

C-List Categorical Exclusion

Does the action described in this "c-list" Categorical Exclusion (CE) exceed one or more of the thresholds described in the PCE Agreement, thereby requiring review and approval by the Federal Highway Administration (FHWA)?

No

Interstate 40

From Levee Road Overhead to Hollywood Street Overhead

Memphis

Shelby County

PIN 130352.00

Submitted Pursuant to the National Environmental Policy Act of 1969, 42 U.S.C. 4332(2)

Document Approval

By signing below, the authorized signatory concurs that this document is in compliance with all applicable environmental laws, regulations and procedures. The authorized signatory has reviewed and verified the document's quality, accuracy, and completeness and that all source material has been compiled and included in the attachments and technical appendices.

Tennessee Department of Transportation

Project Information

General Information

Route: Interstate 40
Termini: From Levee Road Overhead to Hollywood Street Overhead
Municipality: Memphis
County: Shelby County
PIN: 130352.00

Plans: Preliminary Plans
Date of Plans: 03/12/2024
Type of Work Resurfacing

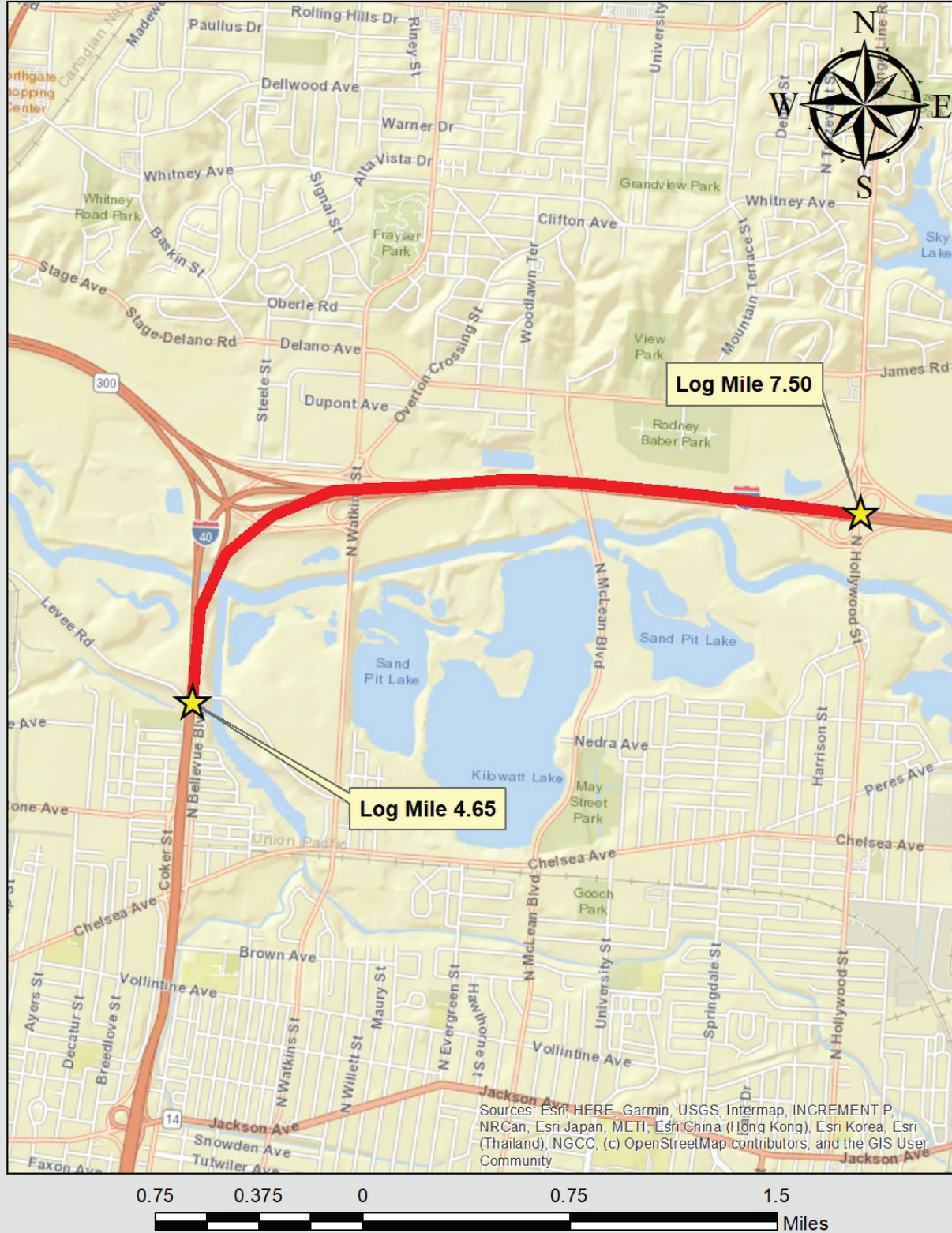
Project Funding

Planning Area: Memphis Metropolitan Planning Organization (MPO)
STIP/TIP: TN-NHPP-2014-04 - National Highway System Preservation and Operation Grouping

