

NEPA Re-evaluation of I-70 SIU 4 EIS for Design-Build Delivery

2024 TEAM Conference

March 15, 2024

Dan Oesch, Matt Burcham, and Buddy Desai



Agenda

- Buddy Desai/Hg Consult
 - Corridor Facts
 - NEPA Re-evaluation for Design-Build
- Matt Burcham/MoDOT
 - Environmental Challenges
- Dan Oesch/MoDOT
 - Transitioning to Design-Build Delivery



Corridor Facts

Buddy Desai/Hg Consult

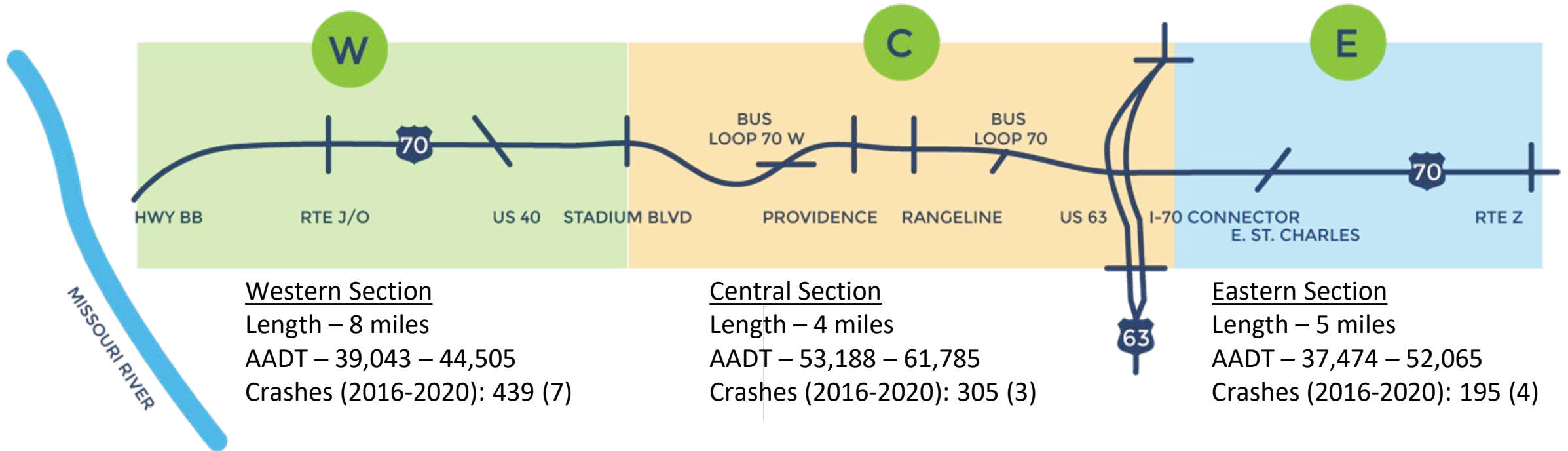


I-70 SIU 4 Re-evaluation

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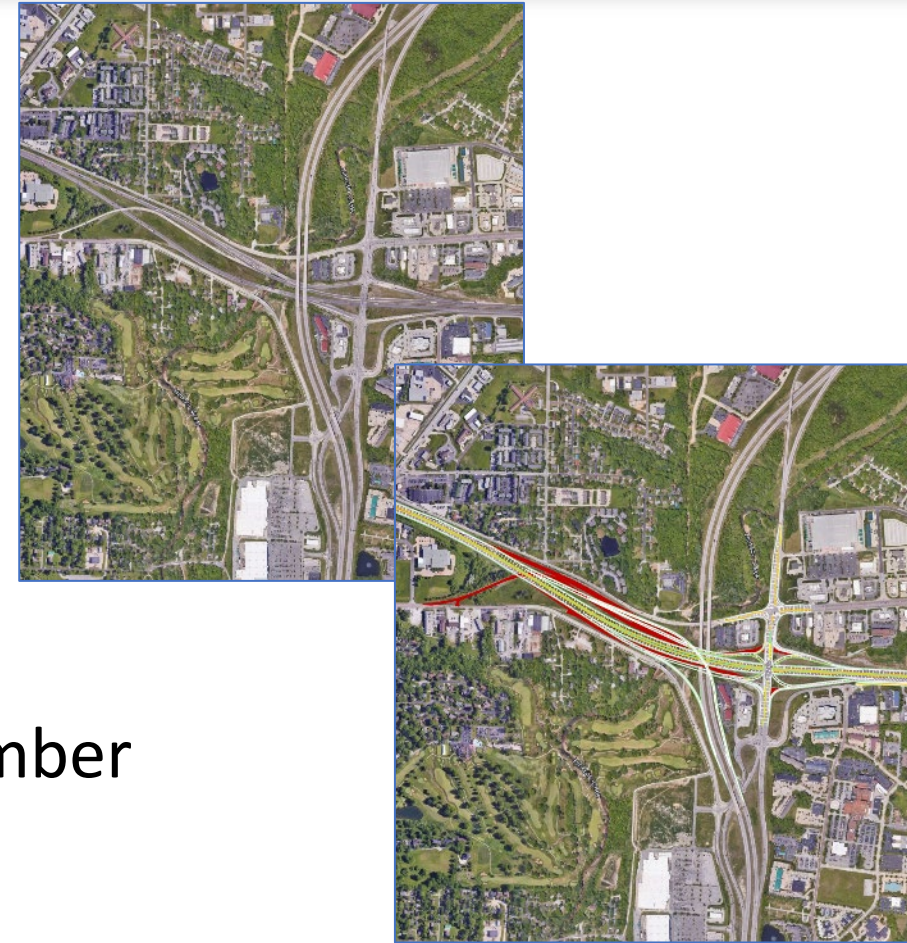
I-70 SIU 4 Facts & Issues

