Environmental Assessment

State Route 19

From East of Eastland Avenue to East of State Route 87

Lauderdale and Haywood Counties, Tennessee

PIN 102251.00

March 18, 2026

Submitted Pursuant to the National Environmental Policy Act of 1969
42 USC 4332(2)(c)

LEAD AGENCIES:
U.S. Department of Transportation, Federal Highway Administration and the Tennessee Department of Transportation

Cooperating Agency*:*
U.S. Army Corps of Engineers, Memphis District

TN TDOT Department of Transportation

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3/30/26

Federal Highway Administration **Date**

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Sharon M Schutz

March 20, 2026

Tennessee Department of Transportation **Date**

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ACRONYMS

APE	Area of Potential Effect
ARAP	Aquatic Resource Alteration Permit
ARC	Appalachian Regional Commission
BG	Block Group
BMP	Best Management Practice
CAAA	Clean Air Act Amendments
CE	Categorical Exclusion
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CMF	Crash Modification Factor
CPIP	Coordination and Public Involvement Plan
CSRP	Conceptual Stage Relocation Plan
CT	Census Tract
dB	Decibel
EA	Environmental Assessment
EO	Executive Order
EPD	Expedited Project Delivery
FEMA	Federal Emergency Management Administration
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPPA	Farmland Policy Protection Act
IMPROVE	Improving Manufacturing, Public Roads and Opportunities for a Vibrant Economy
LM	Log Mile
MSAT	Mobile Source Air Toxics
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NGL	Natural Gas Liquids
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PIPC	Public Involvement and Agency Coordination Plan
PIN	Project Identification Number
QR	Quick Response Code
RCRA	Resource Conservation and Recovery Act
RPO	Rural Planning Organization
SHPO	State Historic Preservation Office
SR	State Route
STIP	State Transportation Improvement Plan
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
TWRA	Tennessee Wildlife Resources Agency
UGB	Urban Growth Boundary
USC	U.S. Code
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WWC	Wet Weather Conveyance

ENVIRONMENTAL COMMITMENTS

Ecological Resources

1. For the section of the project from east of Binford Lane to east of SR-87 (PIN 102251.03), all tree clearing is to occur between October 1st and March 31st.

1.0 Project Background

1.1 Introduction

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), is proposing improvements to approximately 15.2 miles of State Route (SR) 19 from east of Eastland Avenue in Lauderdale County to east of SR-87 in Haywood County (**Figure 1**).

Because the proposed project involves the use of federal funds and would require federal permits, 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.

The EA has been prepared in accordance with FHWA's implementing regulations for NEPA (Title 23 of the Code of Federal Regulations (CFR) 771[1]). FHWA is the lead agency and TDOT is the joint lead agency for the proposed project; the US Army Corps of Engineers (USACE), Memphis District has been identified as a cooperating agency.

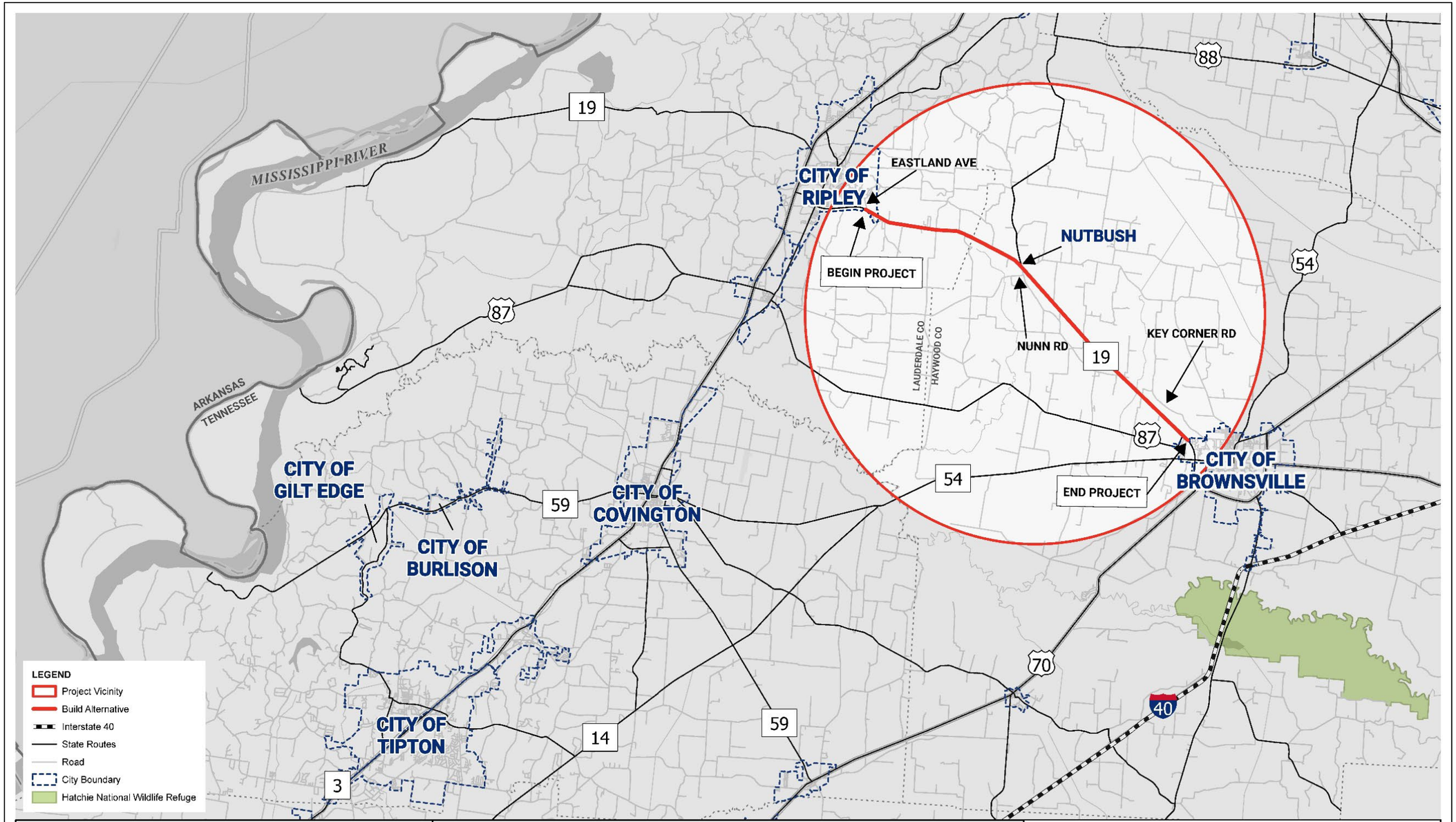
1.2 Description of Project Area

Lauderdale and Haywood counties are located in southwest Tennessee. Lauderdale County is bordered by the Mississippi River on the west, Dyer County on the north, Tipton County on the south and Crockett and Haywood counties on the east. The 472-square mile county is predominantly comprised of flat or rolling agricultural land. Residential development tends to be sparse except in and adjacent to the town of Ripley, the county seat. Four-lane United States (US) Highway 51 traverses the county from north to south, passing through the western edge of Ripley. SR-19 is a two-lane roadway as it crosses through Lauderdale County from west to east.

Haywood County is bounded by Lauderdale and Tipton counties on the west, Crockett County on the north, Fayette and Hardeman counties on the south and

[1] https://www.ecfr.gov/current/title-23/chapter-I/subchapter-H/part-771

Figure 1 Project Location



Madison County on the east. The 533-square mile county is predominantly comprised of flat or rolling agricultural land. Residential development tends to be sparse except in and adjacent to the city of Brownsville, the county seat. The lower portion of Haywood County, south of Brownsville, includes the Hatchie National Wildlife Refuge. The wildlife refuge encompasses 11,556 acres of Haywood County. SR-19 is a two-lane roadway as it crosses through Haywood County except for a short four-lane section where it bypasses Brownsville to the south. The major road network in Haywood County consists of SR-54, US-79, US-70/SR-1, with each passing through Brownsville. Interstate (I) 40 passes through the county from south to northeast.

1.3 Project History

In 1996, TDOT undertook a feasibility study to evaluate potential improvements to SR-19, which led to the initiation of an Advanced Planning Report (APR) in 2003. The APR, which focused on SR-19 from Eastland Avenue in Ripley (Lauderdale County) to US-51 (SR-3) in Brownsville (Haywood County), recommended widening the roadway to from two lanes (one travel lane in each direction) to four lanes (two travel lanes in each direction) along the entire length of the project route. After the report was completed, the project was placed on hold. The TDOT re-initiated planning efforts in 2008, at which time public input was gathered on the recommended widening of SR-19 to four lanes. Public involvement efforts at the time identified strong opposition to major improvements to the existing roadway in the Nutbush community. Additionally, residents in the rural section of Lauderdale County and in the area of the proposed project near Brownsville voiced opposition to widening the roadway to four lanes.

In 2009, taking into consideration public input, TDOT resumed study of potential improvements to SR-19 and completed a Transportation Planning Report (TPR)[2]. The 2009 TPR evaluated a No-Build Option (Option A) and two build options, Option B (widening SR-19) and Option C (spot improvements) (see **Section 3.3.1** for a discussion of these options). The TPR discussed the benefits and drawbacks for each of the three options but did not provide a recommendation for a preferred option. After the TPR was prepared, the project was put on hold until it was revisited again in 2013.

In 2013, the SR-19 project was identified as a candidate for expedited project delivery, TDOT's newly initiated Expedited Project Delivery (EPD) process which focused on identifying and recommending improvement options that were feasible, cost-effective, and

[2] https://www.tn.gov/content/dam/tn/tdot/documents/government-how-do-i-documents/Studies/StatewidePlanning/studies-TPRSR19Final.pdf

provided improved mobility and safety. The resultant EPD reports recommended a refined version of Option B from the 2009 TPR (see **Section 3.3.1** for a discussion of refined Option B).

In 2017, TDOT issued a public notice for solicitation of public comments, informing the public that TDOT was preparing a D-List Categorical Exclusion (CE) to document potential impacts of the proposed project. The Build Alternative evaluated in the D-List CE was a further refined version of Option B (see **Section 3.3.1** for a description of the evaluated Build Alternative). The D-List CE was approved by FHWA on February 1, 2018.