Funding Source	Preliminary Engineering	Right-of-Way	Construction
Federal	NH-I-40-1(370)	N/A	N/A
State	Resurf: 79I040-F8-007 PE-D: 79I040-S1-011	N/A	N/A

Project Location

Interstate 40
From Levee Road Overhead to Hollywood Street Overhead
LM 4.65 to LM 7.50
Shelby County
PIN 130352.00



Project Overview

Introduction

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), proposes to implement resurfacing improvements to Interstate 40 from log mile (LM) 4.56 to LM 7.50 in the City of Memphis, Shelby County, Tennessee.

This federal-aid highway project qualifies for a Categorical Exclusion under 23 CFR 771.117(c)(26), "Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes), if the action meets the constraints in paragraph (e) of this section." The project does meet the constraints of 23 CFR 771.117(e).

Background

Preliminary Plans dated 03/12/2024 were developed and serve as the focus of this evaluation. The Preliminary Plans are included in the Technical Appendices.

Additional details about the need for the project, as well as the proposed scope of work was provided via email on 07/15/2024. Within the project limits along I-40, there are 12 ramp connections, 10 bridges, and several overhead signs. The project correspondence is included in the Technical Appendices.

The proposed project is included in TDOT's 10-Year plan, which includes projects funded through the Transportation Modernization Act (TMA).

Project Development

Need

In Shelby County, the I-40 roadway between the Levee Road overpass and the interchange with Hollywood Street (approximately 2.85-miles) consists of concrete pavement and was opened to instate traffic over 40 years ago. The condition of the concrete pavement has deteriorated due to Alkalai Silica Reactivity (ASR), a chemical reaction in the concrete that causes distress, faulting, and pop-outs. The proposed pavement preservation project is needed to address roadway wear and spalling on I-40 in the City of Memphis, Shelby County, TN, which has occurred due to age and general use of the facility.

Purpose

The purpose of the proposed project is to provide pavement preservation on I-40 in the City of Memphis, Shelby County, TN.

Range of Alternatives

Other than the selected design, were any alternative build designs developed for this project?

No

No-Build

In the development of design solutions that address the needs outlined above and achieve the purpose of the project, TDOT evaluated the potential consequences should the project not be implemented. This option, known as the No-Build alternative, assumed the continuation of current conditions and set the baseline from which the impacts of the selected design were compared. The No-Build Alternative was not selected, as it does not meet the purpose and need of the proposed project.

Public Involvement

Has there been any public involvement for the project?

No

Project Design

Existing Conditions and Layout

In the proposed project location, I-40 is classified as an urban interstate. The 2023 Annual Average Daily Traffic (AADT) is 118,832 between LM 3.93 and LM 5.70 and is 112,283 between LM 5.70 and 7.53. The Enhanced Tennessee Roadway Information Management System (E-TRIMS) indicates that between LM 4.56 and LM 7.50, I-40 consists of six, 12-ft wide travel lanes (three lanes in each direction) divided by a variable width median. The inside shoulders vary from 7-ft to 10-ft in and the outside shoulders vary from 6-ft to 12-ft. Additional 12-ft wide auxiliary lanes are also present along the route to allow access to exit/entry ramps.

Proposed Project Description

As described in the Preliminary Plans, the proposed project includes the following scope of work:

1. Full depth replacement of the existing pavement from LM 4.56 to 7.50.
2. Bridge repair work for four structures within the project limits. Bridge ID#s: 79I00400059, 79I00400060, 79I00400069, and 79I00400070. The bridge repairs will consist of cold planing 1.25-inches of the existing asphalt and replacing with 1.25-inches of new asphalt.
3. Removal of existing curb & gutter and drainage installation for Loop Ramps N, H, and D.
4. Construction of guardrail and the application of pavement markings and the installation of traffic control devices.

As described in the project correspondence dated 07/15/2024, the project scope will consist of rubblizing the existing concrete pavement and repaving with an asphalt surface, drainage improvements at three ramps.

Proposed Typical Section

As described above, the existing typical section of I-40 consists of six, 12-ft wide travel lanes (three lanes in each direction) divided by a variable width median. The inside shoulders vary from 7-ft to 10-ft and the outside shoulders vary from 6-ft to 12-ft. Additional 12-ft wide auxiliary lanes are also present along the route to allow access to exit/entry ramps.

The proposed project will not alter the existing typical section.