18 miles long with 10 interchanges



Corridor Study History

- I-70/US 63 MIS – Late 1990's
- SIU 4 EIS – 2005
- Improvements to some interchanges
 - Stadium Boulevard
 - I-70 Business Loop West (Design-Build project)
 - Rangeline Street
 - I-70/US 63 On-Ramp
- SIU 4 EIS Re-evaluation – Fall 2021 to December 2023



NEPA Re-evaluation for Design-Build

Buddy Desai/Hg Consult



I-70 SIU 4 Re-evaluation


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What is a NEPA Re-evaluation?

- Previous NEPA clearance no longer valid –
Three years or considerable change in context
 - Supplemental EIS or Re-evaluation
- Re-evaluation compares impacts to the original NEPA document
 - Introduction & Background
 - Purpose & Need
 - Alternatives
 - Public/Agency Involvement
 - Comparison between original EIS and Re-evaluation
 - Commitments



I-70 SIU 4 Re-evaluation



I-70 SIU 4 Environmental Impact Statement Re-evaluation

Re-evaluation Conclusion

Most of the impacts to socioeconomic and environmental resources resulting from the proposed project would remain the same as, or less than, the impacts identified in the 2005 Second Tier EIS. The proposed project would result in impacts that are consistent with impact findings in this section of SIU 4 which were evaluated in the 2005 EIS.

This re-evaluation document demonstrates that the 2005 Final I-70 Second Tier EIS and 2006 ROD for SIU 4 remain valid. The proposed project continues to meet the purpose and need identified in the 2005 EIS. Therefore, a supplemental study of the 2005 EIS is not necessary for the current project.

I-70 SIU 4
Boone County, From Just East of Route BB to Just East of Route Z
Job Numbers 5S3411, ST0017, and ST0021

Submitted Pursuant to 42 U.S.C. 4332(2)(c), 49 U.S.C. 303
By the U.S. Department of Transportation
Federal Highway Administration and the
Missouri Department of Transportation.

12/11/2023
Date of Approval

Lauren Paulwell
For FHWA

Acting Programs Team Leader
Title

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Alternatives Comparison




I-70 SIU 4 Environmental Impact Statement Re-evaluation

Table 5: Selected Alternative Comparison Between 2005 SIU 4 EIS and SIU 4 EIS Re-evaluation

Location	Component	Selected Alternative Configuration		
		2006 SIU 4 ROD	SIU 4 EIS Re-evaluation	Re-evaluation Selected Alternative Comments
Western Part of Project Area: Western Terminus to Stadium Interchange	Mainline I-70 between east of Route BB to Stadium	3-lanes in each direction, widening to the south, widened rural median	3-lanes in each direction, <u>symmetrical widening, maintain existing median width</u>	Consistent with ROD's Selected Alternative as there will be three lanes in each direction on I-70 will maintain the existing rural median.
	Outer Roads between Route BB and Route J/O	Continuous south and north outer roads	<u>Continuous north outer road only</u>	Consistent with ROD's Selected Alternative as at least one continuous outer road is provided.
	Route J/O Interchange	Improved diamond interchange and extension of ramps, improve north and south outer roads connections for access management	Improved diamond interchange and extension of ramps, improve north and south outer roads connections for access management	Consistent with ROD's Selected Alternative.
	Outer Roads between Route J/O and US 40	Continuous south outer road	Continuous south outer road	Consistent with ROD's Selected Alternative.
	US 40 Interchange	Enhanced diamond interchange, extensions of ramps, improve north and south outer roads connections for access management	Enhanced diamond interchange, extensions of ramps, <u>improve skew angle of interchange</u> , improve north and south outer roads connections for access management	Consistent with ROD's Selected Alternative with the added benefit of addressing the existing interchange skew angle.
	Outer Roads between US 40 and Stadium	Continuous north and south outer roads	<u>Continuous north outer road only</u>	Consistent with ROD's Selected Alternative as at least one continuous outer road is provided.
Central Part of the Project Area: Columbia between Stadium and US 63	Stadium interchange	Tight diamond interchange, extension of ramps, new WB I-70 off ramp and EB I-70 on ramp at Fairview	<u>Existing Diverging diamond interchange (DDI) to remain, extension of ramps, add additional left turn lane for WB I-70 off ramp, south outer relocated to connect to Stadium along Bernadette, no new WB I-70 off ramp or EB I-70 on ramp at Fairview</u>	Consistent with ROD's Selected Alternative as the new interchange provides similar operational improvements as the ROD's Selected Alternative. The ramps to/from Fairview were intended to alleviate capacity issues on Stadium Blvd. without having to replace the existing bridge. The new DDI and the additional left turn lane on the WB I-70 ramp accomplishes this.
	Mainline I-70 between Stadium and US 63	3-lanes in each direction with room for 4-lanes in each direction, symmetrical widening, urban median	3-lanes in each direction <u>with room for 4-lanes in each direction</u> , symmetrical widening, urban median	Consistent with ROD's Selected Alternative as there will be three lanes in each direction on I-70 and an urban median.
	Outer roads between Stadium and US 63	Existing outer roads maintained	Existing outer roads maintained	Consistent with ROD's Selected Alternative.
	Business Loop I-70 West interchange	Two-point interchange, extension of ramps	<u>Existing "dog-bone" interchange retained, extension of ramps, dedicated Business Loop bypass lane from WB Business Loop to EB I-70</u>	Consistent with ROD's Selected Alternative as the new interchange provides similar operational improvements as the ROD's Selected Alternative. The additional dedicated Business Loop bypass lane provides further operational improvements at the interchange.