As design of the proposed project progressed, changes required further coordination with FHWA. After further coordination with FHWA in 2024, it was determined that due to the increased number of potential relocations, a CE was no longer an appropriate class of action, and an EA was initiated in accordance with 23 CFR 771.119(a)(1).

Since the approval of 2018 D-List CE, the proposed SR-19 project has been divided into three segments for funding purposes; PIN 102251.01, 102251.02, and PIN 102251.03. The current EA effort is analyzing the entirety of the proposed SR-19 corridor from east of Eastland Avenue to east of SR-87 (PIN 102251.00) which is comprised of PIN 102251.01, PIN 102251.02, and PIN 102251.03 (**Figure 2**). See **Section 3.1.2** for a description of the Build Alternative analyzed in this EA.

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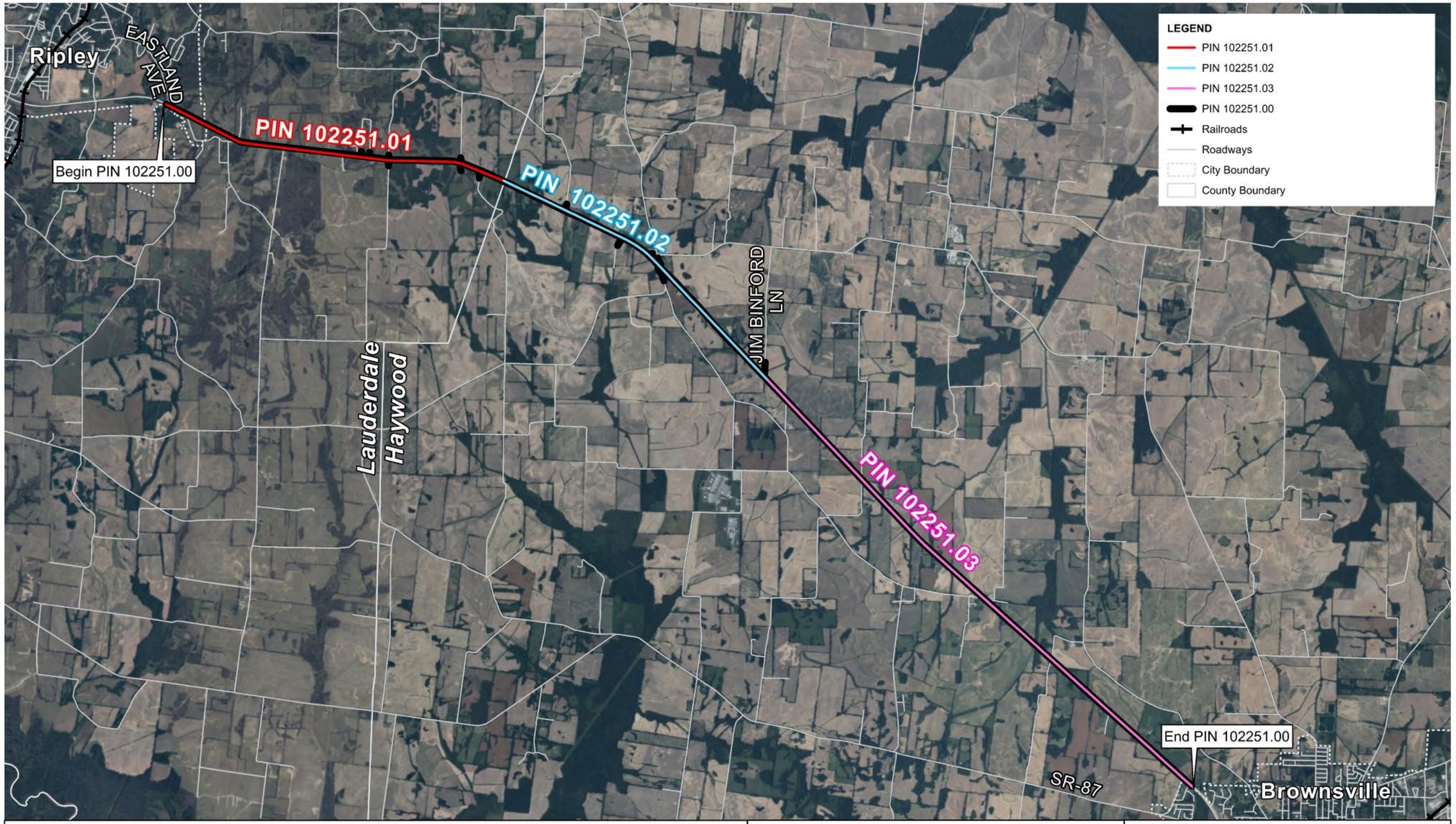
Figure 2 PIN Identification



PIN IDENTIFICATION

PROJECT	**STATE ROUTE 19** ***From east of Eastland Avenue to east of State Route 87*** ***Lauderdale and Haywood Counties*** ***TDOT PIN 102251.00***

TN TDOT Department of Transportation

2.0 Purpose and Need for Action

The needs for the proposed project have been identified as the following:

2.1 Increased Percentage of Severe Crashes

TDOT prepared a crash analysis (**Appendix A**) based on data along SR-19 within the study area between June 19, 2022, and June 19, 2025. Crashes were analyzed based on the Model Minimum Uniform Crash Criteria (MMUCC)[3] severity designation, with crashes designated as "suspected serious injury" and "fatal" being considered the most severe crashes. Results from the study showed the percentage of suspected serious injury and fatal crashes is higher than the statewide percentage (**Existing Roadway** Geometric Deficiencies

SR-19 is classified by TDOT as a Principal Arterial within the city limits of Ripley and a Minor Arterial, in Lauderdale and Haywood counties. Within the limits of the proposed project, the existing SR-19 roadway consists of two 11-foot travel lanes (one lane in each direction) with zero to two-foot outside shoulders. According to the FHWA Highway Functional Classification Concepts, Criteria and Procedures 2023 Edition, it is recommended that Minor Arterial roadways include 10- to 12-foot lane widths with 4- to 8-foot outside shoulders. The existing SR-19 roadway configuration within the limits of the proposed project does not meet current TDOT design standards for a Minor Arterial roadway. Additionally, the rolling terrain within the project area creates sight distance issues.

Table 1**)**. A majority of the crashes involved single vehicles where the vehicle ran off the road, which may be the result of the existing roadway geometric deficiencies discussed in **Section 2.2**.

Existing Roadway Geometric Deficiencies

SR-19 is classified by TDOT as a Principal Arterial within the city limits of Ripley and a Minor Arterial, in Lauderdale and Haywood counties. Within the limits of the proposed project, the existing SR-19 roadway consists of two 11-foot travel lanes (one lane in each direction) with zero to two-foot outside shoulders. According to the FHWA Highway Functional Classification Concepts, Criteria and Procedures 2023 Edition, it is recommended that Minor Arterial roadways include 10- to 12-foot lane widths with 4- to 8-foot outside shoulders. The existing SR-19 roadway configuration within the limits of the proposed

[3] https://www.nhtsa.gov/traffic-records/model-minimum-uniform-crash-criteria

project does not meet current TDOT design standards for a Minor Arterial roadway. Additionally, the rolling terrain within the project area creates sight distance issues.

Table 1 shows that the percentage of fatal crashes are higher along all of the traffic study segments than the state-wide percentages. The percentage of suspected serious injury crashes are also higher than that of the state-wide average on SR-19 from Eastland Avenue to Gill Brackin Road, from Nunn Road to Jim Binford Lane, and from Jim Binford Lane to SR-87. Additionally, the percentage of suspected minor injury crashes is higher than that of the statewide average on the study segment from Eastland Avenue to Gill Brackin Road.

2.2 Existing Roadway Geometric Deficiencies

SR-19 is classified by TDOT as a Principal Arterial[4] within the city limits of Ripley and a Minor Arterial[5,6] in Lauderdale and Haywood counties. Within the limits of the proposed project, the existing SR-19 roadway consists of two 11-foot travel lanes (one lane in each direction) with zero to two-foot outside shoulders. According to the FHWA Highway Functional Classification Concepts, Criteria and Procedures 2023 Edition,[7] it is recommended that Minor Arterial roadways include 10- to 12-foot lane widths with 4- to 8-foot outside shoulders. The existing SR-19 roadway configuration within the limits of the proposed project does not meet current TDOT design standards for a Minor Arterial roadway. Additionally, the rolling terrain within the project area creates sight distance issues.

Table 1 Segment Crash Severity (Crash Year: 2022 to 2024)

Crash Severity Designation	SR-19, from Eastland Avenue to Gill Brackin Road		SR-19, from Gill Brackin Road to Nunn Road		SR-19, from Nunn Road to Jim Binford Lane		SR-19, from Jim Binford Lane to SR-87		TN State Routes	
	Number of Crashes	Percent of Crashes	Number of Crashes	Percent of Crashes	Number of Crashes	Percent of Crashes	Number of Crashes	Percent of Crashes	Number of Crashes	Percent of Crashes
Fatal	2	4.08%	1	33.33%	1	16.67%	1	3.23%	1,840	0.76%

[4] https://www.tn.gov/content/dam/tn/tdot/long-range-planning/maps/updated-functional-class-maps/49aRipley.pdf
[5] https://www.tn.gov/content/dam/tn/tdot/long-range-planning/maps/updated-functional-class-maps/49LauderdaleCounty.pdf
[6] https://www.tn.gov/content/dam/tn/tdot/long-range-planning/maps/updated-functional-class-maps/38HaywoodCounty.pdf
[7] https://www.fhwa.dot.gov/planning/processes/statewide/related/hwy-functional-classification-2023.pdf

Suspected Serious Injury[1]	2	4.08%	0	0.00%	1	16.67%	1	3.23%	7,071	2.92%
Suspected Minor Injury[1]	9	18.37%	0	0.00%	0	0.00%	3	9.68%	25,539	10.55%
Possible Injury	5	10.20%	0	0.00%	0	0.00%	2	6.45%	25,869	10.69%
Property Damage Only	31	63.27%	2	33.33%	4	66.67%	24	77.42%	181,745	75.08%
Total	**49**	**100%**	**3**	**100%**	**6**	**100%**	**31**	**100%**	**246,911**	**100%**
[1]Model Minimum Uniform Crash Criteria (MMUCC)6th Edition										

2.3 Improve SR-19 to 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 "Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy" (IMPROVE) Act[8] 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).[9] A section of the proposed project from east of Eastland Avenue to the Haywood County line has been identified as an IMPROVE Act project (IMPROVE Act Project 585) and would meet the legislative intent of the IMPROVE Act by improving an important infrastructure facility in Haywood County.