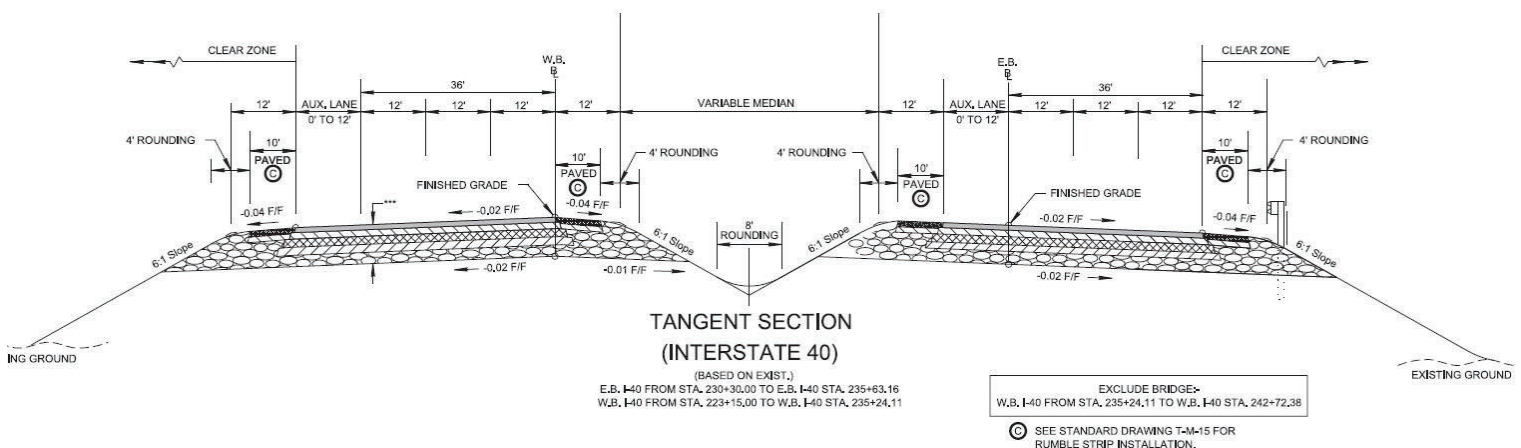
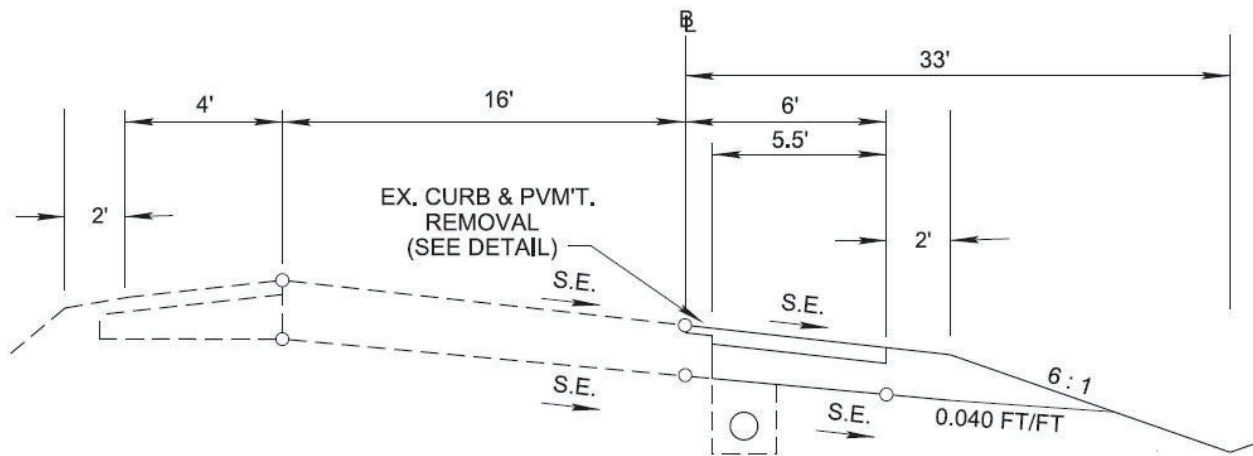


Figure 1. Existing and proposed typical section. From Sheet 2B, Preliminary Plans (3/12/2024).

In addition, the project involves work at three Loop Ramps:

1. Ramp N at the entry ramp for I-40 eastbound from N. Watkins St. southbound
2. Ramp D at the entry ramp for I-40 westbound from N. Hollywood St. northbound
3. Ramp H at the entry ramp for I-40 eastbound from N. Hollywood St. southbound

The existing typical section consists of one 16-ft wide travel lane, a 4-ft outside shoulder, and a 6-ft outside shoulder. The proposed project will remove the existing curb & gutter but will not otherwise alter the typical section.



LOOP RAMP MODIFICATION

(BASED ON EXIST.)

RAMP X B.L. FROM STA. 263+78.23 TO STA. 278+48.14
RAMP X B.L. FROM STA. 263+78.23 TO STA. 278+48.14
RAMP X B.L. FROM STA. 263+78.23 TO STA. 278+48.14

Figure 2. From Sheet 2G5, Preliminary Plans (3/12/2024).