Resource Impact Comparison

	I-70 SIU 4 Environmental Impact Statement Re-evaluation
Right of Way and Displacements	
SIU 4 Corridor - 2005 EIS	
Is there an impact to this resource?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>The 2005 EIS identified 397 acres of right of way impacts along the entire SIU 4 corridor. The breakdown of these impacts are as follows:</p> <ul style="list-style-type: none"> • Residential impacts included 54 acres. • Commercial impacts included 63 acres. • Industrial impacts included 9 acres. • Agricultural (wooded/vacant) impacts included 249 acres. • Publicly owned parcels included 11 acres. • Other (e.g., utilities, institutional, fraternal organizations) impacts included 11 acres. <p>There were 299 residential displacements consisting of 24 single-family residences, 260 multi-family dwelling units and 15 mobile homes. Two senior citizen facilities (located between exits 124/Stadium and 125/BL 70 West) accounted for the majority of the multi-family dwelling units being impacted. There were 66 business operation impacts for the Selected Alternative.</p>	
SIU 4 Corridor Re-Evaluation	
Is there an impact to this resource?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Change since 2005 EIS	More Impacts <input type="checkbox"/> No Change <input type="checkbox"/> Fewer Impacts <input checked="" type="checkbox"/>
<p>The Re-Evaluation has identified 299 acres of right of way impacts along the entire SIU 4 corridor. The breakdown of these impacts are as follows:</p> <ul style="list-style-type: none"> • Residential impacts include 52 acres. • Commercial impacts include 57 acres. • Industrial impacts include less than 1 acre. • Agricultural (wooded/vacant) impacts include 150 acres. • Public (Parks and other publicly owned parcels) include 20 acres. • Other (e.g., utilities, institutional, fraternal organizations) impacts include 7 acres. <p>There are 18 residential displacements, and 14 business operation impacts for the Selected Alternative.</p> <p>Applicable Commitment(s):</p> <p><i>During right of way acquisition and relocations, MoDOT will assure that this will be accomplished in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. MoDOT is committed to examining ways to further minimize property impacts throughout the corridor, without compromising the safety of the proposed facility, during subsequent design phases.</i></p> <p><i>During the final design process, MoDOT will consider options to minimize new right of way acquisition.</i></p>	

