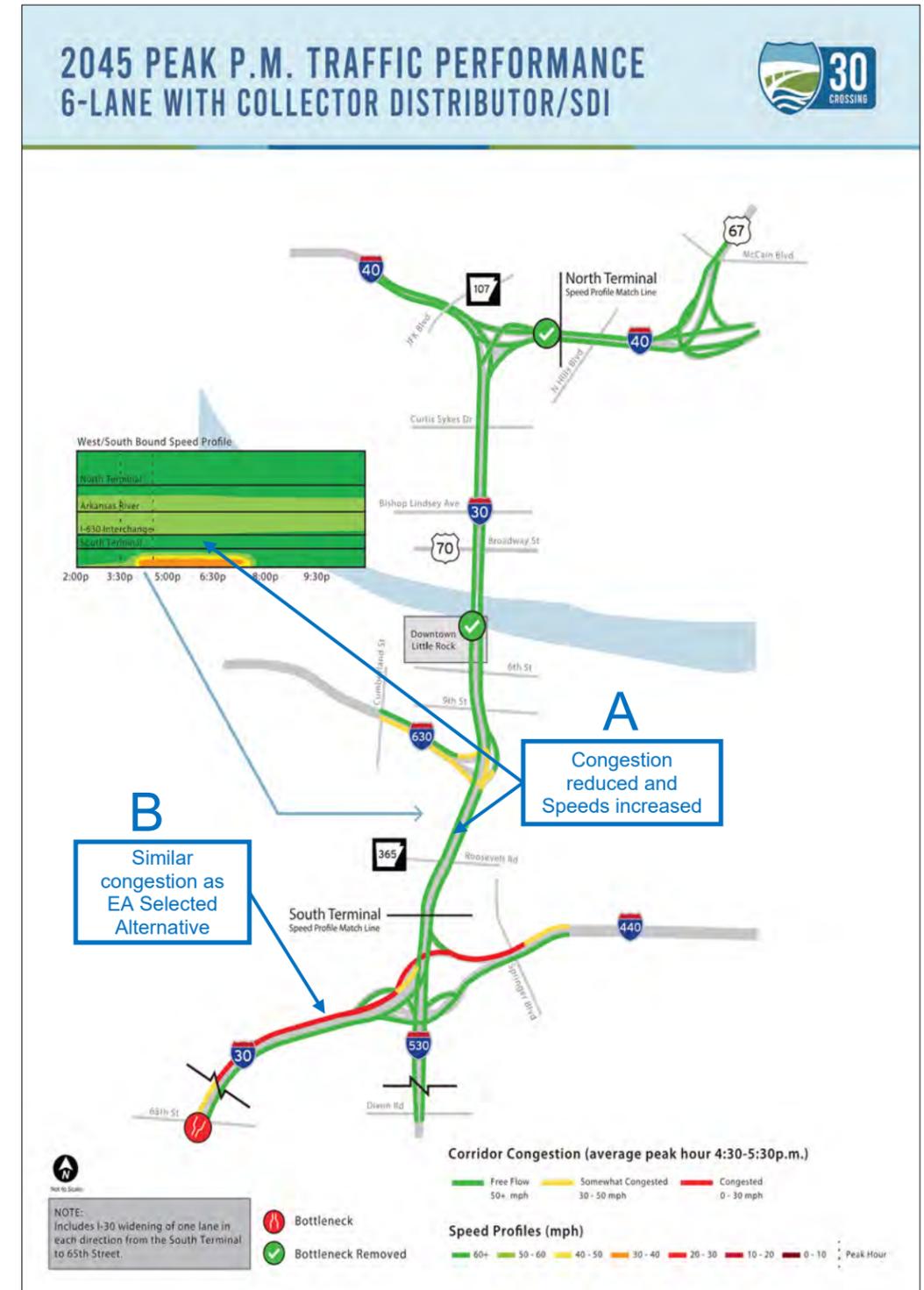
There are design questions related to connecting 30 Crossing with I-30 west of the South Terminal (such as how to tie in lanes to/from I-440). These questions are beyond the scope of the NEPA re-evaluation. The VISSIM model results represent a design with a two-lane I-440W ramp merging to a single lane and the single lane continuing to 65<sup>th</sup> Street. This results in four lanes each direction on I-30 between the South Terminal and 65<sup>th</sup> Street. This is only one of many alternatives that will need to be studied in more detail when improvements are made.

Figure 13 – Future 2041, EA, PM Traffic



\*Figure updated from the I-30 EA

Figure 14 – Future 2045, EA Re-Evaluation, PM Traffic



## 6.0 Summary of Results

Average Daily Traffic from the I-30 EA (pdf page 131/7100) was updated with revised traffic forecasts out to the new design year of 2045 and is shown below in **Table 9**. As discussed in Section 2.0, traffic forecasts were generally reduced due to updated demographic and land use information available.

**Table 9. 2045 Average Daily Traffic**

Location	No-Action Alternative	6-Lane with C/D (Revised Selected Alternative) (SDI (2B))
<b>A1: I-40 east of North Hills Blvd</b>	143,000	147,000
<b>A2: I-30 at Arkansas River Bridge</b>	152,000	167,000
<b>A3: I-30 south of Roosevelt Blvd</b>	114,000	118,000

Peak Hour Travel Times to and from Downtown Little Rock Destinations from the I-30 EA (pdf page 129/7100) were updated with revised travel times from the revised forecasts and geometry reconfigurations for the EA Re-Evaluation. **Table 10** below summarizes the updated travel times for the 2041 and 2045 No-Action alternatives and 2045 Build alternative.

In summary, travel times remained relatively constant between the EA and the EA Re-Evaluation. The majority of travel times are reduced from the No-Action to the Revised Selected Alternative.

**Table 10. Peak Hour Travel Times to Downtown Little Rock Destinations**

Destination	Existing 2014	Future No-Action		2045 6-Lane with C/D with Split Diamond (Revised Selected Alternative)
		2041 <sup>2</sup>	2045 Traffic <sup>3</sup>	
<b>To River Market (AM<sup>1</sup>)</b>				
A. From Wildwood Avenue Interchange on Hwy 67	18:07	30:26	35:00	13:38
B. From I-40 and I-440 Interchange	16:09	31:47	30:11	14:42
C. From the McArthur Bridge on I-40	10:42	23:00	24:55	9:58
D. From Dr. Martin Luther King Drive on I-630	05:17	8:09	8:52	7:22
E. From the Dixon Interchange on I-530	08:25	20:05	17:03	11:38

Destination	Existing 2014	Future No-Action		2045 6-Lane with C/D with Split Diamond (Revised Selected Alternative)
		2041 <sup>2</sup>	2045 Traffic <sup>3</sup>	
F. From the 65th Street Interchange on I-30	08:15	13:37	11:57	10:26
G. From the Bankhead Drive Interchange on I-440	07:28	5:59	05:59	11:32
<b>To Clinton Presidential Center / Heifer International (AM<sup>1</sup>)</b>				
A. From Wildwood Avenue Interchange on Hwy 67	17:46	29:21	34:20	10:51
B. From I-40 and I-440 Interchange	15:47	30:43	29:31	11:55
C. From the McArthur Bridge on I-40	10:21	21:56	24:15	6:11
D. From Dr. Martin Luther King Drive on I-630	04:19	7:07	7:46	5:09
E. From the Dixon Interchange on I-530	07:27	19:03	15:56	8:24
F. From the 65th Street Interchange on I-30	07:16	12:35	10:50	8:12
G. From the Bankhead Drive Interchange on I-440	06:29	7:51	7:22	8:18
<b>From River Market (PM<sup>1</sup>)</b>				
A. To Wildwood Avenue Interchange on Hwy 67	11:05	54:40	1:03:40	10:50
B. To I-40 and I-440 Interchange	11:28	55:40	1:04:40	11:43
C. To the McArthur Bridge on I-40	06:54	51:45	1:00:46	7:40
D. To Dr. Martin Luther King Drive on I-630	03:57	17:27	24:31	9:41
E. To the Dixon Interchange on I-530	07:18	22:32	28:19	12:28
F. To the 65th Street Interchange on I-30	07:24	23:45	29:19	17:43
G. To the Bankhead Drive Interchange on I-440	07:41	22:03	28:10	12:56
<b>From Clinton Presidential Center / Heifer International (PM<sup>1</sup>)</b>				
A. To Wildwood Avenue Interchange on Hwy 67	12:00	30:56	37:27	7:58
B. To I-40 and I-440 Interchange	12:23	31:56	38:27	8:50
C. To the McArthur Bridge on I-40	07:49	28:02	34:32	4:47
D. To Dr. Martin Luther King Drive on I-630	04:44	8:30	10:40	6:47
E. To the Dixon Interchange on I-530	08:06	13:34	14:27	9:35
F. To the 65th Street Interchange on I-30	08:11	14:48	15:27	14:50
G. To the Bankhead Drive Interchange on I-440	08:28	13:06	14:19	10:02

<sup>1</sup>AM Peak = 7:15 AM to 8:15 AM; PM Peak = 4:30 PM to 5:30 PM

<sup>2</sup>2041 volumes from the EA, with additional capacity on I-30 between 65<sup>th</sup> Street and South Terminal

<sup>3</sup>Updated 2045 volumes, with additional capacity on I-30 between 65<sup>th</sup> Street and South Terminal

NOTE: Speeds are inbound to downtown to Little Rock in the AM and outbound in the PM

	Travel times between 10:00 minutes and 25:00 minutes are highlighted in light red
	Travel times greater than 25:00 minutes are highlighted in dark red
	Travel times that are unusually low due to a bottleneck upstream are highlighted in blue

Peak hour traffic from 2041 to 2045 increased in some areas and decreased in others; overall, peak hour volumes decreased. Travel times to downtown Little Rock in the AM

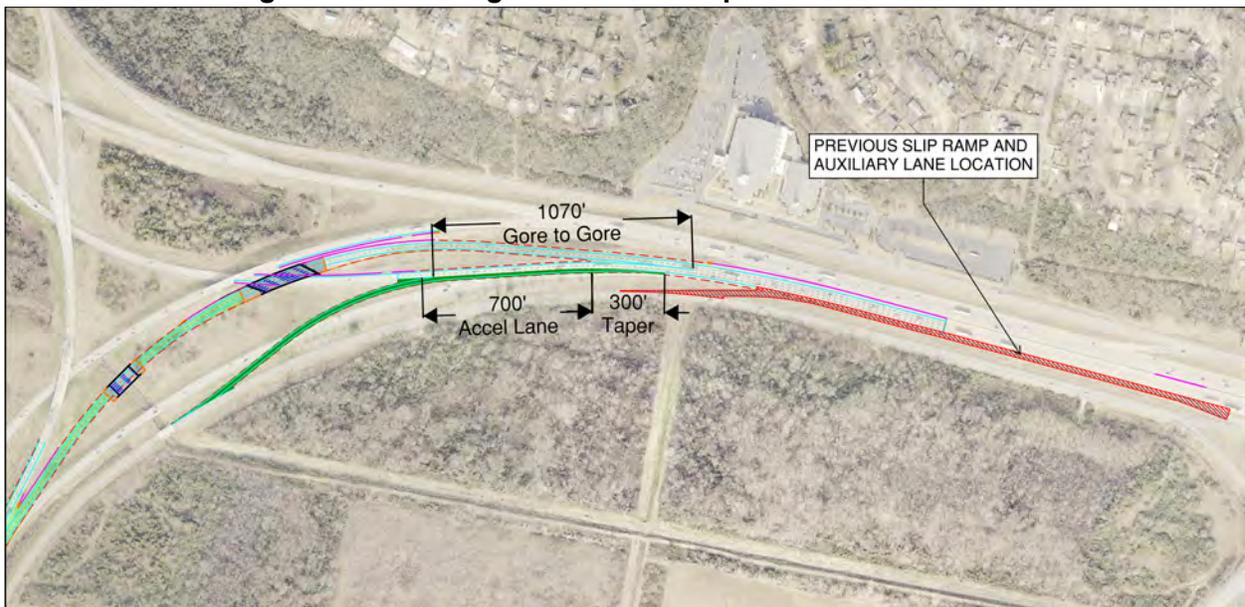
reflect this, with some routes increasing between 2041 and 2045 and others decreasing. Because the growth rate on arterials remained constant and was forecasted four years further from 2041 to 2045, traffic volumes in downtown Little Rock increased. In the PM, when vehicles are attempting to leave downtown, the increased traffic volumes make it more difficult for vehicles to get to the interstate, and travel times are increased.

## 7.0 Frontage Road On-Ramp to I-40E Relocation

Following the completion of the EA Re-Evaluation, the Design-Build team modified the geometry of the on-ramp from Frontage Road to I-40 EB, as shown in **Figure 15**. The ramp was relocated to meet AASHTO Green Book standards on gore-to-gore spacing of adjacent ramps. The 300' taper will exist in the interim configuration, with a full auxiliary lane extension construct later as part of the ultimate configuration. The ramp was relocated upstream to the west, providing additional weaving capacity between the ramp and the North Hills Boulevard exit ramp in the ultimate configuration.

Because the ramp relocation was considered a minor adjustment and should improve capacity in an area predicted to operate acceptably, the traffic models were not adjusted or rerun to reflect this change.

**Figure 15 – Frontage Road On-Ramp to I-40E Relocation**

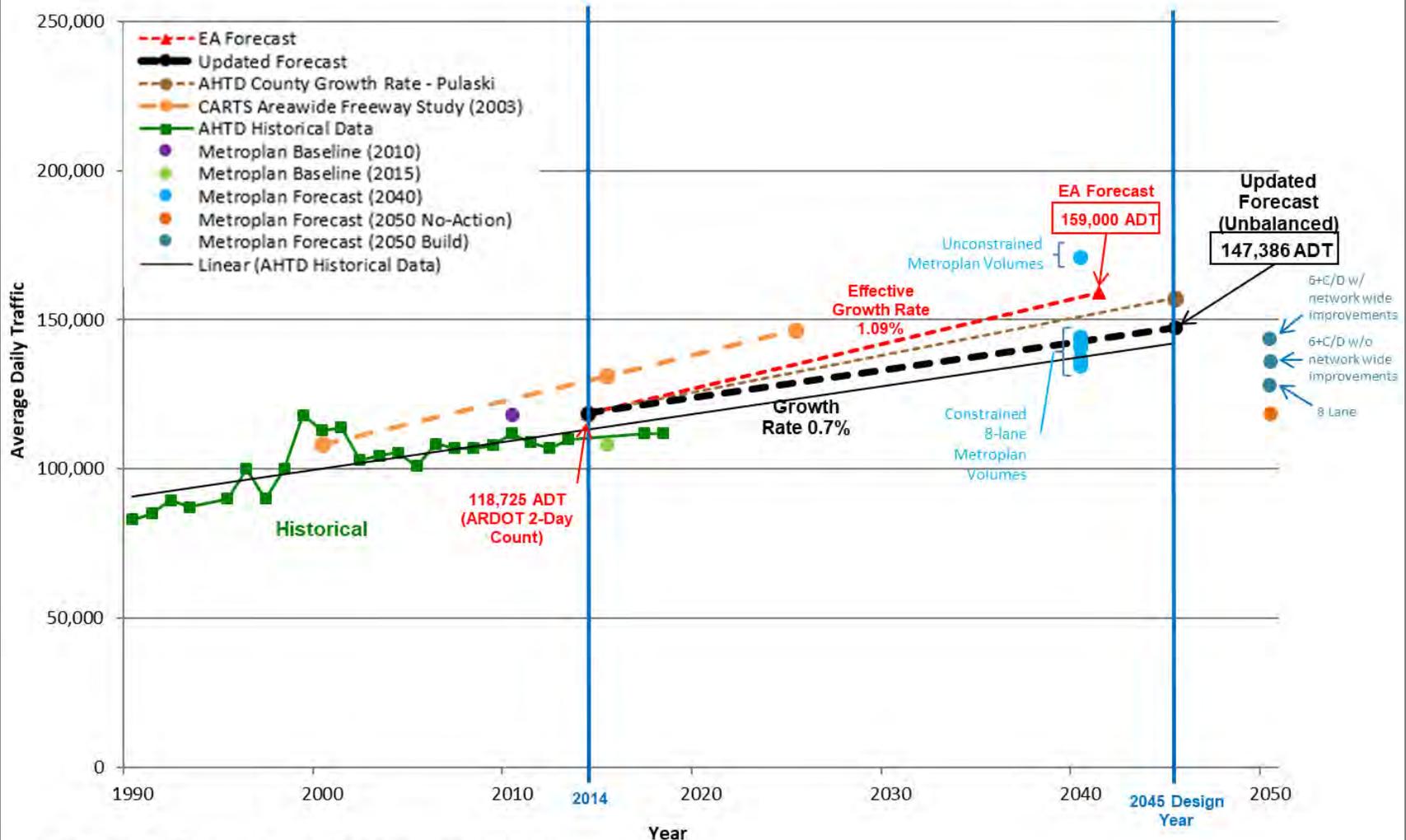


# Attachment A

## Forecast Graphs

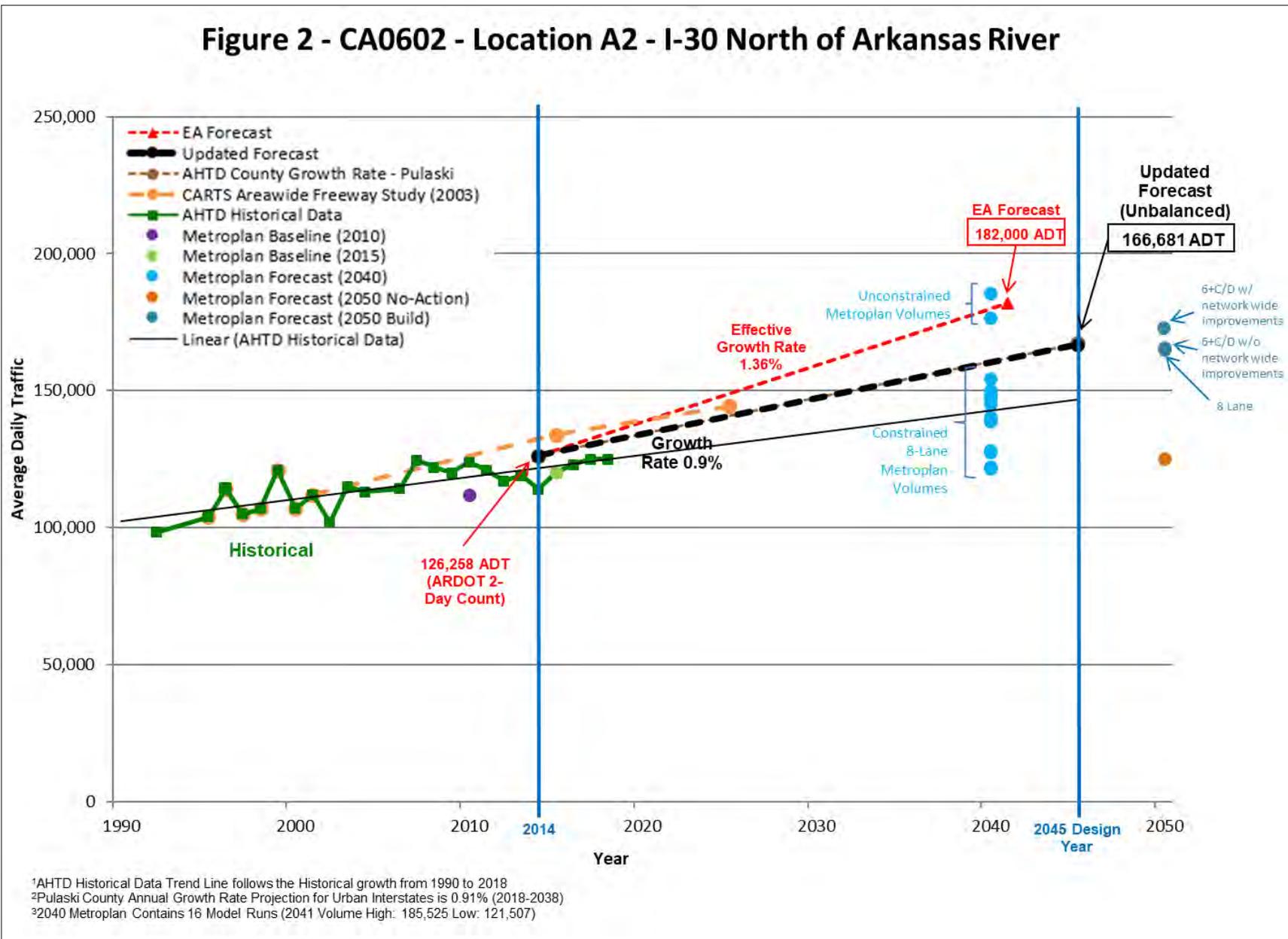
NOTE: Metroplan Forecast (2040) and Metroplan Forecast (2050) graph data is derived from Metroplan's 2040 CARTS Travel Demand Model and 2050 CARTS Travel Demand model, respectively. AHTD Historical Data represents annual counts from ARDOT annual average daily traffic estimates located on the ARDOT website.

**Figure 1 - CA0602 - Location A1 - I-40 West of US 67/US 167**

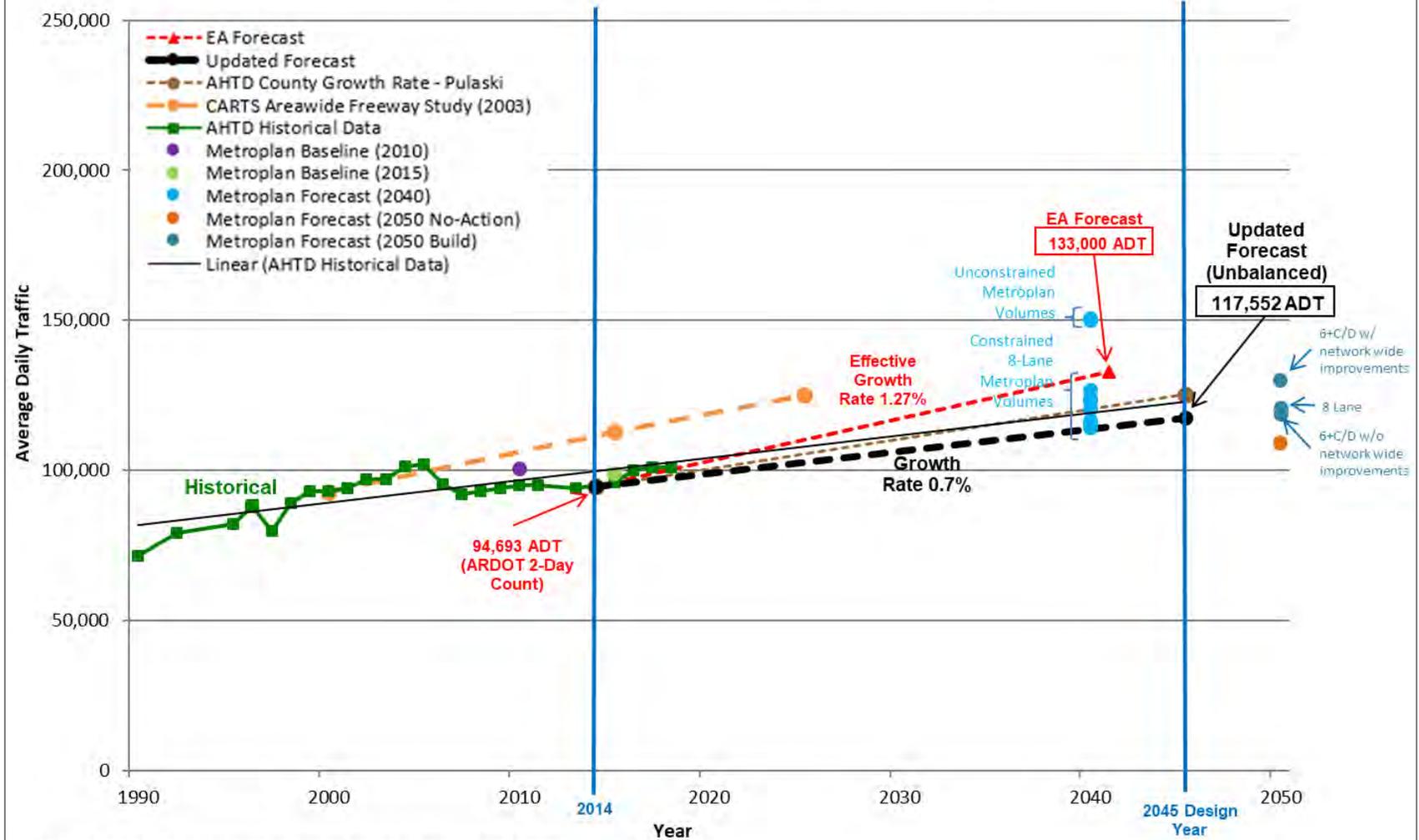


<sup>1</sup>AHTD Historical Data Trend Line follows the Historical growth from 1990 to 2018  
<sup>2</sup>Pulaski County Annual Growth Rate Projection for Urban Interstates is 0.91% (2018-2038)  
<sup>3</sup>2040 Metroplan Contains 16 Model Runs (2041 Volume High: 170,951 Low: 134,498)

**Figure 2 - CA0602 - Location A2 - I-30 North of Arkansas River**



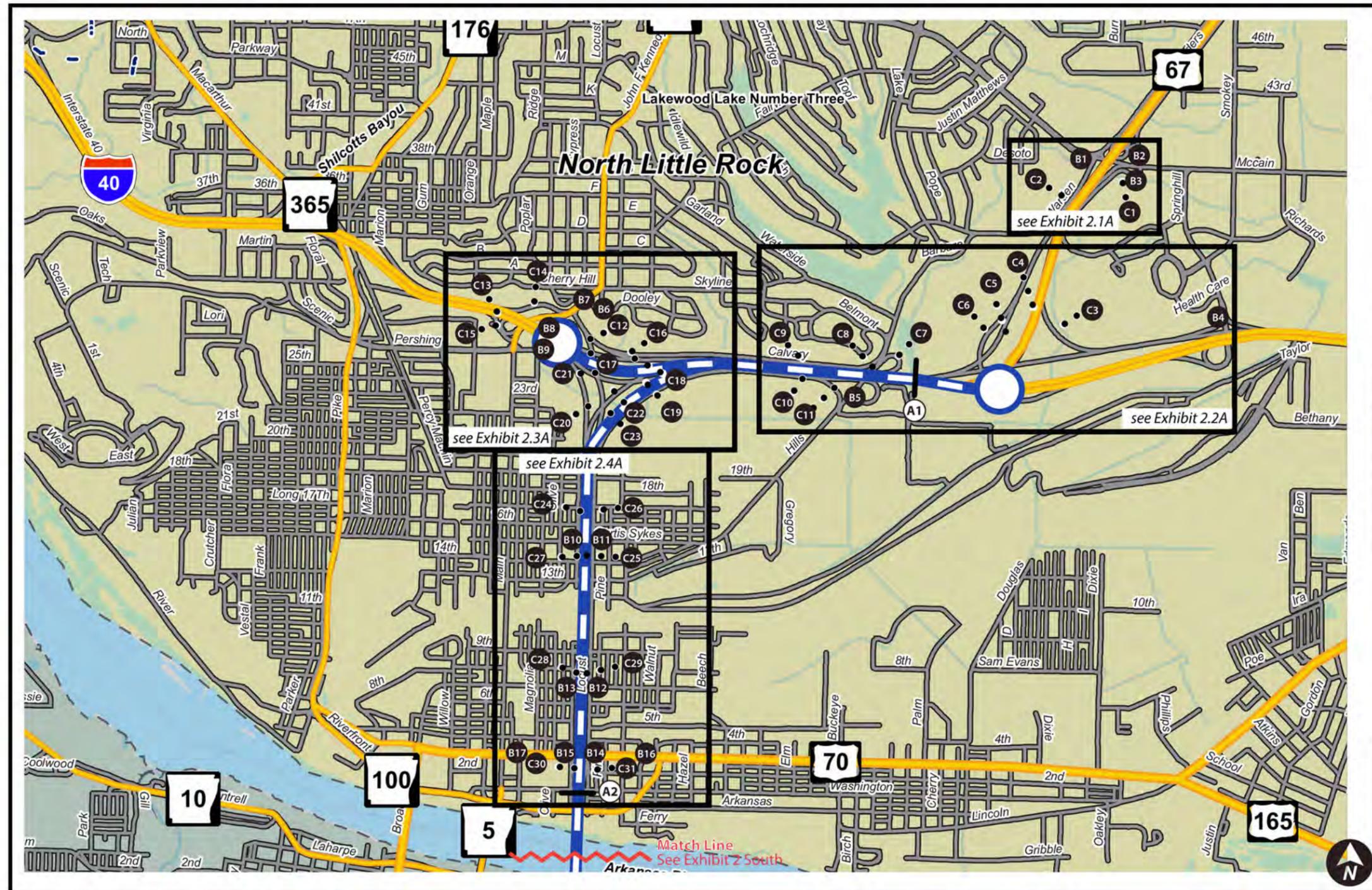
**Figure 3 - CA0602 - Location A3 - I-30 North of I-440**



<sup>1</sup>AHTD Historical Data Trend Line follows the Historical growth from 1990 to 2018  
<sup>2</sup>Pulaski County Annual Growth Rate Projection for Urban Interstates is 0.91% (2018-2038)  
<sup>3</sup>2040 Metroplan Contains 16 Model Runs (2041 Volume High: 150,845 Low: 114,267)

# **Attachment B**

## **I-30 EA Re-Evaluation Traffic Volumes**



**EXHIBIT  
2.0  
NORTH**

**CA0602 - I-30/I-40  
Widening and Rehabilitation  
Interstate 530 to Highway 67  
2045 Future No Action Traffic Volumes**

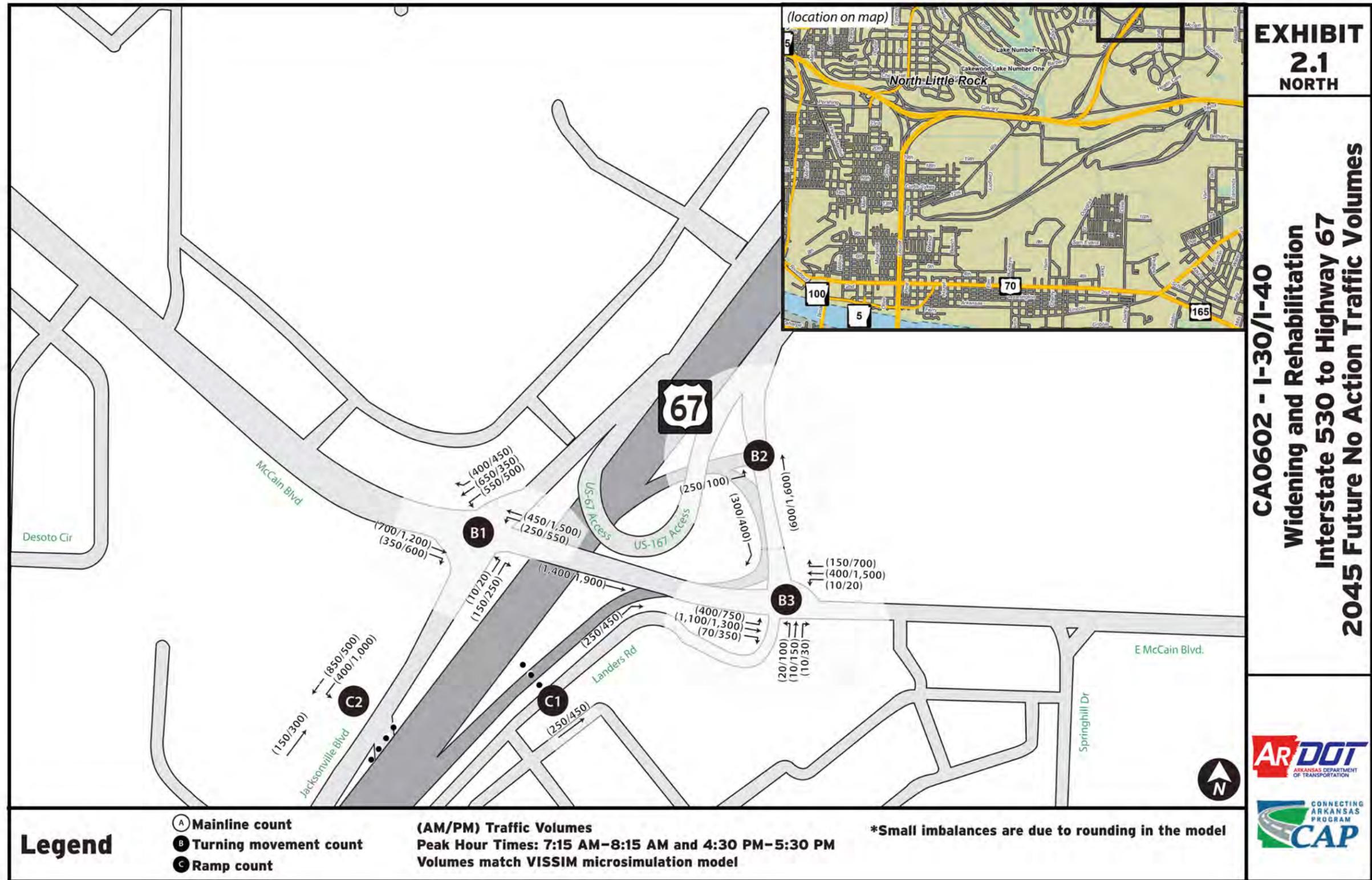


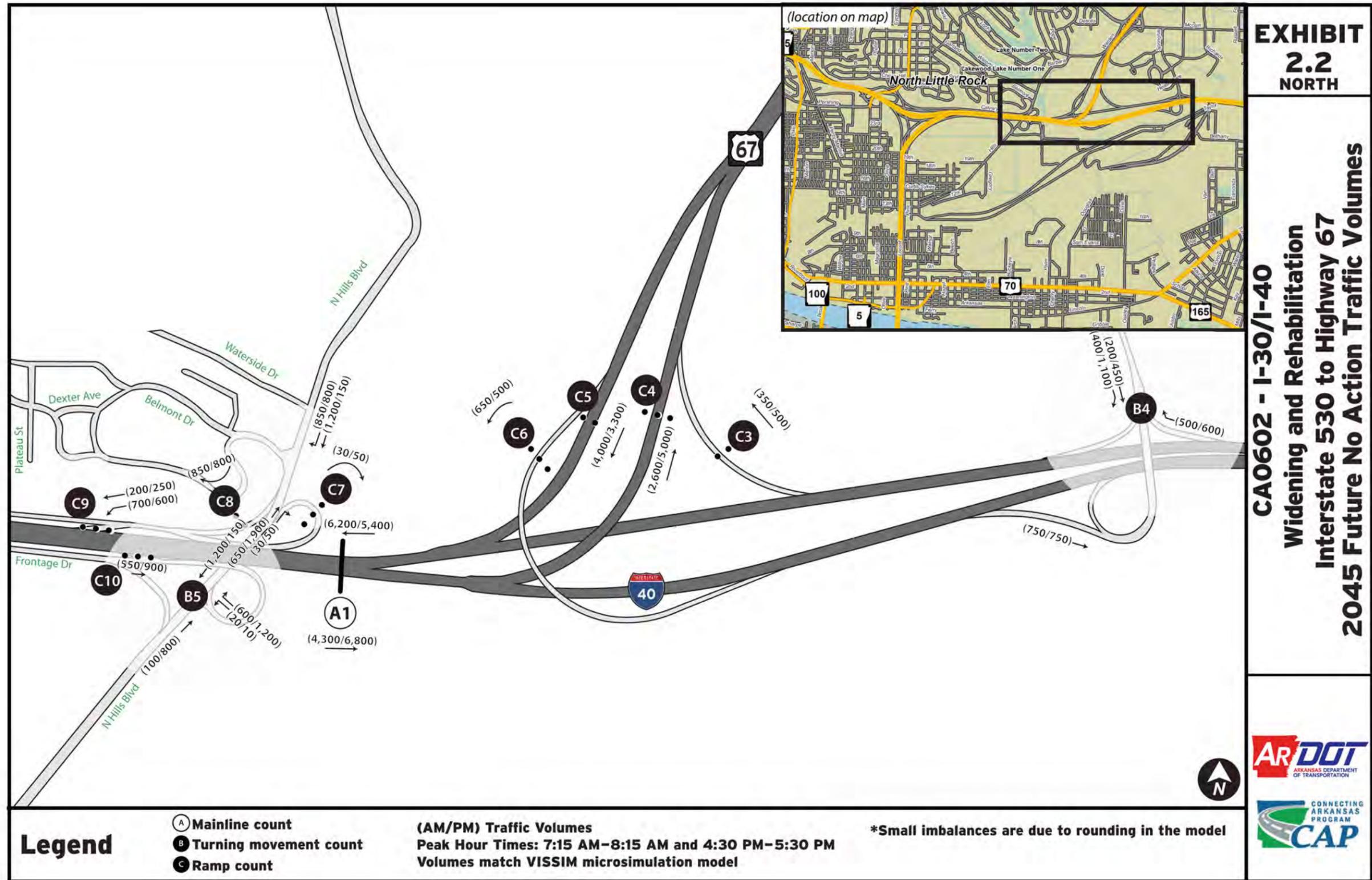

**Legend**

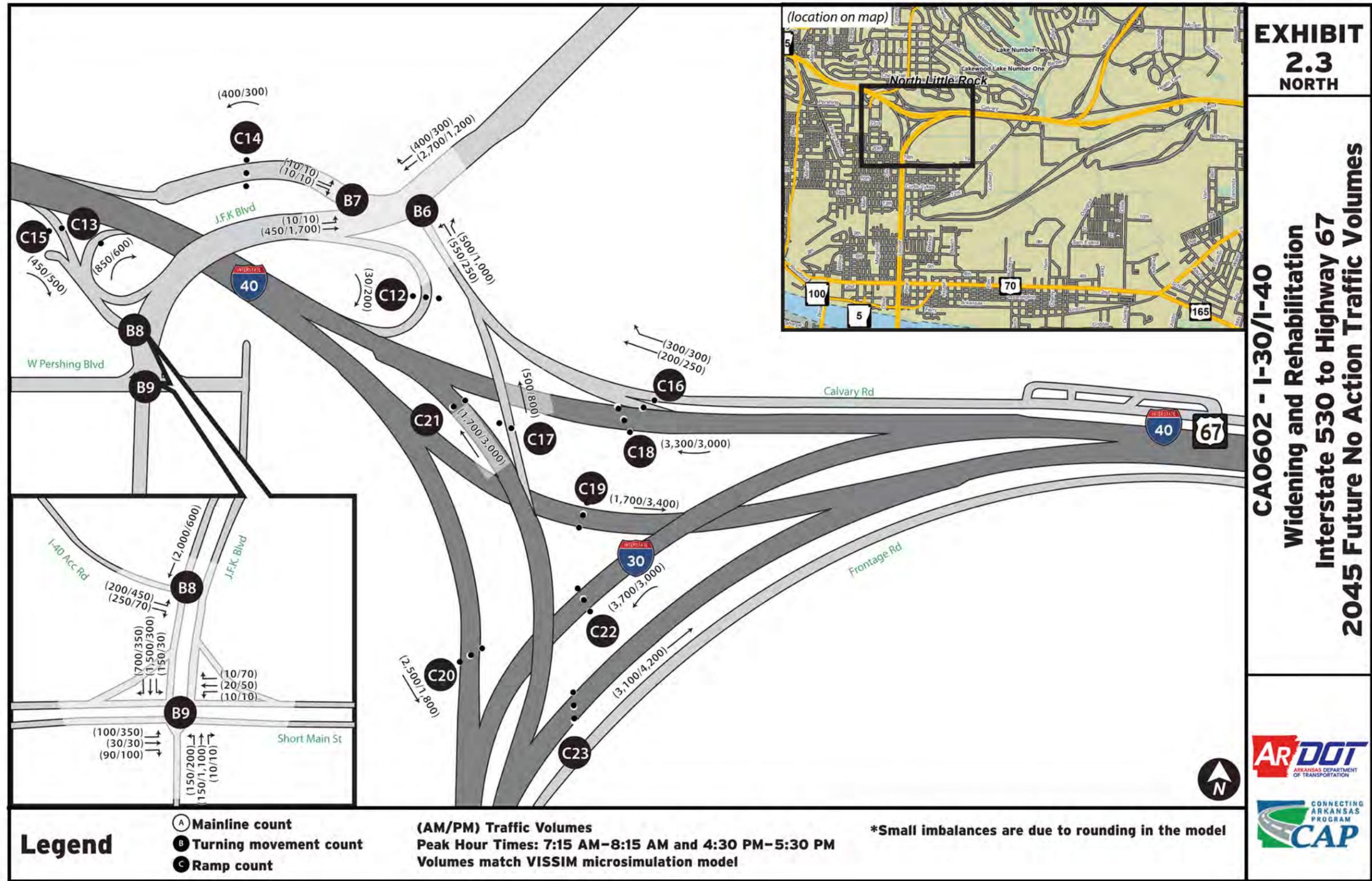
- A Mainline count
- B Turning movement count
- C Ramp count

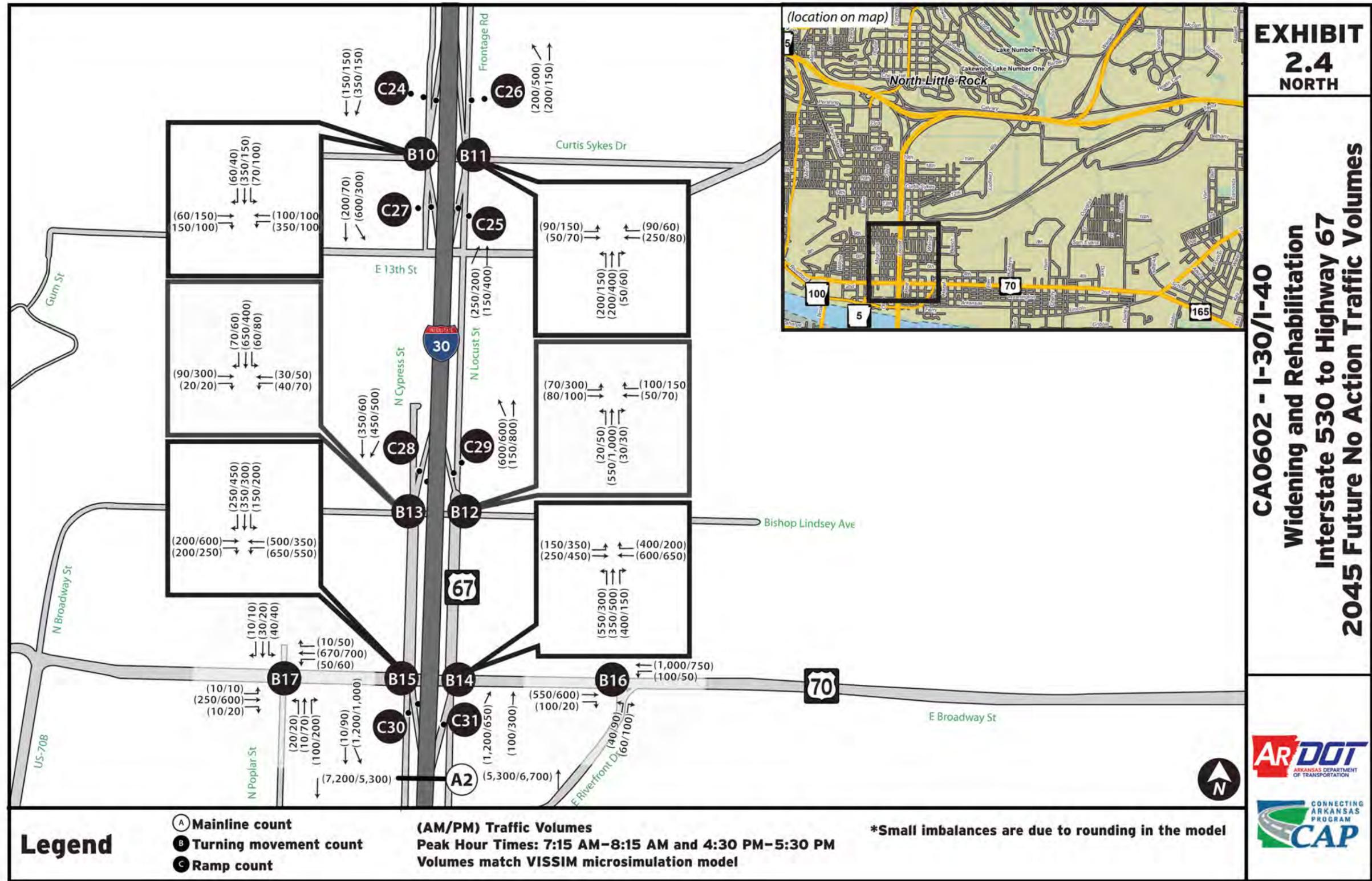


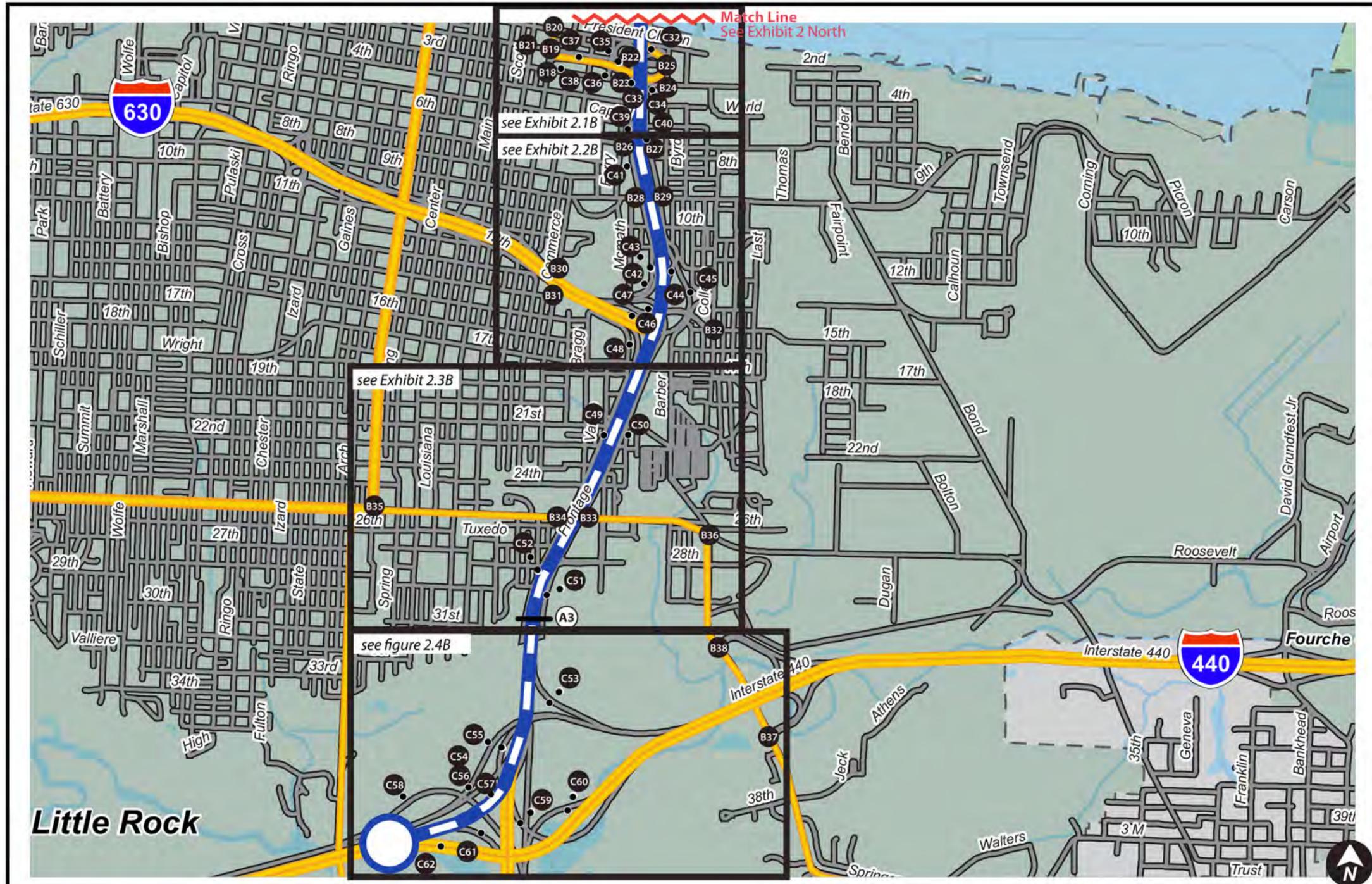
Proposed Work











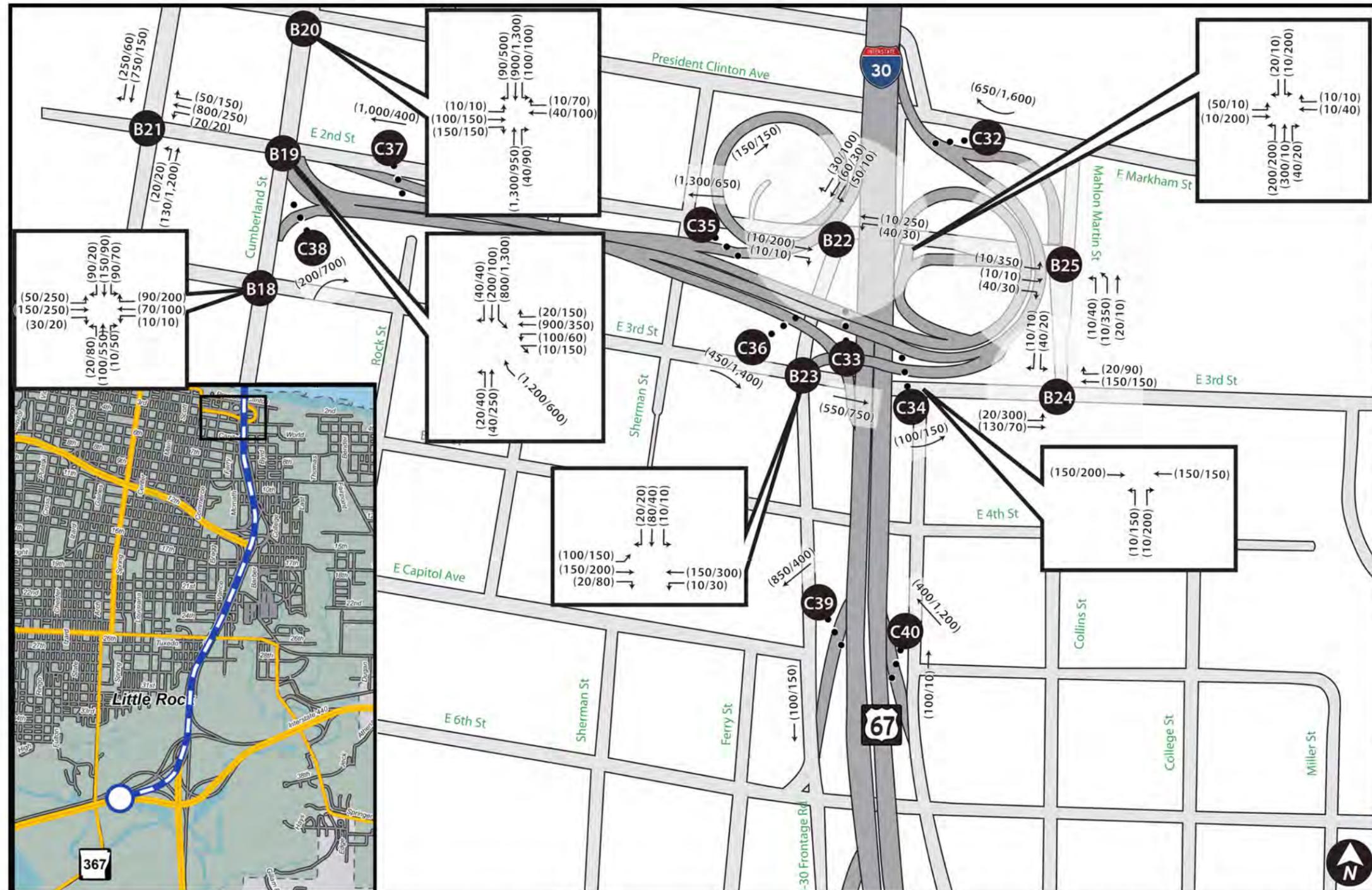
**EXHIBIT  
2.0  
SOUTH**

**CA0602 South - I-30/I-40  
Widening and Rehabilitation  
Interstate 530 to Highway 67  
2045 Future No Action Traffic Volumes**

**Legend**

- Ⓐ Mainline count
- Ⓑ Turning movement count
- Ⓒ Ramp count





**EXHIBIT  
2.1  
SOUTH**

**CA0602 South - I-30/I-40  
Widening and Rehabilitation  
Interstate 530 to Highway 67  
2045 Future No Action Traffic Volumes**

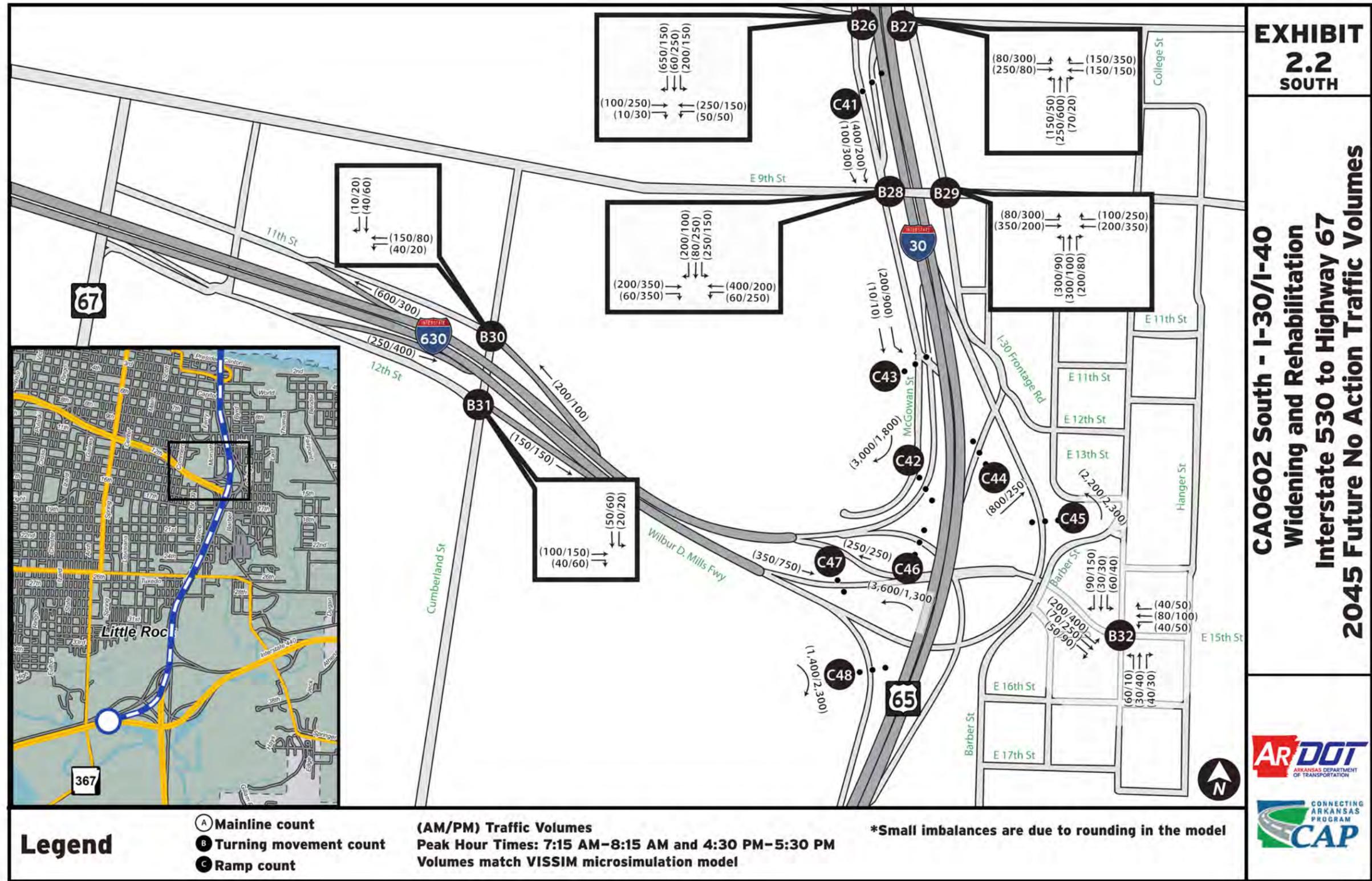
**Legend**

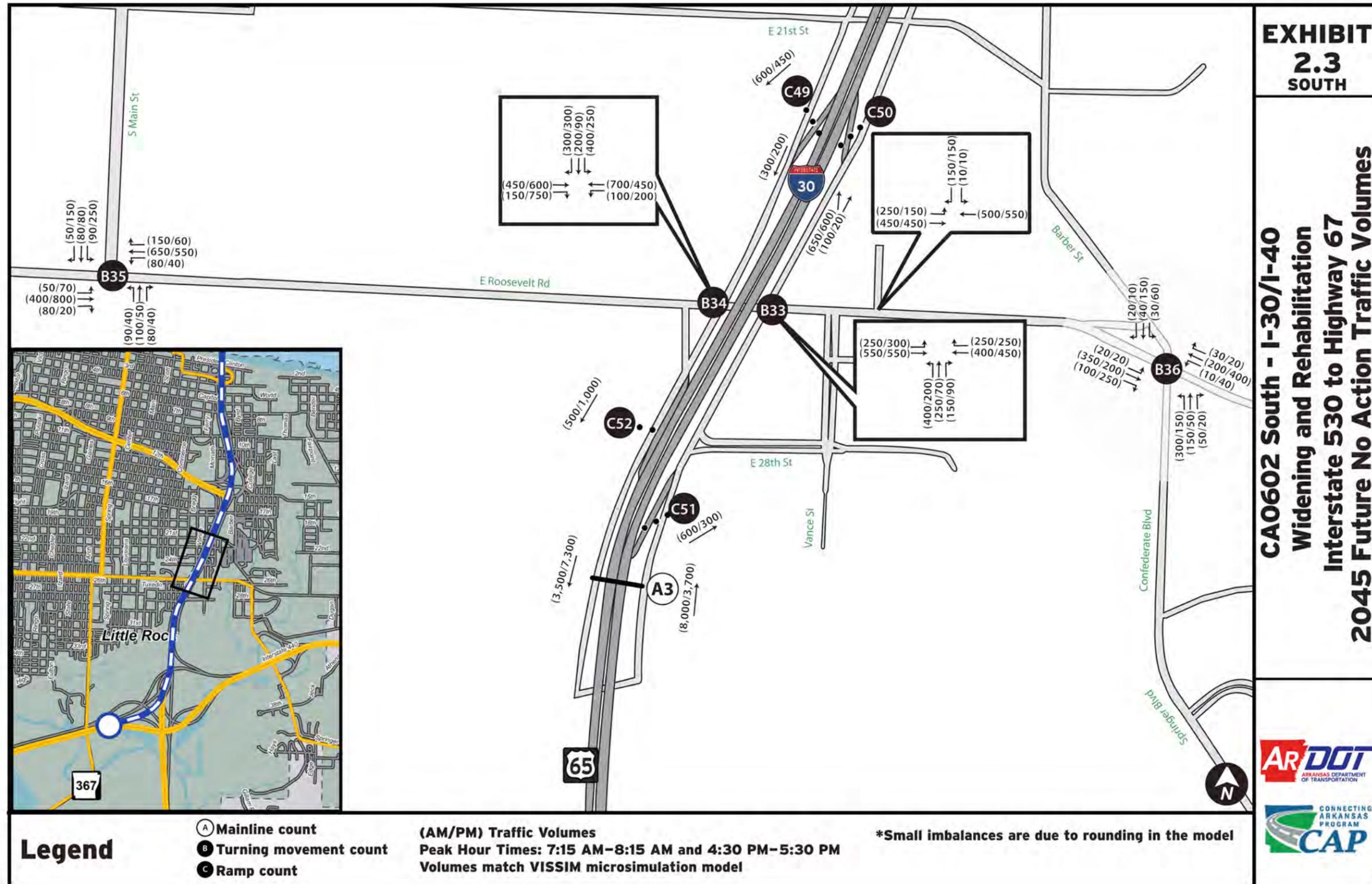
- A** Mainline count
- B** Turning movement count
- C** Ramp count

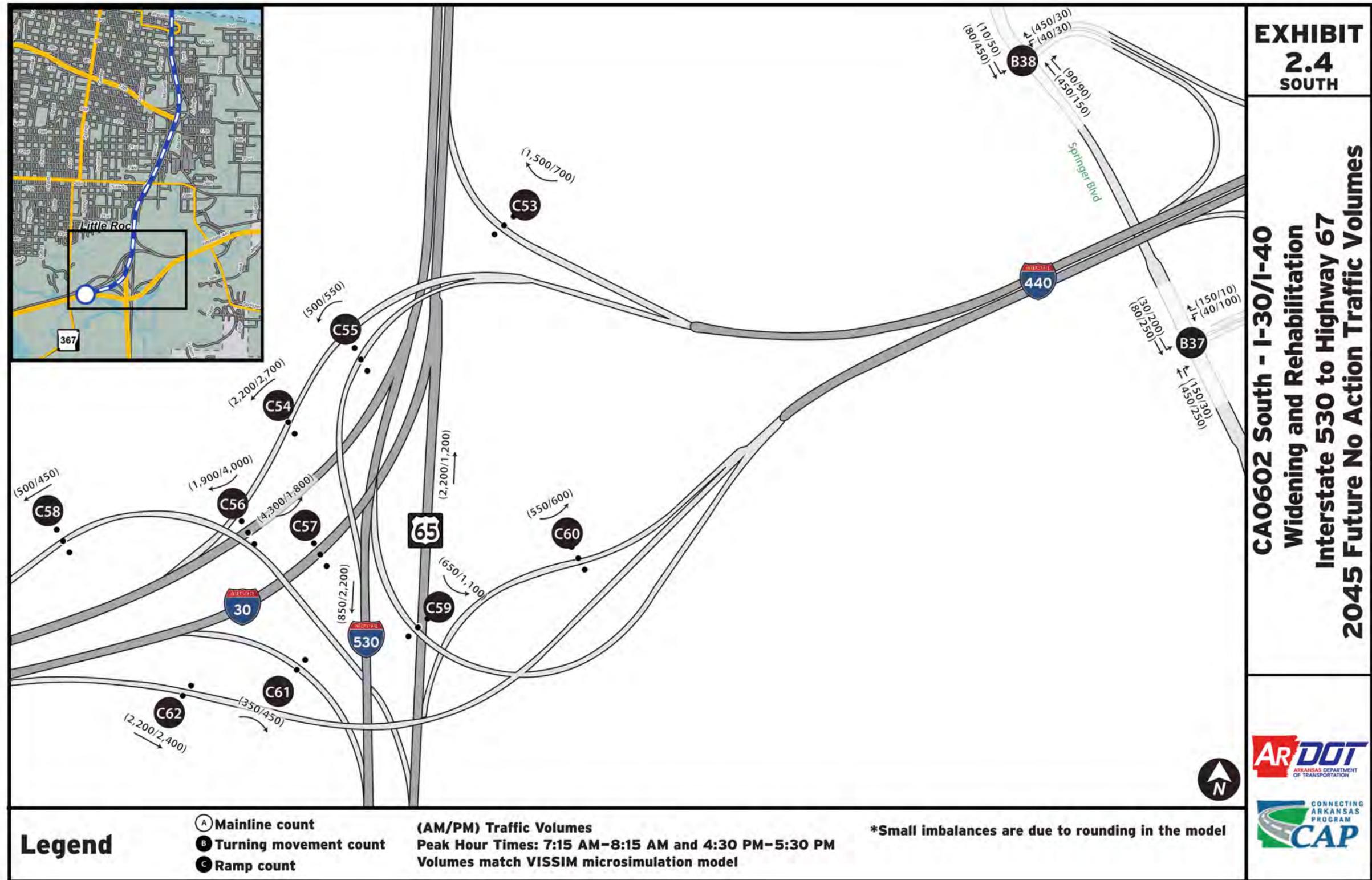
**(AM/PM) Traffic Volumes**  
 Peak Hour Times: 7:15 AM-8:15 AM and 4:30 PM-5:30 PM  
 Volumes match VISSIM microsimulation model