Right-of-Way

Does this project require the acquisition of right-of-way or easements?

No

Relocations

Will this project result in residential, business or non-profit relocations?

No

Changes in Access Control

Will changes in access control permanently impact the functional utility of any adjacent parcels?

No

Traffic Control Measures

At this time, are traffic control measures and temporary access information available?

Yes

Will this project involve traffic control measures that may result in major traffic disruptions?

No

Traffic Control Plans dated 03/08/2024 were included with the Preliminary Plans. Traffic control will consist of two phases:

- During Phase 1, the work zone will be in the outside lane and shoulders of I-40 and traffic will be maintained in two to three lanes along the inside lanes and shoulders.
- During Phase 2, the work zone will be in the inside lane and shoulders of I-40 and traffic will be maintained in two to three lanes along the outside lanes and shoulders.

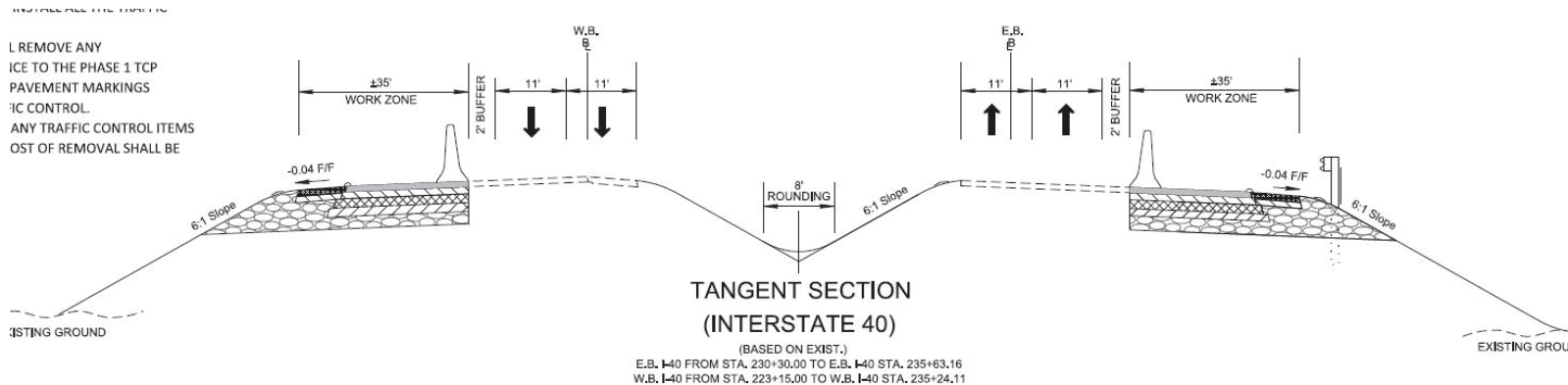


Figure 3. Phase 1 traffic control. From Sheet T1B, Traffic Control Plans (03/08/2024).

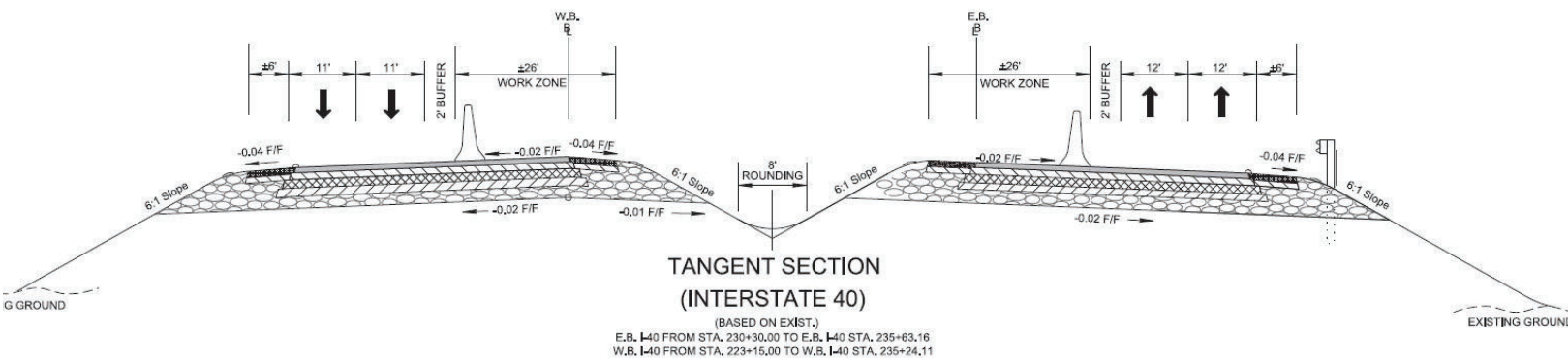


Figure 4. Phase 2 traffic control. From Sheet T1C, Traffic Control Plans (03/08/2024).