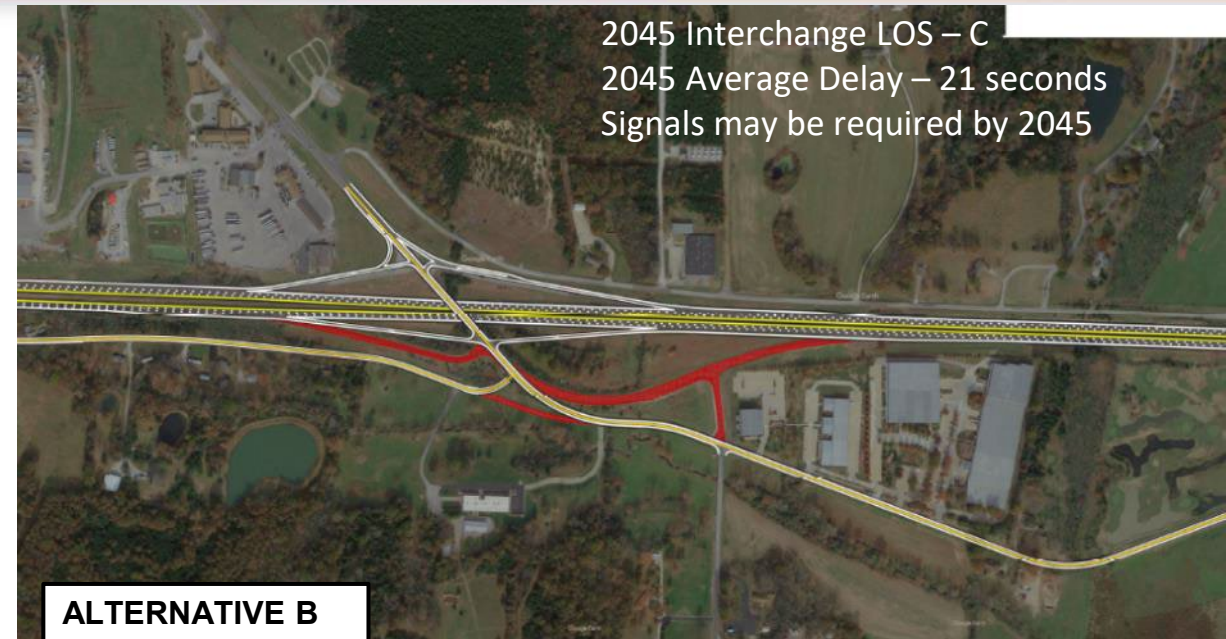
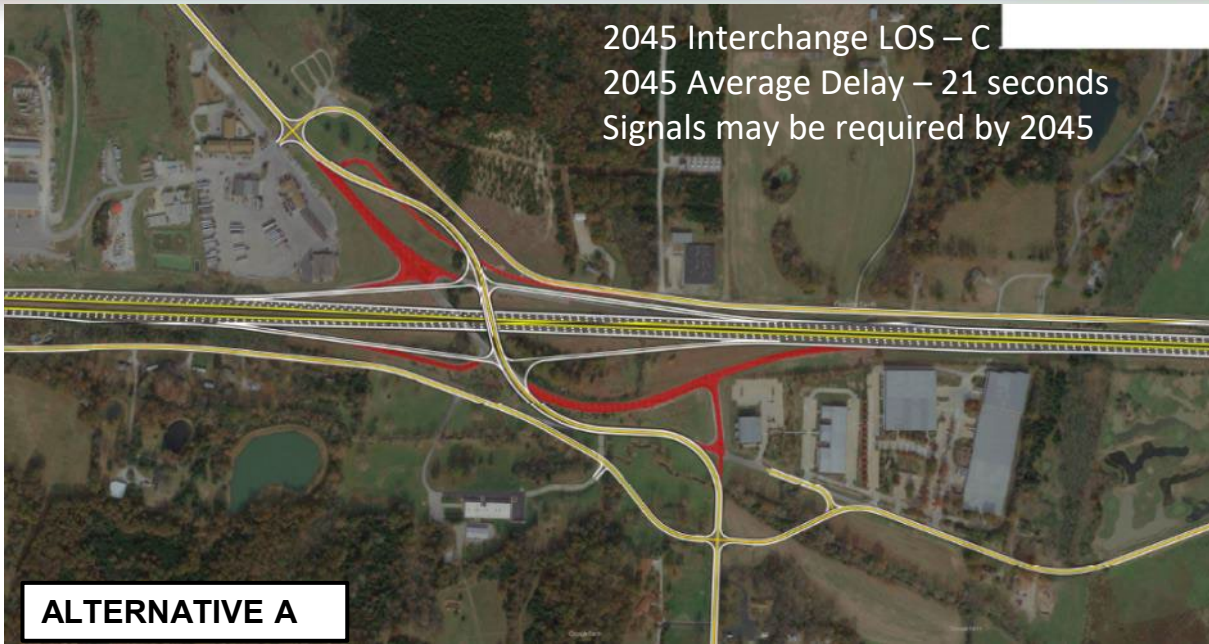


But How do We Provide Flexibility for D-B?

- Traditionally a Preferred Alternative is identified, and impacts within its footprint are calculated
 - Changes to the Re-evaluation footprint/impacts during design would require a new Re-evaluation resulting in project delays
- Solution
 - Identify the Reasonable Alternatives and their respective footprints
 - Develop composite footprint for all Reasonable Alternatives
 - Report the composite footprint resource impacts in the Re-evaluation
 - Allows changes to the Preferred Alternative as long as the modifications remain within the composite footprint
 - Reminder – a Preferred Alternative must be identified in the Re-evaluation