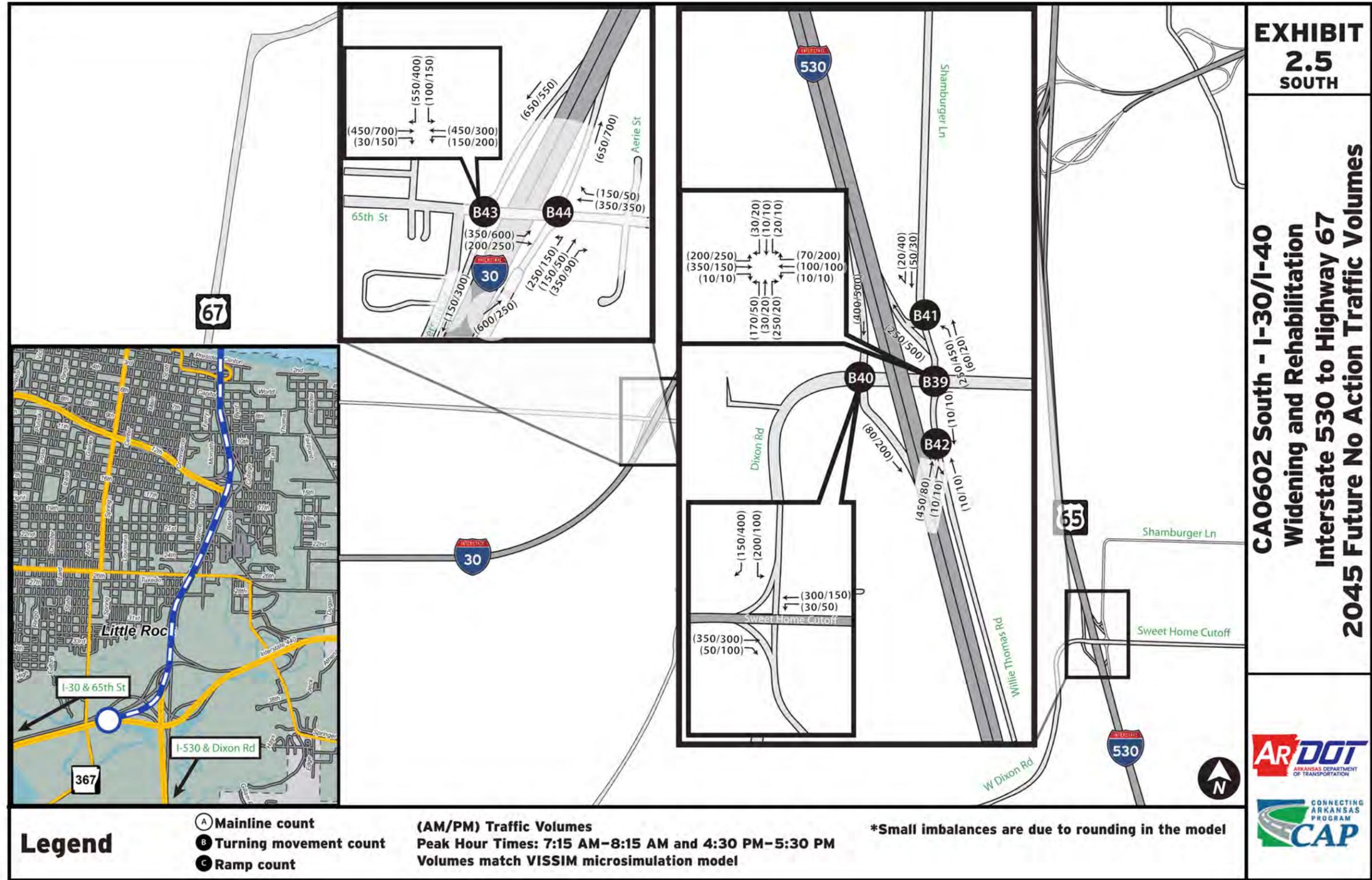
\*Small imbalances are due to rounding in the model

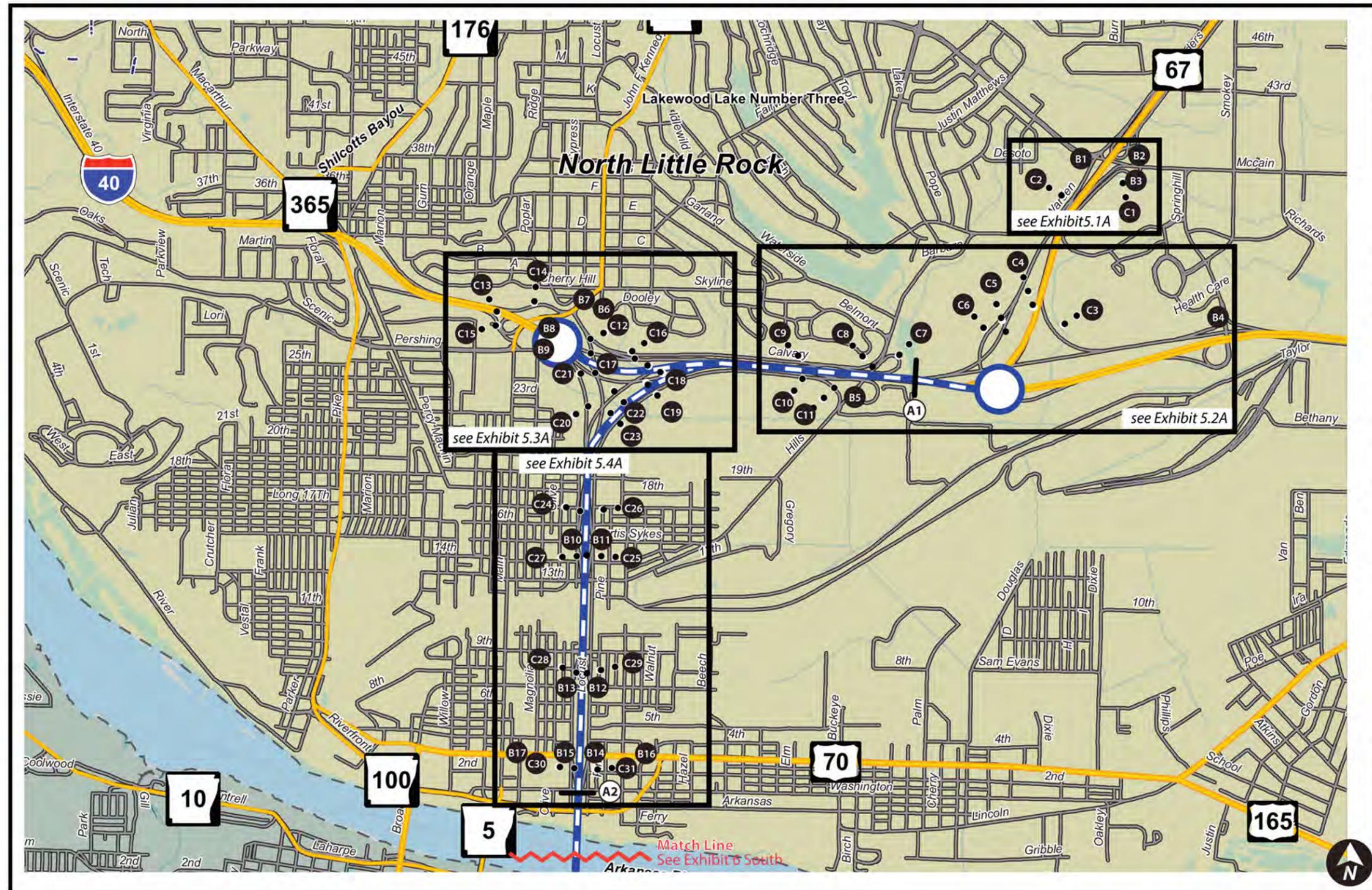












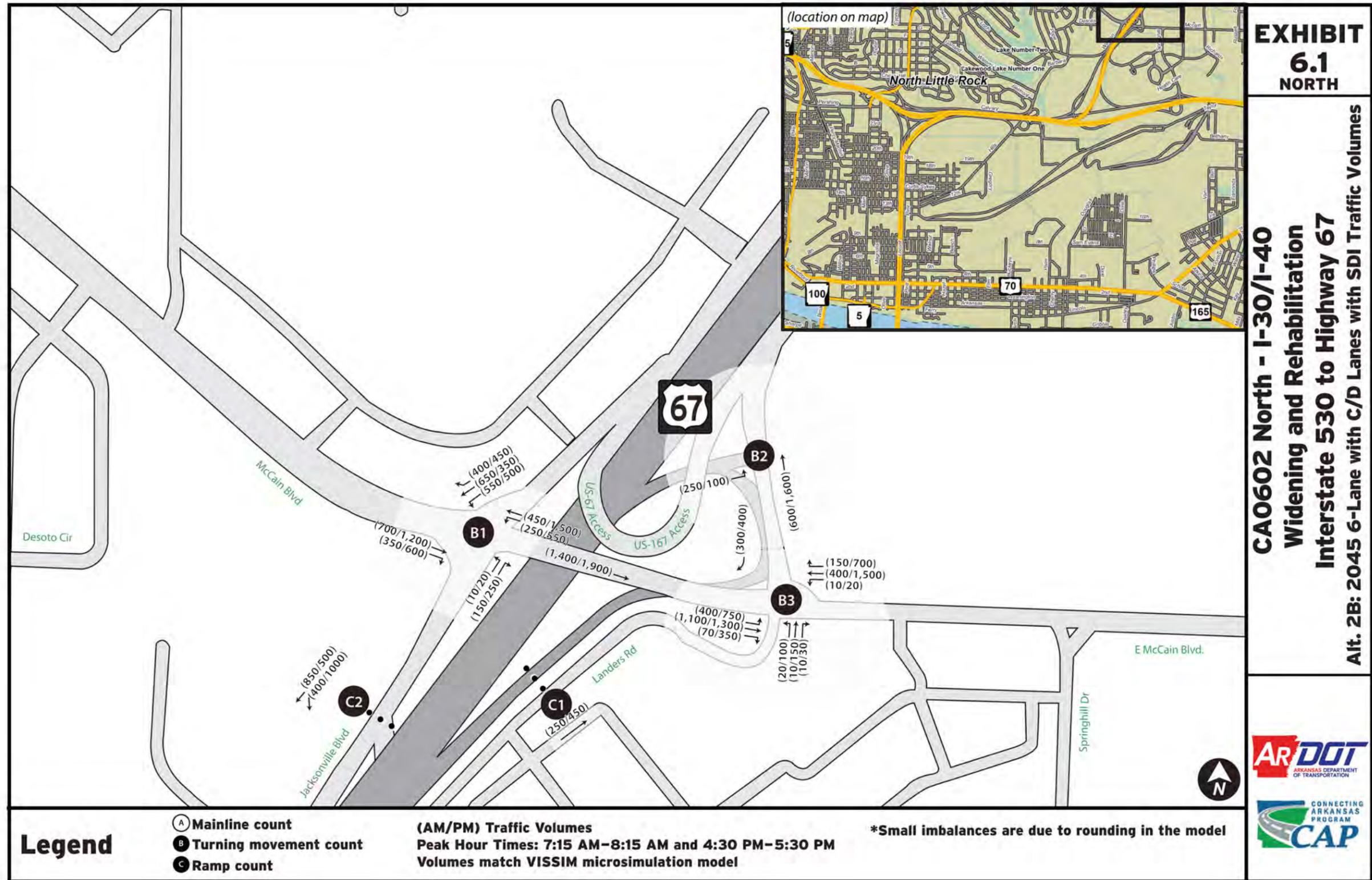
**EXHIBIT  
6.0  
NORTH**

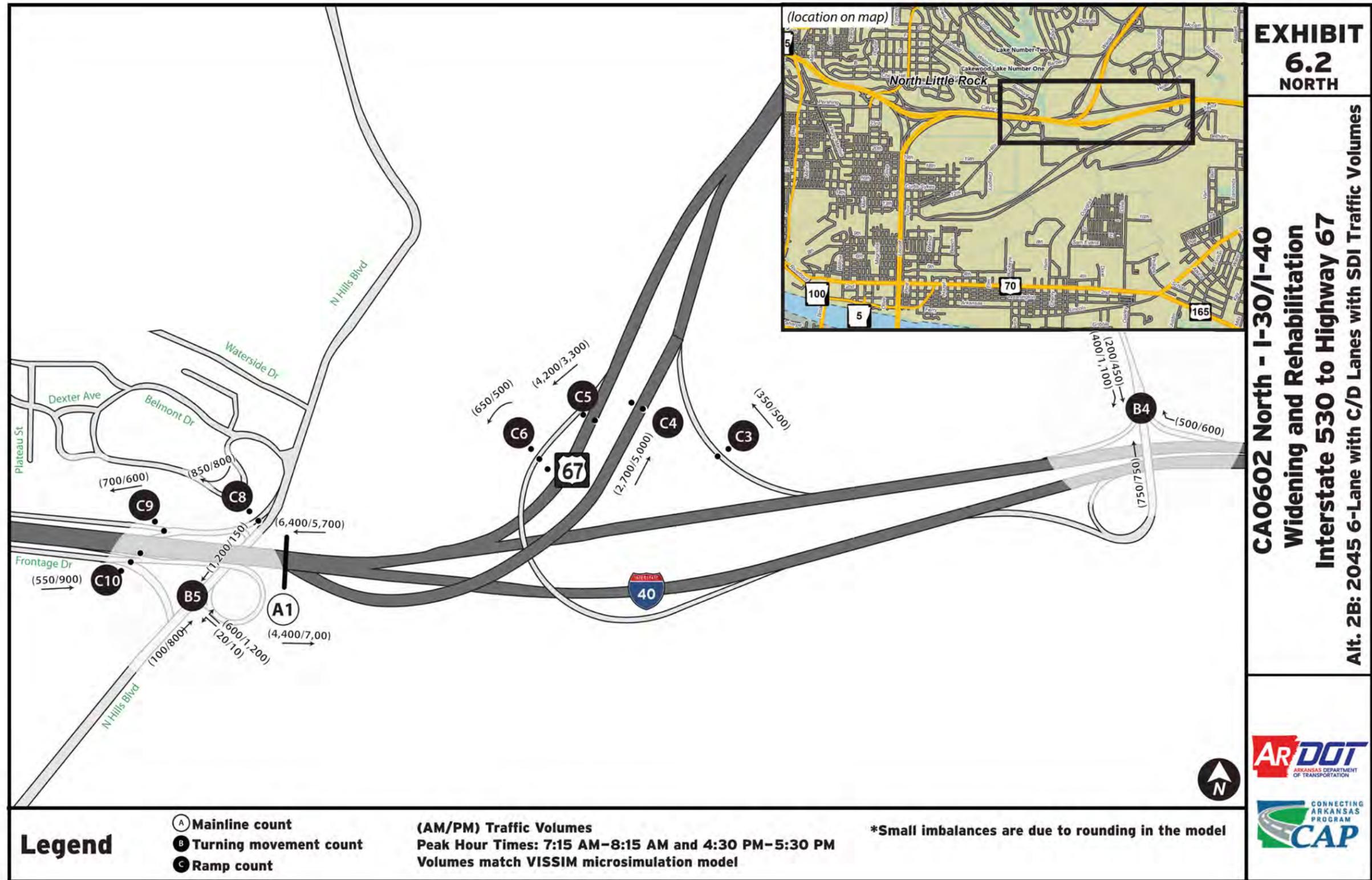
**CA0602 North - I-30/I-40  
Widening and Rehabilitation  
Interstate 530 to Highway 67  
Alt. 2B: 2045 6-Lane with C/D Lanes with SDI Traffic Volumes**

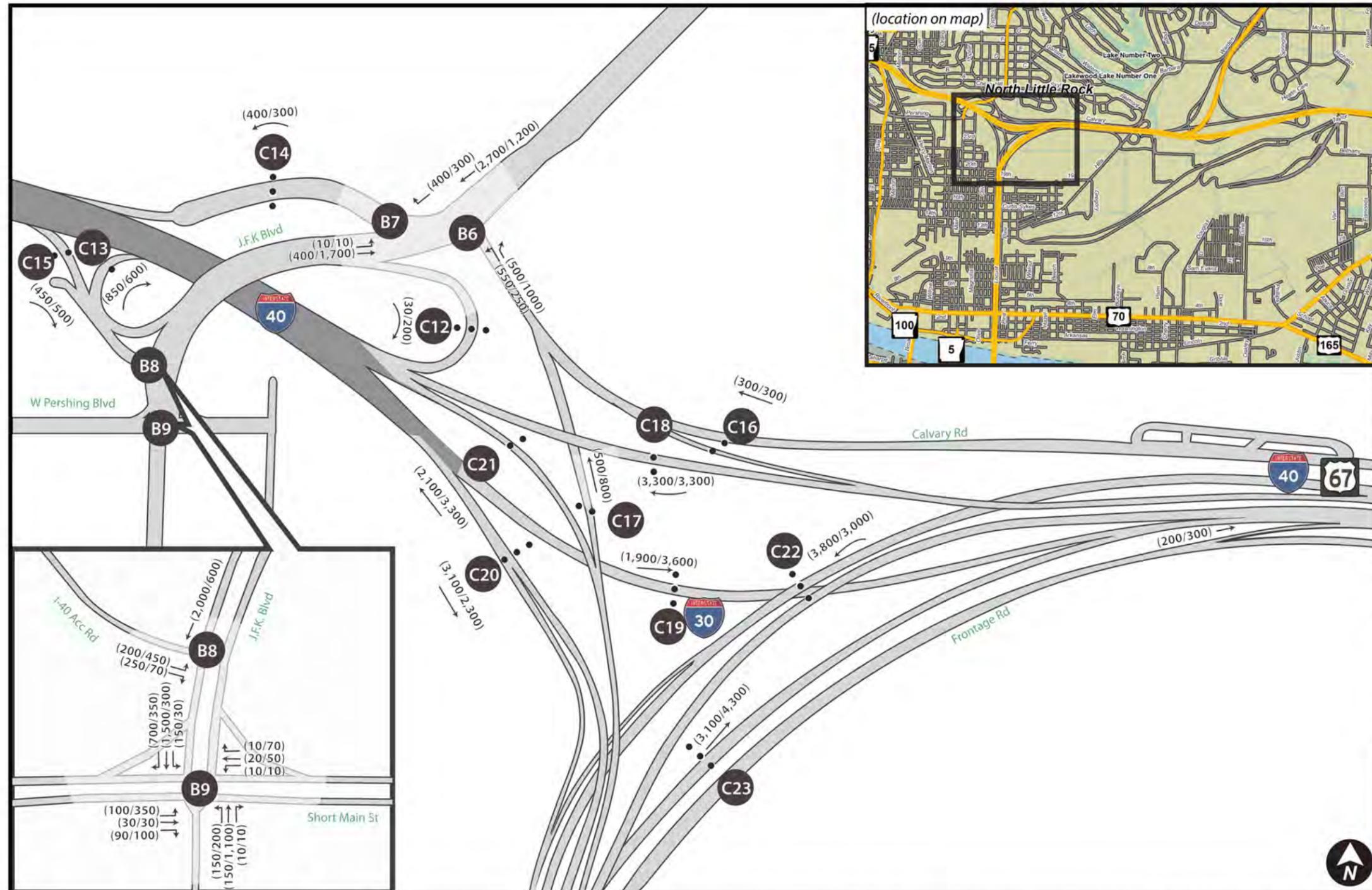
**Legend**

- (A)** Mainline count
- (B)** Turning movement count
- (C)** Ramp count









**EXHIBIT  
6.3  
NORTH**

**CA0602 North - I-30/I-40  
Widening and Rehabilitation  
Interstate 530 to Highway 67  
Alt. 2B: 2045 6-Lane with C/D Lanes with SDI Traffic Volumes**

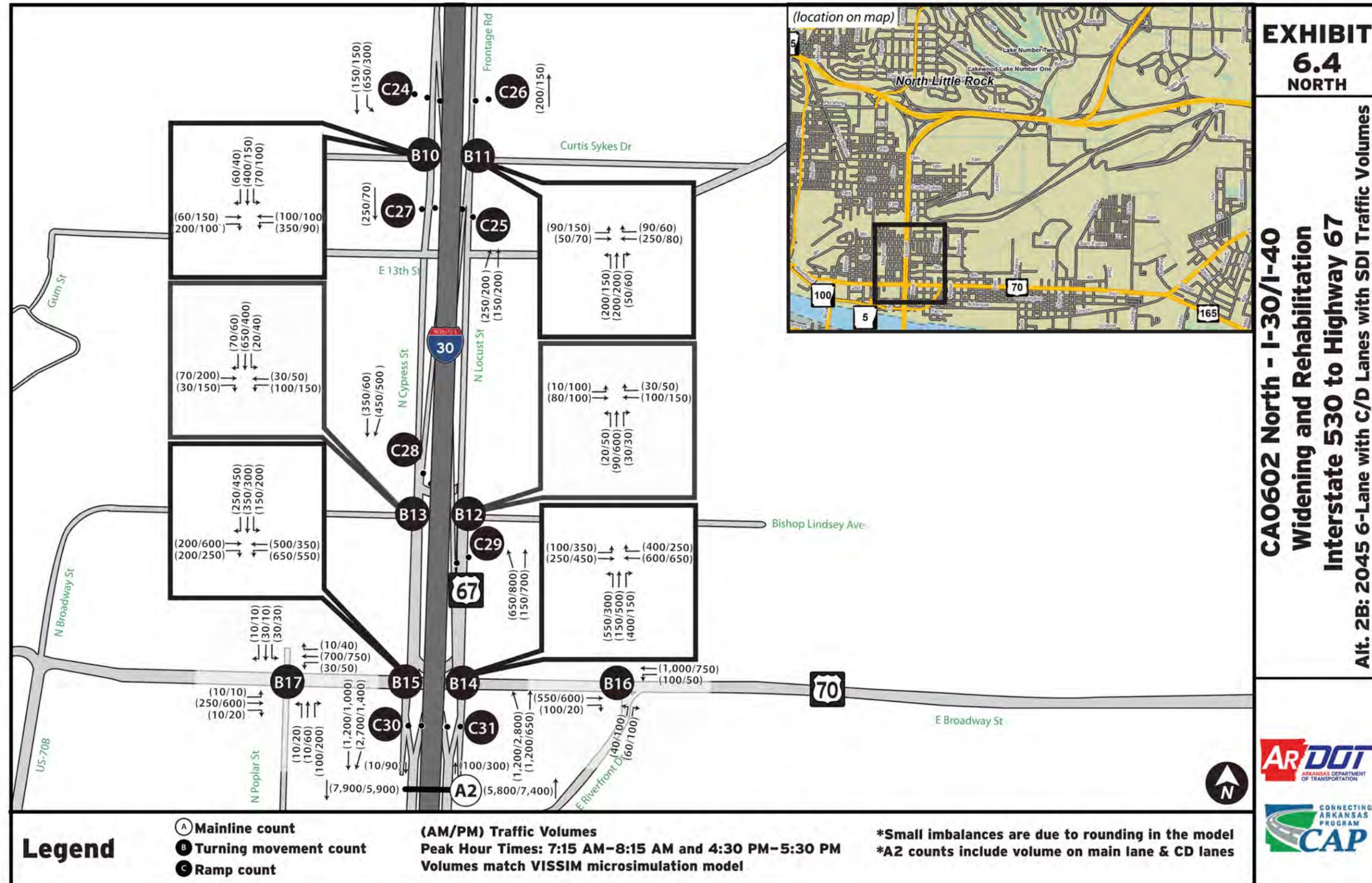
**Legend**

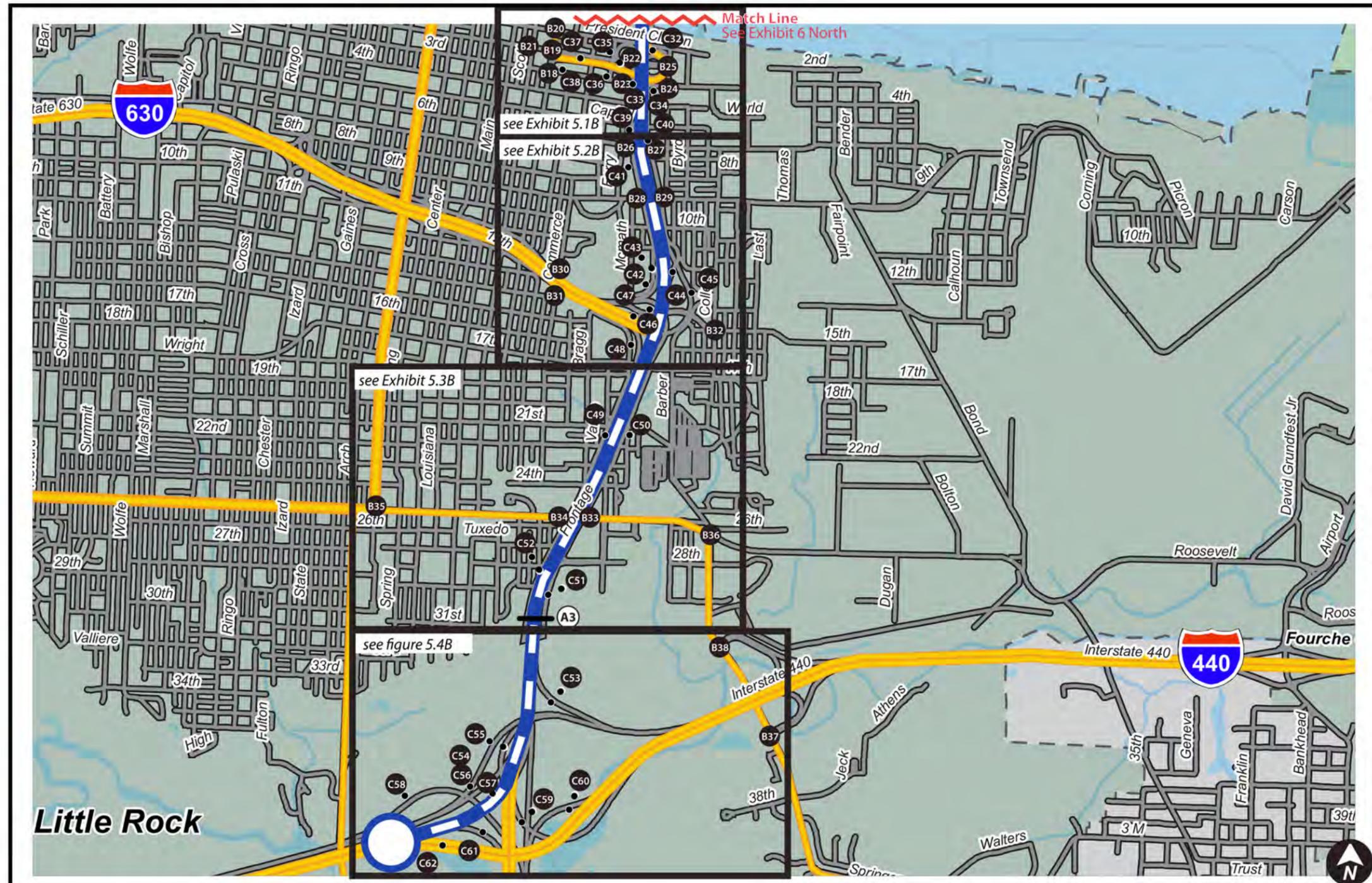
- (A) Mainline count
- (B) Turning movement count
- (C) Ramp count

**(AM/PM) Traffic Volumes**  
 Peak Hour Times: 7:15 AM–8:15 AM and 4:30 PM–5:30 PM  
 Volumes match VISSIM microsimulation model

\*Small imbalances are due to rounding in the model







**EXHIBIT  
6.0  
SOUTH**

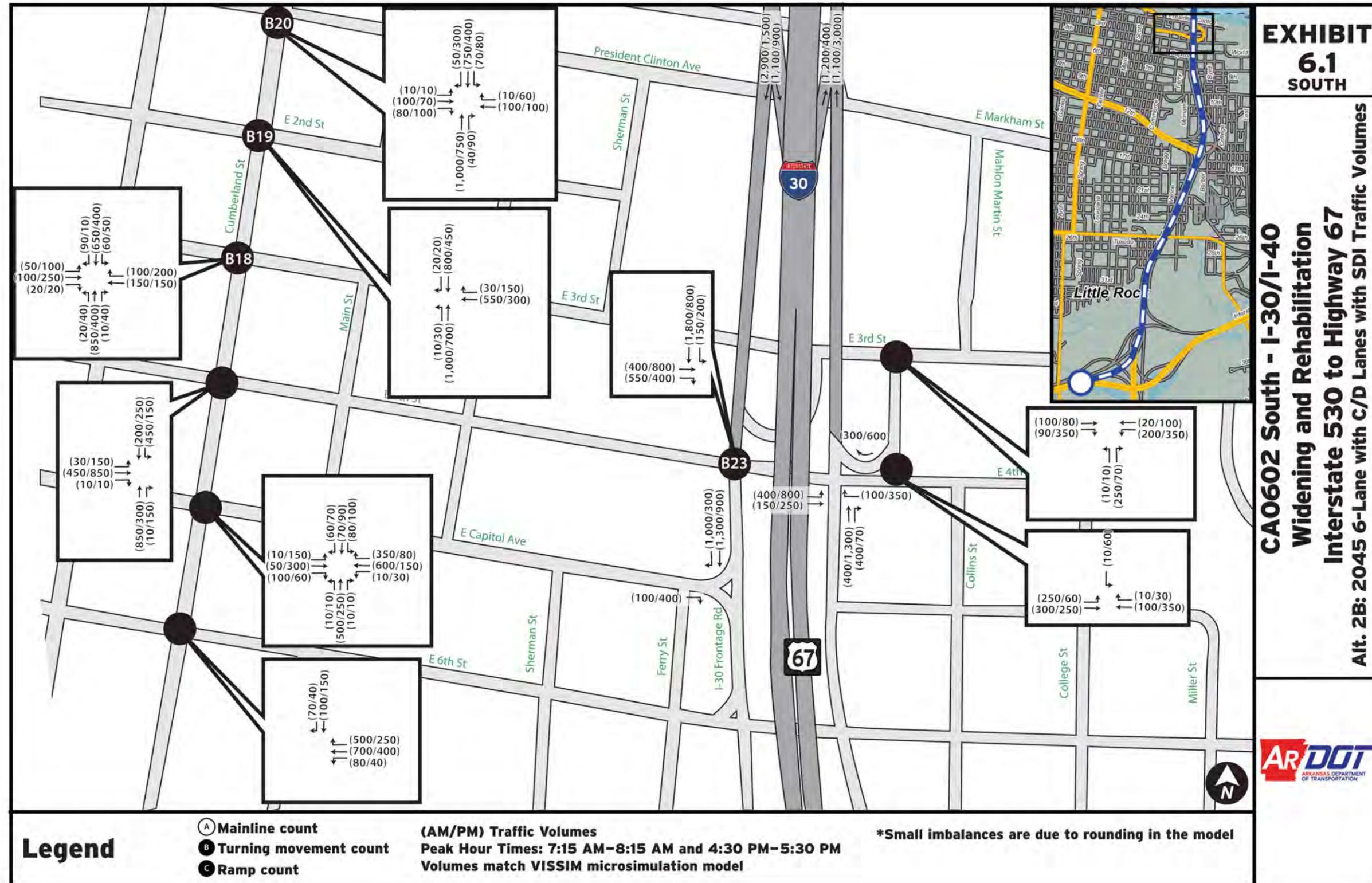
**CA0602 South - I-30/I-40  
Widening and Rehabilitation  
Interstate 530 to Highway 67  
Alt. 2B: 2045 6-Lane with C/D Lanes with SDI Traffic Volumes**

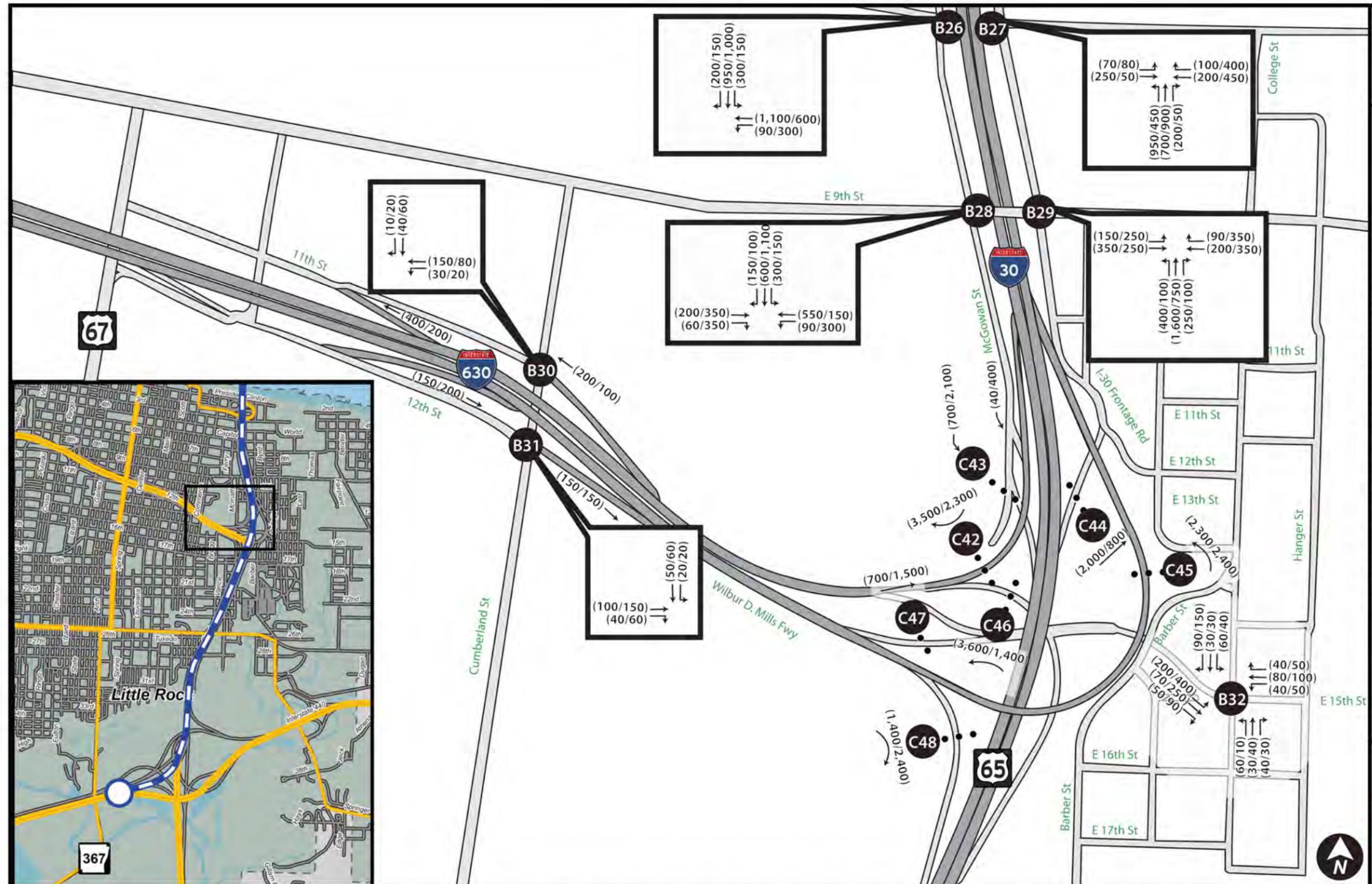
**Legend**

- (A) Mainline count
- (B) Turning movement count
- (C) Ramp count

○ ■ ○ Proposed Work







**EXHIBIT  
6.2  
SOUTH**

**CA0602 South - I-30/I-40  
Widening and Rehabilitation  
Interstate 530 to Highway 67  
Alt. 2B: 2045 6-Lane with C/D Lanes with SDI Traffic Volumes**

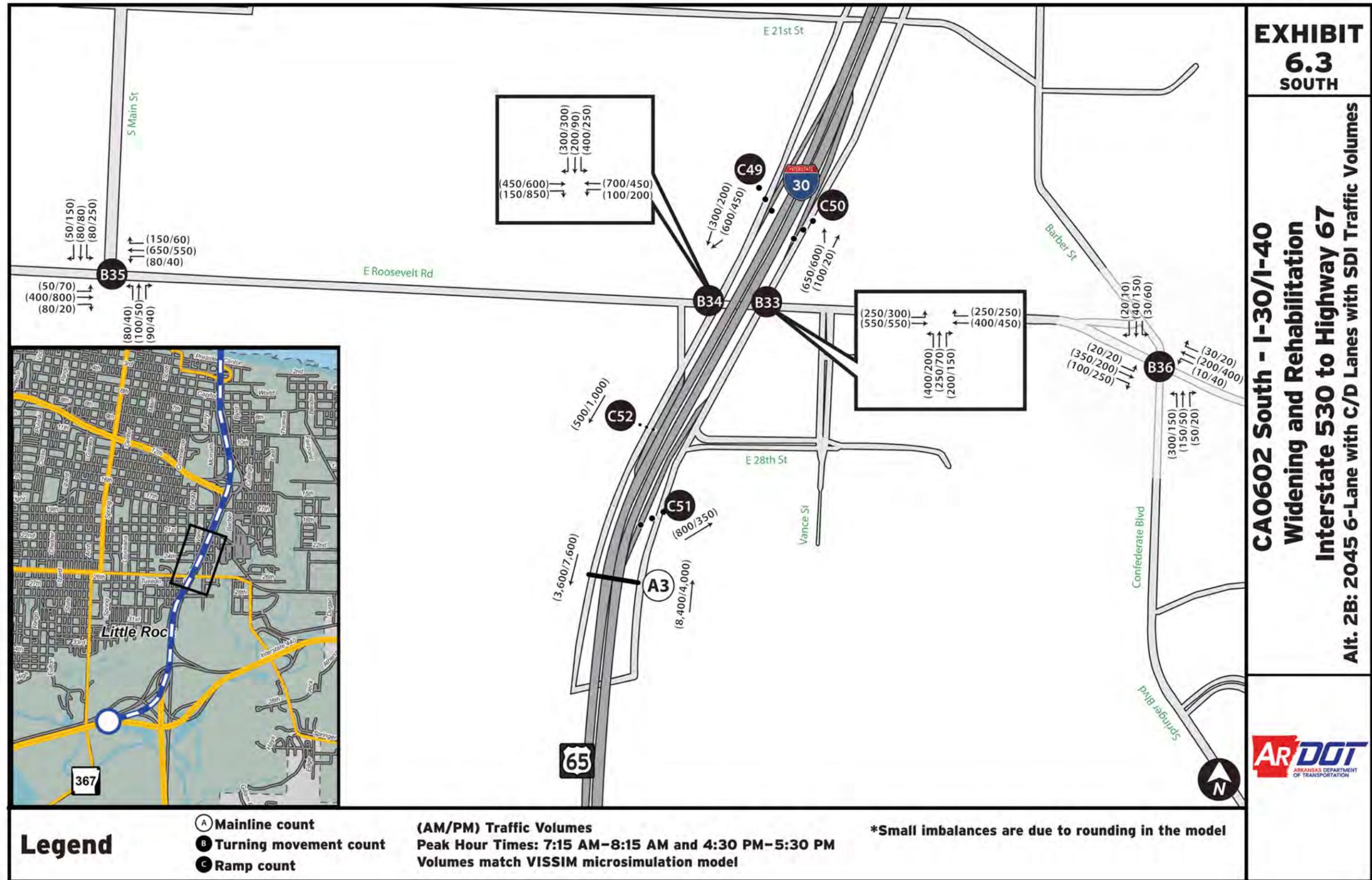


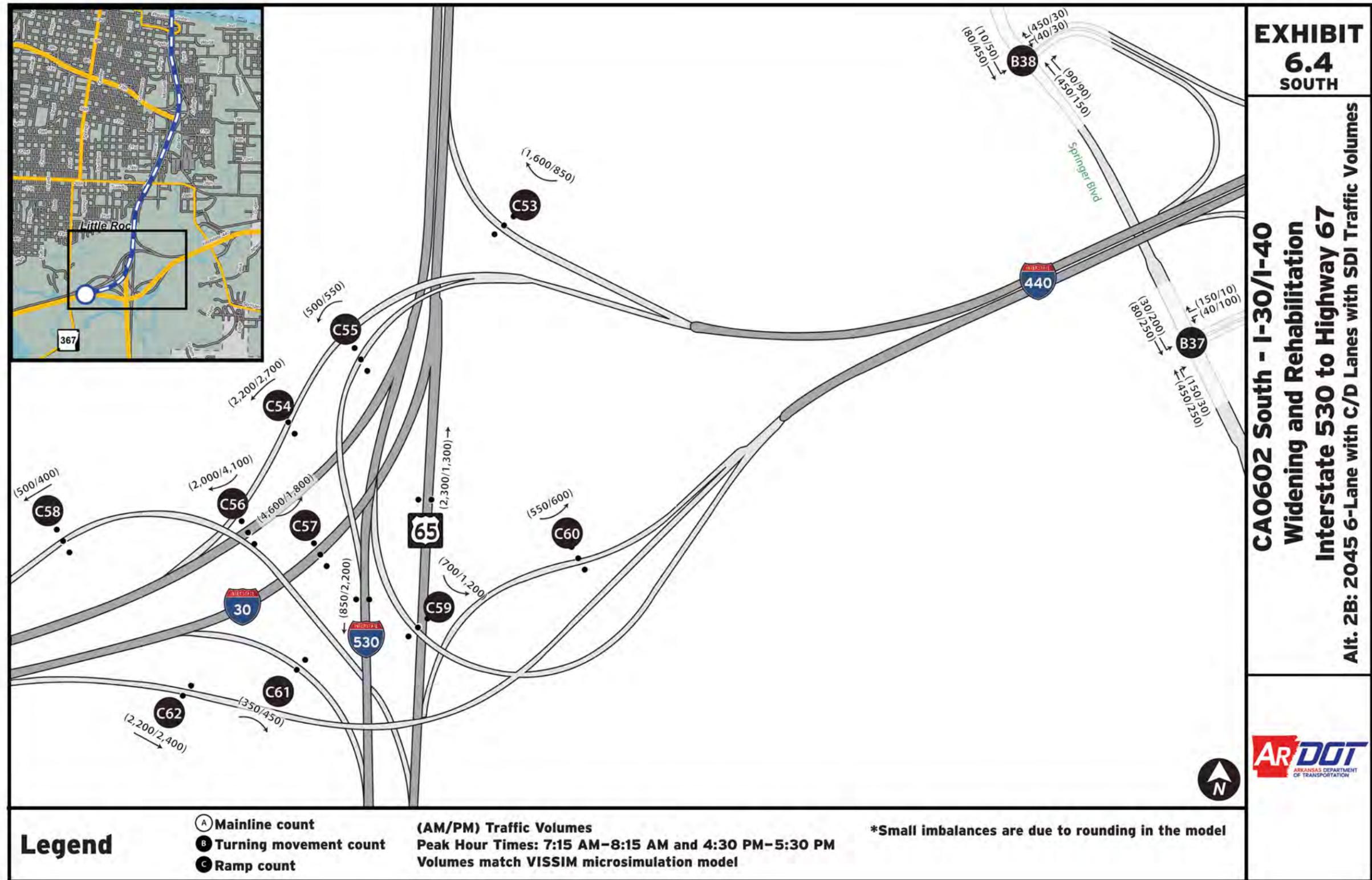
**Legend**

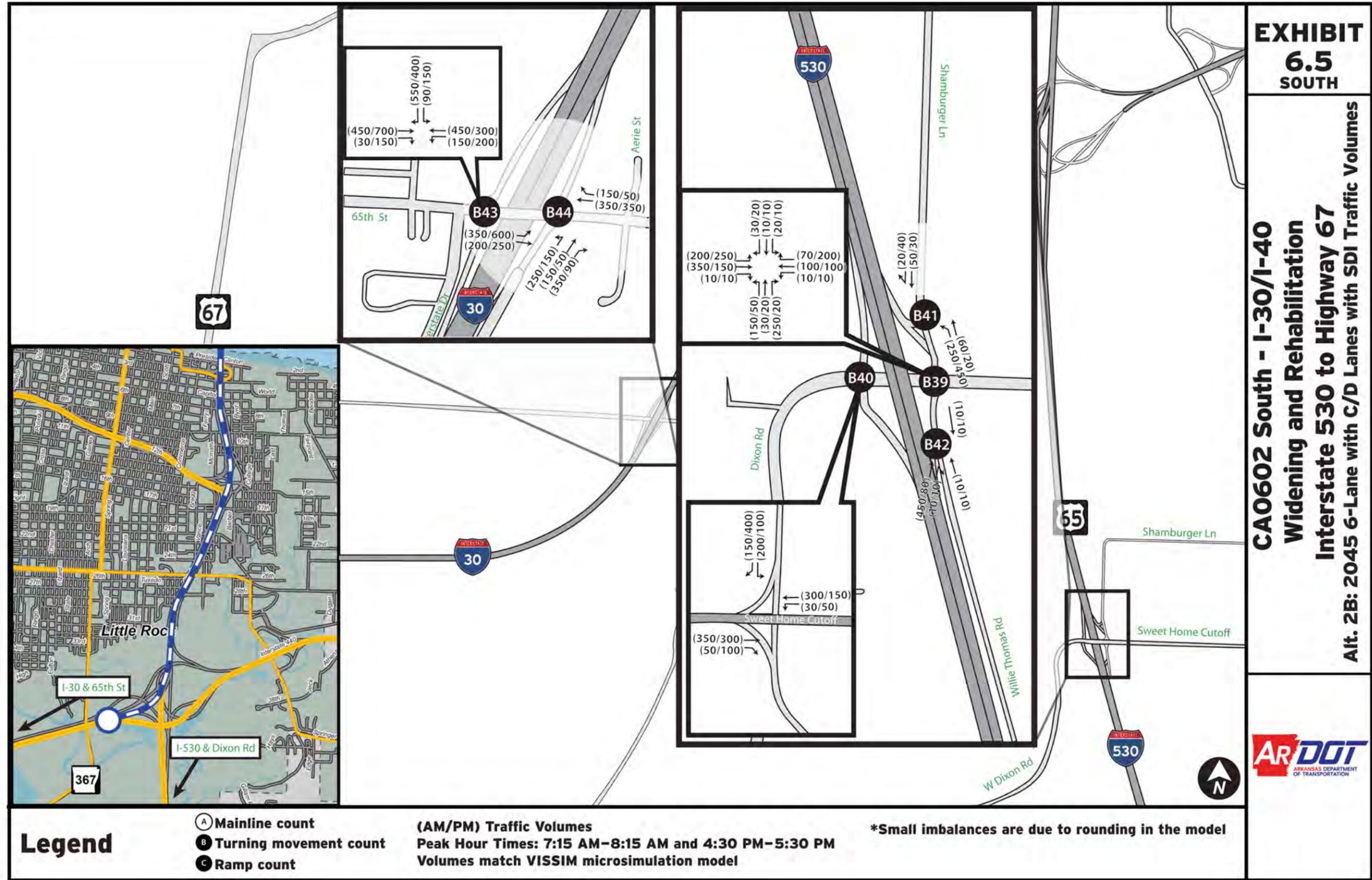
- A** Mainline count
- B** Turning movement count
- C** Ramp count

**(AM/PM) Traffic Volumes**  
 Peak Hour Times: 7:15 AM–8:15 AM and 4:30 PM–5:30 PM  
 Volumes match VISSIM microsimulation model

**\*Small imbalances are due to rounding in the model**







## Appendix B: IJR Addendum 2



Re-Evaluation  
Interstate Justification Report  
Addendum 2  
F.A.P. No. NHPP-030-22(68)  
ARDOT Job NO. 061612

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I-530 – Hwy. 67 (Widening & Reconst.)  
(I-30 & I-40) (F) P.E.  
Pulaski County, Arkansas  
May 2020





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## APPENDICES

- Appendix A - 30 Crossing Re-Evaluation Traffic Analysis
- Appendix B - Conceptual Signing Plan
- Appendix C - Safety Analysis



## 1.0 INTRODUCTION

An Environmental Assessment (EA) and an Interstate Justification Report (IJR) were previously approved for the 30 Crossing Project. Included in both documents were detailed traffic and safety analyses of the existing conditions, future No-Action, and multiple Action Alternatives. The project area lies in Little Rock and North Little Rock, with I-30 generally consisting of three main lanes in each direction, running north and south, with parallel one-way discontinuous frontage roads on each side of the interstate within the right-of-way along the outer edge. In the northern portion of the project area, the I-40 corridor consists of three to four main lanes in each direction, running east and west, with parallel one-way frontage roads on each side of the interstate between the I-30/I-40 interchange and North Hills Boulevard (Blvd.). The original EA and IJR proposed a 6-Lane roadway with Collector/Distributor roads and a Split-Diamond Interchange (Alt 2B – 6-Lane C/D SDI) as the Selected Alternative. At the request of FHWA, an environmental re-evaluation was initiated to analyze the impact of demographic and design changes that arose after the original EA was approved. Therefore, an updated IJR was also required to determine the impact of the demographic and design changes on the traffic and safety conditions of the Interstate System.

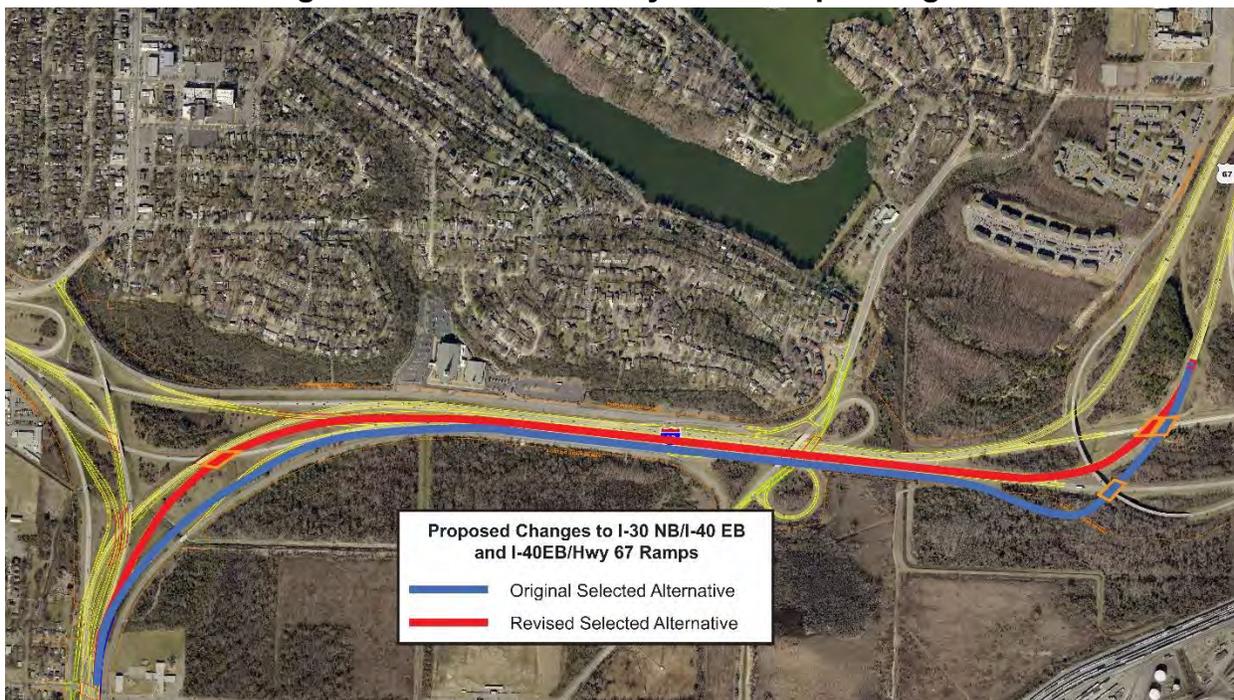
## 2.0 CHANGES FROM THE ORIGINAL IJR

The changes that led to the request for the re-evaluation included:

- In December 2018, Metroplan adopted new demographic data for the Little Rock area, which lowered demographic growth rates from the previous Metroplan forecasts used in the original IJR.
- Traffic forecasts from the original IJR were updated to a new design year of 2045 to accommodate a new project schedule.
- A new capacity project on I-30 between the South Terminal interchange (I-440 & I-530) and 65<sup>th</sup> Street was added to the Metroplan Transportation Improvement Program (TIP) in 2018. As a result, this capacity project was included in the analyses for the No-Action alternative.
- In addition to other minor ramp modifications, changes were made to the geometry of the northbound I-30 to eastbound I-40 ramp and the eastbound I-40 to northbound Highway 67 ramp as described below.
  - The Selected Alternative in the original IJR provided five lanes in the northbound direction of I-30 approaching the I-40 interchange. The three outside I-30 northbound lanes would transition to a three-lane ramp that would merge onto the outside of the two existing I-40 eastbound lanes, creating five eastbound through lanes. Approaching the Hwy. 67 interchange, I-40 eastbound traffic intending to proceed north on Hwy. 67 would bear to the right and exit on a three-lane ramp which would then fly over I-40 and merge with Hwy. 67 northbound.

Under the Revised Selected Alternative proposed by the Design-Build team, there would be five lanes in the northbound direction of I-30 approaching the I-40 interchange. The three outside I-30 northbound lanes would transition to a three-lane ramp that would fly over I-40 eastbound and merge to the inside of the two existing I-40 eastbound lanes, creating five eastbound through lanes. An auxiliary lane would also be created between the northbound I-30 Frontage Road entrance ramp and the North Hills Blvd. exit ramp. Approaching the Hwy. 67 interchange, I-40 eastbound traffic intending to proceed north on Hwy. 67 would then make a left exit to Hwy. 67 northbound. As with the Selected Alternative identified in the original IJR, the weave issue associated with traffic crossing eastbound I-40 to travel from northbound I-30 to northbound Hwy. 67 will be eliminated, as northbound Hwy. 67 traffic will already be on the inside of I-40 and eastbound I-40 traffic will be on the outside. The Revised Selected Alternative also restores route continuity for eastbound I-40 through-traffic which will no longer have to shift lanes to continue through this congested section. The locations of the proposed changes are shown in **Figure 1**.

**Figure 1: Re-Evaluation System Ramp Changes**



### 3.0 POLICY POINTS

FHWA requires that IJR's satisfy two Policy Points in order to justify a proposed change in access. These Policy Points and related analyses are presented below.

#### 3.1 Policy Point 1

Under Policy Point 1, operational and safety analyses must conclude that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes main lanes, existing, new, or modified ramps, and ramp intersections with crossroads) or on the local street network. Each request should also include a conceptual signing plan.

##### 3.1.1 Traffic Analysis

A re-evaluation of the traffic analysis was completed for the No-Action and the Revised Selected Alternative.

###### 3.1.1.1 No Action Updated Results

The future No-Action alternative was modeled with an additional travel lane in each direction between 65<sup>th</sup> Street and the South Terminal using both the original 2041 IJR traffic as well as the updated 2045 Re-evaluation traffic. These new model runs were compared to the 2041 No-Action AM and PM peak hour traffic results from the original IJR, as summarized below.

Traffic models for both the original IJR traffic (2041 design year) and the re-evaluation (2045) operated similarly to that in the original IJR with the following exceptions:

- Traffic on I-30 northbound approaching the South Terminal interchange is slightly less congested as a result of the increased capacity on I-30.
- Traffic on I-30 northbound approaching Roosevelt Rd. is slower during the AM peak period because there are more vehicles getting through the South Terminal interchange to the weave area with northbound traffic from I-530 and I-440.
- The I-440 westbound to I-30 westbound entrance ramp is slightly less congested as a result of the increased capacity on I-30 and decreased volumes from the new demographic data.

###### 3.1.1.2 Revised Selected Alternative Results (AM)

The Revised Selected Alternative (6-Lane + C/D SDI) was modeled using the updated 2045 traffic, an additional lane in each direction along I-30 between 65<sup>th</sup> Street and the South Terminal interchange, and the Revised Selected Alternative configuration at the North Terminal interchange (I-30/I-40). The new model runs were then compared to the 2045 No-Action results and the 2041 Selected Alternative results (from the original IJR) during

the AM and PM peak periods.

As seen in **Figures 2 through 4**, the 2045 No-Action model shows speeds of less than 30 mph for all traffic heading into Little Rock on northbound and southbound I-30 and eastbound and westbound I-40 during the AM peak. The model for the Selected Alternative from the original IJR shows reduced congestion, with speeds greater than 30 mph in all locations except for the southbound section between Curtis Sykes Drive and I-630. This section is congested due to traffic trying to enter downtown Little Rock and a lack of capacity on I-630 westbound.

The Revised Selected Alternative from the re-evaluation eliminates all severe congestion except for the I-30 southbound to I-630 westbound ramp, which shows speeds below 30 mph. Speeds remain above 50 mph during the AM peak for all other locations, except for northbound and southbound traffic along I-30 near I-630, on the Hwy. 67 southbound to I-40 westbound ramp, and along westbound I-40 through the I-30/I-40 interchange. All of these locations operate between 30 and 50 mph.

#### 3.1.1.3 Revised Selected Alternative Results (PM)

In **Figures 5 through 7**, the 2045 No-Action model shows severe congestion with speeds below 30 mph on eastbound and westbound I-40 heading toward Little Rock, northbound I-30 south of the Arkansas River, and southbound I-30 north of the Arkansas River. These speed patterns appear counter-intuitive, with the higher speeds moving away from Little Rock in the PM peak. This is a result of a “wrap-around” effect, with congestion being so poor near and in downtown Little Rock that traffic is metered in both directions. The resulting queues are long enough to block upstream intersections, preventing cars from entering the interstate. Once vehicles eventually make their way beyond the congestion, they essentially have free-flow travel to their destination.

The Selected Alternative from the original IJR eliminates congestion north of the river, though speeds below 30 mph remain along southbound I-30 south of I-630 due to queueing resulting from the need for additional capacity south of the study area.

The Revised Selected Alternative eliminates most congestion, with speeds greater than 50 mph in all except two locations. Speeds along I-30 near I-630 are somewhat slowed to between 30 and 50 mph. Speeds on I-30 westbound beyond the South Terminal interchange are below 30 mph with queues forming when the newly widened I-30 section ends at 65<sup>th</sup> street.

**Figures 2 through 7** show that the Revised Selected Alternative offers significant improvements over the No-Action and the Selected Alternative from the original IJR.