Water Resources

Are there any water resources impacted within the project area?

No

Species Coordination

U.S. Fish and Wildlife Service (USFWS):

On 07/09/2024, the TDOT Ecology Section confirmed that the 2022 Grouped Programmatic No Effect Activities Agreement is applicable to this project.

Tennessee Wildlife Resources Agency (TWRA):

On 07/09/2024, the TDOT Ecology Section confirmed that the 2022 TWRA Memorandum of Agreement is applicable to this project.

Tennessee Department of Environment and Conservation (TDEC):

On 07/09/2024, the TDOT Ecology Section confirmed that Condition #2 of the 2023 TDEC-DNA Memorandum of Agreement is applicable to this project.

The Ecology ESR response, 2022 GPNEA, 2022 TWRA MOA, and 2023 TDEC-DNA MOA are included in the Technical Appendices.

Floodplain Management

Flood Zone: Zone AE (Cross Hatched) - Floodway Area in Zone AE

Portions of this project impact a Federal Emergency Management Agency (FEMA) defined floodplain where a floodway is defined. The project is located on Flood Insurance Rate Maps (FIRM) in Shelby County, Panels 260, 270, and 280 of 635, Maps # 47157C0260F, 47157C0270F, and 47157C0280F. A No Rise Certification or a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) will be submitted for the project and it will be consistent with the Memorandum of Understanding (MOU) between Federal Highway Administration (FHWA) and FEMA. The design of the roadway system will be consistent with the Memorandum of Understanding (MOU) between FHWA and FEMA and with the floodplain management criteria set forth in the National Flood Insurance Regulations (NFIR) of Title 44 of the Code of Federal Regulations (CFR). It will be consistent with the requirements of floodplain management guidelines for implementing Executive Order 11988 and FHWA guidelines 23 CFR 650A. A portion of the FEMA FIRM is included in the Technical Appendices.



Air Quality

Transportation Conformity:

On 07/02/2024, the TDOT Air Quality and Noise Section stated: "The project is in the Memphis/Shelby County ozone maintenance area. However, this resurfacing project is state-funded and not regionally significant. Therefore, the project is not subject to conformity."

Mobile Source Air Toxics (MSAT):

In the same response, the TDOT Air Quality and Noise Section stated: "This project is state-funded and would qualify as qualify as a categorical exclusion under 23 CFR 771.117. Therefore, a MSATs evaluation is not needed."

The Air Quality and Noise ESR response is included in the Technical Appendices.

Noise

In accordance with FHWA requirements and TDOT's Noise Policy this project is determined to be **Type III**

This project is Type III in accordance with the FHWA noise regulation in 23 CFR 772 and TDOT's noise policy; therefore, a noise study is not needed.

Farmland

Is this project exempt from the provisions of the Farmland Protection Policy Act (FPPA)? **Yes**

FPPA Exemption: Small Acreage (10 acres or less per linear mile)

Section 4(f)

Does this project involve the use of property protected by Section 4(f) (49 USC 303)? **No**

Section 6(f)

Does this project involve the use of property assisted by the L&WCF? **No**

Cultural Resources

Are any Agreements/Exemptions regarding Cultural Resources applicable to this project? Yes

Agreement/Exemption: 2005 Advisory Council on Historic Preservation (ACHP) Interstate Exemption

Native American Consultation

Does this project require Native American consultation? Yes

Native American Consultation was requested on 07/03/2024.

Native American Consultation					
Sent	Response		Sent	Response	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Absentee Shawnee Tribe of Indians in Oklahoma	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Muscogee (Creek) Nation
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cherokee Nation	<input type="checkbox"/>	<input type="checkbox"/>	Poarch Band of Creek Indians
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Chickasaw Nation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Quapaw Nation
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Choctaw Nation of Oklahoma	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Shawnee Tribe
<input type="checkbox"/>	<input type="checkbox"/>	Eastern Band of Cherokee Indians	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Thlopthlocco Tribal Town
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Eastern Shawnee Tribe of Oklahoma	<input checked="" type="checkbox"/>	<input type="checkbox"/>	United Keetoowah Band of Cherokee Indians in Oklahoma
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Kialegee Tribal Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Jena Band of Choctaw Indians
<input type="checkbox"/>	<input type="checkbox"/>	Other	<input type="checkbox"/>	<input type="checkbox"/>	Other

Chickasaw Nation:

The response was received on 07/25/2024.
The Chickasaw Nation responded and accepted the invitation to be a consulting party on July 25, 2024.

Quapaw Nation:

The response was received on 07/09/2024.
The Quapaw Nation responded with a finding of "no effect" to known properties of significance. The Quapaw Nation requested to be contacted in the event of an inadvertent archaeological finding.

