

ENVIRONMENTAL ASSESSMENT

TDOT PIN 124121.00

State Route (SR) 170

From SR-62 Interchange to SR-9 (US-25W)
Anderson County, Tennessee

Tennessee Department of Transportation

September 2025

State Route 170
From SR-62 Interchange to SR-9 (US-25W)
Anderson County, Tennessee
TDOT PIN 124121.00

ENVIRONMENTAL ASSESSMENT

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

by

Lead Agencies:

U.S. Department of Transportation
Federal Highway Administration
and
Tennessee Department of Transportation

Cooperating Agencies:

U.S. Army Corps of Engineers, Nashville District
Tennessee Valley Authority



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10/10/25

Federal Highway Administration

Date

For additional information concerning this document, contact:

Boday Borres, P.E.
Acting Division Administrator
FHWA Tennessee Division
404 BNA Drive, Building 200, Suite 508
Nashville, Tennessee 37217
(615) 781-5770

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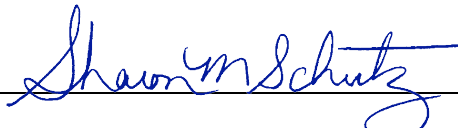
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Tennessee Valley Authority



Tennessee Department of Transportation

9/26/2025

Date

For additional information concerning this document, contact:

Sharon Schutz, P.E.
Director
TDOT Environmental Division
James K. Polk Building, Suite 900
505 Deaderick Street
Nashville, Tennessee 37243
(615) 741-3655

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Acronyms and Abbreviations

AADT	Annual Average Daily Traffic
ACM	Asbestos Containing Material
APE	Area of Potential Effects
ARAP	Aquatic Resource Alteration Permit
CFR	Code of Federal Regulations
dBA	Decibels A-weighted
DHV	Design Hour Volume
DNA	Department of Natural Area
EA	Environmental Assessment
ETSA	Environmental Technical Study Area
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
IMPROVE	Improving Manufacturing, Public Roads and Opportunities for a Vibrant Economy
L.M.	Log Mile
LOS	Level of Service
LWCF	Land and Water Conservation Fund Act
Mph	miles per hour
NAA	Noise Analysis Areas
NEPA	National Environmental Policy Act
NOA	Notice of Availability
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PICP	Public Involvement and Agency Coordination Plan
PIN	Project Information Number
PIP	Public Involvement Plan
ROW	Right-of-Way
RPO	Rural Planning Organization
SR	State Route
STIP	State Transportation Improvement Program
SWPPP	Storm Water Pollution Prevention Plan
TDEC	Tennessee Department of Environment and Conservation
TDOT	Tennessee Department of Transportation
TESA	Tennessee Environmental Streamlining Agreement
TMA	Transportation Modernization Act
TPR	Transportation Planning Report
TVA	Tennessee Valley Authority
TWLT	Two-Way Left-Turn Lane
US	United States Route
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
UT	University of Tennessee
VPD	Vehicles Per Day
WWC	Wet Weather Conveyance

Environmental Commitments

Cultural Resources

1. EDAC001. People's Cemetery: Avoid People's Cemetery with at least a 10-foot Buffer.

Ecological Resources

2. EDEC001. All necessary tree clearing within project limits will be completed between November 16 and March 31.

Section 4(f) Resources

3. EDPO001. Melton Lake Greenway: Prior to construction, TDOT will coordinate with the Officials with Jurisdiction (OWJ), the City of Oak Ridge and Tennessee Valley Authority (TVA), for Melton Lake Greenway to develop and implement mitigation measures to minimize or avoid (where possible) the extent and duration of temporary closures of the greenway during construction. All agreed-upon mitigation measures will be documented and incorporated into the project's construction plans and specifications. Accommodations for adequate notification to the public would be provided prior to any disruption of access.

1. Purpose and Need

1.1 Introduction

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), proposes to widen and realign State Route (SR)-170 (Edgemoor Road) from the SR-62 (Oak Ridge Highway) interchange (Log Mile [L.M.] 0.00) to SR-9 (United States [US]-25W, Clinton Highway) (L.M. 6.18) in Anderson County, Tennessee, for approximately 6.18 miles (see Figure 1: Project Location Map).

Because the proposed project is being designed and constructed utilizing federal transportation dollars, the project is subject to the requirements of the National Environmental Policy Act (NEPA). TDOT and FHWA are preparing an Environmental Assessment (EA) in accordance with NEPA to identify and evaluate the environmental effects of the proposed project and to identify measures to minimize harm.

This EA has been prepared in accordance with FHWA's implementing regulations for NEPA (Title 42 of the United States Code 4332¹ and 23 Code of Federal Regulations (CFR) 771,² respectively). FHWA and TDOT are the Lead Agencies for the proposed project; U.S. Army Corps of Engineers (USACE), Nashville District and Tennessee Valley Authority (TVA) have been identified as Cooperating Agencies.

1.2 Project Context

The proposed project is located in the southeastern part of Anderson County, Tennessee, just north of Melton Hill Lake, east of Oak Ridge, and northwest of Knoxville. Anderson County is situated in the northern part of East Tennessee. The southwestern section of the project is within the town of Oak Ridge, while the northeastern section, northeast of the Clinch River, is in the unincorporated community of Claxton. Knox County lies to the south and east of the project area.

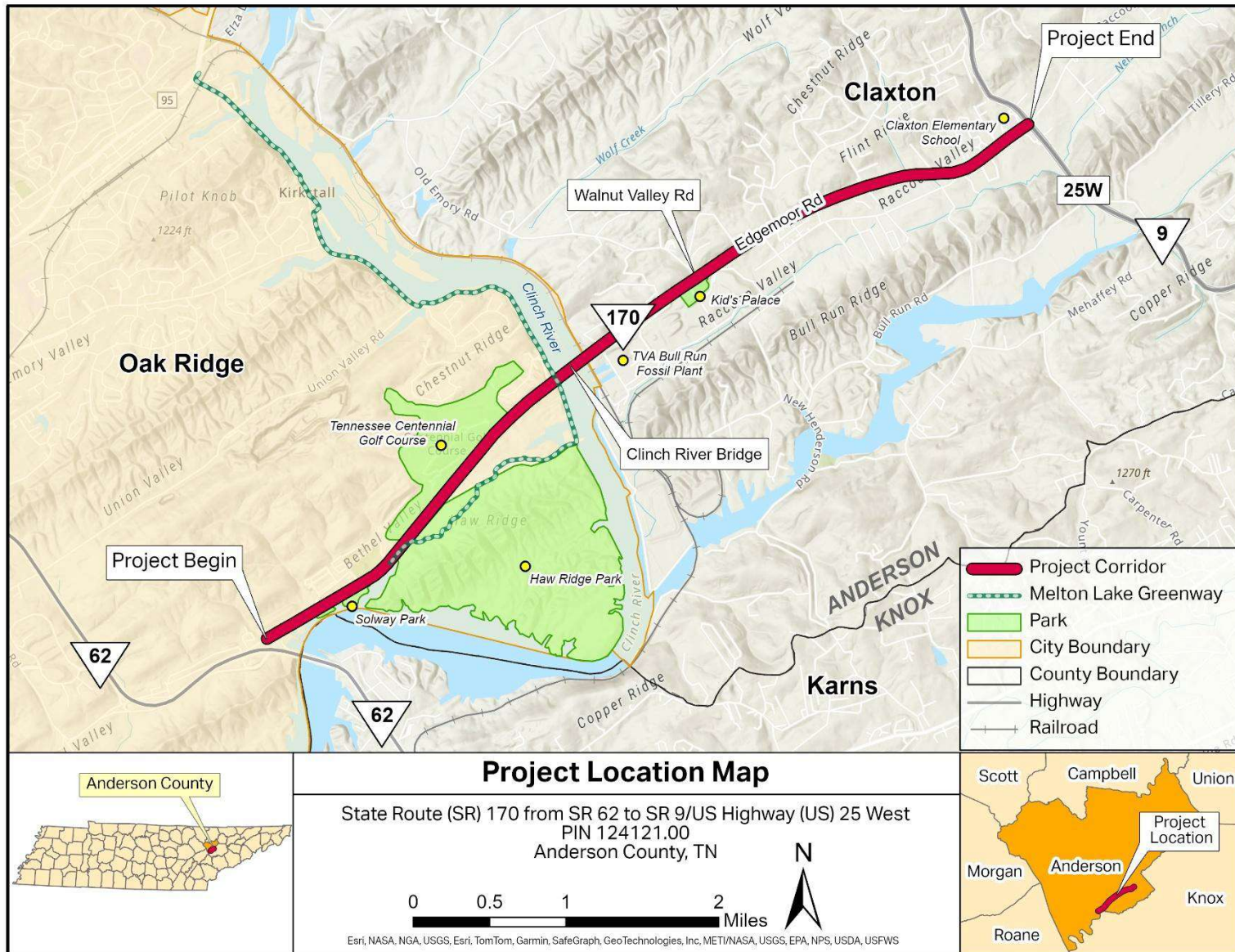
SR-170, which is classified as an urban minor arterial within the project area, serves local traffic and connects SR-62 with SR-9 (US-25W). The roadway also connects the City of Oak Ridge across the Clinch River to the unincorporated community of Claxton.

The project area located west of the Clinch River is primarily rural, featuring a few residential communities, parks with trails, recreational facilities, and a golf course. As SR-170 moves eastward and crosses the Clinch River, the land use becomes more urbanized. The TVA's Bull Run Fossil Plant is located directly at the eastern end of the bridge, and residential communities and businesses become more frequent along the roadway as the project extends toward Claxton.

¹ 42 U.S.C. Section 4332, <https://www.govinfo.gov/app/details/USCODE-2022-title42/USCODE-2022-title42-chap55-subchapl-sec4332>

² 23 CFR 771, <https://www.ecfr.gov/current/title-23/chapter-I/subchapter-H/part-771>

Figure 1: Project Location Map



1.3 Project History

In August 2004, TDOT completed a feasibility study for the SR-170 corridor to review the possibility of widening SR-170 from a two-lane to a four-lane facility. The feasibility study was conducted in response to public concerns about increasing traffic volumes along SR-170/Edgemoor Road. In addition to reviewing the option of widening SR-170 to a four-lane section, the study also recommended consideration of a five-lane section with a center two-way left-turn lane (TWLTL) and the replacement of the Clinch River Bridge. Based on the assessment of the feasibility study, the Rural Planning Organization (RPO) Executive Board requested the SR-170 corridor be listed as a high-priority corridor to move the planning process forward.

In 2011, a Transportation Planning Report (TPR)³ was developed to evaluate the existing and future traffic needs for the SR-170 corridor, develop the preliminary purpose and need to improve the existing route, and assess the feasibility of proposed build options to satisfy the identified project needs and purpose (see *Appendix A: STIP, Project Background, and Line and Grade Plans*). The study area consisted of the 6.18-mile segment of SR-170 between SR-62 and SR-9 (US-25W), and considered three preliminary design options:

- **Option A (No-Build):** No modifications or improvements are made except for other programmed improvements and routine maintenance and safety upgrades.
- **Option B (Widening):** Improvement to a five-lane roadway section and a new structure over the Clinch River Bridge.
- **Option C (Spot Improvements):** Intersection improvements along SR-170 at Melton Lake Drive, Walnut Valley Road, Old Emory Road, and New Henderson Road.

The 2011 TPR dismissed Options A and C from further consideration, concluding that neither adequately addressed the study's purpose and need. Option A, the No-Build option, failed to resolve the identified capacity and operational issues along the route. Option C proposed spot improvements at four key intersections but was ultimately deemed unfeasible due to constructability and operational concerns. The TPR determined that Option B best met the study's objectives and recommended it for further evaluation.

In 2022, TDOT developed a TPR Update⁴ for the corridor that considered the No-Build option and a modified version of Option B (henceforth referred to as the Build Alternative) that would consist of widening SR-170 to four lanes with a raised median west of Walnut Valley Road and to five lanes including a center TWLTL east of Walnut Valley Road (see *Appendix A: STIP, Project Background, and Line and Grade Plans*).

In the 2022 update, with input from the City of Oak Ridge identifying preference for a median, Option B was modified to consist of a 4-lane roadway with left and right turns as needed west of Walnut Valley Road and a 5-lane roadway east of Walnut Valley Road.

Following the development of the 2022 TPR Update, the project was divided into two Design Segments for construction purposes:

- **PIN 124121.01 (Design Segment 1)** covers SR-170 from SR-62 (Oak Ridge Highway) to near Melton Lake Drive. Subject of this EA. This segment of the proposed project is

³ 2011, SR-170 Transportation Planning Report, <https://www.tn.gov/content/dam/tn/tdot/documents/government-how-do-i-documents/Studies/StatewidePlanning/studies-ApprovedTPRwithSignatures.pdf>

⁴ 2022, SR-170 Transportation Planning Report Update, [https://www.tn.gov/content/dam/tn/tdot/infoonprojectsregion1/sr-170-anderson/Anderson%20SR-170%20-%20Technical%20Report%20\(2022\).pdf](https://www.tn.gov/content/dam/tn/tdot/infoonprojectsregion1/sr-170-anderson/Anderson%20SR-170%20-%20Technical%20Report%20(2022).pdf)

located entirely within the Oak Ridge City limits and SR-170 is classified as an Urban Minor Arterial.

- **PIN 124121.02 (Design Segment 2)** covers SR-170 from near Melton Lake Drive (located within the Oak Ridge City limits) to SR-9 (US-25W, Clinton Highway). Subject of this EA. From east of the bridge to SR-9 (US-25W), SR-170 passes through the community of Claxton, an unincorporated area of Anderson County, and is classified as an Urban Minor Arterial.

The Environmental Assessment (EA) is focused on the entire SR-170 project corridor from SR-62 to SR-9 and will provide an analysis of environmental impacts for both Design Segments.

In 2024, TDOT developed a concept design and Environmental Technical Study Area (ETSA) for the proposed Build Alternative. The ETSA and concept design served to initiate preliminary scoping and resource identification to inform the NEPA process and the technical studies needed to be completed as part of NEPA. Moving forward, the impact and effects process was evaluated based on Line & Grade Plans (dated March 5, 2025 for PIN 124121.01 and dated February 9, 2025 for PIN 124121.02).

On December 12, 2024, TDOT used the 2024 ETSA and concept design to coordinate the Letter of Intent (LOI) with FHWA to recommend the appropriate NEPA class of action, which was determined to be an EA, and formally initiate the NEPA process. The ETSA and concept designs were also presented to the public at a NEPA public meeting (see Section 4.3). Line and Grade plans for the proposed Build Alternative have since been developed and are being used to conduct the required technical studies and agency coordination to develop the EA.