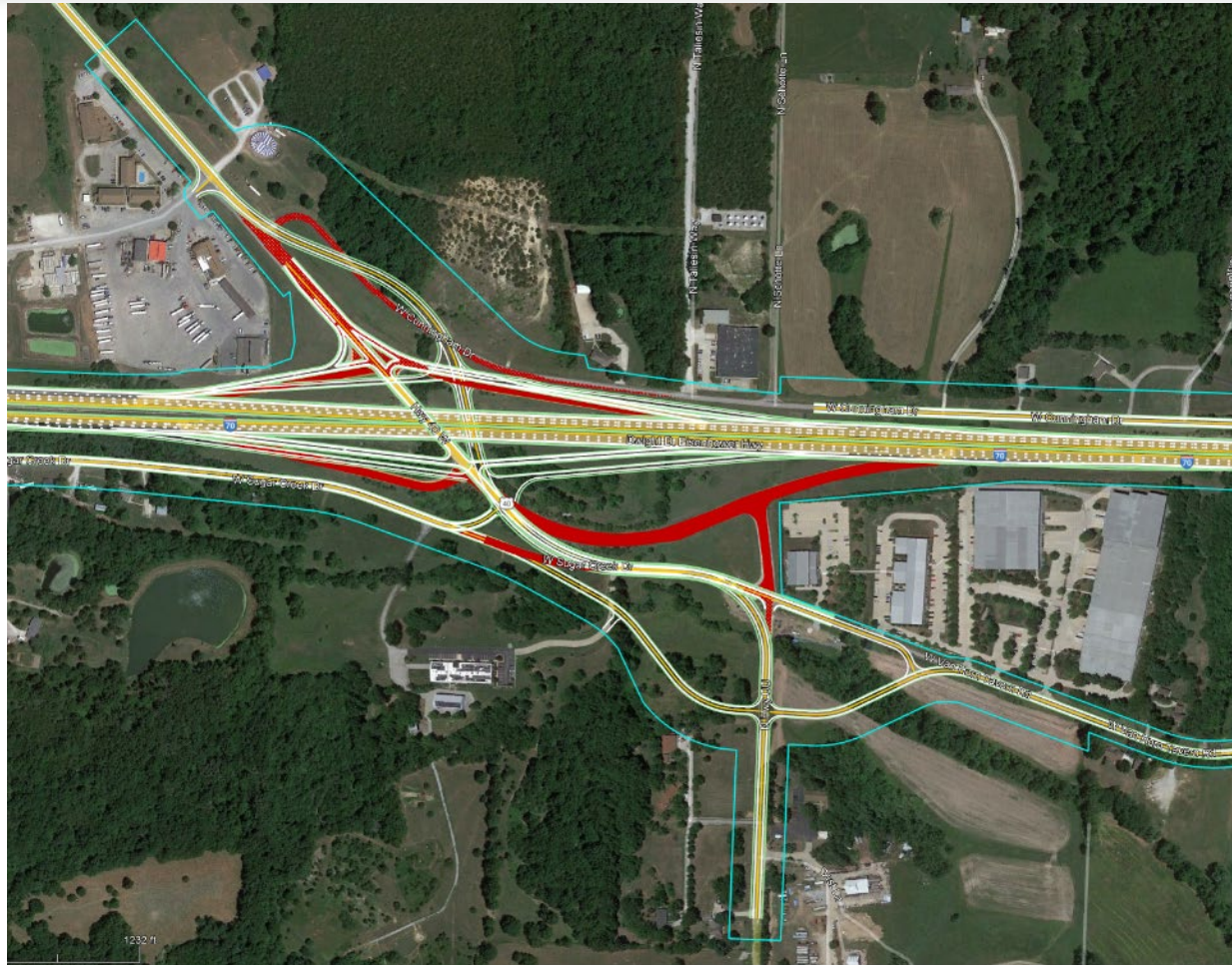
Example: US 40/Midway Interchange



- Alternative A realigns US 40 to remove the skew. US 40 ties into Route UU to the south.
- Alternative B keeps the exiting skew and US 40 ties into Sugar Creek Road to the south.
- Improvements shown are not on the STIP
- ADT – 11,400 (2021) | 12,850 (2045)
- 2016-2020 Crash History at Interchange Intersections – 10 Minor Injury, 17 Property Damage Only
- Alternative A reduces crashes by 22%