Additionally, there is a need to meet the legislative intent of the 2023 Transportation Modernization Act (TMA)[10], 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.

[8] https://legiscan.com/TN/text/HB0534/id/1802326
[9] 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
[10] https://www.tn.gov/tdot/build-with-us/transportation-modernization-act.html

2.4 Purpose of the Project

Based on the project need as established above, the purpose of the project is to:

- Reduce the rate of severe crashes.
- Improve roadway geometric deficiencies to meet current TDOT design standards.
- Meet the legislative intent of the IMPROVE Act and the TMA.

2.5 Consistency with Plans

The proposed project is consistent with state, regional, and local planning and economic development efforts. The proposed project is currently listed in TDOT's 10-Year Project Plan (dated May 2,2025)[11], 2025-2027 Three-Year Program[12], and 2023-2026 State Transportation Improvement Program (STIP)[13] (STIP numbers 23002019052, 23002019045, 23002019046).

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[11] https://www.tn.gov/content/dam/tn/tdot/professional-services-/plans-and-programs/Final%2010yp%20FY-26%202025.pdf
[12] https://www.tn.gov/content/dam/tn/tdot/three-year-program/FY-25%20Comprehensive%20Multimodal%20Program_4-4-24%20Final.pdf
[13] Tennessee STIP 2023-2026 Final_R 2-28-24.pdf

3.0 Alternatives

Projects subject to NEPA are required to explore various ways that the project's purpose and need could be met. This chapter describes the alternative development process and provides a description of the No-Build Alternative and the Build Alternative carried forward for evaluation in this EA.

3.1 Development of Alternatives

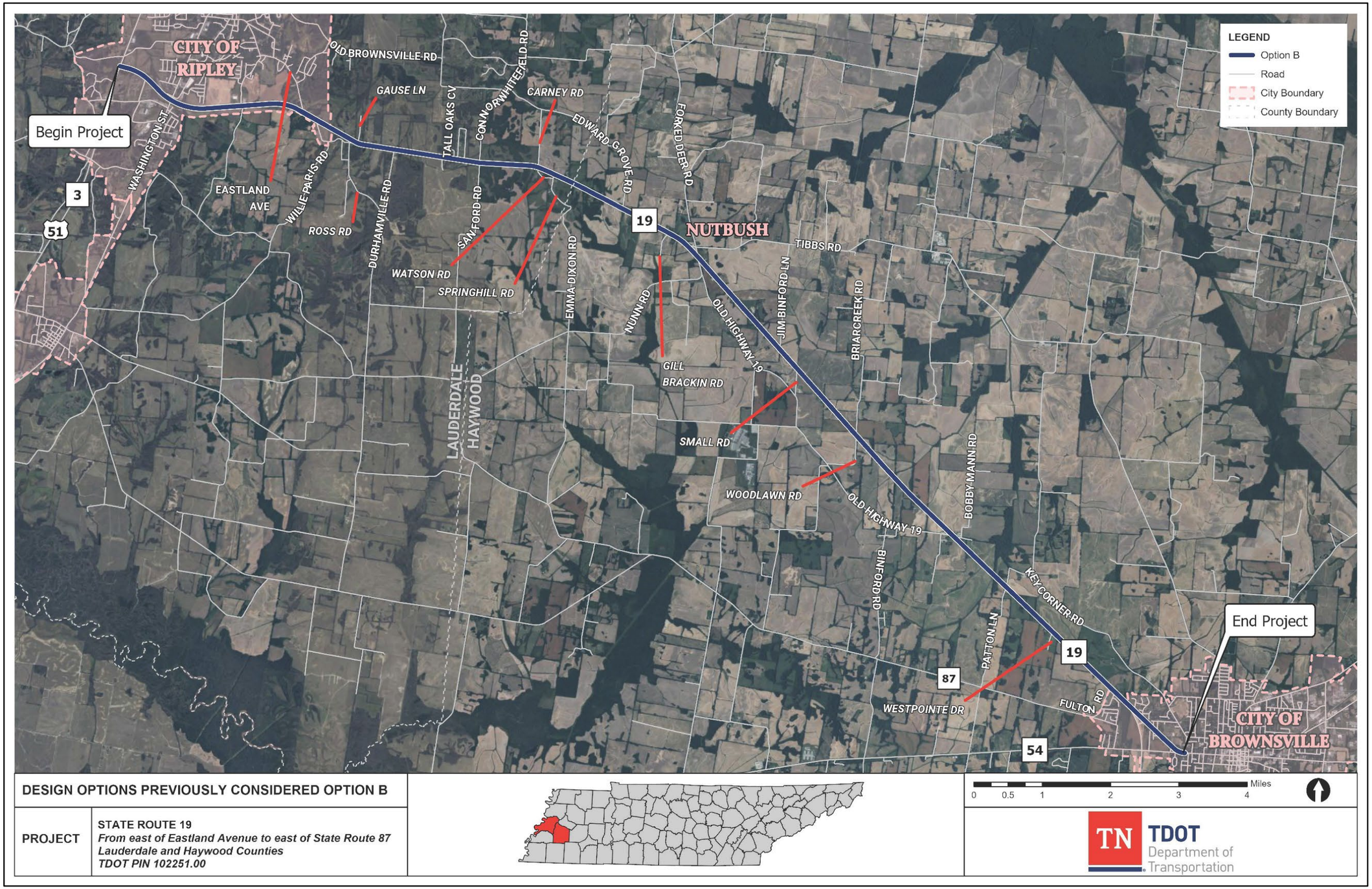
As noted in **Section 1.3**, various studies have been conducted investigating potential improvements to SR-19 in the project area since 1996. This section discusses those design options and alternatives that were developed and evaluated prior to the decision to prepare this EA. This section also discusses the development of the Build Alternative after approval of the D-List CE that resulted in the decision to prepare this EA.

3.1.1 Options and Alternatives Evaluated in Prior Studies

3.1.1.1 Options Developed in the 2009 TPR.

- **Option A: No-Build**
  The No-Build Option 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 and the State Transportation Improvement Program (STIP) and would allow for routine maintenance.
- **Option B: Corridor Widening to a Four-Lane Divided Section Through Lauderdale County, Tapering to a Two-Lane Section Through Haywood County**
  Option B (**Figure 3**) would widen SR-19 from the proposed I-69 junction in Ripley east to Sanford Road from two 11-foot lanes (one travel lane in each direction) to four 12-foot lanes (two travel lanes in each direction) with a median and 10-foot shoulders. At Sanford Road the roadway would transition to two 12-foot lanes (one travel lane in each direction) with 10-foot shoulders, which would continue to project terminus at the Brownsville Bypass.

Figure 3 Option B



DESIGN OPTIONS PREVIOUSLY CONSIDERED OPTION B	
PROJECT	STATE ROUTE 19 *From east of Eastland Avenue to east of State Route 87* *Lauderdale and Haywood Counties* *TDOT PIN 102251.00*

- **Option C: Spot Improvements**
  Option C (**Figure 4**) would provide spot improvements at 17 locations. The spot improvements could be implemented independently or in combination. The majority of the spot improvements were related to installing or replacing pavement markers and signs.

The 2009 TPR made the following determinations regarding the design options:

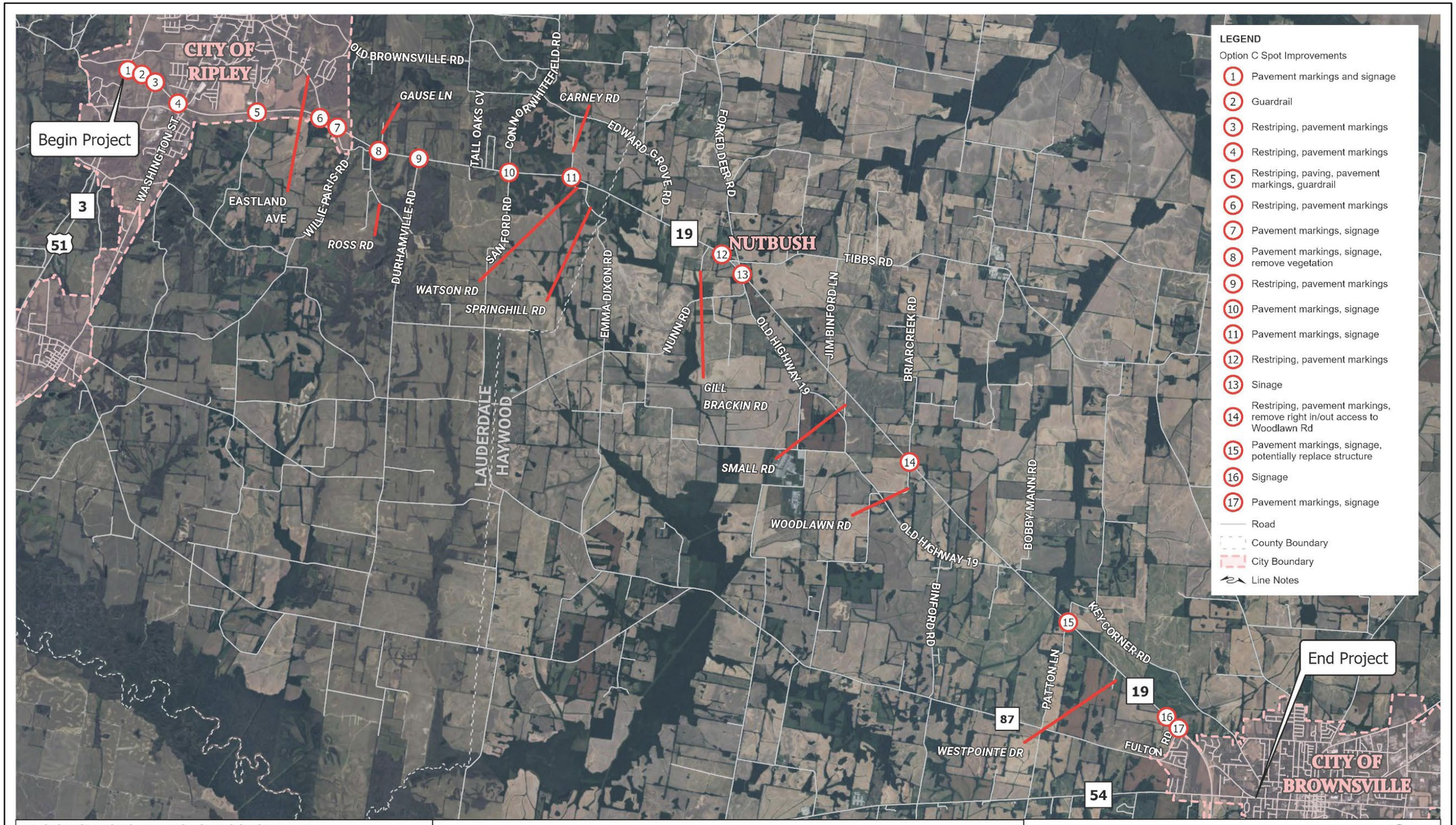
- Option B would provide the benefit of wider shoulders and clear zones, improving the safety in the corridor as well as easing congestion in the Ripley Urban Boundary. Option B would also meet current design standards that could accommodate higher speed traffic.
- Option C would correct deficiencies leading to improved safety, maneuverability, and driver comfort.
- A combination of Options B and C would provide both improved roadway design and a safer facility through elimination of current roadway deficiencies.