1.4 Project Need

The proposed widening and realignment of SR-170 is needed to address existing geometric deficiencies, insufficient mobility/connectivity, traffic congestion, and consistency with the legislative intent of the Tennessee Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy” (IMPROVE) Act⁵ and the Transportation Modernization Act (TMA)⁶.

1.4.1 Existing Geometric Deficiencies

The western section of the SR-170 project corridor, from the western terminus at SR-62 to the eastern terminus at SR-9 (US-25W), is classified as an Urban/Minor Arterial roadway. The project corridor is predominantly a two-lane, undivided facility with a number of disconnected segments that include a center TWLTL. The posted speed limit varies between 50 to 55 miles per hour (mph) along the entire project route. Several existing conditions indicate a need to address geometric deficiencies.

Sections of the roadway along the SR-170 project route do not meet TDOT’s current minimum roadway design standards. Issues relating to sight distance, horizontal alignment, and vertical alignment are all present along the SR-170 corridor. Throughout the corridor, narrow and intermittent outside shoulders varying from 1-foot to 8-foot paved, present limited space for vehicle recovery in an emergency. Additionally, due to the numerous side road tie-ins to SR-170 throughout the corridor, vehicles trying to enter/exit side roads along SR-170 are limited by the lack of continuous dedicated right and left turn lanes or auxiliary lanes (e.g., Solway Park, Haw Ridge Park, Melton Lake Drive, Lakeview Circle), which prevents the separation of slower moving traffic from through traffic, resulting in potential for vehicle conflicts. Larger vehicles, including

⁵ IMPROVE Act, <https://www.tn.gov/nexttennessee/improve-act.html> (accessed 6/18/2025)

⁶ Transportation Modernization Act, <https://www.tn.gov/tdot/build-with-us/transportation-modernization-act.html> (accessed 6/18/2025)

recreational motor vehicles, heavy trucks, and vehicles towing boats, lack additional pavement area to make turns.

The jughandle designed intersection at SR-170 and Melton Lake Drive, the left-turn lane storage on southbound Melton Lake Drive, the right turn to Melton Lake Drive from westbound SR-170, and the general intersection configuration may no longer be adequate in alleviating traffic volumes at this intersection.

1.4.2 Insufficient Mobility/Connectivity

SR-170 is primarily a two-lane, undivided, heavily travelled roadway with approximately 14,500 vehicles per day (vpd) in 2009 that traverses the southeastern edge of the City of Oak Ridge and the unincorporated communities of Claxton and Heiskell in Anderson County. It serves as a major east-west transportation link for commuters and heavy trucks from Knox County and Interstate 75, including essential government facilities in the City of Oak Ridge and the TVA Bull Run Fossil Plant. SR-170 begins at the west end of the proposed project at the interchange with SR-62, which is a major arterial roadway that serves the City of Oak Ridge and recreational land uses in the area. Interstate 40 is connected to SR-170 via SR-62 and the interchange is located just south of the City of Oak Ridge, providing north-south and east-west access routes for automobiles and heavy trucks. To the east, SR-170 connects to the unincorporated community of Claxton at the intersection with SR-9 (US-25W), which is a minor arterial roadway that serves this community and commercial, institutional, and municipal destinations in Anderson County. SR-170 ultimately connects to I-75 east of Claxton and northeast of Knoxville, providing a route to the City of Oak Ridge.

In addition, SR-170 provides regional connectivity for commuters, recreational motor vehicles, trailered water vessels, school buses, and medium/heavy trucks to major medical facilities, educational institutions, recreational facilities and industrial facilities between the cities of Oak Ridge and Knoxville. SR-170 does not currently conform to the City of Oak Ridge's Comprehensive Plan (1998)⁷ because it lacks connectivity with sidewalks and bicycles and does not meet the design criteria of the TDOT's 2015 Multimodal Access Policy.⁸

Increased demand from pass-through traffic is ongoing and anticipated to continue, due to SR-170 serving as a major transportation system linkage in the region and increases in residential development, recreational uses, job opportunities⁹, and institutional facilities. Increased use would require improvements to SR-170 to address mobility and connectivity needs. The predominantly two-lane SR-170 roadway does not provide facilities (passing lanes) for vehicles to pass slower traffic, such as recreational motor vehicles and heavy trucks. Furthermore, the narrow outside shoulders and lack of sidewalks present a potential safety concern for bicyclists traveling along SR-170 and pedestrians walking to and from homes, recreational areas, and businesses, and severely limits movements for non-vehicular traffic and safe access to parks and greenways. The lack of mid-block crossings presents a safety concern for pedestrians, particularly at Melton Lake Drive.

⁷ City of Oak Ridge Comprehensive Plan, 1988 Update, <https://www.oakridgetn.gov/DocumentCenter/View/118/Comprehensive-Plan-PDF?bidId=> (accessed 6/3/2025).

⁸ TDOT Multimodal Project Scoping Manual, 2018, (<https://www.tn.gov/content/dam/tn/tdot/multimodaltransportation/TDOT%20Multimodal%20Project%20Scoping%20Manual.pdf#page=41&zoom=100,92,480>)

⁹ The Oak Ridger, Article: ORNL director provides update on fast-growing lab, 11/26/2024, (<https://www.oakridger.com/story/news/local/2024/11/26/ornl-director-provides-update-on-fast-growing-lab/76569064007/>) (accessed 6/3/2025).

The SR-170 bridge over the Clinch River supports community connectivity between the City of Oak Ridge (west of the river) and the community of Claxton (east of the river) within the project corridor. Limited pedestrian or bicycle accommodation is available on the bridge due to the narrow shoulders, which limits community mobility and connectivity.

1.4.3 Traffic Congestion

Based on 2023 traffic data for SR-170 from SR-62 to the west of Melton Lake Drive, the Annual Average Daily Traffic (AADT) for the base year (2029) and design year (2049) were determined to be 19,320 vpd and 25,100 vpd, respectively. For SR-170 from west of Melton Lake Drive to SR-9 (US-25W), AADT for the base year and design year were determined to be 19,530 vpd and 25,390 vpd, respectively.

The signalized SR-170 intersection with Melton Lake Drive experiences significant delays during peak hours, making it a key bottleneck in the corridor. City of Oak Ridge officials identified this intersection as having the greatest traffic delays in the city during the development of the 2011 TPR.

To further assess capacity needs and poor Level of Service (LOS)¹⁰ on SR-170, the 2011 TPR also reviewed the 2009 AADT from Melton Lake Drive to Old Emory Road, which was 14,622 vpd, and from Old Edgemoor Road to SR-9 (near the community of Claxton), which was 14,665 vpd. The two roadway segments had nearly identical AADTs. From Old Edgemoor Road to SR-9 (US-25W), the two-directional AM peak hour volume between the two locations was 1,336 vpd and the two-directional PM peak hour volume was 1,568 vpd.

The 2011 TPR¹¹ evaluated existing (2009) and future (2015 and 2035) traffic to determine roadway capacity and congestion along the SR-170 corridor. Peak hour operations were analyzed in accordance with the methodologies and procedures outlined in the Highway Capacity Manual 2000 (HCM) for the determination of LOS in the base year and design year in the AM and PM peak hours. The existing (2009), base year (2015), and design year (2035) LOS for the SR-170 corridor was analyzed for this report. The Highway Capacity Software (HCS) package HCS 2000 was used to analyze existing two to three-lane and proposed four- to five-lane segment LOS.

The 2011 TPR included an LOS analysis that utilized the projected base year (2015) design hour volumes (DHVs) and the design year (2035) DHV with the existing geometry, the No-Build, and the proposed Build Alternative. The LOS analysis determined that SR-170 operated at LOS E in both AM and PM peak hours in 2009 and was expected to operate at an unacceptable LOS E or F in both the 2015 base year and 2035 design year, indicating a need to address traffic congestion. See *Appendix B: Concurrence Point 1: Purpose and Need, and Study Area/Alternatives to be Evaluated*.

The 2025 Traffic Study evaluated the base year (2029) and design year (2049) traffic to determine roadway capacity and congestion along the SR-170 corridor. Peak hour operations were analyzed in accordance with the methodologies and procedures outlined in the HCM for the determination of LOS¹² in the base year and design year in the AM and PM peak hours.

¹⁰ Level of Service (LOS) is a qualitative measure that describes traffic conditions related to speeds, the ability to pass slower vehicles, and delays. There are six levels, ranging from A to F, where F represents the most delayed conditions. Highway Capacity Manual (HCM) 2010, Transportation Research Board, 2010, Vol. 1, p. 5-3.

¹¹ SR-170 Transportation Planning Report 2011, <https://www.tn.gov/content/dam/tn/tdot/documents/government-how-do-i-documents/Studies/StatewidePlanning/studies-ApprovedTPRwithSignatures.pdf> (accessed 6/18/2025)

¹² Level of Service (LOS) is a qualitative measure that describes traffic conditions related to speeds, the ability to pass slower vehicles, and delays. There are six levels, ranging from A to F, where F represents the most delayed conditions. Highway Capacity Manual (HCM) 2010, Transportation Research Board, 2010, Vol. 1, p. 5-3.

For the 2029 No-Build Scenario, SR-170 westbound was projected to have a LOS E during the peak AM period between the beginning terminus to Old Emory Road and SR-170 eastbound would have a LOS E during the peak PM period between the project beginning and Foust Carney Road. For the 2049 No-Build Scenario, the LOS in peak AM and PM period was projected to remain at LOS E or worsen to LOS F. For additional details, see *Appendix C: Traffic Capacity and Safety Analysis Technical Memorandum*.

1.4.4 IMPROVE Act and TMA

The IMPROVE Act¹³ was signed into law on April 26, 2017, and went into effect on July 1, 2017. One of the main goals of the IMPROVE Act is “*providing a safe, reliable, and debt-free transportation network... [to] ensure the next generation of Tennesseans will have a robust transportation system*” (Governor Haslam, 2018).¹⁴

The proposed project has been identified as an IMPROVE Act project and would meet the legislative intent of the IMPROVE Act by improving an important infrastructure facility in Anderson County.

In addition, there is a need to meet the legislative intent of the 2023 TMA, which was signed into law and became effective on April 17, 2023. One of the main goals of the TMA is to provide the state with innovative tools to address traffic congestion, especially near urban areas, freeing up funding to invest in rural and suburban communities without raising gas tax or taking on debt.¹⁵ The proposed project includes TMA funding and would meet the legislative intent of the TMA by improving important infrastructure in Anderson County.¹⁶

1.5 Project Purpose

The proposed project would correct geometric deficiencies to meet current TDOT design standards; improve connectivity for vehicles, pedestrians, and bicyclists along the corridor; and provide additional capacity with operational and intersection improvements to address travel delays.

Secondary goals and objectives of the proposed project would include promoting safer operations for users and accommodating efficient movement of people and freight.

1.5.1 Correct Geometric Deficiencies

The proposed project would improve the typical section of existing SR-170 to be consistent with the maximum design standards for a Minor Arterial roadway as described in the FHWA Highway Functional Classification Concepts, Criteria, and Procedures 2023 Edition.¹⁷ Additionally, the proposed project would create a consistent typical section from SR-62 in the City of Oak Ridge to Walnut Valley Road and from Walnut Valley Road to SR-9 (US-25W) in the unincorporated community of Claxton. Furthermore, the existing horizontal and vertical deficiencies, such as

¹³ The IMPROVE ACT, https://comptroller.tn.gov/content/dam/cot/orea/advanced-search/2017/2017_OREA_IMPROVEAct.pdf (Accessed 6/18/2025)

¹⁴ <https://www.tn.gov/former-governor-haslam/news/2018/1/4/haslam-announces-major-awarding-of-improve-act-transportation-projects--largest-bidding-process-in-state-history.html>

¹⁵ Transportation Modernization Act, <https://www.tn.gov/content/dam/tn/tdot/build-with-us/2-21-23%20TMA%20One-Page.pdf> (accessed 6/2/2025)

¹⁶ 2024 Transportation Modernization Fund Annual Report, https://www.capitol.tn.gov/Archives/Senate/114GA/committees/Transportation/2025/TMF%20Annual%20Report%2024_final.pdf (accessed 6/2/2025)

¹⁷ FHWA Functional Classification, <https://www.fhwa.dot.gov/planning/processes/statewide/related/hwy-functional-classification-2023.pdf>

limited sight distances, inconsistent inadequate shoulder widths, and intersection approaches, would be corrected through the proposed improvements to SR-170.

Slower moving traffic, including heavy trucks, recreational motor vehicles, trailers for watercraft, and school buses, and vehicles seeking refuge in an emergency would benefit from improvements to passing and stop sight distances and wider shoulders. Additionally, vehicles trying to access local roads from SR-170 would benefit from the expansion of dedicated left-turn lanes or the two-way left-turn lane along portions of the roadway and from the intersection improvements. Furthermore, bicyclists and pedestrians travelling along SR-170 or accessing the recreational facilities along the corridor would benefit from the addition of sidewalk and shared use path throughout the corridor.

1.5.2 Improve Connectivity and Mobility

The proposed improvements would provide more efficient movement of people and freight throughout the area. Improved vehicular access and multimodal connections between the residential and recreational destinations would be addressed with turn lanes and improved access to Solway Park, Haw Ridge Park, and other recreational facilities in the corridor under the proposed project. The proposed improvements would accommodate the mobility and accessibility needs of commuters, recreational users, and the transportation of goods/materials.

The proposed project would provide an improved and connected intermodal network along the project route, providing pedestrians and bicyclists with new dedicated facilities as well as improved access to residences and neighborhoods, local businesses, and recreation areas including Solway Park, Melton Lake Greenway, and Haw Ridge Park along the project route. Improvements to SR-170 would provide facilities for pedestrians and bicyclists along SR-170 from SR-62 to SR-9 (US-25W), facilitating access between the west and east sides of the Clinch River. Adhering to TDOT's Multimodal Access Policy, the proposed project would improve multimodal facilities at the intersection of SR-170 and Melton Lake Drive, which would also provide a connection along SR-170 to recreational and residential properties north of SR-170.

The SR-170 bridge over the Clinch River serves as an important resource for connectivity and mobility in the local area, as one of two bridges providing access between the west and east banks of the Clinch River (the other bridge is the SR-62 bridge over the Clinch River, near the beginning terminus of this proposed project). Improvements to the SR-170 bridge over the Clinch River would bring the bridge up to TDOT design standards and facilitate a more efficient connection for traffic traveling between the City of Oak Ridge and I-75, the unincorporated communities in southern Anderson County, and northern neighbors of Knoxville. In addition, an improved bridge would better serve heavy trucks travelling from west of the bridge to the TVA Bull Run Fossil Plant, trailing vehicles traveling from east of the bridge to one of the boat ramps, or semis delivering commercial goods to businesses along the SR-170 corridor.