Figure 2: 2045 No-Action AM Traffic with I-30 Capacity Enhancement

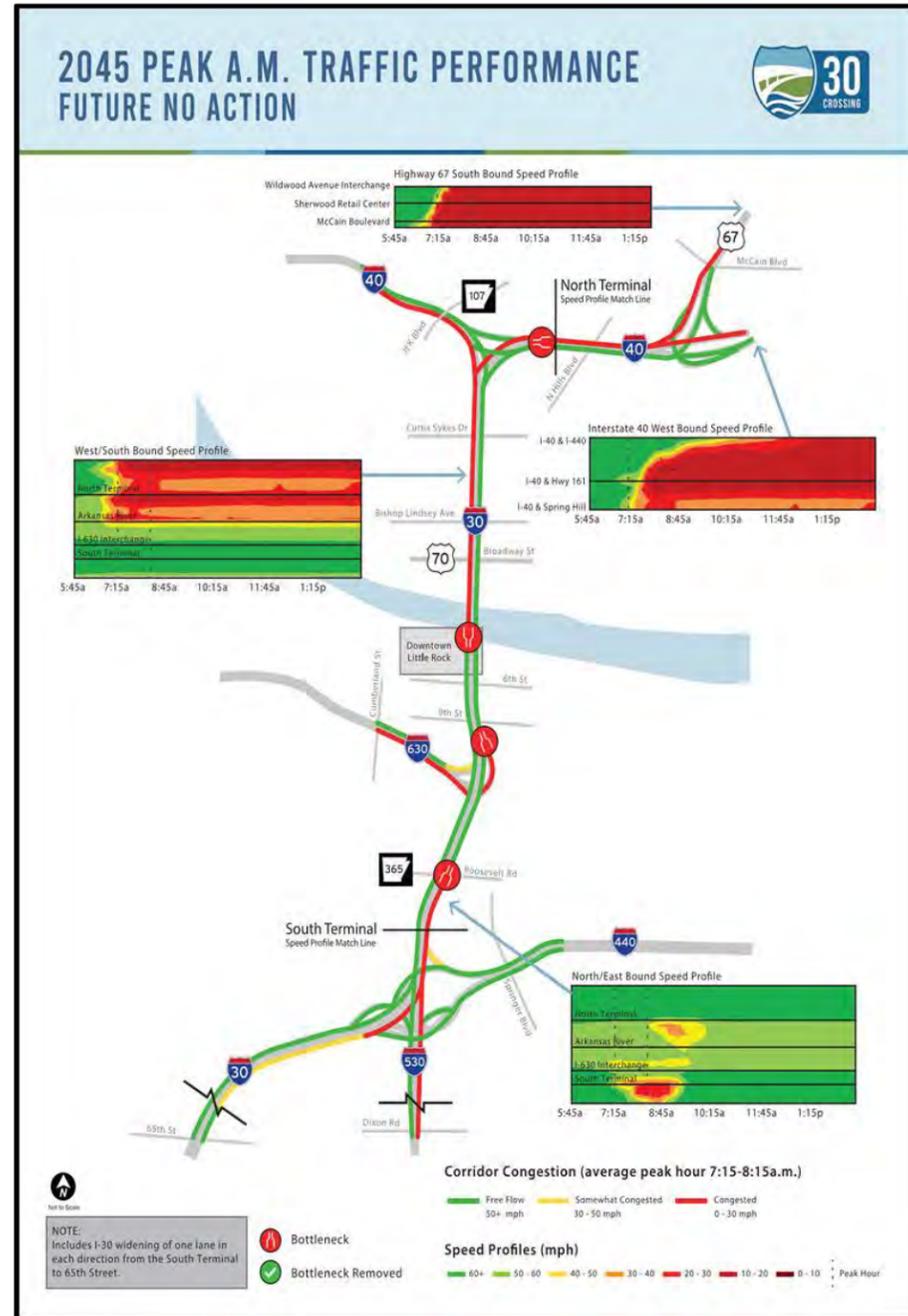


Figure 3: Original IJR 2041 Action AM Traffic

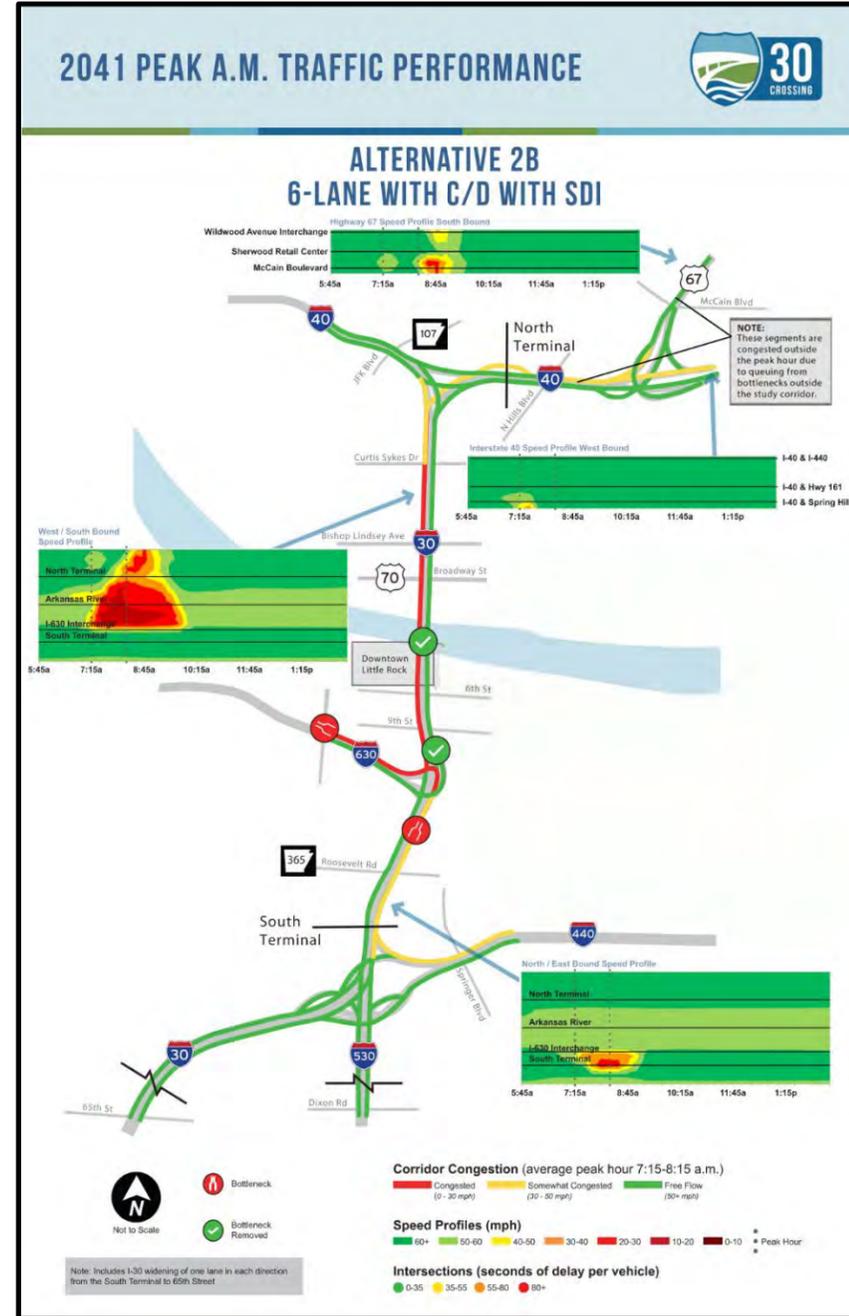


Figure 4: Re-Evaluation 2045 Action AM Traffic

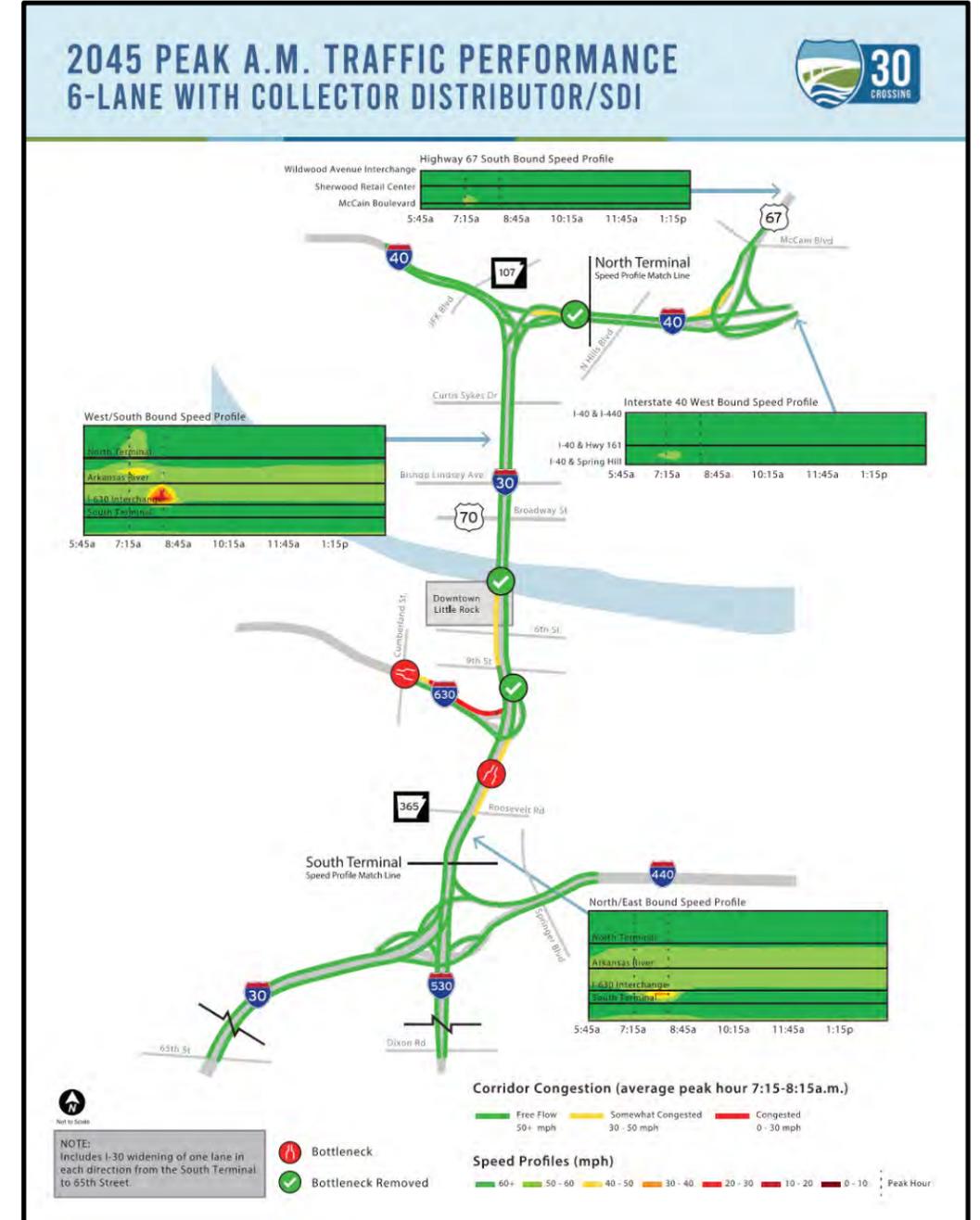


Figure 5: 2045 No-Action PM Traffic with I-30 Capacity Enhancement

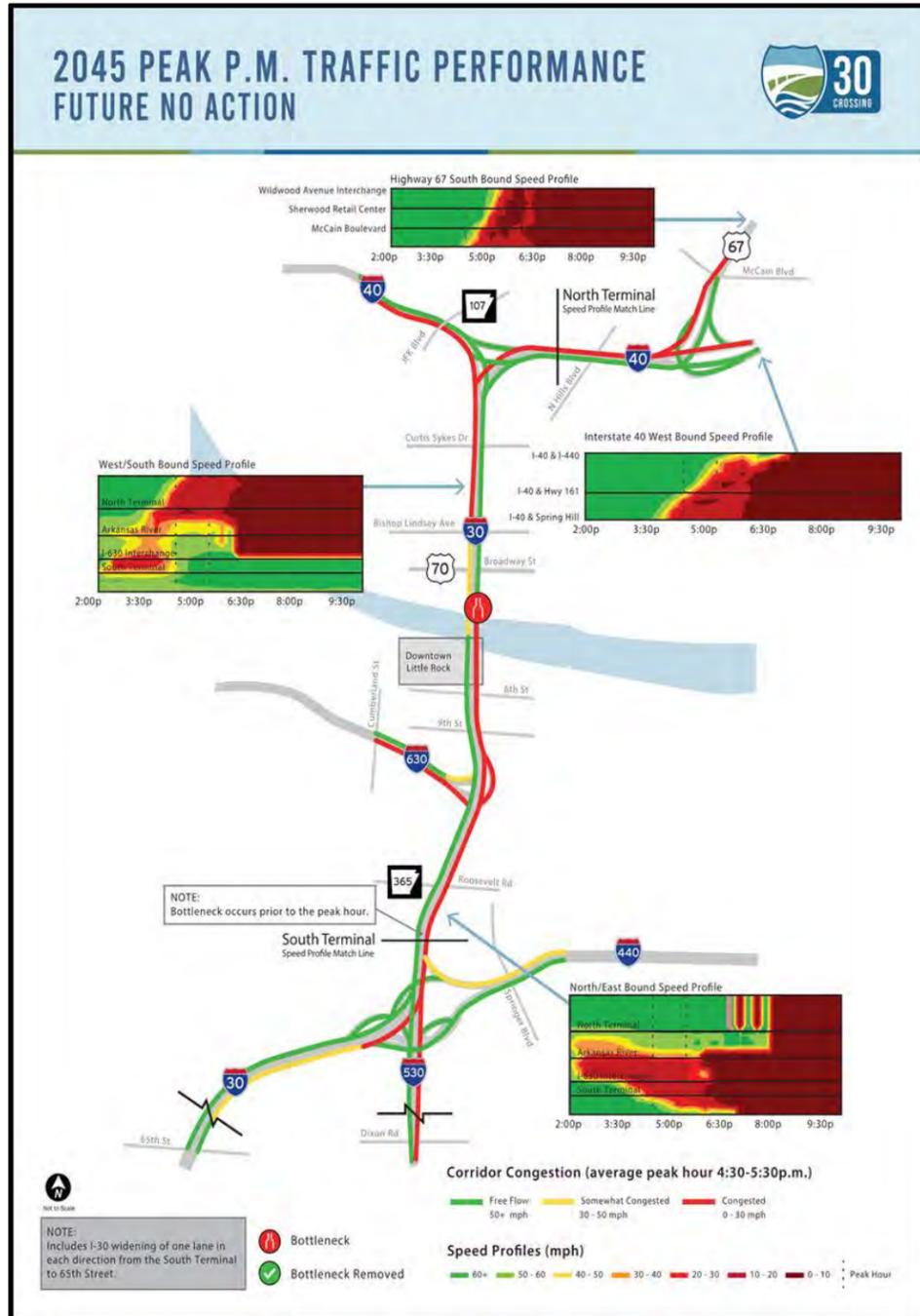
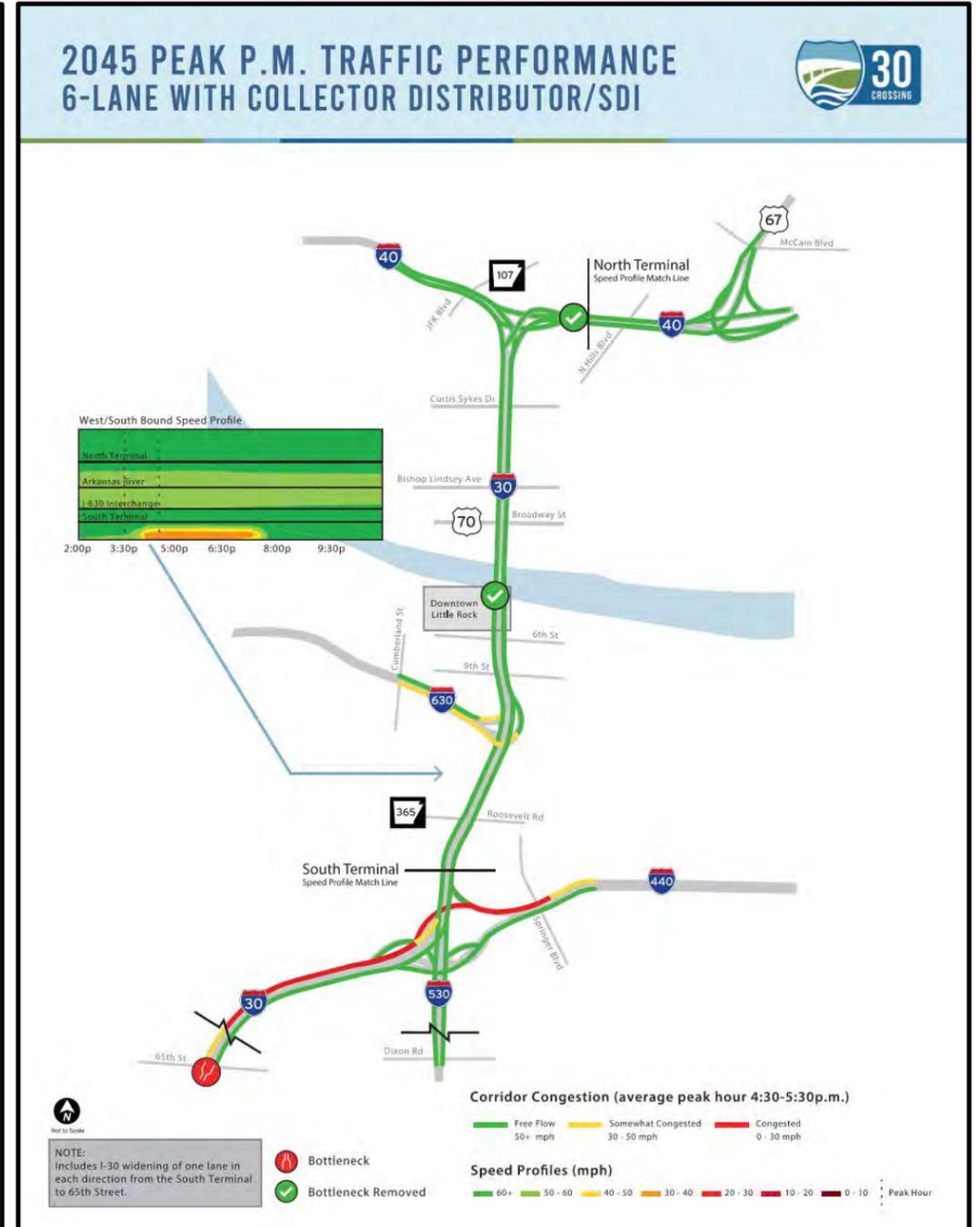


Figure 6: Original IJR 2041 Action PM Traffic



Figure 7: Re-Evaluation 2045 Action PM Traffic



**Appendix A - 30 Crossing Re-Evaluation Traffic Analysis** provides more details on the traffic analyses included in this section.

**Appendix B – Conceptual Signing Plan**, shows the proposed sign layout.

### 3.1.2 Safety Analysis

The *Highway Safety Manual* (HSM) predictive method and FHWA's *Enhanced Interchange Safety Analysis Tool* (ISATe) were used to evaluate the No-Action Alternative and the Revised Selected Alternative north of the Arkansas River to predict and compare the 2045 crash frequencies and rates resulting from the geometric modifications in the Revised Selected Alternative. The results are broken down into five segments and presented in **Table 1**.

**Table 1: 30 Crossing Crashes**

Segment	Main Lane		Ramps		Ramp Terminals		Total Crashes	KA <sup>1</sup> Crashes
	Total	KA <sup>1</sup>	Total	KA <sup>1</sup>	Total	KA <sup>1</sup>		
I-30 Corridor (Broadway St to I-40)								
2045 No-Action	196	3	38	1	47	0	281	5
2045 Action Alternative	65	1	41	2	13	0	118	3
I-40 Corridor (MacArthur Drive to I-30)								
2045 No-Action	60	2	15	0	36	0	112	2
2045 Action Alternative	79	2	15	0	36	0	130	3
I-40 Corridor (I-30 to Highway 67)								
2045 No-Action	74	2	43	1	21	0	138	3
2045 Action Alternative	72	2	60	2	19	0	150	4
Highway 67 Corridor (I-40 to McCain Boulevard)								
2045 No-Action	29	1	25	1	52	0	106	2
2045 Action Alternative	33	1	25	1	53	0	111	2
I-40 Corridor (Highway 67 to Springhill Drive)								
2045 No-Action	14	0	7	0	0	0	21	1
2045 Action Alternative	13	0	7	0	0	0	19	1
Total								
2045 No-Action	373	8	128	5	156	1	657	14
2045 Action Alternative	261	6	147	5	121	1	529	13

1 - KA = fatal (K) and serious injury (A) collisions

Three segments from the Revised Selected Alternative (I-40 from MacArthur Drive to I-30, I-40 from I-30 to Hwy. 67, and Hwy. 67 from I-40 to McCain Blvd.) showed slightly higher total predicted crashes than the No-Action, while two segments (I-40 from MacArthur Drive to I-30 and I-40 from I-30 to Hwy. 67) were predicted to have one more KA crash each than the No-Action. The high number of crashes on two ramps (I-40 eastbound to Hwy. 67 northbound and I-30 northbound to I-40 eastbound) are related to the limitations of the predictive method presented in the HSM and the related ISATe spreadsheet, which allow for a maximum of two lanes per ramp. Traffic volumes for all three proposed lanes are thus

“forced” into two lanes in the analysis, resulting in more congestion and a higher number of crashes. Even with the artificially inflated ramp crashes included, the predictive method shows that the Revised Selected Alternative is safer than the No-Action alternative by a wide margin, with a reduction of 128 total crashes (657 minus 529 total crashes) annually.

The crash rates on the main lanes for the same five segments are presented in **Table 2**.

**Table 2: Crash Rates on Main Lanes**

Alternative	Length (miles)	Average Daily Volume (vpd)	# Crashes <sup>1</sup>		Crash Rate <sup>2</sup>	
			All Severity Types	KA <sup>3</sup>	All Severity Types (per MVM)	KA (per 100 MVM)
<b>I-30 from Broadway Street to I-40 (Log Miles 140.904-142.435)</b>						
2045 No-Action	1.47	136,000	196	3	2.68	4.45
2045 Action Alternative		135,000	65	1	0.89	1.70
<b>I-40 from MacArthur Drive to I-30 (Log Miles 151.395 - 153.048)</b>						
2045 No-Action	1.65	120,000	60	2	0.83	2.10
2045 Action Alternative		141,000	79	2	0.93	2.63
<b>I-40 from I-30 to Highway 67 (Log Miles 153.048 - 154.872)</b>						
2045 No-Action	1.82	152,000	74	2	0.73	1.88
2045 Action Alternative		156,000	72	2	0.69	1.59
<b>Highway 67 from I-40 to McCain Boulevard (Log Miles 0.475-1.254)</b>						
2045 No-Action	0.78	98,000	29	1	1.04	2.76
2045 Action Alternative		107,000	33	1	1.08	2.82
<b>I-40 from Highway 67 to Springhill Drive (Log Miles 154.872 - 155.936)</b>						
2045 No-Action	1.06	69,500	14	0	0.53	1.53
2045 Action Alternative		65,000	13	0	0.51	1.50
<b>Safety Area of Influence</b>						
2045 No-Action	6.79	121,625	373	8	1.24	2.60
2045 Action Alternative		127,922	261	6	0.82	2.01

Notes: 1 Does not include ramps or frontage roads; 2 MVM = million vehicle miles; 3 KA = fatal (K) and serious injury (A) collisions

While crash rates for all severity types and for KA crashes are slightly higher for the I-40 segment from MacArthur Drive to I-30 and the Hwy. 67 segment from I-40 to McCain Blvd, the total crash rate and the KA crash rate for the entire study corridor are predicted to be significantly lower for the Revised Selected Alternative when compared to the No-Action.

Safety issues were addressed in the Revised Selected Alternative by reducing congestion and improving geometric features that contribute to the high crash rate throughout the corridor. The results indicate lower total crashes and a lower main lane crash rate in the Revised Selected Alternative, thus providing the much-needed safety improvements for the

30 Crossing project.

Full details of the safety analysis are included in **Appendix C – Safety Analysis**.

### 3.1.3 Local Street Network

The modifications proposed in the Revised Selected Alternative will affect the Interstate System only. All local street network traffic and safety analyses in the original IJR are still valid.

## 3.2 Policy Point 2

Policy Point 2 requires that the proposed access connects to public roads only, will provide for all traffic movements, and will be designed to meet or exceed current standards.

### 3.2.1 Interchanges Providing All Movements

All interchange movements provided by the Selected Alternative in the previously approved IJR submittal are provided by the Revised Selected Alternative. All interchanges connect to public roads only and the access provided at each interchange has not changed.

### 3.2.2 Design Standards

The Design-Build team will make every effort to meet Interstate design standards for all design modifications. The Design-Build team will communicate with ARDOT and FHWA to acquire approval for any proposed roadway geometry or features that do not meet current standards.

## 4.0 CONCLUSION

The traffic and safety analyses in this Re-Evaluation IJR show that the changes proposed by the Design-Build team will not have significant adverse impact on the traffic operations or safety along the 30 Crossing corridor. Based on the findings in this report, ARDOT recommends that the 30 Crossing project be allowed to proceed with the Revised Selected Alternative.

## Appendix C: Section 4(f) Coordination



Evaluation and Documentation of a De  
Minimis Finding to a Section 4(f) Property  
for Public Parks, Recreation Lands, and  
Wildlife and Waterfowl Refuges  
ARDOT Job No. CA0602  
Julius Breckling Riverfront Park and  
William J. Clinton Presidential Center and Park

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I-30 (From I-530/I-440 to I-40) and  
I-40 (From Hwy. 365/MacArthur Dr. to Hwy. 67)  
Pulaski County, Arkansas  
May 2020



U.S. Department  
of Transportation  
**Federal Highway  
Administration**





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## ATTACHMENTS

- Attachment A: Determination of Applicability for Julius Breckling Riverfront Park
- Attachment B: Determination of Applicability for William J. Clinton Presidential Center and Park
- Attachment C: City of Little Rock Coordination Meeting Notes
- Attachment D: Public Comments
- Attachment E: City of Little Rock Concurrence Letter



## 1.0 WHAT IS SECTION 4(F)?

Section 4(f) is part of a law that was passed in 1966 (Public Law 89-670), 49 U.S.C. 303 (formerly 49 U.S.C. 1651(b) (2) and 49 U.S.C. 1653f). Under Section 4(f), the policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside, public parks, recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation is required to consult and cooperate with the Secretaries of the Interior, Housing and Urban Development, Agriculture, and with the States, in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities. The Secretary may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance only if there is no prudent and feasible alternative to using that land, and the program or project includes all possible planning to minimize harm resulting from the use.

## 2.0 DOES SECTION 4(F) APPLY TO THE JULIUS BRECKLING RIVERFRONT PARK OR THE WILLIAM J. CLINTON PRESIDENTIAL CENTER AND PARK?

The Federal Highway Administration (FHWA) signed a Determination of Applicability (DOA) for Julius Breckling Riverfront Park (Riverfront Park) on October 14, 2015 (**Attachment A**). In the DOA, FHWA determined that Section 4(f) applies to Julius Breckling Riverfront Park.

FHWA signed a DOA for William J. Clinton Presidential Center and Park (Clinton Center) on October 14, 2015 (**Attachment A**). In the DOA, FHWA determined that Section 4(f) applies to William J. Clinton Presidential Center and Park.

The intent of the analysis presented in this document is to demonstrate that Section 4(f) impacts to Riverfront Park and Clinton Center are relatively minor. A finding that the impacts of the project constitute a *de minimis* effect can be made based on the criteria listed in **Table 1**.

**Table 1: Criteria to Establish de minimis Impact Determination**

When Can We Use A <i>De Minimis</i> Finding on Section 4(f) Properties?	Does It Apply To This Project?
Did we specially design the project to protect the Riverfront Park and Clinton Center as much as possible? Did we use mitigation and enhancement where it was suitable?	Yes
Did the official(s) with authority over the Riverfront Park and Clinton Center have a chance to consider this information and agree that the project will not greatly harm the things that make the Riverfront Park and Clinton Center important?	Yes
Did the public have an opportunity to review and comment on the effects of the project on the Riverfront Park and Clinton Center and the things that make the parks important to them?	Yes



### 3.0 WHAT IS THE PROPOSED PROJECT?

Approved by Arkansas voters, the Arkansas State Highway and Transportation Department (ARDOT) is implementing an accelerated State Highway Construction and Improvement Program named the Connecting Arkansas Program (CAP).

A major component of the CAP is to implement a project to improve a portion of Interstate 30 (I-30) from Interstate 530 (I-530) and Interstate 440 (I-440) to Interstate 40 (I-40), including the Arkansas River Bridge, and a portion of I-40 from Highway (Hwy.) 365 (MacArthur Drive [Dr.]) to Hwy. 67. This project is CA0602: I-530 - Hwy. 67 (Widening & Reconst.) (I-30 & I-40), commonly known as the 30 Crossing project. **Figure 1** illustrates the proposed 7.3-mile project limits.

#### 3.1 Existing Facility

I-30 is one of the critical links of the Central Arkansas Freeway System. It connects communities within the Central Arkansas Region and serves local, regional and national travelers with varied destinations and trip purposes.

The I-30 corridor generally consists of three main lanes in each direction with parallel one-way discontinuous frontage roads on each side of the interstate. In the northern portion of the project limits, the I-40 corridor consists of three to four main lanes in each direction with parallel one-way frontage roads on each side of the interstate between the I-30/I-40 interchange and North Hills Boulevard (Blvd.). Within the 7.3-mile corridor, four system interchanges are located:

- I-30 with I-530 and I-440
- I-30 with I-630
- I-30 with I-40
- I-40 with Highways 67/167

#### 3.2 Proposed Alternatives

##### 3.2.1 No-Action Alternative

The No-Action Alternative represents the case in which the proposed project is not constructed, but could include future projects identified through the long-range planning process for maintaining a state of good repair as funding becomes available. The No-Action Alternative serves as a baseline condition to allow comparison of the effects of the Selected Alternative.

##### 3.2.2 Selected Alternative

The Selected Alternative (Six-Lane with C/D Lanes Alternative) would reconstruct the existing six-lane (three in each direction) roadway while adding two decision lanes on each side that ultimately feed into a C/D system located at the Arkansas River Bridge. The Selected Alternative would include the replacement of the Arkansas River Bridge.

FIGURE 1: PROJECT LOCATION MAP



The current Hwy. 10 (Cantrell Rd.) interchange provides direct access to the downtown business district of Little Rock. Its proximity to the Arkansas River Bridge and the I-30 interchange with I-630 creates a unique level of complexity. In order to balance various project goals, the Selected Alternative includes a Split Diamond Interchange (SDI) constructed south of the existing interchange at 4<sup>th</sup> and 9<sup>th</sup> Streets.

For detailed information on the Selected Alternative, refer to the **30 Crossing Environmental Assessment/Finding of No Significant Impact** and **30 Crossing Re-Evaluation** for the proposed project.

#### 4.0 WHY IS THE JULIUS BRECKLING RIVERFRONT PARK IMPORTANT?

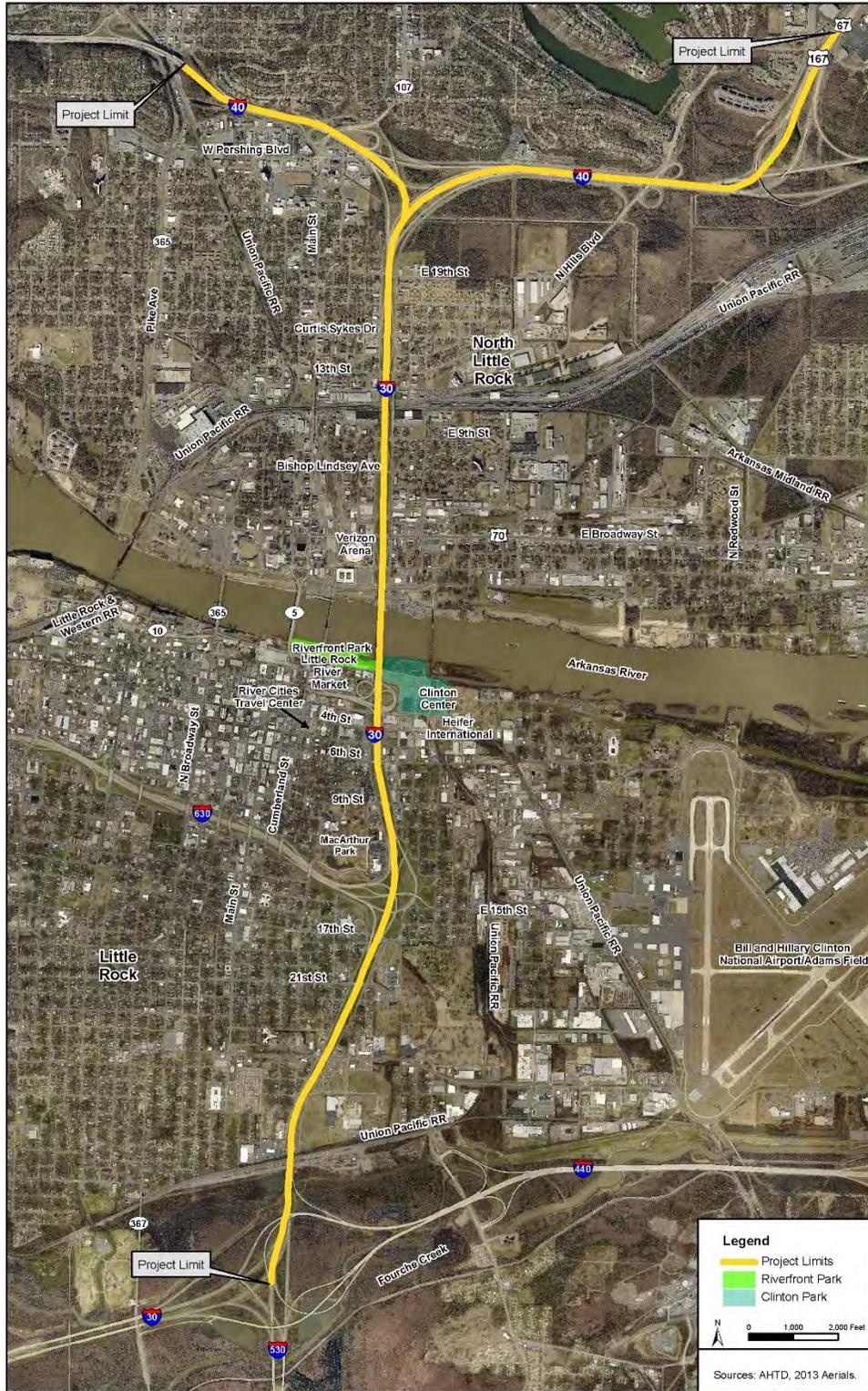
Riverfront Park is owned and operated by the City of Little Rock and located along the Arkansas River. The park stretches from the Bill Clinton Presidential Library to the Broadway Bridge, consisting of 33 acres (**Figures 2, 3 and 4**).

The Arkansas River Trail runs through the park (**Figure 5**), passing through ARDOT right of way under the Arkansas River Bridge by means of an air space agreement. The Trail runs along the historic “Trail of Tears” route. The Trail of Tears National Historic Trail specifically addresses the 1838-1839 removal of the Cherokee from their homelands in Georgia, Alabama, and Tennessee Indian Territory. The Cherokee took 17 different routes; four by water and by land. Both water and land routes passed through central Arkansas in 1830 and 1839 and passed through Little Rock and North Little Rock.

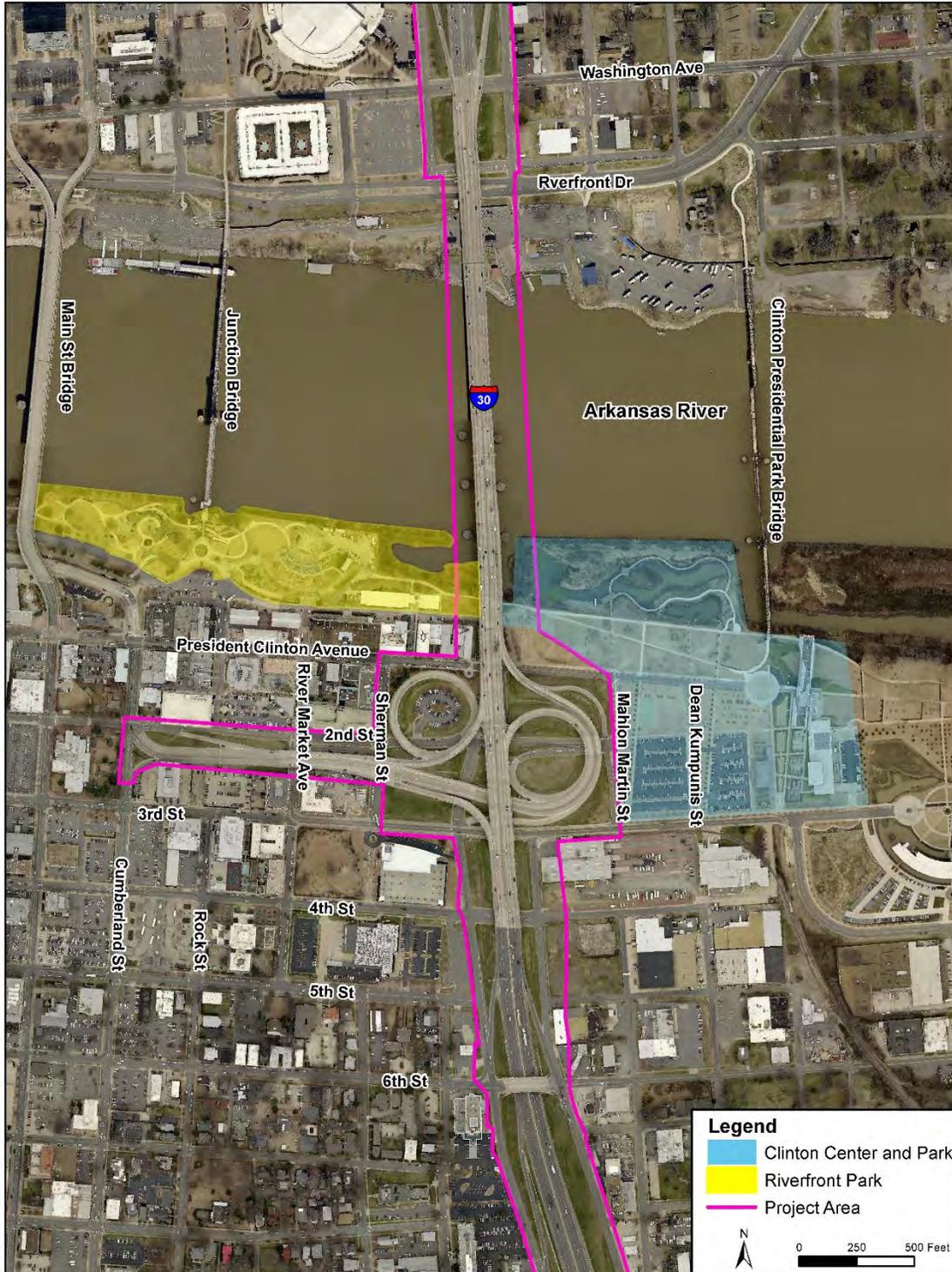
In addition to the Trail, Riverfront Park provides residents and visitors a place to enjoy the outdoors and participate in activities, including the following (**Figure 6**):

- The Junction pedestrian/bicycle bridge over the Arkansas River and display of the “Little Rock” that gave the city its name at La Petite Roche Plaza (**Figure 7**);
- A History Pavilion;
- Medical Mile, a 1,300-foot three-dimensional mural wall promoting wellness benefits and a healthy lifestyle;
- The Belvedere Gazebo (**Figure 8**);
- The Vogel Schwartz Sculpture Garden (**Figure 9**); and
- Peabody Park, Witt Stephens Jr. Central Arkansas Nature Center (**Figure 10**), the Science Museum, and the Riverfest Amphitheater (**Figure 11**).

**FIGURE 2: RIVERFRONT PARK AND CLINTON CENTER LOCATION MAP**



**FIGURE 3: RIVERFRONT PARK AND CLINTON CENTER AND PARK SITE MAP**



**FIGURE 4: JULIUS BRECKLING RIVERFRONT PARK**



**FIGURE 5: ARKANSAS RIVER TRAIL**



**FIGURE 6: IMPORTANT PARK FEATURES**



**FIGURE 7: JUNCTION BRIDGE AND "LA PETITE ROCHE"**



**FIGURE 8: BELVEDERE GAZEBO**



**FIGURE 9: SCULPTURE GARDEN**



**FIGURE 10: WITT STEPHENS JR CENTRAL ARKANSAS NATURE CENTER**



**FIGURE 11: RIVERFEST AMPHITHEATER**



## 5.0 WHY IS THE WILLIAM J. CLINTON PRESIDENTIAL CENTER AND PARK IMPORTANT?

The Clinton Center is located between 3<sup>rd</sup> Street and the south shore of the Arkansas River east of Interstate 30 (**Figure 2**). The Clinton Center opened in 2004 and is the thirteenth presidential library to have been completed in the United States. The Clinton Center occupies almost 30 acres of land. Among the Clinton Center features are the presidential library of Bill Clinton (**Figure 12**), 42<sup>nd</sup> President of the United States, the offices of the Clinton Foundation, and the University of Arkansas Clinton School of Public Service (**Figure 13**). The William E. (Bill) Clark Presidential Wetlands Park (**Figure 14**) is a natural area along the Arkansas River designed to showcase wildlife and river life in a restored wetlands environment for educational purposes. The Arkansas River Trail runs through the park and crosses the Arkansas River on the Clinton Presidential Park Bridge at the east end of the park. The Arkansas River Trail runs along the historic “Trail of Tears” route. The Trail of Tears National Historic Trail specifically addresses the 1838-1839 removal of the Cherokee from their homelands in Georgia, Alabama, and Tennessee Indian Territory. The Cherokee took 17 different routes; four by water and by land. Both water and land routes passed through central Arkansas in 1830 and 1839 and traveled through Little Rock and North Little Rock.

On October 2, 2015, the Clinton Foundation and the Sisterhood of Congregation B’nai Israel, and the Anne Frank Center USA, joined together to open a new exhibit, The Anne Frank Tree (**Figure 15**). A permanent glass installation was created to surround the Anne Frank Tree sapling. The Clinton Center was one of 11 entities in the United States awarded a young chestnut tree by the Anne Frank Center USA’s “Sapling Project.” The sapling came from the white horse chestnut tree that stood outside of Anne Frank’s Secret Annex, where she and her family hid during World War II. The center also plays an active role in the Little Rock community, hosting many events, lectures, and conferences throughout the year.

## 6.0 CAN WE AVOID THE PARKS?

Riverfront Park on the west and the Clinton Center on the east were developed adjacent to the Interstate 30 Arkansas River Bridge corridor, which was constructed in the early 1960’s. Under the Selected Alternative, it will be necessary to replace the existing bridge and bridge piers in order to provide additional capacity and correct the structural and functional deficiencies of the Bridge. To widen the Bridge, right of way and temporary construction easements will be acquired from the parks, and use of ARDOT right of way by the parks will be restricted during construction.

**FIGURE 12: WILLIAM J. CLINTON LIBRARY**



**FIGURE 13: CLINTON SCHOOL OF PUBLIC SERVICE**



**FIGURE 14: WILLIAM E. "BILL" CLARK PRESIDENTIAL PARK WETLANDS**



**FIGURE 15: ANNE FRANK TREE EXHIBIT**



## 7.0 WHAT PARK FEATURES ARE WITHIN THE STUDY AREA?

Within the study area, there are:

- stairs leading from President Clinton Avenue level to the Arkansas River Trail (**Figure 16**);
- a portion of the Bill Clark Wetlands;
- the Promenade, benches and two statues (**Figure 17**);
- the Harriet Tubman Monument (**Figure 18**);
- the Touch the Sky Statue (**Figure 19**);
- and the Arkansas River Trail (**Figure 20**).

The Arkansas River Trail passes through Riverfront Park, along the bank of the Arkansas River and under Interstate 30 within ARDOT right of way, and continues into the Clinton Center. Further up the slope of the River, north of the Trail, the Promenade passes through ARDOT right of way under Interstate 30. The Promenade is a local road providing access to Riverfront Park, the Nature Center and riverfront businesses (**Figure 21**). After passing under Interstate 30, the Promenade turns to run along the east side of Interstate 30 and ties into President Clinton Avenue, within the Clinton Center. The Promenade is not open to the public, but provides commercial vehicles access to businesses through intersections with President Clinton Avenue, just east of Interstate 30, and North Rock Street.

**FIGURE 16: STAIRWAY FROM PRESIDENT CLINTON AVENUE TO ARKANSAS RIVER TRAIL**



**FIGURE 17: THE PROMENADE**



**FIGURE 18: HARRIET TUBMAN MONUMENT**



**FIGURE 19: TOUCH THE SKY STATUE**



**FIGURE 20: ARKANSAS RIVER TRAIL**



**FIGURE 21: THE PROMENADE**





## 8.0 WHAT WILL THE PROJECT DO TO THE PARKS?

The Selected Alternative would greatly reduce the footprint of the existing interchange, creating up to 18 acres of additional open space within ARDOT right of way and enhancing the visibility of the Clinton Center from the west side of Interstate 30. The anticipated right of way acquisition under the Selected Alternative is shown in Table 2. After construction of the project, the ARDOT right of way would remain available for use by the Riverfront Park and Clinton Center through air space agreements with ARDOT.

**Table 2: Anticipated Acreage of Acquisition from Parks**

Park	Type of Acquisition	No-Action	Selected Alternative
Clinton Center	Right of Way	0	0.74
	Temporary Construction Easement	0	1.81
Riverfront Park	Right of Way	0	None
	Temporary Construction Easement	0	0.39

Specific permanent impacts to the parks are listed below:

- Within the Clinton Center, the westernmost stairway connecting President Clinton Avenue to the Arkansas River Trail in the Clinton Center would be in the proposed right of way and would be removed. The stairway would be reconstructed outside the proposed right of way by ARDOT. The Arkansas River Trail would remain within ARDOT right of way. Along the east of Mahlon Martin Street, 0.74 acres of ROW, is proposed in order to widen the roadway between East 3<sup>rd</sup> Street and President Clinton Avenue (**Figure 22**). Twenty trees will be removed, and the existing sidewalk will be relocated to the east of the proposed roadway.
- Future design year noise levels were evaluated for both the No-Action and Selected Alternative. The noise levels resulting from the Selected Alternative does not exceed the 67 dB(A) Noise Abatement Criteria (NAC), or 66 dB(A) Approach NAC, for exterior locations for Activity Category C, which includes parks. Further, it was found that the Selected Alternative resulted in a maximum increase of 5 dB(A) over the existing noise levels, which is considered a minor increase, and which is not considered to be detectable in outdoor environments. Therefore, no noise impacts are anticipated to the parks as a result of the No-Action or Selected Alternative.

**FIGURE 22: SELECTED ALTERNATIVE IMPACTS ON LITTLE ROCK PARKS**



The Selected Alternative would maintain or improve access to the Clinton Center over the existing conditions and the future No Action Alternative (**Table 3**). Access from the north in the AM Peak and to the north in the PM Peak from the Clinton Center would be greatly improved over the Future No Action Alternative.

Temporary impacts during construction are anticipated as follows:

- Within the Clinton Center, temporary construction easements totaling 1.83 acres are proposed for access to the site during construction and temporary storage of construction equipment. The areas include wetlands within the Bill Clark Presidential Wetlands Park, and two small areas (0.01 acres) adjacent to Mahlon Martin Street. Following construction, the areas would be restored to natural contours and stabilized. Natural revegetation is anticipated; therefore, no permanent impacts will occur.
- During certain phases of construction, temporary re-routing of the Arkansas River Trail would be required. A safe detour route for non-motorized traffic would be provided.
- A temporary construction easement of 0.39 acres will be needed over an open area lying to the east of the Arkansas Game and Fish Commission building, and extending from the Arkansas River Trail to the Promenade. The temporary construction easement will not restrict access to the Arkansas Game and Fish Commission building from the west, or to the back of the three businesses that front President Clinton Avenue. Temporary closure of the Promenade, the access road to the Nature Center, may be required.
- Temporary relocation of three benches along the Promenade, and the Harriet Tubman and Touch the Sky statues, would be required. This will be accomplished by the City of Little Rock.



**Table 3: Peak Hour and Peak Direction Travel Times (Minutes) to/from the Clinton Center**

Destination	Existing 2014	Future No Action		2045 Selected Alternative
		2041 <sup>2</sup>	2045 Traffic <sup>3</sup>	
<b>To Clinton Presidential Center / Heifer International (AM<sup>1</sup>)</b>				
A. From Wildwood Avenue Interchange on Hwy 67	17:46	29:21	34:20 <sup>4</sup>	10:51
B. From I-40 and I-440 Interchange	15:47	30:43	29:31	11:55
C. From the McArthur Bridge on I-40	10:21	21:56	24:15	6:11
D. From Dr. Martin Luther King Drive on I-630	04:19	7:07	7:46	5:09
E. From the Dixon Interchange on I-530	07:27	19:03 <sup>4</sup>	15:56	8:24
F. From the 65th Street Interchange on I-30	07:16	12:35	10:50	8:12
G. From the Bankhead Drive Interchange on I-440	06:29	7:51	7:22	8:18
<b>From Clinton Presidential Center / Heifer International (PM<sup>1</sup>)</b>				
A. To Wildwood Avenue Interchange on Hwy 67	12:00	30:56	33:55	7:58
B. To I-40 and I-440 Interchange	12:23	31:56	34:56	8:50
C. To the McArthur Bridge on I-40	07:49	28:02	31:04 <sup>4</sup>	4:47
D. To Dr. Martin Luther King Drive on I-630	04:44	8:30	7:18	6:47
E. To the Dixon Interchange on I-530	08:06	13:34	11:13	9:35
F. To the 65th Street Interchange on I-30	08:11	14:48	12:13	14:50
G. To the Bankhead Drive Interchange on I-440	08:28	13:06	10:57	10:02

Source: Project Team, March 2020.

<sup>1</sup>AM Peak = 7:15 AM to 8:15 AM; PM Peak = 4:30 PM to 5:30 PM

<sup>2</sup>2041 volumes from the EA, with additional capacity on I-30 between 65<sup>th</sup> Street and South Terminal

<sup>3</sup>Updated 2045 volumes, with additional capacity on I-30 between 65<sup>th</sup> Street and South Terminal

<sup>4</sup>Travel time increased by 15% or more from EA

NOTE: Speeds are inbound to downtown to Little Rock in the AM and outbound in the PM

- Travel times between 10:00 minutes and 25:00 minutes are highlighted in light red
- Travel times greater than 25:00 minutes are highlighted in dark red
- Travel times that are unusually low due to a bottleneck upstream are highlighted in blue

## 9.0 WHAT WILL WE DO TO REDUCE HARM TO THE PARKS?

The following measures would be included in the proposed project to reduce harm to Riverfront Park and the Clinton Center:

- The City of Little Rock would be responsible for temporary relocation of the statues and benches along the Promenade. Upon completion of the bridge widening, the statues and benches could be placed within ARDOT right of way under the terms of an air space agreement at a location agreed to by ARDOT, the City of Little Rock and the Clinton Center.
  - There would be temporary impacts to the Bill Clark wetlands to the east of the Interstate 30 Bridge. Upon completion of the bridge, the area would be restored to its natural contours, stabilized, and allowed to revegetate naturally.
  - The Selected Alternative would result in removal of the existing circular ramps at the Hwy. 10 interchange, as well as removal of the storage building under Interstate 30 north of President Clinton Avenue. The Selected Alternative would create additional open space within ARDOT right of way adjacent to the Clinton Center, which would enhance visibility of the Clinton Center.
  - Temporary closures of the Promenade would be minimized so as to minimize disruption and avoid any loss of access to Riverfront Park. Access would not be restricted during construction to the Arkansas Game and Fish Commission building from the west, or to the back of the three businesses that front President Clinton Avenue.
  - The construction contractor would coordinate activities affecting the Arkansas River Trail with the City of Little Rock Parks and Recreation Department through ARDOT. If temporary re-routing of the trail is necessary, a safe detour route would be established to avoid loss of use of the Trail.
  - A plan would be created by the construction contractor and submitted to ARDOT containing a schedule of temporary closure times for the ARDOT right of way containing the Promenade and the Arkansas River Trail. A safe detour route for the Arkansas River Trail, as specified by the City of Little Rock Parks and Recreation Department, would be established and maintained by the construction contractor. The ARDOT would coordinate with the City of Little Rock Parks and Recreation Department to ensure that temporary closure of the Promenade and re-routing of the Arkansas River Trail would not occur until alternate access is provided.
-

## 10.0 HOW DID WE INVOLVE THE PUBLIC IN THIS EVALUATION?

Coordination meetings were held with the City of Little Rock Parks and Recreation. An overview of the project was presented, impacts were identified, and means to mitigate them were discussed. Meeting notes are included as **Attachment C**.

The public was afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource. The comments and responses are included as **Attachment D**.

Following review of the public comments, concurrence that the project does not adversely affect the parks was requested from the City of Little Rock. On May 26, 2020, the City of Little Rock concurred with the assessment and proposed minimization and mitigation of impacts. The signed concurrence letter is included as **Attachment E**.

## 11.0 WHAT IS THE DECISION?

This evaluation concludes that the proposed project will not harm the protected features, assets, or activities that qualify the park for protection under Section 4(f), thus qualifying for a *de minimis* finding on the Julius Breckling Riverfront Park and the William J. Clinton Presidential Center and Park.

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Attachment A: Determination of Applicability for Julius Breckling Riverfront Park

It has been determined that there are potential Section 4(f) properties in the study area of the 30 Crossing project. The following information has been compiled for each property to determine Section 4(f) applicability.

<b>Property Description</b>	Julius Breckling Riverfront Park
<b>Property Location</b>	Located along the south shore of the Arkansas River and immediately adjacent on the west side of the I-30 Bridge in Little Rock, Arkansas (LR).
<b>Property Size</b>	33.0 acres
<b>ROW needed for project (acres / percent of park)*</b>	8-lane General Purpose Alternative = 0.2 acre / 0.6% (see <b>Exhibit 1</b> ) 10-lane Collector/Distributor Alternative = 0.2 acre / 0.6% (see <b>Exhibit 2</b> )
<b>Park features within project area</b>	Arkansas River Trail, grassy/wetland area

\*Estimate based on footprint of the build alternatives.

**I. Property Ownership/Significance**

<b>Who owns the property?</b>	City of LR	
<b>Yes</b>	<b>No</b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. Is there a lease associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	B. Is there an easement associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	C. Is there a covenant associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	D. Is there an airspace agreement associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	E. Are there restrictions associated with the property?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	F. Significance assumed unless otherwise noted by the Officials with Jurisdiction (OWJ).
<b>Additional explanation for any of the above</b>		

**II. Section 4(f) Defining Criteria for Parks, Recreation and Refuge Properties**

<b>Yes</b>	<b>No</b>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	A. Is the property publicly owned?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Is the property open to the public?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	C. Is the property's major purpose for park, recreation or refuge activities?

It has been determined that there are potential Section 4(f) properties in the study area of the 30 Crossing project. The following information has been compiled for each property to determine Section 4(f) applicability.

**III. Establishing Section 4(f) Use of the Property**

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. Does the project require a temporary use (e.g. temporary easement, construction easement, etc.)?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Does the project require permanent incorporation?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	C. Does the project require a constructive use?
<b>Additional explanation for any of the above</b>		The 30 Crossing project will be delivered using Design-Build; thus the exact area of permanent incorporation (e.g., location of bridge columns) is unknown at this phase of project development.

**IV. Section 4(f) Applicability**

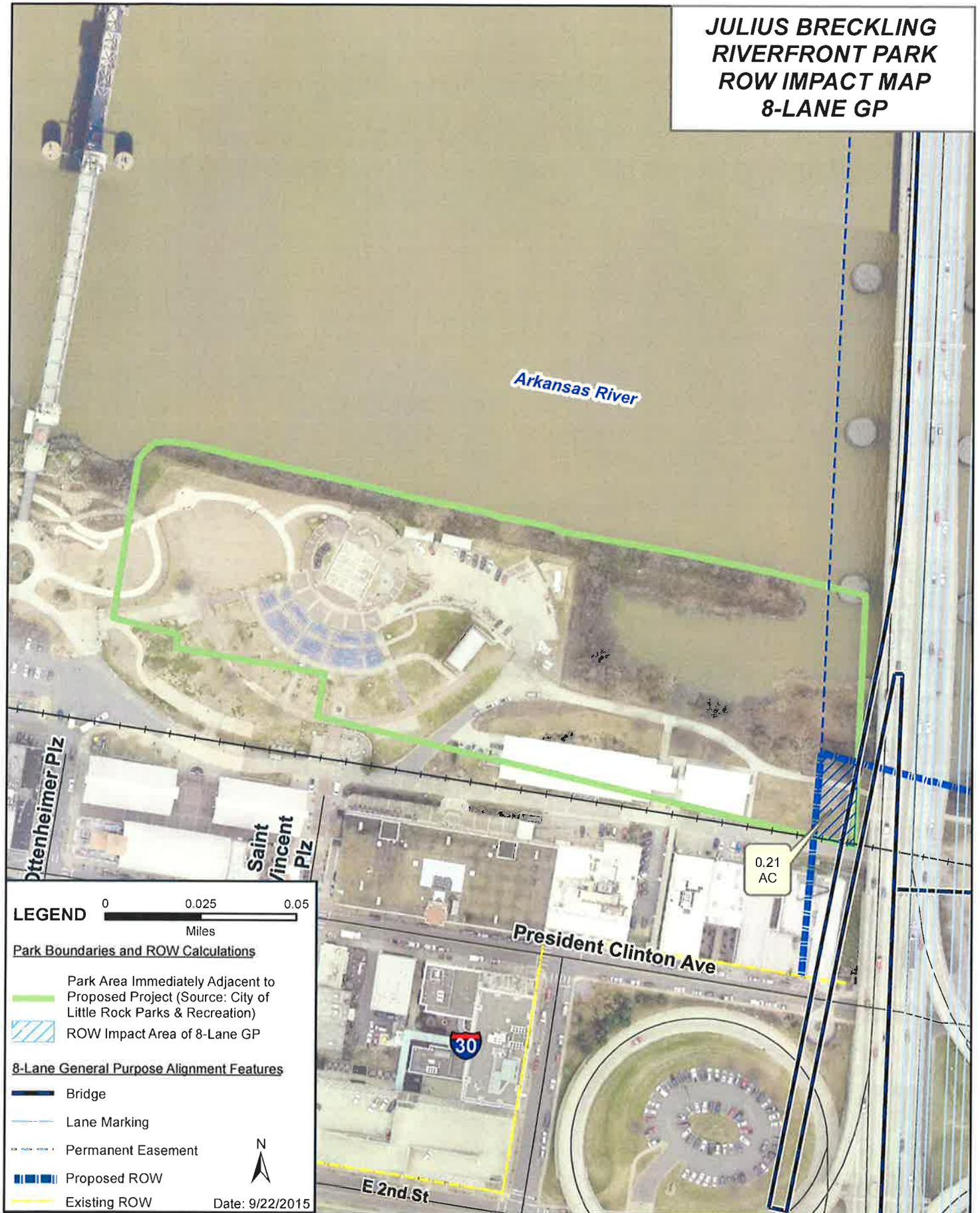
Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does Section 4(f) apply? **
<p><i>**If FHWA determines that the project will use Section 4(f) property, the approval options include preparing a de minimis impact determination, applying a programmatic evaluation or preparing an individual evaluation. The approval method will be determined following evaluation of alternatives analysis, avoidance, minimization, mitigation and coordination with the OWJ, if significance is determined in conjunction with item I.F.</i></p>		

**V. Signatory**

  
 \_\_\_\_\_  
 Randal Looney  
 FHWA  
 Environmental Coordinator Specialist

10-14-2015  
 \_\_\_\_\_  
 Date

**JULIUS BRECKLING  
RIVERFRONT PARK  
ROW IMPACT MAP  
8-LANE GP**



**LEGEND** 0 0.025 0.05  
Miles

**Park Boundaries and ROW Calculations**

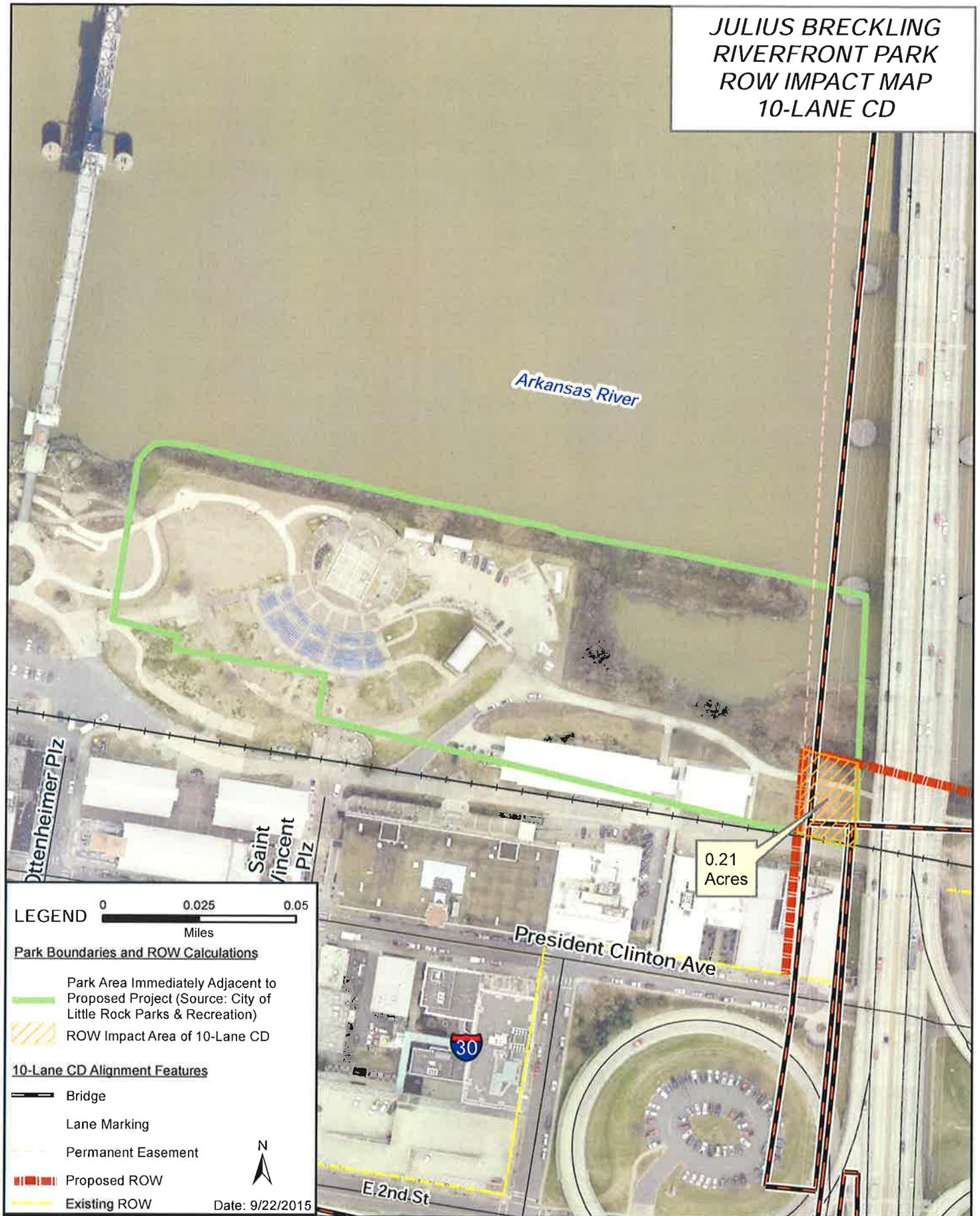
- Park Area Immediately Adjacent to Proposed Project (Source: City of Little Rock Parks & Recreation)
- ROW Impact Area of 8-Lane GP

**8-Lane General Purpose Alignment Features**

- Bridge
- Lane Marking
- Permanent Easement
- Proposed ROW
- Existing ROW

Date: 9/22/2015

**JULIUS BRECKLING  
RIVERFRONT PARK  
ROW IMPACT MAP  
10-LANE CD**





Attachment B: Determination of Applicability for William J. Clinton Presidential Center  
and Park

It has been determined that there are potential Section 4(f) properties in the study area of the 30 Crossing project. The following information has been compiled for each property to determine Section 4(f) applicability.

<b>Property Description</b>	William J. Clinton Presidential Center and Park
<b>Property Location</b>	Located along the south shore of the Arkansas River and immediately adjacent on the east side of the I-30 Bridge in Little Rock, Arkansas (LR).
<b>Property Size</b>	30.0 acres
<b>ROW needed for project (acres / percent of park)*</b>	8-lane General Purpose Alternative = 0.5 acres / 1.7% (see <b>Exhibit 1</b> ) 10-lane Collector/Distributor Alternative = 0.6 acres / 2.0% (see <b>Exhibit 2</b> )
<b>Park features within project area</b>	Arkansas River Trail, approximately 8 stairs of the stairway leading from street level to the Arkansas River Trail, wetland area.

\*Estimate based on footprint of the build alternatives.

**I. Property Ownership/Significance**

<b>Who owns the property?</b>	City of LR	
<b>Yes</b>	<b>No</b>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	A. Is there a lease associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	B. Is there an easement associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	C. Is there a covenant associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	D. Is there an airspace agreement associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	E. Are there restrictions associated with the property?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	F. Significance assumed unless otherwise noted by the Officials with Jurisdiction (OWJ).
<b>Additional explanation for any of the above</b>	Clinton Library leases a portion of the park from the City of LR (excludes wetland area with walking trail).	

**II. Section 4(f) Defining Criteria for Parks, Recreation and Refuge Properties**

<b>Yes</b>	<b>No</b>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	A. Is the property publicly owned?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Is the property open to the public?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	C. Is the property's major purpose for park, recreation or refuge activities?

It has been determined that there are potential Section 4(f) properties in the study area of the 30 Crossing project. The following information has been compiled for each property to determine Section 4(f) applicability.

**III. Establishing Section 4(f) Use of the Property**

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. Does the project require a temporary use (e.g. temporary easement, construction easement, etc.)?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Does the project require permanent incorporation?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	C. Does the project require a constructive use?
<b>Additional explanation for any of the above</b>		The 30 Crossing project will be delivered using Design-Build; thus the exact area of permanent incorporation (e.g., location of bridge columns) is unknown at this phase of project development.