The 2009 APR also noted that based on public comments from public meetings, Lauderdale County public officials and citizens generally supported the four-lane divided design (Option B) throughout the Lauderdale County section of corridor. Conversely, the citizens of Haywood County, especially those in the community of Nutbush, were generally opposed to a four-lane divided roadway in the Haywood County section of the corridor. Public comment suggested that Haywood County citizens were generally opposed to the four-lane divided highway design (Option B) due to the change they felt a higher capacity roadway would bring to their traditional, rural community. The citizens of Nutbush supported the No-Build Option but did indicate that they would support an improved two-lane roadway with improved shoulders.

3.1.1.2 2013 EPD Alternative

As part of the EPD process, an updated traffic analysis was conducted for the former Option B. The traffic analysis concluded that the traffic numbers in the section from the project beginning in Ripley to Sanford Road met the design criteria for a two-lane cross section rather than a four-lane cross section. Based on the results of the traffic analysis and public input from the 2009 TPR process, the EPD report recommended further refinements of Option B.

Figure 4 Option C



DESIGN OPTIONS PREVIOUSLY CONSIDERED: OPTION C SPOT IMPROVEMENTS	
PROJECT	STATE ROUTE 19 *From east of Eastland Avenue to east of State Route 87* *Lauderdale and Haywood Counties* *TDOT PIN 102251.00*

TN TDOT Department of Transportation

The recommended refinements included:

- Reducing the number of proposed lanes in the section from east of Eastland Avenue[14] to Sanford Road from four 12-foot lanes (two travel lanes in each direction) to two 12-foot lanes (one travel lane in each direction) due to the reduced traffic numbers.
- Retaining the 11-foot lane width and reducing the proposed 10-foot shoulder width to 4 feet in the vicinity of Nutbush in order to minimize impacts to the community.
- Improving the sight distance at Gause Lane.
- Realigning the SR-180 (Forked Deer Road) approach at the SR-19/SR-180 (Forked Deer Road) intersection to improve sight distance and improve access to the Nutbush cotton gin.
- Realigning the Briarwood Road/Woodlawn Road approaches to improve sight distance and create a standard four-way intersection.

In summary, the recommended EPD alternative proposed widening SR-19 to two 12-foot lanes (one travel lane in each direction) with 10-foot shoulders from east of Eastland Avenue to west of Tibbs Road. From west of Tibbs Road to east of SR-180 (Forked Deer Road) the proposed alternative would consist of two 11-foot travel lanes (one in each direction) with four-foot shoulders. From east of SR-180 (Forked Deer Road) to east of SR-87 the proposed alternative would widen SR-19 to two 12-foot lanes (one travel lane in each direction) with 10-foot shoulders.

3.1.1.3 Alternatives Evaluated in the 2018 D-List CE

Two alternatives were studied in the 2018 D-List CE: the No-Build Alternative and one 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 and the State Transportation Improvement Program (STIP) and would allow for routine maintenance.

The EPD recommended alternative was carried forward in the 2018 D-List CE as the Build Alternative with one change. Instead of two 11-foot lanes (one travel lane in each direction)

[14] By the time of the 2013 EPD study, the section of SR-19 from US-51 to east of Eastland Avenue had already been improved to two 12-foot lanes (one travel lane in each direction) with 10-foot shoulders.

with 4-foot shoulders in the vicinity of Nutbush, the Build Alternative proposed two 12-foot lanes (one travel lane in each direction) with 4-foot shoulders[15].

In summary, the Build Alternative proposed widening SR-19 from east of Eastland Road in Ripley to east of SR-87 in Brownsville from two 11-foot travel lanes (one lane in each direction) with 2-foot shoulders to two 12-foot travel lanes with 10-foot shoulders (8-foot paved), with the exception of the area near Nutbush. For the approximately three-quarter mile section in Nutbush, the Build Alternative would widen the two 11-foot travel lanes and 2-foot shoulders to two 12-foot travel lanes with 4-foot shoulders. The Build Alternative would also correct the sight distance at Gause Lane and realign the SR-180 (Forked Deer Road)/Nunn Road and Briarcreek Road/Woodlawn Road intersections to four-way intersections.

3.1.2 Refinement of the Build Alternative

The analysis of the Build Alternative in the 2018 D-List CE was based on conceptual plans. As the Build Alternative began to move through the preliminary design phase, it became evident that additional right-of-way and additional relocations would be required due to the topography of the area and maintenance of traffic concerns during construction of the project. As noted in **Section 1.3**, after further coordination with FHWA in 2024, it was determined that due to the increased number of potential relocations, a CE was no longer appropriate, and an EA was initiated in accordance with 23 CFR 771.119(a)(1).

Initially, the number of potential relocations increased from the six (five residences and one business) noted in the 2018 D-List CE to 33 (31 residences and 2 businesses) and the anticipated right-of-way increased from 97 acres to 117 acres. Further engineering of the Build Alternative, which included minor shifts of the alignment, tightening of slopes, and reduction of cross-sections, reduced the potential relocations to 28 (26 residences and 2 businesses) and reduced the anticipated right-of-way to 98.8 acres.

[15] At the time, the plans were conceptual and it was believed that this cross-section could be accommodated within the existing right-of-way.

The design changes since the approval of the 2018 D-List CE include:

- Changing the proposed lane width of 12 feet in the vicinity of Nutbush back to 11-foot travel lanes (one in each direction) with 2-foot shoulders and milling and overlaying the existing roadway.
- Changing the proposed lane width of 12 feet from east of Jim Binford Lane to east of SR-87 back to 11-foot travel lanes (one in each direction) with 2-foot shoulders and milling and overlaying the existing roadway.
- Improving nine additional intersections.

The resulting Build Alternative is the subject of this EA and is described in **Section 3.1.2**. As the design of the proposed Build Alternative is further refined, TDOT will continue to explore opportunities to reduce the footprint of proposed project and minimize impacts to residential and business properties.

3.2 Alternatives Evaluated in the EA

As described in **Section 1.3**, design options and alternatives were developed in a manner that took into account engineering, social, and environmental considerations. Comments received in response to coordination with federal, state, and local agencies and other interested parties as well as comments received in response to engagement with the public were considered in the development of design options and alternatives. Agency coordination and public outreach are discussed further in **Chapter 4.0**. The alternatives under consideration in this EA are discussed in the following sections.

The evaluation of one Build Alternative in detail in this EA is consistent with the FHWA's Technical Advisory T6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents.[16] A No-Build Alternative is also under consideration and is described in **Section 3.1.1**.

3.2.1 No-Build Alternative

In accordance with federal regulations, the No-Build Alternative has been retained for detailed study and serves as a benchmark for comparison with the Build Alternative. The No-Build Alternative would leave the segment of SR-19 from east of Eastland Avenue to east of SR-87 as it currently exists except for routine maintenance and safety upgrades, as needed, or modifications that have been programmed and approved for implementation

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

through TDOT's 25-Year Long Range Transportation Policy Plan[17], State Transportation Improvement Program (STIP)[18], and the TDOT 10-Year Project Plan.[19]