US 40/Midway Composite NEPA Footprint



US 40/Midway Impact Summary Table

IMPACT CATEGORY	MEASUREMENT	ALT A (INTERCHANGE REALIGN)	ALT B (W SUGAR CREEK CONNECTION)
RIGHT OF WAY IMPACTS (Existing Land Use within Environmental Footprint)			
Residential	acres	6.5	5.9
Commercial	acres	6.4	2.9
Industrial	acres	0.0	0.0
Agricultural (Wooded/Vacant)	acres	19.1	4.3
Public (Parks and other publicly owned parcels)	acres	0.0	0.0
Other (e.g. utilities, institutional, fraternal organizations)	acres	0.4	0.0
Total Right of Way Required	acres	32.4	13.1
ENVIRONMENTAL IMPACTS			
Wetland Impacts	acres	0.123	0.123
Open Water Impacts	acres	0	0
100-Year Floodplain Impacts	acres	16.1	8.2
Regulatory Floodway	LF	1,650	200
Stream Crossings	#	11	11
Streams	LF	6,059	3,813
Potential Bat Habitat Impacts	acres	6.23	3.9
Number of Hazardous Waste Sites	#	8	6
COMMUNITY IMPACTS			
National Register of Historic Places Impacted	#	0	0
Potential Disproportionate Impacts to EJ Populations	Yes/No	No	No
Total Number of Parcels Impacted	#	31	24
DISPLACEMENT IMPACTS			
Residential Impacts (Displacement of Dwelling Units)	#	5	5
Business Operation Impacts (Displacement of at Least One Structure)	#	0	0
ENGINEERING ISSUES			
Improvements to Access Management	rating	++	+
Construction Staging / Maintenance of Traffic	rating	+	o
Traffic Operations	rating	o	o
Traffic Resiliency	rating	o	o
Safety Improvements	rating	++	+
Project Costs			
New Construction Costs -Interchange/Outer Rd improvements	2022 Dollars	\$31,800,000	\$18,000,000
Right of Way Costs (including displacements and relocation assistance)	2022 Dollars	\$9,400,000	\$1,900,000
I-70 Reconstruction/Widening Costs	2022 Dollars	\$14,200,000	\$14,200,000
Total Costs	2022 Dollars	\$55,400,000	\$34,100,000



Environmental Challenges

Matt Burcham/MoDOT




I-70 SIU 4 Re-evaluation


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Environmental Challenges Related to NEPA Clearance to Allow Design-Build


- Given the composite NEPA footprint, actual impacts will be less than reported in the Re-evaluation document
- Architecture & Archaeology
 - Right of entry provided for approximately ½ of potentially affected properties
 - Remainder of properties will be investigated after R/W plans are prepared
 - Only perform field studies on affected properties
 - SHPO coordination and preparation of the Section 106 Programmatic Agreement

WHAT SURVEYS MAY BE CONDUCTED ON MY PROPERTY?

 **Archaeological studies**
In floodplains, river terraces, and areas covered with vegetation, holes are dug approximately every 50 feet looking for artifacts. Typically, holes are about 12 inches in diameter and 24 inches in depth. Soil from each hole is either sifted through a screen or sorted by trowel. The holes are then immediately back-filled (exhibit 1).

 **Architecture studies**

- The exterior of buildings are photographed.
- Sometimes more in-depth studies are needed. The property owner may be asked about the history of the property or alterations made to the buildings.


Exhibit 1



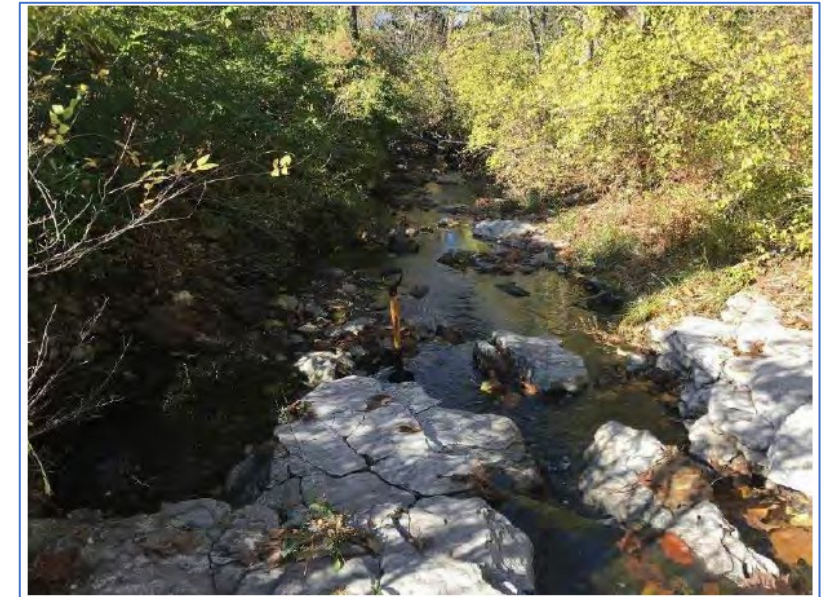
Environmental Challenges Related to NEPA Clearance to Allow Design-Build

- Threatened & Endangered Species
 - Northern Long-eared Bat, Indiana Bat, Gray Bat, and Tricolored Bat
 - FWS Acoustic Presence/Absence Studies at 17 sites throughout SIU 4
 - Presence of Gray bats identified at 14 sites, Tricolored at 6 sites
 - Will require appropriate commitments/mitigation
 - *MoDOT will review the Natural Heritage Database and coordinate with the USFWS periodically during the project development process to identify any new locations of threatened and endangered bat activity.*
 - *MoDOT will cooperate with MDC and their partners to relocate impacted populations of bristled Cyperus within the study limits.*