The NAC ESR response was received on 08/05/2024: "To date, no other responses have been received. TDOT will re-initiate consultation if additional cultural resources studies are required or if archaeological materials or human remains are discovered during construction. All NAC correspondence is on file with TDOT Cultural Resources."
The NAC ESR response is included in the Technical Appendices.

Are any EJ populations present within the project study area?

Yes

Are any disproportionately high and adverse effects on EJ populations anticipated as a result of this project?

No

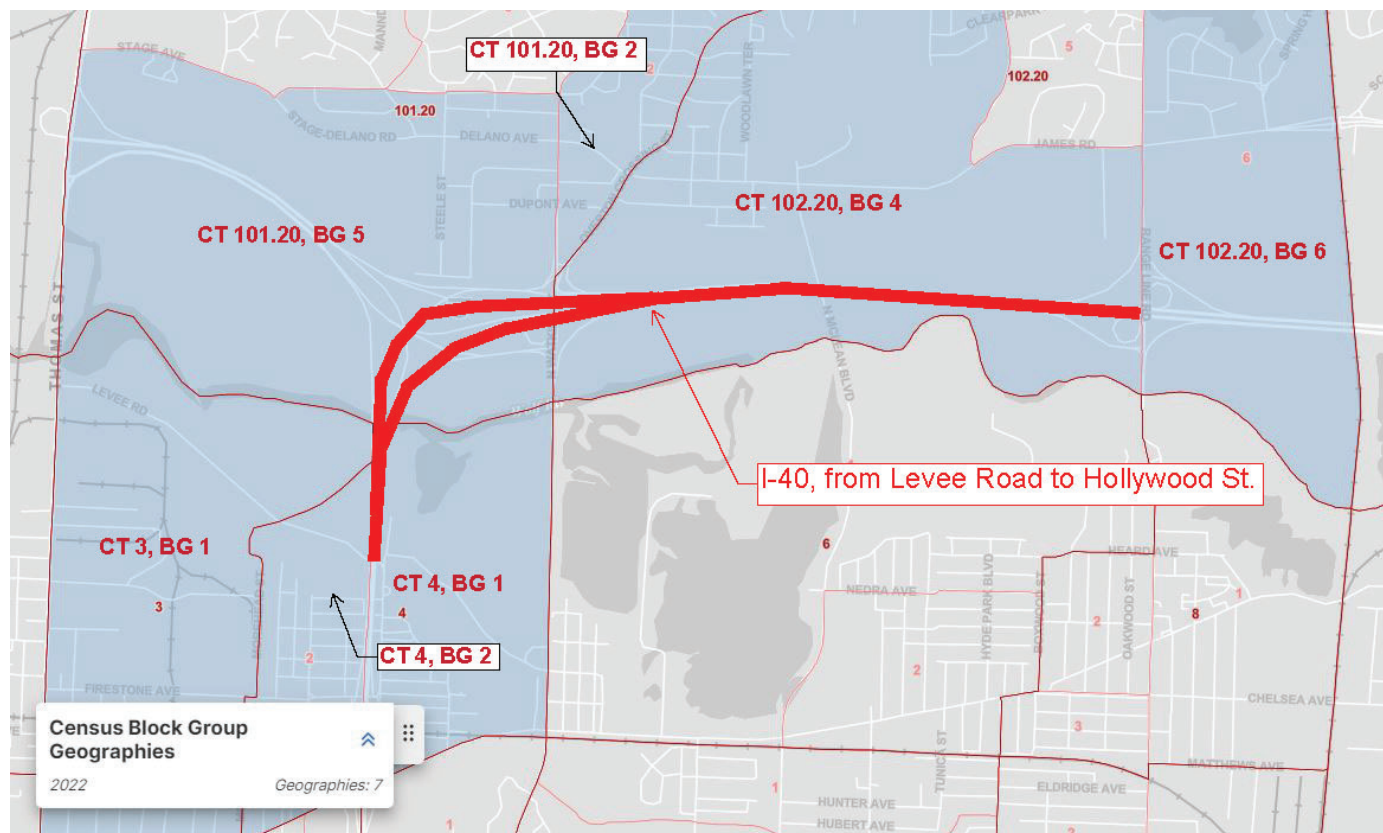


Figure 5. Project Location map with 2018-2022 ACS 5-Year estimates boundaries.