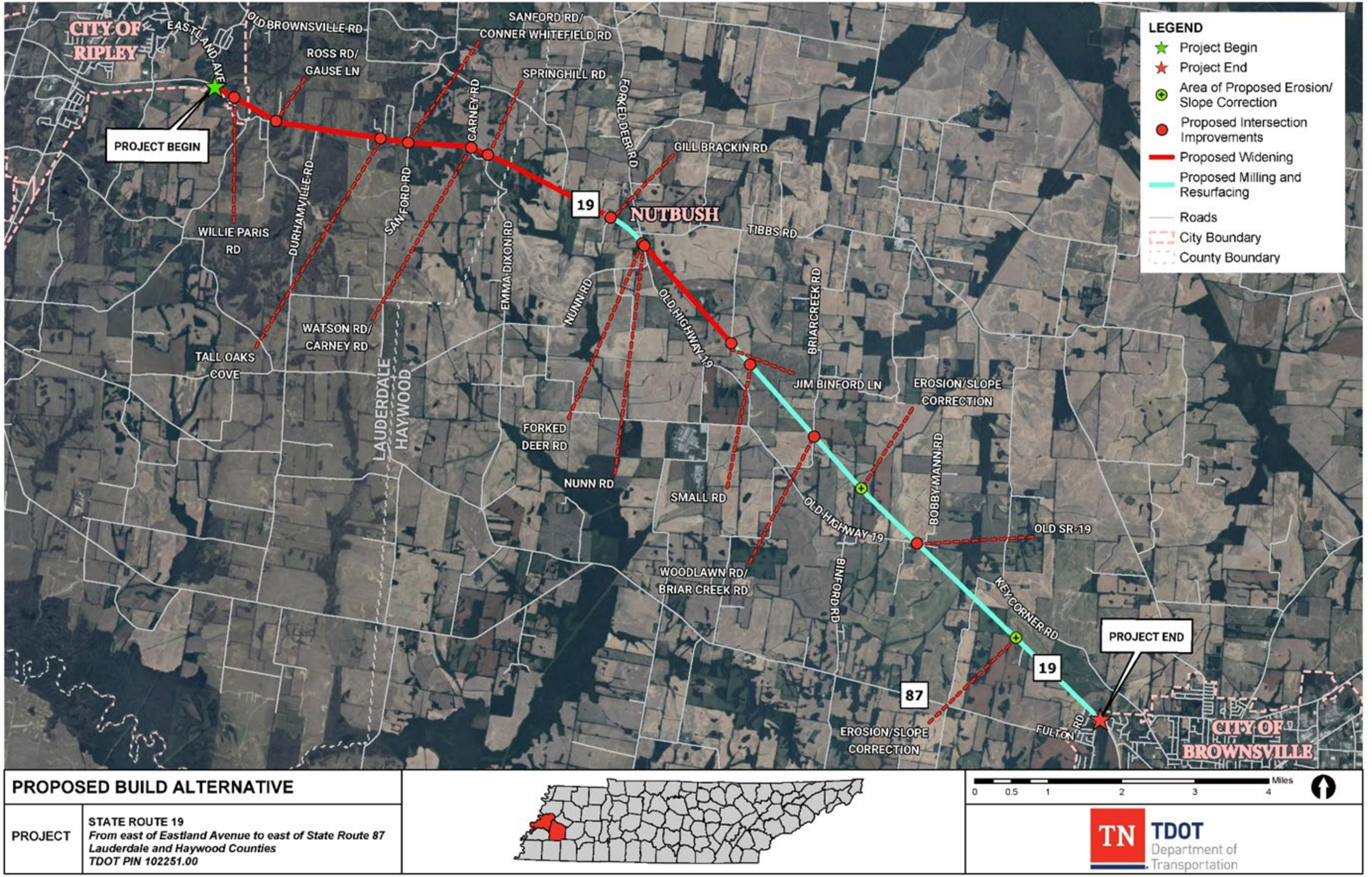
3.2.2 Build Alternative

The following describes the improvements proposed in the Build Alternative. **Figure 5** shows the general locations of the proposed improvements. See the July 2025 Line and Grade Plans in **Appendix B** for additional details

From east of Eastland Avenue in Lauderdale County to just west of Gill Brackin Road in Haywood County, the proposed Build Alternative would widen the existing 11-foot travel lanes (one in each direction) to 12-foot travel lanes (one in each direction) with variable paved shoulders ranging from 2 feet to 10-feet (8-feet paved). Along this segment of SR-19, the roadway would be widened primarily to the north side of the existing roadway in the Lauderdale County portion and to the south side in Haywood County. From just west of Gill Brackin Road to Nunn Road, the proposed Build Alternative would mill and resurface the existing 11-foot travel lanes and 2-foot shoulders. From Nunn Road to east of Jim Binford Lane, the proposed project would widen the two existing 11-foot travel lanes and 2-foot shoulders to two 12-foot travel lanes with 10-foot shoulders (8-foot paved). From east of Jim Binford Lane to east of SR-87, the proposed project would mill and resurface the existing 11-foot travel lanes and 2-foot shoulders. Additionally, the proposed project would correct erosion/slope issues from approximately 4,351 feet east of Woodlawn Road to approximately 4,411 feet west of Old SR-19 (approximately 1,700 feet) and from approximately 3,417 feet east of Patton Road to approximately 279 feet east of Westpointe Road (approximately 1,800 feet).

[17] https://www.tn.gov/tdot/long-range-planning-home/25-year-transportation-policy-plan.html
[18] https://www.tn.gov/tdot/program-development-and-administration-home/program-development-and-administration-state-programs.html (Also see **Appendix B**, Project Background)
[19] https://www.tn.gov/tdot/build-with-us.html (Also see **Appendix B**, Project Background)

Figure 5 Build Alternative



As part of the roadway widening improvements, the following intersections will be reconstructed and the side roads realigned to match the proposed mainline profile, cross slope, and horizontal alignment. Intersection approaches will be adjusted as necessary to provide smooth transitions to the widened roadway, maintain proper lane alignment, and meet current design standards (see the July 2025 Line and Grade Plans in **Appendix B** for details).

- Willie Paris Road
- Ross Road/Gause Lane
- Tall Oaks Cove
- Sanford Road/Conner Whitefield Road
- Watson Road/Carney Road
- Springhill Road
- Forked Deer Road (SR-180)
- Nunn Road
- Jim Binford Lane
- Small Road at SR-19
- Woodlawn Road/Briar Creek Road at SR-19
- Old SR-19 at SR-19

The proposed Build Alternative would also correct erosion/slope issues from approximately 4,351 feet east of Woodlawn Road to approximately 4,411 feet west of Old SR-19 (approximately 1,700 feet) and from approximately 3,417 feet east of Patton Road to approximately 279 feet east of Westpointe Road (approximately 1,800 feet).

3.3 Ability of Alternatives to Meet Purpose and Need

The following sections discuss the ability of the No-Build Alternative and the Build Alternative to meet the purpose and need for the proposed project. As described in the sections below, the No-Build Alternative does not meet the purpose and need for the proposed project. Based on the ability of the Build Alternative to meet the purpose and need for the proposed project, as described in the following sections, it has been designated as the Recommended Preferred Alternative.

3.3.1 Reduce the Rate of Severe Crashes

No-Build Alternative

Under the No-Build Alternative, SR-19 within the project limits would remain as it currently exists other than for routine maintenance and safety upgrades as needed. Since the No-Build Alternative would not fix conditions that could be contributing to crashes, the rate of severe crashes is likely to continue.

Build Alternative

FHWA, through the *Highway Safety Manual* (HSM), has developed a methodology for assessing the benefits of future geometric and operational improvements on traffic safety through the application of Crash Modification Factors (CMF). The CMF represents a factor that helps to indicate the amount by which the proposed modification will affect the crashes throughout the applicable area. Crash Reduction Factors (CRF) are the inverse of the CMF and represent the percentage of crashes to be reduced due to the improvements. As shown in **Table 2**, the proposed Build Alternative improvements are anticipated to result in potential reductions in annual crashes of between 5.0 percent and 32.0 percent depending on the type of improvement.

CMF VALUES

- CMF > 1.0 represents an anticipated increase in crashes.
- CMF = 1.0 represents no anticipated change in crashes
- CMF < 1.0 represents an anticipated decrease in crashes.

Table 2 CMF and CRF Values for the Build Alternative

Segment	CMF ID	Description	CMF Value	CRF Value	Crash Type	Crash Severity	Area
Eastland Avenue to Gill Brackin Road and Nunn Road to Jim Binford Lane	7756	Widen shoulder	0.680	0.320 (32.0%)	All	K, A, B, C	Rural
	3	Increase lane width from 11 feet to 12 feet	0.950	0.050 (5.0%)	All	All	Rural
Jim Binford Lane to SR-87	4615	Flatten side slope from 1V:3H to 1V:6H	0.890	0.110 (11.0%)	All	All	Rural
Intersection Improvements	5189	Change intersection skew angle	0.784	0.216 (21.6%)	All	All	Rural

Notes:
CMF for Intersection Improvements based on adjustment of skew angle from 45° to 0°.
CMF ID's are taken from the CMF clearinghouse.
Crash Severity Designations: K = Fatal, A = Suspected Serious Injury, B = Suspected Minor Injury, C = Possible Injury, O = Property Damage Only

*For more information, see **Appendix A**.*

3.3.2 Improve Roadway Geometric Deficiencies to Meet Current TDOT Design Standards

No-Build Alternative

Under the No-Build Alternative, SR-19 within the project limits would remain as it currently exists other than for routine maintenance and safety upgrades as needed. Leaving the roadway as it currently exists would not meet the need to improve the existing roadway geometric deficiencies or the purpose of the project to improve the roadway to meet current TDOT design standards.

Build Alternative

The proposed Build Alternative would improve existing roadway geometric deficiencies to meet current TDOT design standards through the widening of travel lanes and shoulders from east of Eastland Avenue in Lauderdale County to just west of Gill Brackin Road and from Nunn Road to east of Jim Binford Lane. In areas where the shoulders would not be widened, the shoulders would be paved to meet a minimum width of two feet. Intersection approaches identified in **Section 3.1.2** would be adjusted as necessary to provide smooth transitions to the widened roadway, maintain proper lane alignment, and meet current design standards. Proposed improvements would also include correction of two erosion-induced side slope issues identified along SR-19 between Jim Binford Lane and SR-87 would also be corrected.

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

No-Build Alternative

Under the No-Build Alternative, SR-19 within the project limits would remain as it currently exists other than for routine maintenance as needed. Leaving the roadway as it currently exists would not meet the legislative intent of the IMPROVE Act and the TMA as it would not make any improvements to SR-19.

Build Alternative

The Build Alternative would meet the intent of the IMPROVE Act and the TMA by improving SR-19, which is considered an important infrastructure facility in Lauderdale and Haywood counties.

3.4 Other TDOT Projects in the Project Vicinity

Table 3 identifies other planned and programmed TDOT transportation projects in the vicinity of the project area. **Figure 6** shows the location of the projects in relation to the proposed SR-19 project. Projects were identified through a review of the 2023-2026 STIP