Environmental Challenges Related to NEPA Clearance to Allow Design-Build

- Section 401/404 Permitting
 - SCOTUS ruling on WOTUS – redefining what qualifies as a jurisdictional water of the US
 - Approved jurisdictional determination (AJD) guidance has been issued from EPA/USACOE
 - Permitting will be completed during Design-Build delivery
 - Dedicated USACOE staff for I-70 projects



Environmental Challenges Related to NEPA Clearance to Allow Design-Build

- Approval of the SIU 4 Re-evaluation required the preparation of an amended Record of Decision from the 2009 Truck Only Lanes Supplemental EIS
- Must be included in each of the seven I-70 SIU Re-evaluations

Amended Record of Decision

FHWA-MO-EIS-09-01-FSEIS
Interstate 70 Corridor Kansas City to St. Louis, Missouri
Supplemental Environmental Impact Statement

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KENYATTA
TOLLIVER

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Date: 2023.12.05
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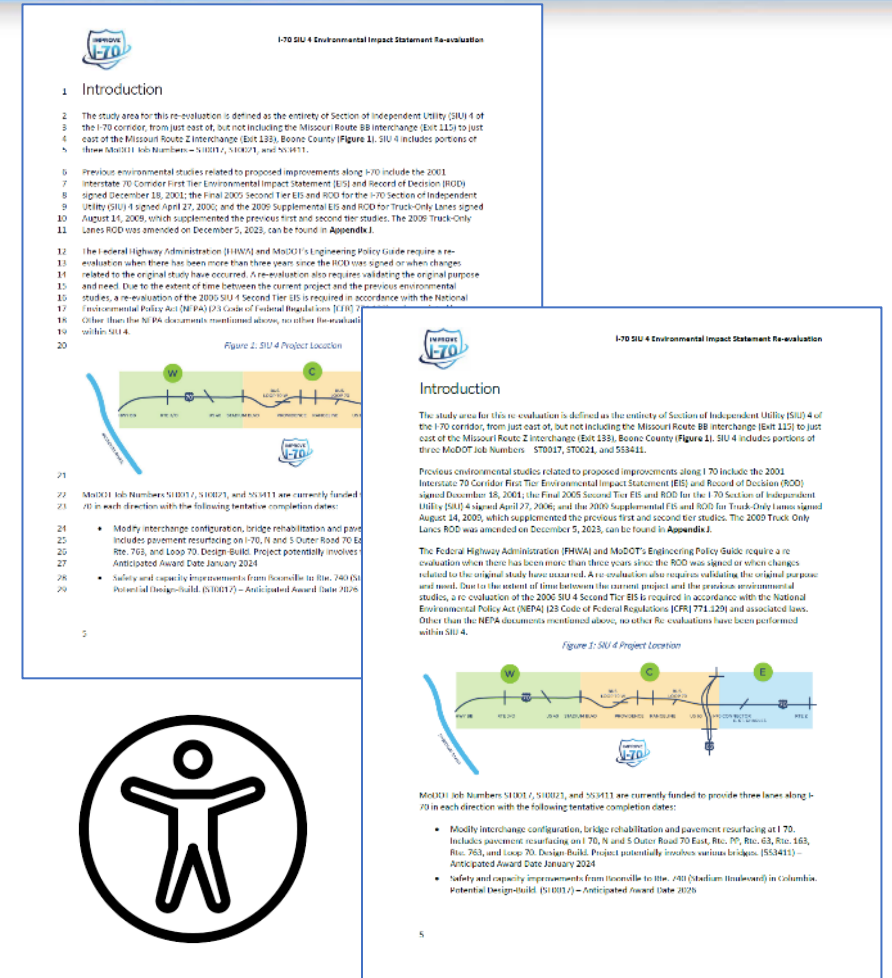
Approving Official: _____ Date: _____

Deputy Division Administrator
Federal Highway Administration



Environmental Challenges Related to NEPA Clearance to Allow Design-Build

- Document Accessibility is now a requirement for all Stakeholder facing project documents
- Ensures that Stakeholders with disabilities can properly comprehend project documents
- Must comply with Missouri's Information Communication Technology accessibility standards
(<https://at.mo.gov/it-access/ict-electronic-documents.html>)



Transition to Design-Build

Dan Oesch/MoDOT



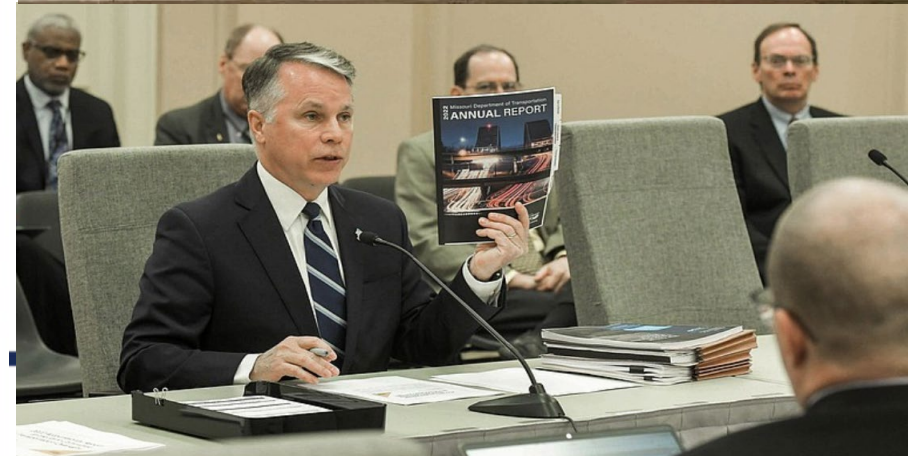
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Legislative Funding