1.5.3 Reduce Traffic Congestion

Based on the 2011 Capacity Analysis completed for the TPR, SR-170 is currently experiencing an unacceptable LOS of E or lower during peak periods. Without improvements, SR-170 from SR-62 to SR-9 (US-25W) is expected to continue experiencing unacceptable LOS of E or F. The proposed project would improve LOS to acceptable LOS during peak AM and PM periods, alleviating congestion along SR-170 within the project area. The proposed project would also modify and improve intersections at strategic locations by improving sight distances and accessibility of side roads and reconfiguring some intersections to increase efficiency or increasing storage for left turns.

Under the Build scenario, in the design year (2035), all segments of SR-170 would operate at LOS C or D, indicating that the proposed Build Alternative would fully accommodate the projected design year traffic at an acceptable LOS.

The 2025 Traffic Study evaluated the base year (2029) and design year (2049) traffic to determine roadway capacity and congestion along the SR-170 corridor. Peak hour operations were analyzed in accordance with the methodologies and procedures outlined in the HCM for the determination of LOS¹⁸ in the base year and design year in the AM and PM peak hours.

For the 2029 Build Scenario, the LOS for SR-170 was projected to operate at LOS B or higher during peak AM and PM periods. Under the 2049 Build Scenario, LOS was projected to operate at LOS C or higher. The updated Traffic Study continues to indicate that the proposed project would fully accommodate the project design year traffic at an acceptable LOS. For additional details, see *Appendix C: Traffic Capacity and Safety Analysis Technical Memorandum*.

1.5.4 Meet the Legislative Intent of the IMPROVE Act and the TMA

The proposed project would meet the legislative intents of the IMPROVE Act and the TMA by improving an important infrastructure facility in Anderson County.

2. Logical Termini and Independent Utility

FHWA provides EA preparation guidance through Technical Advisory T 6640.8A¹⁹ and general principles for the development of highway projects, including *logical termini* and *independent utility*, under 23 CFR 771.111(f)²⁰. A project's purpose and need must establish that the project has "*logical termini*" and "*independent utility*" (see *Appendix B: Concurrence Point 1: Purpose and Need and Study Area/Alternatives to be Evaluated*).

"*Logical termini*" means that the project route has rational endpoints for the proposed transportation improvement(s) and for the environmental review process. The proposed SR-170 project has logical termini because the western project terminus connects SR-170 to SR-62. SR-62 is an approximately 90-mile-long multi-county east/west corridor extending between Monterey and Knoxville as an arterial roadway serving transportation needs in the region. The eastern project terminus connects SR-170 to the unincorporated community of Claxton at the intersection with SR-9 (US-25W). SR-9 (US-25W) is a north/south arterial roadway extending between Rocky Top and Knoxville, which provides a crossing of the Clinch River and serves this established community and commercial, institutional, and municipal destinations in Anderson County.

The term "*independent utility*" refers to a project's ability to function as intended even if no additional future transportation improvements in the area are made. By incorporating the proposed corridor widening improvements, intersection improvements, and bridge replacement, the proposed project demonstrates independent utility as follows:

¹⁸ Level of Service (LOS) is a qualitative measure that describes traffic conditions related to speeds, the ability to pass slower vehicles, and delays. There are six levels, ranging from A to F, where F represents the most delayed conditions. Highway Capacity Manual (HCM) 2010, Transportation Research Board, 2010, Vol. 1, p. 5-3.

¹⁹ FHWA Technical Advisory T 6640.8A,

https://www.environment.fhwa.dot.gov/legislation/nepa/guidance_preparing_env_documents.aspx

²⁰ 23 CFR 771.111,

<https://www.law.cornell.edu/cfr/text/23/771.111#:~:text=%28f%29%20Any%20action%20evaluated%20under%20NEPA%20as%20a,to%20address%20environmental%20matters%20on%20a%20broad%20scope%3B>

- Based on the regional connectivity providing access from across Anderson County to Oak Ridge and nearby areas that this project's termini provide, the proposed project consists of rational endpoints that are of sufficient length to address broad environmental concerns and accommodate potential alternatives between the two arterial roadways of SR-62 and SR-9 (US-25W) as well as providing direct access to the TVA Bull Run Fossil Plant facility.
- The proposed widening functions with independent significance to address the Purpose and Need as a standalone project independent of any additional transportation improvements in the area, regardless of funding.
- The proposed widening is not anticipated to impede or result in impacts on traffic flow for traffic entering/leaving the western or eastern project terminus that would force future improvements and would not restrict consideration for other reasonably foreseeable transportation improvements, including multimodal connectivity, as it included a survey area sufficient to address alternatives.

3. Alternatives

The design options for the alternatives were developed with careful consideration of engineering, social, and environmental factors. Input received through coordination with federal, state, and local agencies (as well as feedback from other stakeholders and the public) was incorporated into the development process. Further details on agency coordination and public outreach are provided in Section 4, below. The alternatives being considered in this EA are discussed in the following sections. Project history (Section 1.3) provides background context on the identification and development of the proposed alternatives.

3.1 No-Build Alternative

The No-Build Alternative would retain the existing state route and roadway configuration throughout the project area except for those modifications to the roadway network that have been programmed and approved for implementation, as identified in TDOT's 25-Year Long Range Transportation Policy Plan,²¹ State Transportation Improvement Program (STIP),²² and the TDOT 10-Year Project Plan²³ and would allow for routine maintenance and safety upgrades. The No-Build Alternative is retained to serve as a benchmark for comparison against the Build Alternative.

3.2 Build Alternative

For design and construction purposes, the proposed Build Alternative for this project has been divided into two Design Segments and two separate plan sets were developed and serve as the basis of this EA. The Line and Grade Plans dated March 5, 2025 were developed for Design Segment 1 (TDOT PIN 124121.01), which covers the proposed SR-170 project from SR-62 to near Melton Lake Drive (L.M. 0.00 to L.M. 2.55). The Line & Grade Plans dated February 9, 2025

²¹ TDOT's 25-Year Long Range Transportation Policy Plan, <https://www.tn.gov/tdot/long-range-planning-home/25-year-transportation-policy-plan.html>

²² State Programs, <https://www.tn.gov/tdot/program-development-and-administration-home/program-development-and-administration-state-programs.html>

²³ Build With Us, <https://www.tn.gov/tdot/build-with-us.html>

were developed for Design Segment 2 (TDOT PIN 124121.02) and cover SR-170 from near Melton Lake Drive to SR-9 (US-25W) (L.M. 2.55 to 6.18).

The proposed Build Alternative would include widening the existing two to three-lane typical section to a four-lane typical section (two 12-foot travel lanes in each direction) with a variable median and eight-foot shoulders west of Walnut Valley Road, and a five-lane section (two 12-foot travel lanes in each direction and a center 12-foot TWLTL) with eight-foot shoulders east of Walnut Valley Road. The proposed project would also include curb and gutter, a five-foot sidewalk to the north, a 10-foot shared-use path to the south, and guardrails as needed. Proposed improvements would also include adding turn lanes at strategic intersections, realigning and reconfiguring several intersections along the corridor, and replacing the existing two-lane bridge over the Clinch River with a four-lane bridge with a painted median.

Detailed descriptions of the typical section of the Build Alternative are as follows (see *Figure 2: Typical Sections*):

3.2.1 Typical Section 1: SR-62 (Begin Project) to West of the Clinch River Bridge

The proposed Build Alternative would begin just east of the SR-62 interchange where SR-170 would be widened from two to four lanes. The Build Alternative would include a variable 14-foot wide raised concrete median to accommodate the transition for SR-62, eight-foot outside paved shoulders on both sides, curb and gutter on both sides, a five-foot sidewalk on the north side of SR-170, and a 10-foot shared use path and guardrail (as needed) on the south side of SR-170. Dedicated 12-foot wide left-turn lanes would be incorporated into the typical section at intersections and cross streets. Typical Section 1 would extend for 2.17 miles.

At the west end of the bridge over the Clinch River, the existing one-lane jughandle exit from eastbound SR-170 onto Melton Lake Drive would be realigned to improve the roadway curve. While the exit itself would remain a single lane, it would be widened to two lanes after the exit to provide additional capacity for queuing in the jughandle. Westbound traffic on SR-170 would retain the right turn onto northbound Melton Lake Drive.

The proposed eastbound shared-use path on the south side of SR-170 would follow the jughandle exit for Melton Lake Drive and then diverge into two separate shared-use paths: one would continue eastbound along SR-170 crossing the bridge over the Clinch River, and the second would extend northbound onto new location, crossing SR-170 underneath the bridge structure, and run parallel to Melton Lake Drive until it eventually connects to the Melton Lake Greenway along Melton Lake Drive north of SR-170 (see Sheets 5B and 21B from the Design Segment 2 Line and Grade Plans in Appendix A).

3.2.2 Typical Section 2: SR-170 Bridge Over the Clinch River

The proposed Build Alternative would widen the existing two-lane bridge with a new four-lane structure by adding two new lanes to the south. The proposed bridge typical section would consist of four 12-foot travel lanes (two in each direction) divided by a 12-foot median, 10-foot outside shoulders, and a 12-foot shared use path on the south side of the bridge. Typical Section 2 would extend for 0.32 mile.

The proposed replacement structure would not include a sidewalk on the north side of the roadway. Ten-foot outside shoulders would be wide enough to accommodate cyclists.

3.2.3 *Typical Section 3: East of Clinch River Bridge to Walnut Valley Road*

At the east end of the SR-170 bridge over the Clinch River, SR-170 would transition to a four-lane typical section with a 14-foot raised median, eight-foot outside paved shoulders on both sides, curb and gutter on both sides, a five-foot sidewalk on the north side of SR-170, and a 10-foot shared use path and guardrail (as needed) on the south side of SR-170. Typical Section 3 would extend for 0.46 mile.

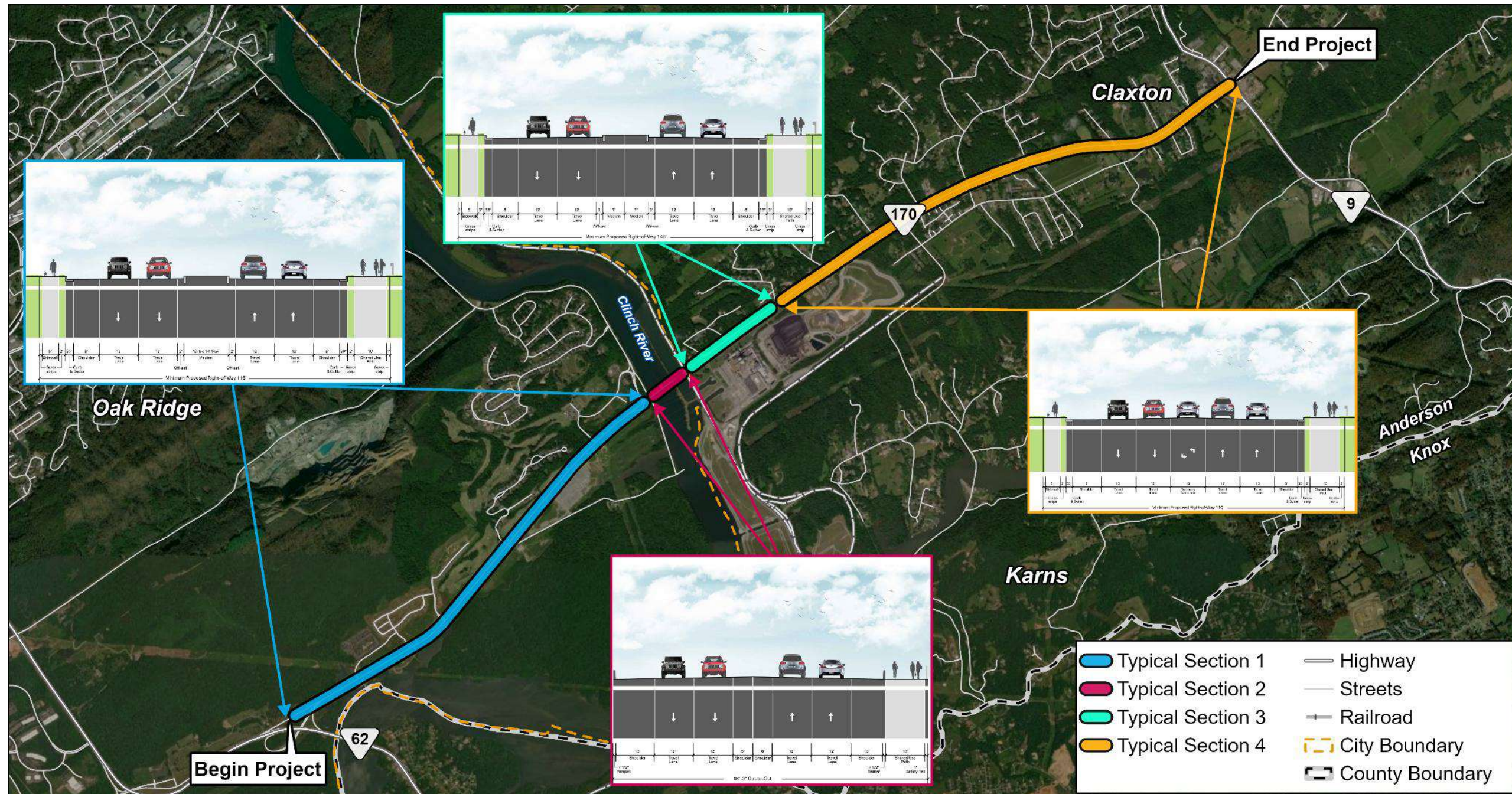
Because the proposed bridge improvements would not include a sidewalk on the north side of the structure, at the eastern end of the proposed bridge, a five-foot sidewalk would be constructed to cross SR-170 underneath the bridge (see Sheets 6B and 7B from the Design Segment 2 Line and Grade Plans in Appendix A). This would provide an opportunity for pedestrians on the north side of SR-170 to safely cross to the south and across the river. On the eastern side of the bridge, the five-foot sidewalk would begin underneath the bridge and run on both the north and south sides of SR-170. The sidewalk on the southern side of SR-170 would be parallel to the proposed 10-foot shared use path and tie into the shared-use path just west of the TVA Bull Run Fossil Plant entrance.