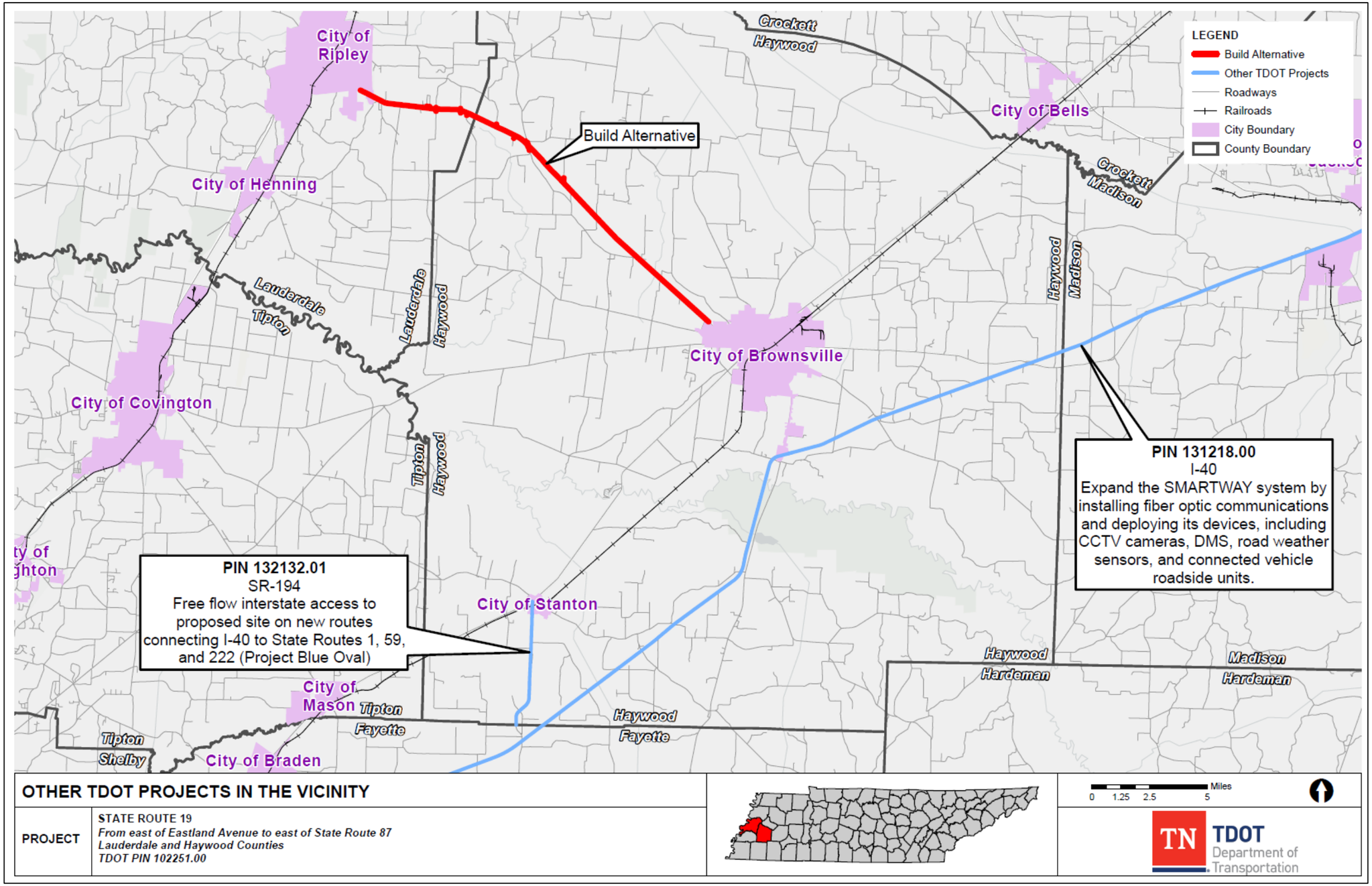
and associated STIP amendments,[20] the Tennessee STIP Project Viewer,[21] and the TDOT 10-Year Project Plan[22]. The proposed SR-19 project would not affect the planned and programmed projects shown in **Table 3**.

Table 3 Other Projects in the SR-19 Vicinity[23]

STIP Number	TDOT Project Identification Number (PIN)	County	Route Number	Description	Scope of Work
23242194100	132132.01	Fayette, Haywood, Tipton	SR-194	Free flow Interstate access to proposed site on new routes connecting I-40 to State Routes 1, 59, and 222 (Project Blue Oval).	4-Lane from SR-194 to SR-222, 2-Lane from SR-468 to SR-1, 4-Lane from I-40 to SR-468 new I-40 interchange (Exit 39), 2-Lane from I-40 to SR-59.
23241040033	131218.00	Madison, Carroll, Decatur, Benton, Dickson, Humphreys, Hickman, Fayette, Haywood, Henderson	I-40	From the Shelby/Fayette County Line to near I-840 in Dickson County.	Expand the SMARTWAY system by installing fiber optic communications and deploying its devices, including CCTV cameras, DMS, road weather sensors, and connected vehicle roadside units. The ITS devices include CCTV Cameras, DMSs, road weather sensors, and connected vehicle roadside units.

[20] https://www.tn.gov/tdot/program-development-and-administration-home/program-development-and-administration-state-programs/approved-stip-amendments.html
[21] https://www.arcgis.com/apps/webappviewer/index.html?id=28036ec194e648dd97ee5b35252c9bce
[22] https://www.tn.gov/tdot/build-with-us.html
[23] Information in this table is based on the 2023-2026 STIP and associated STIP Amendments, the Tennessee STIP Project Viewer, and the TDOT 10-Year Project Plan. Additional information on STIP projects is available at https://www.tn.gov/tdot/program-development-and-administration-home/program-development-and-administration-state-programs.html.

Figure 6 Other TDOT Projects in the Vicinity



3.5 Logical Termini and Independent Utility

FHWA regulations (23 CFR 771.111(f))[24] outline three criteria for selecting the end points of a transportation project as follows:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
- Have independent utility or independent significance (i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made); and
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

3.5.1 Logical Termini

The proposed SR-19 project would begin east of Eastland Avenue in Lauderdale County and end east of SR-87 in Haywood County. The western terminus of the proposed project would tie into a previously improved section of SR-19. SR-87 at the eastern terminus of the proposed project is a state route that is classified as a major collector road.[25]

3.5.2 Independent Utility

The proposed Build Alternative would not depend on any other transportation improvements in the area in order to function and it would not require other transportation projects to be constructed in order to meet the purpose and need for the proposed project. The Build Alternative would be a usable and reasonable expenditure of public funds even if no additional transportation improvements are made.

Regardless of whether other projects in the vicinity are constructed, the Build Alternative would reduce the severity of crashes, correct existing roadway geometric deficiencies, and meet the legislative intent of the IMPROVE Act and the TMA.

3.5.3 Consideration of Other Reasonably Foreseeable Projects

The Build Alternative would not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. The planned and programmed TDOT projects in

[24] https://www.ecfr.gov/current/title-23/chapter-I/subchapter-H/part-771/section-771.111
[25] Major collectors help collect traffic from local roads and funnel it to arterial roads.

the vicinity of the proposed SR-19 project (**Table 3**) would not be affected by the proposed project.

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4.0 Environmental Consequences of the Proposed Action

Transportation projects can potentially impact social, economic, physical, and natural resources. Therefore, existing environmental resources and conditions and potential impacts to those are important to identify and understand. The following sections inventory and analyze the potential environmental effects associated with the No-Build Alternative and Build Alternative that are under consideration in this EA.

4.1 Type of Effects Analyzed in this Environmental Assessment

Potential direct effects (impacts) of the proposed project to environmental resources within the project study area are analyzed in this EA. Direct effects are those anticipated to be directly caused by the proposed project and would occur at the same time and place that the proposed project would be constructed.

Table 4 identifies social, economic, physical, and natural resources (impact categories) that were assessed to determine the potential for significant direct effects associated with the No-Build and Build Alternatives. Additionally, **Table 4** notes where additional information and supporting materials for each impact category can be found.

Table 4 Impact Categories Addressed in the EA

Impact Categories	Direct Impacts (Yes/No)	Reference Appendix
Traffic and Safety	Yes	**Appendix A** Traffic and Safety Analysis
Land Use	Yes	**Appendix C** SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum
Farmland	Yes	**Appendix C** SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum
Transportation	Yes	**Appendix C** SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum
Community and Economic Resources	Yes	**Appendix D** SR-19 Community Impact Assessment Technical Memorandum
Relocations	Yes	**Appendix D** SR-19 Community Impact Assessment Technical Memorandum
Air Quality	Yes	**Appendix E** SR-19 Air Quality and Noise Technical Memorandum
Noise	Yes	**Appendix E** SR-19 Air Quality and Noise Technical Memorandum
Historic Architecture	Yes	**Appendix F** SR-19 Cultural Resources Technical Memorandum
Archaeology	No	**Appendix F** SR-19 Cultural Resources Technical Memorandum
Native American Consultation	No	**Appendix F** SR-19 Cultural Resources Technical Memorandum
Section 4(f) Resources	No	**Appendix D** SR-19 Community Impact Assessment Technical Memorandum for Recreational Resources **Appendix F** SR-19 Cultural Resources Technical Memorandum for Section 106 Resources
Section 6(f) Resources	No	**Appendix D** SR-19 Community Impact Assessment Technical Memorandum
Natural Resources	Yes	**Appendix G** SR-19 Natural Resources Technical Memorandum
Floodplains	Yes	**Appendix G** SR-19 Natural Resources Technical Memorandum
Visual Quality	Yes	**Appendix H** SR-19 Visual Impact Assessment Technical Memorandum
Hazardous Materials	Yes	**Appendix I** SR-19 Hazardous Materials Technical Memorandum
Construction and Operations	Yes	A separate technical memorandum was not developed for review of potential construction and operations impacts. Findings are summarized in **Section 3.2.1**.

4.1.1 Direct Effects Associated with the Alternatives Under Consideration

Table 5 describes the potential direct effects anticipated for the No-Build Alternative and the Build Alternative for the impact categories (social, economic, physical, and natural resources) studied for the proposed SR-19 project.[26] Where effects are identified, **Table 5** describes preliminary measures to address and mitigate those effects (if applicable). **Table 5** also notes whether analysis for each impact category indicated a potential significant adverse impact as a result of the construction of the Build Alternative.

Additionally, the following impact categories are not discussed in **Table 5** as no associated resources were identified within the limits of the SR-19 project area and therefore would not be directly impacted by the Build Alternative:

- Section 6(f)[27]
- Century Farms[28]
- Freight Rail[29]
- Airports[30]
- Section 4(f) Recreational Resources
- Wild and Scenic Rivers

[26] Please refer to the relevant technical memorandum for each impact category for additional information. See Table 3 for the location of the various technical memoranda.
[27] Section 6(f) resources are discussed in the SR-19 Community Impact Assessment Technical Memorandum, which can be found in **Appendix D**.
[28] Century farms are discussed in the SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum, which can be found in **Appendix C**.
[29] Freight rail is discussed in the SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum, which can be found in **Appendix C**.
[30] Airports are discussed in the SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum, which can be found in **Appendix C**.