Missouri governor signs off on I-70 expansion, state budget

As part of a \$2.8 billion plan, I-70 will be expanded to three lanes across Missouri — from suburban St. Louis to suburban Kansas City.



IMPROVE I-70



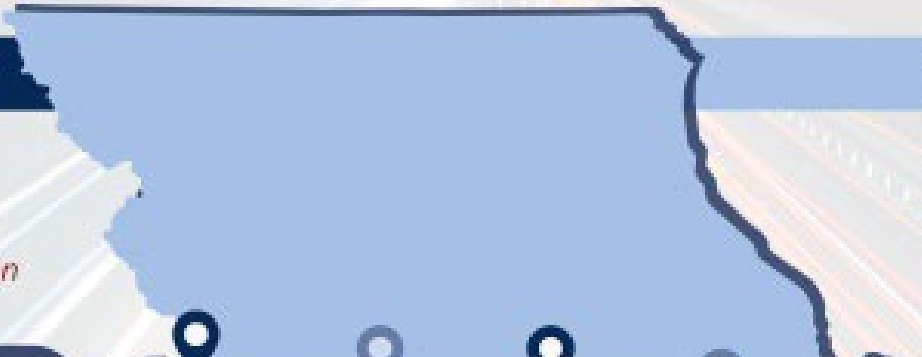
MAY 2023

Needed Capacity Improvements Blue Springs to Wentzville

- Awarded - \$271 million
- STIP Funded - \$236 million
- General Revenue - \$2.8 billion

Additional Capacity Improvements Kansas City and St. Louis

- Awarded - \$709 million
- STIP Funded - \$274 million



Kansas City

- \$257 million
Buck O'Neil Bridge
- \$145 million
Paseo to I-435
- \$6 million
Blue Ridge Boulevard



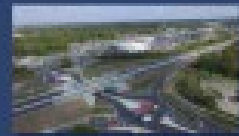
Kansas City Suburban

- Blue Springs to Odessa
19 miles
- \$0
 - \$6 million
 - \$233 million



Western Rural

- Odessa to Midway
83 miles
- \$240 million
Hocheport Bridge
 - \$0
 - \$1.1 billion



Columbia

- Midway to Route Z
13 miles
- \$0
 - \$185 million
 - \$410 million



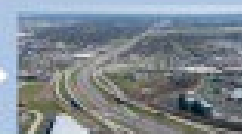
Eastern Rural

- Route Z to Warrenton
60 miles
- \$31 million
 - \$13 million
 - \$796 million



St. Louis Suburban

- Warrenton to Wentzville
20 miles
- \$0
 - \$32 million
 - \$216 million



St. Louis

- \$278 million
I-270
- \$112 million
Chain of Rocks
- \$62 million
Cave Springs to Fairgrounds
- \$77 million
I-70/I-64
- \$46 million
I-70/I-55/67

- Environmental near completion
- **1.1 million jobs** depend on I-70
- Workforce development opportunities
- I-70 carries **100 million tons of freight**

modot.org/improveI70



MoDOT's Improve I-70 Program

- Potential Design-Build delivery required an expedited survey of the of SIU 4
 - Additional firms added to complete on schedule
- MoDOT's Improve I-70 Program
 - Six projects – Blue Springs to Wentzville
 - Project 1 – Includes portions of SIU 4, 5, and 6
 - Required NEPA Re-evaluation of SIUs 5 and 6
 - Including full survey within the Project 1 limits




Transitioning from NEPA to Design-Build Delivery

- Design-Build procurement for Project 1
 - Process
 - **July 10th 2023 – Improve I-70 Industry Meeting**
 - **August 24th – Industry Meeting Project #1 – Columbia to Kingdom City**
 - **August 28th to September 7th – Public Meetings along Corridor**
 - **November 14th – Industry Meeting Project #2 – Warrenton to Wentzville**
 - **December 4th - DBE Mixer Project #1**
 - **January 25th – RFP's Due Project #1**
 - **February 14th – Commission Meeting – Award Project #1**
 - Selection of Contractor team
 - Successful Proposal Additions





Existing



New underpass promotes local connectivity and establishes additional North-South connection

Roundabouts enhance access to I-70

Multi-modal facilities enhance access and increase safety

Proposed

Questions?



Thank You!

