

Appendix B: Concurrence Point 1: Purpose and Need, and Study Area/Alternatives to be Evaluated

State Route (SR) 170

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

Tennessee Department of Transportation

TDOT PIN 124121.00

June 2025

Table of Contents

1. INTRODUCTION	1
1.1 Project Description	1
1.2 Project History	2
2. LOGICAL TERMINI AND INDEPENDENT UTILITY	3
3. NEED AND PURPOSE	4
3.1 Project Need	4
3.1.1 Existing Geometric Deficiencies	4
3.1.2 Insufficient Mobility/Connectivity	5
3.1.3 Traffic Congestion	6
3.1.4 Improve SR-170 Consistent with the Legislative Intent of the "Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy" (IMPROVE) Act and the Transportation Modernization Act (TMA)	7
3.2 Project Purpose	8
3.2.1 Correct Geometric Deficiencies	8
3.2.2 Improve Connectivity and Mobility	8
3.2.3 Reduce Traffic Congestion	9
3.2.4 Meet the Legislative Intent of the "Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy" (IMPROVE) Act and the Transportation Modernization Act (TMA)	9
4. ALTERNATIVE DESCRIPTIONS	9
4.1 No-Build Alternative	10
4.2 Build Alternative	10
5. PUBLIC AND AGENCY INPUT	10
5.1 NEPA Public Meeting	10
5.2 Early Coordination with Stakeholders	11

Figures

Figure 1: Project Location Map	2
--------------------------------	---

Tables

Table 1: SR-170 Level of Service Analysis	7
Table 2: Meeting Summary	11
Table 3: Stakeholder Database	12

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 from the SR-62 (Oak Ridge Highway) interchange (L.M. 0.00) to SR-9 (US-25W, Clinton Highway) (L.M. 6.18) in Anderson County, Tennessee, a total project length of 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 the NEPA to identify and evaluate the environmental effects of the proposed project and to identify measures to minimize harm.

As outlined in the Public Involvement and Agency Coordination Plan, this Concurrence Point 1 document provides preliminary details regarding the purpose and need as well as the study area and range of alternatives being considered in the Environmental Assessment (EA) currently being developed for the proposed project, in accordance with the National Environmental Policy Act (NEPA). The package for Concurrence Point 1 will be distributed by the Joint Lead Agency (TDOT) to Cooperating and Participating Agencies and other/Non-Participating agencies and officials for review and comment.

1.1 Project Description

The subject section of SR-170 runs from the City of Oak Ridge to the unincorporated community of Claxton. The current land use at the proposed project's start is primarily rural, with a few residential communities, parks, and a public golf course. As SR-170 crosses the Clinch River, the land use begins to urbanize, with the Tennessee Valley Authority's (TVA's) Bull Run Fossil Plant directly at the northern end of the bridge and residential communities and businesses appearing more frequently adjacent to the roadway as the proposed project extends toward Claxton.

The existing roadway along SR-170 between SR-62 and SR-9 (US-25W) consists primarily of two 12-foot travel lanes (one in each direction) with intermittent 12-foot paved turn lanes and variable shoulders. Based on the traffic forecasts for 2015-2035, it is expected that SR-170 will experience more congestion and longer traffic delays along many segments unless capacity is added.¹

The proposed project would improve the existing segment of SR-170 within the limits of the project area to address geometric deficiencies, enhance mobility, and relieve traffic congestion. The goals and objectives of an improved SR-170 facility include promoting safer operations for commuters and accommodating efficient movement of people and freight.