Table 5 Potential Direct Effects

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Land Use - See **Appendix C** for the SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum				
Direct Conversion of Land to a Transportation Use	No Effect	Approximately 98.8 acres of land within the limits of the Build Alternative would be converted to transportation use[31]. The Build Alternative would also result in a total of 28 potential relocations (26 residential, 2 business).	Proposed right-of-way and easement amounts associated with the Build Alternative may be minimized as the project moves through the project development process. Therefore, direct conversion of land to transportation use may be reduced. Potential land use impacts may be minimized as the proposed project moves through the project development process.	No Significant Impact
Existing Land Use	No Effect	The Build Alternative would convert approximately 98.8 acres of land to transportation use. Most of the land is currently used for agricultural and residential land uses; however, these lands are currently adjacent to land that is already in transportation use. Although 28 relocations are anticipated, the overall existing land uses within the corridor are not expected to be altered by the proposed project. Therefore, impacts to existing uses along the Build Alternative are anticipated to be minimal.	Proposed right-of-way and easement amounts associated with the Build Alternative may be minimized as the project moves through the project development process. Therefore, direct conversion of land to transportation use may be reduced. Continued coordination among TDOT, Lauderdale County, and Haywood County, is necessary to ensure that the Build Alternative is consistent with existing land use, future land use, and zoning to the extent possible.	No Significant Impact
Zoning	No Effect	The Build Alternative would not conflict with any zoning ordinances in Lauderdale County since the county does not currently have any zoning ordinances. Haywood County has adopted zoning ordinances. Roadway expansion is consistent with the general provisions for access control across all zones in Haywood County. These provisions aim to "promote motorist and pedestrian safety and to minimize traffic congestion and conflict by reducing contact," which aligns with the goals of the proposed project.	Proposed right-of-way and easement amounts associated with the Build Alternative may be minimized as the project moves through the project development process. Therefore, direct conversion of land to transportation use may be reduced. Continued coordination among TDOT, Lauderdale County, and Haywood County, is necessary to ensure that the Build Alternative is consistent with existing land use, future land use, and zoning to the extent possible.	No Significant Impact

[31] See **Section 2.0** of the SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum included in **Appendix C** for more information.

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Land Use - See **Appendix C** for the SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum				
Future Land Use	No Effect	Lauderdale County is currently developing a county-wide Comprehensive Plan[32], which includes future land use planning, transportation, and growth boundary assessments. However, as of this writing, there are no publicly available development permits for the areas within the Ripley urban growth boundary (UGB) that would intersect with the Build Alternative. Haywood County's Future Land Use Plan, known as Haywood *NEXT*[33] designates the SR-19 corridor for land uses such as FARR (Farm, Agriculture, Rural Residential), Rural Four-Way, and Neighborhood Residential. These designations aim to preserve rural character while accommodating modest residential growth. The Build Alternative would be consistent with the goals of the Haywood *NEXT* plan and may support future residential development without conflicting with the intended land use.	Proposed right-of-way and easement amounts associated with the Build Alternative may be minimized as the project moves through the project development process. Therefore, direct conversion of land to transportation use may be reduced. Continued coordination among TDOT, Lauderdale County, and Haywood County, is necessary to ensure that the Build Alternative is consistent with existing land use, future land use, and zoning to the extent possible.	No Significant Impact
Planned Development	No Effect	Four industrial properties currently listed for sale in Lauderdale County are located approximately one to two miles north of the western terminus of the Build Alternative. Based on the current and proposed alignment and project footprint, no right-of-way acquisition is anticipated from these parcels. Therefore, direct impacts to these properties are not expected. The planned Blue Oval City development in Haywood County is situated approximately 14 miles south of the eastern terminus of the Build Alternative. Given the substantial distance from the project corridor, it is unlikely that any temporary or permanent easements associated with the proposed SR-19 improvements would extend to or affect the Blue Oval City site.	Not Applicable	No Significant Impact
Legislation, Plans, and Policies	No Effect	The Build Alternative would be consistent with stated infrastructure and economic development goals.	Not Applicable	No Significant Impact

[32] https://lauderdalecountytn.org/chamber/community-development/
[33] https://haywoodtn.gov/wp-content/uploads/2024/03/23005-HaywoodFutureLandUsePlan_Report-240312-sm.pdf

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Farmland - See **Appendix C** for the SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum				
Farm Size and Agricultural Employment	No Effect	Between 1997 and 2022, the number of farms in Lauderdale County declined, while both land in farms and average farm size increased. In contrast, Haywood County saw increases in the number of farms, land in farms, and average farm size. Over the 10-year period from 2013 to 2023, agriculture has not been a major source of employment in either county, consistently ranking near the bottom of employment sectors. In 2023, Lauderdale County's agricultural employment rank dropped from 16th to 17th, while Haywood County remained at 16th. Converting portions of farmland to transportation use will reduce the total amount of available farmland. However, the small scale of the conversion is not expected to significantly impact farm size or the demand for agricultural labor. As a result, impacts to agricultural employment and farm operations under the proposed Build Alternative are anticipated to be minimal.	Proposed right-of-way and easement amounts associated with the Build Alternative may be minimized as the project moves through the project development process. Therefore, impacts to prime, unique, and/or statewide or locally important farmland due to acquisition may be reduced.	No Significant Impact
Prime Farmland	No Effect	Conversion of prime farmland to transportation use is anticipated to be less than 6.5 acres per linear mile. While this meets the 10-acre or less threshold for the FPPA small acreage exemption, Tennessee does not have an approved statewide, local or tribal Land Evaluation and Site Assessment (LESA) system, therefore, the TDOT is currently coordinating with NCRS to complete the NRCS CPA-106 form for prime farmland. Due to the minor amounts of proposed ROW, the Build Alternative is not anticipated to receive a rating that would require further consideration or the evaluation of additional alternatives.	Proposed right-of-way and easement amounts associated with the Build Alternative may be minimized as the project moves through the project development process.	No Significant Impact

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Transportation Infrastructure– See **Appendix C** for the SR-19 Land Use, Farmland, and Transportation Infrastructure Technical Memorandum				
Road Network	No Effect	The proposed Build Alternative would widen the existing two 11-foot travel lanes to 12-foot travel lanes, mill and resurface existing 11-foot travel lanes to improve pavement conditions and would also include minor horizontal and vertical alignment changes intended to meet current highway design standards. These proposed impacts would cause temporary traffic disruptions, however, traffic control plans will be implemented to minimize these impacts. The proposed project would improve the SR-19 intersections at Forked Deer Road, a major collector, and Conner Whitefield Road and Nunn Road which are minor collectors, improving the safety at those intersections. The proposed project would also improve the SR-19 intersections at 10 local roads improving safety at those intersections. SR-19 within the proposed Build Alternative limits has also been identified as a proposed state highway bicycle route. The proposed Build Alternative would include 10-foot shoulders (8-foot paved) from east of Eastland Avenue to just west of Gill Brackin Road and from Nunn Road to east of Jim Binford Lane which would provide additional accommodations for bicyclists on SR-19.	Not Applicable	No Significant Impact
Bicycle and Pedestrian Facilities	The No-Build Alternative would be inconsistent with the State Transportation Improvement Program (STIP)[34] and would not support the infrastructure goals of the legislation, plans, and policies.	The Build Alternative would include 10-foot shoulders (8-foot paved) from east of Eastland Avenue to just west of Gill Brackin Road and from Nunn Road to east of Jim Binford Lane, which would provide additional accommodations for bicyclists on SR-19.	Not Applicable	No Significant Impact

[34] https://www.tn.gov/tdot/program-development-and-administration-home/program-development-and-administration-state-programs.html

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Community Impact, Relocations, and Economic Resources – See Appendix **D** for the SR-19 Community Impact Assessment Technical Memorandum				
Residential/Business Relocations	No Effect	The proposed project would result in approximately 20 proposed single-family relocations, 2 proposed business relocations, and 6 proposed mobile home relocations along the SR-19 corridor.[35]	As the design of the proposed Build Alternative is refined, impacts to residential and business properties within the SR-19 project area may be reduced. Should a property be acquired, compensation would be at fair market value. TDOT will 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 will 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, TCA 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. Additionally, in the event that suitable replacement housing is not available in the immediate SR-19 project area, TDOT will work with individuals to identify alternate options, potentially including the construction of a new home. Both renters and mobile homeowners will also be compensated and will receive assistance from TDOT in the identification of and relocation of their home to a new location. Businesses subject to relocation under the Build Alternative will be compensated for their relocation to a new location, including moving costs, incidentals, and the cost to reestablish the business in a new location. TDOT will 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.	No Significant Impact

[35] Source: SR-19 Conceptual Stage Relocation Plan, November 2025. See **Appendix D,** Attachment D.

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Community Impact, Relocations, and Economic Resources – See Appendix **D** for the SR-19 Community Impact Assessment Technical Memorandum				
Community Stability and Cohesion	No Effect	While the proposed Build Alternative would result in the following, it is not anticipated to have an adverse effect on community cohesion: • 26 residential relocations/2 business relocations • 240 square foot construction easement (temporary) from Elam Baptist Church • Temporary inconvenience accessing community facilities within the SR-19 project area. It is unlikely that the Build Alternative would introduce a new perceived barrier or alter current perceived barriers in a way that discourages interaction across the roadway.	As the design of the proposed Build Alternative is refined, impacts to residential and business properties within the SR-19 project area may be reduced. Should a property be acquired, compensation would be at fair market value. TDOT will 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 will 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, TCA 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. Additionally, in the event that suitable replacement housing is not available in the immediate SR-19 project area, TDOT will work with individuals to identify alternate options, potentially including the construction of a new home. Both renters and mobile homeowners will also be compensated and will receive assistance from TDOT in the identification of and relocation of their home to a new location. Businesses subject to relocation under the Build Alternative will be compensated for their relocation to a new location, including moving costs, incidentals, and the cost to reestablish the business in a new location. TDOT will 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. Access to community facilities along the SR-19 project corridor will remain open throughout the duration of construction. As the project advances through the project development process, more defined traffic control plans will be developed and reviewed to minimize traffic disruptions during construction. Additionally, the Build Alternative has been designed to minimize impacts to the community by avoiding the creation of a new physical barrier by widening the existing SR-19 roadway except in locations where minor alignment shifts are needed to correct roadway geometric deficiencies.	No Significant Impact