**IV. Section 4(f) Applicability**

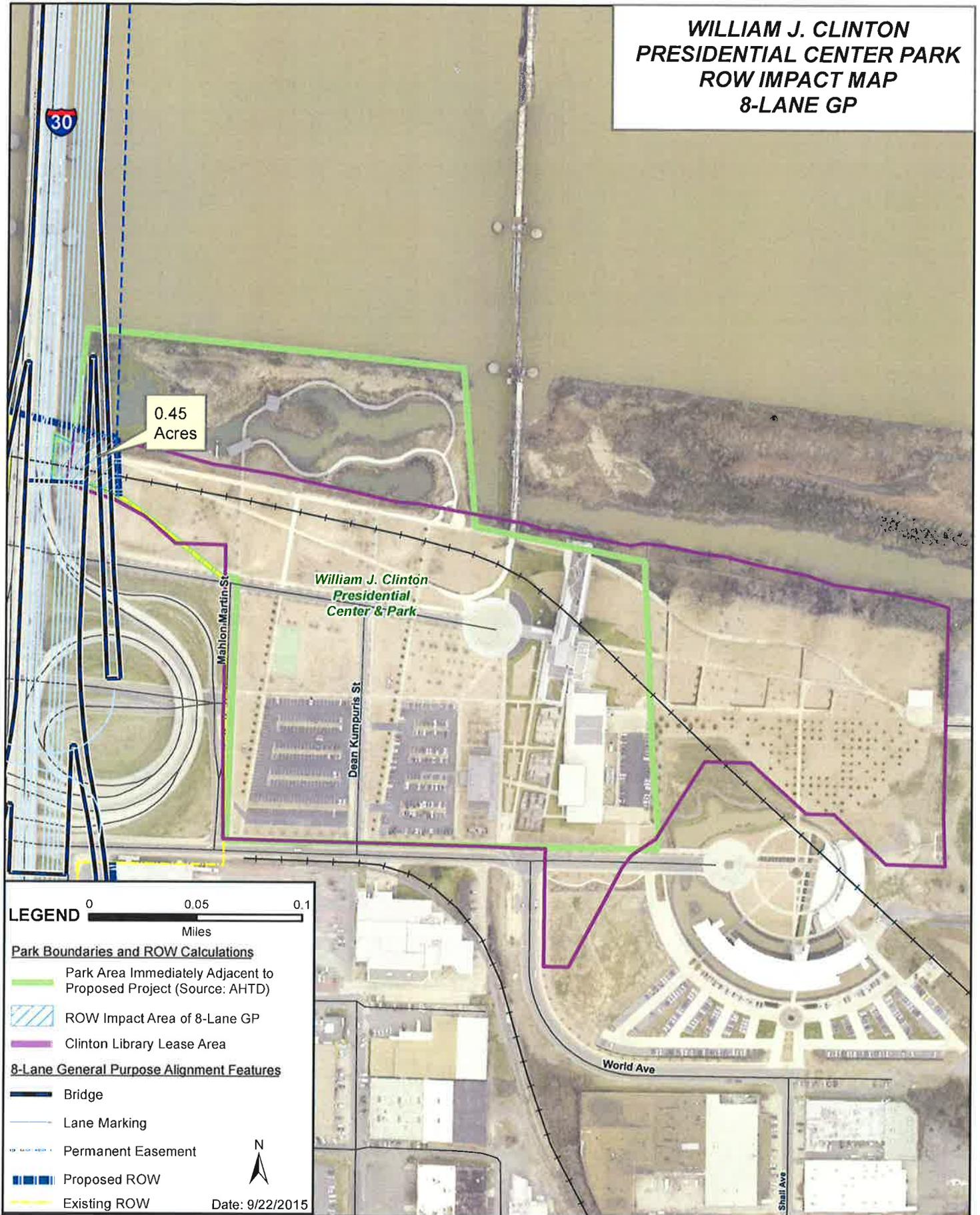
Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does Section 4(f) apply? **
<p><i>**If FHWA determines that the project will use Section 4(f) property, the approval options include preparing a de minimis impact determination, applying a programmatic evaluation or preparing an individual evaluation. The approval method will be determined following evaluation of alternatives analysis, avoidance, minimization, mitigation and coordination with the OWJ, if significance is determined in conjunction with item I.F.</i></p>		

**V. Signatory**

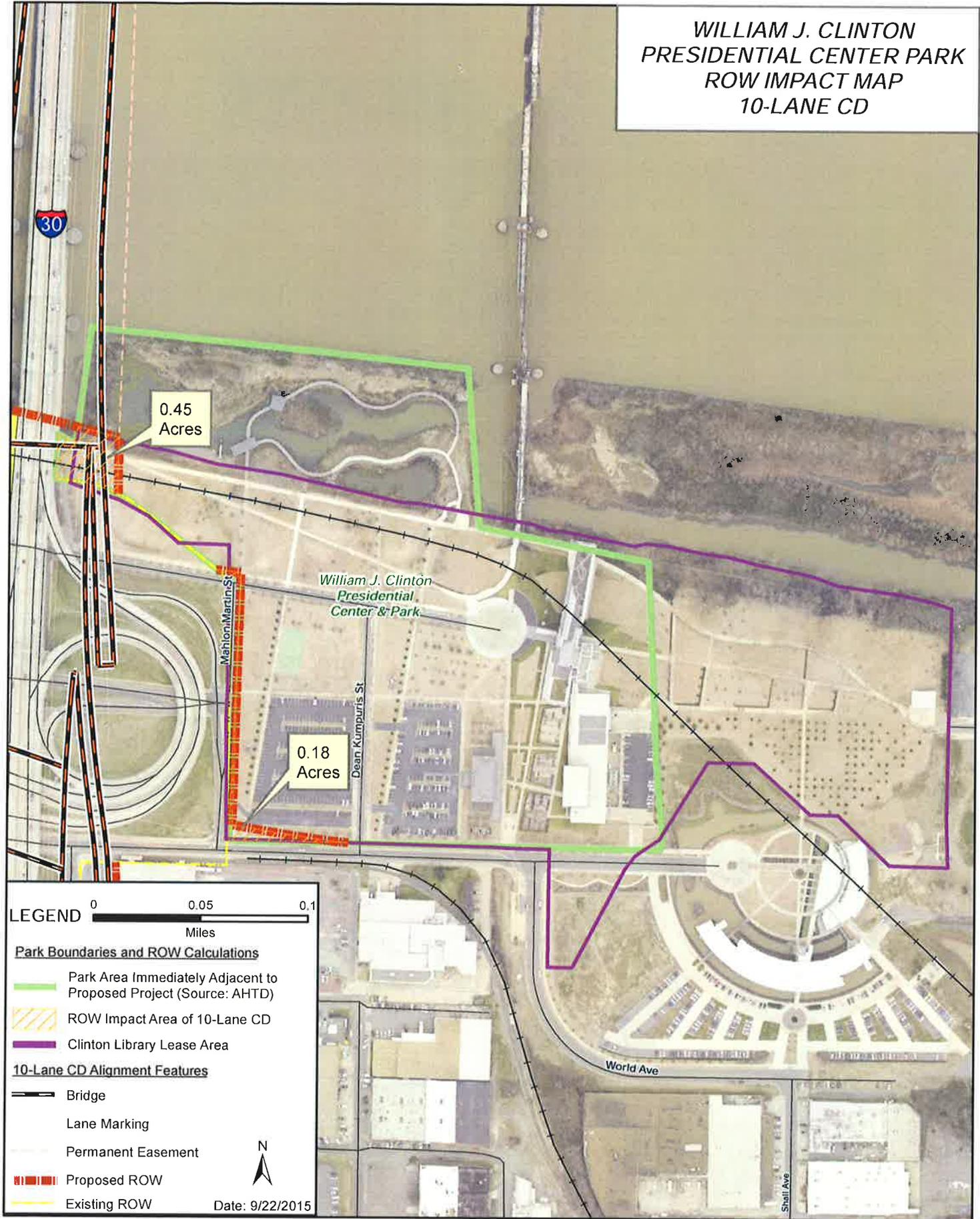
  
 \_\_\_\_\_  
 Randal Looney  
 FHWA  
 Environmental Coordinator Specialist

10-14-2015  
 \_\_\_\_\_  
 Date

**WILLIAM J. CLINTON  
PRESIDENTIAL CENTER PARK  
ROW IMPACT MAP  
8-LANE GP**



**WILLIAM J. CLINTON  
PRESIDENTIAL CENTER PARK  
ROW IMPACT MAP  
10-LANE CD**





Attachment C: City of Little Rock Coordination Meeting Notes

# City of Little Rock Parks Coordination Meeting/ February 9th

**ATTENDEES:** Keli Wylie, Ben Browning, John Fleming, Susan Staffeld, Randal Looney, Truman Tolefree, Mark Webre, Leland Couch, Steve Moore, Jon Light, Mark Callahan, Earl Mott, Bryon Russell

**COPY TO:** Jennifer Halstead, April English

**PREPARED BY:** Bryon Russell

**DATE:** February 9, 2016 8:30 am CST

**PROJECT:** CA0602

## Objectives

Provide City of Little Rock with information regarding project effects on Julius Breckling Riverfront Park and William J Clinton Presidential Center and Park

## Summary

Mark Callahan and John Fleming gave an overview of the current status of the project and explained that AHTD and FHWA would like to arrive at a finding that the project represents a *de minimis* impact on the parks, similar to the Broadway Bridge project. Because I-30 will be on an elevated structure over the parks, the only new right of way required will be an expansion of the air space agreement. During construction, there will be temporary impacts to the parks. Conceptual drawings were presented showing the potential impacts of the 8 and 10 lane Build alternatives. These were discussed in detail.

The tile on the existing pier columns will have to be removed when the existing piers are replaced. The City was invited to participate in the Visioning Process to provide input on aesthetic treatment of the new pier columns. The Harriet Tubman and Fiesta sculptures will be in the construction area and will have to be temporarily relocated. The City will determine the best locations. There will be temporary closures required of the trail/service road during construction; however, these will be restored to their original condition after construction. The trees on the east side of I-30 will have to be removed. The City will work with AHTD on landscaping requirements.

The disposition of the existing parking under the I-30 bridges is being discussed with City officials. At this time, no consensus has been reached on whether to continue to allow parking under the bridges.

The City asked whether there will be additional impacts due to maintenance of traffic. The MOT scheme has not been finalized but the City will be provided with MOT concepts as soon as they are available. Any impacts to the wetlands during construction will be restored after construction. The City asked whether drainage from the bridge would be allowed to fall onto the parks. This has not been addressed yet in design.

The City asked whether the maintenance equipment that was relocated from the Broadway Bridge prior to its construction could be relocated to the I-30 right of way. AHTD does not want maintenance equipment stored at the site.

The team asked the City whether there were any Section 6(f) funds used on either park. The City was not sure if Land and Water Conservation funds had been spent on the Clinton Park. AHTD will follow up on this question.

### Action Items

Include Arkansas Game and Fish in future meetings with the parks.

Provide the City with the 8 and 10 lane alternative drawings in DWG format.

## Russell, Bryon/JAX

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**From:** Webre, Mark <MWebre@littlerock.org>  
**Sent:** Monday, June 20, 2016 11:01 AM  
**To:** Russell, Bryon/JAX; Tolefree, Truman  
**Cc:** Callahan, Mark/ORL  
**Subject:** RE: I-30 Crossing

In terms of Parks' perspective, Murray Park boat ramp would be acceptable for use by parties referenced below.

Mark  
501-371-6851

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**From:** Bryon.Russell@CH2M.com [mailto:Bryon.Russell@CH2M.com]  
**Sent:** Monday, June 20, 2016 9:56 AM  
**To:** Tolefree, Truman <ttolefree@littlerock.org>; Webre, Mark <MWebre@littlerock.org>  
**Cc:** Mark.Callahan@CH2M.com  
**Subject:** I-30 Crossing

Good morning, Mr. Tolefree and Mr. Webre. I am trying to resolve an issue that has come up on the I-30 Crossing project regarding the boat ramp adjacent to Locust Street in North Little Rock. During construction, this boat ramp will need to be closed. Ben Batten of AGFC has suggested that, during the duration of construction, the Murray Park boat ramp could serve as a temporary substitute location for the activities that are normally held at the Locust Street location. I understand that the Locust Street boat ramp is used by the Sheriff's office, US Army Corps of Engineers, and for fishing tournaments held weekly during the summer and periodically at other times of the year. Would the use of the Murray Park boat ramp be acceptable to you? Thanks.

Bryon J. Russell, PE  
[Bryon.Russell@ch2m.com](mailto:Bryon.Russell@ch2m.com)  
CH2M Hill  
9428 Baymeadows Road, Suite 300  
Jacksonville, FL 32256  
904-596-6528  
Cell: 904-206-2894

# City of Little Rock Parks Coordination Meeting/ August 8th

**ATTENDEES:** John Eckart, Mark Webre, Leland Couch, John Fleming, Randall Looney, Bryon Russell  
**COPY TO:** Earl Mott, Mark Callahan, Keli Wylie, Ben Browning  
**PREPARED BY:** Bryon Russell  
**DATE:** August 8, 2017 10:00 am CST  
**PROJECT:** CA0602

## Objectives

Provide City of Little Rock an update regarding project effects on Julius Breckling Riverfront Park and William J Clinton Presidential Center and Park

## Summary

The City was given an overview of the current status of the project. Figures showing the four project alternatives were reviewed.

There was a discussion of the art/sculptures that currently are located within ArDOT right of way (ROW). These will have to be moved outside ArDOT ROW for the duration of construction, and should be moved and stored offsite by the City. As these are in ArDOT ROW, the cost of relocation is not reimbursable. The Fiesta statue has already been moved, but the Tubman and Eagle statues will have to be relocated. The Rabbit statue may be able to stay. It will not be possible to know for sure until the Design-Build Contractor submits plans for construction. At that point, ArDOT will prepare an air space agreement to the City for the activities that may occur within existing and proposed ArDOT ROW.

Some of the elements of the air space agreement were discussed. The City may request a particular ground cover/treatment under the I-30 Bridge, which the City would maintain. The City may want to change the location of the Promenade and Arkansas River Trail within ArDOT ROW. The City will refer to renderings on the 30 Crossing website to help them visualize the area.

The stairway east of I-30 within the Clinton Center will have to be closed. The City had previously indicated that it was not needed and did not need to be replaced, but John Eckart will make sure.

There will be temporary detours of the Promenade and Arkansas River Trail required during construction. The Design Build contractor will determine where and when these detours will occur once their MOT scheme is complete. The City asked that we coordinate with Arkansas Game and Fish and Clinton Center to make sure they are not impacted by these temporary detours. The team has coordinated with both entities.

The disposition of the existing parking under the I-30 bridges has not been decided by the City. If the City desires to allow parking, it would be up to the City to create it under a new airspace agreement.

The area of the Bill Clark wetlands impacted during construction will be restored to pre-construction contours and allowed to revegetate after construction. The City would like to restore circulation between the Arkansas River and the open water portion of the wetlands and may want a change in the contours to facilitate this. The City will provide proposed contours. On the west side of I-30, the City would not have a problem with granting a temporary construction easement (TCE) if the contractor

would agree to create a revetment across the open water area along the Arkansas River to facilitate a relocation of the Arkansas River Trail. The revetment would extend from the northwest spur embankment to the southeast and connect with the Trail under the I-30 Bridge. The City will consider this further and propose something to ArDOT within two weeks (August 22). Drainage of this area is a concern.

The large storage cell under I-30 will be removed, but ArDOT is willing to allow the City to store maintenance equipment in I-30 ROW as part of the air space agreement. The exact location will have to be determined after the Design Build contractor submits plans.

The City did not have any issues with the proposed TCE shown to them for the Clinton Center, although they did point out that the area depicted is very steep. The area may have to be regraded but would be restored to pre-construction contours following construction.

### Action Items

The City will decide whether the stairway east of I-30 within the Clinton Center is needed in the future.

The City will come up with a plan for grading along the River to restore flow to the Bill Clark wetlands and will consider allowing a TCE west of I-30 in exchange for the construction of the revetment as discussed above.

## Russell, Bryon/JAX

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**From:** Webre, Mark <MWebre@littlerock.gov>  
**Sent:** Thursday, August 24, 2017 9:52 AM  
**To:** Russell, Bryon/JAX  
**Cc:** Fleming, John; Looney, Randal; Mott, W. Earl; Callahan, Mark/ORL; Eckart, John; Couch, Leland; Allmond, Rena  
**Subject:** RE: I-30 Crossing Meeting Notes from August 8 Coordination Meeting [EXTERNAL]

Little Rock Parks appreciated your last visit and catching us up to your progress for I-30 Crossing. As a follow up to items you all were seeking answers, please see the following:

- Stairs to the east side in Clinton Park and Library will be needed and are to be placed back to original condition prior to construction
- Ground identified as construction easement to east side of I-30 is acceptable
- Revetments in Arkansas River to east and west sides of I-30 utilized as staging for demolition and construction of I-30 are on hold for now. While Parks is supportive of this proposal, we and Game and Fish need to discuss the use of these further. We recognized an answer on these will be needed soon, and we will work towards delivering an answer as such. Could you please provide another date that allows this discussion and still assists you in a timely delivery?

I have copied John and Leland to see if there are any additional notes or clarifications required to our answers to your questions.

### Mark Webre / Deputy Director Operations

Little Rock Parks and Recreation  
500 West Markham, Room 108  
Little Rock, AR 72201  
Phone: 501-371-6851 / Fax: 501-371-6832  
[www.lrpr.org](http://www.lrpr.org)



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**From:** Russell, Bryon/JAX [mailto:Bryon.Russell@CH2M.com]  
**Sent:** Tuesday, August 15, 2017 3:22 PM  
**To:** Eckart, John <jeckart@littlerock.gov>; Webre, Mark <MWebre@littlerock.gov>; Couch, Leland <lcouch@littlerock.gov>  
**Cc:** Fleming, John <John.Fleming@ardot.gov>; Looney, Randal <Randal.Looney@dot.gov>; Mott, W. Earl <WEMott@GarverUSA.com>; Callahan, Mark/ORL <Mark.Callahan@CH2M.com>  
**Subject:** I-30 Crossing Meeting Notes from August 8 Coordination Meeting

John, Mark, and Leland, thank you very much for meeting with us last week. I have attached meeting notes from our meeting. If you see anything you feel is inaccurate, would you please let me know?

We are looking forward to your decision on the temporary construction easement west of I-30. Thanks.

## Russell, Bryon/JAX

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**From:** Debbie Shock <dshock@clintonfoundation.org>  
**Sent:** Monday, September 11, 2017 1:43 PM  
**To:** Webre, Mark  
**Subject:** RE: I - 30 Crossing

Mark,

We are aware of the construction easement and that it will be replaced as before. Of course we have a ton of other questions regarding I-30 Crossings.

Thanks and have a marvelous Monday,

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**From:** Webre, Mark [mailto:MWebre@littlerock.gov]  
**Sent:** Friday, September 01, 2017 10:30 AM  
**To:** Debbie Shock <dshock@clintonfoundation.org>  
**Subject:** I - 30 Crossing

Is Clinton Foundation okay with construction easement for subject?

**Mark Webre / Deputy Director Operations**

Little Rock Parks and Recreation

500 West Markham, Room 108

Little Rock, AR 72201

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## Russell, Bryon/JAX

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**From:** Sheehan, Jennifer <jennifer.sheehan@agfc.ar.gov>  
**Sent:** Wednesday, October 04, 2017 10:29 AM  
**To:** Webre, Mark  
**Subject:** RE: I-30 Crossing

Hi Mark,

Staff members of the Arkansas Game & Fish Commission (AGFC) have reviewed the proposal from Little Rock Parks & Recreation (LRPR). Due to safety concerns, the potential removal of a vegetated riparian buffer, and maintenance requirements AGFC would prefer to keep the area in its current condition. If LRPR would like to continue this discussion with AGFC, please let me know.

Thanks,  
jen

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**From:** Webre, Mark [mailto:MWebre@littlerock.gov]  
**Sent:** Monday, August 28, 2017 8:43 AM  
**To:** Sheehan, Jennifer <jennifer.sheehan@agfc.ar.gov>  
**Cc:** Eckart, John <jeckart@littlerock.gov>; Curry, Neil <Neil.Curry@agfc.ar.gov>  
**Subject:** RE: I-30 Crossing

We look forward to y'all's reply, thank you.

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**From:** Sheehan, Jennifer [mailto:jennifer.sheehan@agfc.ar.gov]  
**Sent:** Monday, August 28, 2017 7:55 AM  
**To:** Webre, Mark <MWebre@littlerock.gov>  
**Cc:** Eckart, John <jeckart@littlerock.gov>; Curry, Neil <Neil.Curry@agfc.ar.gov>  
**Subject:** RE: I-30 Crossing

Thanks, Mark. I will forward your proposal to the appropriate staff here at Game & Fish for their review and comment. We will get back to you as soon as we have discussed internally. Please let me know if you need anything in the meantime.

Sincerely,  
jen sheehan

Jennifer Elise Sheehan  
Chief, Environmental Coordination Division  
P: 501-223-6356 | M: 501-680-0319  
E: [Jennifer.sheehan@agfc.ar.gov](mailto:Jennifer.sheehan@agfc.ar.gov)

**Arkansas Game & Fish Commission**  
2 Natural Resources Dr. | Little Rock, AR 72205  
P: 800-364-4263  
[www.agfc.com](http://www.agfc.com)

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**From:** Webre, Mark [<mailto:MWebre@littlerock.gov>]  
**Sent:** Wednesday, August 23, 2017 5:04 PM  
**To:** Sheehan, Jennifer <[jennifer.sheehan@agfc.ar.gov](mailto:jennifer.sheehan@agfc.ar.gov)>  
**Cc:** Eckart, John <[jeckart@littlerock.gov](mailto:jeckart@littlerock.gov)>; Curry, Neil <[Neil.Curry@agfc.ar.gov](mailto:Neil.Curry@agfc.ar.gov)>  
**Subject:** I-30 Crossing

To recap our phone conversation today, Federal Highway Transportation and Arkansas DOT with their consultant shared their plans and progress for staging the I-30 Crossing project. They were particularly interested to find opportunities for contractor to tear down and construct this crossing.

It occurred to Parks that we could realize some opportunities to improve our park while they were doing this. Namely, Parks could open up revetment on west end of Bill Clark Wetland to increase river flow through this area. This would eliminate or at least minimize significant dredging cost to maintain channel through this area. Another opportunity, shown in attachments, is realizing access to the normal pool of Arkansas River and providing an array of leisure opportunities that currently are not possible (i.e. fishing, viewing unique environments, staging interpretive programs and connecting Arkansas River Trail closer to river).

Please note that attached sketches were prepared in July 2004. I am sharing date of preparation, because in these sketches at this time you will see other considerations surrounding the esplanade and fishing pier proposal that have been tabled.

The thought is, if we are supportive of these opportunities, together we could show Federal and State authorities our intentions. They would in turn write up construction easements, work through the Corps requirements and specify to contractor what will be required in order to stage demolition and construction of bridge along with our proposals.

I did have a phone conversation with Julia Smethurst with U.S. Corps of Engineers about the Section 408 and 10 processes. Outcomes to these studies could not be predicted. She did say since Federal Transportation Department is involved, that they could do the NEPA studies, and Corps could review these for approval.

Due to the quick pace of this project, we are communicating to Federal and State authorities tomorrow of our support for construction easements on east side of crossing (Clinton Park and Library). As to our suggested proposals to you on wetland and esplanade, we will note to these authorities that these are pending upon further discussion with Game and Fish.

If you need additional information or wish to meet with us to discuss further, please let me know. We look forward to hearing back from you soon.

**Mark Webre / Deputy Director Operations**

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## Meeting Notes

Subject Meeting with Clinton Center on Construction Impacts

Location: Clinton Library, Little Rock

Date and Time: May 23, 2019, 10:30 AM

### ATTENDEES

Debbie Shock, Clinton Center

Ben Browning, ARDOT

Keli Wylie, ARDOT

Earl Mott, Garver

Bill McAbee, Garver

Kyhl Cooper, Kiewit Massman Construction (DB team)

### MEETING NOTES

The purpose of the meeting was to update the Clinton Center on changes to temporary construction impacts and changes to temporary construction easements proposed by the Design Build (DB) team.

The team reviewed proposed plans and described the changes in impacts proposed to the Clinton Center. The team is proposing to recontour the area between President Clinton Avenue (East Markham Street) and the Arkansas River Trail within the boundaries of the proposed temporary construction easement. The purpose of the recontouring is to facilitate access to the proposed I-30 bridge. Ms. Shock asked that following construction, the area not be restored to its current contours, but left permanently as the DB team has proposed.

The team also discussed the increases in proposed temporary construction easements to the east of Mahlon Martin Street, to the north of the Arkansas River Trail, and along the west side of the Bill Clark wetlands. Ms. Shock did not have any issues with these changes to the temporary impacts to the park.

### ACTION ITEMS

The team agreed to update the Clinton Center if any changes to the proposed design occurs that would impact the Clinton Center.



## Meeting Notes

Subject Meeting with US Army Corps of Engineers and Arkansas Game and Fish Commission on Construction Impacts

Location: Garver Pinnacle Board Room, North Little Rock

Date and Time: June 11, 2019, 10:00 AM

### ATTENDEES

Johnny McLean, USACE

Jennifer Sheehan, AGFC

Keli Wylie, ARDOT

Earl Mott, Garver

Bill McAbee, Garver

### MEETING NOTES

The purpose of the meeting was to update the US Army Corps of Engineers (USACE) and Arkansas Game and Fish Commission (AGFC) on changes to temporary construction impacts and an addition to the temporary construction easements proposed by the Design Build (DB) team within the boundaries of Riverfront Park.

The team reviewed proposed plans and described the changes in impacts proposed to Riverfront Park. The team is proposing to recontour the area along the Arkansas River, which includes a USACE revetment. The purpose of the recontouring is to facilitate barge access to the proposed I-30 bridge. Mr. McLean asked that following construction, the revetment should be replaced and the area restored to its current contours. He also reminded the team that the Section 404 permit would have to include the change, and that the proposed work would have to be approved through the Section 408 process.

The team also discussed the addition of a proposed temporary construction easement along the south of the Promenade, and to the east of the AGFC building. The area is currently a vacant grassed area, but also includes a section of the Arkansas River Trail and extends to the Arkansas River. The purpose of the proposed easement is to facilitate access to the proposed bridge during construction. The temporary construction easement would not affect access from the west to the AGFC building, or to the businesses along the Promenade. Temporary closure of the Promenade to the east of this area was previously proposed and is necessary for safety during construction operations. Ms. Sheehan did not have any issues with this additional temporary construction easement, or to the changes in impacts to the USACE revetment.

### ACTION ITEMS

The team agreed to update the USACE and AGFC if any changes to the proposed design occurs that would impact Riverfront Park.



## Attachment D: Public Comments

## **Comments on the Julius Breckling Riverfront Park and William J. Clinton Presidential Center and Park De Minimis Document**

**1. Reliance on a document which has not been released to the public.** The document on page 7 of 50 refers the reader to the “**30 Crossing Environmental Assessment/Finding of No Significant Impact and 30 Crossing Re-Evaluation** for the proposed project.”

However, no “30 Crossing Re-Evaluation” document has been issued and it is not now available on the ArDOT website. This renders meaningful public review impossible and raises questions as to whether meaningful review has been achieved with other government agencies. A De Minimis Finding may not be based on an undefined proposal.

**Response:** *The 30 Crossing Re-Evaluation is an internal FHWA document that documents review and consideration of additional studies regarding several changes to the project design that have occurred since publication of the Finding of No Significant Impact (FONSI). After consideration of these changes, the Re-Evaluation supports the conclusion that the (FONSI) remains valid. If FHWA had made the decision that a supplemental environmental document was required due to the changes, the public would have been involved in review of that document. Because the decision was made that no significant changes had occurred, there is no requirement under NEPA for the public to be involved subsequent to the FONSI, with the exception of the Section 4(f) process, which deals specifically with the effect of the project on significant public parks, recreational areas, and historic sites.*

*Most of the information included in the Re-Evaluation has nothing to do with the parks. All changes that are relevant to the consideration of impacts on the parks are included in Sections 8.0 and 9.0 of this document: “What Will the Project do to the Parks?”*

*The public and commenting agencies were afforded ample opportunity to provide input on the project during the public involvement process, which culminated in a Public Hearing in July 2018. The public and commenting agencies submitted 319 comments following the Public Hearing, and ARDOT provided responses to each comment.*

**2. The De Minimis document fails to address or even recognize significant noise impacts to MacArthur Park which are identified on pages 4219, 4376, 4508 and 4509 of the 7100-page EA.**

- Table 6-4, Summary of Noise Impacts, on page 4219/7100 specifically identifies “1 park (5 receptors)” for Noise Study Area 5--MacArthur Park.
- Three “impacted receivers” in MacArthur Park are shown on page 4508/7100 and another two on page 4509/7100.
- Table C-5 on page 4376 of the 7100-page EA identifies impacted noise receptors in MacArthur Park.

The impacts are not de minimis--by definition. They have exceeded the ArDOT-established standards<sup>1</sup> and are documented as such on the pages shown.

**Response:** *The documents that are currently being circulated for public comment are the Section 4(f) evaluations of North Shore Riverwalk Park, Julius Breckling Riverfront Park and the Clinton Center and Park. A Section 4(f) document was not required for MacArthur Park due to the fact that the project did not involve a taking from MacArthur Park.*

*ARDOT considers a receptor to be impacted by traffic noise when either the predicted noise*

*level approaches or exceed the Noise Abatement Criteria (NAC) or when there is a substantial increase in noise (defined as an increase of 10 dB(A) or greater). As shown in Table C-5 on page 4376, five receptors in the MacArthur Park were considered to be impacted, due to predicted noise levels ranging from 66-70 dB(A). The NAC for these receptors is 67 dB(A). The noise increase due to the project was predicted to be between 1-3 dB(A), so this increase is not considered an impact.*

*Of these five receptors, two are actually within MacArthur Park, and three are within ARDOT ROW (the dog park) along I-630. All are within Noise Sensitive Area 5. When I-630 was originally constructed, the grade was lowered as a means of avoiding and minimizing noise impacts to MacArthur Park. As part of the noise study evaluated in the EA, an investigation was conducted to see if it is possible to further lower noise levels in MacArthur Park. A noise barrier (Noise Barrier 5) was evaluated along the north side of I-630 (see Table 7-4 on page 4245 of the EA). Because of the grade difference between the roadway and the park, the 25-foot tall barrier evaluated at this location was not effective in reducing noise sufficiently to meet the design goal reduction of 8 dB(A) for at least one receptor, and was therefore considered unreasonable.*

*There is no property required, either permanently or temporarily, from MacArthur Park as a result of the project. The project team also considered the possibility of constructive use. Constructive use is defined when the proximity impacts of a transportation project on a Section 4(f) property, even without acquisition of the property, are so great that the activities, features and attributes of the property are substantially impaired. Two receptors within the Park boundary showed noise levels of 66 dB(A), which is considered to approach the NAC of 67 dB(A). Both of these receptors showed increases of 3 dB(A) from the existing condition. This increase is below the threshold for human hearing, so would not be perceptible to park users in the vicinity of I-630. The slight noise increase predicted by the model at two receptors along the south park boundary, which borders a busy interstate highway, is not considered a substantial impairment of the activities, features and attributes of the park, and is not a constructive use.*

**3. The Noise Impact Analysis for the Riverfront Park erred in not placed receivers beneath, and in closer proximity to the I-30 Arkansas River Bridge.** As shown on pages 4507 and 4513 of the 7100-page EA, no receivers were placed on the Riverfront Park trail beneath the I-30 Arkansas River Bridge or in close proximity thereto. The analysis has apparently excluded what would seem to be the noisiest part of the park trail with frequent human use--the areas most in need of noise abatement. As Section 2.5 of Techniques for Reviewing TNM Model Runs and Associated Noise Modeling Reports FHWA-HEP-18-068 6.1.2018 puts it, "A Standard model calculates noise levels at area(s) of frequent human use with receivers placed in representative locations where frequent human use occurs.

**Response:** *The receptors within Julius Breckling Riverfront Park and the Clinton Center and Park were placed on the Arkansas River Trail, on sidewalks connecting to the Trail, and on the trail through the Bill Clark wetlands, as these were the areas determined to have the highest public use, based on observations and coordination with the Officials with Jurisdiction.*

*ARDOT Noise Policy on Highway Traffic Noise Abatement dated September 13, 2018, for Activity Category C land uses follows an activity focused theme, using associated facilities and related uses as the basis of identifying a receptor. Per ARDOT Noise Policy, "Trails will be assessed for independent utility of trail segments, stopping areas, and project crossings. Each segment of trail that has independent utility (connector segments, trail extensions, etc.) will be assigned one*

receptor. Stopping places along a trail, such as rest areas with benches or scenic viewing areas, and trail crossings of the project will each be assigned a receptor. The receptor for each segment or project crossing will be placed on the trail no closer than 50 feet from the edge of pavement that best represents the worst expected highway traffic noise condition”.

Two noise receivers located east and west and within close proximity of the I-30 bridge, N355 and N483, were analyzed for the Riverfront Park Trail near areas of frequent human use. Noise receiver N355, located approximately 100 feet east of the I-30 bridge, had a noise level of 61 dBA. Noise receiver N483, located approximately 250 feet west of the I-30 bridge, had a noise level of 62 dBA. These results indicate that the noise level decreases as the receiver gets closer to the I-30 bridge due to the shadow from the I-30 bridge.

**4. The document does not display a consistent depiction of the project limits** rendering meaningful public input impossible, and raising the question as to whether meaningful input has been received from other government agencies. For instance, Figure 1 on page 3 shows the

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<sup>1</sup> Noise impacts are identified if traffic noise is expected to at least double, or to meet a threshold of 66 decibels (66 dB(A), 1 decibel less than the 67 decibel level identified for parks. (page 4203 of 7100-page EA)

project's limits some two or three blocks to the east of Cumberland Street whereas Figure 3 on page 6 shows the project limits extending to Cumberland Street. The Project's northeastern terminus is also depicted differently in Figures 1 and 2, the latter of which shows the project limits extending well up into Highway 67/167, at variance with Figure 1 which shows the project limit at the junction of I-40 and Highway 67. The lack of consistent project limits in the document raises questions as to whether proper consideration has been given to effects on Pettaway, South Little Rock, Gillam, Interstate and Fourche Bottoms Parks in Little Rock.

**Response:** *Figure 1 is a graphical representation of the project, not intended to show the precise limits of the study area, which are not called out on the figure. It is intended to orient the reader with respect to well-known landmarks, and roughly show where the project improvements will be. Nevertheless, it does not show the project limits extending 2-3 blocks east of Cumberland Street.*

*Figure 3 is a more accurate representation of the project area and does accurately show the project limits, which includes improvements extending north on Hwy. 67/167. The Hwy. 67/167 segment was studied with respect to all environmental impacts, was documented in the Environmental Assessment, and was shown on the materials shown at the Public Hearing.*

*The documents that are being circulated for public comment are the Section 4(f) evaluations of North Shore Riverwalk Park, Julius Breckling Riverfront Park and the Clinton Center and Park. No other parks were identified in the Environmental Assessment as being impacted and therefore requiring a Section 4(f) evaluation. None of the parks mentioned in the comment are within the area studied as part of the Environmental Assessment, as they are further than 500 feet from the closest project improvements, and therefore outside the area of effect.*

**5. The document fails to address the harm done by the loss of free parking space in the vicinity of the parks, or to explain how the loss would be mitigated.** The loss of public parking near the parks associated with the project is identified on pages 39 and 42 of 50. However, the document fails to quantify the loss, fails to acknowledge that it is free parking space which is being lost, and otherwise fails to identify the harm and provide any mitigation to this adverse effect on access to the Parks.

**Response:** *Loss of parking under the I-30 bridge, and within existing I-30 ROW, was discussed with the City of Little Rock officials at a meeting on February 9, 2016. The purpose of the meeting was to discuss impacts to the parks and obtain feedback from the City officials with respect to those impacts, which is why the meeting notes are included in the document. At the meeting, the City officials mentioned the parking under the I-30 bridge, which is within ARDOT ROW. As detailed in the notes, at the time of the meeting in February 2016, the disposition of the parking was not known, and is still not known. As the parking is not within the Julius Breckling Riverfront Park or the Clinton Center and Park, it is not a permanent or temporary incorporation of park land and is not required to be discussed in the Section 4(f) document.*

*The disposition of the parking would be covered under an air space agreement. At this time, the City of Little Rock has not requested to renew the air space agreement by which the free public parking exists within ARDOT ROW. The City has not objected to the Section 4(f) documents even though air space agreements have not been finalized.*

*Although not pertinent to a Section 4(f) analysis, the loss of public parking due to the Selected Alternative was quantified in the Community Impacts section of the Environmental Assessment, on page 86, and is extensively discussed in Section 5.2.1 Parking Removal (page 3298) of the*

**6. Section 6(f) funding.** The document fails to make clear (page 40 of 50) whether the concerns about Section 6(f) funding (apparently Land and Water Conservation funds) raised in Attachment C were resolved and to what effect and to what implication.

**Response:** *Whether or not Section 6(f) applied to the parks was discussed with the City of Little Rock officials at a meeting on February 9, 2016. At that time, ARDOT agreed to look into it further and subsequently did. As a result of that investigation, it was determined that Section 6(f) funding had not been used for the parks, as documented on page 110 of the EA, in the second sentence of Section 3.4 "How Would the Project Affect Parks and Recreation Areas?" Consequently, no discussion of Section 6(f) was needed in the Section 4(f) evaluations.*

**7. Attachments A and B failed to recognize that Temporary Use would be required.**

Attachments A and B at pages 30 and 35 of 50 indicate that the project does not require a temporary use but page 12 (page 15 of 50) says "To widen the Bridge, right of way and temporary construction easements will be acquired from the parks, and use of ARDOT right of way by the parks will be restricted during construction." Likewise, Attachment C (page 26 of 50) shows that there would be effects to an air space agreement which was not recognized in Attachments A and B. The contradiction needs to be resolved.

**Response:** *The documents in Appendices A and B to the Section 4(f) Evaluation (pages 30 and 35) are Determinations of Applicability (DOA). These documents were prepared in October 2015 for the purpose of determining whether Section 4(f) applied to the parks that are being evaluated in the Section 4(f) document. They are required for all Section 4(f) determinations and are appended to the document to establish the record for why the parks were evaluated. The conclusion of the DOA's was that the parks did need to be evaluated, based on permanent incorporation. At the time of the DOA's, the Environmental Assessment was just beginning, and it was not known if temporary impacts would be involved or not. However, it is irrelevant, because it was known that permanent impacts would be required, and have turned out to be required, and that established the need for a Section 4(f) evaluation.*

*As it turned out, temporary impacts were indeed necessary, and those are described in detail in Sections 8.0 and 9.0 of the Section 4(f) evaluation "What Will the Project do to the Parks?", along with the permanent impacts.*

*Attachment C of the Section 4(f) Evaluation are meeting notes documenting coordination with the Officials with Jurisdiction. At the meetings, air space agreements were discussed. These agreements detail the rights that the City would like to have to various features within ARDOT ROW that are of concern to the City. Among these are the Arkansas River Trail, and statues and benches along the trail. In some cases, ARDOT and the City have reached agreement concerning these features, as detailed in Sections 8.0 and 9.0. Air space agreements regarding other features are still being discussed. These are not temporary or permanent incorporation of park property and are not required to be finalized in the Section 4(f) documents.*

**8. The document is presented as a finding when actually it is a draft or proposal, thereby stifling public input.** In its totality, this document is actually a **Draft** De Minimis Finding. Many of the pages are labelled "DRAFT", public comment has not yet been received or acted upon, and there is no concurrence by the City of Little Rock. The document needs to be relabelled accordingly throughout to avoid any impression that such a finding has already occurred. As

presented, the document is prejudicial and could lead the public to conclude that there is no need to comment because:

- It is entitled “Evaluation and Documentation of a De Minimis Finding to a Section 4(f) Property for Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges ARDOT Job No. CA0602 Julius Breckling Riverfront Park and William J. Clinton Presidential Center and Park”. Why comment on a finding that has already been made?
- Its Table of Contents lists entries of
  - “What Is the Decision?” An indication that a De Minimis finding has already been made.
  - “Attachment D: City of Little Rock Concurrence Letter” A false indication that the City of Little Rock has already issued a letter of concurrence.
  - “How Did We Involve the Public in This Evaluation?” The use of the past tense clearly indicates that the document considers that public involvement in the decision has already occurred. In reading the contents of this section of the document it is clear that **there has been no public involvement** on this “Finding”--only coordination with the “City of Little Rock Parks and Recreation”:

“Coordination meetings were held with the City of Little Rock Parks and Recreation. An overview of the project was presented, impacts were identified, and means to mitigate them were discussed. Meeting notes are included as Attachment C. The public will be afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource. Following review of the public comments, concurrence that the project does not adversely affect the parks will be requested from the City of Little Rock.”

This Table of Contents item therefore needs to be relabelled as “How Did We Involve the City of Little Rock Parks and Recreation?”. Another section would then be entitled “How Will We Involve the Public in This Evaluation?”

The last sentence must also be corrected as it assumes that nothing the public says will have a material effect on the De Minimis decision--that it has already been made. One possible rephrasing follows.

CHANGE FROM: Following review of the public comments, concurrence that the project does not adversely affect the parks will be requested from the City of Little Rock.

CHANGE TO: Following review of the public comments, a decision will be made as to whether a De Minimis finding is appropriate. If such is the finding, concurrence that the project does not adversely affect the parks will be requested from the City of Little Rock.”

The document needs to be re-issued as a Draft document with all the misleading language corrected.

**Response:** *The documents are clearly labeled with the DRAFT watermark. Section 10.0 “How did We Involve the Public in the Evaluation?” says that the City will not be asked for concurrence on the De Minimis Finding until after comments have been received from the public. Section 11.0 “What is the Decision” says “This Section Will Be Completed Following Review of Public Comments,” clearly indicating that the decision has not been reached. At no*

*point is it stated or implied that a decision has already been made.*

- *The document title is appropriate. The contents of the document are the evaluation and the finding of effect on Section 4(f) resources. The fact that the finding has not been made yet and that the finding section has not yet been completed yet is irrelevant. This is a living document. The decision will be made following public input and included in the document. The document will then be final.*
- *The Table of Contents is a standard format for De Minimis findings throughout the State of Arkansas and not specific to this project.*
  - *The “What is the Decision?” section says “This Section Will Be Completed Following Review of Public Comments,” clearly indicating that the decision has not been reached.*
  - *Attachment D: City of Little Rock Concurrence Letter is currently empty. The letter will be written following the receipt and evaluation of public comment. If public comment causes FHWA to reconsider the De Minimis finding, a new document will be created. It will not be a De Minimis finding, as the finding will be that it is not a De Minimis impact. There would be no reason for FHWA to ask the City for concurrence on a De Minimis finding if the finding is that it is not a De Minimis impact.*
  - *Section 10.0 “How did We Involve the Public in the Evaluation?” details the public involvement that has occurred to date. The public involvement regarding the parks so far has consisted of the coordination with the Cities, and the Section 4(f) documentation that was distributed to the public prior to the Public Hearing as part of the Environmental Assessment (see Section 3.4 “How Would the Project Affect Parks and Recreation Areas?” and Appendix H, which contains the Section 4(f) Evaluations. The Cities are part of the public. Comments were received from the public on these documents, and that coordination is documented in Appendix E of the Environmental Assessment - Public Involvement Summary. Following receipt of public comments on the documents that are currently being circulated, Section 10.0 will be completed.*
- *There is nothing misleading in these documents and no reason for any changes in section heading labeling.*

**9. The de minimis analysis and resultant document reflect an inappropriate advocacy position for the selected alternative and for a de minimis finding.** The document is supposed to provide information on a proposed De Minimis Finding, and yet it includes information not relevant to that decision, information intended to influence a De Minimis Finding. For instance, its Table 3 shows travel times for the Selected Alternative to and from the Clinton Center. What relevance does this have to a proposed De Minimis Finding? And why were the various deficiencies in the modeling not disclosed?<sup>2</sup> Information on the air pollution effects on the parks associated with the project would have been appropriate, for instance, but why provide information on estimated rush hour travel times in the year 2045? The intent is clearly to influence a De Minimis Finding.<sup>3</sup>

--The year 2045 is not the design year for the project. The year 2045 is not the design year used in the EA's noise impact analysis.

--Selecting the Clinton Center as a rush hour trip terminus is itself distorting as the Clinton Center is not identified in the EA as being a major employer and many of its activities occur outside the rush hour. If there were some logical basis for presenting such estimates, then estimated commuting times should be shown on an average portal-to-portal basis for commuters associated with at least one of the major employers identified in the EA.

--The document fails to mention any of the various adverse effects associated with the Selected Alternative such as:

- Up to 9 new traffic lights in the downtown area with attendant congestion and increased travel times
- Forced relocation of people from their homes
- Forced relocation of businesses with the associated potential loss of jobs or increased costs of commuting
- Removal of scores of free parking spaces
- Longer-distance and longer-time portal-to-portal commutes for major employers such as the City of Little Rock and the federal government.

---

<sup>2</sup>--**The VISSIM model used to generate estimates of congestion and speed/travel duration provides a distorted picture in that it fails to incorporate normal human behavior of avoiding congestion.** Table 3 is misleading in that it fails to incorporate necessary cautionary notes explaining its limitations as explained in the 3992-page EA:

--“However, the VISSIM microsimulation model used is a static model rather than a dynamic assignment model meaning that the model does not reassign traffic based on congestion. Therefore, it can be assumed that as congestion builds to oversaturated extreme gridlock conditions, motorists will seek alternative routes).” Appendix B of Appendix A, page ES-4, indicated epage 276/3992.

--“Therefore, extreme congestion shown in the Future No-Action as well as one of the 8-Lane GP Action Alternative conditions is likely not to be as bad as displayed, where no recovery in travel conditions is shown.” Appendix B of Appendix A, page 13, indicated epage 289/3992. People avoid congestion. No one stands in a long grocery line when they see an adjoining empty line. However, these explanations are buried in an appendix to an appendix of the EA, rather than being disclosed in the pertinent graphics, charts, and narratives in the EA proper where the failing needs to be addressed--or at least disclosed.

<sup>3</sup>The ch2m memo of February 9, 2016 on page 39 of 50 in the “Finding” itself reflects this undue influence: “Mark Callahan and John Fleming gave an overview of the current status of the project and explained that AHTD and FHWA would like to arrive at a finding that the project represents a de minimis impact on the parks....”

- Redirection of through-traffic into the downtown Corridor with attendant increases in noise and air pollution
- Concentration of travel into the downtown area from the north into a single downtown exit instead of the current three exits
- Increased commuting times during periods of construction
- The costs of future work outside the project area which will be needed in order to prevent traffic from backing up into the Corridor

**Response:** *This evaluation documents impacts to the parks. Impacts can be both beneficial and adverse. Table 3 demonstrates that the Selected Alternative would maintain or improve access to the Clinton Center. The improvement in travel time to and from the parks is a beneficial impact. It is more likely that the public will visit the parks if they do not have to deal with traffic congestion and delays to get there.*

- *Air pollution was evaluated in the EA: Section 3.15 “Will the Project Have an Effect on Air Quality?” and EA Appendix Q: MSAT Technical Report. The conclusion was that the project will have a beneficial effect on air quality compared to the No-Action Alternative, due to reduction in congested traffic conditions.*
- *2045 is the design year used in the Re-Evaluation, including re-evaluated noise impacts. The travel time analysis was redone to reflect the current design year.*
- *Travel times were estimated to two major destinations in downtown Little Rock, the Clinton Center and the River Market. The results were similar. The project will reduce travel delays to downtown Little Rock compared to the Existing and Future No-Action conditions.*
- *The Section 4(f) document that is being circulated for public comment is intended to evaluate impacts to the parks. The concerns listed in the bulleted list above do not have anything to do with the parks. Further, all of these have been addressed previously in the responses to the Public Hearing comments (EA Appendix E: NEPA Public Involvement Summary).*

*The assertions made in Footnote 2 are incorrect. They were made by Norm Marshall of Smart Mobility and were included in Public Hearing comments from Pat Riley, Matthew Pekar, and Richard Mays. They were responded to on pages 2478-2479, pages 2516-2518, and 2566-2572, and 2573-2575 of the EA (Appendix E - NEPA Public Involvement Summary). Mr. Marshall’s statements demonstrate a misunderstanding of the traffic modeling techniques used for this project.*

*Traffic modeling was done in two stages: the first used the Metroplan CARTS model to assign traffic volumes to the corridor. CARTS is a dynamic model that takes into account driver behavior in avoiding congestion. The second stage was a microsimulation using VISSIM, which is a static model, to describe how the traffic volumes determined by CARTS would operate at specific locations in the corridor. This is a common, accepted procedure which was reviewed, approved, and verified a team consisting of nationally-recognized experts, including Professional Transportation Operation Engineers, with decades of experience modeling complex interstate projects. The models were also verified by Metroplan, ARDOT, and FHWA.*

*Footnote 3 is taken from the meeting notes with the Officials with Jurisdiction for the parks. The excerpt accurately portrays that it has always been ARDOT’s desire to avoid and minimize impacts to the parks. Complete avoidance of impacts was never possible, as it was known as early as the DOA documentation in 2015 that ROW would be required from the parks. Therefore, it was ARDOT’s intent to work with the Cities to minimize impacts to the extent that a finding of De Minimis*

*impact was appropriate. The coordination meetings from which these notes were generated demonstrate that ARDOT made every attempt to minimize impacts in order to make a De Minimis find possible.*

## **Additional Comments on the Little Rock 30 Corridor De Minimis Document**

**1. The Noise Impact Analysis failed to address noise concerns in that portion of MacArthur Park east of I-630.** As shown on page 4504 of the 7100 page EA, no receivers were placed in that portion of MacArthur Park east of I-630. Furthermore, noise receivers placed on properties immediately adjacent to said portion of MacArthur Park show a number of receivers (at least seven) recording noise levels in the range of 62-65 dB(A). Given the topography of the land, and the fact that that portion of MacArthur Park lies in closer proximity to I-630 than the receivers on the adjoining properties, it is likely that receivers placed in this portion of MacArthur Park would have registered 66 dB(A) or higher and thus would have been identified as noise impacts--as was the case with noise receivers placed in that portion of MacArthur Park west of I-630. Note that the EA elsewhere indicates that "A change in noise level of 3 dB(A) is not perceptible to the human ear." page 3919/7100

**Response:** *The documents that are currently being circulated for public comment are the Section 4(f) evaluations of North Shore Riverwalk Park, Julius Breckling Riverfront Park and the Clinton Center and Park. A Section 4(f) document was not required for MacArthur Park due to the fact that the project did not involve a taking from MacArthur Park.*

*The receivers for the portion of MacArthur Park "east" (actually north) of I-630 are shown on page 4508 of the EA. As shown in Table C-5 on page 4376, five receptors in the MacArthur Park were considered to be impacted, due to predicted noise levels ranging from 66-70 dB(A). The NAC for these receptors is 67 dB(A). The noise increase due to the project was predicted to be between 1-3 dB(A), so this increase is not considered an impact. The threshold for human hearing is considered to be 3 dB(A).*

*Of these five receptors, two are actually within MacArthur Park, and three are within ARDOT ROW (the dog park) along I-630. All are within Noise Sensitive Area 5. When I-630 was originally constructed, the grade was lowered as a means of avoiding and minimizing noise impacts to MacArthur Park. As part of the noise study evaluated in the EA, an investigation was conducted to see if it is possible to further lower noise levels in MacArthur Park. A noise barrier (Noise Barrier 5) was evaluated along the north side of I-630 (see Table 7-4 on page 4245 of the EA). Because of the grade difference between the roadway and the park, the 25-foot tall barrier evaluated at this location was not effective in reducing noise sufficiently to meet the design goal reduction of 8 dB(A) for at least one receptor, and was therefore considered unreasonable.*

**2. The Noise Impact Analysis failed to address noise concerns in that portion of the project area east of the Union Pacific Railroad tracks' intersection with I-30.** In the totality of the NOISE RECEIVER LOCATION MAPS 6 LN WITH C/D WITH SDI (the preferred alternative) on pages 4500-4531 of the 7100 page EA for the "I-30 from I-530 to Hwy. 67 30 Crossing Project CA0602", no noise receivers are shown anywhere in the project area east of the Union Pacific Railroad tracks' intersection with I-30. Nor have Noise Study Areas been identified therein. The De Minimis document shows this area as being within the Project Limits in Figure 1 on page 3 and in Figure 2 on page 5. These failings to address noise concerns are at variance with direction at 23 CFR 772 as shown below.

"The best estimation of the future design year noise levels at various distances from the

edge of the nearest travel lane of the highway improvement where the future noise levels meet the highway agency's definition of "approach" for undeveloped lands or properties within the project limits. At a minimum, identify the distance to the exterior noise abatement criteria in Table 1;" 23 CFR 772.17(a)(2)

"If undeveloped land is not permitted for development by the date of public knowledge, the highway agency shall determine noise levels in accordance with 772.17(a) and document the results in the project's environmental clearance documents and noise analysis documents."  
23 CFR 772.11(c)(2)(vii)(C)

The failure to study this area raises serious questions as to exactly what the project's noise effects are on Fourche Bottoms, Gillam, and Interstate Parks.

**Response:** *The documents that are currently being circulated for public comment are the Section 4(f) evaluations of North Shore Riverwalk Park, Julius Breckling Riverfront Park and the Clinton Center and Park.*

*A Section 4(f) document is not required for the area east of the UPRR intersection with I-30 as it is not a park.*

*In order to be considered a public park, the land must be publicly owned, must be open to the public, the major purpose of the land must be for a park, and it must be significant. The undeveloped land adjacent to I-30 on the east in the vicinity of the UPRR meets none of these criteria.*

*The ownership is private, not public:*

- UPRR
- Stephen E Whitwell Sr. Revocable Trust

*The land is privately owned and not open to the public. There is no public access.*

*The major purpose of the UPRR property is transportation. The purpose of the trust property is unknown.*

*The significance test applies to publicly owned properties. The agency with jurisdiction over the park determines whether it is significant with respect to other parks administered by the agency. This does not apply.*

*None of the parks mentioned in the comment are within the area studied as part of the Environmental Assessment, as they are further than 500 feet from the closest project improvements, and therefore outside the area of effect.*



Attachment E: City of Little Rock Concurrence Letter



ARKANSAS DEPARTMENT OF TRANSPORTATION

ARDOT.gov | IDriveArkansas.com | Lorie H. Tudor, P.E., Director

ENVIRONMENTAL DIVISION

10324 Interstate 30 | P.O. Box 2261 | Little Rock, AR 72203-2261 | Phone: 501.569.2281 | Fax: 501.569.2009

May 13, 2020

John Eckart  
Director, Little Rock Parks and Recreation  
500 West Markham, Room 108  
Little Rock, AR 72201

Re: ARDOT Job Number CA0602  
30 Crossing  
Pulaski County

Dear Mr. Eckart:

The Arkansas Department of Transportation (ARDOT), in cooperation with the Federal Highway Administration (FHWA) is proposing a project to improve I-30 and I-40, which would involve replacement of the existing I-30 bridge over the Arkansas River and provision for additional capacity on I-30 and I-40 in the Cities of Little Rock and North Little Rock in Pulaski County.

The proposed I-30 right of way (ROW) would include an area within the William J. Clinton Presidential Center and Park (Clinton Center) and Julius Breckling Riverfront Park (Riverfront Park) in Little Rock. The primary uses of the park areas adjacent to I-30 are recreational activities such as walking, running, and bicycling. Additionally, the proposed highway ROW passes near several works of public art.

The determination has been made by the ARDOT that the proposed project will not adversely affect the protected features, attributes or activities qualifying the property for protection under Section 4(f) of the Department of Transportation Act of 1966, thus qualifying for a *de minimis* finding for the two parks, as well as nearby public art (see the enclosed Section 4(f) *De Minimis* Finding). The ARDOT's proposal includes all possible planning to minimize harm to the recreational use.

The total area of the Clinton Center is approximately 30 acres. The total area of ROW that may be acquired to construct the project is 0.74 acre. In addition, a temporary construction easement of 1.81 acres would be needed to construct the project. The total area of the Riverfront Park is approximately 33 acres. No ROW will be needed from Riverfront Park to construct the project; however, a temporary construction easement of 0.39 acre would be needed. The land conversion affects an area where walking, running, and cycling occur. Impacts as a result of the highway construction would include:

- The westernmost stairway connecting President Clinton Avenue to the Arkansas River Trail in the Clinton Center would be in the proposed ROW and would be removed.
- Temporary construction impacts to 0.3 acre of wetlands within the Bill Clark Presidential Wetlands Park would occur.
- During certain phases of construction, temporary re-routing of the Arkansas River Trail would be required.
- Temporary closure of the Promenade, the access road to the Nature Center, would be required.
- Temporary relocation of three benches along the Promenade, and the Harriet Tubman and Touch the Sky statues, would be required.
- Temporary use of land from the Clinton Center for purposes of access to the site during construction and temporary storage of construction equipment may be required.

Recreational uses in both parks after construction of the highway would be unchanged from the present conditions. Several measures have been incorporated into the project to assure that the proposed project does not jeopardize the recreational value of the facility. The measures included as part of the proposed project are:

- The stairway within the Clinton Center which would be impacted by construction would be reconstructed outside the proposed ROW by ARDOT.
- Upon completion of the bridge, the area within the Bill Clark wetlands disturbed by construction would be restored to its natural contours, stabilized, and allowed to revegetate naturally.
- The construction contractor would coordinate activities affecting the Arkansas River Trail with the City of Little Rock Parks and Recreation Department through ARDOT. If temporary re-routing of the trail is necessary, a safe detour route would be established to avoid loss of use of the Trail.
- Temporary closures of the Promenade would be minimized so as to minimize disruption and avoid any loss of access to Riverfront Park.
- The City of Little Rock would be responsible for temporary relocation of the statues and benches along the Promenade. Upon completion of the bridge widening, the statues and benches could be placed within ARDOT right of way under the terms of an air space agreement at a location agreed to by ARDOT, the City of Little Rock and the Clinton Center.
- A plan would be created by the construction contractor and submitted to ARDOT containing a schedule of temporary closure times for the ARDOT right of way containing the Promenade and the Arkansas River Trail. A safe detour route for the Arkansas River Trail, as specified by the City of Little Rock Parks and Recreation Department, would be established and maintained by the construction contractor. The ARDOT would coordinate with the City of Little Rock Parks and Recreation Department to ensure that temporary closure of the Promenade and re-routing of the Arkansas River Trail would not occur until alternate access is

provided.

- The Preferred Alternative would result in removal of the existing circular ramps at the Hwy 10 interchange, as well as removal of the storage building under Interstate 30 north of President Clinton Avenue. The Preferred Alternative would create additional open space within ARDOT right of way adjacent to the Clinton Center, which would enhance visibility of the Clinton Center.

A requirement of the Section 4(f) process for a *de minimis* finding is an opportunity for the public to comment on the Section 4(f) Evaluation. The draft Section 4(f) Evaluation was made available for review and comment by the public. Two sets of comments were received, both from Dale Pekar. The comments were addressed and are included in Attachment D of the Draft Section 4(f) Statement.

If you have any questions, comments or wish to discuss the impacts to the park further, please contact Randal Looney at (501) 324-6430 or John Fleming at (501) 569-2281.

If you agree with the assessment of the impacts of this project and the proposed minimization and mitigation for the impacts on the William J. Clinton Presidential Center and Park and Julius Breckling Riverfront Park, please sign the statement on the next page and return it to us. Thank you for your cooperation.

Sincerely,



John Fleming  
Division Head  
Environmental Division

Enclosure

I concur with the assessment and the proposed minimization and mitigation of impacts to William J. Clinton Presidential Center and Park and Julius Breckling Riverfront Park as detailed in the enclosed Section 4(f) Evaluation and documentation of De Minimis Findings to Section 4(f) Property for Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges.

John Schutt Signature  
Director - Parks Title  
5-26-20 Date



Evaluation and Documentation of a  
De Minimis Finding to Section 4(f) Property  
for Public Parks, Recreation Lands, and  
Wildlife and Waterfowl Refuges  
ARDOT Job No. CA0602  
North Shore Riverwalk Park

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I-30 (From I-530/I-440 to I-40) and  
I-40 (From Hwy. 365/MacArthur Dr. to Hwy. 67)  
Pulaski County, Arkansas  
May 2020



U.S. Department  
of Transportation  
**Federal Highway  
Administration**





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## ATTACHMENTS

Attachment A: Determination of Applicability for Northshore Riverfront Park

Attachment B: Meeting Notes from Coordination Meetings with City of North Little Rock Parks and Recreation (2/9/16 and 6/27/16)

Attachment C: Phone Conversation Notes with City of North Little Rock (2/29/16), North Little Rock Downtown Recreational Vehicle Park (4/13/16), and City of North Little Rock (5/19/16)

Attachment D: Public Comments

Attachment E: City of North Little Rock Concurrence



## 1.0 WHAT IS SECTION 4(F)?

Section 4(f) is part of a law that was passed in 1966 (Public Law 89-670), 49 U.S.C. 303 (formerly 49 U.S.C. 1651(b)(2) and 49 U.S.C. 1653f). Under Section 4(f), the policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside, public parks, recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation is required to consult and cooperate with the Secretaries of the Interior, Housing and Urban Development, Agriculture, and with the States, in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities. The Secretary may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance only if there is no prudent and feasible alternative to using that land, and the program or project includes all possible planning to minimize harm resulting from the use.

## 2.0 DOES SECTION 4(F) APPLY TO NORTH SHORE RIVERWALK PARK?

The Federal Highway Administration (FHWA) signed a Determination of Applicability (DOA) for North Shore Riverwalk Park (Riverwalk Park) on October 14, 2015 (**Attachment A**). In the DOA, FHWA determined that Section 4(f) applies to North Shore Riverwalk Park.

The intent of the analysis presented in this document is to demonstrate that Section 4(f) impacts to Riverwalk Park are relatively minor. A finding that the impacts of the project constitute a *de minimis* effect can be made based on the criteria listed in **Table 1**.

**Table 1: Criteria to Establish *de minimis* Impact Determination**

When Can We Use A <i>De Minimis</i> Finding on Section 4(f) Properties?	Does It Apply To This Project?
Did we specially design the project to protect Riverwalk Park as much as possible? Did we use mitigation and enhancement where it was suitable?	Yes
Did the official(s) with authority over Riverwalk Park have a chance to consider this information and agree that the project will not greatly harm the things that make the Riverwalk Park important?	Yes
Did the public have an opportunity to review and comment on the effects of the project on Riverwalk Park and the things that make it important to them?	Yes

## 3.0 WHAT IS THE PROPOSED PROJECT?

Approved by Arkansas voters, the Arkansas Department of Transportation (ARDOT) is implementing an accelerated State Highway Construction and Improvement Program named the Connecting Arkansas Program (CAP).

A major component of the CAP is to implement a project to improve a portion of Interstate 30 (I-30) from Interstate 530 (I-530) and Interstate 440 (I-440) to Interstate 40 (I-40), including the Arkansas River Bridge, and a portion of I-40 from Highway (Hwy.) 365



(MacArthur Drive [Dr.] to Hwy. 67. This project is CA0602: I-530 - Hwy. 67 (Widening & Reconst.) (I-30 & I-40), commonly known as the 30 Crossing project. **Figure 1** illustrates the proposed 7.3-mile project limits.

### 3.1 Existing Facility

I-30 is one of the critical links of the Central Arkansas Freeway System. It connects communities within the Central Arkansas Region and serves local, regional and national travelers with varied destinations and trip purposes.

The I-30 corridor generally consists of three main lanes in each direction with parallel one-way discontinuous frontage roads on each side of the interstate. In the northern portion of the project limits, the I-40 corridor consists of three to four main lanes in each direction with parallel one-way frontage roads on each side of the interstate between the I-30/I-40 interchange and North Hills Boulevard (Blvd.). Within the 7.3-mile corridor, four system interchanges are located:

- I-30 with I-530 and I-440
- I-30 with I-630
- I-30 with I-40
- I-40 with Highways 67/167

### 3.2 Proposed Alternatives

#### 3.2.1 No-Action Alternative

The No-Action Alternative represents the case in which the proposed project is not constructed, but could include future projects identified through the long-range planning process for maintaining a state of good repair as funding becomes available. The No-Action Alternative serves as a baseline condition to allow comparison of the effects of the Selected Alternative.

#### 3.2.2 Selected Alternative

The Selected Alternative (Six-Lane with C/D Lanes Alternative) would reconstruct the existing six-lane (three in each direction) roadway while adding two decision lanes on each side that ultimately feed into a C/D system located at the Arkansas River Bridge. The Selected Alternative would include the replacement of the Arkansas River Bridge.

The current Hwy. 10 (Cantrell Rd.) interchange provides direct access to the downtown business district of Little Rock. Its proximity to the Arkansas River Bridge and the I-30 interchange with I-630 creates a unique level of complexity. In order to balance various project goals, the Selected Alternative includes a Split Diamond Interchange (SDI) constructed south of the existing interchange at 4<sup>th</sup> and 9<sup>th</sup> Streets.

For detailed information on the Selected Alternative, refer to the **30 Crossing Environmental Assessment/Finding of No Significant Impact** and **30 Crossing Re-Evaluation** for the proposed project.

FIGURE 1: PROJECT LOCATION MAP



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#### 4.0 WHY IS RIVERWALK PARK IMPORTANT?

The Riverwalk Park is located between Riverfront Drive and the north shore of the Arkansas River from Smart House Drive to the Clinton Presidential Park Bridge (**Figures 2 and 3**). Within its boundaries lies the North Little Rock Downtown Riverside Recreation Vehicle Park (RV Park), which is separately administered by the City of North Little Rock. The Riverwalk Park is owned and operated by the City of North Little Rock and is approximately 36 acres in size.

The Arkansas River Trail runs along the length of the park. The Trail supports both pedestrian and bicycle traffic and connects to the Junction and Clinton Pedestrian Bridges. The Trail runs along the historic “Trail of Tears” route. Seven interpretive panels commemorating the Cherokee Trial of Tears can be found along the Trail. The Trail of Tears National Historic Trail specifically addresses the 1838-1839 removal of the Cherokee from their homelands in Georgia, Alabama, and Tennessee Indian Territory. The Cherokee took 17 different routes; four by water and thirteen by land. Both water and land routes passed through central Arkansas in 1830 and 1839 and passed through Little Rock and North Little Rock.

In addition to the Trail, other park amenities include:

- A boat ramp;
- The Arkansas Inland Maritime Museum;
- The Boathouse Club; and
- The North Little Rock Downtown Riverside Recreational Vehicle Park.

#### 5.0 CAN WE AVOID THE PARK?

The existing I-30 Arkansas River Bridge passes through the Park. Under the Selected Alternative, it will be necessary to replace the existing bridge with a wider structure in order to provide additional capacity and correct the structural and functional deficiencies of the Bridge. There would be unavoidable permanent impacts to the park as a result of construction, and unavoidable temporary impacts which would occur for the duration of construction under the Selected Alternative.

#### 6.0 WHAT PARK FEATURES ARE WITHIN THE PROJECT AREA?

Within the project area, there is a pavilion with picnic tables (**Figure 4**), a boat ramp (**Figure 5**), the Boathouse Club (**Figure 6**), parking under the I-30 Bridge (**Figure 7**), and the Arkansas River Trail (**Figure 8**). The location of these features is depicted on **Figure 9**. The Boathouse Club has relocated to an offsite location until construction is complete. There is an air space agreement between ARDOT and the City of North Little Rock that allows the pavilion, parking, and Arkansas River Trail to exist within ARDOT right of way.