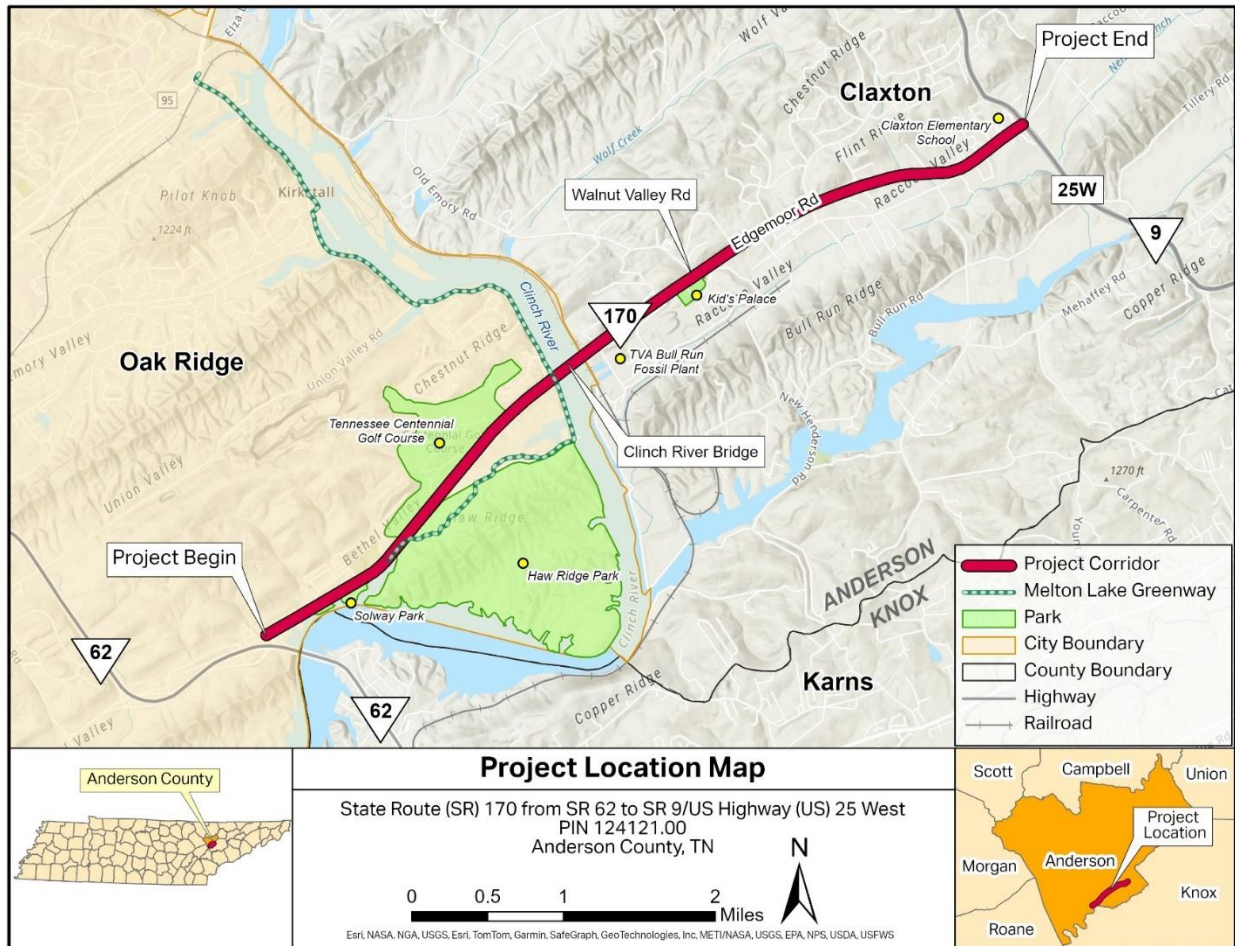
The proposed improvements would include widening the existing two-lane typical section to a four-lane typical section (two 12-foot travel lanes in each direction) with a variable median and eight-foot shoulders west of Walnut Valley Road, and a five-lane section (two 12-foot travel lanes in each direction and a center 12-foot two-way left-turn lane [TWLTL]) with eight-foot

¹ SR-170 Technical Planning Report Update 2022: [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) (Accessed 6/18/2025)

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. The design for the proposed project is being developed concurrently with the environmental analysis and in compliance with applicable environmental laws and regulations.

Figure 1: Project Location Map



1.2 Project History

In 2004, TDOT completed a feasibility study for the SR-170 corridor in August 2004 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 Edgemoor Road (concurrent with SR-170 within the project area). 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 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)² was developed to evaluate SR-170 corridor needs and alternatives. The study area started from SR-62, ended at 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:** Intersection improvements along SR-170 at Melton Lake Drive, Walnut Valley Road, Old Emory Road, and New Henderson Road.

In 2022, TDOT developed a TPR Update³ for this corridor, focused on the No-Build option and an updated version of the widening option (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 with a center TWLTL east of Walnut Valley Road.

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. On December 12, 2024, TDOT used the 2024 ETSA and concept design to coordinate the Letter of Intent with FHWA to recommend the appropriate NEPA class of action, which was determined to be an Environmental Assessment (EA), and formally initiate the NEPA process. The ETSA and concept designs were also presented to the public at a NEPA public meeting. 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.

2. Logical Termini and Independent Utility

FHWA provides EA preparation guidance through Technical Advisory T 6640.8A⁴ and general principles for the development of highway projects, including *logical termini* and *independent utility*, under 23 CFR 771.111(f).⁵ A project's purpose and need must establish that the project has "*logical termini*" and "*independent utility*."