3.2.4 *Typical Section 4: Walnut Valley Road to SR-9 (US-25W) (End Project)*

East of Walnut Valley Road, SR-170 would consist of a five-lane typical section with a center TWLTL, eight-foot paved outside shoulders on both sides, curb and gutter on both sides, a five-foot sidewalk on the north side of SR-170, and a 10-foot shared use path and guardrail (as needed) on the south side of SR-170. Typical Section 4 would extend for 2.73 miles.

SR-170 in this section would maintain full access with a center TWLTL, allowing left turns to/from SR-170 and the side roads. This typical section would continue easterly until the end of the project at the intersection of SR-170 and SR-9 (US-25W). Intersection improvements are proposed at the SR-170 and SR-9 (US-25W) signalized intersection, including pedestrian access improvements and double left-turn lanes from eastbound SR-170 onto northbound SR-9 (US-25W).

Figure 2: Typical Sections



Projection Location and Typical Section Map



Project	State Route 170 From SR 62 to SR 9/US 25W Anderson County, TN, PIN 124121.00	1 inch equals 2,500 feet 		

3.3 Alternatives' Ability to Meet the Purpose and Need

Each alternative was analyzed for its ability to meet the proposed project's Purpose and Need (see *Table 1*, below).

Table 1: Alternatives Overview to Meet Purpose and Need

Need	Purpose	No-Build Alternative	Build Alternative
Geometric Deficiencies	Correct Geometric Deficiencies	Under the No-Build Alternative, the existing geometric deficiencies—such as poor sight distances, substandard vertical and horizontal alignments, and narrow shoulders—would remain, resulting in ongoing safety issues and mobility challenges for all vehicles, including emergency and service vehicles.	The Build Alternative would address existing geometric deficiencies by widening the roadway, improving horizontal and vertical alignments, and providing adequate shoulders and turn lanes. These improvements would enhance safety, better accommodate larger vehicles, and improve overall roadway functionality.
		Does not meet Purpose and Need.	Meets Purpose and Need.
Insufficient Mobility/ Connectivity	Improve Connectivity	Under the No-Build Alternative, the corridor would remain a two-lane road with limited multimodal options and constrained access to key destinations, maintaining poor connectivity between Oak Ridge, Claxton, and regional networks, and ongoing safety and accessibility issues for non-motorized users.	The Build Alternative would improve regional and local connectivity by increasing capacity and adding multimodal features like sidewalks and shared-use paths, enhancing safety, efficiency, and access for all users.
		Does not meet Purpose and Need.	Meets Purpose and Need.
Traffic Congestion	Reduce Traffic Congestion	Under the No-Build Alternative, growing demand from residential, recreational, and regional travel would worsen congestion on SR-170, which already operates at LOS E during peak hours and is projected to decline to LOS F by the design year.	The Build Alternative would widen SR-170 to a four- and five-lane facility, adding turn lanes and upgrading intersections, thereby increasing capacity, reducing congestion, and improving LOS during peak hours in the design year.
		Does not meet Purpose and Need.	Meets Purpose and Need.
Consistency with the Legislative Intent of the IMPROVE Act and the TMA	Meet the Legislative Intent of the IMPROVE Act and the TMA	Under the No-Build Alternative, the legislative intents and specific objectives of the IMPROVE Act and TMA for the subject corridor would not be addressed.	The Build Alternative would be consistent with the Legislative Intent of the IMPROVE Act and the TMA.
		Does not meet Purpose and Need.	Meets Purpose and Need.

3.4 Traffic Control During Construction

If the proposed Build Alternative is constructed, traffic control for both segments of the design would occur in multiple stages. There will be traffic shifts, possibly diversions, and intermittent lane closures in off-peak hours. Line and Grade Plans are preliminary at this time and traffic control plans have not been developed. Presently, the project is not expected to have any detours (see *Appendix M: Public Engagement Summary*).

3.4.1 Design Segment 1 (TDOT PIN 124121.01)

The Maintenance of Traffic (MOT) plan proposed for Design Segment 1, SR-170 from SR-62 to near Melton Lake Drive (L.M. 0.00 to L.M. 2.55), would be constructed in three Phases.

- **Phase 1** would involve constructing all elements that are in the existing clear zone and outside the existing edges of pavement. This includes the area to the left of the existing centerline from the ramps on SR-62 to east of Harbour Pointe Lane. In this area, the proposed centerline runs along the northern edge of existing pavement, which would allow construction of both westbound lanes. From east of Harbour Pointe Lane to east of Park Meade Drive, the proposed centerline would shift from the northern existing edge of pavement to the southern existing edge. This shift would minimize impacts to the golf course and homes on the northern side of SR-170. Construction would continue in the existing clear zone outside the existing edges of pavement. From east of Park Meade Drive to west of Centennial Bluff Boulevard, the proposed centerline would align with the existing southern edge of pavement, allowing construction of both eastbound lanes. From west of Centennial Bluff Boulevard to near the Centennial Bluff Boulevard intersection, the proposed centerline would shift from the southern edge to the existing SR-170 centerline to tie into Design Segment 2 (TDOT PIN 124121.02). Construction in this area would include a retaining wall and other elements in the clear zone outside existing pavement. All areas constructed during Phase 1 would be built up to the binder level of asphalt.
- **Phase 2** would shift the two existing lanes of traffic onto the newly constructed sections from the beginning of the project to east of Harbour Pointe Lane and from east of Park Meade Drive to west of Centennial Bluff Boulevard. With traffic shifted off existing SR-170, the remaining sections in these areas would then be constructed up to the binder level of asphalt, while maintaining existing lanes in the areas from east of Harbour Pointe Lane to east of Park Meade Drive and from west of Centennial Bluff Boulevard to near the Centennial Bluff Boulevard intersection.
- **Phase 3** would complete construction of all remaining sections not addressed in Phases 1 and 2, also up to the binder level of asphalt. Once all base work is complete, the final pavement surface and required pavement markings would be installed throughout the project limits.

3.4.2 Design Segment 2 (TDOT PIN 124121.02)

The MOT plan for Design Segment 2, SR-170 from near Melon Lake Drive to SR-9 (US-25W) (L.M. 2.55 to 6.18), would also be constructed in three Phases.

- **Phase 1** would maintain traffic on the existing travel lanes, maintaining an 11-ft travel lane and two-ft shoulder in each direction. In Phase 1, construction would take place along the southern portion of SR-170, outside the existing eastbound travel lanes. The jug handle would be constructed while traffic is rerouted along SR-170 to a temporary left turn at the Melton Lake Drive intersection. Traffic would utilize the existing bridge over the Clinch

River while the southern portion of the proposed bridge is constructed. Construction would continue on the south side of existing SR-170 until east of Ozella Lane. From east of Ozella Lane to east of Mooncrest Lane, construction would shift to the northernmost edge of pavement. From east of Mooncrest Lane to east of Coconut Lane, construction would shift back to south of the roadway. From east of Coconut Lane to the project limit at SR-9, traffic would be maintained on the existing SR-170. Areas of new roadway pavement would but laid up to the binder level.

- **Phase 2** would shift traffic onto the newly constructed portions of SR-170 and the southern portion of the new bridge over the Clinch River, with an 11-ft travel lane and two-ft shoulder in each direction. In Phase 2, the remainder of the roadway construction would take place within the existing SR-170 roadway. Pavement would be laid up to the binder level and the remainder of the Clinch River bridge would be constructed.
- In **Phase 3**, the newly constructed bridge would provide two 12-ft travel lanes and a two-ft shoulder in each direction on the northernmost side while the concrete parapet for the 10-ft shared use path is installed. Final pavement surface and required pavement markings would be installed throughout the project limits.

3.5 Local Road Access

The construction of the proposed Build Alternative would include improvements to local roads that tie into the existing SR-170 roadway. Improvements are also proposed at various driveway locations. Access to the local roads and driveways would be maintained throughout the duration of construction and no off-site detours would be needed.

3.6 Other TDOT Projects in the Vicinity

As shown in *Table 2*, four other transportation projects in the vicinity of the SR-170 project were identified. Projects were identified through a review of the Fiscal Year 2023-2026 STIP and associated STIP amendments,²⁴ the Tennessee STIP Project Viewer,²⁵ and the TDOT 10-Year Project Plan.²⁶ Please note that no projects listed in the Fiscal Year 2023-2026 STIP were identified within the vicinity of the SR-170 project. See *Appendix D: Land Use and Transportation Analysis Technical Memorandum*, for more information.

²⁴ TDOT STIP Amendments, <https://www.tn.gov/tdot/program-development-and-administration-home/program-development-and-administration-state-programs/approved-stip-amendments.html> (accessed 6/18/2025)

²⁵ TDOT STIP Project Viewer, <https://www.arcgis.com/apps/webappviewer/index.html?id=28036ec194e648dd97ee5b35252c9bce> (accessed 6/18/2025)

²⁶ TDOT 10-Year Project Plan, <https://www.tn.gov/content/dam/tn/tdot/build-with-us/050525TDOT10YP.pdf> (accessed 6/18/2025)

Table 2: Other TDOT Projects in the Vicinity

TDOT PIN	County	Route Number	Description	Type of Work	Status
127949.00	Anderson	SR-95	From Illinois Avenue (SR-62) to Florida Avenue/Fairbanks Avenue	Signal improvement	Under Construction
128830.00	Anderson	SR-62 and Lafayette Drive	SR-62 from Robertsville Road to Lafayette Drive, and Lafayette Drive from Illinois Road to Laboratory Rd.	Signal improvement	Preliminary Design Construction 2026
125624.00	Anderson	Elza Gate Park near Melton Lake Drive to south of Briarcliff Avenue	Oak Ridge Rails to Trails - Ph. 1: Construction of a greenway along an old rail line along Belgrade Road, Warehouse Road, and Fairbanks Road.	Greenway Construction	Construction 2026
123073.00	Knox	SR-162	Pellissippi Parkway interchange at SR-62 (Oak Ridge Highway)	Reconstruct Interchange	Preliminary Engineering Design and Right of Way (ROW).

4. Affected Environment and Environmental Consequences

Transportation projects can potentially impact social, economic, physical, and natural resources. As a result, it is essential to identify and understand existing environmental conditions and the possible effects of proposed actions. The following sections provide an inventory and analysis of the potential environmental impacts associated with the No-Build and Build Alternatives considered in this EA.

4.1 Type of Effects Analyzed in this Environmental Assessment

Potential direct impacts to environmental resources as a result of the proposed project are analyzed in this EA. Direct effects are those anticipated to be caused by the proposed project and would occur at the time and place the project is constructed.

Table 3 presents a general overview of the social, economic, physical, and natural resources—referred to as “impact categories”—identified within the boundaries of the SR-170 project area. These categories were evaluated to assess the potential for significant direct impacts associated with the No-Build and Build Alternatives. Additionally, *Table 3* indicates where further information and supporting materials for each impact category can be found. *Table 4* provides a more detailed analysis of the direct impacts within each impact category.

Table 3: Resources Addressed in the EA

Impact Categories*	Direct Impacts (Yes/No)	Reference Appendix	Appendix Name
Land Use	Yes	Appendix D	Land Use and Transportation Analysis Technical Memorandum
Multimodal	No	Appendix D	Land Use and Transportation Analysis Technical Memorandum
Transportation	Yes	Appendix D Appendix E	Land Use and Transportation Analysis Technical Memorandum; and Community Impact Assessment, Relocations, and Economic Resources Technical Memorandum
Social and Community	Yes	Appendix E	Community Impact Assessment, Relocations, and Economic Resources Technical Memorandum
Relocations	Yes	Appendix E	Community Impact Assessment, Relocations, and Economic Resources Technical Memorandum
Economic Resources	Yes	Appendix E	Community Impact Assessment, Relocations, and Economic Resources Technical Memorandum
Farmland	Yes	Appendix F	Farmland, Soils, and Floodplain Analysis Technical Memorandum
Floodplain	Yes	Appendix F	Farmland, Soils, and Floodplain Analysis Technical Memorandum
Soils and Geology	No	Appendix F	Farmland, Soils, and Floodplain Analysis Technical Memorandum

Impact Categories*	Direct Impacts (Yes/No)	Reference Appendix	Appendix Name
Visual Resources	Yes	Appendix G	Visual Resources Technical Memorandum
Section 4(f)	Yes	Appendix H	Parks and Recreation/Section 4(f)/Section 6(f) Technical Memorandum
Section 6(f) of the Land and Water Conservation Fund Act (LWCF)	No	Appendix H	Parks and Recreation/Section 4(f)/Section 6(f) Technical Memorandum
Air Quality	Yes	Appendix I	Air Quality and Noise Technical Reports
Noise	Yes	Appendix I	Air Quality and Noise Technical Reports
Ecological Resources	Yes	Appendix J	Ecological Resources Technical Reports
Historic Architecture	Yes	Appendix K	Cultural Resources Technical Reports
Archaeology	Yes	Appendix K	Cultural Resources Technical Reports
Native American Consultation	No	Appendix K	Cultural Resources Technical Reports
Hazardous Materials	No	Appendix L	Hazardous Materials Technical Report
Construction and Operations	Yes	NA	Section 3.1.1 of EA

**Note: Table is specific to environmental resources and effects. Appendix A, B, C, M and N have no environmental resources. Appendix A is for project and design related documents, Appendix B is concurrence point; Appendix C is traffic analysis; Appendix M is public engagement; and Appendix N is agency coordination.*

Table 4: Potential Direct Impacts

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Land Use – See Appendix D for the Land Use and Transportation Analysis Technical Memorandum				
Direct Conversion of Land to a Transportation Use	No Effect	Within the limits of the proposed Build Alternative, approximately 94.84 acres of land would be converted to transportation use. ²⁷ This amount may be minimized as the proposed project moves through the project development process.	As the project plans continue to be developed, the amount of additional ROW and easements in the Build Alternative could be reduced through design refinements. Therefore, less land may need to be permanently converted for transportation purposes.	No Significant Impact
Existing Land Use	No Effect	The proposed Build Alternative would convert approximately 94.84 acres of land to transportation use. Most of the land is currently used for residential, commercial, agricultural, industrial, and public/semi-public identified land uses; however, these lands are adjacent to land that is already in transportation use. Although 87 potential relocations (residential and commercial) are anticipated, the overall existing land uses of the corridor would not be altered by the proposed project. Therefore, the impacts to the existing land uses along the project corridor are anticipated to be minimal.	TDOT will continue to coordinate with Anderson County and the City of Oak Ridge throughout the NEPA and project development processes as the proposed Build Alternative continues to be refined to be consistent with existing land uses to the maximum extent practicable.	No Significant Impact
Zoning	No Effect	The proposed Build Alternative would be inconsistent with the low-density residential and business zoning districts in both the City of Oak Ridge and Anderson County sections of the proposed project as highway and roadway ROW are not among the permitted uses of the respective districts. However, one of the Anderson County Zoning Resolutions was intended to reduce congestion on streets in the County. Additionally, the Build Alternative will be located along the existing SR-170 alignment, making anticipated impacts to the affected zoning districts minimal.	TDOT will continue to coordinate with Anderson County and the City of Oak Ridge throughout the NEPA and project development processes as the proposed Build Alternative continues to be refined to be consistent with existing zoning to the maximum extent practicable.	No Significant Impact
Future Land Use	No Effect. Projects may be ongoing or foreseeable that are independent of the proposed transportation action.	The City of Oak Ridge is updating its Comprehensive Plan to include future land use. Currently, the City's goals and plans for planned and future growth and development are included in the 2019 Oak Ridge Blueprint ²⁸ . While the proposed SR-170 widening project is not mentioned in the 2019 Blueprint, the improvements associated with the proposed project would not conflict with any of the recommendations. Anderson County does not have a future land use plan.	TDOT will continue to coordinate with Anderson County and the City of Oak Ridge throughout the NEPA and project development processes as the proposed Build Alternative continues to be refined to be consistent with future land use plans to the extent possible.	No Significant Impact
Planned Development	No Effect	The proposed Build Alternative would require additional ROW on the north side of SR-170 at the location of the planned Centennial Bluff at Centennial Village residential developments. The anticipated ROW acquisition would include four parcels that have had permits issued by the City of Oak Ridge for duplex homes. The ROW would also include other subdivided parcels that are intended for future duplex homes. Additionally, an area identified for future apartments (potentially containing up to five building structures) ²⁹ is	Proposed ROW and easement amounts associated with the proposed Build Alternative may be further minimized as the project moves through the project development process. Therefore, impacts to the planned development of Centennial Bluff may be reduced.	No Significant Impact

²⁷ Note that approximately 347.09 acres are within the limits of the Build Alternative; however, approximately 252.25 acres are already designated as transportation right-of-way (based on Line and Grade Plans, Appendix A). Therefore, only 94.84 acres would be converted to transportation use as a result of the proposed Build Alternative.