Table 1. Environmental Justice Table

Environmental Justice Analysis Tables								
Minority Populations								
Census Tract (CT)/ Block Group (BG)	CT 3 BG 1	CT 4 BG 1	CT 4 BG 2	CT 101.20 BG 2	CT 101.20 BG 5	CT 102.20 BG 4	CT 102.20 BG 6	Shelby Co.
% Minority/Non-White	99.7%	98.4%	99.4%	95.8%	93.8%	87.0%	90.3%	65.5%
Exceeds County Average by 10% or More	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Is BG Population Avg. >50%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Meet EJ Criteria?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Low-Income Populations								
Census Tract (CT)/ Block Group (BG)	CT 3 BG 1	CT 4 BG 1	CT 4 BG 2	CT 101.20 BG 2	CT 101.20 BG 5	CT 102.20 BG 4	CT 102.20 BG 6	Shelby Co.
% Low-Income/Below Poverty Line	29.9%	29.0%	48.7%	41.0%	57.2%	15.0%	6.9%	18.1%
Exceeds County Average by 10% or More	Yes	Yes	Yes	Yes	Yes	No	No	
Is BG Population Avg. >50%	No	No	No	No	Yes	No	No	
Meet EJ Criteria?	Yes	Yes	Yes	Yes	Yes	No	No	

Source: U.S. Census Bureau, 2018-2022 American Community Survey (ACS) 5-Year Estimates. ACS data was accessed and reviewed on 07/03/2024 via the U.S. Census Bureau website.

The EJ Analysis for the Selected Alternative was conducted using U.S. Census Bureau data from the 2018-2022 American Community Survey (ACS) 5-Year Estimates database (Appendix A). This analysis was completed to identify the census block groups within the limits of the Selected Alternative and to determine whether the minority or low-income populations present within the census block groups are considered EJ populations.

This analysis identified the following seven census block groups within the limits of the Selected Alternative (see Figure 2):

- Census Tract (CT) 3, Block Group (BG) 1
- CT 4, BG 1
- CT 4, BG 2
- CT 101.20, BG 2
- CT 101.20, BG 5
- CT 102.20, BG 4
- CT 102.20, BG 6

The Environmental Justice Analysis Table below displays population data for the block groups within the limits of the Selected Alternative, comparing their respective minority population and low-income population percentages to that of each county in which the project is located, as a whole.

For population analysis, TDOT assumes, according to FHWA Order 6640.23A, FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations:

- A minority population includes any readily identifiable group of minority persons who live in geographic proximity and who will be similarly affected by a proposed FHWA program, policy, or activity. Minority populations include Black or African American, Hispanic or Latino, Asian American, American Indian or Alaskan Native, and Native Hawaiian or Pacific Islander individuals.
- A low-income population includes any readily identifiable group of low-income persons who live in geographic proximity and who will be similarly affected by a proposed FHWA program, policy, or activity. Low-income populations include individuals whose median household income is at or below the poverty guidelines published yearly by the U.S. Department of Health and Human Services.

For population analysis, TDOT assumes that persons living in "geographic proximity" reside within the same US Census block group. Where the concentration of minority or low-income individuals is a readily identifiable group, this indicates the presence of an EJ population. TDOT has developed two threshold indicators to identify and report minority and low-income populations (EJ populations) present within a project study area. The TDOT thresholds include:

1. the percent of the block group population that is minority and/or low-income exceeds the county percentage by 10 percentage points or more and/or
2. minority and/or low-income individuals within the block group account for 50 percent or more of the overall block group population.

Minority Populations

As shown in the table above, the 2018-2022 ACS 5-Year Estimates data shows that the minority population percentage for Shelby County is 65.5% of the population. The minority population percentages range from 87.0% (CT 102.20, BG 4) to 99.7% (CT 3, BG 1).

Based on this EJ analysis, all seven of the identified BGs contain minority populations percentages that exceed the county average by more than 10%. In addition, all seven BGs contain minority population averages that exceed 50% of their total BG populations. Therefore, all seven BGs within the limits of the Selected Alternative are considered to contain EJ minority populations.

Low-Income Populations

As shown in the table above, the 2018-2022 ACS 5-Year Estimates data shows that the low-income population percentage for Shelby County is 18.1% of the population. The low-income population percentages range from 6.9% (CT 102.20, BG 6) to 57.2% (CT 101.20, BG 5).

Based on this EJ analysis, five of the identified BGs (CT 3, BG 1; CT 4, BG 1; CT 4, BG 2; CT 101.20, BG 2; and CT 101.20, BG 5) contain minority populations percentages that exceed the county average by more than 10%. In addition, one BG (CT 101.20, BG 5) exceeds 50% or more of the overall BG population. Therefore, five BGs within the limits of the Selected Alternative are considered to have low-income EJ populations.