"*Logical termini*" means that the area has rational endpoints for the transportation improvement 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-

² SR-170 Transportation Planning Report, <https://www.tn.gov/content/dam/tn/tdot/documents/government-how-do-i-documents/Studies/StatewidePlanning/studies-ApprovedTPRwithSignatures.pdf> (accessed 6/18/2025)

³ SR-170 Technical Planning Report Update 2022: [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) (Accessed 6/18/2025)

⁴ FHWA Technical Advisory T 6640.8A, https://www.environment.fhwa.dot.gov/legislation/nepa/guidance_preparing_env_documents.aspx? (Accessed 6/18/2025)

⁵ Code of Federal Regulations, <https://www.ecfr.gov/current/title-23/chapter-I/subchapter-H/part-771/section-771.111> (Accessed 6/18/2025)

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 corridor widening improvements, intersection improvements, and bridge replacement, the proposed project demonstrates independent utility as follows:

- Based on the regional connectivity providing access from across Anderson County to City of 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 Need and Purpose 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 multi-modal connectivity, as it included a survey area sufficient to address alternatives.

3. Need and Purpose

The goals and objectives of an improved SR-170 facility include promoting safer operations for commuters and accommodating efficient movement of people and freight. The widening and realignment of SR-170 is needed to address existing geometric deficiencies, insufficient mobility/connectivity, traffic congestion, and consistency with the IMPROVE Act⁶ and the Transportation Modernization Act (TMA)⁷. The proposed project’s purpose includes correcting geometric deficiencies to meet current TDOT design standards; improving connectivity for vehicles, pedestrians, and bicyclists; and providing additional capacity with operational and intersection improvements to address travel delays.

3.1 Project Need

3.1.1 Existing Geometric Deficiencies

The western section of the SR-170 project corridor, from the terminus at SR-62 to the Clinch River Bridge, is classified as an Urban/Minor Arterial. From the Clinch River Bridge to the eastern terminus at SR-9 (US-25W), SR-170 is classified as a Rural/Major Collector. The project corridor is predominantly a two-lane undivided facility with a number of disconnected segments

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

⁷ Transportation Modernization Act, <https://www.tn.gov/tdot/build-with-us/transportation-modernization-act.html> (accessed 6/18/2025)

that include a center TWLTL. The posted speed limit varies between 50 to 55 miles per hour (mph) along the entire project route.

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 measuring up to 12-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 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.

3.1.2 Insufficient Mobility/Connectivity

SR-170 is primarily a two-lane, undivided, heavily travelled roadway with approximately 14,500 vehicles per day (vpd in 2009)⁸ 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 the community of Claxton 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)⁹ because it lacks connectivity with sidewalks and bicycles and does not meet the design criteria of the TDOT's Multimodal Access Policy.¹⁰

⁸ Based on the TDOT Technical Report Update for SR-170 (August 2022)

⁹ <https://www.oakridgetn.gov/DocumentCenter/View/118/Comprehensive-Plan-PDF?bidId=> (accessed 6/3/2025).

¹⁰ Page 2-15

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

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 opportunities¹¹, 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.

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.

3.1.3 Traffic Congestion

Based on 2023 traffic data for SR-170 from SR-62 to the west of Melton Lake Drive, the Average Annual 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 east 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 LOS 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 community of Claxton), which was 14,665 vpd. The two roadway segments had nearly identical AADTs. From Old Edgemoor Road to SR-9, the two-directional AM peak hour between the two locations was 1,336 vpd and the two-directional PM peak hour was 1,568 vpd.

The 2011 TPR¹² 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 Level of Service (LOS) in the base year and design year in the AM and PM peak hours. 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. The existing (2009), base year (2015), and design year (2035) LOS for the SR-170 corridor was analyzed for

¹¹ The Oak Ridge National Lab has been growing in budget and staff in the early 2020s, and considered an economic driver for the region (<https://www.oakridger.com/story/news/local/2024/11/26/ornl-director-provides-update-on-fast-growing-lab/76569064007/> , accessed 6/3/2025).

¹² 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)

this report. The Highway Capacity Software package HCS 2000 was used to analyze existing two-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 (see Table 1, below).

Table 1: SR-170 Level of Service Analysis

SR-170 Segment	AADT (vehicles per day [vpd])			AM Peak LOS				PM Peak LOS			
				No-Build		Build		No-Build		Build	
	2009	2015	2035	2009	2015	2035	2035	2009	2015	2035	2035
				2-Ln	2-Ln	2-Ln	4 & 5-Ln	2-Ln	2-Ln	2-Ln	4 & 5-Ln
Oak Ridge Highway to Melton Lake Drive	13,000	18,860	22,630	E	E	F	C	E	E	F	C
Melton Lake Drive to Old Emory Road	14,622	21,250	25,750	E	E	F	D	E	E	F	D
Old Emory Road to New Henderson Road	14,300	20,830	25,230	E	F	F	D	E	E	F	D
New Henderson Road to Old Edgemoor Road	14,100	20,510	24,860	E	F	F	D	E	E	F	D
Old Edgemoor Road to Clinton Highway (SR-9/US-25W)	14,665	14,950	18,240	E	E	E	C	E	E	E	C

Ln: Lane, **Bold:** Non-acceptable LOS

3.1.4 Improve SR-170 Consistent with the Legislative Intent of the “Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy” (IMPROVE) Act and the Transportation Modernization Act (TMA)

The “[Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy](#)” (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

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

*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 Transportation and Modernization Act (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

3.2 Project Purpose

3.2.1 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 Edition¹⁷. 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 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 a sidewalk and shared use path throughout the corridor.