FIGURE 2: NORTH SHORE RIVERWALK PARK LOCATION MAP

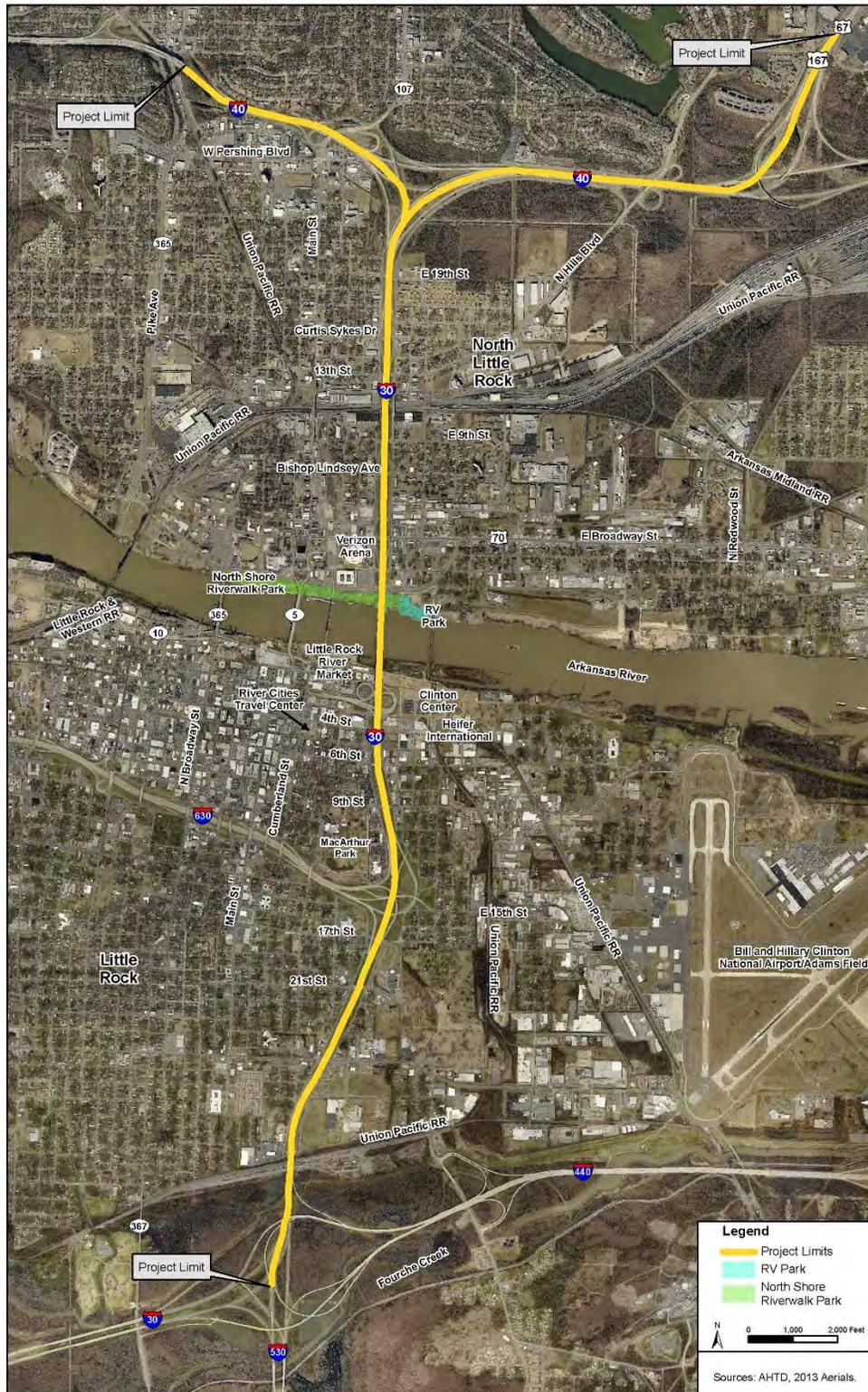
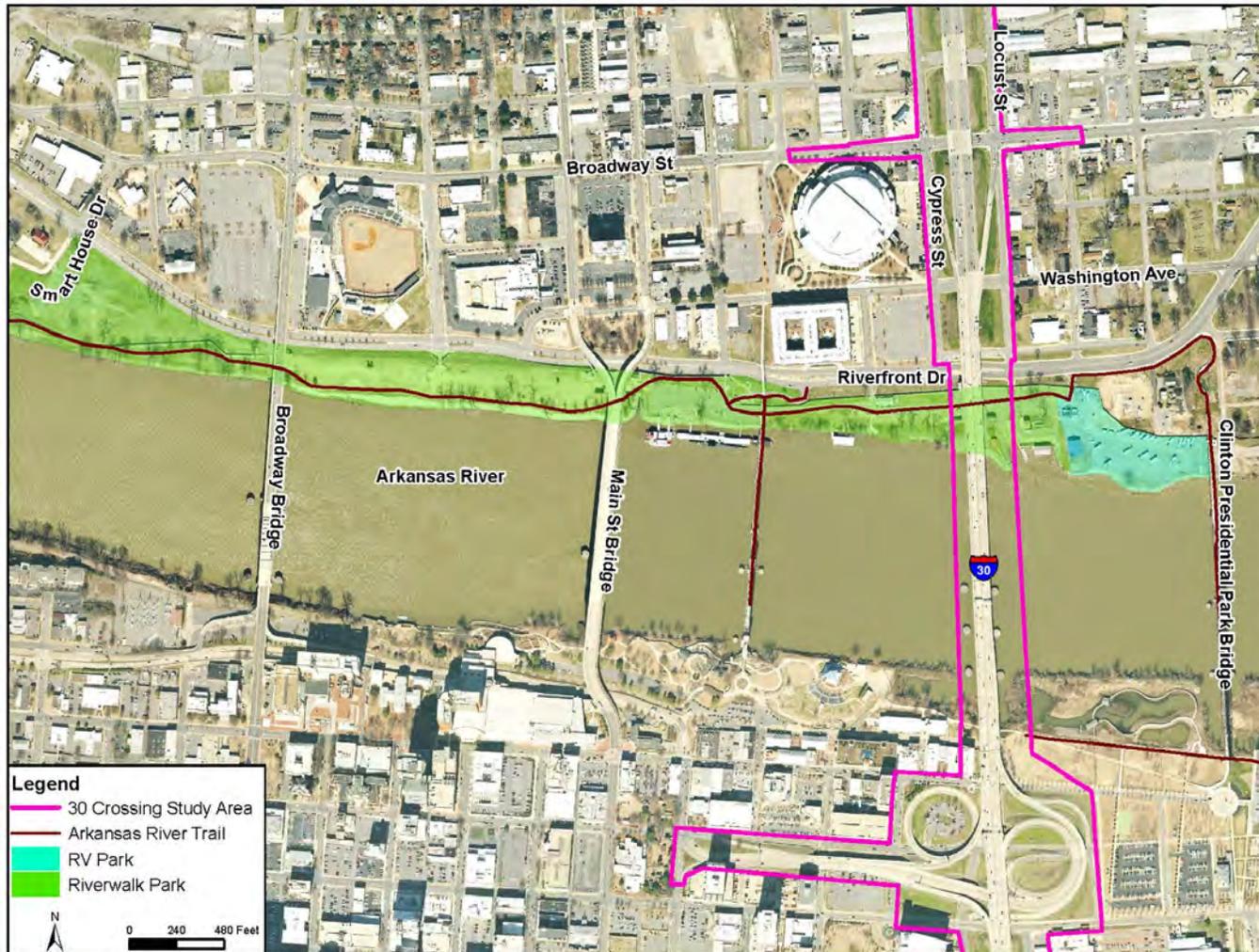


FIGURE 3: NORTH SHORE RIVERWALK PARK



**FIGURE 4: PAVILION ON EAST SIDE OF I-30**



**FIGURE 5: BOAT RAMP ON EAST SIDE OF I-30**



**FIGURE 6: BOATHOUSE CLUB ON EAST SIDE OF I-30**



**FIGURE 7: PARKING UNDER I-30 BRIDGE**



**FIGURE 8: ARKANSAS RIVER TRAIL UNDER I-30 BRIDGE**



**FIGURE 9: PARK FEATURES IN THE VICINITY OF THE ARKANSAS RIVER BRIDGE**





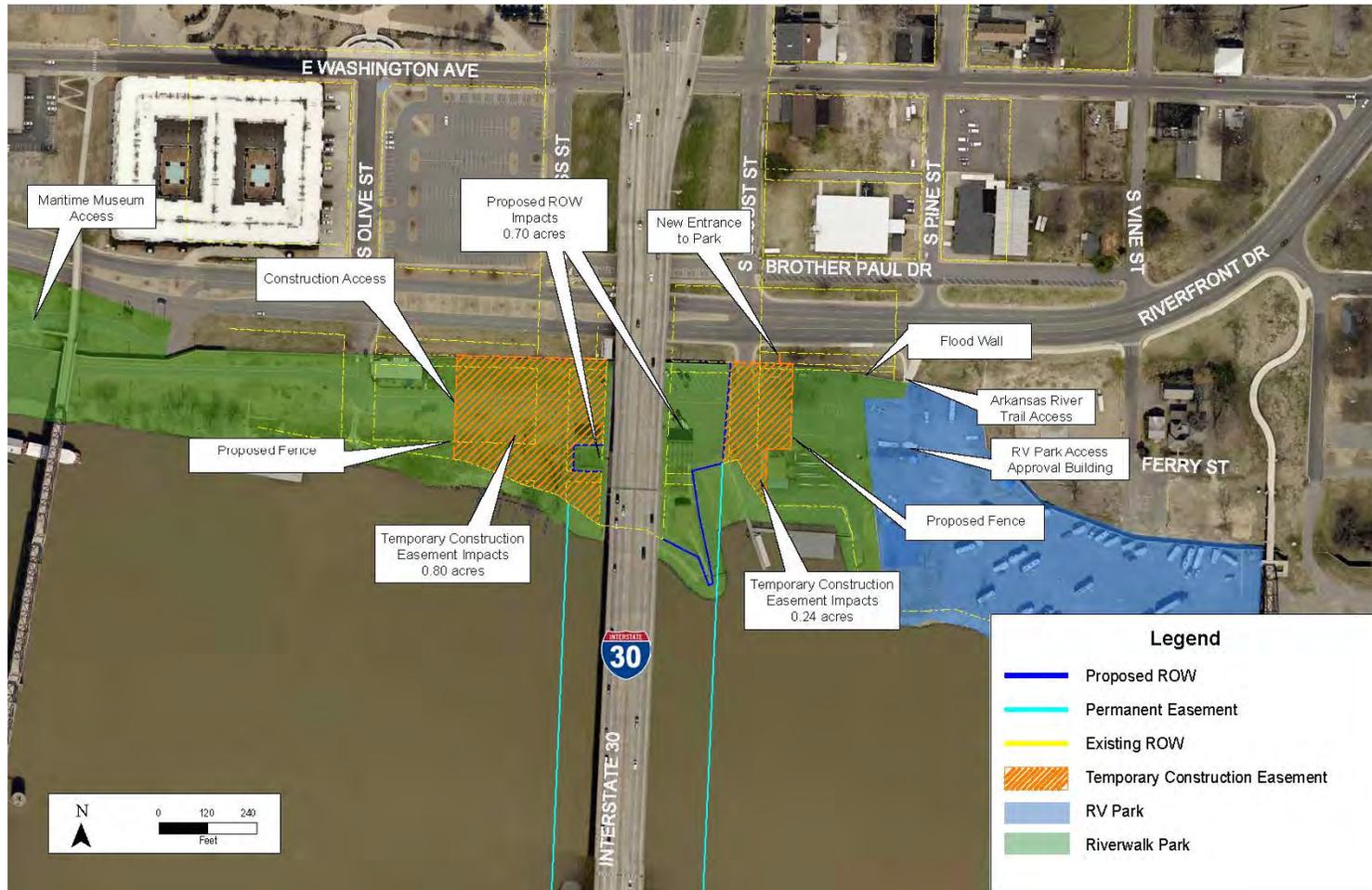
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## 7.0 WHAT WILL THE PROJECT DO TO THE PARK?

It is anticipated that the Selected Alternative would require 0.54 acres of additional right of way from the City of North Little Rock, resulting in permanent impacts to the pavilion and parking under the I-30 Bridge (**Figure 10**). This taking is approximately 2% of the total area of Riverwalk Park. In addition, 0.16 acres would be acquired from a private land holding within the park boundaries.

- The existing Locust Street entrance located to the east of the I-30 Bridge would be closed to the public during construction. A new public entrance to the Park would be constructed approximately 78 feet to the east of the existing entrance. After the completion of construction, both entrances would remain and be open to the public.
- The pavilion would be allowed within ARDOT right of way via an air space agreement with the City. Prior to construction, the City would relocate the pavilion outside of the construction area.
- There is parking under the I-30 Bridge and adjacent to the bridge that is within the area of park being acquired. Parking should continue to be allowed within ARDOT right of way. There would be no anticipated permanent loss of parking due to the project.
- Future design year noise levels were evaluated for both the No-Action and Selected Alternative. The noise levels resulting from the Selected Alternative do not exceed the 67 dB(A) Noise Abatement Criteria (NAC), or 66 dB(A) Approach NAC, for exterior locations for Activity Category C, which includes parks. Further, it was found that the Selected Alternative resulted in a maximum increase of 3 dB(A) over the existing noise levels, which is considered a minor increase, and which is not considered to be detectable in outdoor environments. Therefore, no noise impacts are anticipated to Riverwalk Park as a result of the project.

**FIGURE 10: IMPACTS TO NORTH SHORE RIVERWALK PARK AND RV PARK**





In addition, there would be temporary impacts during construction. The Selected Alternative would require temporary construction easements totaling 1.04 acres on both sides of the Bridge. Approximately 0.8 acres of temporary construction easements would be needed from the City of North Little Rock, with the remaining 0.24 acres to be acquired from private land holdings within the park boundaries. In addition, these impacts would be involved:

- Temporary re-routing of the section of the Arkansas River Trail that passes through the construction zone may be required during certain phases of construction. A safe detour route would be provided.
- Temporary closure of the portion of the park located immediately east and west of Interstate 30 (**Figure 10**) would be required for the duration of Bridge construction. This area would be used for access to the project site by construction equipment and laydown of construction equipment. The contractor would be permitted to use the Olive Street gate (**Figures 11 and 12**) to access the construction site; however, the gate would remain open to the public.
- Temporary closure of the boat ramp would occur during the duration of Bridge construction.

The Selected Alternative would result in additional covered area under the I-30 Bridge that could be used for park activities under an air space agreement with the City.

**FIGURE 11: EXISTING OPENING IN FLOOD WALL AT SOUTH OLIVE STREET FROM PARK**



**FIGURE 12: EXISTING OPENING IN FLOOD WALL AT SOUTH OLIVE STREET FROM RIVERSIDE DRIVE**



#### 8.0 WHAT WILL WE DO TO REDUCE HARM TO THE PARK?

The following measures would be included in the proposed project to reduce harm to Riverwalk Park. These measures have been coordinated with the City of North Little Rock (**Attachment C**).

- The pavilion is currently within ARDOT right of way and the City would need to move it outside the construction zone prior to construction. Following construction, the City may choose to relocate it to another area within the park. If the City desires to relocate it back to ARDOT right of way, this could be possible under an air space agreement.
- The Design-Build contractor would work through ARDOT with the City to identify areas where parking can be provided within ARDOT right of way.
- Re-routing of the Arkansas River Trail would be coordinated through ARDOT, with the City of North Little Rock Parks and Recreation Department, to provide the park personnel ample time to schedule park activities, including cycling events. A safe detour route would be provided.

- 
- Access to the area of the Park west of Olive Street would be maintained by making the existing entrance-only opening in the flood wall to the west of Olive Street a two-way roadway. The area of the Park east of the Locust Street entrance would not be affected, as a new entrance would be provided east of the existing Locust Street entrance to provide access to the Park.
  - Temporary closure of the boat ramp would be coordinated with the activities of the Sherriff, US Army Corps of Engineers (USACE), and with fishing tournaments. Alternate access to the River is available at the existing boat ramps at either Burns Park, approximately 4 miles upstream in North Little Rock, or Murray Park, approximately 5 miles upstream in Little Rock.
  - A plan would be created by the construction contractor and submitted to ARDOT containing a schedule of temporary closure times for the boat ramp and the Arkansas River Trail in the construction zone. A safe detour route for the Arkansas River Trail, as specified by the City of North Little Rock Parks and Recreation Department, would be established and maintained by the construction contractor. The ARDOT would coordinate with the City of North Little Rock to ensure that temporary closure of the boat ramp or re-routing of the Trail does not occur until alternate access is provided.

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## 9.0 HOW DID WE INVOLVE THE PUBLIC IN THIS EVALUATION?

A coordination meeting was held with the City of North Little Rock Parks and Recreation on February 9, 2016. An overview of the project was presented, impacts were identified, and means to mitigate them were discussed. Meeting notes are included as **Attachment B**.

The City of North Little Rock and manager of the RV Park were contacted to obtain feedback on temporary access options to the RV Park during construction. A coordination meeting was held onsite on June 27, 2016, to discuss access options. The City of North Little Rock prefers that the public access to the RV Park be maintained to the east of I-30. The City prefers that the existing public access to North Shore Riverwalk Park at Olive Street remains open, but the contractor would be allowed access to the construction site at Olive Street. Phone conversation notes and meeting notes are included as **Attachment C**.

The public was afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource. The comments and responses are included as **Attachment D**.

Following review of the public comments, concurrence that the project does not adversely affect the parks will be requested from the City of North Little Rock. On May 26, 2020, the City of North Little Rock concurred with the assessment and proposed minimization and mitigation of impacts. The signed concurrence letter is included as **Attachment E**.

## 10.0 WHAT IS THE DECISION?

This evaluation concludes that the proposed project will not harm the protected features, assets, or activities that qualify the park for protection under Section 4(f), thus qualifying for a *de minimis* finding on the Northshore Riverwalk Park in North Little Rock.



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Attachment A: Determination of Applicability

It has been determined that there are potential Section 4(f) properties in the study area of the 30 Crossing project. The following information has been compiled for each property to determine Section 4(f) applicability.

<b>Property Description</b>	North Shore Riverwalk Park (Riverwalk Park)
<b>Property Location</b>	Located along the north shore of the Arkansas River at the I-30 river crossing in North Little Rock, Arkansas (NLR).
<b>Property Size</b>	14.3 acres
<b>ROW needed for project (acres / percent of park)*</b>	8-lane General Purpose Alternative = 1.3 acres / 9.1% (see <b>Exhibit 1</b> ) 10-lane Collector/Distributor Alternative = 1.3 acres / 9.1% (see <b>Exhibit 2</b> )
<b>Park features within project area</b>	Two billboards, boat ramp, sheet metal awning with picnic tables, parking area under the I-30 bridge, storage under the bridge (also used as bridge support structure), utility structure.

*\*Estimate based on footprint of the build alternatives and exclusive of the airspace agreement.*

**I. Property Ownership/Significance**

<b>Who owns the property?</b>		City of NLR
<b>Yes</b>	<b>No</b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. Is there a lease associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	B. Is there an easement associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	C. Is there a covenant associated with the property?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	D. Is there an airspace agreement associated with the property?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	E. Are there restrictions associated with the property?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	F. Significance assumed unless otherwise noted by the Officials with Jurisdiction (OWJ).
<b>Additional explanation for any of the above</b>		Airspace agreement executed between the Highway Department and City of NLR.

**II. Section 4(f) Defining Criteria for Parks, Recreation and Refuge Properties**

<b>Yes</b>	<b>No</b>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	A. Is the property publicly owned?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Is the property open to the public?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	C. Is the property's major purpose for park, recreation or refuge activities?

It has been determined that there are potential Section 4(f) properties in the study area of the 30 Crossing project. The following information has been compiled for each property to determine Section 4(f) applicability.

**III. Establishing Section 4(f) Use of the Property**

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. Does the project require a temporary use (e.g. temporary easement, construction easement, etc.)?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Does the project require permanent incorporation?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	C. Does the project require a constructive use?
<b>Additional explanation for any of the above</b>		The 30 Crossing project will be delivered using Design-Build; thus the exact area of permanent incorporation (e.g., location of bridge columns) is unknown at this phase of project development.

**IV. Section 4(f) Applicability**

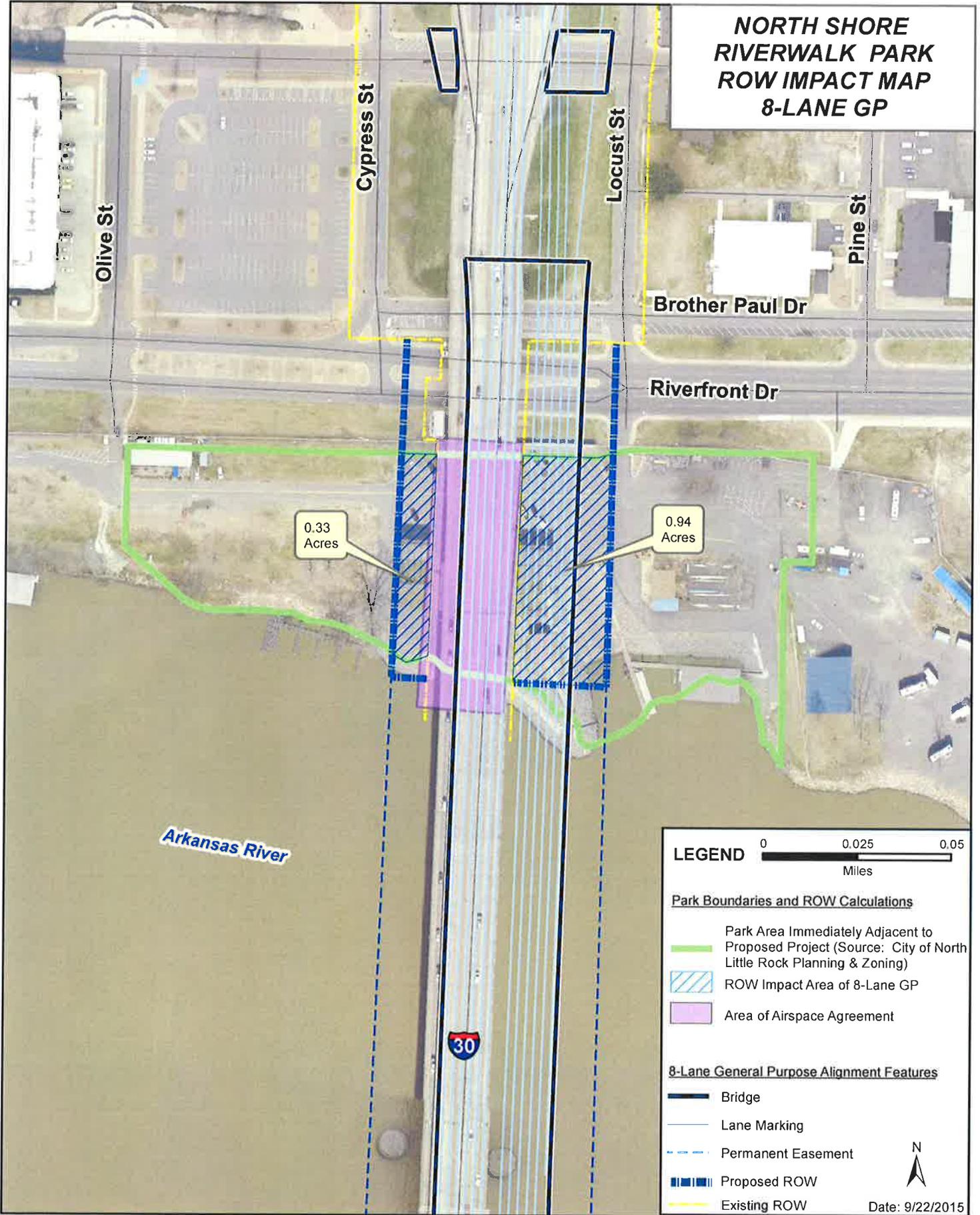
Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does Section 4(f) apply? **
<p><i>**If FHWA determines that the project will use Section 4(f) property, the approval options include preparing a de minimis impact determination, applying a programmatic evaluation or preparing an individual evaluation. The approval method will be determined following evaluation of alternatives analysis, avoidance, minimization, mitigation and coordination with the OWJ, if significance is determined in conjunction with item I.F.</i></p>		

**V. Signatory**

  
 \_\_\_\_\_  
 Randal Looney  
 FHWA  
 Environmental Coordinator Specialist

10-14-2015  
 \_\_\_\_\_  
 Date

# NORTH SHORE RIVERWALK PARK ROW IMPACT MAP 8-LANE GP



## LEGEND



### Park Boundaries and ROW Calculations

- Park Area Immediately Adjacent to Proposed Project (Source: City of North Little Rock Planning & Zoning)
- ROW Impact Area of 8-Lane GP
- Area of Airspace Agreement

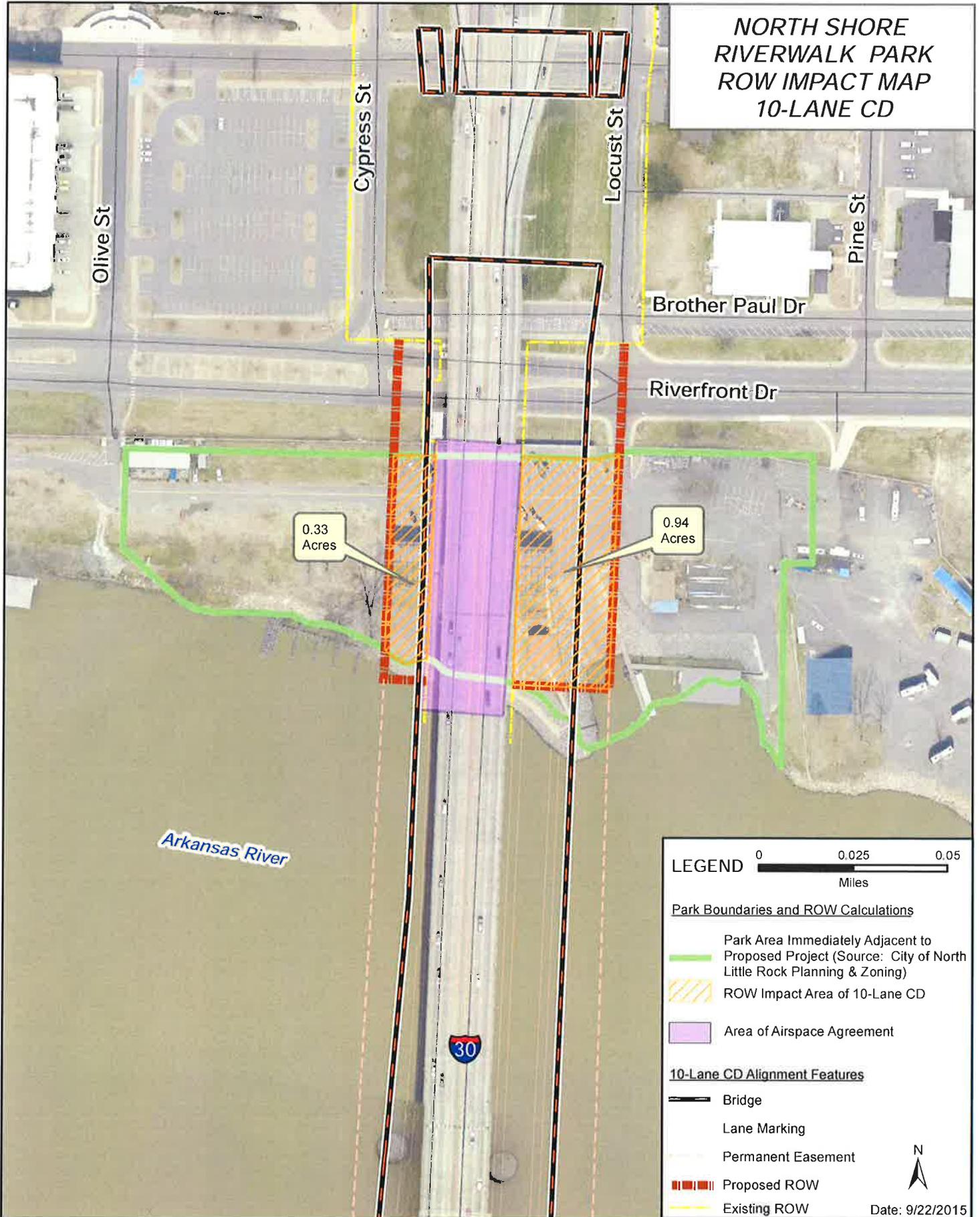
### 8-Lane General Purpose Alignment Features

- Bridge
- Lane Marking
- Permanent Easement
- Proposed ROW
- Existing ROW



Date: 9/22/2015

**NORTH SHORE  
RIVERWALK PARK  
ROW IMPACT MAP  
10-LANE CD**





Attachment B: Meeting Notes from Coordination Meetings with City of North Little Rock  
Parks and Recreation (2/9/16 and 6/27/16)

# City of North Little Rock Park Coordination Meeting/ February 9th

**ATTENDEES:** Keli Wylie, John Fleming, Susan Staffeld, Terry Hartwick, Chris Wilbourn, Mark Callahan, Earl Mott, Bryon Russell

**COPY TO:** Jennifer Halstead, April English

**PREPARED BY:** Bryon Russell

**DATE:** February 9, 2016 11:00 am CST

**PROJECT:** CA0602

## Objectives

Provide City of North Little Rock with information regarding project effects on the North Shore Riverwalk Park

## Summary

Mark Callahan and John Fleming gave an overview of the current status of the project and explained that AHTD and FHWA would like to arrive at a finding that the project represents a *de minimis* impact on the park, similar to the Broadway Bridge project. Because I-30 will be on an elevated structure over the parks, the only new right of way required will be an expansion of the air space agreement. Conceptual drawings were presented showing the potential impacts of the 8 and 10 lane Build alternatives.

The pavilion next to the boat ramp will be impacted by a bridge pier and will have to be relocated. The storage cell that supports the existing bridge is no longer needed and will be removed. There will be temporary closures of the boat ramp required during construction; these will have to be coordinated with fishing tournaments, Sheriff's needs and US Army Corps of Engineers (USACE) needs. There is an ongoing siltation issue adjacent to the boat ramp.

The RV park to the east of the boat ramp is owned by the City and generates significant revenue. RV's currently enter the park through the opening in the USACE seawall just east of the I-30 Bridge. This is likely to be effected by construction activities and may have to be closed for some period. There was a discussion of alternate access locations to the RV park. The Clinton Presidential Park Bridge to the east of the RV park may not have sufficient clearance to allow larger RV's to pass under it. This also would involve changing traffic patterns within the RV park. There is a break in the seawall at the west end of the RV park where the trail passes through. CH2M will investigate whether this could be modified to allow RV's to use it. If the seawall has to be modified, the USACE would have to permit it through the Section 408 process.

## Action Items

CH2M will investigate alternative access locations to the RV park.

# City of North Little Rock Park Coordination Meeting/ June 27th

**ATTENDEES:** Ben Browning, Earl Mott, Bob Major  
**COPY TO:** Keli Wylie, John Fleming, Jennifer Halstead, April English, Mark Callahan  
**PREPARED BY:** Bryon Russell  
**DATE:** June 27, 2016 11:00 am CST  
**PROJECT:** CA0602

## Objectives

Discuss access to North Little Rock Downtown Riverside Recreation Vehicle Park (RV Park) during construction of the project

## Summary

Three access options were discussed with Bob Major. In order of preference to the City of North Little Rock, these options are

- Construction vehicles would utilize the Olive Street entrance. The Olive Street entrance would be for contractor access only along with the area between the Olive Street entrance and Arkansas River Bridge. The contractor would need to construct a fence from the west edge of the Locust Street entrance south to the River, and the public would be prohibited from this area during construction. Everything east of the fence would remain open to the public during construction. Additional modifications to the entrance west of the Olive Street entrance would be required to allow for two-way access.
- The existing Arkansas River Trail opening would be expanded to allow RV's and the general public to enter. With this option, the Locust Street entrance would become the construction entrance and would be closed to the public. A fence would extend from the east edge of the Locust Street entrance to the River. This option may require some additional modification to the existing RV park fence to function adequately.
- Similar to the previous option, but the RV's and general public would enter from under the Clinton pedestrian bridge at the east end of the RV Park. This would require the RV Park electric entrance gate and check-in to be moved from the west end to the east end. The public would have to pass through the RV Park to reach the Boathouse and rowing dock. Additional grading will be required at the access road over the levy. This option is not preferred by the City.

## Action Items

CH2M and the City will explore the Olive Street construction access option.



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Attachment C: Phone Conversation Notes with City of North Little Rock (2/29/16), North Little Rock Downtown Recreational Vehicle Park (4/13/16), and City of North Little Rock (5/19/16)

# **CH2MHILL** TELEPHONE CONVERSATION RECORD

**Phone No.:** (501) 791-8538

**Date:** 2/29/16

**Call To:** Terry Hartwick (City of North Little Rock Parks and Recreation)

**Message**

**Taken By:** Bryon Russell

**Subject:** CA0602 North Shore Riverwalk Park

Terry returned my call concerning the access issue raised in our meeting on 2-9-16. Terry stressed again that it was extremely important to keep the RV park open during the construction. The City of North Little Rock supports the project and can work with either of the access options shown in the drawing sent to them on 2-25-16. He asked us to look further into both options, including evaluating the turning radius needed for recreational vehicles.

Terry will need to coordinate with the RV park operator, Bob Major, regarding how the two options would affect the operation of the park. He also will need to coordinate with the private land owner to the east. He asked us to determine who owns that property. He may need someone from CH2M to attend the coordination meetings.

I explained that widening the trail access point would require coordination with the US Army Corps of Engineers, and that the coordination may turn out to be lengthy. In order to not impact the project schedule, we will pursue both access options.

# **CH2MHILL** TELEPHONE CONVERSATION RECORD

**Phone No.:** (501) 940-2717

**Date:** 4/13/16

**Call To:** Bob Major (North Little Rock Downtown Riverside Recreational Vehicle Park)

**Message**

**Taken By:** Bryon Russell

**Subject:** CA0602 Temporary Access to RV Park During Construction

Bob returned my call concerning access alternatives to the RV Park during construction. Bob pointed out that a significant portion of City revenue comes from the RV Park and that it is extremely important to keep the RV Park open during construction.

Bob said he was concerned with widening the Trail opening in the USACE seawall as a way to bring RV traffic into the Park during construction. He pointed out that the turning radius on the south side of the seawall would be very tight. He also indicated that the proximity to the RV park operator's residence may be an issue. Finally, he feels that it is less safe for cyclists and RV's to use the same opening in the seawall.

Bob prefers the option of bringing in RV's at the east end of the park, under the Clinton pedestrian bridge. He is concerned with RV's "bottoming out" as they pass over the seawall at the south end of Cedar Street, but apparently the contractor who is currently using that roadway is not having any problems.

# CH2MHILL TELEPHONE CONVERSATION RECORD

**Phone No.:** (501) 940-2717

**Date:** 5/19/16

**Call To:** Terry Hartwick (City of North Little Rock Parks and Recreation) and Bob Major (North Little Rock Downtown Riverside Recreational Vehicle Park)

**Message**

**Taken By:** Bryon Russell

**Subject:** CA0602 North Shore Riverwalk Park Impacts

Terry and Bob called to discuss mitigation for temporary and permanent impacts to the Park.

Concerning the temporary closure of the boat ramp, they indicated we need to coordinate with Arkansas Game and Fish. They stressed that the boat ramp is heavily used during the summer, with weekly tournaments. They do not think that using the boat ramp constructed next to the Broadway Bridge on the north bank is an option, as there is no parking available at that location. They suggested that the existing Burns Park Boat Ramp, approximately 4 miles upstream, could be used during construction.

Regarding the gazebo adjacent to the I-30 bridge on the east side, which we are currently showing to be in conflict with a bridge pier, they would prefer that this be relocated to the west of the proposed bridge, if it turns out to be in conflict.

Regarding the Arkansas River Trail, this can be relocated to Riverfront Park Drive while work on the bridge over the Park is in progress. They would need to stripe out a bike lane on Riverfront Park Drive. In the vicinity of the Broadway project, they have relocated the Trail to Riverfront Park Drive.

Concerning the temporary closure of the Locust Street access into the Park, the City agrees that a temporary easement would be needed to widen the Locust Street floodwall entry point for the purposes of bringing construction equipment through. The City prefers that the replacement temporary access should be at the east end of the Park, under the Clinton Bridge. The Broadway contractor is currently using the area for staging. The contractor obtained authorization from USACE to cut the floodwall at the south end of Cedar Street so that equipment could be brought over the floodwall. The contractor committed to restore the floodwall at the end of the Broadway construction, which is expected to be October 2017. The City suggested that AHTD obtain authorization from USACE to extend the cut in the floodwall until the end of the I-30 construction, and commit to restoring it at that time.

The City also pointed out that the existing gate for the RV Park at the Clinton Bridge is not an automatic gate, and would have to be upgraded to allow it to replace the existing gate at the west end of the Park. Not only RV traffic, but traffic for the boathouse and USCG auxiliary, would also be using the temporary east access under the Clinton Bridge, so having a secure access system is necessary.

Concerning the billboards, the City does not have an issue with them being relocated outside of the proposed AHTD right of way.



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Attachment D: Public Comments

## Comments on the North Shore Riverfront Park De Minimis Document

**1. Reliance on a document which has not been released to the public.** The document on page 7 of 50 refers the reader to the “**30 Crossing Environmental Assessment/Finding of No Significant Impact** and **30 Crossing Re-Evaluation** for the proposed project.”

However, no “30 Crossing Re-Evaluation” document has been issued and it is not now available on the ArDOT website. This renders meaningful public review impossible and raises questions as to whether meaningful review has been achieved with other government agencies. A De Minimis Finding may not be based on an undefined proposal.

**Response:** *The 30Crossing Re-Evaluation is an internal FHWA document that documents review and consideration of additional studies regarding several changes to the project design that have occurred since publication of the Finding of No Significant Impact (FONSI). After consideration of these changes, the Re-Evaluation supports the conclusion that the (FONSI) remains valid. If FHWA had made the decision that a supplemental environmental document was required due to the changes, the public would have been involved in review of that document. Because the decision was made that no significant changes had occurred, there is no requirement under NEPA for the public to be involved subsequent to the FONSI, with the exception of the Section 4(f) process, which deals specifically with the effect of the project on significant public parks, recreational areas, and historic sites.*

*Most of the information included in the Re-Evaluation has nothing to do with the parks. All changes that are relevant to the consideration of impacts on the parks are included in Sections 8.0 and 9.0 of this document: “What Will the Project do to the Parks?”*

*The public and commenting agencies were afforded ample opportunity to provide input on the project during the public involvement process, which culminated in a Public Hearing in July 2018. The public and commenting agencies submitted 319 comments following the Public Hearing, and ARDOT provided responses to each comment.*

**2. The document does not display a consistent depiction of the project limits** rendering meaningful public input impossible, and raising the question as to whether meaningful input has been received from other government agencies. For instance, Figure 1 on page 6 of 34 shows the project’s northeastern limit at the juncture of I-40 and Highway 67/167 whereas Figure 2 shows the project’s northeastern limit extending well into Highway 67/167. Figure 3 on page 9 of 34 shows the project extending farther west of I-30 than is shown in either of Figures 1 and 2. The lack of consistent project limits in the document raises questions as to whether proper consideration has been given to all the effects of the selected alternative.

**Response:** *Figure 1 is a graphical representation of the project, not intended to show the precise limits of the study area, which are not called out on the figure. It is intended to orient the reader with respect to well-known landmarks, and roughly show where the project improvements will be.*

*Figure 2 is a more accurate representation of the project area and does accurately show the project limits, which includes improvements extending north on Hwy. 67/167. The Hwy. 67/167 segment was studied with respect to all environmental impacts, was documented in the Environmental Assessment, and was shown on the materials shown at the Public Hearing.*

Figure 3 does not show the project limits. The legend in Figure 3 shows that the pink line is the boundary of the Study Area.

**3. The project has an identified noise impact.** The text:

**Identifies** an absolute noise impact on page 15 of 34:

“One location, within ARDOT right of way, was found to equal the Approach NAC of 66 dB(A) for the Selected Alternative.”

**Admits** there will be no remediation of the impact:

“Noise abatement measures were evaluated and not found to be feasible.”

**Obfuscates** with a distraction about the relative Noise Abatement Criterion:

“Further, it was found that the Selected Alternative resulted in a maximum increase of 5 dB(A) over the existing noise levels, which is considered a minor increase, and which is not considered to be detectable in outdoor environments.

And then **denies** the existence of the noise impact:

“Therefore, no noise impacts are anticipated to Riverwalk Park as a result of the project.

All in the same paragraph. The text needs to be corrected to avoid the confusion it causes to the reader. 23 CFR 772.5 itself recognizes 5 dB(A) as a “substantial noise increase” as do passages in the 7100-page EA on pages 114 and 4204. Likewise, ArDOT’s established policy of only recognizing that noise which is 1 dB(A) less than the Noise Abatement Criteria as approaching the Noise Abatement Criteria is disingenuous in the extreme as such a sound level would be virtually indiscernible from that sound exceeding the Noise Abatement Criteria. It is also the absolute minimum criterion allowed for an “Approach” designation under 23 CFR 772.11(e)).

*ARDOT considers a receptor to be impacted by traffic noise when either the predicted noise level approaches or exceed the Noise Abatement Criteria (NAC) or when there is a substantial increase in noise (defined as an increase of 10 dB(A) or greater).*

*As shown in Table C-6 on page 4379 and Table C-7 on page 4384 of the EA, seven noise receptors were placed within North Shore Riverwalk Park (N355-N359 on the east, N482 and N483 on the west). The highest predicted noise level is 62 dB(A) at N356 and N359, neither of which approach the NAC. The highest predicted noise increase is +3 dB(A) at N357 and N358. The threshold for human hearing is considered to be 3 dB(A).<sup>1</sup>*

*None of the seven receptors showed an impact, either in noise level or noise increase. The information in the draft Section 4(f) statement on noise will be corrected before finalizing the draft document.*

<sup>1</sup> Noise values in the EA/FONSI are more current and lower than those shown in the Section 4(f) Statement. This change will be made to the Final Section 4(f) Statement.

**4. The De Minimis document and the EA both fail to demonstrate compliance with 23 CFR 772 regarding noise impacts on undeveloped land.**

“The best estimation of the future design year noise levels at various distances from the edge of the nearest travel lane of the highway improvement where the future noise levels meet the highway agency's definition of “approach” for undeveloped lands or properties within the project limits. At a minimum, identify the distance to the exterior noise abatement criteria in Table 1;” 23 CFR 772.17(a)(2)

C) If undeveloped land is not permitted for development by the date of public knowledge, the highway agency shall determine noise levels in accordance with 772.17(a) and document the results in the project's environmental clearance documents and noise analysis documents. 23 CFR 772.11(c)(2)(vii)(C)

Review of the EA noise analysis shows no noise receiver information in the Dark Hollow and other undeveloped areas. See for instance, pages 4428-4432, 4451, 4456, and 4459 of the 7100-page EA.

**Response:** *The documents that are currently being circulated for public comment are the Section 4(f) evaluations of North Shore Riverwalk Park, Julius Breckling Riverfront Park and the Clinton Center and Park.*

*A Section 4(f) document is not required for Dark Hollow as it is not a park. In order to be considered a public park, the land must be publicly owned, must be open to the public, the major purpose of the land must be for a park, and it must be significant. The undeveloped land adjacent to I-30 and I-40 in Dark Hollow meets none of these criteria.*

*The ownership is private, not public:*

- *First Pentecostal Church of Jesus Christ*
- *Lilac LLC*
- *Spectrum Addition subdivision, owned by Terraforma and Matthews Properties*

*The land is privately owned and not open to the public.*

*The major purpose of the church property is likely to expand the church. A platted subdivision exists on the Spectrum property.*

*The significance test applies to publicly owned properties. The agency with jurisdiction over the park determines whether it is significant with respect to other parks administered by the agency. This does not apply.*

**5. The document is presented as a finding when actually it is a draft or proposal, thereby stifling public input.** In its totality, this document is actually a **Draft De Minimis Finding**. Many of the pages are labelled "DRAFT", public comment has not yet been received or acted upon, and there is no concurrence by the City of North Little Rock. The document needs to be relabelled accordingly throughout to avoid any impression that such a finding has already occurred. As presented, the document is prejudicial and could lead the public to conclude that there is no need to comment because:

- It is entitled “Evaluation and Documentation of a De Minimis Finding to Section 4(f) Property for Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges

ARDOT Job No. CA0602 North Shore Riverwalk Park”. **Why comment on a finding that has already been made?**

- Its Table of Contents lists entries of
  - "What Is the Decision?" A false indication that a De Minimis finding has already been made.
  - "Attachment D: City of North Little Rock Concurrence Letter" A false indication that the City of North Little Rock has already issued a letter of concurrence.
  - "How Did We Involve the Public in This Evaluation?" The use of the past tense indicates that public involvement in the decision has already occurred. In reading this section of the document it is clear that **there has been no public involvement** on this "Finding"--only coordination with the "The City of North Little Rock and manager of the RV Park":

"The City of North Little Rock and manager of the RV Park were contacted to obtain feedback on temporary access options to the RV Park during construction. A coordination meeting was held onsite on June 27, 2016, to discuss access options. The City of North Little Rock prefers that the public access to the RV Park be maintained to the east of I 30. The City prefers that the existing public access to North Shore Riverwalk Park at Olive Street remains open, but the contractor would be allowed access to the construction site at Olive Street. Phone conversation notes and meeting notes are included as Attachment C.

"The public will be afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource. Following review of the public comments, concurrence that the project does not adversely affect the parks will be requested from the City of North Little Rock."

This Table of Contents item therefore needs to be relabelled as "How Did We Involve the City of North Little Rock and Manager of the RV Park?" Another section would then be entitled "How Will We Involve the Public in This Evaluation?"

The last sentence must also be corrected as it assumes that nothing the public says will have a material effect on the De Minimis decision--that it has already been made. One possible rephrasing follows.

CHANGE FROM: Following review of the public comments, concurrence that the project does not adversely affect the parks will be requested from the City of North Little Rock.

CHANGE TO: Following review of the public comments, a decision will be made as to whether a De Minimis finding is appropriate. If such is the finding, concurrence that the project does not adversely affect the parks will be requested from the City of North Little Rock."

The document needs to be re-issued as a Draft document with all the misleading language corrected.

**Response:** *The documents are clearly labeled with the DRAFT watermark. Section 9.0 "How did We Involve the Public in the Evaluation?" says that the City will not be asked for*

concurrency on the De Minimis Finding until after comments have been received from the public. Section 10.0 “What is the Decision” says “This Section Will Be Completed Following Review of Public Comments,” clearly indicating that the decision has not been reached. At no point is it stated or implied that a decision has already been made.

- The document title is appropriate. The contents of the document are the evaluation and the finding of effect on Section 4(f) resources. The fact that the finding has not been made yet and that the finding section has not yet been completed yet is irrelevant. This is a living document. The decision will be made following public input and included in the document. The document will then be final.
- The Table of Contents is a standard format for De Minimis findings throughout the State of Arkansas and not specific to this project.
  - The “What is the Decision?” section says “This Section Will Be Completed Following Review of Public Comments,” clearly indicating that the decision has not been reached.
  - Attachment D: City of North Little Rock Concurrence Letter is currently empty. The letter will be written following the receipt and evaluation of public comment. If public comment causes FHWA to reconsider the De Minimis finding, a new document will be created. It will not be a De Minimis finding, as the finding will be that it is not a De Minimis impact. There would be no reason for FHWA to ask the City for concurrence on a De Minimis finding if the finding is that it is not a De Minimis impact.
  - Section 9.0 “How did We Involve the Public in the Evaluation?” details the public involvement that has occurred to date. The public involvement regarding the parks so far has consisted of the coordination with the City of North Little Rock and the RV Park, and the Section 4(f) documentation that was distributed to the public prior to the Public Hearing as part of the Environmental Assessment (see Section 3.4 “How Would the Project Affect Parks and Recreation Areas?” and Appendix H, which contains the Section 4(f) Evaluations. The City of North Little Rock is part of the public. Comments were received from the public on these documents, and that coordination is documented in Appendix E of the Environmental Assessment - Public Involvement Summary. Following receipt of public comments on the documents that are currently being circulated, Section 9.0 will be completed.
- There is nothing misleading in these documents and no reason for any changes in section heading labeling.

**6. Shading/Aesthetic Degradation.** The De Minimis document identifies the increased size of the Arkansas River Bridge but fails to address the deleterious effects of an expanded bridge covering over the park area caused by the greatly increased bridge size. People characteristically avoid the underside of bridges whose un-parklike ambience is so vividly characterized in Figure 7 on page 12 of 34.

**Response:** We did not receive any comments from the parks during our coordination efforts regarding an adverse effect from shading. We did not receive any comments from the public during the public involvement process, either before, during, or after the Public Hearing,

*regarding adverse effects from shading. Shading is often viewed as an amenity for parks under bridges, as evidenced by the below photo of the Riverside Arts Market, held under the I-95 bridge at a public park along the St. Johns River in Jacksonville, Florida. The Market is one of the most popular activities in Jacksonville, particularly in the summer, due to the shading and protection from rain by the I-95 bridge.*



**7. The underlying environmental analysis failed to include “prudent and reasonable” alternatives which would have reduced the harm to the park, rendering the Environmental Assessment ineffective as a basis for a De Minimis ruling. As stated on page 4 of 34 of the De Minimis document: “The Secretary may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance only if there is no prudent and feasible alternative to using that land, and the program or project includes all possible planning to minimize harm resulting from the use.”**

In actuality the EA studiously excluded “reasonable and prudent” alternatives which did not add lanes to the I-30 Corridor and widen the Arkansas River Bridge--to the detriment of developed and yet-to-be-developed lands.

One such “prudent and feasible” alternative was included in an ArDOT-funded economic analysis. Inexplicably, ArDOT failed to include the alternative in the EA--even though it could be accomplished with available funding rather than relying on a new, yet-to-be-voted-on statewide sales tax increase whose burden would fall disproportionately on the poor, minority communities adversely affected by the project.

ArDOT was also remiss in failing to include the effects of their proposed routing of the new I-57 interstate directly into this 30 Crossing project area--thereby exacerbating the very congestion they maintain they are trying to reduce with this project--and increasing the likelihood of a further bridge widening request.

**Response:** *CFR 774.3 says that FHWA may not approve the use of a Section 4(f) property unless a determination is made under paragraph (a) or (b). Paragraph (a) is quoted above.*

*Paragraph (b) concerns the situation where the impact is considered de minimis. The documents that are being circulated for public comment are intended to demonstrate that the project impacts are de minimis. CFR 774.3 (b) allows FHWA to approve the use if the impacts are de minimis: "The Administration determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a de minimis impact, as defined in §774.17, on the property."*

*I-30 pre-dates the existence of North Shore Riverwalk Park. The Park exists within I-30 ROW by means of an air space agreement. Because of this, even replacement of the failing I-30 Arkansas River Bridge would have involved temporary and permanent Section 4(f) impacts, as stated in Section 5.0 "Can We Avoid the Park?" Therefore, it was not possible to avoid the Park.*

*With avoidance not an option, ARDOT coordinated with the City of North Little Rock to design the project to protect the Park as much as possible, and to mitigate any adverse effects. As a result, we are requesting concurrence from the City that the impacts to the park constitute a de minimis effect based on the criteria in Table 1.*



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Attachment E: City of North Little Rock Concurrence



May 13, 2020

Mayor Joe Smith  
Mayor, City of North Little Rock  
300 Main Street  
North Little Rock, AR 72119

Re: ARDOT Job Number CA0602  
30 Crossing  
Pulaski County

Dear Mayor Smith:

The Arkansas Department of Transportation (ARDOT), in cooperation with the Federal Highway Administration, is proposing a project to improve I-30 and I-40, which would involve replacement of the existing I-30 bridge over the Arkansas River and provision for additional capacity on I-30 and I-40 in the Cities of Little Rock and North Little Rock in Pulaski County.

The proposed I-30 right of way (ROW) would include an area within the North Shore Riverwalk Park (Riverwalk Park) in North Little Rock. The primary uses of the park area adjacent to I-30 are recreational activities such as walking, running, bicycling and boating.

The determination has been made by the ARDOT that the proposed project will not adversely affect the protected features, attributes or activities qualifying the property for protection under Section 4(f) of the Department of Transportation Act of 1966, thus qualifying for a *de minimis* finding for the Riverwalk Park property (see the attached Section 4(f) *De Minimis* Finding). The ARDOT's proposal includes all possible planning to minimize harm to the recreational use.

The total area of Riverwalk Park is approximately 36 acres. Approximately 0.54 acre of property would be acquired from the City in the Park as additional ROW. Approximately 0.8 acre of temporary construction easements would be needed from the City, and 0.24 acre from private land holdings within the Park boundaries. The land conversion affects an area where boating and other riverside recreational activities occur. Impacts as a result of the highway construction would include:

- Prior to construction, the City would relocate a pavilion that is within the footprint of the proposed bridge.

- Parking within ARDOT ROW would not be allowed during construction but should be allowed under an air space agreement following construction.
- The Locust Street boat ramp would be temporarily closed during construction.
- The section of the Arkansas River Trail that passes through the construction zone would be temporarily closed during certain phases of construction.
- A portion of the park immediately east and west of I-30 may be used during construction for access to the project site and for laydown on construction equipment. This area would be fenced and not open to the public for the duration of construction.

Recreational uses after construction of the highway will be unchanged from the present conditions. Several measures have been incorporated into the project to assure that the proposed project does not jeopardize the recreational value of the facility. These measures included as part of the proposed project are:

- Following construction, the pavilion may be allowed within ARDOT under an air space agreement.
- Following construction, parking should be allowed within ARDOT ROW under an air space agreement.
- Temporary re-routing of the Arkansas River Trail would be coordinated through ARDOT with the City of North Little Rock Parks and Recreation Department to provide the park personnel ample time to schedule park activities, including cycling events. A safe detour route would be provided.
- The existing Locust Street entrance east of I-30 would be closed during construction. Access to the area of the Park east of Locust Street would be maintained during construction by constructing a new entrance in the flood wall to the east of Locust Street. After completion of construction, the existing Locust Street entrance would be re-opened to the public.
- Access to the area of the Park west of Olive Street would be maintained by making the existing entrance-only opening in the flood wall to the west of Olive Street a two-way roadway. The area of the Park east of the Locust Street entrance would not be affected, as the Locust Street entrance would remain open.
- Temporary closure of the boat ramp would be coordinated with the activities of the Sheriff, US Army Corps of Engineers (USACE), and with fishing tournaments. Alternate access to the River is available at the existing boat ramps at either Burns Park, approximately 4 miles upstream in North Little Rock, or Murray Park, approximately 5 miles upstream in Little Rock.
- A plan would be created by the construction contractor and submitted to ARDOT containing a schedule of temporary closure times for the boat ramp and the Arkansas River Trail in the construction zone. A safe detour route for the Arkansas River Trail, as specified by the City of North Little Rock Parks and Recreation

Department, would be established and maintained by the construction contractor. The ARDOT would coordinate with the City of North Little Rock to ensure that temporary closure of the boat ramp or re-routing of the Trail does not occur until alternate access is provided.

A requirement of the Section 4(f) process for a *de minimis* finding is an opportunity for the public to comment on the Section 4(f) Evaluation. The draft Section 4(f) Evaluation was made available for review and comment by the public. Comments were received from Dale Pekar. The comments were addressed and are included in Attachment D of the Draft Section 4(f) Evaluation.

If you have any questions, comments or wish to discuss the impacts to the park further, please contact Randal Looney at (501) 324-6430 or John Fleming at (501) 569-2281.

If you agree with the assessment of the impacts of this project and the proposed minimization and mitigation for the impacts on the North Shore Riverwalk Park, please sign the statement on the next page and return it to us. Thank you for your cooperation.

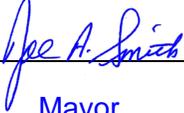
Sincerely,



John Fleming  
Division Head  
Environmental Division

Attachment

I concur with the assessment and the proposed minimization and mitigation of impacts to the North Shore Riverwalk Park as detailed in the attached Section 4(f) Evaluation and documentation of *De Minimis* Findings to Section 4(f) Property for Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges.

  
\_\_\_\_\_  
Signature  
\_\_\_\_\_  
Mayor  
Title  
\_\_\_\_\_  
5/26/20  
Date

**Appendix D: Traffic Noise Re-Evaluation Memorandum**



# 30 Crossing Re-evaluation Traffic Noise Technical Memorandum

ARDOT JOB NO. CA0602

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I-30 (From I-530/I-440 to I-40) and  
I-40 (From Hwy. 365/MacArthur Dr. to Hwy. 67)  
Pulaski County, Arkansas  
April 2020



U.S. Department  
of Transportation  
**Federal Highway  
Administration**



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- Attachment A: Noise Study Areas and Noise Re-evaluation Areas
- Attachment B: Sound Level Results and Impact Tables
- Attachment C: Noise Receiver Location Maps
- Attachment D: Re-evaluation Traffic Noise Barriers

## 1.0 INTRODUCTION

In February 2019, the Federal Highway Administration (FHWA) approved the Environmental Assessment/Finding of No Significant Impact (EA/FONSI) for a project to improve a portion of Interstate 30 (I-30) from Interstate 530 (I-530) and Interstate 440 (I-440) to Interstate 40 (I-40), including the Arkansas River Bridge, and a portion of I-40 from Highway (Hwy.) 365 (MacArthur Drive [Dr.]) to Hwy. 67. This project is CA0602: I-530 - Hwy. 67 (Widening & Reconst.) (I-30 & I-40), commonly known as the 30 Crossing project. **Figure 1** illustrates the proposed 7.3-mile project limits.

The identified method of delivery of the project is Design-Build (DB). In DB, the design-builder is permitted to incorporate innovation into final design, as long as the project purpose and need, environmental commitments and contractual obligations are met. This allows for innovation and cost efficiency. In 2019, a contract was issued to a DB team to complete the design and construction of the project. The DB team found that the entire project could not be built for the budget of \$631.7 million. Instead, the DB team proposed that the project be constructed in phases, with a portion of the ultimate improvements (Phase 1) being constructed for the \$631.7 million budget. The DB team also proposed certain modifications to the final design that would lower the ultimate cost of the project.

As part of the EA/FONSI, the Arkansas Department of Transportation (ARDOT) prepared a traffic noise study to evaluate the potential traffic noise impacts of the proposed project's ultimate condition. The traffic noise study for the proposed project ultimate condition was completed in accordance with FHWA's Procedures for Abatement of Highway Traffic Noise and Construction Noise as presented in the Code of Federal Regulations (CFR), Title 23 Part 772 (23 CFR 772) and ARDOT's "Policy on Highway Traffic Noise Abatement".

Since the FONSI, the DB team has proposed modifications to the Selected Alternative that would result in permanent changes to the ultimate condition of the project. Therefore, a traffic noise re-evaluation to document any changes in traffic noise impacts and additional traffic noise impacts that were not identified/evaluated for abatement in the original EA was prepared.

### 1.1 Selected Alternative

#### 1.1.1 Phase 1 (Interim Improvements)

The interim modifications differ principally from the Selected Alternative in the geographic limits of the proposed work (**Figure 1**). In Phase 1, no improvements are proposed south of the I-30/I-630 interchange, and limited improvements north of the I-30/East Broadway Street interchange. For a complete description of the interim improvements, refer to Section 6.1 in the 30 Crossing Re-evaluation.

Within the limits of the Phase 1 improvements, the configuration is similar to the Selected Alternative: the 6-lane with C/D with the Split Diamond Interchange (SDI). Consequently, the interim improvements do not involve any impacts that were not evaluated in the EA/FONSI.

### 1.1.2 Revised Selected Alternative

The DB team has proposed two modifications to the design of the I-30/I-630 and I-30/I-40 interchanges that would be permanent changes to the Selected Alternative. For a complete description of the revisions to the Selected Alternative, refer to Section 6.2 in the 30 Crossing Re-evaluation.

Within the I-30/I-630 interchange, the revision would not shift the location of the northbound I-30 to northbound frontage road ramp toward the west, as in the Selected Alternative but would maintain its current alignment near the east ROW line.

Within the I-30/I-40 interchange, the revision would shift the location of the northbound I-30 to eastbound I-40 ramp. This ramp, which would be signed for northbound Hwy. 67 traffic and would merge onto the inside of the two existing I-40 eastbound lanes, would be shifted toward the northwest. The revisions would eliminate the right exit from I-40 eastbound to Hwy. 67 northbound. This exit would remain a left exit, as it is in its current condition; however, the weave associated with the northbound Hwy. 67 traffic crossing eastbound I-40 to make a left exit would be eliminated, as northbound Hwy. 67 traffic would be on the inside of I-40 and eastbound I-40 traffic would be on the outside.

FIGURE 1: LOCATION MAP



## 2.0 NOISE RE-EVALUATION AREAS

A total of three noise re-evaluation areas (NRA) were reanalyzed for noise due to design changes since the EA/FONSI. The areas to be re-evaluated for noise include those adjacent to the I-630/I-30, I-30/I-40, and I-40/Hwy. 67 interchanges. At the I-630/I-30 interchange, NRA 1 which includes a portion of EA Noise Study Area (NSA) 4 and NSA 5; at the I-30/I-40 interchange, NRA 2 which includes a portion of NSA 10; and at the I-40/Hwy. 67 interchange, NRA 3 which includes NSA 11 and a portion of NSA 12 (**Figure 1**). No other areas within the project corridor are proposed for noise re-evaluation. The NRA boundaries do not match the original NSAs as these were determined to be focused on areas to be potentially affected by design changes. See **Attachment A: Noise Study Areas and Noise Re-evaluation Areas** map for a display of the areas re-evaluated.

The land uses potentially affected by the proposed design changes at the I-30 and I-630 interchange include the residential area between the interchange and 9th Street. This residential area is located within the EA NSA 4. The land uses potentially affected by the proposed design changes at the I-30 and I-40 interchange includes the residential area on the northern bluffs (NSA 10). Design changes at I-40/Hwy. 67 include potential impacts at a new development, The Pointe North Hills apartment complex, currently under construction. The new apartment complex is located within NSA 11, which was previously evaluated under noise abatement criteria (NAC) G, undeveloped. In accordance with ARDOT's Noise Policy, because The Pointe North Hills apartment complex phases 1 and 2 were permitted during preparation of the EA, the land was assigned as NAC Category B (residential) and analyzed in the same manner as developed lands under NAC B.

## 3.0 Determination of One-Hour Equivalent Sound Levels

The FHWA's Traffic Noise Model, TNM<sup>®</sup>2.5, was used to model design year (2041) worst hourly traffic noise levels at receivers within NSAs 4, 5, 10, 11 and 12, as shown in **Attachment A**, to re-evaluate traffic noise impacts due to the proposed design changes.

TNM<sup>®</sup>2.5, was used to model existing (2014) and design year (2041) worst hourly traffic noise levels at receivers within the new The Pointe North Hills apartment complex located between North Hills Blvd. and the Hwy. 67/167 Interchange on the northern side of I-40 (NSA 11).

EA traffic data was used in the noise re-evaluation. The Selected Alternative modeled consisted of:

- 6-Lane with C/D Lanes with SDI Alternative (6 LN with C/D with SDI)

The Selected Alternative TNM models developed during the EA were revised to reflect design changes. New receivers were identified and modeled in NRA 3. Receivers were located at frequently used human activity areas. For the apartments, that area could be a patio or balcony or a common use area. A TNM receiver could represent more than one receptor, such as several adjacent single-family residences or condominium balconies, or the common use area for an apartment building. Large buildings were modeled as noise barriers to properly account for the shielding of the traffic noise that they provide to the receptor or as

rows of buildings to account for the shielding that they would provide.

#### 4.0 NOISE ANALYSIS OVERVIEW

This report evaluates the potential for additional traffic noise impacts that were not identified/evaluated in the original environmental assessment as a result of design changes. The analysis is in conformance with corresponding Federal regulations and guidance, and the National Environmental Policy Act (NEPA).