Conclusion

In summary, based on this EJ analysis completed for the C-List CE, all seven census block groups contain minority and/or low-income population percentages that exceed the county average by 10 percentage points or more. Seven minority EJ populations were identified from: CT 3, BG 1; CT 4, BG 1; CT 4, BG 2; CT 101.20, BG 2; CT 101.20, BG 5; CT 102.20, BG 4; and CT 102.20, BG 6. All block groups' minority population percentages exceed 50% of their total population. Five low-income EJ populations were identified from: CT 3, BG 1; CT 4, BG 1; CT 4, BG 2; CT 101.20, BG 2; and CT 101.20, BG 5. TDOT acknowledges that minority and low-income persons are present within the project area. However, the proposed project, does not have the potential to cause disproportionate or adverse effects to EJ populations when compared to the impacts borne by the overall population in and around the limits of the Selected Alternative. While some adverse impacts are anticipated due to construction and temporary impacts to traffic, the improvements will be shared amongst all populations. Both EJ and non-EJ populations would receive benefits from the project, including pavement preservation and improved drainage. TDOT will comply with Title VI to ensure that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

On 07/10/2024, the TDOT Civil Rights Division stated: "Actions and steps taken are found to be in accordance with the mandates of Title VI of the 1964 Civil Rights Act, the National Environmental Policy Act of 1969, and 42.U.S.C. 4332(2), and Executive Order 12898. There does not appear to be any Title VI nor Environmental Justice issues."

The Environmental Justice coordination materials are included in the Technical Appendices.

Hazardous Materials

Does the project involve any hazardous material sites? No

On 06/26/2024, the TDOT Hazardous Materials Section stated: "Based on a review of the Preliminary Plans dated 12 March 2024, these resurfacing will be completed within the present right-of-way, and therefore do not require additional hazardous materials studies. No bridge repair work is indicated in these plans, only paving. No asbestos bridge surveys are required."

The Hazardous Materials ESR response is included in the Technical Appendices.

Multimodal Transportation

Does this project include accommodations for bicycles and pedestrians? Yes

On 08/23/2024, the TDOT Multimodal Transportation Resources Division responded: "This project includes 3 crosswalks at interstate on/off ramps where the ramps cross pedestrian paths. See TDOT Multimodal Policy VII.Procedures.A.1 through 7."

The Multimodal ESR response is included in the Technical Appendices.

Environmental Commitments

Does this project involve any environmental commitments? No

Additional Environmental Issues

Are there any additional environmental concerns involved with this project? No

Conclusion

Review Determination

Determination: (c)(26) - meets (e)

This federal-aid highway project has been determined to be a "C-List" CE pursuant to 23 CFR 771.117(c)(26), "Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes), if the action meets the constraints in paragraph (e) of this section." The project does meet the constraints of 23 CFR 771.117(e).

Reference Material

All source material used in support of the information and conclusions presented in this document are included in the technical appendices. The technical appendices are compiled as a separate document and include information on funding, agency concurrence, applicable agency agreements, special commitment support, project plans, technical reviews, reports and any other additional information.

Preparer Certification

By signing below, you certify that this document has been prepared in compliance with all applicable environmental laws, regulations and procedures. You can attest to the document's quality, accuracy, and completeness, and that all source material has been compiled and included in the technical appendices.

Document Preparer

Acronyms

AADT	Annual Average Daily Traffic	NEPA	National Environmental Policy Act
ADA	Americans with Disabilities Act	NRCS	Natural Resources Conservation Service
APE	Area of Potential Effect	NRHP	National Register of Historic Places
BMP	Best Management Practice	PCE	Programmatic Categorical Exclusion
CAA	Clean Air Act	PIN	Project Identification Number
CE	Categorical Exclusion	PM	Particulate Matter
CEQ	Council on Environmental Quality	PND	Pond
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
CMAQ	Congestion Mitigation and Air Quality	ROD	Record of Decision
DEIS	Draft Environmental Impact Statement	ROW	Right-of-Way
EA	Environmental Assessment	RPO	Rural Planning Organization
EIS	Environmental Impact Statement	SIP	State Implementation Plan
EJ	Environmental Justice	SNK	Sinkhole
EPA	Environmental Protection Agency	SR	State Route
EPH	Ephemeral Stream	STIP	State Transportation Improvement Program
FEIS	Final Environmental Impact Statement	STR	Stream
FEMA	Federal Emergency Management Agency	TDEC	TN Department of Environment and Conservation
FHWA	Federal Highway Administration	TDOT	Tennessee Department of Transportation
FIRM	Flood Insurance Rate Map	TIP	Transportation Improvement Program
FONSI	Finding of No Significant Impact	SHPO	State Historic Preservation Office
FPPA	Farmland Protection Policy Act	TPO	Transportation Planning Organization
GHG	Greenhouse Gas	TVA	Tennessee Valley Authority
GIS	Geographic Information System	TWRA	Tennessee Wildlife Resources Agency
IAC	Interagency Consultation	USACE	U.S. Army Corps of Engineers
LWCF	Land and Water Conservation Fund	USDOT	U.S. Department of Transportation
LOS	Level of Service	USFWS	U.S. Fish and Wildlife Service
MOA	Memorandum of Agreement	UST	Underground Storage Tank
MOU	Memorandum of Understanding	VMT	Vehicle Miles Traveled
MPO	Metropolitan Planning Organization	VPD	Vehicles Per Day
MSAT	Mobile Source Air Toxics	WWC	Wet Weather Conveyance