²⁸ City of Oak Ridge, City Blueprint, <https://oakridgeblueprint.info/plan/land/>

²⁹ The site has already been subdivided and ground levelled. As of May 5, 2025, permits are still being reviewed by the City of Oak Ridge.

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
		located within the proposed ROW to be acquired for the proposed project.		
Legislation, Plans, and Policies	No Effect	The proposed Build Alternative is consistent with stated legislation, executive orders, plans, and policies. The proposed Build Alternative would be consistent with the TMA and IMPROVE Act.	None	No Significant Impact
Farmland – See Appendix F for the Farmland, Soils, and Floodplain Analysis Technical Memorandum				
Farm Size and Agricultural Employment	No Effect	Within the past 30-year review period, the number of farms in Anderson County has increased by nearly five percent, but the average size of farms in the county has shrunk by nearly 18 percent. Furthermore, agricultural, forestry, fishing and hunting, and mining employment makes up less than one percent of total employment in Anderson County. The proposed Build Alternative would convert a small portion (approximately 0.03 percent) of the available farmland in Anderson County to transportation use, which would reduce the overall amount of available farmland and could reduce the need for agricultural industry employees around the project area. However, the agricultural industry is not a predominant source of employment in Anderson County.	As the project plans continue to be developed for the proposed Build Alternative, the amount of anticipated additional ROW and easements could be reduced through design refinements. These potential reductions in anticipated acquisition could include identified farmland along the project route.	No Significant Impact
Century Farms	No Effect	No Century Farms are located within the project study area.	None	No Impact
Prime Farmland	No Effect	Approximately 4.9 acres of prime and unique farmland found within the limits of the proposed Build Alternative would be converted to transportation use by the proposed project.	As the project plans continue to be developed, the amount of land needed for ROW and easements in the proposed Build Alternative could be reduced through design refinements. Therefore, less prime farmland may be converted to transportation use.	No Significant Impact
Impacts Under the Farmland Protection Policy Act	No Effect	Impacts to farmland were assessed according to the FPPA outlined in 7 CFR 658. ³⁰ The NRCS, in an email dated July 7, 2025, concurred with NRCS-CPA-106 total assessment score for the proposed Build Alternative i.e. 109 points (55 points for relative value of farmland and 54 points for total corridor assessment). Because the score is less than 160, no further coordination is required.	The requirements of the Farmland Protection Policy Act have been satisfied for the proposed Build Alternative, and no additional minimization or mitigation measures are necessary at this time.	No Significant Impact
Social and Community Impacts, Relocations, and Economic Resources – See Appendix E for the Community Impact Assessment, Relocations, and Economic Resources Technical Memorandum				
Relocations of Residents or Businesses	No Effect	The proposed Build Alternative project would result in 69 residential and 18 business potential relocations. ³¹ As noted by the TDOT Right-of-Way Division, 13 of the 18 commercial storefronts appear to be occupied by active businesses.	As the design of the proposed Build Alternative is refined, impacts to residential and business properties within the SR-170 project area may be reduced. Should a property be acquired, compensation would be at fair market value. TDOT would make relocation assistance available to all eligible persons impacted by this project, including residences, businesses, farm operations, non-profit organizations, and those requiring special services or assistance. The TDOT	No Significant Impact

³⁰ 7 CFR 658, Farmland Protection Policy, <https://www.law.cornell.edu/uscode/text/7/chapter-73>

³¹ See Conceptual Stage Relocation Plan in **Appendix E: Community Impact Assessment, Relocations, and Economic Resources Technical Memorandum**

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
			<p>Regional Relocation Staff would administer the relocation program under the rules, policies, and procedures set forth in the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Uniform Relocation Assistance Act of 1972, implementing federal regulations, Tennessee Code Annotated 13-11-101 through 119, The State of Tennessee Relocation Assistance Brochure, and Chapter IX of the State of Tennessee Department of Transportation Right-of-Way Manual.</p> <p>Additionally, if suitable replacement housing is not available in the immediate SR-170 project area, TDOT would work with individuals to identify alternate options, potentially including the construction of a new home. Both renters and mobile-home owners would also be compensated and would receive assistance from TDOT in the identification of, and relocation of their home to a new location. Businesses subject to relocation under the proposed Build Alternative would be compensated for their relocation to a new location including moving costs, incidentals, and the cost to reestablish the business in a new location.</p> <p>TDOT would provide advance notification of proposed ROW acquisition. The TDOT Right-of-Way Office has the responsibility, once a project is approved, of appraising, purchasing and, if required, assisting individuals, families or businesses in relocating. Before acquiring property, all properties are appraised based on comparable sales and land use values in the surrounding areas.</p>	
Community Services and Facilities	No Effect	<p>The proposed Build Alternative would impact five of 16 community facilities identified within or adjacent to the limits of the Build Alternative including partial acquisition of several parks and recreational facilities, including Solway Park (0.99 acre), Haw Ridge Park (1.77 acres), Tennessee Centennial Golf Course (3.58 acres), and Melton Lake Greenway (land containing 713 linear feet of trail). A portion of the Woodhaven Memorial Gardens cemetery (0.4 acre) would also be acquired. A partial acquisition of Claxton Elementary School's athletic fields and playground would also be needed. It should be noted that the existing Claxton Elementary School is independently planning to relocate outside the project limits by the time construction is anticipated for the proposed SR-170 project.</p>	<p>Construction of the proposed Build Alternative would be phased so that SR-170 would remain open throughout the duration of construction for the general public to access the identified community facilities.</p>	No Significant Impact
Community Stability and Cohesion	No Effect	<p>Relocations: The proposed Build Alternative would result in relocations (33 single-family residences, 28 multi-family residences, eight mobile-home residences, and 18 businesses [13 occupied storefronts]). The density and rural nature of the community following the relocation of residences and businesses as a result of the proposed Build Alternative would be consistent with the existing nature of the community.</p>	<p>As the design of the proposed Build Alternative is refined, impacts to residential and businesses properties within the project area may be reduced. Should a property be acquired, compensation would be at fair market value. TDOT would make relocation assistance available to all eligible persons impacted by this project, including residences, businesses, farm operations, non-profit organizations, and those requiring special services or assistance. The TDOT Regional Relocation</p>	No Significant Impact

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
		<p>Community Facilities: The proposed Build Alternative would result in five community facilities being impacted, but none of the community facilities will be relocated.</p> <p>Barriers: The proposed Build Alternative would avoid creating new physical barriers in the community by including access at existing driveways/side roads west of the Clinch River bridge and including a center TWLTL east of the river. Additionally, the project would include bicycle and pedestrian facilities, which would enhance community access across various users and support community cohesion by creating multimodal connections from residential communities to recreational and commercial facilities along the corridor.</p> <p>Community Stability and Cohesion Summary: The proposed Build Alternative would impact residents and businesses. Due to the availability of sufficient housing stock and available commercial space, the project would not be anticipated to affect the local economy. Of the potential commercial impacts, 25 percent of storefronts are currently vacant and would not affect active businesses. In addition, approximately 40 percent of the anticipated residential displacements would be from two buildings. Therefore, the project would not adversely destabilize the community. With the maintaining of existing community facilities and improvements in multimodal connectivity, community cohesion would be retained.</p>	<p>Staff would administer the relocation program under the rules, policies, and procedures set forth in the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Uniform Relocation Assistance Act of 1972, implementing federal regulations, Tennessee Code Annotated 13-11-101 through 119, The State of Tennessee Relocation Assistance Brochure, and Chapter IX of the State of Tennessee Department of Transportation Right-of-Way Manual.</p> <p>Additionally, if suitable replacement housing is not available in the immediate SR-170 project area, TDOT would work with individuals to identify alternate options, potentially including the construction of a new home. Both renters and mobile-home owners would also be compensated and would receive assistance from TDOT in the identification of, and relocation of their home to, a new location. Businesses subject to relocation under The proposed Build Alternative would be compensated for their relocation to a new location including moving costs, incidentals, and the cost to reestablish the business in a new location.</p> <p>TDOT would provide advance notification of proposed right-of-way acquisition. The TDOT Right-of-Way Office has the responsibility, once a project is approved, of appraising, purchasing and, if required, assisting individuals, families or businesses in relocating. Before acquiring property, all properties are appraised based on comparable sales and land use values in the surrounding areas.</p>	
Economic Conditions	No Effect	<p>18 businesses would potentially be relocated as a result of the proposed project. As indicated in the Conceptual Stage Relocation Plan, 13 of the commercial storefronts appear to currently be occupied by an active business.</p> <p>The proposed Build Alternative would improve system linkage by creating two lanes in each direction along SR-170 between the cities of Oak Ridge and Claxton, improving commutes for employees living and working in the area. Additionally, the proposed widening would allow for commuter vehicles to pass slower vehicles such as freight and recreational vehicles.</p>	<p>As the design of the proposed Build Alternative is refined, anticipated impacts to residential and businesses properties within the SR-170 project area may be reduced. Should a property be acquired, compensation would be at fair market value. TDOT would make relocation assistance available to all eligible persons impacted by this project, including residences, businesses, farm operations, non-profit organizations, and those requiring special services or assistance. The TDOT Regional Relocation Staff would administer the relocation program under the rules, policies, and procedures set forth in the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Uniform Relocation Assistance Act of 1972, implementing federal regulations, Tennessee Code Annotated 13-11-101 through 119, The State of Tennessee Relocation Assistance Brochure, and Chapter IX of the State of Tennessee Department of Transportation Right-of-Way Manual.</p>	No Significant Impact

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Transportation – See Appendix D for the Land Use and Transportation Analysis Technical Memorandum				
Road Network	No Effect	<p>The proposed Build Alternative would include widening the existing two to three-lane typical section into a four-lane section with two lanes in each direction and a variable median. Additionally, the proposed project would add turn lanes at strategic intersections, realign and reconfigure several intersections along the corridor, and replace the existing two-lane bridge over the Clinch River with a four-lane bridge. The proposed project is expected to improve mobility through and within the corridor.</p> <p>Proposed SR-170 improvements would improve average travel speeds through the corridor and reduce delays and congestion at intersections and near the bridge over the Clinch River when compared to the No-Build Alternative.</p>	None	No Significant Impact
Bicycle and Pedestrian Facilities	No Effect	<p>Proposed improvements include a 5-foot sidewalk and 10-foot shared use path along portions of SR-170 to improve access, connectivity, and safety for bicyclists and pedestrians. These facilities would help provide safe connections from the neighborhoods to the various parks and recreation facilities in the project corridor. They would also help bicycle and pedestrian mobility within the corridor itself. The Oak Ridge Bicycle and Pedestrian Plan recommended sidewalks along Edgemoor Road (SR-170).³²</p>	None	No Significant Impact
Rail and Airport	No Effect	<p>The proposed project is not anticipated to permanently impact the railroad (CSX) located along the east bank of the Clinch River. Since there are no airports in the vicinity of the proposed project, no effects would occur to airports.</p>	<p>Proposed bridge and utility construction would have some temporary impacts on railroad operations during the construction of the bridge, which would be coordinated with CSX railroad representatives as the project development progresses.</p>	No Impact
Planned Roadway Projects in the Vicinity of the proposed Build Alternative	No Effect	No Effect	None	No Impact
Air Quality – See Appendix I for the Air Quality and Noise Technical Reports				
Transportation Conformity	No Effect	<p>The proposed Build Alternative is located in the Knoxville Particulate Matter 2.5 (PM2.5) and ozone maintenance area. TDOT completed a PM2.5 Hot-Spot Determination for the proposed project that concluded that the project was “not a project of air quality concern.” TDOT submitted this determination to the Knoxville Area Interagency Consultation (IAC) group on May 22, 2025. The IAC members concurred with TDOT’s determination on the following dates: EPA on June 4, 2025; TDEC on May 23, 2025; and Knox County on May 27, 2025.</p>	None	No Significant Impact
Mobile Source Air Toxics	No Effect	<p>The proposed project meets the criteria for a “Project with Low Potential” MSAT Effects.</p>	None	No Significant Impact

³² Oak Ridge Bicycle and Pedestrian Plan, 2011, <https://oakridgetn.gov/DocumentCenter/View/451/Bicycle-and-Pedestrian-Plan?bidId=>

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Construction Air Quality	No Effect	Construction activities would generate intermittent and temporary construction-related pollutant emissions and dust. TDOT's construction specifications would apply to this project.	TDOT's construction specifications would apply to the proposed project. Construction procedures should be governed by the <i>Standard Specifications for Road and Bridge Construction</i> as issued by TDOT and as amended by the most recent applicable supplements. All construction equipment shall be maintained, repaired, and adjusted to keep it in full satisfactory condition.	No Significant Impact
Noise – See Appendix I for the Air Quality and Noise Technical Reports				
Noise	No Effect	The Noise Technical Report identified 22 noise analysis areas (NAA) within the limits of the proposed Build Alternative. 12 Activity Category C (Recreational Facilities) receptors are predicted to be impacted by the proposed project with design year noise levels of 66 dBA (Decibels A-weighted) or greater. However, the proposed Build Alternative is not predicted to cause a substantial increase in existing noise levels or exceed the FHWA Noise Abatement Criteria.	No minimization or mitigation measures are currently proposed under the Build Alternative. Noise barriers are not considered feasible for the impacted facilities at this time; however, a final noise abatement decision would be made during the final design process.	No Significant Impact
Construction Noise	No Effect	Construction activities may generate intermittent and temporary noise above existing ambient noise levels. The noise levels resulting from construction activities would depend on the types of equipment utilized, the duration of the activities, and the distances between construction activities and nearby land uses. However, the noise increases would be temporary and not constitute a noise impact as defined by the FHWA noise regulation and TDOT's noise policy.	None	No Significant Impacts
Historic Resources – See Appendix K for the Cultural Resources Technical Reports				
Historic Resources	No Effect	As part of the 2024 Historic Architecture Assessment report and the 2025 Addendum (Appendix K), four (4) historic architectural resources were identified within the historic Area of Potential Effects (APE) ³³ of the proposed Build Alternative. The University of Tennessee (UT) Arboretum and the Guy M. Jones House are recommended eligible for listing on the National Register of Historic Places (NRHP). The Bull Run Fossil Plant Historic District is determined eligible for the NRHP, and the J.B. Jones House is listed on the NRHP. It was determined that the proposed Build Alternative would have "no effect" on the J.B. Jones House and UT Arboretum, and "no adverse effect" on the Bull Run Fossil Plant Historic District and Guy M. Jones House.	None	No Significant Impact

³³ The historic architectural Area of Potential Effects for the proposed SR-170 project included the entirety of all parcels intersected by or immediately adjacent to the proposed project area, which, given the nature of the project, encompasses all properties that may be affected by the Build Alternative.