The determination of noise abatement measures and locations follows the FHWA Procedures for Abatement of Highway Traffic Noise and Construction Noise as presented in the Code of Federal Regulations, Title 23 Part 772 (23 CFR 772) and the 2018 “Arkansas Department of Transportation Policy on Highway Traffic Noise Abatement” (ARDOT’s Noise Policy).

##### 4.1 Basic Noise Information

Traffic noise levels are expressed in terms of the hourly, A-weighted equivalent sound level in decibels [dB(A)]. A sound level represents the level of the rapid air pressure fluctuations caused by sources such as traffic that are heard as noise. A decibel is a unit that relates the sound pressure of a noise to the faintest sound the young human ear can hear. The A-weighting refers to the amplification or attenuation of the different frequencies of the sound (subjectively, the pitch) to correspond to the way the human ear “hears” these frequencies.

Generally, when the sound level exceeds the mid-60 dB(A) range, outdoor conversation in normal tones at a distance of 3 ft becomes difficult. A 9-10 dB(A) increase in sound level is typically judged by the listener to be twice as loud as the original sound while a 9-10 dB(A) reduction is judged to be half as loud. Doubling the number of sources (i.e., vehicles) will increase the hourly equivalent sound level by approximately 3 dB(A), which is usually the smallest change in hourly equivalent A-weighted traffic noise levels that people can detect without specifically listening for the change.<sup>1</sup>

Because most environmental noise fluctuates from moment to moment, it is standard practice to condense data into a single level called the equivalent sound level (Leq). The Leq is a steady sound level that would contain the same amount of sound energy as the actual time-varying sound evaluated over the same time period. The Leq averages the louder and quieter moments but gives much more weight to the louder moments in the averaging. For traffic noise assessment purposes, Leq is typically evaluated over the worst one-hour period and is written as Leq(h).

The term insertion loss (IL) is generally used to describe the reduction in Leq(h) at a location after a noise barrier is constructed. For example, if the Leq(h) at a residence before a barrier is constructed is 75 dB(A) and the Leq(h) after a barrier constructed is 65 dB(A), then the insertion loss would be 10 dB(A).

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<sup>1</sup> “Policy on Highway Traffic Noise Abatement”, Arkansas State Highway and Transportation Department, 2018, page 23 of 38.

Highway noise sources have been divided into five types of vehicles; automobiles (A), medium trucks (MT), heavy trucks (HT), Buses (B) and Motorcycles (MC). Each vehicle type is defined as follows<sup>2</sup>:

- Automobiles – all vehicles with two axles and four tires, includes passenger vehicles and light trucks, less than 10,000 pounds.
- Medium trucks – all vehicles having two axles and six tires, vehicle weight between 10,000 and 26,000 pounds.
- Heavy trucks – all vehicles having three or more axles, vehicle weight greater than 26,000 pounds.
- Buses – all vehicles designed to carry more than nine passengers.
- Motorcycles – all vehicles with two or three tires and an open-air driver/passenger compartment.

Noise levels produced by highway vehicles can be attributed to three major categories:

- Running gear and accessories (tires, drive train, fan and other auxiliary equipment)
- Engine (intake and exhaust noise, radiation from engine casing)
- Aerodynamic and body noise

Tire sound levels increase with vehicle speed but also depend upon road surface, vehicle weight, tread design and wear. Change in any of these can vary noise levels. At lower speeds, especially in trucks and buses, the dominant noise source is the engine and related accessories.

#### 4.2 Re-evaluation Methodology and Assumptions

The traffic noise models for the Selected Alternative (6-Lane with C/D with SDI Action Alternative) were revised to reflect design changes and reanalyzed to document any changes in traffic noise impacts as reported in the original EA. The traffic noise re-evaluation analysis included the following steps:

1. Identification of NRAs;
2. Identification of new receptors at The Pointe North Hills apartment complex;
3. Revision of the future “build” models for the NRAs;
4. Revision of the existing model for The Pointe North Hills apartment complex;
5. Determination of traffic noise impacts; and
6. Evaluation of noise abatement for impacted areas.

No changes were made to the traffic used in the original noise analysis. The re-evaluation utilized the traffic data from the EA to represent the worst-case scenario and to maintain consistency with the rest of the areas along the project corridor not being re-evaluated.

ARDOT’s Noise Policy is the state’s tool for implementing 23 CFR 772. The NAC, which is presented in 23 CFR 772 (**Table 4-1**), establishes the criteria for various land uses. The criteria

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<sup>2</sup> G.S. Anderson, C.S.Y. Lee, G.G. Fleming and C. Menge, “FHWA Traffic Noise Model®, Version 1.0 User’s Guide”, Federal Highway Administration, January 1998, p.60.

stated in **Table 4-1** was used to determine whether the proposed project would result in a traffic noise impact.

**Table 4-1: Noise Abatement Criteria Hourly A-Weighted Sound Level-Decibels (dB(A))**

Activity Category	Activity Criteria <sup>1</sup> Leq(h), dB(A)	Evaluation Location	Activity Description
<b>A</b>	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
<b>B<sup>2</sup></b>	67	Exterior	Residential.
<b>C<sup>2</sup></b>	67	Exterior	Active sport areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
<b>D</b>	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
<b>E<sup>2</sup></b>	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
<b>F</b>	--	--	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
<b>G<sup>3</sup></b>	--	--	Undeveloped lands that are not permitted.

1 The Leq(h) Activity Criteria values are for impact determination only, and are not design standards for noise abatement.  
 2 Includes undeveloped lands that have been permitted for this Activity Category.  
 3 Indicates no building permits on or before the date of public knowledge.  
 4 Section 4(f) property means publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance, as initially defined in Section 4(f) of the Department of Transportation Act of 1966 and addressed in 23 CFR 774, Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites (Section 4(f)).

Source: ARDOT Policy on Highway Traffic Noise Abatement (Sept. 13, 2018).

Traffic noise impacts may occur when either the predicted noise level at a receiver approaches, equals, or exceeds the NAC (absolute criterion) or when there is a substantial increase in noise (relative criterion) as a result of the project. Approach is defined by ARDOT to be the one-hour equivalent sound levels [Leq(h)] that are 1 dB(A) or less below the NAC. Substantial increase is defined by ARDOT criteria for determining the severity of a noise level increase over existing noise levels. A 10 dB(A) or greater increase in highway traffic noise is considered a substantial increase and results in identification of noise impacts. In accordance with criteria in the ARDOT noise policy, traffic noise abatement measures are to be considered when traffic noise impacts have been identified under either the absolute or relative criterion.

### 4.3 Noise Barrier Evaluation Requirements

Abatement needs to be studied first for “feasibility” and, if feasible, for “reasonableness.” Noise barriers must be both feasible and reasonable to be deemed likely for construction.

Feasibility applies primarily with the acoustical and engineering considerations of the project that determine whether a noise barrier would provide “substantial” noise reduction [at least a 5 dB(A) reduction] in the one-hour equivalent sound level for at least one impacted receiver. If a barrier cannot meet this criterion, abatement is considered to not be acoustically feasible. Additionally, the noise barrier should be feasible from an engineering perspective. Engineering feasibility takes into account topography, drainage, safety, barrier height, utilities and access and maintenance needs (which may include right-of-way considerations). If a barrier poses engineering problems, it may be judged as not feasible even if it meets the acoustical feasibility criterion, and it would not be recommended for construction. Acoustically, the best location for barriers are usually either close to the receiver, or close to the noise source, depending on the terrain.

If feasible, then the barriers are assessed for reasonableness. The reasonableness evaluation involves an examination of costs, public support, and whether a certain amount of noise reduction can be achieved. In accordance with the criteria in ARDOT’s noise policy, the following three reasonableness factors must be met for a noise abatement measure to be considered reasonable:

1. For those barriers found to be reasonable by the Cost-Effectiveness and Design Goal criteria below, viewpoints from property owners and residents of the benefitted receivers will be obtained. Two attempts (meetings, mail surveys, or other method) would be made to establish a consensus (greater than 50 percent) of support for or against the proposed noise barriers. If a consensus is reached before the second attempt, the efforts to collect viewpoints is discontinued. If a consensus is not obtained after the second attempt, ARDOT will determine the appropriate abatement measure.
2. Cost-Effectiveness: If the estimated cost of constructing a noise barrier (including installation and additional necessary construction such as foundations or barrier walls) divided by the number of benefitted receivers [those who would receive a reduction of at least 5 dB(A)] is \$36,000 or less per benefitted receiver, a barrier is considered to be cost-effective. For initial considerations, a unit cost of \$35 per square foot for reflective barriers, \$40 for absorptive barriers and \$50 for barriers on structures is used in this cost-effectiveness calculation.
3. Design Goal for Noise Abatement: Traffic noise abatement must achieve at least an 8 dB(A) reduction for at least one benefitted receiver.

If any of the above-mentioned criterion is not met, noise abatement measures would not be constructed.

The proposed noise barrier locations determined to be feasible and reasonable during the EA would still be valid (pending results from a noise workshop) except at the NRAs in which design changes required further analysis. None of the NRAs had noise barriers that were feasible and reasonable based on the EA noise study. A new noise barrier analysis was conducted during this re-evaluation. Results of the new noise barrier analysis are reported in

**Table 8-1.****5.0 IDENTIFICATION OF NOISE STUDY AREAS AND RECEIVERS****5.1 Noise Study Areas (NSA)**

A total of five NSAs with potential changes for traffic noise impacts were identified. **Attachment A** includes the NSAs defined for this re-evaluation. **Table 5-1** lists by activity category, the relevant associated land uses in each NSA.

**Table 5-1: Noise Study Area Descriptions**

<b>NSA No./ NRA No.</b>	<b>Description</b>
<b>NSA 4/NRA 1</b>	NSA 4 follows the east side of I-30 from the I-630 entrance/exit ramp at 15th St. north to the Arkansas River. The area between the I-630 interchange and 9th St. is largely residential. North of 9th St. the NSA becomes retail and industrial uses associated with the downtown area. Along the river, a park provides recreational areas and trails that surround a library and museum, including the William J. Clinton Library and Museum and the Clinton School of Public Service.
<b>NSA 5/NRA 1</b>	NSA 5 is located on the west of I-30 between the I-630 interchange north to the Arkansas River. This NSA encompasses Downtown Little Rock. Just northwest of the I-630 interchange, MacArthur Park includes recreation areas and museums, such as the Arkansas Arts Center, the MacArthur Museum of Arkansas Military History, and the MacArthur Park Historic District. Surrounding the park are residential areas that reach as far north as Capitol Ave. and west to Cumberland St. Just south of the highway spur to Cumberland St. there are several multi-story residential towers with balconies, including 300 Third Tower and River Market Tower. For this re-evaluation, the design changes occurred on the east side of I-30; therefore, only the southern portion of NSA 5 was re-analyzed.
<b>NSA 10/NRA 2</b>	NSA 10 is bounded by Main St. and continues along the northern side of I-40 to North Hills Blvd. The area is predominantly residential on the northern bluffs with the exception of one church, First Pentecostal Church of Jesus Christ, along the I-40 frontage road. Two multi-family unit developments, Woodland Terrace Apartments and multiple buildings along Belmont Dr., are located along North Hills Blvd. Both developments have residential balconies that are exposed to the Interstate.
<b>NSA 11/NRA 3</b>	NSA 11 is located between North Hills Blvd. and the Hwy. 67/167 Interchange on the northern side of I-40. NSA 11 was undeveloped permitted land during preparation of the EA for the proposed project. Since then, construction started for a new development, The Pointe North Hills apartment complex (Phases 1 and 2).
<b>NSA 12/NRA 3</b>	NSA 12 is located along the western side of the Hwy. 67/167 north of I-40 and continues to Jacksonville Blvd. The NSA contains an area of multi-family residential development in two areas, both called Foothill Apartments. Both developments have exterior balconies and patios that are exposed to traffic along the Hwy. 167 corridor. The northern portion of the NSA consist of retail development, the Northeast High School, and the North Little Rock Middle School complex.

Source: Project Team, March 2020.

**6.0 MODEL VALIDATION**

ARDOT policy requires validation of TNM. Validation involves taking noise measurements at selected points near the existing roadway while making simultaneous vehicle classification counts of the traffic and estimating travel speed. The traffic collected along with the speeds,

are then entered into a TNM model of the existing road configuration. The modeled (predicted) levels are compared to the measured levels, and if the predicted levels are within 3 dB(A) of the measured levels, the model is determined to be validated.<sup>3</sup>

During the preparation of the EA, TNM 2.5 was used to validate the predicted noise levels through comparison of the measured and modeled noise levels. Traffic was counted and classified concurrently during the noise measurement by vehicle type: cars, medium trucks, heavy trucks, and buses. Traffic classification counts were taken concurrently with the noise measurements. All predicted levels were within 0 to 3 dB of the measured levels. Therefore, the model was considered to be validated. The EA validation conclusion applies to this re-evaluation.

## 7.0 IMPACT DETERMINATION ANALYSIS

### 7.1 Summary of Impacts

An impact assessment was completed for the Selected Alternative for NSAs 4, 5, 10, 11 and 12. As mentioned previously, impacts to receivers are determined based on two criteria:

1. The predicted noise level at a receiver approaches, equals, or exceeds the NAC (absolute criterion). Approach is defined by ARDOT to be the one-hour equivalent sound levels [Leq(h)] that are 1 dB(A) or less below the NAC.
2. There is a substantial increase in noise (relative criterion) as a result of the project. Substantial increase is defined by ARDOT as a 10 dB(A) or greater increase in highway traffic noise.

Typically, increased capacity projects (i.e., widening of an interstate) show that increases over existing levels are well below the ARDOT criterion of a substantial increase of 10 or more dB(A) because noise is already high in the existing condition. Therefore, none of the receivers were anticipated to be impacted by a substantial increase in noise level.

For comparison purposes, **Table 7-1** lists the noise levels that changed from what was reported in the EA.

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<sup>3</sup> "Policy on Highway Traffic Noise Abatement", Arkansas Department of Transportation, 2018, page 21.

**Table 7-1: Noise Levels Comparison Between EA and Re-evaluation (Year 2041)**

Receiver ID.	NSA	EA Noise Level [dB(A)]	EA Impact (Yes/No)	Re-evaluation Noise Level [dB(A)]	Re-evaluation Impacts (Yes/No)	Change (+/-)
N193	4	55	No	54	No	-1
N196	4	55	No	56	No	+1
N197	4	40	No	41	No	+1
N198	4	56	No	57	No	+1
N199	4	54	No	55	No	+1
N200	4	59	No	60	No	+1
N201	4	59	No	60	No	+1
N203	4	66	Yes	65	No	-1
N204	4	65	No	64	No	-1
N207	4	64	No	63	No	-1
N210	4	57	No	56	No	-1
N241	5	64	No	63	No	-1
N248	5	60	No	59	No	-1
N253	5	59	No	58	No	-1
N257	5	62	No	61	No	-1
N263	5	73	Yes	72	Yes	-1
N270	5	70	No	69	No	-1
N662	10	63	No	64	No	+1
N665	10	61	No	62	No	+1
N666	10	60	No	61	No	+1
N667	10	61	No	62	No	+1
N668	10	58	No	59	No	+1
N669	10	60	No	61	No	+1
N670	10	63	No	64	No	+1
N671	10	63	No	64	No	+1
N672	10	63	No	64	No	+1
N673	10	63	No	64	No	+1
N674	10	65	No	66	Yes	+1
N675	10	65	No	66	Yes	+1
N676	10	66	Yes	67	Yes	+1
N679	10	68	Yes	69	Yes	+1
N680	10	68	Yes	69	Yes	+1
N688	10	48	No	49	No	+1
N689	10	48	No	49	No	+1
N697	10	70	Yes	69	Yes	-1
N739-1	10	66	Yes	65	No	-1
N740-2	10	66	Yes	65	No	-1
N750-1	12	59	No	57	No	-2
N750-2	12	60	No	59	No	-1
N751-1	12	59	No	58	No	-1
N752-1	12	59	No	58	No	-1

Receiver ID.	NSA	EA Noise Level [dB(A)]	EA Impact (Yes/No)	Re-evaluation Noise Level [dB(A)]	Re-evaluation Impacts (Yes/No)	Change (+/-)
N753-1	12	60	No	59	No	-1
N753-3	12	61	No	62	No	+1
N754-1	12	61	No	60	No	-1
N755-2	12	62	No	63	No	+1
N755-3	12	63	No	64	No	+1
N756-2	12	62	No	63	No	+1
N756-3	12	63	No	64	No	+1
N757-3	12	64	No	65	No	+1
N758-2	12	48	No	49	No	+1
N758-3	12	51	No	52	No	+1
N760-1	12	44	No	45	No	+1
N762-2	12	53	No	54	No	+1
N763-2	12	54	No	55	No	+1
N763-3	12	57	No	58	No	+1
N765-2	12	56	No	57	No	+1
N766-2	12	50	No	48	No	-2
N766-3	12	54	No	55	No	+1
N767-1	12	44	No	45	No	+1
N767-2	12	51	No	49	No	-2
N767-3	12	55	No	56	No	+1
N768-2	12	51	No	49	No	-2
N768-3	12	55	No	56	No	+1
N769-1	12	47	No	46	No	-1
N769-2	12	51	No	50	No	-1
N770-1	12	56	No	55	No	-1
N770-3	12	60	No	61	No	+1
N773-1	12	58	No	57	No	-1
N775-1	12	50	No	49	No	-1
N783	12	58	No	59	No	+1
N786A	12	63	No	64	No	+1
N793	12	57	No	56	No	-1
N794	12	59	No	58	No	-1

Source: Project Team, March 2020.

As shown in **Table 7-1**, the difference in noise levels due to design changes decreased by a maximum of 2 dB(A) and increased by a maximum of 1 dB(A). Because the changes that are less than 3 dB(A) may be considered negligible or unimportant under NEPA because they are barely perceptible, these differences are considered to be minor.

**Table 7-2** summarizes the noise level results for each NSA re-evaluated for the Selected Alternative. The impacts are further described in the sections that follow.

**Table 7-2: Re-evaluation Summary of Noise Impacts (Year 2041)**

NRA	NSA	Design Year Noise levels, Leq(h) dB(A)	Increase over Existing Sound Levels, dB(A)	Impacts Based on NAC? (Yes/No)	Impacts Based on Substantial Increase? (Yes/No)	Total Receptors Evaluated in this Re-evaluation	Number and Type of Impacted Receptors	New Impacts? (Yes/No)
1	4	NAC B, D, E: 41-70	0-4	No	No	60	No impacted receptors	No
1	5	NAC B, C, E: 47-72	0-9	Yes	No	150	3 residences, and 1 park (5 receptors)	No
2	10	NAC B, D: 39-74	0-2	Yes	No	157	57 residences	Yes
3	11	NAC B: 55-68	0-2	Yes	No	74	9 residences	Yes
3	12	NAC B, C: 44-69	0-4	Yes	No	121	2 residences and 1 apartment pool	No

Source: Project Team, March 2020.

#### NRA 1

Results of the re-evaluation indicate that there would not be any impacts within NSA 4 as a result of design changes within NRA 1. This represents a reduction of impacts when compared to the EA/FONSI. During the EA, it was determined that a single-family residential receptor (Receiver N203) would be impacted under the absolute criterion at 66 dB(A). The noise re-evaluation indicates that the design changes within NRA 1 would result in a reduction of the predicted noise level from 66 dB(A) to 65 dB(A) resulting in no impacts.

A total of 8 receptors out of the 155 receptors re-evaluated would be impacted within NSA 5 [3 residences and 1 park (5 receptors)]. This represents the same conclusion presented in the EA. There would not be any new traffic noise impacts within NSA 5 as a result of the design changes. Therefore, the previous determination regarding the feasibility and reasonableness of noise abatement, as stated in the EA/FONSI remain valid.

#### NRA 2

Results of the re-evaluation indicate that there would be 57 impacted residences within NSA 10 as a result of design changes within NRA 2. From these, two are new impacts (N674 and N675) for which predicted noise levels would increase by 1 dB(A), from 65 dB(A) to 66 dB(A); and two changed from impacted receivers to no impacted receivers (N739-1 and N740-2). Noise levels for N739-1 and N740-2 were reduced by 1 dB(A) from 66 dB(A) to 65 dB(A). Compared to the EA/FONSI determination, although the overall conclusions remain the same as in this re-evaluation (57 receivers would be impacted in total); two of the impacted receivers are new impacts. Regarding noise abatement, a noise abatement evaluation for the NSA 10 indicates that there is no feasible and reasonable abatement for NSA 10. Therefore, the previous determination regarding the feasibility and reasonableness of noise abatement, as stated in the EA/FONSI remain valid.

### *NRA 3*

A total of 74 new receptors were added and analyzed to NSA 11 to represent the multi-family residences at The Pointe North Hills apartment complex currently under construction. The noise analysis was completed for the permitted phases of the complex (phases 1 & 2). Results of the analysis indicate that the Selected Alternative would result in traffic noise impacts at the apartment complex. A total of 9 out of the 74 receptors within NSA 11 would be impacted under the absolute criterion. This represents a different conclusion from what was reported in the EA/FONSI, in which only contours were developed for NSA 11.

Results of the re-evaluation indicate that there would be 3 impacted receptors (2 residences and 1 apartment pool) within NSA 12 as a result of design changes within NRA 3. This represents the same conclusion presented in the EA. There would not be any new traffic noise impacts within NSA 12 as a result of the design changes. Regarding noise abatement, a noise abatement evaluation for the NSA 12 indicates that there is no feasible and reasonable abatement for NSA 12. Therefore, the previous determination regarding the feasibility and reasonableness of noise abatement, as stated in the EA/FONSI remain valid.

The modeling results tables and location of individual receivers within each NSA re-evaluated are included in **Attachments B** and **C**, respectively.

## 8.0 NOISE ABATEMENT EVALUATION

### 8.1 Statement of Likelihood of Abatement

Based on this re-evaluation, the ARDOT has determined that the design changes to the Selected Alternative would result in traffic noise impacts at all NSAs except for NSA 4. **Tables 8-1** lists the noise barriers analyzed within the NRAs. The table does not include the noise barriers that were determined feasible and reasonable during the EA. The cost of the barriers was based on \$40.00/sqft for ground mounted absorptive noise barriers and \$50.00/sqft for absorptive noise barriers on retaining walls and bridges. The location of the noise barriers analyzed in this re-evaluation are illustrated in **Attachment D**. The costs for absorptive noise barriers were used in all areas to minimize reflected noise to receptors opposite to the proposed noise barriers.

**Table 8-1: Re-evaluation Noise Barriers Analyzed**

NRA	NSA	Barrier Number	Location	Feasible	Average Height of Barrier (ft)	Length of Barrier (ft)	Meets Design Goal of 8 dB(A)	Total Cost	Number of Benefitted Residences	Cost per Benefitted Receptor	Feasible and Reasonable
1	5	NB 5	West of I-30 between 9th St. and 11th St.	Yes	25	1,318	No	N/A	N/A	N/A	No
2	10	NB 12	North of I-40, from approximately 3,000 east of J.F.K. Blvd. to J.F.K. Blvd.	No	25	3,437	No	N/A	N/A	N/A	No
	10	NB 13	North of I-40 from Belmont Dr. to Plateau St.	Yes	16-25	787	Yes	\$638,682	11	\$58,062	No
	10	NB 14	West of Hills Blvd. between Waterside Dr. and Belmont Dr.	No	25	372	No	N/A	N/A	N/A	No
3	11	NB 16	Along Hwy 67 north of I-40 and along I-40 west of Hwy 67	Yes	25	2,302	No	N/A	N/A	N/A	No
3	12	NB 15	West of Hwy. 167 and south of Lakeview Rd.	Yes	10-16	1,011	Yes	\$506,323	9	\$56,258	No

Source: Project Team, March 2020.

This study provides details for all considered and proposed noise abatement measures for inclusion in the re-evaluation document. Design of design-build noise abatement measures shall be based on the preliminary noise abatement design developed during the EA noise analysis and re-evaluated during the project's final design. Noise abatement measures are considered, developed, and constructed in accordance with this standard and in conformance with the provisions of 40 CFR 1506.5(c) and 23 CFR 636.109.

One new noise barrier, NB 16, is feasible but not reasonable as a result of the noise re-evaluation to mitigate traffic noise at The Pointe of North Hills apartment complex currently under construction. The location of noise barrier NB 15 shifted slightly from the location where it was analyzed in the EA. However, as in the EA, NB 15 would not be both feasible and reasonable. During the EA, NB 12 was determined to be feasible but not reasonable. During the re-evaluation, NB 12 was found not feasible; however, it is still not reasonable and therefore not proposed for incorporation into the project. This is the same conclusion reached during the EA. No other changes to the previously proposed barriers would result from the re-evaluation.

## 8.2 View of Benefitted Property Owners and Residents

The final step in determining reasonableness of any abatement system is the solicitation of

the viewpoints of the benefitted property owners and residents. If the cost-effectiveness and noise reduction design reasonableness criteria are still met after any additional design investigations, then the viewpoints of the benefitted residents and property owners would be sought and considered before final decisions are made.

## 9.0 MITIGATION OF CONSTRUCTION NOISE

In addition to noise from traffic, construction activities themselves can produce increased noise of a temporary nature. ARDOT would be sensitive to local needs and may make adjustments to work practices in order to reduce inconvenience to the public.

The major construction elements of this project are expected to be demolition, hauling, grading, paving, and bridge construction. Construction of the proposed improvements would result in a temporary increase in the ambient noise level along I-30. General construction noise impacts for passerby and those individuals living or working near the project can be expected particularly from demolition, earth moving, pile driving, and paving operations. Equipment associated with construction generally includes backhoes, graders, pavers, concrete trucks, compressors, and other miscellaneous heavy equipment. **Table 9-1** lists some typical peak operating noise levels at a distance of 15 m (50 ft), grouping construction equipment according to mobility and operating characteristics. Motorized equipment shall be maintained with appropriate mufflers to minimize construction noise levels. During certain phases of construction (i.e., land clearing) and during certain seasons of the year, there will be areas along the project where no construction activity is taking place.

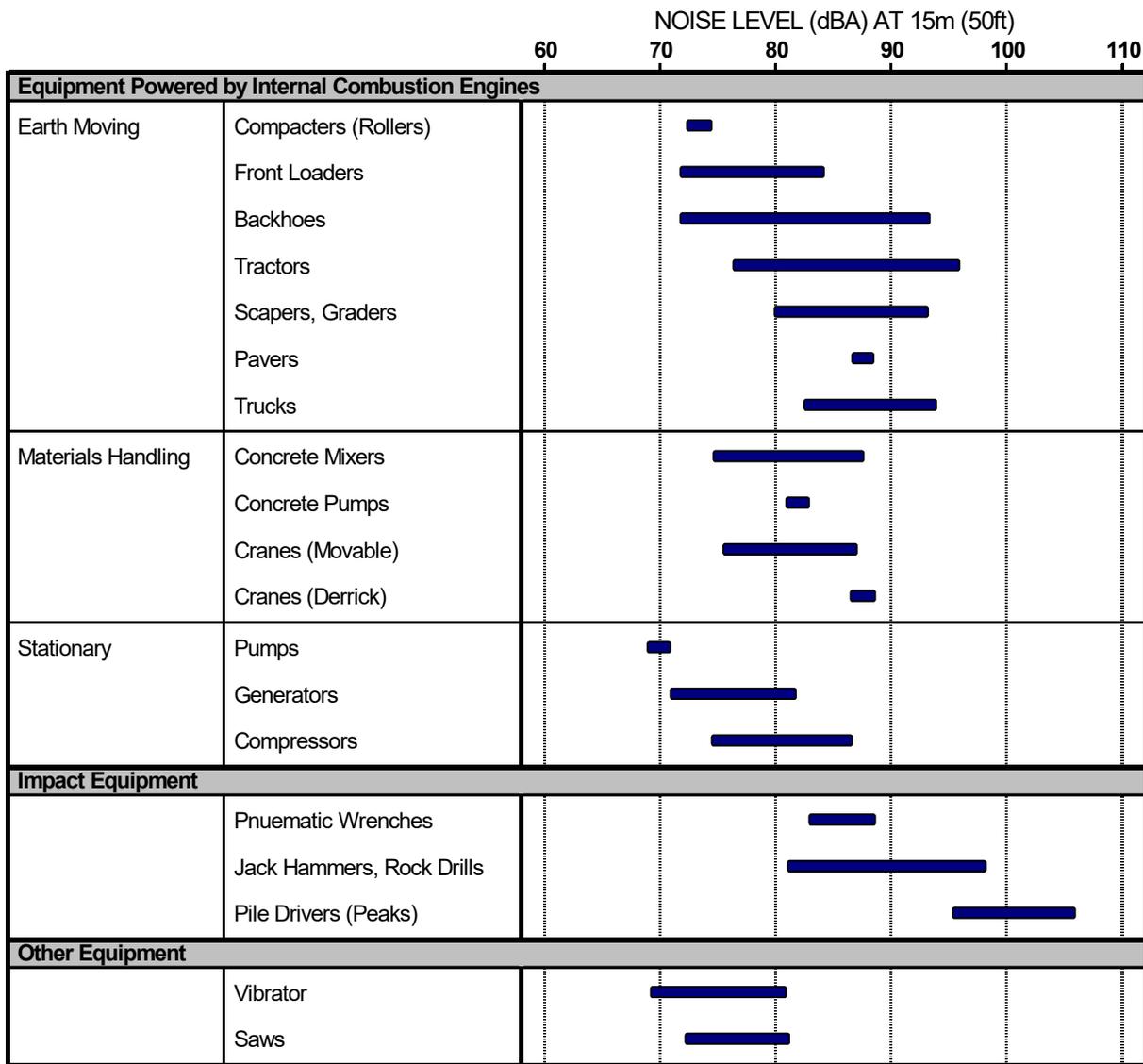
Local noise ordinances may prohibit construction activity between certain times of the day, or there may be other restrictions imposed on the contractor. Contractors are required to comply with all applicable regulations governing equipment source levels and noise resulting from construction site activities for Type I projects. Alternately, the contractor may seek a variance to operate outside the local noise ordinance. The following techniques can be used to reduce construction noise impacts:

1. Place stationary noise sources as far from sensitive receptors as possible.
2. Use portable noise barriers or take advantage of natural terrain features between the noise source and sensitive receptors to provide shielding.
3. Turn idling equipment off.
4. Drive equipment forward instead of backward whenever possible; lifting instead of dragging materials; and avoid scraping or banging activities by substituting quieter hand methods, if possible.
5. Confine work that does not have to be done at night to daylight hours. When work must be done at night, complete the noisiest work as early as possible.

Construction noise can be further reduced through the use of properly sized and maintained mufflers, engine intake silencers, less obtrusive backup alarms, engine enclosures, noise blankets, and rubber linings. Considering the relatively short-term nature of construction noise, impacts are not expected to be substantial. Yet, for brief periods of time, some construction noise impacts could be substantial (an increase in existing noise levels by 10 dB(A) or greater), even though existing I-30 traffic noise levels are anticipated to remain high. These episodes usually occur during daytime work hours. As a result, these impacts will be minimized to adjacent residents. Additionally, nearby structures usually contribute to

transmission loss and a resulting moderation of intrusive construction noise.

**Table 9-1: Construction Equipment Sound Levels**



SOURCE: U.S. Report to the President and Congress on Noise, February, 1972.

### 10.0 COORDINATION WITH LOCAL OFFICIALS

Areas of undeveloped lands are scattered throughout the 30 Crossing corridor. These are Activity Category G lands which are undeveloped and at the time of this traffic noise analysis in this re-evaluation were not permitted for development. The proposed project includes travel lanes at grade, on-fill/structure and in cut along a rolling terrain. The EA presented a range of distances from the nearest edge of travel lane to the design year noise levels where 71 and 66 dB(A) are expected. The 71 and 66 dB(A) values represent the approach noise levels for NAC E, C and B. Future developments within these setbacks would have noise levels that are greater than 71 or 66 dB(A). The setback distances were identified to assist

local planning authorities in developing land use controls to prevent incompatible land use due to traffic noise. Given the alignment and topography of the 30 Crossing corridor, it is recommended that future developments proposed along the project corridor be modeled with accurate survey data to avoid creating incompatible land uses based on highway noise. The setbacks distances presented in the EA remain valid.

ARDOT encourages local communities and developers to practice noise compatibility planning in order to avoid future noise impacts. Two guidance documents on noise compatible land use planning are available from FHWA: “The Audible Landscape: A Manual for Highway Noise and Land Use” and “Entering the Quiet Zone: Noise Compatible Land Use Planning.”

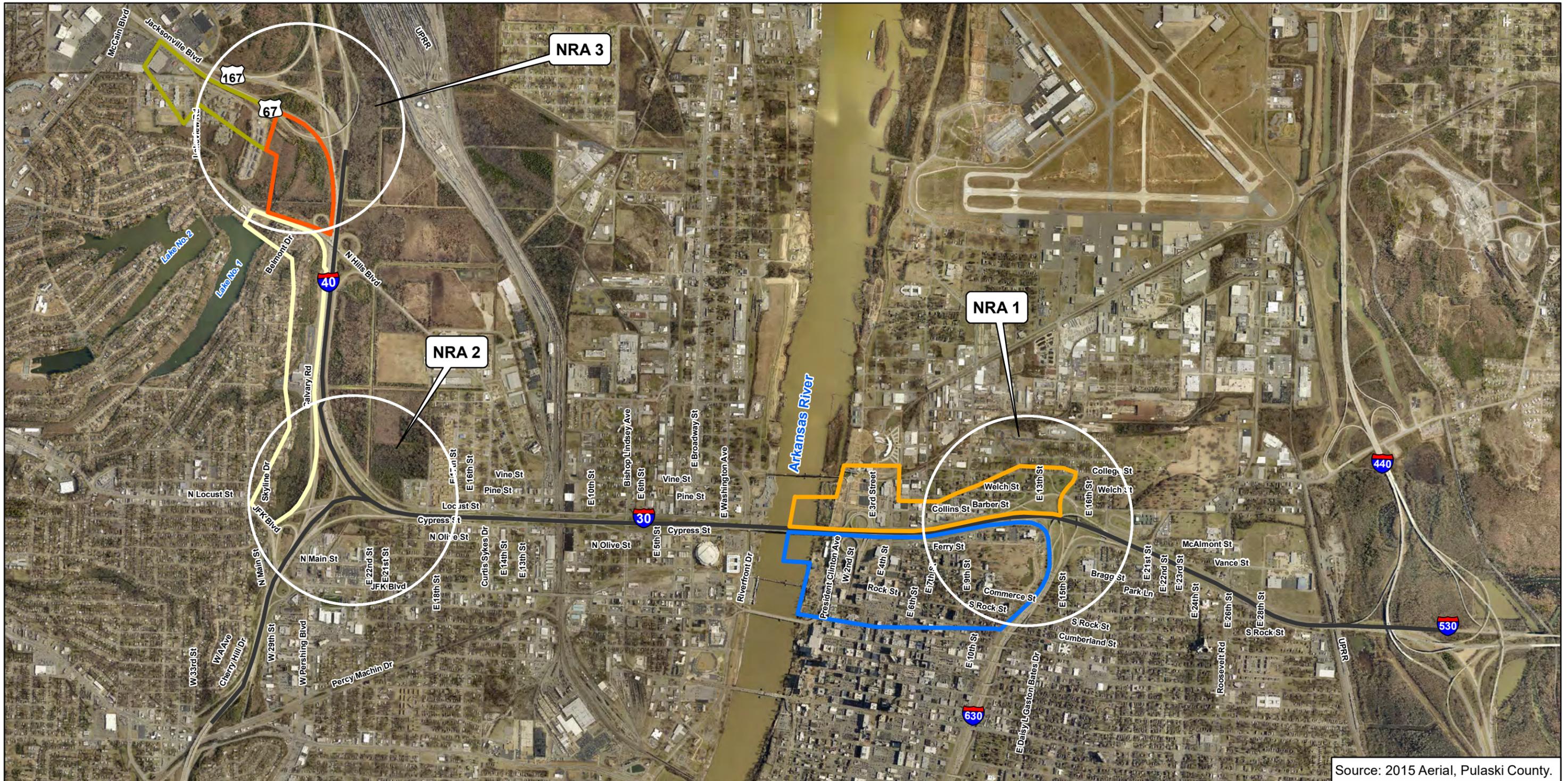
## 11.0 SUMMARY AND CONCLUSIONS

A total of three areas were reanalyzed for noise to determine any changes in traffic noise impacts and any additional traffic noise impacts that were not identified/evaluated for abatement in the original EA/FONSI. The areas re-evaluated included those adjacent to the I-630/I-30, I-30/I-40, and I-40/Hwy. 67 interchanges; designated as NRA 1; NRA 2; and NRA 3; respectively. The NRAs encompassed NSAs 4, 5, 10, 11, and 12 previously defined in the EA.

The traffic noise re-evaluation concludes that the proposed design changes to the Selected Alternative would not result in any impacts within NSA 4. This represents a reduction of impacts when compared to the EA. The re-evaluation also concludes that there would not be any new traffic noise impacts, that were not identified/evaluated in the EA, within NSAs 5, 10, and 12. No traffic noise abatement was determined to be feasible and reasonable within NSAs 5, 10, and 12.

Design changes at I-40/Hwy. 67 would result in traffic noise impacts at a new development, The Pointe North Hills apartment complex, currently under construction. The new apartment complex, located within NSA 11, was previously evaluated under NAC G, undeveloped. Receptors within NSA 11 to represent the new multi-family residences were analyzed. Results of the analysis indicate that the Selected Alternative would result in traffic noise impacts and abatement was analyzed. One new traffic noise barrier, NB 16, is feasible but not reasonable as a result of this noise re-evaluation to mitigate traffic noise impacts at The Pointe North Hills apartment complex.

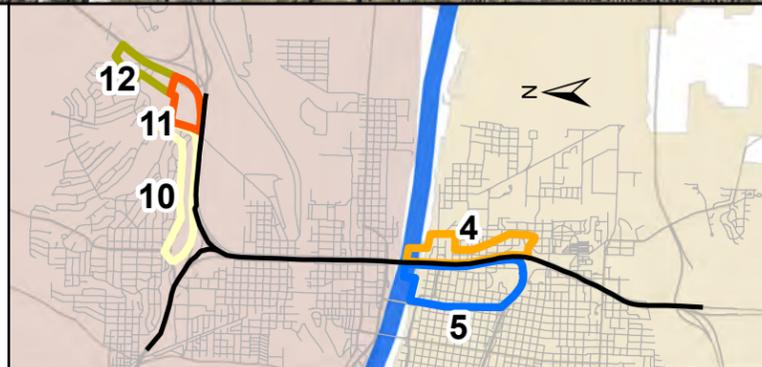
**Attachment A: Noise Study Areas and Noise Re-evaluation Areas**



Source: 2015 Aerial, Pulaski County.

**Legend**

- NSA 4
- NSA 5
- NSA 10
- NSA 11
- NSA 12



**NOISE STUDY AREAS AND NOISE RE-EVALUATION AREAS**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum

Pulaski County, Arkansas

**Attachment B: Sound Level Results and Impacts Tables**

Table B-1: Design Hour Noise Levels, dBA, Leq(1h), NRA1 Within NSA 4

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]				
	Description	Category	Criteria Leq(h)		Existing	Existing Impact	Re-Evaluation Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)
N182	Residential	B	67	3	62	No	62	0	N
N183	Residential	B	67	1	62	No	62	0	N
N184	Residential	B	67	1	61	No	61	0	N
N185	Residential	B	67	1	61	No	61	0	N
N186	Residential	B	67	1	60	No	60	0	N
N187	Residential	B	67	1	60	No	60	0	N
N188	Residential	B	67	1	60	No	60	0	N
N189	Residential	B	67	1	59	No	60	+1	N
N190	Residential	B	67	1	56	No	56	0	N
N191	Residential	B	67	2	59	No	59	0	N
N192	Residential	B	67	1	59	No	60	+1	N
N193	Residential	B	67	1	57	No	54	-3	N
N194	Residential	B	67	1	58	No	58	0	N
N195	Residential	B	67	2	60	No	60	0	N
N196	Residential	B	67	1	57	No	56	-1	N
N197	Immanuel Outreach Church Ministries	D	52	1	40	No	41	+1	N
N198	Residential	B	67	2	56	No	57	+1	N
N199	Residential	B	67	2	53	No	55	+2	N
N200	Residential	B	67	2	59	No	60	+1	N
N201	Residential	B	67	2	59	No	60	+1	N
N202	Residential	B	67	5	55	No	57	+2	N
N203	Residential	B	67	1	64	No	65	+1	N
N204	Residential	B	67	1	63	No	64	+1	N
N205	Residential	B	67	1	59	No	60	+1	N
N206	Residential	B	67	3	52	No	55	+3	N
N207	Residential	B	67	3	62	No	63	+1	N
N208	Residential	B	67	1	58	No	59	+1	N
N209	Residential	B	67	2	57	No	58	+1	N
N210	Residential	B	67	5	54	No	56	+2	N
N211	Residential	B	67	1	56	No	59	+3	N
N212	Office	E	72	1	57	No	60	+3	N
N213	Law Office	E	72	1	54	No	56	+2	N
N214	Residential	B	67	2	54	No	57	+3	N
N215	Residential	B	67	3	53	No	56	+3	N
N216	Hotel	E	72	1	70	No	70	0	N
N217	Office	E	72	1	54	No	58	+4	N
<b>Summary</b>		<b>NAC B, D, E</b>	<b>Total Receptors Re-Evaluated</b>	<b>60</b>	<b>Min level, change, and num of "Y" impacts on Receptors</b>		<b>41</b>	<b>0</b>	<b>0</b>
<b>Total Number of Receivers</b>		<b>36</b>			<b>Max level, change, and num of "N" impacts on Receptors</b>		<b>70</b>	<b>+4</b>	<b>36</b>
<b>NAC B Receivers</b>		<b>31</b>			<b>Number and Type of Impacted Receptors: Residences</b>				<b>0</b>
<b>NAC D Receivers</b>		<b>1</b>			<b>Total Number of Impacted Receptors</b>				<b>0</b>
<b>NAC E Receivers</b>		<b>4</b>			<b>Existing Noise Min.</b>				
					<b>Existing Noise Max.</b>				
					<b>Number of Existing Impacts Preferred Alt. (6 Ln SDI) Avg. Decibel Increase</b>				
					<b>40</b>	<b>6LN SDI Min. Impacted</b>	<b>N/A</b>		
					<b>70</b>				
					<b>0</b>	<b>6LN SDI Max. Impacted</b>	<b>N/A</b>		
					<b>+1</b>				

Table B-2: Design Hour Noise Levels, dBA, Leq(1h), NRA1 Within the South Section of NSA 5

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]				
	Description	Category	Criteria Leq(h)		Existing	Existing Impact	Re-Evaluation Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)
N226	Residential	B	67	1	60	No	62	+2	N
N227	Residential	B	67	1	58	No	60	+2	N
N229	MacArthur Park	C	67	1	59	No	61	+2	N
N230	MacArthur Park	C	67	1	61	No	64	+3	N
N231	MacArthur Park	C	67	1	61	No	64	+3	N
N232	MacArthur Park	C	67	1	63	No	66	+3	Y
N233	MacArthur Park	C	67	1	63	No	66	+3	Y
N234	MacArthur Park	C	67	1	68	Yes	70	+2	Y
N235	MacArthur Park	C	67	1	64	No	65	+1	N
N236	MacArthur Park	C	67	1	68	Yes	69	+1	Y
N237	MacArthur Park	C	67	1	65	No	66	+1	Y
N238	MacArthur Park	C	67	1	61	No	63	+2	N
N239	MacArthur Park	C	67	1	60	No	61	+1	N
N240	MacArthur Park	C	67	1	61	No	62	+1	N
N241	UALR School of Law	C	67	1	60	No	63	+3	N
N242	MacArthur Park	C	67	1	59	No	61	+2	N
N243	MacArthur Park	C	67	1	59	No	61	+2	N
N244	MacArthur Park	C	67	1	58	No	60	+2	N
N245	MacArthur Park	C	67	1	57	No	59	+2	N
N246	MacArthur Park	C	67	1	58	No	60	+2	N
N247	MacArthur Park	C	67	1	56	No	59	+3	N
N248	MacArthur Park	C	67	1	57	No	59	+2	N
N249	MacArthur Park	C	67	1	57	No	60	+3	N
N250	MacArthur Park	C	67	1	56	No	59	+3	N
N251	MacArthur Park	C	67	1	56	No	58	+2	N
N252	MacArthur Park	C	67	1	55	No	58	+3	N
N253	MacArthur Park	C	67	1	56	No	58	+2	N
N254	MacArthur Park	C	67	1	56	No	57	+1	N
N255	MacArthur Park	C	67	1	57	No	56	-1	N
N256	MacArthur Park	C	67	1	53	No	55	+2	N
N257	Bylites Film Production	C	67	1	58	No	61	+3	N
N258	MacArthur Park	C	67	1	57	No	56	-1	N
N259	Residential	B	67	1	51	No	60	+9	N
N262	Residential - Apts	B	67	6	62	No	64	+2	N
N263	Residential - Apts	B	67	3	71	Yes	72	+1	Y
N264	MacArthur Park	C	67	1	54	No	55	+1	N
N265	Residential	B	67	1	53	No	54	+1	N
N267	Restaurant	E	71	1	68	No	69	+1	N
N268	MacArthur Park	C	67	1	56	No	57	+1	N
N269	MacArthur Park	C	67	1	55	No	58	+3	N
N270	Restaurant	E	71	1	68	No	69	+1	N
N281	School	C	67	1	55	No	58	+3	N
N282	Condominium Complex Pool	B	67	1	55	No	58	+3	N
N283	Residential - Condos	B	67	66	57	No	61	+4	N
N284	St. Edward Catholic School	C	67	1	49	No	54	+5	N
N285	Residential - Apts	B	67	20	52	No	56	+4	N
N286	Residential	B	67	1	54	No	58	+4	N
N287	Residential - Apts	B	67	4	45	No	47	+2	N
N288	Residential - Apts	B	67	4	48	No	51	+3	N
N289	Residential	B	67	1	54	No	58	+4	N
N290	Residential	B	67	2	55	No	58	+3	N
N293	Hotel	E	71	1	61	No	67	+6	N
	<b>Summary</b>	<b>NAC B, C, E</b>	<b>Total Receptors Re-Evaluated</b>	<b>150</b>	<b>Min level, change, and num of "Y" impacts on Receivers</b>		<b>47</b>	<b>0</b>	<b>6</b>
	<b>Total Number of Receivers</b>	52			<b>Max level, change, and num of "N" impacts on Receivers</b>		<b>72</b>	<b>+9</b>	<b>46</b>
	<b>NAC B Receivers</b>	14			<b>Number and Type of Impacted Receptors: Residences</b>				<b>3</b>
	<b>NAC C Receivers</b>	35			<b>Number and Type of Impacted Receptors: Museum</b>				<b>0</b>
	<b>NAC E Receivers</b>	3			<b>Number and Type of Impacted Receptors: Restaurant</b>				<b>0</b>
					<b>Number and Type of Impacted Receptors: Park</b>				<b>5</b>
					<b>Number and Type of Impacted Receptors: Hotel</b>				<b>0</b>
					<b>Total Number of Impacted Receptors</b>				<b>8</b>
				<b>Existing Noise Min.</b>	45				
				<b>Existing Noise Max.</b>	71				
				<b>Max. Number of Existing Impacts</b>	5	<b>6LN SDI Min. Impacted</b>	<b>66</b>		
				<b>Preferred Alt. (6 Ln SDI) Avg. Decibel Increase</b>	+2	<b>6LN SDI Max. Impacted</b>	<b>72</b>		

Table B-3: Design Hour Noise Levels, dBA, Leq(1h), NRA2 Within NSA 10

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]				
	Description	Category	Criteria Leq(h)		Existing	Existing Impact	Re-Evaluation Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)
N660	Residential	B	67	1	62	No	63	+1	N
N661	Residential	B	67	1	63	No	63	0	N
N662	Residential	B	67	1	63	No	64	+1	N
N663	Residential	B	67	3	57	No	57	0	N
N664	Residential	B	67	3	59	No	61	+2	N
N665	Residential	B	67	1	62	No	62	0	N
N666	Residential	B	67	1	61	No	61	0	N
N667	Residential	B	67	1	61	No	62	+1	N
N668	Residential	B	67	1	58	No	59	+1	N
N669	Residential	B	67	1	60	No	61	+1	N
N670	Residential	B	67	2	64	No	64	0	N
N671	Residential	B	67	1	64	No	64	0	N
N672	Residential	B	67	1	64	No	64	0	N
N673	Residential	B	67	1	64	No	64	0	N
N674	Residential	B	67	2	66	Yes	66	0	N
N675	Residential	B	67	1	67	Yes	66	-1	N
N676	Residential	B	67	1	67	Yes	67	0	Y
N677	Residential	B	67	1	68	Yes	67	-1	Y
N678	Residential	B	67	1	68	Yes	68	0	Y
N679	Residential	B	67	1	69	Yes	69	0	Y
N680	Residential	B	67	1	69	Yes	69	0	Y
N681	Residential	B	67	1	69	Yes	69	0	Y
N682	Residential	B	67	1	69	Yes	69	0	Y
N683	Residential	B	67	6	61	No	62	+1	N
N684	Residential	B	67	1	70	Yes	69	-1	Y
N685	Residential	B	67	1	69	Yes	68	-1	Y
N686	Residential	B	67	1	67	Yes	67	0	Y
N687	Residential	B	67	1	66	Yes	66	0	Y
N688	First Penecostal Church	D	52	1	48	No	49	+1	N
N689	Calvary Academy	D	52	1	48	No	49	+1	N
N690	Residential	B	67	1	62	No	63	+1	N
N691	Residential	B	67	1	65	No	66	+1	Y
N692	Residential	B	67	1	67	Yes	68	+1	Y
N693	Residential	B	67	1	69	Yes	70	+1	Y
N694	Residential	B	67	1	70	Yes	71	+1	Y
N695	Residential	B	67	3	66	Yes	67	+1	Y
N696	Residential	B	67	1	70	Yes	71	+1	Y
N697	Residential	B	67	1	68	Yes	69	+1	Y
N698	Residential	B	67	1	68	Yes	69	+1	Y
N699	Residential	B	67	1	69	Yes	70	+1	Y
N700	Residential	B	67	1	69	Yes	70	+1	Y
N701	Residential	B	67	1	69	Yes	71	+2	Y
N702	Residential	B	67	1	70	Yes	71	+1	Y
N703	Residential	B	67	1	69	Yes	71	+2	Y
N704	Residential	B	67	1	69	Yes	70	+1	Y
N705	Residential	B	67	1	69	Yes	70	+1	Y
N706	Residential	B	67	1	69	Yes	70	+1	Y
N707	Residential	B	67	1	69	Yes	71	+2	Y
N708	Residential	B	67	1	69	Yes	70	+1	Y
N709	Residential	B	67	1	69	Yes	70	+1	Y
N710	Residential	B	67	1	69	Yes	70	+1	Y
N711	Residential	B	67	1	69	Yes	70	+1	Y
N712	Residential	B	67	11	59	No	59	0	N
N713	Residential	B	67	1	69	Yes	70	+1	Y
N714	Residential	B	67	1	69	Yes	70	+1	Y
N715	Residential	B	67	1	69	Yes	70	+1	Y
N716	Residential	B	67	1	69	Yes	70	+1	Y
N717	Residential	B	67	6	59	No	60	+1	N
N718	Residential	B	67	1	70	Yes	71	+1	Y
N719	Residential	B	67	1	70	Yes	71	+1	Y
N720	Residential	B	67	1	71	Yes	72	+1	Y
N721	Residential	B	67	1	71	Yes	72	+1	Y
N722	Residential	B	67	2	68	Yes	68	0	Y
N723	Residential	B	67	2	65	No	66	+1	Y
N724	Residential	B	67	2	61	No	61	0	N
N725	Residential	B	67	3	48	No	48	0	N
N726	Residential	B	67	2	53	No	52	-1	N
N727	Residential	B	67	1	70	Yes	70	0	Y
N728	Residential	B	67	2	56	No	56	0	N
N729-1	Residential - Apts	B	67	1	61	No	62	+1	N
N729-2	Residential - Apts	B	67	1	68	Yes	68	0	Y
N730-1	Residential - Apts	B	67	1	59	No	60	+1	N
N730-2	Residential - Apts	B	67	1	67	Yes	68	+1	Y
N731	Residential - Apts	B	67	2	55	No	55	0	N
N732	Residential - Apts	B	67	2	55	No	54	-1	N
N733	Residential - Apts	B	67	2	64	No	65	+1	N
N734	Residential - Apts	B	67	2	64	No	64	0	N
N735	Residential - Apts	B	67	2	60	No	61	+1	N
N736	Residential - Apts	B	67	2	62	No	63	+1	N
N737	Residential -Woodland Terrace Apts Pool	B	67	1	38	No	39	+1	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]				
	Description	Category	Criteria Leq(h)		Existing	Existing Impact	Re-Evaluation Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)
N738-1	Residential - Apts	B	67	1	65	No	66	+1	Y
N738-2	Residential - Apts	B	67	1	65	No	66	+1	Y
N738-3	Residential - Apts	B	67	1	66	Yes	66	0	Y
N739-1	Residential - Apts	B	67	1	65	No	65	0	Y
N739-2	Residential - Apts	B	67	1	65	No	66	+1	Y
N739-3	Residential - Apts	B	67	1	65	No	66	+1	Y
N740-1	Residential - Apts	B	67	1	65	No	65	0	N
N740-2	Residential - Apts	B	67	1	65	No	65	0	Y
N740-3	Residential - Apts	B	67	1	65	No	66	+1	Y
N741-1	Residential - Apts	B	67	1	65	No	65	0	N
N741-2	Residential - Apts	B	67	1	65	No	65	0	N
N741-3	Residential - Apts	B	67	1	65	No	65	0	N
N742-1	Residential - Apts	B	67	1	65	No	65	0	N
N742-2	Residential - Apts	B	67	1	65	No	65	0	N
N742-3	Residential - Apts	B	67	1	65	No	65	0	N
N743-1	Residential - Apts	B	67	1	64	No	65	+1	N
N743-2	Residential - Apts	B	67	1	64	No	65	+1	N
N743-3	Residential - Apts	B	67	1	65	No	65	0	N
N744-1	Residential - Apts	B	67	1	64	No	65	+1	N
N744-2	Residential - Apts	B	67	1	64	No	65	+1	N
N744-3	Residential - Apts	B	67	1	64	No	65	+1	N
N745-1	Residential - Apts	B	67	1	64	No	65	+1	N
N745-2	Residential - Apts	B	67	1	64	No	65	+1	N
N745-3	Residential - Apts	B	67	1	64	No	65	+1	N
N746-1	Residential - Apts	B	67	1	60	No	60	0	N
N746-2	Residential - Apts	B	67	1	61	No	61	0	N
N746-3	Residential - Apts	B	67	1	61	No	61	0	N
N747-1	Residential - Apts	B	67	1	57	No	58	+1	N
N747-2	Residential - Apts	B	67	1	58	No	58	0	N
N747-3	Residential - Apts	B	67	1	59	No	59	0	N
N748-1	Residential - Apts	B	67	1	57	No	57	0	N
N748-2	Residential - Apts	B	67	1	57	No	58	+1	N
N748-3	Residential - Apts	B	67	1	58	No	58	0	N
N749-1	Residential - Apts	B	67	1	56	No	56	0	N
N749-2	Residential - Apts	B	67	1	56	No	57	+1	N
N749-3	Residential - Apts	B	67	1	57	No	58	+1	N
	Summary	NAC B, D	Total Receptors Re-Evaluated	157	Min level, change, and num of "Y" impacts on Receivers		39	0	53
	Total Number of Receivers	116			Max level, change, and num of "N" impacts on Receivers		72	+2	63
	NAC B Receivers	114			Number and Type of Impacted Receivers: Residences				57
	NAC D Receivers	2			Total Number of Impacted Receivers				57
					Existing Noise Min.				
					Existing Noise Max.				
					Number of Existing Impacts		6LN SDI Min. Impacted	65	
					Preferred Alt. (6 Ln SDI) Avg. Decibel Increase		6LN SDI Max. Impacted	72	

**Table B-4: Design Hour Noise Levels, dBA, Leq(1h), NRA 3 Within NSA 11**

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]				
	Description	Category	Criteria Leq(h)		Existing	Existing Impact	Re-Evaluation Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)
P1-1	Residential - Apts	B	67	1	58	No	58	0	N
P1-2	Residential - Apts	B	67	1	61	No	61	0	N
P1-3	Residential - Apts	B	67	1	63	No	63	0	N
P2-1	Residential - Apts	B	67	1	57	No	57	0	N
P2-2	Residential - Apts	B	67	1	60	No	60	0	N
P2-3	Residential - Apts	B	67	1	62	No	62	0	N
P4-1	Residential - Apts	B	67	1	55	No	56	+1	N
P4-2	Residential - Apts	B	67	1	58	No	59	+1	N
P4-3	Residential - Apts	B	67	1	60	No	60	0	N
P5-1	Residential - Apts	B	67	1	55	No	55	0	N
P5-2	Residential - Apts	B	67	1	58	No	58	0	N
P5-3	Residential - Apts	B	67	1	59	No	60	+1	N
P6	Residential - Apts	B	67	1	57	No	57	0	N
P7-1	Residential - Apts	B	67	1	58	No	58	0	N
P7-2	Residential - Apts	B	67	1	61	No	62	+1	N
P7-3	Residential - Apts	B	67	1	63	No	64	+1	N
P10-1	Residential - Apts	B	67	1	60	No	60	0	N
P10-2	Residential - Apts	B	67	1	63	No	63	0	N
P10-3	Residential - Apts	B	67	1	64	No	65	+1	N
P11-1	Residential - Apts	B	67	1	60	No	60	0	N
P11-2	Residential - Apts	B	67	1	63	No	64	+1	N
P11-3	Residential - Apts	B	67	1	65	No	66	+1	Y
P12-1	Residential - Apts	B	67	1	61	No	61	0	N
P12-2	Residential - Apts	B	67	1	64	No	65	+1	N
P12-3	Residential - Apts	B	67	1	66	Yes	67	+1	Y
P16-1	Residential - Apts	B	67	1	61	No	62	+1	N
P16-2	Residential - Apts	B	67	1	65	No	65	0	N
P16-3	Residential - Apts	B	67	1	66	Yes	67	+1	Y
P17-1	Residential - Apts	B	67	1	61	No	62	+1	N
P17-2	Residential - Apts	B	67	1	65	No	66	+1	Y
P17-3	Residential - Apts	B	67	1	66	Yes	67	+1	Y
P19-1	Residential - Apts	B	67	1	60	No	60	0	N
P19-2	Residential - Apts	B	67	1	63	No	64	+1	N
P19-3	Residential - Apts	B	67	1	65	No	66	+1	Y
P20-1	Residential - Apts	B	67	1	60	No	61	+1	N
P20-2	Residential - Apts	B	67	1	64	No	65	+1	N
P20-3	Residential - Apts	B	67	1	66	Yes	67	+1	Y
P21-1	Residential - Apts	B	67	1	61	No	62	+1	N
P21-2	Residential - Apts	B	67	1	65	No	66	+1	Y
P21-3	Residential - Apts	B	67	1	66	Yes	68	+2	Y
P74-1	Residential - Apts	B	67	1	56	No	57	+1	N
P74-2	Residential - Apts	B	67	1	58	No	60	+2	N
P74-3	Residential - Apts	B	67	1	60	No	62	+2	N
P75-1	Residential - Apts	B	67	1	56	No	57	+1	N
P75-2	Residential - Apts	B	67	1	59	No	60	+1	N
P75-3	Residential - Apts	B	67	1	61	No	62	+1	N
P76-1	Residential - Apts	B	67	1	56	No	57	+1	N
P76-2	Residential - Apts	B	67	1	59	No	60	+1	N
P76-3	Residential - Apts	B	67	1	61	No	62	+1	N
P77-1	Residential - Apts	B	67	1	57	No	57	0	N
P77-2	Residential - Apts	B	67	1	59	No	60	+1	N
P77-3	Residential - Apts	B	67	1	62	No	63	+1	N
P105	Residential - Apts	B	67	1	57	No	58	+1	N
P108-1	Residential - Apts	B	67	1	57	No	58	+1	N
P108-2	Residential - Apts	B	67	1	60	No	61	+1	N
P108-3	Residential - Apts	B	67	1	62	No	63	+1	N
P109-1	Residential - Apts	B	67	1	57	No	58	+1	N
P109-2	Residential - Apts	B	67	1	60	No	61	+1	N
P109-3	Residential - Apts	B	67	1	63	No	64	+1	N
P110-1	Residential - Apts	B	67	1	57	No	58	+1	N
P110-2	Residential - Apts	B	67	1	60	No	61	+1	N
P110-3	Residential - Apts	B	67	1	63	No	64	+1	N
P111-1	Residential - Apts	B	67	1	58	No	58	0	N
P111-2	Residential - Apts	B	67	1	61	No	62	+1	N
P111-3	Residential - Apts	B	67	1	64	No	65	+1	N
P112-1	Residential - Apts	B	67	1	58	No	59	+1	N
P112-2	Residential - Apts	B	67	1	62	No	63	+1	N
P112-3	Residential - Apts	B	67	1	64	No	65	+1	N
P113-1	Residential - Apts	B	67	1	58	No	59	+1	N
P113-2	Residential - Apts	B	67	1	61	No	63	+2	N
P113-3	Residential - Apts	B	67	1	64	No	65	+1	N
P114-1	Residential - Apts	B	67	1	58	No	59	+1	N
P114-2	Residential - Apts	B	67	1	61	No	62	+1	N
P114-3	Residential - Apts	B	67	1	64	No	65	+1	N

Summary	NAC B	Total New Receptors (this Re-evaluation)	74	Min level, change, and num of "Y" impacts on Receptors	55	0	9
Total Number of Receptors	74			Max level, change, and num of "N" impacts on Receptors	68	+2	65
NAC B Receptors	74			Number and Type of Impacted Receptors: Residences			9
				Total Number of Impacted Receptors			9
		Existing Noise Min.	55				
		Existing Noise Max.	66				
		Number of Existing Impacts Preferred Alt. (6 Ln SDI) Avg. Decibel Increase	5		6LN SDI Min. Impacted	66	
			+1		6LN SDI Max. Impacted	68	

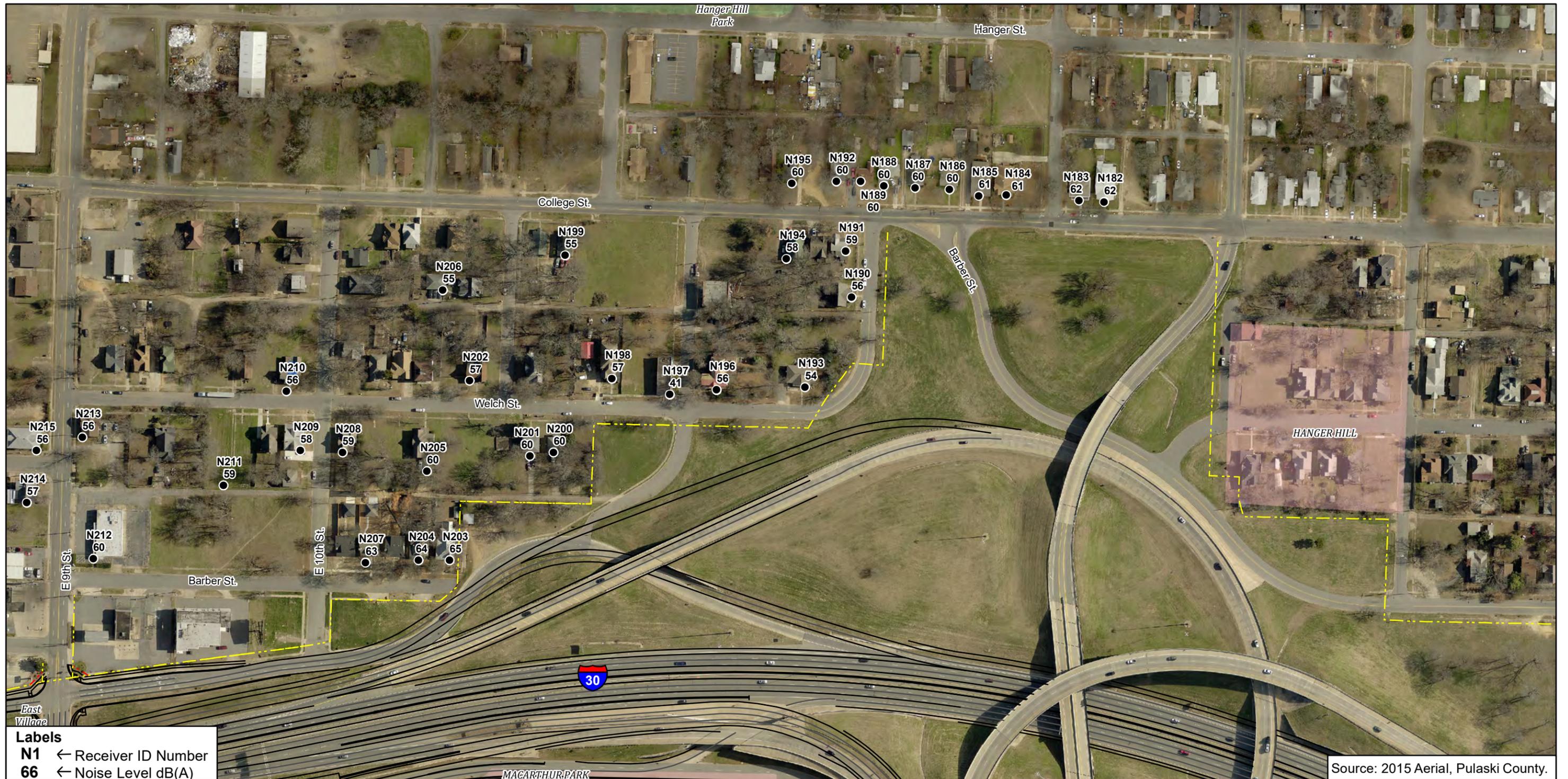
Table B-5: Design Hour Noise Levels, dBA, Leq(1h), NRA3 Within NSA 12