3.2.2 Improve Connectivity and Mobility

The proposed improvements would provide more efficient movement of people and freight throughout the area. Improved vehicular access and multi-modal connections between the

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%202024_final.pdf (accessed 6/2/2025)

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

residential and recreational destinations would be addressed with turn lanes and improved accesses 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 from the City of Oak Ridge to 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, trailering 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.

3.2.3 Reduce Traffic Congestion

Based on the 2011 Capacity Analysis completed for the Technical Planning Report, 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 will fully accommodate the projected design year traffic at an acceptable LOS (Table 1).

3.2.4 Meet the Legislative Intent of the “Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy” (IMPROVE) Act and the Transportation Modernization Act (TMA)

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

4. Alternative Descriptions

In accordance with the implementing regulations of NEPA (FHWA Technical Advisory T6640.8A and Title 23 of the Code of Federal Regulations (CFR) 771.111), the No-Build Alternative has

been retained for detailed study and serves as a benchmark for comparison with the Build Alternative. Other Build Alternatives were eliminated in previous planning phases because they did not meet the need and purpose of the project; one Build Alternative is being considered.¹⁸

4.1 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, State Transportation Improvement Program (STIP), and the TDOT 10-Year Project Plan and would allow for routine maintenance and safety upgrades.

4.2 Build Alternative

The proposed Build Alternative would include widening the existing two-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 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.

5. Public and Agency Input

5.1 NEPA Public Meeting

A NEPA public meeting was held on March 6, 2025, at the Claxton Elementary School Gymnasium located at 2218 Clinton Hwy, Powell, TN 37849, at the project's eastern terminus. The purpose of the public meeting was to provide the public with the opportunity to review and comment on the preliminary purpose and need of the proposed project as well as the range of alternatives under consideration.

The public meeting outreach included legal advertisement published in *The Courier News* of Clinton, direct mailing of postcards to residences and businesses along the SR-170 corridor, and distribution of public meeting flyers to City of Oak Ridge facilities and commercial establishments in Clinton at least 15 days before the public meeting date (see Appendix P of EA: Public Engagement Summary).

The public meeting followed an "open house" format during which TDOT presented relevant project information on the NEPA process and development of the EA, the current proposed layout, and the project development process and anticipated timeline. Following a brief welcome and introduction, the public was invited to review the concept design displays, watch a looping PowerPoint presentation with additional project information, and provide comments and feedback or ask questions directly to the TDOT project team. All of the displays, handouts, and

¹⁸[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)

presentation materials used during the public meeting were made available for review on the project website¹⁹. The TDOT project team (consisting of Project Management, ROW agents, Roadway Design, and environmental subject matter experts) engaged the public and stakeholders to discuss transportation concerns and proposed solutions, update the public with the project status, and inform them on how to provide feedback to the project team. Public comments were solicited for a 21-day period, with the official period closing on March 27, 2025.

Following the public meeting, a total of 27 comments were received through various formats as noted in Table 2 below. Of the comments received, 10 of the comments were in support of the project, five (5) were conditional support, two (2) were in opposition, and 10 were uncommitted. See Appendix P of EA: Public Engagement Summary, for more information on comments.

Table 2: Meeting Summary

Public Input	
Public Meeting Attendees	91
Comments Received (by format)	
Public Meeting	9
Phone	0
Email	5
Online Survey	5
Mailed	10
General TDOT Inbox	0
<i>Total Comments received</i>	27
Comment Disposition of All Received Comments	
Support	10
Conditional Support	5
Against	2
Uncommitted	10

5.2 Early Coordination with Stakeholders

TDOT prepared the early coordination package and distributed the early coordination letter, project location map, and Public Involvement and Agency Coordination Plan (PICP) to stakeholders and agencies on March 25, 2025 (see Appendix Q of EA: Public Involvement and Agency Coordination Plan). Comments were requested to be returned by April 24, 2025. Table 3 includes the list of stakeholders and agencies.

¹⁹ Project website: <https://www.tn.gov/tdot/projects/projects-region-1/sr-170-widening.html>

Table 3: 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 ● 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"> ● 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 ○ 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