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
		The Tennessee State Historic Preservation Office (TN SHPO), in a letter dated May 22, 2025, concurred with those determinations and stated that the proposed Build Alternative would result in a <i>de minimis</i> 4(f) impact to the NRHP-eligible Bull Run Fossil Plant Historic District and Guy M. Jones House (see Appendix K).		
Archaeological Resources – See Appendix K for the Cultural Resources Technical Reports				
Archaeological Resources	No Effect	No NRHP-eligible archaeological sites were identified within the archaeology APE ³⁴ of the proposed Build Alternative. The TN SHPO, in a letter dated November 22, 2024, stated that the proposed Build Alternative contains no archaeological resources eligible for listing in the NRHP (see Appendix K).	The following project commitment has been added and is shown on the Green Sheet of this document: There is a commitment to avoid the People’s Cemetery (EDAC001).	No Significant Impact
Native American Consultation – See Appendix K for the Cultural Resources Technical Reports				
Native American Consultation	No Effect	Section 106 Native American Consultation Coordination was sent to six Native American Tribes (Cherokee Nation, Eastern Band of Cherokee Indians, Muscogee (Creek) Nation, Shawnee Tribe, Eastern Shawnee Tribe of Oklahoma, and United Keetoowah Band of Cherokee Indians in Oklahoma) on February 14, 2018. The Muscogee (Creek) Nation accepted the invitation to be a consulting party on March 13, 2018. Cultural resources reports were sent to the Muscogee (Creek) Nation on June 13, 2025. Native American Coordination was re-initiated on June 20, 2024, and August 20, 2024, due to an additional five tribes (Thlopthlocco Tribal Town, Absentee-Shawnee Tribe of Indians in Oklahoma, Kialegee Tribal Town, Alabama-Coushatta Tribe of Texas, and Coushatta Tribe of Louisiana) being interested in the subject county. As of June 16, 2025, no additional responses have been received.	Pursuant to Tennessee Code Annotated 11-6-107(d), ³⁵ if human remains are identified, construction work must be halted, and the state archaeologist, the county coroner, and local law enforcement must be contacted immediately. In addition, each recognized Native American tribe would be contacted to afford a representative the opportunity to examine and evaluate the material found.	No Significant Impact
Section 4(f) Resources – See Appendix H for the Parks and Recreation/Section 4(f)/Section 6(f) Technical Memorandum				
Section 4(f) Resources – Historic Architecture	No Effect	Four NRHP-eligible or listed resources were located within the historic APE: the UT Arboretum, the Guy M. Jones House, the Bull Run Fossil Plant Historic District, and the J.B. Jones House. The May 2025 Addendum to the Historic Architecture Assessment report noted that the proposed Build Alternative would qualify as a Section 4(f) <i>de minimis</i> use of the Bull Run Fossil Plant Historic District and Guy M. Jones House, based on the Line and Grade Plans (dated February and March 2025), which serve as the focus of the EA (included in Appendix A). Specifically, approximately 7.002 acres of permanent easements (slope and drainage) and approximately 0.378 acre of temporary construction easement would be required from the Bull Run Fossil Plant Historic District. Approximately 0.073 acre of right-of-way and 0.031 acre of temporary construction easement would be required	None	No Significant Impact

³⁴ The archaeological Area of Potential Effects for the proposed SR-170 project included the limits of the existing and proposed right-of-way and easements associated with the Build Alternative.

³⁵ Laws regarding the Tennessee Division Of Archaeology and Archaeology In Tennessee, https://www.tn.gov/content/dam/tn/environment/archaeology/documents/TCA_Archaeology.pdf

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
		from Guy M. Jones House. There was no Section 4(f) use of the remaining resources. The TN SHPO, as the official with jurisdiction (OWJ), concurred with this determination on May 22, 2025.		
Section 4(f) Resources – Archaeological	No Effect	No Effect	None	No Impact
Section 4(f) Resources – Recreational and Wildlife and Waterfowl Refuges	No Effect	<p>A Section 4(f) <i>De Minimis</i> Use determination is proposed for the following anticipated recreational resource impacts located along the project corridor:</p> <p>Solway Park: 0.99 acre Haw Ridge Park: 1.77 acres Melton Lake Greenway: 713 linear feet (0.14 mile) Tennessee Centennial Golf Course: 3.58 acres TVA Melton Hill Reservoir: 12.21 acres</p> <p>Concurrence with TDOT <i>De Minimis</i> determinations was provided by the OWJs for the impacted resources on the following dates: City of Oak Ridge on August 19, 2025, TVA on August 20, 2025, and TWRA on July 27, 2025). FHWA approved the <i>De Minimis</i> Determination Evaluations for the resources prior to the approval of EA. See Appendix H for approved Determination Evaluations.</p>	<p>Coordination between TDOT and OWJ(s) has occurred to minimize the potential of ROW or easements required from the Section 4(f) resources and to avoid any impacts to recreational facilities at the parks. A virtual meeting with the City of Oak Ridge was held on April 11, 2025, with TVA on April 2, 2025, and with TWRA on May 12, 2025, to discuss the project design and potential land use impacts. The proposed roadway alignment has been placed as close to the existing alignment as feasible to minimize the land use impacts. However, land use impacts to Section 4(f) resources adjacent to the proposed Build Alternative would be unavoidable.</p> <p>It is anticipated that during the construction of proposed Build Alternative, access to Section 4(f) resources may be temporarily impacted while improvements to these locations are completed. TDOT intends to maintain access to all parcels throughout construction by implementing phased construction.</p>	No Significant Impact
Section 6(f) Resources – See Appendix H for the Parks and Recreation/Section 4(f)/Section 6(f) Technical Memorandum				
Section 6(f) of LWCF	No Effect	No Effect	None	No Impact
Ecology³⁶ – See Appendix J for the Ecological Resources Technical Reports				
Perennial Streams ³⁷	No Effect	Seven perennial streams (approximately 4,189.01 linear feet [0.52 acre]) are located within the limits of the proposed Build Alternative.	Throughout the design process, TDOT would endeavor to mitigate impacts to streams, wetlands, or any other jurisdictional water features through avoidance and minimization. Where impacts cannot be avoided or sufficiently minimized, compensatory mitigation for permanent stream/wetland impacts would be accomplished either through permittee-responsible mitigation, mitigation banking, or In-Lieu Fee mitigation to satisfy statutory requirements.	No Significant Impact
Intermittent Streams ³⁷	No Effect	Seven intermittent streams (approximately 706.83 linear feet [0.03 acre]) are located within the limits of the proposed Build Alternative.	Throughout the design process, TDOT would endeavor to mitigate impacts to streams, wetlands, or any other jurisdictional water features through avoidance and minimization. Where impacts cannot be avoided or sufficiently minimized, compensatory mitigation for permanent stream/wetland impacts would be accomplished either through permittee-responsible mitigation, mitigation banking, or In-Lieu Fee mitigation to satisfy statutory requirements.	No Significant Impact

³⁶ For the purpose of Environmental Assessment, all of the water resources (Perennial Streams, Intermittent Streams, Wet Weather Conveyances [WWC], Ponds, and Lakes/impoundment) from both design segment EBRs (124121.01 & 124121.02) have been combined.

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Wet Weather Conveyances (WWC) ³⁷	No Effect	Four WWC (approximately 2,785.37 linear feet [0.12 acre]) are located within the limits of the proposed Build Alternative.	Throughout the design process, TDOT would endeavor to mitigate impacts to streams, wetlands, or any other jurisdictional water features through avoidance and minimization. Where impacts cannot be avoided or sufficiently minimized, compensatory mitigation for permanent stream/wetland impacts would be accomplished either through permittee-responsible mitigation, mitigation banking, or In-Lieu Fee mitigation to satisfy statutory requirements.	No Significant Impact
Ponds ³⁷	No Effect	No ponds were identified within the limits of the proposed Build Alternative; therefore, no effect would occur to ponds.	Throughout the design process, TDOT would endeavor to mitigate impacts to streams, wetlands, or any other jurisdictional water features through avoidance and minimization. Where impacts cannot be avoided or sufficiently minimized, compensatory mitigation for permanent stream/wetland impacts would be accomplished either through permittee-responsible mitigation, mitigation banking, or In-Lieu Fee mitigation to satisfy statutory requirements.	No Significant Impact
Lakes / impoundment ³⁷	No Effect	One lake/impoundment (approximately 12.18 acres) is located within the limits of the proposed Build Alternative.	Throughout the design process, TDOT would endeavor to mitigate impacts to streams, wetlands, or any other jurisdictional water features through avoidance and minimization. Where impacts cannot be avoided or sufficiently minimized, compensatory mitigation for permanent stream/wetland impacts would be accomplished either through permittee-responsible mitigation, mitigation banking, or In-Lieu Fee mitigation to satisfy statutory requirements.	No Significant Impact
Wetlands ³⁷	No Effect	45 wetlands (approximately 3.30 acres) are located within the limits of the proposed Build Alternative.	Throughout the design process, TDOT would endeavor to mitigate impacts to streams, wetlands, or any other jurisdictional water features through avoidance and minimization. Where impacts cannot be avoided or sufficiently minimized, compensatory mitigation for permanent stream/wetland impacts would be accomplished either through permittee-responsible mitigation, mitigation banking, or In-Lieu Fee mitigation to satisfy statutory requirements.	No Significant Impact
Water Quality	No Effect	One 303(d) listed lake, the LAK-1 (Melton Hill Reservoir), was found within the limits of the proposed Build Alternative and is listed as having a non-supporting water quality.	Some of the projected impacts to water quality would be offset by the roadway design and by the federal, state, and local regulations that require erosion and sediment control plans, the implementation of best management practices, and various water quality permits that require water quality monitoring. Refer to Section 4.1.1 for more details regarding construction-related water quality impacts.	No Significant Impact
Threatened and Endangered Species	No Effect	In coordination dated July 30, 2025, the US Fish and Wildlife Service (USFWS) concurred with TDOT's determination of "Not Likely to Adversely Affect" the federally listed Spectaclecase mussel (<i>Margaritifera monodonta</i>), Indiana bat (<i>Myotis sodalis</i>) or tricolored bat (<i>Perimyotis subflavus</i>). Per the Tennessee Wildlife Resources Agency (TWRA) coordination letter, dated October 15, 2024, no state-listed animal species are located within a one-mile radius of the project area. Implementation of standard best management practices would satisfy the needs of the TWRA. As indicated in the July 25, 2025 Environmental Boundaries Report (EBR) for Design Segment 1 and July 24, 2025 EBR for Design Segment 2, the proposed Build Alternative is	The following project commitment has been added as a result of coordination with USFWS and is shown on the Green Sheet of this document: All necessary tree clearing within project limits will be completed between October 1 and March 31 to minimize impacts to listed species.	Not Likely to Adversely Affect the Spectaclecase mussel (<i>Margaritifera monodonta</i>), Indiana bat (<i>Myotis sodalis</i>), or tricolored bat (<i>Perimyotis subflavus</i>).