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]				
	Description	Category	Criteria, Leq(h)		Existing	Existing Impact	Re-Evaluation Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)
N750-1	Residential - Apts (Foothills Apts.)	B	67	1	57	No	57	0	N
N750-2	Residential - Apts (Foothills Apts.)	B	67	1	60	No	59	-1	N
N750-3	Residential - Apts (Foothills Apts.)	B	67	1	61	No	60	-1	N
N751-1	Residential - Apts (Foothills Apts.)	B	67	1	58	No	58	0	N
N751-2	Residential - Apts (Foothills Apts.)	B	67	1	60	No	60	0	N
N751-3	Residential - Apts (Foothills Apts.)	B	67	1	61	No	61	0	N
N752-1	Residential - Apts (Foothills Apts.)	B	67	1	58	No	58	0	N
N752-2	Residential - Apts (Foothills Apts.)	B	67	1	60	No	60	0	N
N752-3	Residential - Apts (Foothills Apts.)	B	67	1	61	No	61	0	N
N753-1	Residential - Apts (Foothills Apts.)	B	67	1	59	No	59	0	N
N753-2	Residential - Apts (Foothills Apts.)	B	67	1	61	No	61	0	N
N753-3	Residential - Apts (Foothills Apts.)	B	67	1	62	No	62	0	N
N754-1	Residential - Apts (Foothills Apts.)	B	67	1	60	No	60	0	N
N754-2	Residential - Apts (Foothills Apts.)	B	67	1	62	No	62	0	N
N754-3	Residential - Apts (Foothills Apts.)	B	67	1	63	No	63	0	N
N755-1	Residential - Apts (Foothills Apts.)	B	67	1	60	No	61	+1	N
N755-2	Residential - Apts (Foothills Apts.)	B	67	1	62	No	63	+1	N
N755-3	Residential - Apts (Foothills Apts.)	B	67	1	63	No	64	+1	N
N756-1	Residential - Apts (Foothills Apts.)	B	67	1	60	No	61	+1	N
N756-2	Residential - Apts (Foothills Apts.)	B	67	1	62	No	63	+1	N
N756-3	Residential - Apts (Foothills Apts.)	B	67	1	63	No	64	+1	N
N757-1	Residential - Apts (Foothills Apts.)	B	67	1	61	No	62	+1	N
N757-2	Residential - Apts (Foothills Apts.)	B	67	1	63	No	63	0	N
N757-3	Residential - Apts (Foothills Apts.)	B	67	1	64	No	65	+1	N
N758-1	Residential - Apts (Foothills Apts.)	B	67	1	43	No	44	+1	N
N758-2	Residential - Apts (Foothills Apts.)	B	67	1	47	No	49	+2	N
N758-3	Residential - Apts (Foothills Apts.)	B	67	1	51	No	52	+1	N
N759-1	Residential - Apts (Foothills Apts.)	B	67	1	43	No	44	+1	N
N759-2	Residential - Apts (Foothills Apts.)	B	67	1	48	No	49	+1	N
N759-3	Residential - Apts (Foothills Apts.)	B	67	1	52	No	52	0	N
N760-1	Residential - Apts (Foothills Apts.)	B	67	1	43	No	45	+2	N
N760-2	Residential - Apts (Foothills Apts.)	B	67	1	49	No	50	+1	N
N760-3	Residential - Apts (Foothills Apts.)	B	67	1	52	No	53	+1	N
N761-1	Residential - Apts (Foothills Apts.)	B	67	1	44	No	45	+1	N
N761-2	Residential - Apts (Foothills Apts.)	B	67	1	50	No	51	+1	N
N761-3	Residential - Apts (Foothills Apts.)	B	67	1	53	No	54	+1	N
N762-1	Residential - Apts (Foothills Apts.)	B	67	1	46	No	47	+1	N
N762-2	Residential - Apts (Foothills Apts.)	B	67	1	52	No	54	+2	N
N762-3	Residential - Apts (Foothills Apts.)	B	67	1	56	No	56	0	N
N763-1	Residential - Apts (Foothills Apts.)	B	67	1	46	No	48	+2	N
N763-2	Residential - Apts (Foothills Apts.)	B	67	1	53	No	55	+2	N
N763-3	Residential - Apts (Foothills Apts.)	B	67	1	57	No	58	+1	N
N764-1	Residential - Apts (Foothills Apts.)	B	67	1	47	No	49	+2	N
N764-2	Residential - Apts (Foothills Apts.)	B	67	1	54	No	55	+1	N
N764-3	Residential - Apts (Foothills Apts.)	B	67	1	57	No	58	+1	N
N765-1	Residential - Apts (Foothills Apts.)	B	67	1	50	No	52	+2	N
N765-2	Residential - Apts (Foothills Apts.)	B	67	1	55	No	57	+2	N
N765-3	Residential - Apts (Foothills Apts.)	B	67	1	59	No	60	+1	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]				
	Description	Category	Criteria, Leq(h)		Existing	Existing Impact	Re-Evaluation Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)
N766-1	Residential - Apts (Foothills Apts.)	B	67	1	48	No	44	-4	N
N766-2	Residential - Apts (Foothills Apts.)	B	67	1	50	No	48	-2	N
N766-3	Residential - Apts (Foothills Apts.)	B	67	1	55	No	55	0	N
N767-1	Residential - Apts (Foothills Apts.)	B	67	1	46	No	45	-1	N
N767-2	Residential - Apts (Foothills Apts.)	B	67	1	50	No	49	-1	N
N767-3	Residential - Apts (Foothills Apts.)	B	67	1	55	No	56	+1	N
N768-1	Residential - Apts (Foothills Apts.)	B	67	1	45	No	45	0	N
N768-2	Residential - Apts (Foothills Apts.)	B	67	1	49	No	49	0	N
N768-3	Residential - Apts (Foothills Apts.)	B	67	1	55	No	56	+1	N
N769-1	Residential - Apts (Foothills Apts.)	B	67	1	46	No	46	0	N
N769-2	Residential - Apts (Foothills Apts.)	B	67	1	49	No	50	+1	N
N769-3	Residential - Apts (Foothills Apts.)	B	67	1	56	No	56	0	N
N770-1	Residential - Apts (Foothills Apts.)	B	67	1	54	No	55	+1	N
N770-2	Residential - Apts (Foothills Apts.)	B	67	1	57	No	58	+1	N
N770-3	Residential - Apts (Foothills Apts.)	B	67	1	60	No	61	+1	N
N771-1	Residential - Apts (Foothills Apts.)	B	67	1	55	No	57	+2	N
N771-2	Residential - Apts (Foothills Apts.)	B	67	1	58	No	59	+1	N
N771-3	Residential - Apts (Foothills Apts.)	B	67	1	60	No	61	+1	N
N772-1	Residential - Apts (Foothills Apts.)	B	67	1	56	No	57	+1	N
N772-2	Residential - Apts (Foothills Apts.)	B	67	1	59	No	60	+1	N
N772-3	Residential - Apts (Foothills Apts.)	B	67	1	61	No	62	+1	N
N773-1	Residential - Apts (Foothills Apts.)	B	67	1	56	No	57	+1	N
N773-2	Residential - Apts (Foothills Apts.)	B	67	1	59	No	60	+1	N
N773-3	Residential - Apts (Foothills Apts.)	B	67	1	62	No	63	+1	N
N774-1	Residential - Apts (Foothills Apts.)	B	67	1	48	No	49	+1	N
N774-2	Residential - Apts (Foothills Apts.)	B	67	1	51	No	53	+2	N
N774-3	Residential - Apts (Foothills Apts.)	B	67	1	54	No	55	+1	N
N775-1	Residential - Apts (Foothills Apts.)	B	67	1	48	No	49	+1	N
N775-2	Residential - Apts (Foothills Apts.)	B	67	1	52	No	53	+1	N
N775-3	Residential - Apts (Foothills Apts.)	B	67	1	54	No	56	+2	N
N776-1	Residential - Apts (Foothills Apts.)	B	67	1	48	No	50	+2	N
N776-2	Residential - Apts (Foothills Apts.)	B	67	1	52	No	54	+2	N
N776-3	Residential - Apts (Foothills Apts.)	B	67	1	55	No	56	+1	N
N777-1	Residential - Apts (Foothills Apts.)	B	67	1	49	No	50	+1	N
N777-2	Residential - Apts (Foothills Apts.)	B	67	1	53	No	54	+1	N
N777-3	Residential - Apts (Foothills Apts.)	B	67	1	55	No	57	+2	N
N778-1	Residential - Apts (Foothills Apts.)	B	67	1	49	No	51	+2	N
N778-2	Residential - Apts (Foothills Apts.)	B	67	1	54	No	55	+1	N
N778-3	Residential - Apts (Foothills Apts.)	B	67	1	57	No	58	+1	N
N779-1	Residential - Apts (Foothills Apts.)	B	67	1	50	No	52	+2	N
N779-2	Residential - Apts (Foothills Apts.)	B	67	1	55	No	57	+2	N
N779-3	Residential - Apts (Foothills Apts.)	B	67	1	57	No	58	+1	N
N780-1	Residential - Apts (Foothills Apts.)	B	67	1	51	No	53	+2	N
N780-2	Residential - Apts (Foothills Apts.)	B	67	1	56	No	58	+2	N
N780-3	Residential - Apts (Foothills Apts.)	B	67	1	58	No	59	+1	N
N781-1	Residential - Apts (Foothills Apts.)	B	67	1	52	No	54	+2	N
N781-2	Residential - Apts (Foothills Apts.)	B	67	1	57	No	59	+2	N
N781-3	Residential - Apts (Foothills Apts.)	B	67	1	60	No	61	+1	N
N782	Residential - Apts (Foothills Apts.)	B	67	1	55	No	57	+2	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]				
	Description	Category	Criteria, Leq(h)		Existing	Existing Impact	Re-Evaluation Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)
N783	Residential - Apts (Foothills Apts.)	B	67	1	56	No	59	+3	N
N784	Foothills Apts. Pool	C	67	1	67	Yes	69	+2	Y
N784A	Foothills Apts. Barbecue Area	C	67	1	64	No	65	+1	N
N785	Residential - Apts (Foothills Apts.)	B	67	1	55	No	56	+1	N
N786	Foothills Apts. Pool	C	67	1	60	No	61	+1	N
N786A	Foothills Apts. Barbecue Area	C	67	1	63	No	64	+1	N
N787	Residential - Apts (Foothills Apts.)	B	67	1	55	No	56	+1	N
N788	Foothills Apts. Pool	C	67	1	63	No	65	+2	N
N788A	Foothills Apts. Bark Park	C	67	1	60	No	62	+2	N
N789	Residential - Apts (Foothills Apts.)	B	67	1	60	No	61	+1	N
N790	Residential - Apts (Foothills Apts.)	B	67	1	62	No	63	+1	N
N791	Residential - Apts (Foothills Apts.)	B	67	1	63	No	65	+2	N
N792	Residential - Apts (Foothills Apts.)	B	67	1	65	No	66	+1	Y
N793	Residential - Apts (Foothills Apts.)	B	67	1	52	No	56	+4	N
N794	Residential - Apts (Foothills Apts.)	B	67	1	54	No	58	+4	N
N795	Residential - Apts (Foothills Apts.)	B	67	1	63	No	66	+3	Y
N796	Residential - Apts (Foothills Apts.)	B	67	1	62	No	65	+3	N
N797	Residential - Apts (Foothills Apts.)	B	67	1	50	No	52	+2	N
N798	Residential - Apts (Foothills Apts.)	B	67	1	52	No	53	+1	N
N799	Residential - Apts (Foothills Apts.)	B	67	1	61	No	63	+2	N
N800	Residential - Apts (Foothills Apts.)	B	67	1	61	No	62	+1	N
N801	Northeast High School Active Sports Area	C	67	1	51	No	52	+1	N
N802	Northeast High School	C	67	1	55	No	56	+1	N
N803	Northeast High School	C	67	1	57	No	58	+1	N
	<b>Summary</b>	<b>NAC B, C</b>	<b>Total Receptors Re-Evaluated</b>	<b>121</b>	<b>Min level, change, and num of "Y" impacts on Receivers</b>		<b>44</b>	<b>0</b>	<b>3</b>
	<b>Total Number of Receivers</b>	121			<b>Max level, change, and num of "N" impacts on Receivers</b>		<b>69</b>	<b>+4</b>	<b>118</b>
	<b>NAC B Receivers</b>	112			<b>Number and Type of Impacted Receivers: Residences</b>				<b>2</b>
	<b>NAC C Receivers</b>	9			<b>Number and Type of Impacted Receivers: Apt. Pool</b>				<b>1</b>
					<b>Total Number of Impacted Receivers</b>				<b>3</b>
				<b>Existing Noise Min.</b>	43				
				<b>Existing Noise Max.</b>	67				
				<b>Number of Existing Impacts Preferred Alt. (6 Ln SDI)</b>	1		<b>6LN SDI Min. Impacted</b>	<b>66</b>	
				<b>Avg. Decibel Increase</b>	+1		<b>6LN SDI Max. Impacted</b>	<b>69</b>	

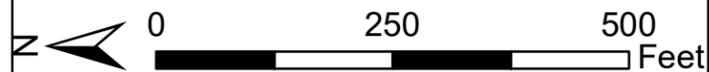
**Attachment C: Noise Receiver Location Maps**



**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

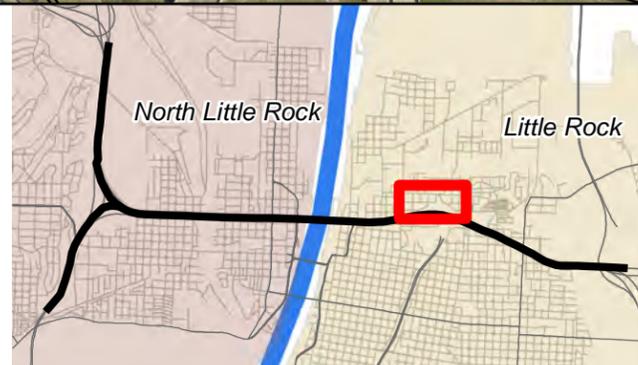
**Legend**

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- - - Proposed ROW
- - - Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District



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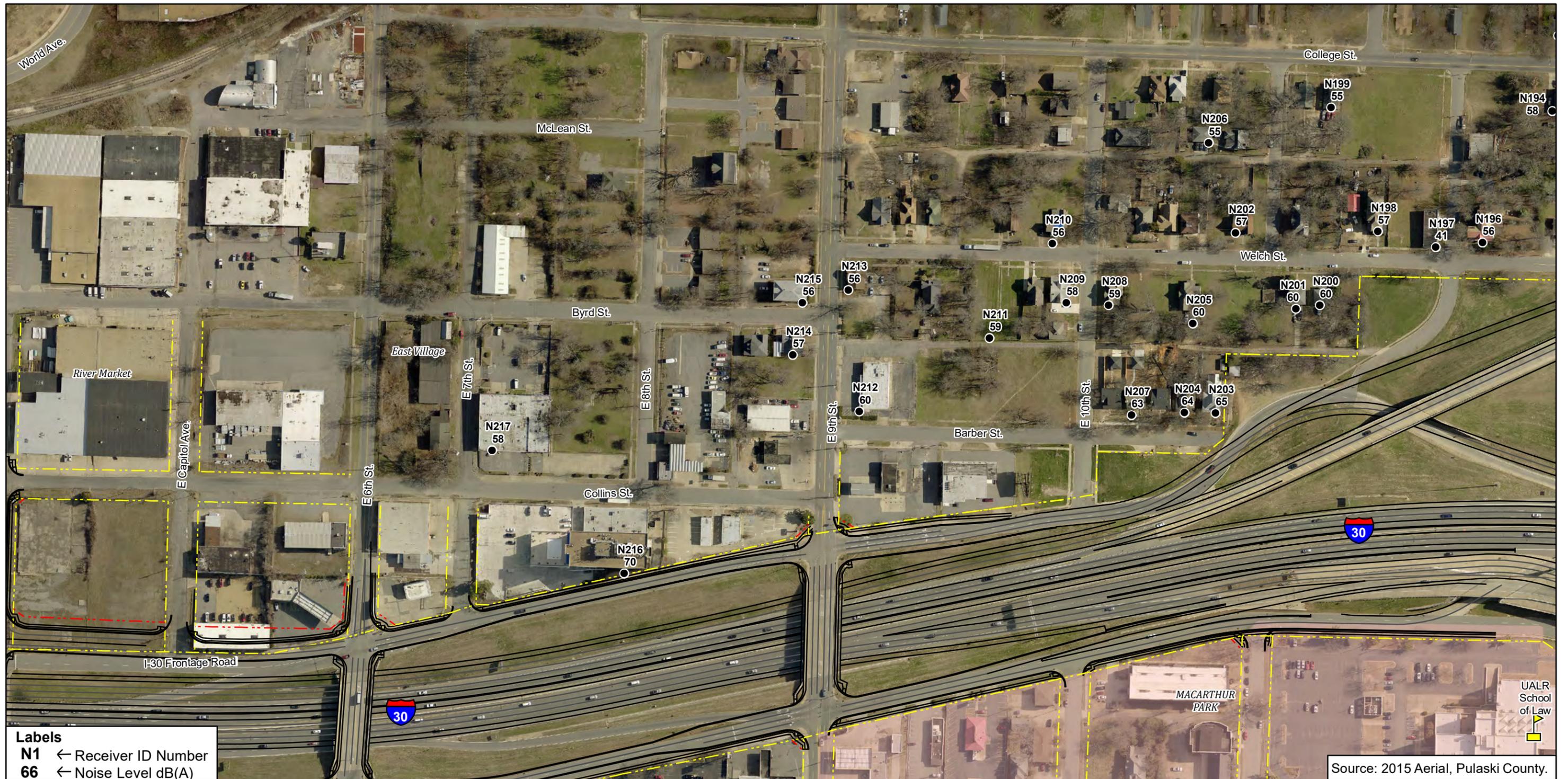
\*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP  
NSA 4: SHEET 1 OF 2**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum  
 Pulaski County, Arkansas



**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

Source: 2015 Aerial, Pulaski County.

**Legend**

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- - - Proposed ROW
- - - Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District

0 250 500 Feet

**Sheet Index**

\*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP**  
**NSA 4: SHEET 2 OF 2**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum

Pulaski County, Arkansas



Source: 2015 Aerial, Pulaski County.

**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
  - Impacted Receiver
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - - - Proposed ROW
  - - - Existing ROW
  - 🚏 School
  - 🌳 Public Park
  - 🏡 Historic District

Sheet Index  
*\*The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP**  
**NSA 5: SHEET 1 OF 3**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum  
 Pulaski County, Arkansas

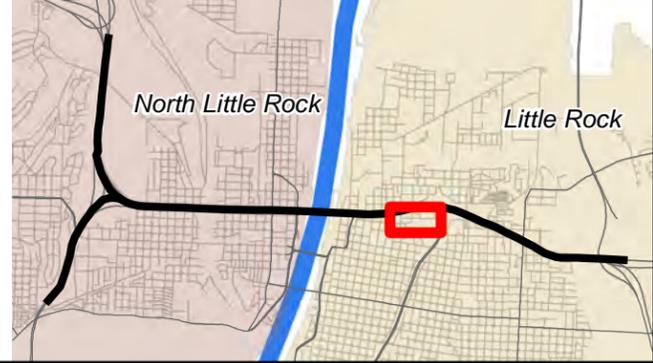


Source: 2015 Aerial, Pulaski County.

**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
  - Impacted Receiver
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - - - Proposed ROW
  - - - Existing ROW
  - 🚩 School
  - 🌳 Public Park
  - 🏠 Historic District

Sheet Index  
*\*The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP**  
**NSA 5: SHEET 2 OF 3**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

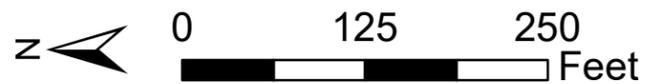
Traffic Noise Technical Memorandum  
 Pulaski County, Arkansas



**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

Source: 2015 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
  - Impacted Receiver
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - - - Proposed ROW
  - - - Existing ROW
  - 🚏 School
  - 🌳 Public Park
  - 🏠 Historic District



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\*The extent of each sheet is highlighted in red

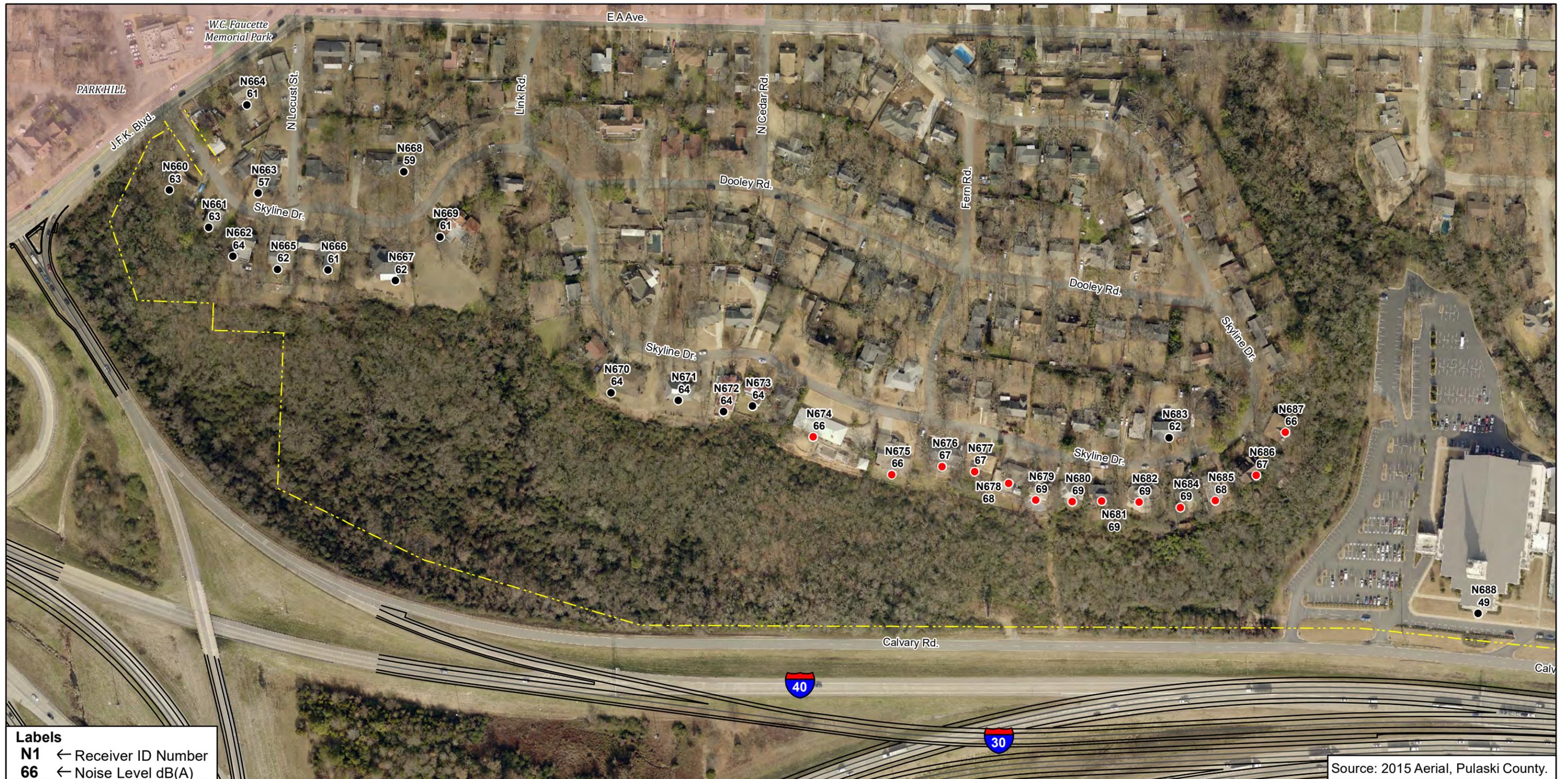


**NOISE RECEIVER LOCATION MAP  
 NSA 5: SHEET 3 OF 3**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum

Pulaski County, Arkansas



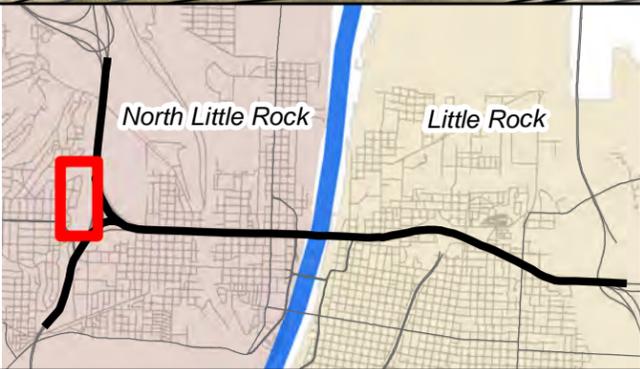
**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

Source: 2015 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
  - Impacted Receiver
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - - - Proposed ROW
  - - - Existing ROW
  - 🚩 School
  - 🌳 Public Park
  - 🏠 Historic District

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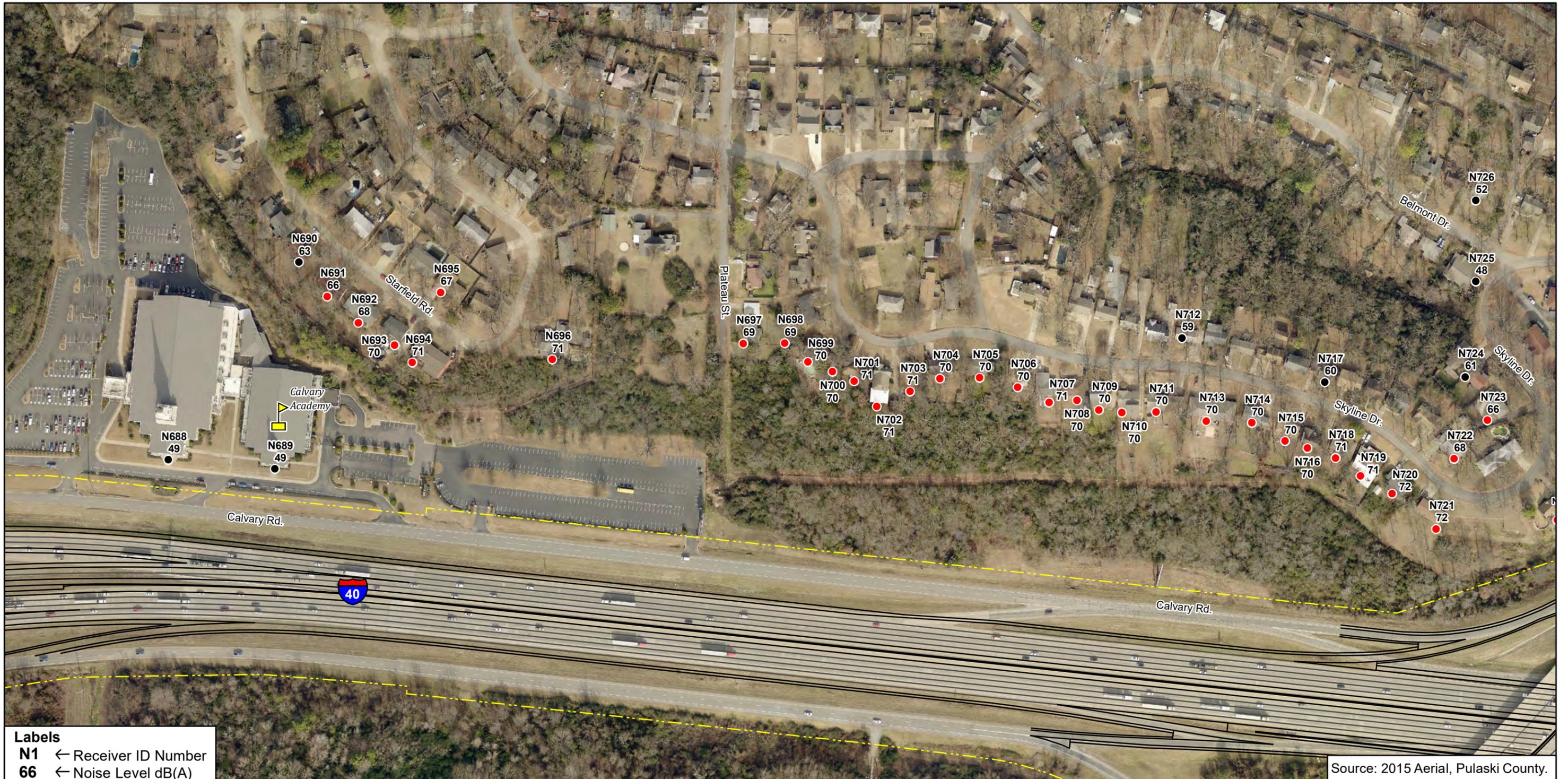
\*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP  
 NSA 10: SHEET 1 OF 3**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum  
 Pulaski County, Arkansas



Source: 2015 Aerial, Pulaski County.

**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
  - Impacted Receiver
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - - - Proposed ROW
  - - - Existing ROW
  - 🚩 School
  - 🌳 Public Park
  - 🏠 Historic District

Sheet Index  
*\*The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP**  
**NSA 10: SHEET 2 OF 3**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum  
 Pulaski County, Arkansas



Source: 2015 Aerial, Pulaski County.

**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
  - Impacted Receiver
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - - - Proposed ROW
  - - - Existing ROW
  - 🚩 School
  - 🌳 Public Park
  - 🏠 Historic District

Sheet Index

\*The extent of each sheet is highlighted in red

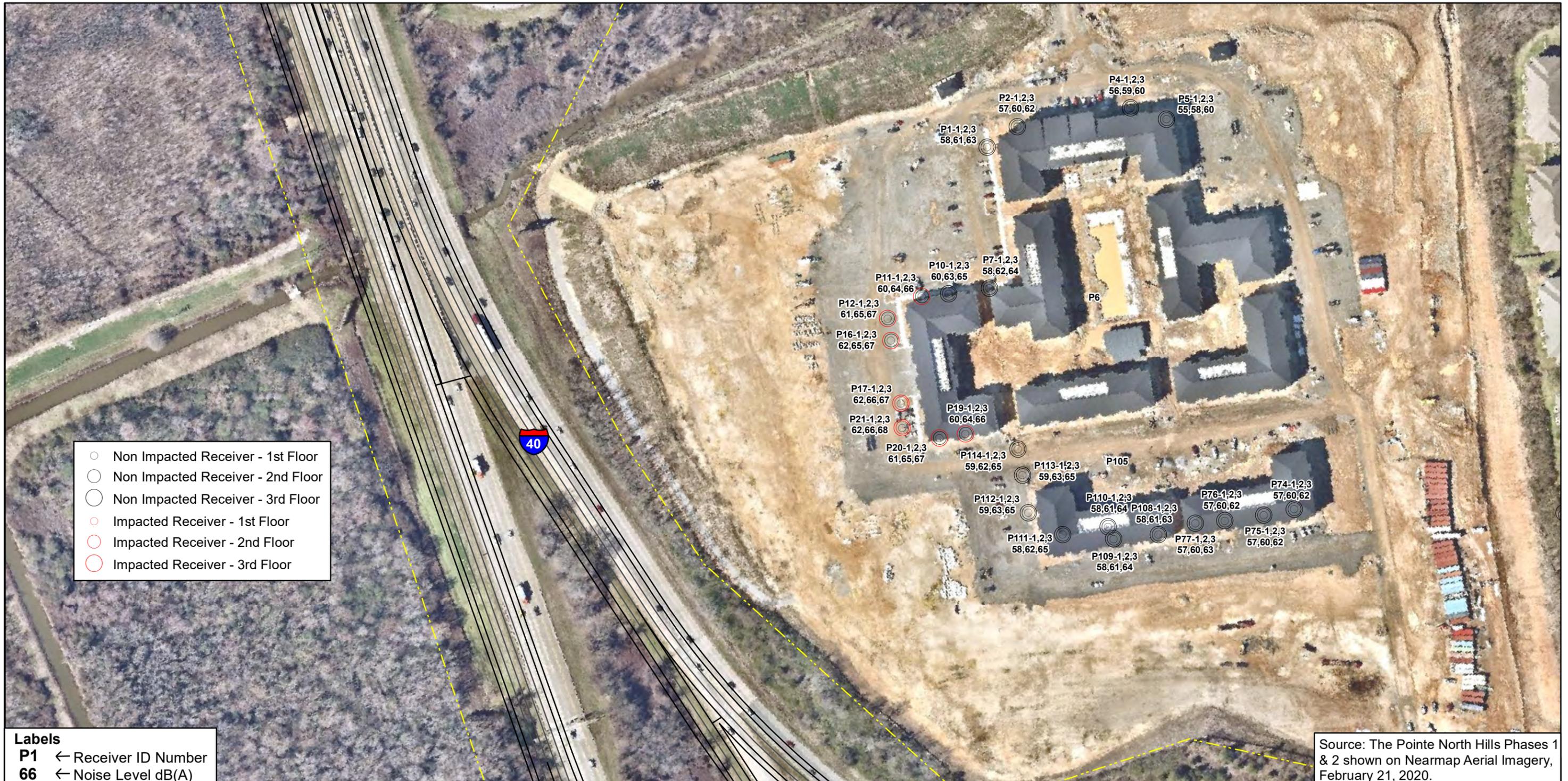


**NOISE RECEIVER LOCATION MAP**  
**NSA 10: SHEET 3 OF 3**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum

Pulaski County, Arkansas



**Legend**

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- - - Proposed ROW
- - - Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District

**AR DOT**  
 ARKANSAS DEPARTMENT OF TRANSPORTATION

**30 CROSSING**

0 200 400 Feet

Sheet Index

\*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP**  
 NSA 11: SHEET 1 OF 1

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum

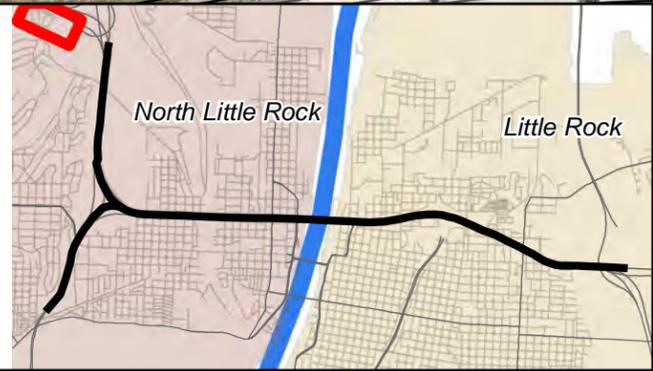
Pulaski County, Arkansas



**Labels**  
**N1** ← Receiver ID Number  
**66** ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
  - Impacted Receiver
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - - - Proposed ROW
  - - - Existing ROW
  - 🚏 School
  - 🌳 Public Park
  - 🏡 Historic District

**Sheet Index**  
*\*The extent of each sheet is highlighted in red*



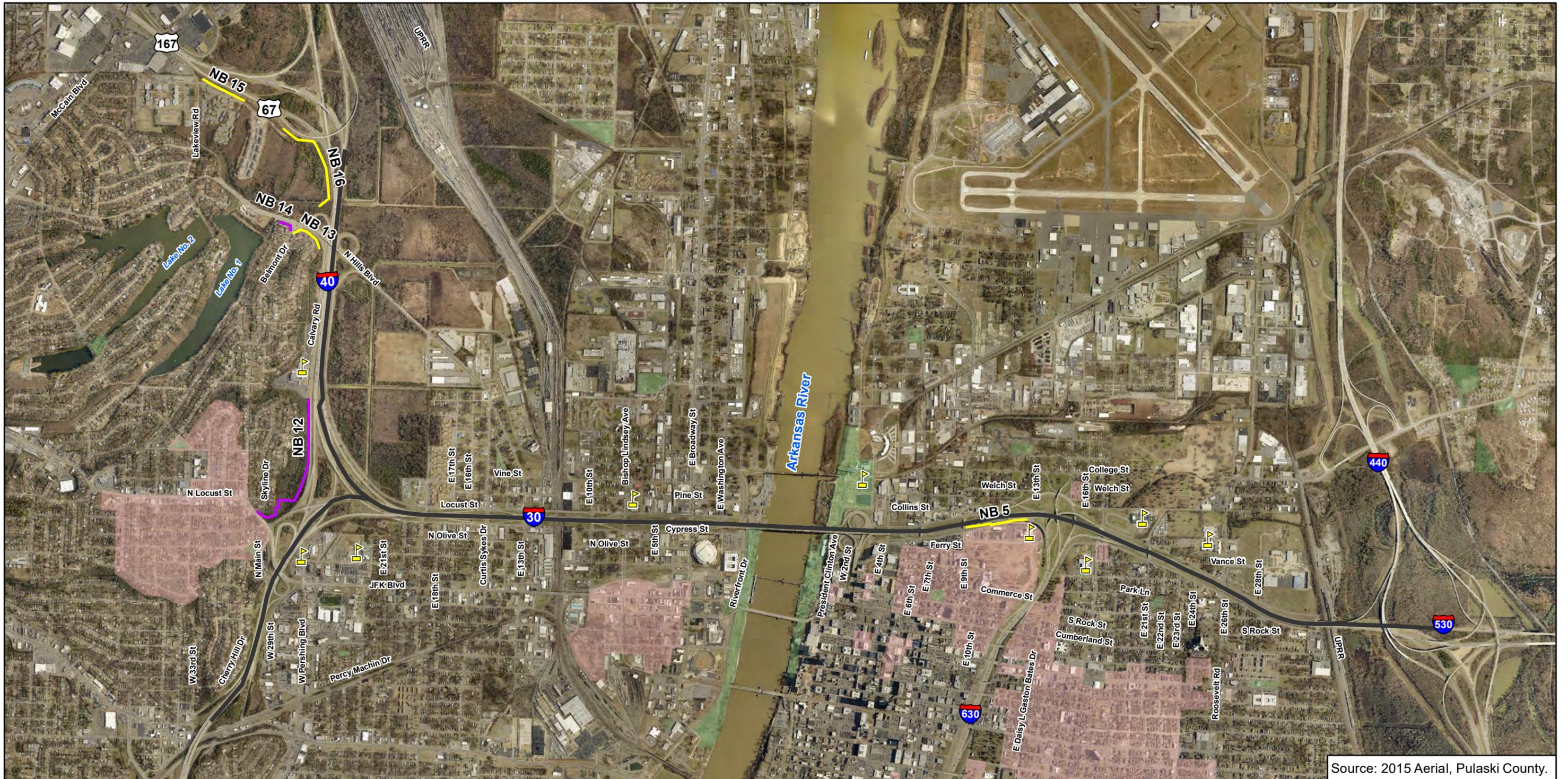
**NOISE RECEIVER LOCATION MAP**  
**NSA 12: SHEET 1 OF 1**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum  
 Pulaski County, Arkansas

Source: 2015 Aerial, Pulaski County.

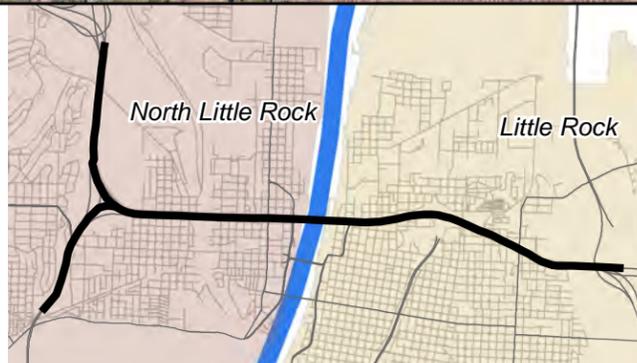
**Attachment D: Re-evaluation Traffic Noise Barriers**



Source: 2015 Aerial, Pulaski County.

**Legend**

- Feasible, Not Reasonable Barrier
- Not Feasible, Not Reasonable Barrier
- School
- Public Park
- Historic District



**RE-EVALUATION TRAFFIC NOISE BARRIERS  
SHEET 1 OF 6**

I-30 from I-530 to Hwy. 67  
30 Crossing Re-evaluation  
CA0602

Traffic Noise Technical Memorandum

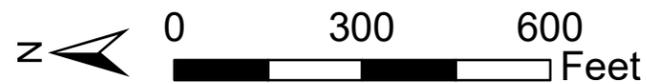
Pulaski County, Arkansas



Source: 2015 Aerial, Pulaski County.

**Legend**

- Non Benefitted Receiver
- Benefitted Receiver (NR Barrier)
- Feasible, Not Reasonable Barrier
- Not Feasible, Not Reasonable Barrier
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District
- 📏 NSA 4
- 📏 NSA 5
- 📏 NSA 10
- 📏 NSA 11
- 📏 NSA 12



**Sheet Index**

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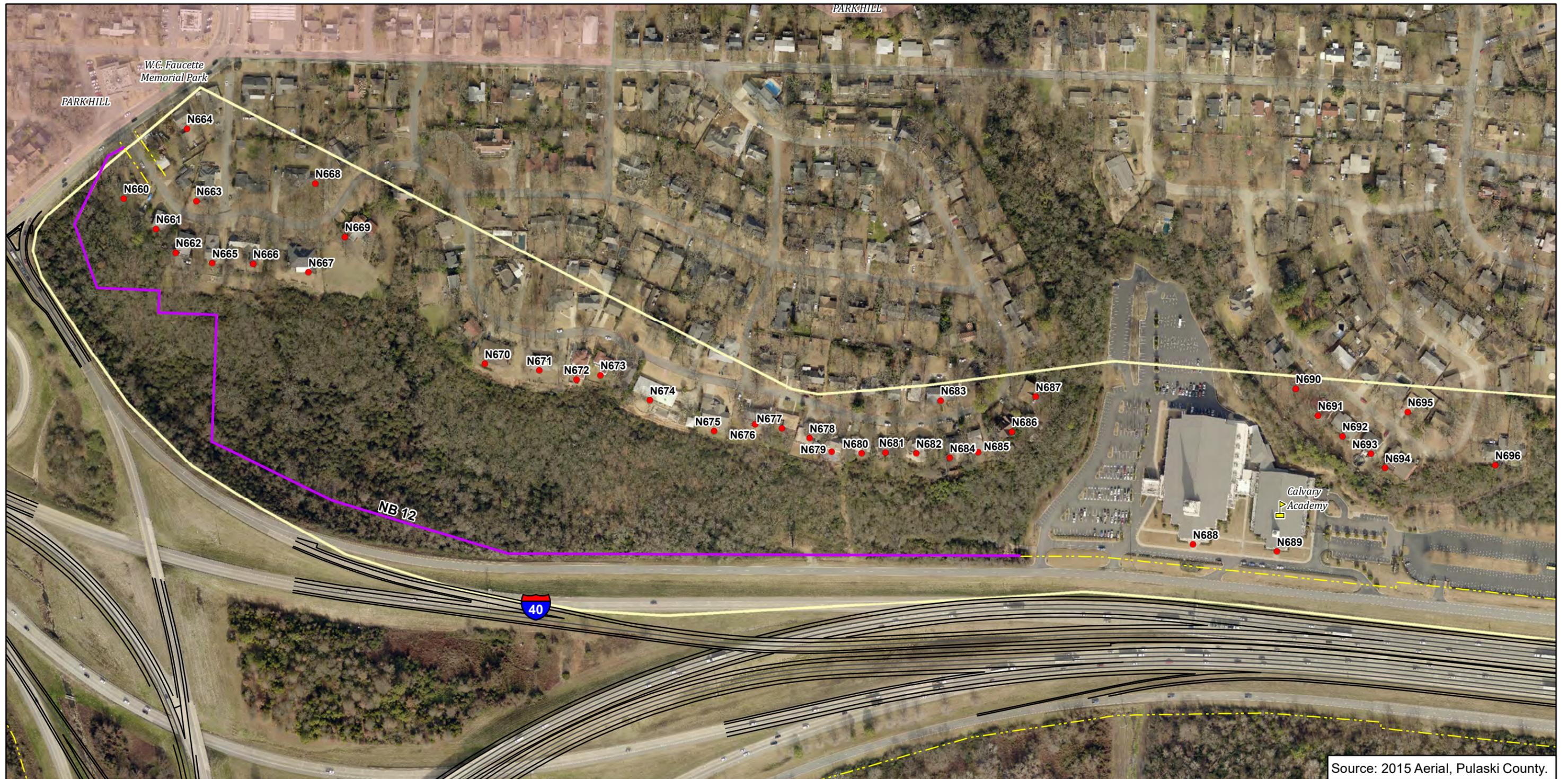


**RE-EVALUATION TRAFFIC NOISE BARRIERS  
SHEET 2 OF 6**

I-30 from I-530 to Hwy. 67  
30 Crossing Re-evaluation  
CA0602

Traffic Noise Technical Memorandum

Pulaski County, Arkansas



Source: 2015 Aerial, Pulaski County.

- Legend**
- Non Benefitted Receiver
  - Benefitted Receiver (NR Barrier)
  - Feasible, Not Reasonable Barrier
  - Not Feasible, Not Reasonable Barrier
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - Proposed ROW
  - Existing ROW
  - 🚩 School
  - 🌳 Public Park
  - 🏠 Historic District
  - 📏 NSA 4
  - 📏 NSA 5
  - 📏 NSA 10
  - 📏 NSA 11
  - 📏 NSA 12

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*\*The extent of each sheet is highlighted in red*



**RE-EVALUATION TRAFFIC NOISE BARRIERS**  
**SHEET 3 OF 6**

I-30 from I-530 to Hwy. 67  
 30 Crossing Re-evaluation  
 CA0602

Traffic Noise Technical Memorandum

Pulaski County, Arkansas



Source: 2015 Aerial, Pulaski County.

**Legend**

- Non Benefitted Receiver
- Benefitted Receiver (NR Barrier)
- Feasible, Not Reasonable Barrier
- Not Feasible, Not Reasonable Barrier
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚦 School
- 🌳 Public Park
- 🏠 Historic District
- 📏 NSA 4
- 📏 NSA 5
- 📏 NSA 10
- 📏 NSA 11
- 📏 NSA 12



**Sheet Index**

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**RE-EVALUATION TRAFFIC NOISE BARRIERS SHEET 4 OF 6**

I-30 from I-530 to Hwy. 67  
30 Crossing Re-evaluation  
CA0602

Traffic Noise Technical Memorandum

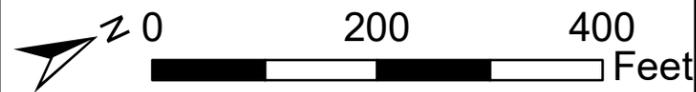
Pulaski County, Arkansas



Source: 2015 Aerial, Pulaski County.

**Legend**

- Non Benefitted Receiver
- Benefitted Receiver (NR Barrier)
- Feasible, Not Reasonable Barrier
- Not Feasible, Not Reasonable Barrier
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏘️ Historic District
- 📏 NSA 4
- 📏 NSA 5
- 📏 NSA 10
- 📏 NSA 11
- 📏 NSA 12



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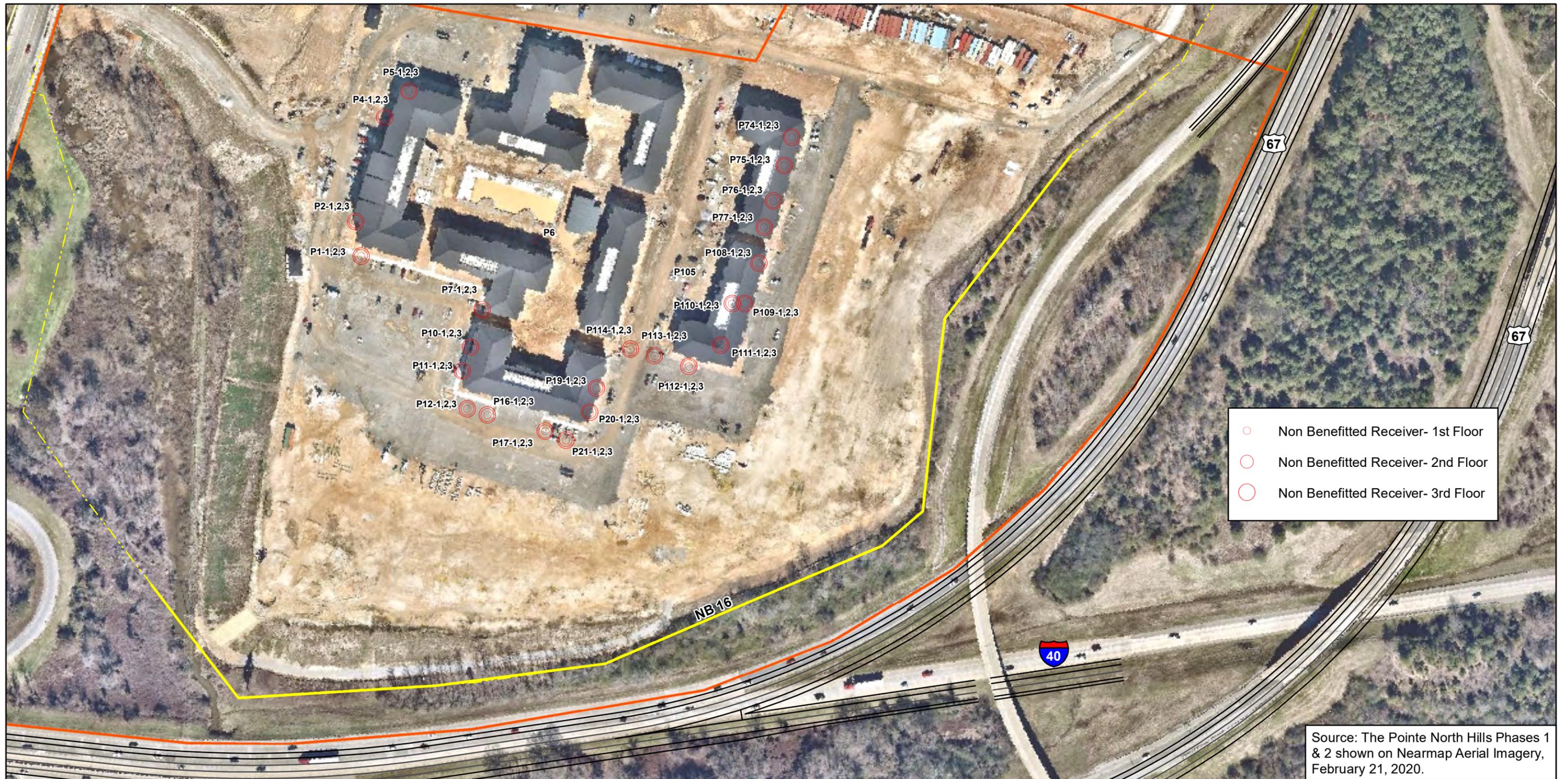


**RE-EVALUATION TRAFFIC NOISE BARRIERS SHEET 5 OF 6**

I-30 from I-530 to Hwy. 67  
30 Crossing Re-evaluation  
CA0602

Traffic Noise Technical Memorandum

Pulaski County, Arkansas



- Non Benefitted Receiver- 1st Floor
- Non Benefitted Receiver- 2nd Floor
- Non Benefitted Receiver- 3rd Floor

Source: The Pointe North Hills Phases 1 & 2 shown on Nearmap Aerial Imagery, February 21, 2020.

- Legend**
- Non Benefitted Receiver
  - Benefitted Receiver (NR Barrier)
  - Feasible, Not Reasonable Barrier
  - Not Feasible, Not Reasonable Barrier
  - Proposed Lane Markings
  - Proposed Pavement Edge
  - Proposed ROW
  - Existing ROW
  - 🚩 School
  - Public Park
  - Historic District
  - NSA 4
  - NSA 5
  - NSA 10
  - NSA 11
  - NSA 12

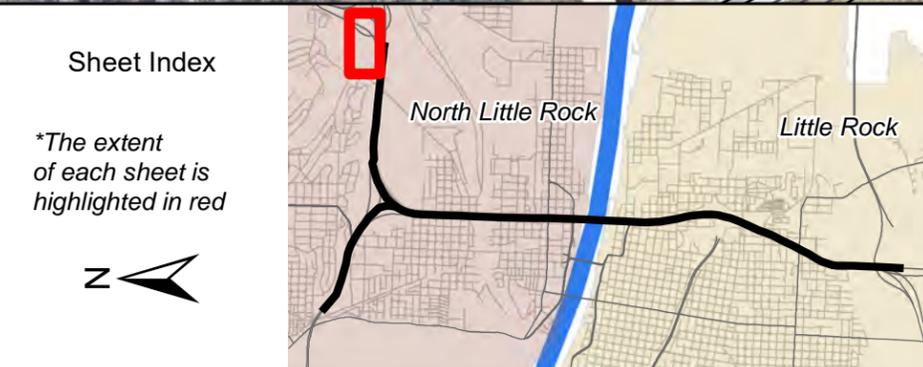
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Sheet Index

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**RE-EVALUATION TRAFFIC NOISE BARRIERS**  
**SHEET 6 OF 6**

I-30 from I-530 to Hwy. 67  
30 Crossing Re-evaluation  
CA0602

Traffic Noise Technical Memorandum

Pulaski County, Arkansas

## Appendix E: Indirect Effects Re-Evaluation Memorandum



# Re-evaluation: Indirect Effects Technical Report

ARDOT JOB NO. CA0602

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I-30 (From I-530/I-440 to I-40) and  
I-40 (From Hwy. 365/MacArthur Dr. to Hwy. 67)  
Pulaski County, Arkansas  
May 2020



U.S. Department  
of Transportation  
**Federal Highway  
Administration**



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**ATTACHMENTS**

Attachment A: Indirect Effects Questionnaire Responses

## 1.0 INTRODUCTION

In February 2019, the Federal Highway Administration (FHWA) approved the Environmental Assessment/Finding of No Significant Impact (EA/FONSI) for a project to improve a portion of Interstate 30 (I-30) from Interstate 530 (I-530) and Interstate 440 (I-440) to Interstate 40 (I-40), including the Arkansas River Bridge, and a portion of I-40 from Highway (Hwy.) 365 (MacArthur Drive [Dr.]) to Hwy. 67. This project is CA0602: I-530 - Hwy. 67 (Widening & Reconst.) (I-30 & I-40), commonly known as the 30 Crossing project. **Figure 1** illustrates the proposed 7.3-mile project limits.

The identified method of delivery of the project is Design-Build (DB). In Design-Build, the design-builder is permitted to incorporate innovation into final design, as long as the project purpose and need, environmental commitments and contractual obligations are met. This allows for innovation and cost efficiency. In 2019, a contract was issued to a DB team to complete the design and construction of the project. The DB team found that the entire project could not be built for the budget of \$631.7 million. Instead, the DB team proposed that the project be constructed in phases, with a portion of the ultimate improvements (Phase 1) being constructed for the \$631.7 million budget. The DB team also proposed certain modifications to the final design, shown in **Figure 2**, that would lower the ultimate cost of the project.

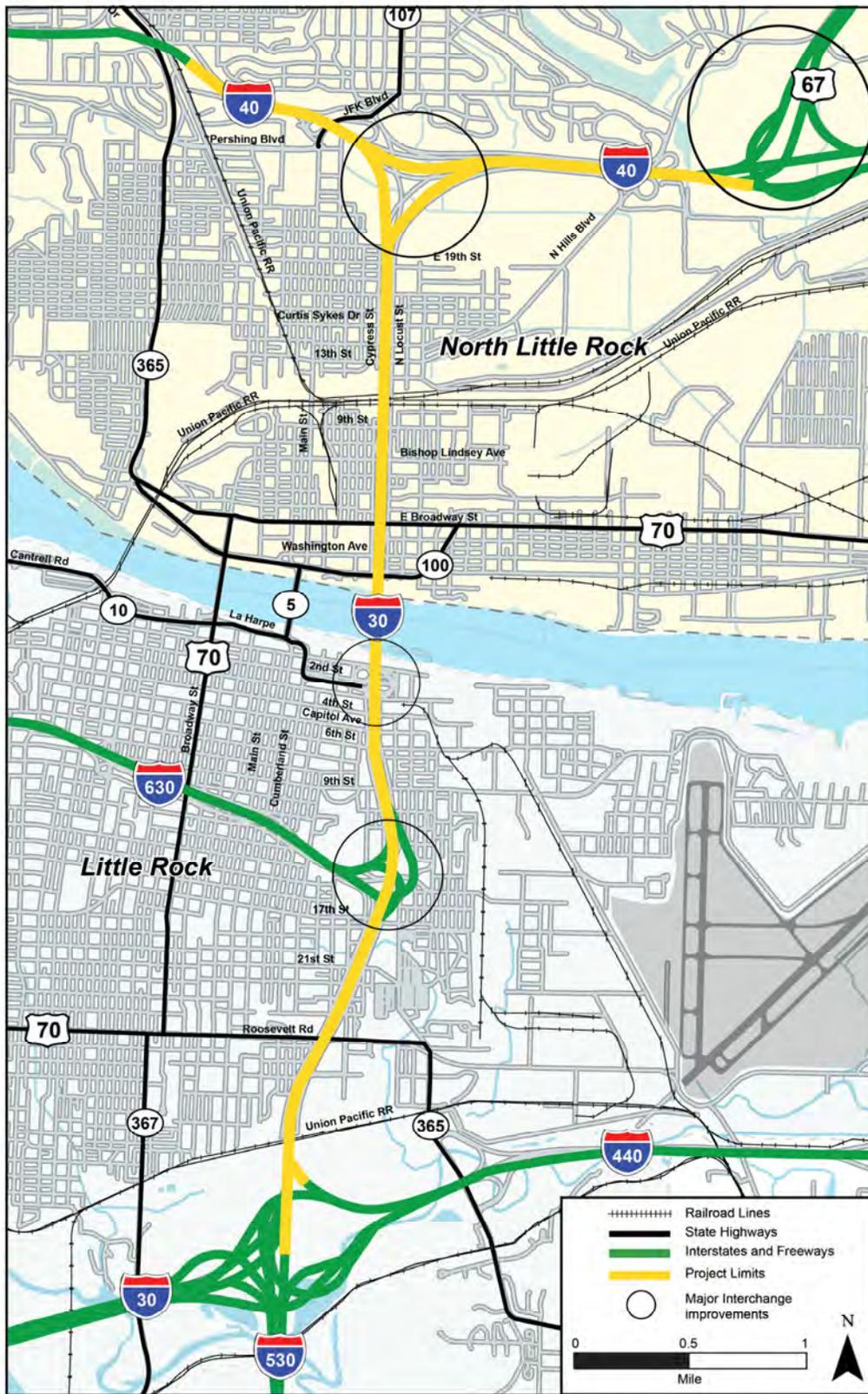
### 1.1 Revised Selected Alternative

The Selected Alternative is the 6-lane with C/D with the Split Diamond Interchange as described and evaluated in the EA. As described above, the DB team has proposed Phase 1 interim improvements. In Phase 1, no improvements are proposed south of the I-30/I-630 interchange, and limited improvements north of the I-30/East Broadway Street interchange. Within the limits of the Phase 1 improvements, the configuration is similar to the Selected Alternative. Consequently, the interim improvements do not involve any impacts that were not evaluated in the EA/FONSI. For a complete description of the interim improvements, refer to Section 6.1 in the 30 Crossing Re-Evaluation.

The ultimate design that the DB team has proposed includes two modifications to the design of the I-30/I-630 and I-30/I-40 interchanges that would be permanent changes to the Selected Alternative, hereafter known as the Revised Selected Alternative. For a complete description of the Revised Selected Alternative, refer to Section 6.2 in the 30 Crossing Re-Evaluation.

Within the I-30/I-630 interchange, the revision would not shift the location of the northbound I-30 to northbound frontage road ramp toward the west, as in the Selected Alternative, but would maintain its current alignment near the east ROW line. Within the I-30/I-40 interchange, the revision would shift the location of the northbound I-30 to eastbound I-40 ramp. This ramp, which would be signed for northbound Hwy. 67 traffic and would merge onto the inside of the two existing I-40 eastbound lanes, would be shifted toward the northwest. The revisions would eliminate the right exit flyover ramp from I-40 eastbound to Hwy. 67 northbound. This exit would become a left exit; however, the weave associated with the northbound Hwy. 67 traffic crossing eastbound I-40 to make a left exit would be eliminated, as northbound Hwy. 67 traffic would be on the inside of I-40 and westbound I-40 traffic would be on the outside.

Figure 1: Project Limits Map



Source: Project Team, 2017.

Figure 2: 30 Crossing Re-evaluation Concept



Source: Project Team, March 2020.

## 2.0 INDIRECT EFFECTS

The Council of Environmental Quality (CEQ) and the Federal Highway Administration (FHWA) regulations require that potential indirect effects be considered during the National Environmental Policy Act (NEPA) process. Indirect effects are defined as impacts that are “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable” according to the CEQ (40 Code of Federal Regulations (C.F.R.) 1508.8) and may “include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”

The purpose of this technical report was to re-evaluate the indirect effects analysis for the proposed 30 Crossing project resulting from changes in the design and latest information provided by local planners.

The time frame of the indirect effects analysis extended to 2041 previously, but has been further extended to 2045 consistent with the traffic forecast adjustments performed for the re-evaluation. There were no changes to the study area, or Area of Influence (AOI), that was used from the previous indirect effects analysis for the EA. Major roadways, development areas and natural features helped to determine the boundary of the AOI to ensure that potential developments and areas with a potential for indirect effects were encompassed within the AOI. Questionnaires and discussions with City of Little Rock and North Little Rock city planners also provided input using the same AOI boundary.

### 2.1 Encroachment-Alteration Effects

#### 2.1.1 Ecological Encroachment Effects

The encroachment effects for ecological resources discussed in the previous Indirect Effects Technical Report and the EA remain valid and there are no changes to the determinations previously reported.

#### 2.1.2 Socio-economic Encroachment Effects

As previously reported, two major types of encroachment effects that transportation projects may have on a neighborhood that were discussed were access modifications and relocations. There is one less commercial relocation and no changes to access modifications as previously reported, with the exception of travel times. No changes to the access, bicycle and pedestrian accommodations, Highway 10 interchange, ramp configurations would occur from what was previously reported in the Indirect Effects Technical Report and EA. An updated table of peak hour travel times to downtown Little Rock destinations has been provided (see **Table 1**) and travel patterns is discussed in the following section.