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
covered under Condition 1 of the 2023 Memorandum of Agreement (MOA) between TDOT, FHWA, and TDEC Division of Natural Areas (DNA) with no effect for state listed species; therefore, coordination with TDEC-DNA was not required.				
Floodplains – See Appendix F for the Farmland, Soils, and Floodplain Analysis Technical Memorandum				
Floodplains	No Effect	Portions of the proposed project are located in or near a Federal Emergency Management Agency (FEMA) defined floodplain where Base Flood Elevations have been determined; however, there is no floodway defined. Specifically, approximately 2.20 acres of the 100-year floodplain associated with the Clinch River, are located within the limits of the proposed Build Alternative.	The design of the proposed Build Alternative would be consistent with the Memorandum of Understanding (MOU) between the FHWA and FEMA and with the floodplain management criteria set forth in the National Flood Insurance Regulations of Title 44 of the Code of Federal Regulations . ³⁷ It would be consistent with the requirements of floodplain management guidelines for implementing Executive Order 11988 ³⁸ and FHWA guidelines 23 Code of Federal Regulations 650A . ³⁹	
Soils and Geology Impacts – See Appendix F for the Farmland, Soils, and Floodplain Analysis Technical Memorandum				
Geology	No Effect	Construction of the proposed Build Alternative may result in impacts to geology, such as impacts to drainage, ground, and slope instability	As per TDOT standard practice, TDOT would likely conduct a subsurface investigation during the design phase and develop a project-specific design to address any geotechnical or geological concerns that are identified at that time.	No Significant Impact
Hazardous Materials – See Appendix L for the Hazardous Materials Technical Report				
Hazardous Materials	No Effect	A 2025 Hazardous Materials Database Review was completed in April 2025 to document a federal and state database search of potential hazardous materials sites. Based on the review, four potential hazardous material sites were found within the limits of the proposed Build Alternative, two of which would be impacted by the proposed project: Tract 51 (1060 Edgemoor Road) and Tract 121 (601 Edgemoor Road). Additionally, the bridge over Clinch River has confirmed asbestos.	The following recommendations have been included: <ul style="list-style-type: none"> • Tract 51 (1060 Edgemoor Road): recommendation of additional take to clear the property of encroachments and conflicts. • Tract 121 (601 Edgemoor Road): requires the complete removal and closure of system within the ROW. • Clinch River Basin: Environmental samples from the basin will be collected during geotechnical drilling. 	No Significant Impact
Visual Impacts – See Appendix G for the Visual Resources Technical Memorandum				
Visual Impacts	No Effect	The existing visual landscape of the project area is primarily rural and undeveloped with scattered residential development and businesses. The proposed Build Alternative is anticipated to have minimal visual impact as transportation and industrial facilities are already part of the viewshed. The proposed Build Alternative would add to the scale of existing features; however, viewer groups are accustomed to viewing the elements of transportation infrastructure in the project area. Viewers would notice the changes along the project corridor, but the changes would not substantially degrade existing views. No areas of high visual quality or visually sensitive resources exist along the project corridor. Views from the Melton Lake Greenway would be slightly degraded due to the addition of infrastructure and removal of vegetative buffer;	Coordination would continue with the local community and officials to minimize disruption, duration, and extent of temporary construction impacts.	No Significant Impact

³⁷ CFR Title 44, <https://www.ecfr.gov/current/title-44>

³⁸ Executive Order 11988--Floodplain management, <https://www.archives.gov/federal-register/codification/executive-order/11988.html>

³⁹ 23 CFR Part 650, Subpart A, <https://www.ecfr.gov/current/title-23/chapter-I/subchapter-G/part-650/subpart-A>

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
		<p>however, the existing bridge and surrounding overhead utilities interrupt the natural harmony of existing views. The proposed Build Alternative is consistent with local planning documents and aligns with the community's desired visual character. Construction activities inherently involve the introduction of temporary visual and physical elements along the project corridor.</p> <p>The overall visual quality of the landscape units is anticipated to remain the same, therefore, the visual impacts would be considered minimal and neutral.</p>		

4.1.1 Construction and Operations Impacts

A roadway construction project is likely to cause some level of inconvenience through disruption to residents, businesses, and travelers. Impacts from construction projects are short-term in duration and may include inconveniences such as noise, dust, and traffic conflicts, along with temporary increases in soil erosion and siltation in downstream watercourses. Operations refer to fuel use associated with construction related activities, routine maintenance, and motor vehicle use.

The primary construction impacts for the proposed Build Alternative would be associated with grading activities and the use of heavy equipment and trucks used to transport materials to and from the area. It is anticipated that the local roadways would remain open to traffic throughout the construction phase, with minor lane restrictions or possible short-term closures in some areas. Construction-related issues including maintenance of traffic, access to properties adjoining the road, and utility relocations would be addressed throughout the project development process.

Construction impact controls would be integrated into the proposed project's contract specifications and traffic control plans. The proposed project would be constructed in accordance with all applicable rules and regulations regarding construction impacts, as required in TDOT's Standard Specifications for Road and Bridge Construction.

No-Build Alternative Impacts

The No-Build Alternative would not have any construction or operations related impacts. However, future impacts may occur from maintenance work on the existing roadway.

Build Alternative Impacts

The proposed Build Alternative would have the following construction and operations related impacts:

- **Traffic and Access:** Construction of the proposed Build Alternative may create a temporary inconvenience for local residents and businesses attempting to reach destinations within the SR-170 project area. Additionally, construction of the proposed Build Alternative may cause temporary traffic impacts. Access to properties would be maintained during construction; however, access may become more challenging during construction. The design plans for the proposed Build Alternative would include a general note to the contractor that no less than seven (7) days prior to the closure of a road during construction, the contractor shall provide a notice describing the affected roads and the approximate duration of the construction to relevant individuals or agencies that include, but are not limited to: the local law enforcement office(s), the local fire department(s), ambulance services, local school superintendent(s), United States Postal Service, and the local road superintendent. Traffic control measures and access are covered in more detail in Section 2.5 and Section 2.6 of this EA.
- **Fuel Consumption:** The proposed Build Alternative would have the following impacts related to fuel consumption:
 - Construction: Fuel would be used for the manufacturing and transport of the construction components and by the heavy equipment used for roadway construction. Traffic delays could accompany the construction activities and could result in temporary increases in fuel use.
 - Maintenance: The proposed Build Alternative would require routine maintenance that would result in fuel use. Traffic delays could result from maintenance activities and cause temporary increases in fuel use.

- Motor Vehicle Use: The proposed Build Alternative is anticipated to improve system linkage on the overall roadway network, thereby decreasing fuel use.
- **Air Quality:** Construction of the proposed Build Alternative may cause temporary generation of construction-related pollutant emissions and dust. The contractor would follow the procedures in TDOT's Standard Specifications for Road and Bridge Construction as amended by the most recent applicable supplements to minimize these effects. Refer to *Table 4*, above, for more details regarding air quality impacts and minimization/mitigation measures.
- **Noise:** Construction of the proposed Build Alternative may cause intermittent and temporary noise above existing noise levels. TDOT's construction specifications would apply to this project. Refer to *Table 4*, above, for more details regarding noise impacts and minimization/mitigation measures.
- **Soils and Geology:** Construction of the proposed Build Alternative may result in impacts to soils and geology. Refer to *Table 4*, above, for more details regarding impacts to geology and minimization/mitigation measures.
- **Water Quality and Erosion:** Construction of the proposed Build Alternative has the potential to result in temporary impacts to water quality. The project would be subject to conditions of the National Pollutant Discharge Elimination System (NPDES) and permit conditions would require the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) to help control erosion, sedimentation, and other project-generated waste. Refer to *Table 4*, above, for more details regarding water quality impacts and minimization/mitigation measures.
- **Utilities:** Underground and above-ground utilities are currently located within the existing ROW or immediately adjacent to it. Utilities located within the proposed ROW for the proposed Build Alternative that are in conflict with the design of the proposed Build Alternative would be relocated as part of the construction. Relocation of utilities could result in temporary pauses in service; however, construction of the proposed Build Alternative would not result in the permanent elimination of any current services. As the design process progresses, TDOT would confirm which utilities warrant relocation. Relocation of utilities would be coordinated with the appropriate service providers to avoid or minimize disruption of service.
- **Vibration:** Trucks and machinery used for construction of the proposed Build Alternative would produce noise and vibration, which may affect some land uses and activities during the construction period. Individuals inhabiting homes along the proposed Build Alternative would, at some time, experience perceptible construction noise and vibration from the construction of this project. Occupants of buildings near some construction equipment may perceive ground vibration effects during the operation of that equipment. Although these effects are temporary and would vary from day to day based on specific construction operations, damage to buildings is not anticipated. The contractor would follow the procedures in TDOT's Standard Specifications for Road and Bridge Construction⁴⁰ as amended by the most recent applicable supplements. Mitigation measures are incorporated into TDOT's Standard Specifications for Road and Bridge Construction to minimize or eliminate the effects of construction noise on adjacent noise receptors are expected to also mitigate the effects of vibration.

⁴⁰ TDOT 2021 Standard Specifications, <https://www.tn.gov/tdot/tdot-construction-division/transportation-construction-division-resources/2021-standard-specifications.html>

- **Solid Waste and Hazardous Waste:** Potential hazardous material sites were identified within the limits of the proposed Build Alternative. Solid waste could be generated by project construction (e.g., through demolition and removal of structures). The quantity of disposed waste and construction debris would represent a negligible proportion of the total waste directed toward local landfills. Any toxic and hazardous materials would be handled and used in accordance with package labels and manufacturer's directions. Wastes would be segregated, labeled, and stored in a manner that would prevent their release into the environment from an accident or spill. The contractor would dispose of these materials and their containers in accordance with applicable state and federal regulations. Refer to *Table 4*, above, for more details regarding hazardous materials impacts and minimization/mitigation measures.
- **Archaeology and Native American Consultation:** Construction of the proposed Build Alternative could result in the identification of unknown archaeological sites. If archaeological materials are uncovered during construction, all construction work in the area of the find would cease. The Tennessee Division of Archaeology and recognized Native American tribes would be immediately contacted so that their representative may have the opportunity to examine and evaluate the materials. Refer to *Table 4*, above, for more details regarding archaeological impacts, Native American Consultation, and minimization/mitigation measures.
- **Terrestrial and Aquatic Species:** The contractor would be required to prepare and implement a revegetation plan that has been approved by TDOT.
- **Wetlands and Waters of the US:** Construction activities would be confined within the permitted limits to prevent unnecessary disturbance of adjacent wetland areas. Potential temporary impacts to wetlands would be minimized by implementing sediment and erosion control measures, including seeding of side slopes, silt fences, and sediment basins, as appropriate. Refer to *Table 4*, above, for more details regarding wetland impacts and minimization/mitigation measures.

Without proper planning and implementation of controls, traffic disruption, loss of access, and utility relocation could adversely affect the daily life of residents and inconvenience or disrupt the flow of customers, employees, and material or supplies to and from businesses. Construction impact controls would be integrated into the project's contract specifications and traffic control plans.

Potential construction-related impacts are anticipated to be temporary and would not exceed the timeframe during which active construction of the proposed Build Alternative would take place.

As it relates to operations, the amount of fuel required to construct a highway project of this type is substantial, but temporary in nature, and generally leads to reduced operating costs once the proposed project is completed. Given that the proposed Build Alternative would predominantly consist of widening existing SR-170, it is not anticipated that fuel impacts related to the proposed Build Alternative would be more than the No-Build Alternative post construction.

4.2 Identification of Significant Impacts for Direct Effects

Following the analysis of impacts, as described in *Table 4*, above, and *Section 4.1.1* the following impact determinations have been made for both the No-Build and Build Alternatives:

- **No-Build Alternative** - The No-Build Alternative would have no significant direct effects on the social, economic, physical, and natural resources identified within the SR-170 project area.

- Build Alternative - The proposed Build Alternative would have no significant direct effects on the social, economic, physical, and natural resources identified within the SR-170 project area.

4.2.1 Measures to Minimize or Mitigate Any Direct Effects

Measures to minimize or mitigate any direct effects are presented in *Table 4*, above, and *Section 4.1.1*.

4.3 Environmental Permits

The following permits would be required from the USACE, TVA, U.S. Coast Guard (USCG), and TDEC for implementation of the proposed Build Alternative:

- Clean Water Act Section 404 Permit⁴¹ - Required for construction that involves placement of dredge and fill material in Waters of the U.S. Typical Waters of the U.S. include rivers, blue line streams, headwaters streams, and special aquatic sites, such as wetlands. Section 404 Permits are issued by the USACE and may include individual or nationwide permits depending on the activity and resource (USACE issues Clean Water Act Section 404 Permits);
- Section 401 Water Quality Certification⁴² - Required to ensure that activities requiring Federal permits or licenses would not cause pollution in violation of State water quality standards (TDEC's Division of Water Resources issues 401 Water Quality Certifications);⁴³
- Aquatic Resource Alteration Permit (ARAP)⁴⁴ - Required for any alterations of State waters, including wetlands that do not require a Federal (Section 404) permit. The ARAP permits are required for construction at locations where the proposed project involves placement of fill in the following: a pond that is spring fed or impacts springs; reservoirs; wetlands; blue line streams; intermittent blue line streams on the U.S. Geological Survey (USGS) 7.5 quadrangle map; any stream that supports any form of aquatic life; or is in the vicinity of a State-listed endangered species (TDEC's Division of Water Resources issues ARAP permits);⁴⁵
- National Pollutant Discharge Elimination System (NPDES)⁴⁶ - Required for grubbing, clearing, grading, or excavation that result in an area of disturbance of one or more acres of land and for stormwater discharges (TDEC's Division of Water Resources issues NPDES permits);⁴⁷
- TVA Section 26a Permit – Required for any construction, operation, or maintenance of any dam, appurtenant works, or other obstruction affecting navigation, flood control, or public lands or reservations along or in the Tennessee River or any of its tributaries⁴⁸.

⁴¹ Clean Water Act Section 404 Permit, <https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404>

⁴² Section 401 Water Quality Certification, <https://www.epa.gov/cwa-401/overview-cwa-section-401-certification>

⁴³ TDEC's Division of Water Resources issues 401 Water Quality Certifications, <https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html>

⁴⁴ Aquatic Resource Alteration Permit, <https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html>

⁴⁵ TDEC's Division of Water Resources issues ARAP permits, <https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html>

⁴⁶ National Pollutant Discharge Elimination System, <https://www.tn.gov/content/tn/environment/permit-permits/water-permits1/npdes-permits1/npdes-stormwater-permitting-program/npdes-stormwater-construction-permit.html>

⁴⁷ TDEC's Division of Water Resources issues NPDES permits, <https://www.tn.gov/environment/permit-permits/water-permits.html>

⁴⁸ TVA Section 26a Permit, <https://www.tva.com/environment/shoreline-construction-permits/section-26a-regulations>

- USCG Bridge Permit⁴⁹ - Required if the proposed replacement bridge over the Clinch River meets or exceeds the existing horizontal and vertical clearance of the current Edgemoor Rd Bridge. The existing clearances are 203.5 horizontal feet, and 35.2 vertical feet. The USCG will need to review the designs for the proposed bridge and process a public notice and receive public input before a final concurrence can be provided.

5. Public Involvement and Agency Coordination

Throughout the development of this project, the public, agencies, and other stakeholders have been given opportunities to provide input. This chapter summarizes the agency coordination and public involvement activities conducted to date, and describes the key issues identified through those coordination activities.

5.1 Project Initiation

On December 11, 2024, TDOT provided written notification to FHWA of the intent to initiate the NEPA process for the proposed SR-170 project and develop an EA to comply with NEPA. Refer to *Appendix A: STIP, Project Background, and Line and Grade Plans*, for a copy of TDOT’s Letter of Intent to FHWA and for a copy of FHWA’s Concurrence Letter. FHWA provided written concurrence with this approach via letter dated December 12, 2024. This written concurrence serves as the official start to the NEPA process for the proposed project.