**Table 1: Peak Hour Travel Times to Downtown Little Rock Destinations**

Destination	Existing 2014	Future No-Action		2045 Revised Selected Alternative
		2041 <sup>2</sup>	2045 Traffic <sup>3</sup>	
<b>To River Market (AM<sup>1</sup>)</b>				
A. From Wildwood Avenue Interchange on Hwy 67	18:07	30:26	35:00	13:38
B. From I-40 and I-440 Interchange	16:09	31:47	30:11	14:42
C. From the McArthur Bridge on I-40	10:42	23:00	24:55	9:58
D. From Dr. Martin Luther King Drive on I-630	05:17	8:09	8:52	7:22
E. From the Dixon Interchange on I-530	08:25	20:05	17:03	11:38
F. From the 65th Street Interchange on I-30	08:15	13:37	11:57	10:26
G. From the Bankhead Drive Interchange on I-440	07:28	5:59	05:59	11:32
<b>To Clinton Presidential Center / Heifer International (AM<sup>1</sup>)</b>				
A. From Wildwood Avenue Interchange on Hwy 67	17:46	29:21	34:20	10:51
B. From I-40 and I-440 Interchange	15:47	30:43	29:31	11:55
C. From the McArthur Bridge on I-40	10:21	21:56	24:15	6:11
D. From Dr. Martin Luther King Drive on I-630	04:19	7:07	7:46	5:09
E. From the Dixon Interchange on I-530	07:27	19:03	15:56	8:24
F. From the 65th Street Interchange on I-30	07:16	12:35	10:50	8:12
G. From the Bankhead Drive Interchange on I-440	06:29	7:51	7:22	8:18
<b>From River Market (PM<sup>1</sup>)</b>				
A. To Wildwood Avenue Interchange on Hwy 67	11:05	54:40	1:03:40	10:50
B. To I-40 and I-440 Interchange	11:28	55:40	1:04:40	11:43
C. To the McArthur Bridge on I-40	06:54	51:45	1:00:46	7:40
D. To Dr. Martin Luther King Drive on I-630	03:57	17:27	24:31	9:41
E. To the Dixon Interchange on I-530	07:18	22:32	28:19	12:28
F. To the 65th Street Interchange on I-30	07:24	23:45	29:19	17:43
G. To the Bankhead Drive Interchange on I-440	07:41	22:03	28:10	12:56
<b>From Clinton Presidential Center / Heifer International (PM<sup>1</sup>)</b>				
A. To Wildwood Avenue Interchange on Hwy 67	12:00	30:56	37:27	7:58
B. To I-40 and I-440 Interchange	12:23	31:56	38:27	8:50
C. To the McArthur Bridge on I-40	07:49	28:02	34:32	4:47
D. To Dr. Martin Luther King Drive on I-630	04:44	8:30	10:40	6:47
E. To the Dixon Interchange on I-530	08:06	13:34	14:27	9:35
F. To the 65th Street Interchange on I-30	08:11	14:48	15:27	14:50
G. To the Bankhead Drive Interchange on I-440	08:28	13:06	14:19	10:02

<sup>1</sup>AM Peak = 7:15 AM to 8:15 AM; PM Peak = 4:30 PM to 5:30 PM

<sup>2</sup>2041 volumes from the EA, with additional capacity on I-30 between 65<sup>th</sup> Street and South Terminal

<sup>3</sup>Updated 2045 volumes, with additional capacity on I-30 between 65<sup>th</sup> Street and South Terminal

NOTE: Speeds are inbound to downtown to Little Rock in the AM and outbound in the PM

Travel times between 10:00 minutes and 25:00 minutes are highlighted in light red  
 Travel times greater than 25:00 minutes are highlighted in dark red  
 Travel times that are unusually low due to a bottleneck upstream are highlighted in blue

### 2.1.2.1 Travel Patterns

Given the similar accessibility to conditions previously reported, travel patterns along most of the proposed project corridor are not anticipated to be substantially altered. The differences in travel times for the Revised Selected Alternative to and from the River Market and Clinton Presidential/Heifer International sites are assessed in **Table 1**. Peak Hour Travel Times to and from Downtown Little Rock Destinations from the I-30 EA (pdf page 129/7100) were updated with revised travel times from the revised forecasts and geometry reconfigurations for the Re-evaluation.

In summary, travel times remained relatively constant between the EA and the Re-evaluation, with a two percent overall increase in the 2041 No-Action, five percent increase in the 2045 No-Action, and nine percent decrease in the 2045 Build. No single travel time route increased by more than 20 percent, with the majority having less than a five percent increase or decrease. These minor changes are a result of the geometric modifications and traffic forecast adjustments.

Specific travel times differ at certain locations between the Selected Alternative in the EA and Revised Selected Alternative in the Re-evaluation. The highest travel times between the alternatives differ approximately 5 minutes which is not a substantial travel time savings, in this context, for any given scenario presented in **Table 1**. **Table 2** summarizes the lowest and highest travel times for the alternatives to and from the River Market area and Clinton Presidential Center/Heifer International from the EA and the Re-evaluation.

**Table 2: Travel Time Range Comparison**

Scenario	Shortest Travel Time	Longest Travel Time
Selected Alternative (EA Forecast 2041)	4:48 minutes	21:52 minutes
Revised Selected Alternative (Revised Forecast 2045)	4:47 minutes	17:43 minutes

Source: Interchange Justification Report (IJR) (2018) and Re-evaluation Traffic Analysis (April 2020).

### 2.1.2.2 Other Issues

For traffic noise, the direct impacts analysis extends beyond the project construction footprint. Accordingly, indirect effects are necessarily addressed as an extension of the analyses of these resources and can be found within the air quality and traffic noise sections of the Re-evaluation. Encroachment effects to hazardous materials are not anticipated, as any hazardous material potentially encountered would occur within the direct project footprint and not extend outside of that footprint.

## 3.0 INDUCED GROWTH EFFECTS

The primary goal of the induced growth effects analysis will be to understand the relationship between the 30 Crossing project, the growth induced by the proposed project and the potential changes in land use and other resources.

This induced growth effects analysis was conducted in accordance with the *Practitioner's Handbook: Assessing Indirect Effects and Cumulative Impacts under NEPA* by the

*American Association of State Highway and Transportation Officials (AASHTO) (August 2016)*. The handbook describes a four-step process for determining indirect effects and was used for the induced growth effects analysis.

Questionnaires were distributed to Little Rock and North Little Rock city planners to gather their feedback to determine any updated future and projected developments. The feedback supplements the re-evaluation of induced growth effects.

### 3.1 Summary of Indirect Effects and Conclusions in the EA

The proposed project is not anticipated to result in substantial ecological encroachment alteration effects to vegetation and habitat, threatened and endangered species, water resources or floodplains. Increased eroded soil from construction impacts would be temporary and local regulations and construction BMPs would be implemented for erosion and sediment control measures.

From a socio-economic standpoint, the proposed project would provide additional lanes and improved frontage road systems that improve mobility and reduce congestion, resulting in improved access. Bicycle and pedestrian accommodations such as shared-use lanes and sidewalks would also have the potential to improve east-west connectivity and accessibility for pedestrians and cyclists to reach public transportation and their desired destinations. In addition, ramp modifications designed to improve safety (e.g., reduce motorist weaving) would improve and/or shift access, but not eliminate existing accessibility to locations along the project corridor. The Selected Alternative would shift downtown access to 4<sup>th</sup> St. and 9<sup>th</sup> St. The shift in downtown access would lead to changes in travel patterns, potentially resulting in increased traffic on 2<sup>nd</sup> St., 3<sup>rd</sup> St. and 4<sup>th</sup> St. and longer travel times to the River Market and the Clinton Presidential Center/Heifer International. Total approximate travel times is 5 hours and 14 minutes for the Selected Alternative.

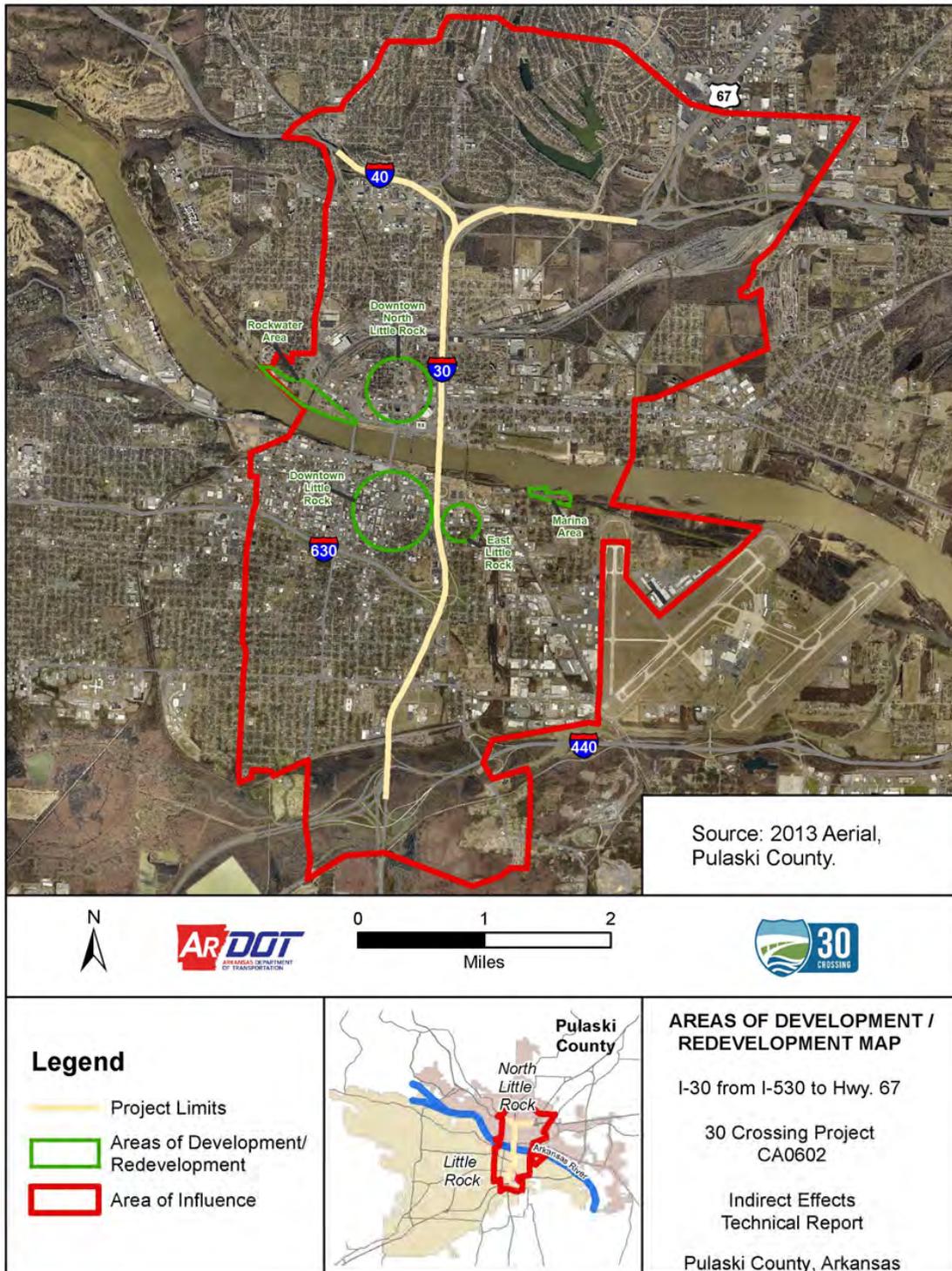
The Selected Alternative would provide better accessibility with a connected frontage road system from I-630 to the Arkansas River. The Selected Alternative would have continuous frontage roads from I-630 to 4<sup>th</sup> St. and provides direct access from the frontage road to 3<sup>rd</sup> St., 2<sup>nd</sup> St., and President Clinton Ave. Furthermore, better accessibility for pedestrians would result with a sidewalk along both sides of 2<sup>nd</sup> St. from Cumberland St. to Mahlon Martin St., part of the reconstruction of 2<sup>nd</sup> St. for the Selected Alternative. These proposed improvements would result in better east to west and north to south connectivity.

The improved mobility and accessibility within the project limits could potentially indirectly affect traffic operations outside of the project limits. Low speeds were observed along some of the outside roadway segments leading into and out of the project corridor under the Selected Alternative. The Selected Alternative generally demonstrated higher speed ranges on outside roadway segments compared to the No-Action Alternative, of which the lowest speeds were observed along I-530 south of the South Terminal, Hwy. 67 north of I-40 and I-40 east of Hwy. 67.

The increase in accessibility described above is anticipated to increase the rate of future

development within the AOI. These anticipated induced growth effects are expected to occur at five locations shown in **Figure 3**: the Marina, East Little Rock, downtown Little Rock, downtown North Little Rock, and Rockwater areas.

**Figure 3: EA Originally Identified Areas of Induced Growth Effects**



Source: 30 Crossing Original Indirect Impacts Technical Report, May 2018.

Increased rate of development for residential, commercial and mixed-use purposes could

potentially impact sensitive biological resources in the AOI; however, measures such as BMPs, permitting guidelines, agency coordination and regulatory requirements in cooperation with appropriate stakeholders and entities would mitigate or minimize potential adverse induced growth impacts for these sensitive resources. The increased rate of development resulting from the proposed project could result in positive economic impacts due to increased property taxes and sales tax revenues as denser, more modernized tax-generating commercial and residential developments are constructed.

### 3.2 Changes Assessed for the Re-evaluation

The average daily traffic initially reported were at 2041 and the revised forecast of 2045 are included in **Table 3**. These are not substantial differences in ADT. Overall for the re-evaluation, the ADT is less than previously included in the EA. In December 2018, Metroplan revised their growth traffic forecasts based on updated demographic information, which showed slower growth trends in the Little Rock metropolitan area. Additionally, construction of the project is now expected to be completed in 2025, making a design year of 2045, rather than the 2041 design year used in the EA/FONSI, more appropriate for traffic forecasting. As a result, traffic forecasts for both the Selected and No-Action alternatives have been lowered from those included in the EA/FONSI. Revised 2045 traffic volumes for the Future No-Action and Selected Alternative are shown in **Table 3**.

**Table 3: Average Daily Traffic (ADT)**

Location	Revised Forecast (2045)		EA (2041)	
	No-Action Alternative	Selected Alternative	No-Action Alternative	Selected Alternative
<b>A1: I-40 east of North Hills Blvd</b>	143,000	147,000	153,000	159,000
<b>A2: I-30 at Arkansas River Bridge</b>	152,000	167,000	153,000	182,000
<b>A3: I-30 south of Roosevelt Blvd</b>	114,000	118,000	119,000	133,000

Source: IJR (2018) and Re-evaluation Traffic Analysis (April 2020). Note: All values are in vehicles per day.

At the three locations, the No-Action 2041 ADTs are greater than the No-Action 2045 revised forecast ADTs. Furthermore, the Selected Alternative 2041 ADTs are greater than the Selected Alternative 2045 ADTs. Although not substantially greater, the smaller numbers would represent a lesser potential of the Selected Alternative to increase accessibility.

Questionnaires with local city planners from the City of Little Rock and North Little Rock identified the same general development areas discussed in the previous indirect effects analysis presented in the EA. Although additional developments were identified since the EA was prepared, these areas are within the same development areas of downtown Little Rock and downtown North Little Rock, East Little Rock, Rockwater and the Marina. Feedback from the planners also included that influence from the proposed project would

be limited to be along or within a few city blocks of the corridor on either side of the existing I-30 facility. The proposed project would provide a strong influence in the development of vacant land; however, with the amount of developable land within the AOI and along the corridor being sparse, much of the induced growth would be limited to infill of individual parcels within an urbanized landscape that currently exists along the corridor.

#### 4.0 CONCLUSION

Based on the information presented in this technical report, it is determined that previous conclusions remain valid and the proposed project is not anticipated to result in substantial encroachment alteration effects and induced growth effects. As stated from the original Indirect Effects Technical Report, increased rate of development for residential, commercial and mixed-use purposes is expected and measures such as BMPs, permitting guidelines, agency coordination and regulatory requirements in cooperation with appropriate stakeholders and entities would mitigate or minimize potential adverse induced growth impacts. Furthermore, the limited vacant and developable land would result in minor potential for induced growth.

#### 5.0 REFERENCES

American Association of State Highway and Transportation Officials (AASHTO). August 2016. Practitioner's Handbook Number 12. *Assessing Indirect Effects and Cumulative Impacts Under NEPA*.

National Cooperative Highway Research Program (NCHRP). 2002. Report 466: *Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects*.

**Attachment A: Indirect Effects Questionnaire Responses**

**Indirect and Cumulative Impacts Questionnaire**

30 Crossing Project - Reevaluation  
I-30 from Interstate 530 to US Highway 67  
Pulaski County, Arkansas

**Respondent Information**

Date: 1/29/2020  
Name: D Chris Wilbourn / Shawn Spencer  
Organization/Title: CNLR Chief Engineer / Planning Director  
Address: 500 West 13<sup>ST</sup> / 120 Main St.  
Phone and Email: 501-352-8887 / 501-475-8835

**Questions & Discussion Topics**

- 1) What are the new major developments in your jurisdiction or planning area? Any additional developments in the future (out to 20-30 years) that is reasonably foreseeable? *1. Downtown Area Is Revitalizing  
Examples: Rockwater Area, Argenta Thrive, Argenta Plaza, First Orion, Building 600 Main Office Complex, Vae Apartments and Esplanade Apartment*
- 2) In your opinion, would the proposed project induce development in your area that would otherwise not occur? *Yes, increase access to the downtown area.*
- 3) In your opinion, would any redevelopment occur as a result of the proposed project? If so, where? *Yes, along Riverfront Drive*
- 4) In your opinion, would the proposed project prohibit development in your jurisdiction or planning area and if so, why? *No, we don't see any negatives to downtown development*
- 5) In your opinion, would the proposed project affect or change the type of development within your jurisdiction and if so, why? *No*
- 6) What future development would you expect independent of the proposed project? *Housing*
- 7) In your opinion, would the proposed project affect the rate and intensity of these developments discussed from the previous question? Please rate on a scale of 1 (no influence) to 5 (strong influence).

Received January 8, 2020

Walter Malone, AICP

Planning Manager, City of Little Rock

723 West Markham

[wmalone@littlerock.gov](mailto:wmalone@littlerock.gov), 501 371-6819

- 1) What are the new major developments in your jurisdiction or planning area? Any additional developments in the future (out to 20-30 years) that is reasonably foreseeable?

Most likely there have been no large projects developed or starting developments in the last 18 months. The Largest is the expansion of the Arts Center in MacArthur Park. Two hotel projects are underway - 205 West Capitol and 811 East 4<sup>th</sup> Street. One multifamily underway – 1424 Main. Two commercial and one office all in the 1 to 2 million price range completed in last year – 1123 Welch, 515 Broadway, 1307 West 4<sup>th</sup>. The Marina project with apartments has under development at the east end of 2<sup>nd</sup> Street - east boundary of the area of influence. New apartment development 10th and Rock is currently at public hearing as is a major expansion of OUR House – Roosevelt Road and I-30. There has been discussion about converting three different downtown office buildings into residential buildings – two are currently vacant and one is partial occupied. (unlikely that all three would happen and two have been discussed for years with little to no movement).

- 2) In your opinion, would the proposed project induce development in your area that would otherwise not occur?

Not in the immediate area, possibly on the extreme edge of the area of influence.

- 3) In your opinion, would any redevelopment occur as a result of the proposed project? If so, where?

This is more likely to the west of the project in the downtown ‘core’ area – Main Street to Broadway.

- 4) In your opinion, would the proposed project prohibit development in your jurisdiction or planning area and if so, why?

Could negatively impact immediate area which is developing as an entertainment residential area where walkability is of high value. There are concerns on how the parallel roads as well as 4<sup>th</sup> Street, Capitol Avenue and 6<sup>th</sup> Street will all work for non-vehicle modes of transportation – foot and bike primarily. This area needs to be walkable to continue the existing development pattern.

- 5) In your opinion, would the proposed project affect or change the type of development within your jurisdiction and if so, why?

It could, the connections across the project to link the areas east of and west of the freeway as well as the walkability of the streets adjacent to I-30 will be critical.

- 6) What future development would you expect independent of the proposed project?

The development pattern to continue as currently going with small to medium residential projects, entertainment related venues, and a few small commercial developments - all small scale.

- 7) In your opinion, would the proposed project affect the rate and intensity of these developments discussed from the previous question? Please rate on a scale of 1 (no influence) to 5 (strong influence). 5

\*\* Identified as a “Pretty Definite” Development

Additional comments:

Has the possibility to be extremely negative by being too auto oriented – volumes and speed with limited non-vehicular elements. During construction, strong negative influence because of uncertainty and past experiences of other construction projects.

Heifer to 9<sup>th</sup> would be more positive influence/east side due to increased accessibility from proposed project. Dense areas are less influenced.

\*\*\*\*\*

**Phone discussion on Future Developments for Little Rock  
with Walter Malone, City of Little Rock. 1/9/2020 at 11:00 a.m. and 3/9/20 12:15 p.m.**

Phone call with Walter Malone identifying known major developments occurring within City of Little Rock and listed as follows:

1) Port Industrial Developer\*\*

Industrial developer – 1 possibly 2 areas – 1 is ammunition company for 15-20 employees.  
S of 440 @ pier not on river, short line railroad  
Port actively acquiring land., several hundred acres – approx. 200 acres  
Industrial port.  
I-440 before you go over the river - the last 2 exits, Fourche Dam Pike and Lindsey Road

2) Former Sears Redevelopment\*\*

Redevelopment Sears site (2-story) auto and other buildings north of 630 at University Avenue – Dallas firm  
New streets and new drainage – 2 hotels other commercial, retail and office use.  
Not built, earth work going on now. “under construction”  
Access from McInley on to 630 – moved WB on ramp from university – new driveway – Raising Canes as part of it.

3) Bank of the Ozarks HQ\*\*

Highway 10 west of 430. 7 buildings, finishing main building now.  
Within 5 years to be completed.

4) West LR – near Chenal Parkway, Rahlings area, west of 430 – not likely, west of Kroger on Chenal Parkway.

Commercial primarily, least likely development  
Not have purchased property yet, in negotiations at this time. The land is virgin land and would be new construction.  
Probably use 430 and 630 to use it as roadway access facilities  
Not likely to occur – unknown.

5) Multifamily apartment complex. At Rawlings and St. Vincent. West of Chenal parkway. \*\*

Approx. 327 units/ 4 buildings, approx. 10 acres. Within land of shopping village. Permitted job trailer. Happening now. (Approved by Planning Commission last April. [note added 3/12/20].)

\*\* Identified as a “Pretty Definite” Development

## Appendix F: Cumulative Effects Re-Evaluation Memorandum



# Re-evaluation: Cumulative Effects Technical Report

ARDOT JOB NO. CA0602

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I-30 (From I-530/I-440 to I-40) and  
I-40 (From Hwy. 365/MacArthur Dr. to Hwy. 67)  
Pulaski County, Arkansas  
April 2020



U.S. Department  
of Transportation  
**Federal Highway  
Administration**



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## 1.0 INTRODUCTION

In February 2019, the Federal Highway Administration (FHWA) approved the Environmental Assessment/Finding of No Significant Impact (EA/FONSI) for a project to improve a portion of Interstate 30 (I-30) from Interstate 530 (I-530) and Interstate 440 (I-440) to Interstate 40 (I-40), including the Arkansas River Bridge, and a portion of I-40 from Highway (Hwy.) 365 (MacArthur Drive [Dr.]) to Hwy. 67. This project is CA0602: I-530 - Hwy. 67 (Widening & Reconst.) (I-30 & I-40), commonly known as the 30 Crossing project. **Figure 1** illustrates the proposed 7.3-mile project limits.

The identified method of delivery of the project is Design-Build (DB). In Design-Build, the design-builder is permitted to incorporate innovation into final design, as long as the project purpose and need, environmental commitments and contractual obligations are met. This allows for innovation and cost efficiency. In 2019, a contract was issued to a DB team to complete the design and construction of the project. The DB team found that the entire project could not be built for the budget of \$631.7 million. Instead, the DB team proposed that the project be constructed in phases, with a portion of the ultimate improvements (Phase 1) being constructed for the \$631.7 million budget. The DB team also proposed certain modifications to the final design, shown in **Figure 2**, that would lower the ultimate cost of the project.

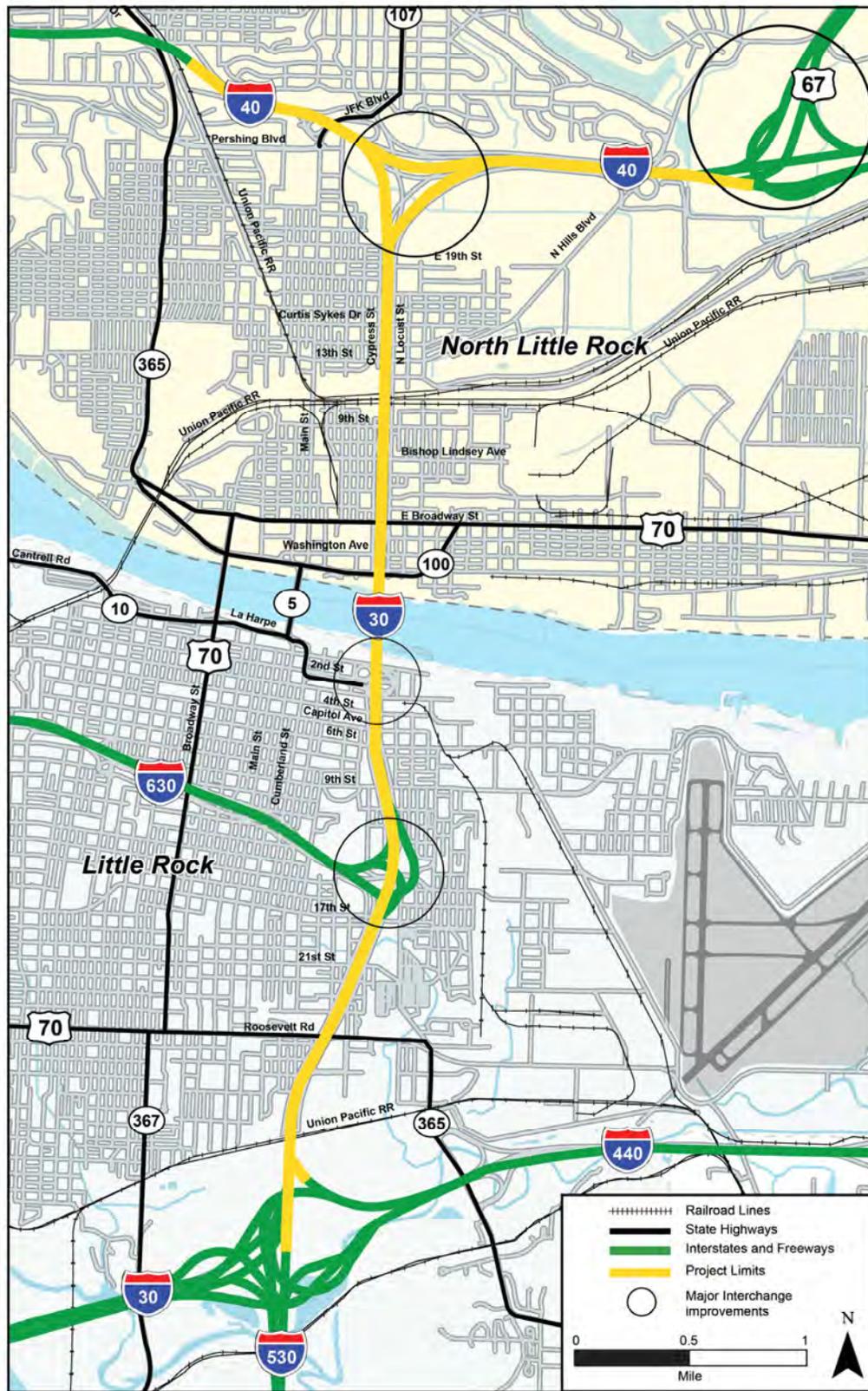
### 1.1 Revised Selected Alternative

The Selected Alternative is the 6-lane with C/D with the Split Diamond Interchange as described and evaluated in the EA. As described above, the DB team has proposed Phase 1 interim improvements. In Phase 1, no improvements are proposed south of the I-30/I-630 interchange, and limited improvements north of the I-30/East Broadway Street interchange. Within the limits of the Phase 1 improvements, the configuration is similar to the Selected Alternative. Consequently, the interim improvements do not involve any impacts that were not evaluated in the EA/FONSI. For a complete description of the interim improvements, refer to Section 6.1 in the 30 Crossing Re-Evaluation.

The ultimate design that the DB team has proposed includes two modifications to the design of the I-30/I-630 and I-30/I-40 interchanges that would be permanent changes to the Selected Alternative, hereafter known as the Revised Selected Alternative. For a complete description of the Revised Selected Alternative, refer to Section 6.2 in the 30 Crossing Re-Evaluation.

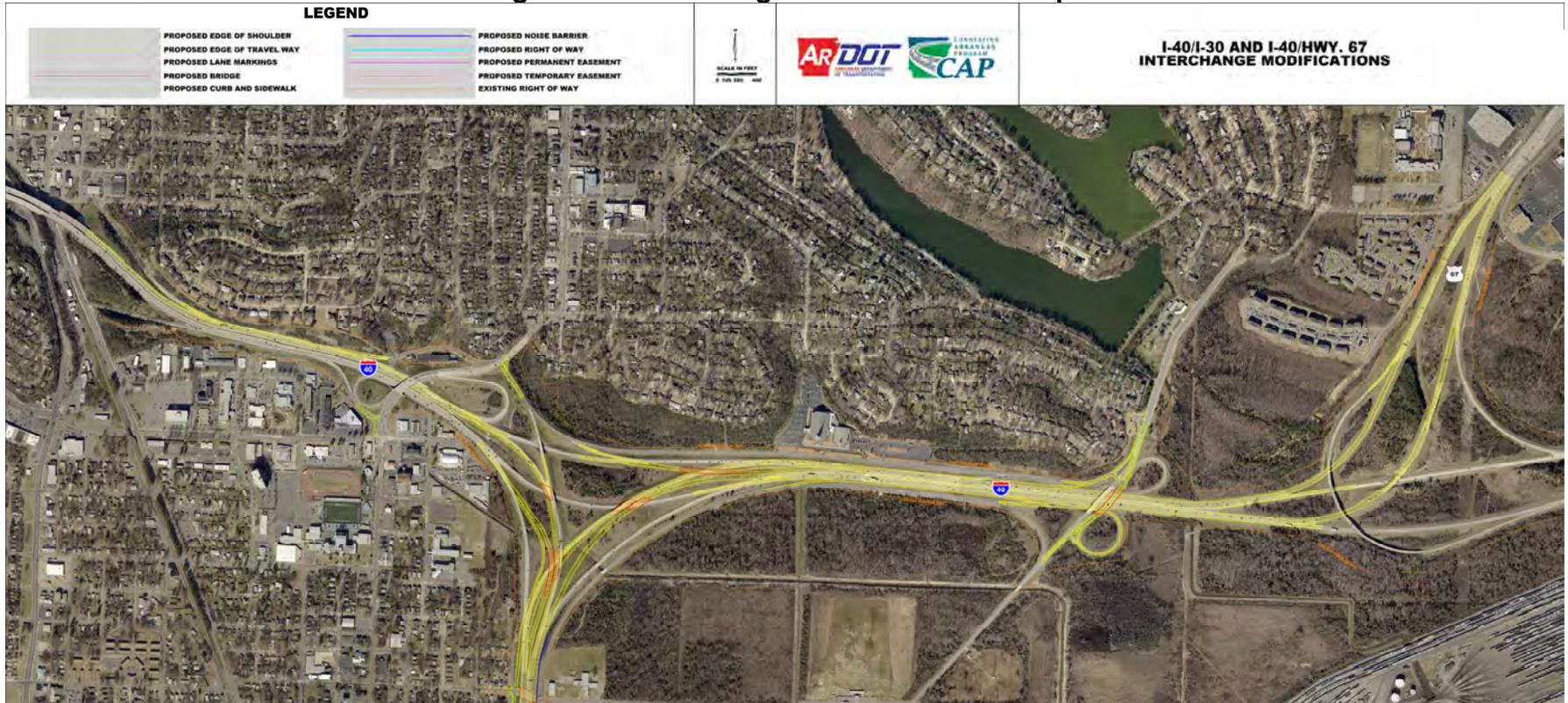
Within the I-30/I-630 interchange, the revision would not shift the location of the northbound I-30 to northbound frontage road ramp toward the west, as in the Selected Alternative, but would maintain its current alignment near the east ROW line. Within the I-30/I-40 interchange, the revision would shift the location of the northbound I-30 to eastbound I-40 ramp. This ramp, which would be signed for northbound Hwy. 67 traffic and would merge onto the inside of the two existing I-40 eastbound lanes, would be shifted toward the northwest. The revisions would eliminate the right exit flyover ramp from I-40 eastbound to Hwy. 67 northbound. This exit would become a left exit; however, the weave associated with the northbound Hwy. 67 traffic crossing eastbound I-40 to make a left exit would be eliminated, as northbound Hwy. 67 traffic would be on the inside of I-40 and westbound I-40 traffic would be on the outside.

Figure 1: Project Limits Map



Source: Project Team, 2017.

Figure 2: 30 Crossing Re-evaluation Concept



Source: Project Team, March 2020.

## 2.0 CUMULATIVE EFFECTS

The Council on Environmental Quality (CEQ) regulations (40 CFR § 1508.7) defines cumulative impacts (i.e., effects) as “the impact on the environment which results from the incremental impact of the proposed action when added to other past, present and reasonably foreseeable future actions.” The purpose of a cumulative effects analysis is to assess the direct and indirect impacts of the proposed project within the larger context of past, present, and future activities that are independent of the proposed project, but which are likely to affect the same resources in the future. This approach evaluates the incremental impacts of the proposed project in respect to the overall health and abundance of selected resources. The same five-step approach<sup>1</sup> was used in the cumulative impacts analysis performed in 2018 for the EA.

The purpose of this technical report was to re-evaluate the cumulative effects analysis for the proposed 30 Crossing project resulting from changes in the design, latest development information provided by local planners, and the latest transportation plans.

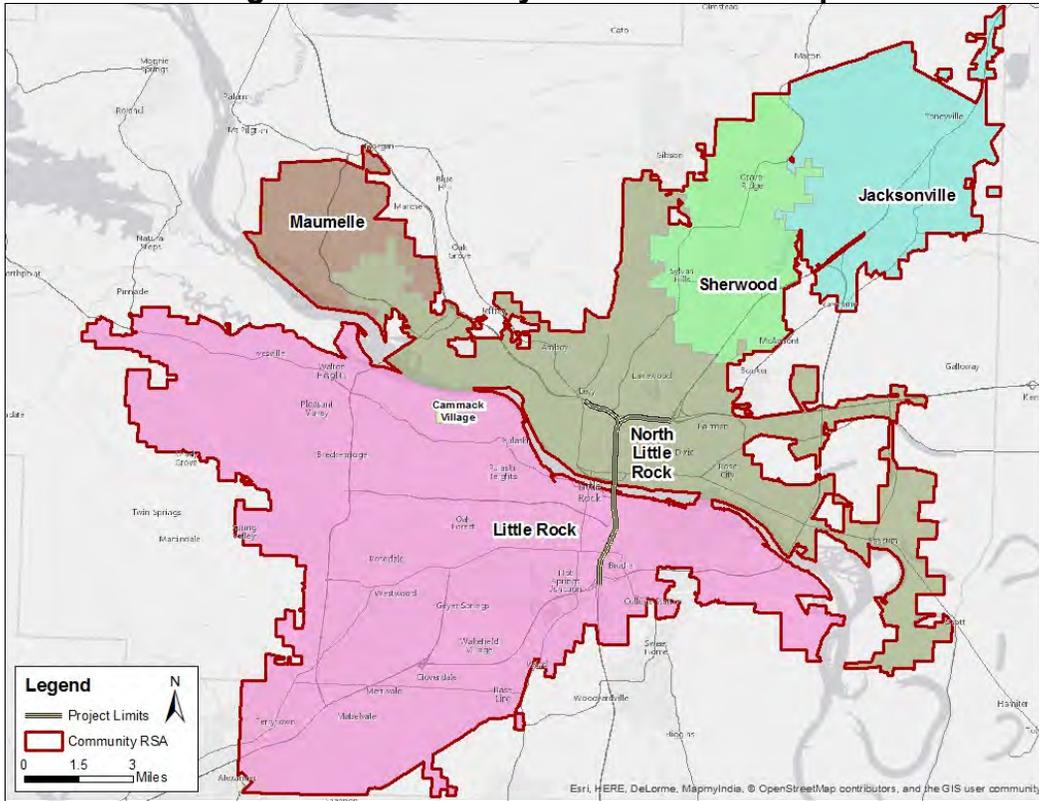
### 2.1 Summary and Conclusions of the Previous Cumulative Effects Analysis

Reasonably foreseeable transportation actions that were included in the cumulative impact analysis are listed in **Table 1**. The table lists the planned transportation projects within the Resource Study Areas (RSA) which are shown in **Figures 3-5**. Projects along I-40 and I-30 were being studied; however, scope and plans for those projects were not yet determined at the time of the analysis. Impacts that could be estimated and anticipated to be likely were considered for the cumulative impacts analyses for the resources analyzed. The direct, indirect, and cumulative impacts of those projects on community, water, and historic resources were analyzed using the AASHTO procedures for evaluating cumulative effects. The analysis followed the AASHTO procedures and considered the impacts of these projects in the cumulative analysis. Other considerations were also included in the cumulative impacts analysis and reflected in the EA in response to public comments. These considerations included the proposed developments for Amazon and the Pointe at North Hills apartments.

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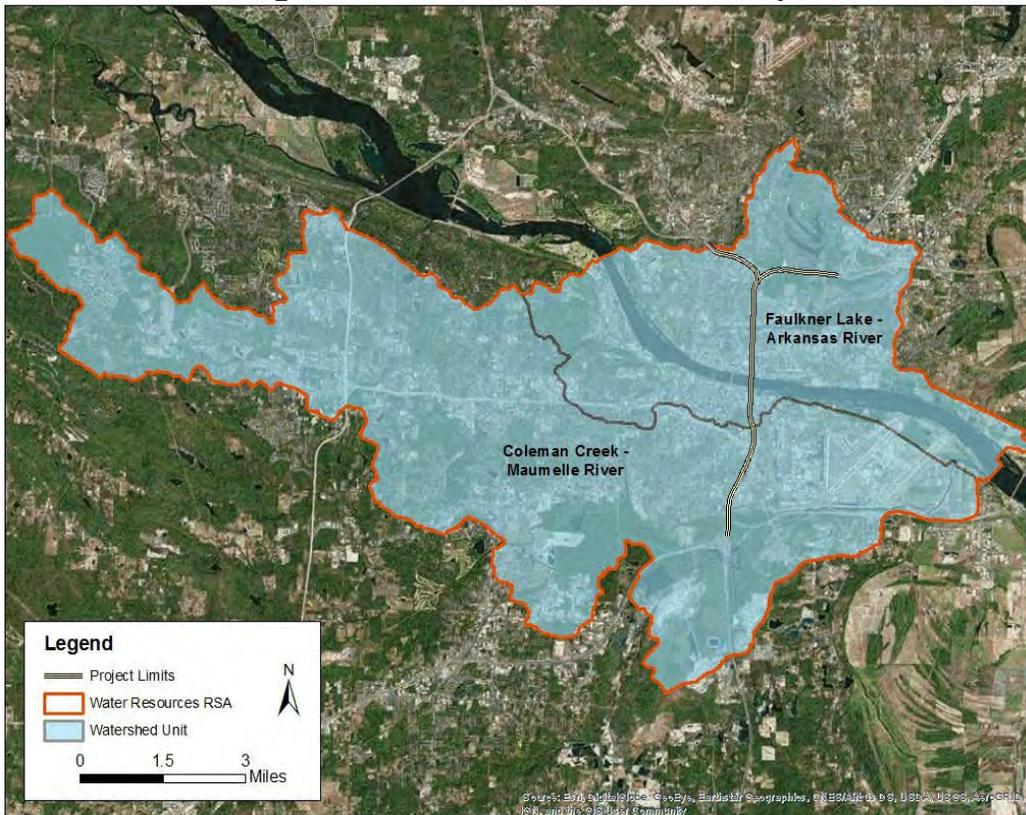
<sup>1</sup> The five-step approach is described in the Cumulative Impacts Methodology approved by ARDOT and based on AASHTO’s Practitioner’s Handbook 12: Assessing Indirect and Cumulative Impacts (2016).

**Figure 3: Community Resource RSA Map**



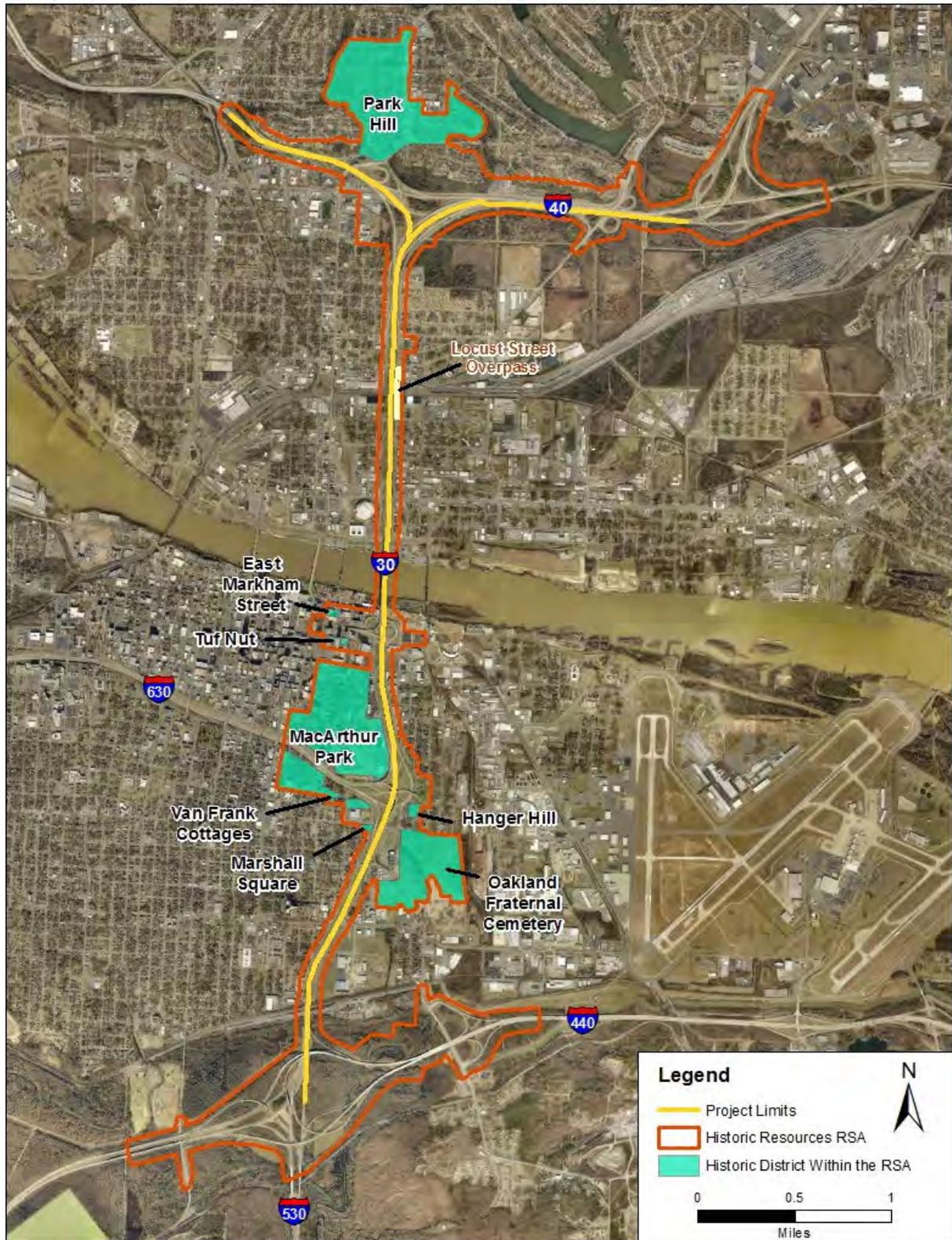
Source: 30 Crossing EA Cumulative Impacts Technical Report May 2018; ArcGIS, 2016.

**Figure 4: Water Resources RSA Map**



Source: 30 Crossing EA Cumulative Impacts Technical Report, May 2018; NRCS 2013.

Figure 5: Historic Resources RSA Map



Source: 30 Crossing EA Cumulative Impacts Technical Report, May 2018.

**Table 1: Transportation Projects Reflected in EA**

<b>Location</b>	<b>Type of Work</b>
Hwy. 67 north of the Hwy. 67/I-440 interchange	Widening
I-630 from Baptist Hospital to University Avenue	Widening
I-40/ Hwy. 391 interchange	Interchange improvements
I-30 at 65th Street	Reconstruction
I-440 from the Arkansas River Bridge to I-40	Reconstruction
I-40 in Maumelle	New Interchange
Hwy. 5/Hwy. 70/University Avenue	Intersection Improvements
Hwy. 10 and I-430 from Pleasant Ridge Road to Pleasant Valley Drive	Major Widening
Hwy. 176 at Shilcotts Bayou	Structure and Approaches Improvements
Hwy. 365 at Palarm Creek	Structure and Approaches Improvements
JP Wright Loop Road Rail	Railroad Grade Separation
Shackleford Road and Gamble Road (Kanis Road)	Major Widening
Hwy. 10 at Gill Street	Railroad Overpass Structures and Approaches
Hwy. 67 from Main Street to Vandenberg Boulevard	Major Widening
Hwy. 176 from 47 <sup>th</sup> Street to Remount Road	Safety Improvements
Hwy. 10 at Taylor Loop Road to Pleasant Ridge Road	Major Widening and Operational Improvements

Source: 30 Crossing EA/FONSI (2018).

### 2.1.1 Community Resources

For socioeconomic resources, the proposed project would result in right-of-way (ROW) acquisition and displacements; however, it would also provide new improvements to strengthen east-west connectivity. Providing new bicycle and pedestrian accommodations and removing the Hwy. 10 (Cantrell Rd.) interchange circular ramps would result in potential green spaces that local neighborhoods could use to improve east-west connectivity and revitalize Little Rock east of I-30. Furthermore, proposed improvements are anticipated to provide traffic congestion relief, improve safety, and improve mobility within the RSA. It is anticipated that future actions would result in minor amounts of ROW acquisitions and no displacements from planned transportation projects. Although past actions have adversely impacted communities, the proposed project would not contribute to the cumulative impacts to the community in the RSA because of the minor proposed ROW acquisitions, no adverse impacts to community cohesion; and because proposed improvements would provide positive impacts through improved mobility, bicycle and pedestrian accommodations, and increased east-west connectivity.

### 2.1.1 Water Resources

For water resources, the previous EA reported direct impacts of approximately 6.6 acres of wetlands, approximately 0.2 percent of the total acreage for water resources (approximately 3,717 acres) found within the RSA. The impacts from other reasonable and feasible actions was estimated to be approximately 15 acres. Although an additional 8 percent reduction is anticipated on the amount of water resources within the RSA, a combined acreage of approximately 327 acres was estimated. This total would be considered minor in the context of the entire RSA (approximately 46,982 acres). Considering the minor percentage of impact (8.5 percent) and assuming appropriate implementation of regulatory control strategies and policies, the proposed project would not contribute to substantial cumulative impacts to the water resources in the RSA.

### 2.1.1 Historic Resources

Regarding historic resources, the removal of one historic bridge structure (Locust Street Overpass) would not be considered a substantial impact to the overall state of the historic resources within the historic RSA because it would be the only historic structure that would experience direct adverse effects as a result of the Selected Alternative. Mitigation measures for the loss of this resource was coordinated with the ACHP and SHPO under a PA. The PA included measures to avoid and mitigate impacts to unanticipated archaeological resources encountered during construction. A Design Coordination Plan has been developed by FHWA and ARDOT to establish procedures for coordination with SHPO and other interested parties should design changes occur that may affect historic properties. A Mitigation Measures Plan also was developed to resolve any adverse effects resulting from unanticipated effects on historic properties. Based on the analysis, no substantial cumulative effects on historic resources within the RSA is anticipated from the proposed project.

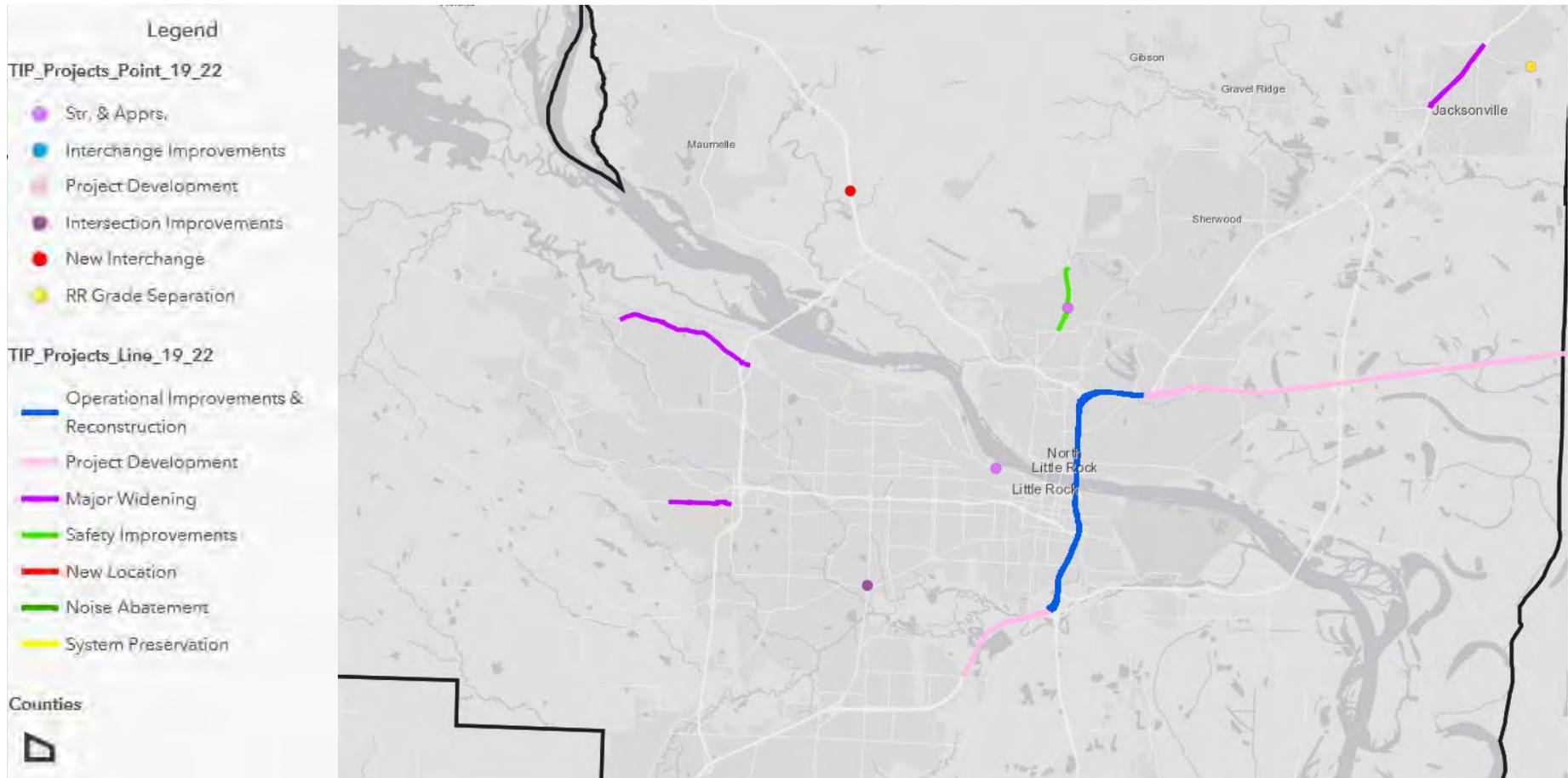
Efforts would be taken through local, state and federal regulations to avoid and minimize any adverse effects from development or future activities. City, county or local plans could help avoid and minimize impacts to community resources from future developments or activities. Several standards and regulations are in place by ARDOT and other agencies to mitigate for water and wetland impacts. Additional protection from historic preservation groups and historic districts commissions would also avoid and minimize potential future impacts to historically significant community neighborhoods and properties. Any impacts associated with future developments would be the responsibility of developers to comply with all applicable federal, state and local laws and policies in coordination with state and local agencies and organizations.

## 2.2 Changes Since the 30 Crossing EA

After the EA/FONSI for the 30 Crossing project, changes to the 30 Crossing project include DB modifications, an updated transportation implementation plan (TIP) and additional development information by city planners. These updates are assessed for the re-evaluation and discussed in this section. The DB modifications result in changes to previously determined direct impacts to water resources. Permanent fill impacts to wetlands from the proposed project were approximately 6.6 acres for the Selected Alternative. Permanent fill impacts to streams from the proposed project were approximately 3,529 linear feet based on a preliminary conceptual design estimate. For the re-evaluation, DB modifications resulted in design changes for the Revised Selected Alternative as stated in Section 1.1. New acreage of wetland impacts were determined to be approximately 0.5 acre of permanent impacts for the ultimate build out. Stream impacts were also re-evaluated to be 1,257 linear feet of impacts with only one stream (the Arkansas River) having greater than 300 feet of impacts requiring mitigation. Ongoing coordination with the U.S. Army Corps of Engineers for permit requirements will continue for the proposed project.

Changes assessed for the re-evaluation also include the updated TIP, published by Metroplan, the metropolitan planning organization for the area of the proposed project. The latest plan is the TIP 2019-2022. The TIP includes additional projects within the RSAs. These projects are shown in **Figure 2** and listed in **Table 2**.

Figure 5: Transportation Projects Map



Source: Metroplan TIP 2019-2022 interactive map (<http://metroplan.org/content/maps>), accessed March 2020.

**Table 2: Transportation Projects within the RSAs**

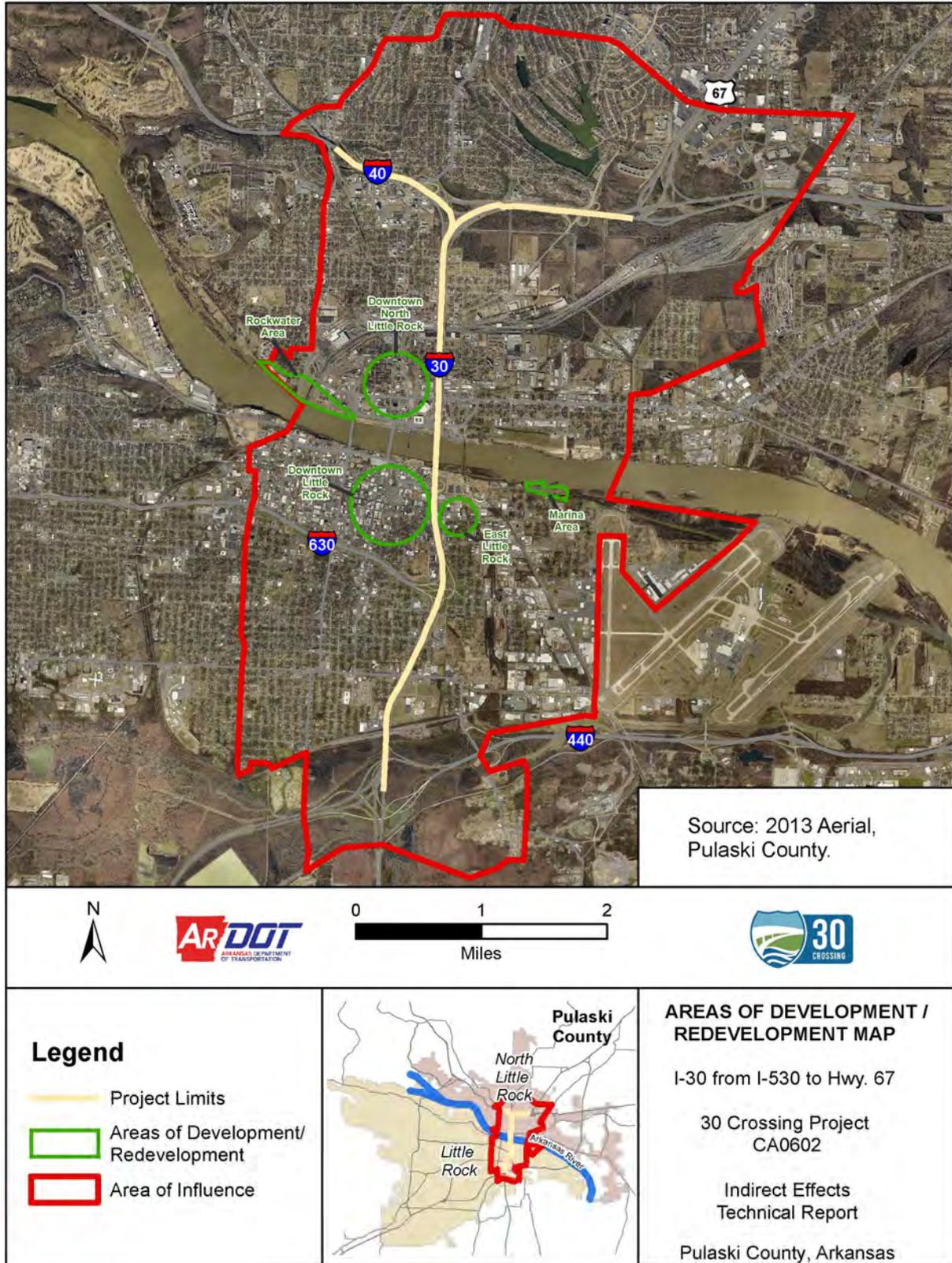
Facility	Location	Type of Work
I-40	I-40 Interchange	New Interchange
10 & I-430	Pleasant Ridge Rd. - Pleasant Valley Dr.	Major Widening
176	Shilcotts Bayou St. and Approaches	Structure and Approaches
5 & 70	Hwy. 70/Hwy. 5/University Ave.	Intersection Improvements
CS	JP Wright Loop Rd.	Railroad Grade Separation
176	47th St. - Remount Rd.	Safety Improvements
10	Gill St. & RR Overpass and Approaches	Structure and Approaches
67	Main St. - Vandenberg Blvd. Widening	Major Widening
10	Taylor Loop Rd. - Pleasant Ridge Rd.	Major Widening & Operational Improvements
I-40	Hwy. 161 - Lonoke Co. Line	Reconstruction & Capacity
I-40	Hwy. 67 - Hwy. 161	Reconstruction
I-30	65th St. - South Terminal	Reconstruction & Capacity
365	Palarm Creek	Structure and Approaches
Kanis Road	(Kanis Road) Shackelford Rd. - Gamble	Major Widening

Source: Metroplan 2019-2022 TIP (accessed in March 2020).

All but one of the transportation projects listed in **Table 2** were projects previously included in the EA. The one additional project is the I-40 from Highway 161 to Lonoke County Line. This is a reconstruction and capacity project with a letting year of 2025. This project is within the eastern edge of the community RSA, but is located outside of both the historic and water resource RSAs.

The latest information on recent and foreseeable actions were updated from the original report. Additional developments were gathered from feedback received by local planners from the City of Little Rock and North Little Rock. The planners answered a questionnaire similar to the version previously used in the analysis performed in 2018 for the EA. These responses are included in the revised Indirect Effects Technical Report prepared for the Re-evaluation. The updates the local planners provided expanded on the development areas already identified in the previous analysis. These areas remain valid areas of development and continue to show growth and potential for future development. These areas were the Downtown Little Rock, East Little Rock, Marina, Rockwater, and Downtown North Little Rock areas, shown in **Figure 3**. The City of Little Rock also provided additional information of developments in west Little Rock that are underway and independent of the proposed project. These reasonably foreseeable projects include a redevelopment of a former Sears property, a headquarters development for the Bank of OZK, a multi-family apartment complex west of Chenal Parkway, and an industrial complex development in southeast Little Rock near I-440 and the Arkansas River bridge. These developments were identified to be redevelopments and developments outside the RSA, which would likely result in minor amounts of impact to water resources. These developments would not adversely impact communities, but in fact have the potential to spur positive economic impacts to the local area and provide services and employment not otherwise located at those areas.

**Figure 6: EA Originally Identified Areas of Induced Growth**



Source: 30 Crossing EA Indirect Impacts Technical Report, May 2018.

## 2.3 Summary and Conclusions

The RSA for the cumulative analysis for historic resources was delineated using historic district boundaries and locations of known historic properties. The RSA boundary generally followed the area of potential effects (APE) and expanded APE used in the Section 106 process for the proposed project. Based on the design change that is reflected in the north terminal of the project and the additional foreseeable projects being outside of the RSA and not likely to adversely affect historic resources, the changes would not warrant a revision of the cumulative effects analysis for historic resources and the original determination remains valid that no substantial cumulative effects on historic resources within the RSA is anticipated from the proposed project.

### 2.3.1 Community Resources

The changes discussed in Section 2.2 were considered for the re-evaluation of cumulative impacts to community resources. An evaluation between the resulting changes in the re-evaluation to the previous EA was performed. The minor design change in the north terminal did not result in changes in the ramping configuration and access and travel patterns as reported previously. The planned reconstruction and capacity project along I-40 from Highway 161 to Lonoke County line would result in some effects to areas adjacent to this existing facility. There is a presence of minority populations along the I-40 corridor from Hwy 161 and Lonoke County Line. This separate transportation project may have the potential to impact EJ populations; however, displacements or impacts to community facilities are unlikely due to the overall character of the area within these project limits. The areas adjacent to the roadway between Hwy. 161 and Lonoke county line is dominated by distribution, trucking, industrial and commercial businesses. The other developments mentioned by local planners discussed in the Re-evaluation Indirect Impacts Technical Report, identified developments and redevelopments that could provide a positive economic impact and revitalization adjacent to those areas that would otherwise not be used; however, these developments could also spur additional traffic to areas not previously visited resulting in congestion.

Based on the above discussion and evaluation, the determinations previously made in the original cumulative impacts analysis for community resources remain valid, that the proposed project would not contribute to the cumulative impacts to the community in the RSA. As previously included in the original report, efforts would be taken through local, state and federal regulations to avoid and minimize any adverse effects from development or future activities. City, county or local plans could help avoid and minimize impacts to community resources from future developments or activities. Additional protection from historic preservation groups and historic districts commissions would also avoid and minimize potential future impacts to historically significant community neighborhoods and properties. Any impacts associated with future developments would be the responsibility of developers to comply with all applicable federal, state and local laws and policies in coordination with state and local agencies and organizations.

### 2.3.2 Water Resources

A comparison between the resulting changes of impacts to water resources in the re-evaluation and the EA shows the previous determinations to be valid and no changes to

previous determinations are needed. The changes discussed in Section 2.2 resulted in less impacts to water resources and therefore previously determined conclusions remain valid.

Minimal indirect impacts were determined from the proposed project. Five areas of potential future development were identified in the original indirect impacts analysis, the Downtown Little Rock, East Little Rock, Downtown North Little Rock, Marina and Rockwater Areas. These developments would occur independent of the proposed project; however, the proposed project would affect the rate of the development. The reasonably foreseeable projects discussed in Section 2.2 are either redevelopments or developments outside the RSA that would likely result in minor impacts to water resources. These developments would not result in substantial adverse impacts to water resources. These new developments and water features within the indirect development areas were discussed and evaluated previously; therefore, no additional analysis or changes to the water resource impacts determinations are warranted.

As previously stated in the original report, efforts would be taken through local, state and federal regulations to avoid and minimize any adverse effects from development or future activities. Several standards and regulations are in place by ARDOT and other agencies to mitigate for water and wetland impacts. Any impacts associated with future developments would be the responsibility of developers to comply with all applicable federal, state and local laws and policies in coordination with state and local agencies and organizations.

Several standards, regulations, regulatory control strategies and permitting requirements are in place by ARDOT and other agencies to mitigate for water and wetland impacts. Because wetland abundance and distribution affect wetland biodiversity, reestablishment and mitigation actions could improve ecological interactions if wetland type (diversity) and geospatial interspersion were considered during these actions (Dahl 2011). Efforts should be taken through local, state and federal regulations to avoid and minimize any adverse effects from development or future activities and include these considerations. Any impacts associated with future developments would be the responsibility of developers in coordination with the local municipalities and local agencies.

### **3.0 REFERENCES**

American Association of State Highway and Transportation Officials. August 2016. Practitioner's Handbook Number 12. *Assessing Indirect Effects and Cumulative Impacts Under NEPA*.

Metroplan. December 2018. *Central Arkansas 2050*.