5.2 Agency Coordination

5.2.1 Coordination and Public Involvement Plan

On March 25, 2025, TDOT distributed an early coordination package to agencies, organizations, and government officials asking for input and comments regarding the proposed project. The early coordination package consisted of an early coordination letter, a project location map, and a copy of the Public Involvement and Agency Coordination Plan (PICP) (see *Appendix N: Public Involvement and Agency Coordination Plan and Agency Correspondence*). The transmittal letter requested that recipients review the enclosed materials and provide input/comments on the proposed project by April 24, 2025. *Table 5*, below, includes the list of stakeholders and agencies.

Table 5: Stakeholder Database

Local, Regional, State, and Federal Agencies for Coordination	
<ul style="list-style-type: none"> • U.S. Army Corps of Engineers* • U.S. Department of Transportation - Federal Railroad Administration • Tennessee Valley Authority* • Natural Resource Conservation Service* • U.S. Department of Housing and Urban Development • U.S. Coast Guard • U.S. Environmental Protection Agency • U.S. Department of the Interior - Office of Surface Mining 	<ul style="list-style-type: none"> • City of Oak Ridge** <ul style="list-style-type: none"> ○ Office of The Mayor ○ Police Department ○ Fire Department ○ Recreation and Parks ○ Planning and Development ○ Transportation • Anderson County <ul style="list-style-type: none"> ○ Office of The County Mayor ○ Parks and Recreation ○ Department of Emergency Management ○ Schools

⁴⁹ USCG Bridge Permit, <https://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/Marine-Transportation-Systems-CG-5PW/Office-of-Bridge-Programs/Bridge-Permit-Application-Process/>

Local, Regional, State, and Federal Agencies for Coordination	
<ul style="list-style-type: none"> ● U.S. Department of the Interior - U.S. Geological Survey ● U.S. Department of Transportation - Federal Aviation Administration ● U.S. Fish and Wildlife Service** ● Appalachian Regional Commission ● Tennessee Department of Environment and Conservation ● Tennessee Wildlife Resource Agency ● Tennessee Historical Commission ● Tennessee Department of Agriculture** ● Tennessee Housing Development Agency ● Tennessee Emergency Management Agency ● Tennessee Association of Floodplain Management ● Knoxville Regional Transportation Planning Organization ● East Tennessee Human Resource Agency 	<ul style="list-style-type: none"> ○ Sheriff ● Claxton Volunteer Fire Department ● City of Oak Ridge Centennial Golf Course ● University of Tennessee Arboretum ● Woodhaven Funeral Home and Memorial Gardens ● Oak Ridge Memorial Park ● Sierra Club ● The Nature Conservancy ● Tennessee Environmental Council ● Tennessee Trails Association ● Tennessee Wildlife Federation ● Tennessee Division of Forestry ● Claxton Country Squares***

* Responded as a cooperating agency

** Responded as a participating agency

*** Responded as a non-participating agency

All the responses received from the agencies were made part of the proposed project and are available in *Appendix N: Public Involvement and Agency Coordination Plan and Agency Correspondence*.

5.2.2 Tennessee Environmental Streamlining Agreement

During preparation of the early coordination packages in January 2025, TDOT and the FHWA determined that the proposed project did not warrant involvement in the Tennessee Environmental Streamlining Agreement (TESA) process due to anticipated minimal adverse impacts to the resources that are protected under the jurisdiction of the agencies that are parties to TESA. For additional information on the TESA process and on the determination that the proposed SR-170 project did not warrant involvement in the TESA process, see *Appendix N: Public Involvement and Agency Coordination Plan and Agency Correspondence*.

5.2.3 Section 106 Tribal Coordination

An invitation to participate in the Section 106 process was sent on February 14, 2018, to all federally recognized Native American tribes with interests in the subject county: Cherokee Nation, Eastern Band of Cherokee Indians, Muscogee (Creek) Nation, Shawnee Tribe, Eastern Shawnee Tribe of Oklahoma, and United Keetoowah Band of Cherokee Indians in Oklahoma.

The Muscogee (Creek) Nation responded and accepted the invitation to be a consulting party on March 13, 2018. Cultural resources reports were sent to this consulting party on June 13, 2025.

Native American Coordination was re-initiated for the subject project on June 20, 2024, and August 20, 2024, due to additional tribes being interested in the subject county.

An invitation to participate in the Section 106 process was sent June 20, 2024, to Thlopthlocco Tribal Town and Absentee-Shawnee Tribe of Indians in Oklahoma.

An invitation to participate in the Section 106 process was sent August 20, 2024, to Kialegee Tribal Town, Alabama-Coushatta Tribe of Texas, and Coushatta Tribe of Louisiana. To date, no other responses have been received.

In accordance with Section 106 regulations, tribes must be provided a reasonable opportunity to comment on the proposed undertaking. TDOT Cultural Resources staff would document all additional requests for information, comments, or additional communications with recognized tribes on this undertaking. TDOT would re-initiate consultation if additional cultural resources studies are required or if archaeological materials or human remains are discovered during construction.

5.2.4 Coordination Summary

TDOT conducted coordination with federal, state, regional, and local agencies, as well as Native American tribes and community organizations, in accordance with NEPA requirements. Responses received were generally supportive or neutral, and no formal opposition to the proposed project was documented during project coordination. Agency and tribal input was considered in the planning and environmental review process. Summary tables detailing correspondence and response tracking are provided in *Appendix N: Public Involvement and Agency Coordination Plan and Agency Correspondence*.

5.3 NEPA Public Meeting, March 6, 2025

A Public Meeting was held on March 6, 2025, from 5:00 p.m. EST to 7:00 p.m. EST at Claxton Elementary School located at 2218 Clinton Highway in Powell, TN. The purpose of the meeting was to provide the public with the opportunity to review and comment on the purpose and need for the proposed SR-170 project as well as a range of alternatives under consideration.

5.3.1 Meeting Advertisement

To publicize the March 6, 2025, Public Meeting, a public notice was published in the Tennessee Press Service (statewide public notice website) and in the local newspaper (*The Courier News*) on February 26, 2025, and additionally, the public meeting was advertised on the TDOT project website⁵⁰ (see *Appendix M: Public Engagement Summary*). To further reach the public and stakeholders around the proposed project corridor, 1,928 postcards were mailed to the property owners and residents adjacent to the project area to notify them about the meeting, and flyers were distributed to stakeholders. Several yard signs were also placed at the school (Public Meeting location) on March 6, 2025, before the pick-up time for kids, so parents could also be notified about the public meeting.

5.3.2 Public Meeting

The March 6, 2025, public meeting was an open house format meeting with a brief introduction by TDOT. A welcome table was set up at the entrance of the meeting room where attendees were asked to sign in and were provided a project informational handout and a pre-addressed, pre-paid postage comment card. Members of the public that chose to sign-in also had the option of selecting to be a part of the project stakeholder database for future updates about the project. These individuals would receive future mailings related to the proposed SR-170 project along with individuals already included in the project stakeholder database. The meeting attracted approximately 100 people, including public stakeholders and local officials.

⁵⁰ <https://www.tn.gov/tdot/projects/projects-region-1/sr-170-widening.html>

5.3.3 Methods of Public Comment

Throughout the March 6, 2025, public meeting, and the 21-day public comment period that followed, the public was able to submit official comments or questions to TDOT in several ways outlined below. Please note that TDOT requested that all comments be postmarked by March 27, 2025, the end of the 21-day comment period.

1. *Toll Free Number*

A toll-free TDOT SmartWay phone number and Project Manager's phone number were provided for the public to ask questions and make comments about the proposed project during the official comment period.

2. *Electronic Mail (Email)*

To provide the public with a convenient single point of contact, TDOT prompted members of the public to send an email to TDOT.comments@tn.gov, using the subject line "State Route 170 Project". This email address was made available for general inquiries and was also an option for submittal of official comments during the comment period.

3. *Comment Card*

Comment cards were also distributed to everyone at the public meeting. These comment cards include prepaid postage giving members of the public an option to leave their comment card with the TDOT project team at the public meeting or take the comment card home with them to mail at a later date. Additionally, the comment card was also available for download via the project website for interested individuals to print and mail at a later time.

4. *Online Comment Form*

Following the public meeting, public comments could also be submitted online. The online form link was posted on the project website and several QR codes directly linked to the online form were displayed during the public meeting.

- URL: <https://tinyurl.com/SR170-commentform>

5. *Mail*

Members of the public were offered the option to submit a letter with either their comment or question to the following address:

- C/O John Sherk, Project Manager
Tennessee Department of Transportation – Region 1
7345 Region Lane,
Knoxville, TN 37914

5.3.4 Public Response Summary

Following the public meeting, a total of 27 comments were received through various formats including in-person comments from the meeting and comments submitted via mail, phone, email, or online form. Of the 27 comments received, the majority expressed support or conditional support for the proposed project. Two commenters who opposed the project acknowledged the need for improvements but raised concerns about potential impacts to community resources, traffic patterns, and the surrounding environment. TDOT reviewed all comments and provided detailed responses, addressing concerns and clarifying project intent. A full record of public input and official TDOT responses is available in *Appendix M: Public Engagement Summary*. Please see *Table 6*, below, for the breakdown of comments received.

Table 6: Breakdown of Comments Received

Public Input	
Public Meeting Attendees	93
Comments Received (by format)	
Public Meeting Comments	8
Phone Comments	0
Email Comments	5
Online Comments	5
Mailed Comments	9
<i>Total Comments received</i>	27
Comment Disposition of All Received Comments	
Support	10
Conditional Support	9
Against	2
Uncommitted	6
Comments Received by Topic	
ROW	1
Traffic	16
Environmental	2
Roadway Design, and others	8

5.4 Distribution of EA and Notice of Availability

Following FHWA approval of the EA, a Notice of Availability (NOA) for the EA document would be posted to the project website and published in the local newspaper(s)⁵¹. The EA document and associated technical appendices would be made available electronically via the SR-170 project website⁵². TDOT will also make physical copies of the EA and appendices available at the following locations for public review:

- TDOT Region 1 Office
7345 Region Lane,
Knoxville, TN 37914
- Clinton Public Library
118 S Hicks Street,
Clinton, TN 37716
- Oak Ridge Public Library
1401 Oak Ridge Turnpike, Oak
Ridge, TN 37830
- Tennessee Centennial Golf Course
101 Centennial Boulevard, Oak
Ridge, TN 37830

The EA would be distributed (digitally, unless otherwise specifically requested) to all Cooperating and Participating Agencies, stakeholders, and members of the public who have requested copies. The NOA would identify where the EA would be available for public review, how the public can provide input, and who to contact with comments or for additional information. The NOA, in addition to announcing the availability of the EA and other project documents for review, also shares information about the NEPA Public Hearing such as date, time, and location. In accordance with TDOT's Public Involvement Plan (PIP) and the regulatory requirements outlined in 23 CFR 771.111(h)(iv), the NOA would be published at least 15 calendar days prior to the Public Hearing. The NOA also announces the beginning of the formal review and comment period and provides instructions on how to provide oral or written comments.

⁵¹ The Courier, <https://www.courieranywhere.com/>

⁵² SR-170 Project Website, <https://www.tn.gov/tdot/projects/projects-region-1/sr-170-widening.html>

5.5 Public Hearing

As noted above, the regulations and requirements for publishing notices, providing the opportunity for a Public Hearing, and obtaining public input are based on the FHWA environmental procedures (23 CFR 771) and Title VI of the Civil Rights Act of 1964 (as cited in the TDOT PIP).

The Public Hearing would present project information regarding the proposed project's purpose and need, the proposed range of alternatives evaluated in the EA, the identification of the recommended Preferred Alternative as identified in the approved EA, any anticipated social, economic, and environmental impacts of the Preferred Alternative, and preliminary plans to mitigate those impacts. Information on relocation services and payments, as well as the land acquisition process, must also be provided and discussed. TDOT's ROW booklet and at least one representative from the Right-of-Way Division would be present to facilitate these conversations. A formal question-and-answer period following a formal presentation on the information discussed above would allow attendees the opportunity to directly address the project team with questions regarding the proposed project, the findings of the EA, and the selected Preferred Alternative. The project team would bring displays for the public to view throughout the hearing. The project team would also be available following the formal presentation and question-and-answer period to participate in conversations with attendees. A court reporter would be present throughout the Public Hearing and would provide a complete transcription of the presentation and question-and-answer session to be included in the project record.

Attendees would be able to provide written comments or use a court reporter to leave oral comments during the Public Meeting. Following the Public Hearing, comments would continue to be accepted for 21 calendar days. Comments received during the Public Hearing and following public comment period will be part of the official project record. The information on all the available methods to provide comments, including where to send written comments, would be provided during the Public Hearing as well as on the project website. All official public and agency comments will be published and responded in the final NEPA decision document.

State and local elected officials should be invited to the Public Hearing, as well as stakeholders included in the stakeholder database. All attendees would be asked to sign in upon entering the Public Hearing and would be given a comment sheet to record any comments. The project team may also provide handouts or fact sheets in multiple languages and font types. If needed or requested, the project team would sign individuals in and record their comments. The Public Hearing would be scheduled for a convenient date and time for the public and held at a convenient and accessible location within the project area for attendees.

6. Statute of Limitations

Following the approval of the final NEPA decision document, the FHWA may publish a notice in the Federal Register, pursuant to 23 U.S. Code 139(l),⁵³ indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for the subject transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions would be barred unless such claims are filed within 150 days after the date of publication of the notice or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by Federal laws governing such claims would apply.

⁵³ 23 U.S. Code § 139 - Efficient environmental reviews for project decision-making and One Federal Decision, <https://www.law.cornell.edu/uscode/text/23/139>

APPENDICES

- APPENDIX A** STIP, Project Background, and Line and Grade Plans
- APPENDIX B** Concurrence Point 1: Purpose and Need and Study Area/Alternatives to be Evaluated
- APPENDIX C** Traffic Capacity and Safety Analysis Technical Memorandum
- APPENDIX D** Land Use and Transportation Analysis Technical Memorandum
- APPENDIX E** Community Impact Assessment, Relocations, and Economic Resources Technical Memorandum
- APPENDIX F** Farmland, Soils, and Floodplain Analysis Technical Memorandum
- APPENDIX G** Visual Resources Technical Memorandum
- APPENDIX H** Parks and Recreation/Section 4(f) & Section 6(f) Technical Memorandum
- APPENDIX I** Air Quality and Noise Technical Reports
- APPENDIX J** Ecological Resources Technical Reports
- APPENDIX K** Cultural Resources Technical Reports
- APPENDIX L** Hazardous Materials Technical Report
- APPENDIX M** Public Engagement Summary
- APPENDIX N** Public Involvement and Agency Coordination Plan and Agency Correspondence