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Community Impact, Relocations, and Economic Resources – See Appendix **D** for the SR-19 Community Impact Assessment Technical Memorandum				
Economic Conditions	No Effect	While Lauderdale County is considered an at-risk county and Haywood County is considered a distressed county, it is not anticipated that the proposed Build Alternative would negatively affect employment in the current top three industries in each county or impact the unemployment rate. The proposed Build Alternative is not likely to change commuting patterns. The proposed Build Alternative would not influence development decisions regarding Ford Motor Company's Blue Oval City.	The Build Alternative would not result in adverse economic impacts; therefore, no mitigation is proposed.	No Significant Impact
Air Quality – See **Appendix E** for the SR-19 Air Quality and Noise Technical Memorandum				
Air Quality	No Effect	The Build Alternative is located within Lauderdale and Haywood Counties, which are both in attainment for all regulated criteria pollutants. Therefore, transportation conformity would not apply to the proposed project. The Build Alternative qualifies as a "Project with Low Potential Mobile Source Air Toxic (MSAT) Effect" and is not anticipated to create adverse MSAT effects. The Build Alternative may generate intermittent and temporary construction-related pollutant emissions and dust.	To mitigate temporary construction-related pollutant emissions, TDOT's construction specifications will apply to this project. Construction procedures will be governed by TDOT's *Standard Specifications for Road and Bridge Construction*[36], 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 E** for the SR-19 Air Quality and Noise Technical Memorandum				
Noise	No Effect	The Build Alternative was determined to be Type III in accordance with 23 CFR 772, which does not require highway agencies to complete a noise analysis or consider abatement measures.	To mitigate the temporary generation of construction-related noise, standard best management practices will be implemented in accordance with the procedures in TDOT's *Standard Specifications for Road and Bridge Construction*, as amended by the most recent applicable supplements.	No Significant Impact
Historic Resources – See **Appendix F** for the SR-19 Cultural Resources Technical Memorandum				
Historic Resources	No Effect	No Adverse Effect. The project as currently proposed would not adversely affect any NRHP listed or eligible historic or architectural resources.	Current avoidance and minimization strategies adequately mitigate anticipated environmental impacts. Therefore, further technical studies are not required. However, in the event that right-of-way shifts, their disposition shall be subject to all applicable regulations such as Section 106 of the National Historic Preservation Act (NHPA) and the implementing regulations in the CFR (36 CFR § 800).	No Significant Impact

[36] https://www.tn.gov/tdot/tdot-construction-division/transportation-construction-division-resources/2021-standard-specifications.html

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Archaeological Resources – See **Appendix F** for the SR-19 Cultural Resources Technical Memorandum				
Archaeological Resources	No Effect	None of the archaeological sites within the APE are NRHP listed or eligible for listing.	Not Applicable	No Significant Impact
Native American Consultation – See **Appendix F** for the SR-19 Cultural Resources Technical Memorandum				
Native American Consultation	No Effect	No Adverse Effect. Section 106 (Native American Consultation) Coordination was sent to 10 Native American Tribes for PIN 102251.01 on July 2, 2024; 8 Native American Tribes for PIN 102251.02 on July 2, 2024, and 8 Native American Tribes on July 2, 2024, for PIN 102251.03. The Chickasaw Nation accepted the invitation to be a consulting party to PIN 102251.01 on July 25, 2024, and to PIN 102251.02 and PIN 102251.03 on July 16, 2024. On August 19, 2024, The Eastern Shawnee Tribe and the Shawnee Tribe requested to be contacted in the event of an inadvertent archaeological finding for all three project PINs.	Not Applicable Pursuant to TCA 11-6-107(d), if human remains are identified, construction work must be halted, and the state archaeologist, the county medical examiner and local law enforcement must be contacted immediately. In addition, each recognized Native American Tribe will be contacted to afford a representative the opportunity to examine and evaluate the material found.	No Significant Impact
Section 4(f)-Section 106 Resources – See **Appendix F** for the SR-19 Cultural Resources Technical Memorandum				
Section 4(f) Resources-Historic Properties	No Effect	No Effect. The project as currently proposed would not adversely affect any NRHP listed or eligible historic or architectural resources therefore, the project would not result in a Section 4(f) use for any NRHP listed or eligible historic architectural resources.	Not Applicable	No Significant Impact
Natural Resources – See **Appendix G** for the SR-19 Natural Resources Technical Memorandum				
Aquatic Resources	No Effect	The Build Alternative would impact the following aquatic resources: • 82 wet-weather conveyances/upland drainage features/ephemeral streams (16,983 linear feet) • 6 perennial streams (3,473 linear feet) • 28 intermittent streams (13,802 linear feet) • 16 wetlands (4.29 acres) • 8 ponds (1.4 acres)	Throughout the design process, TDOT will endeavor to mitigate impacts on 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	The Build Alternative would impact five 303(d) listed streams: • Briar Creek • Cane Creek • Lagoon Creek • Meridian Creek • Pond Creek	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 BMPs, and various water quality permits that require water quality monitoring.	No Significant Impact

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Natural Resources – See **Appendix G** for the SR-19 Natural Resources Technical Memorandum				
Threatened and Endangered Species	No Effect	US Fish and Wildlife Service (USFWS) *East of Eastland Avenue to east of Jim Binford Lane (PINs 102251.01 and 102251.02)*: On September 18, 2024, USFWS responded that a review of their database did not indicate that any federally listed or proposed species or designated critical habitat would be impacted by the project and therefore, based on the best available information at the time, the requirements of the Endangered Species Act (ESA) are fulfilled for all species that currently receive protection under the ESA. *East of Jim Binford Lane to east of SR-87 (PIN 102251.03)*: On October 14, 2024, USFWS concurred with the determination that the Build Alternative was "Not Likely to Adversely Affect" the tricolored bat (*Perimyotis subflavus*) and noted that this finding fulfills the requirements of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). Tennessee Wildlife Resources Agency (TWRA) On October 27, 2017, TWRA reviewed the project information for the entire length of the project and responded that implementation of standard BMPs would be sufficient to satisfy the needs of TWRA for the proposed project. Tennessee Department of Environment and Conservation Division of Natural Areas (TDEC DNA) The entire project was determined to meet Condition #1 of the Memorandum of Agreement between TDOT and TDEC DNA. TDOT completed its evaluation of potential effects to the monarch butterfly (*Danaus plexippus*) for the entire project (PINs 102251.01, 102251.02, and 102251.03) in Lauderdale County and Haywood County, Tennessee. Based on a review of the most current available species information, project design and environmental setting, TDOT has determined that the proposed action is "Not likely to jeopardize the continued existence of the Monarch Butterfly."	Standard BMPs would be implemented to avoid and minimize impacts to protected species and if possible, work at stream crossings would be scheduled during a lower flow period. In consultation with the USFWS, the following commitment has been added to the section of the project from east of Binford Lane to east of SR-87 (PIN 102251.03) – All tree clearing is to occur between October 1st and March 31st.	No Significant Impact

Table 5 Potential Direct Effects (con't)

Impact Category	No-Build Alternative Effects Determination	Build Alternative Effects Determination	Minimization/Mitigation Measures to Address Impacts	Analysis Result
Natural Resources – See **Appendix G** for the SR-19 Natural Resources Technical Memorandum				
Geology	No Effect	The Build Alternative would result in minor rock cuts. The Build Alternative may result in impacts to geology, such as impacts to drainage and ground and slope stability.	As per TDOT standard practice, TDOT would conduct a subsurface investigation during subsequent phases of project development and develop a project-specific design to address any geotechnical or geological could be identified at that time.	No Significant Impact
Floodplains	No Effect	The Build Alternative would impact approximately 3.6 acres of FEMA designated 100-year floodplains.	The design of the roadway system will be consistent with the MOU between FHWA and FEMA and with the floodplain management criteria set forth in the National Flood Insurance Regulations of Title 44 CFR. It will be consistent with the requirements of floodplain management guidelines for implementing Executive Order 11988 and FHWA guidelines 23 CFR 650A.	No Significant Impact
Visual Impacts – See **Appendix H** for the SR-19 Visual Impact Assessment Technical Memorandum				
Visual Impacts	No Effect	The overall viewer sensitivity and project compatibility ratings within the visual environment were determined to be "low" and "compatible", respectively. Therefore, the proposed Build Alternative is anticipated to have a neutral effect on the neighbors' and travelers' experience of overall visual quality within the area of visual effect (AVE).	Not Applicable	No Significant Impact
Hazardous Materials – See **Appendix I** for the SR-19 Hazardous Materials Technical Memorandum				
Hazardous Materials	No Effect	Two potential hazardous materials sites were identified on Tracts 106 and 42 within the project area. The proposed Build Alternative is not anticipated to acquire additional right-of-way (ROW) on either of these tracts. However, should ROW acquisition become necessary on either tract, a Phase I Environmental Site Assessment (ESA) may be required.	At this time, no additional studies, avoidance, or minimization are recommended for the proposed project. However, in the event hazardous substances/wastes are encountered within the right-of-way, their abatement shall be subject to all applicable regulations.	No Significant Impact

4.1.2 Construction and Operations Effects

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 refers to fuel use associated with construction related activities, routine maintenance, and motor vehicle use.

4.1.2.1 No-Build Alternative

The No-Build Alternative would not have any construction or operations related effects. However, future effects may occur as a result of maintenance work on the existing roadway.

4.1.2.2 Build Alternative

The Build Alternative would have the following anticipated construction and operations related effects.

- **Traffic and Access** – Construction of the Build Alternative may create a temporary inconvenience for local residents and businesses attempting to reach destinations within the SR-19 project area. Additionally, construction of the proposed Build Alternative may cause temporary traffic impacts. Access to properties adjacent to the proposed project route 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.
- **Fuel Consumption** – The Build Alternative would have the following effects 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 5** 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 5** for more details regarding noise impacts and minimization/mitigation measures.
- **Geology** – Construction of the proposed Build Alternative may result in effects to geology. Refer to **Table 5** for more details regarding effects to geology and minimization/mitigation measures.
- **Water Quality** – Construction of the Build Alternative has the potential to result in temporary effects on water quality. This 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 5** for more details regarding water quality effects and minimization/mitigation measures.
- **Utilities** – Underground and above-ground utilities are currently located within the existing right-of-way or immediately adjacent to it. Utilities located within the proposed right-of-way for the Build Alternative that are in conflict with the design of the Build Alternative would be relocated. Relocation of utilities could result in temporary pauses in service; however, construction of the Build Alternative would not result in the permanent elimination of any current services. As the design process progresses, TDOT will 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 produce noise and vibration, which may affect some land uses and activities during the construction

period. Individuals inhabiting homes along the Build Alternative would, at times, experience perceptible construction noise and vibration from the construction of the proposed 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 Construction[37] as amended by the most current applicable supplements. Mitigation measures 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.

- **Solid Waste and Hazardous Waste** – Solid waste could be generated as a result of 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. Currently no permanent right-of-way or permanent easement acquisition is anticipated from potential hazardous material sites identified within the limits of the Build Alternative. Refer to **Table 5** for more details regarding hazardous materials effects and minimization/mitigation measures.
- **Archaeology and Native American Consultation** – Construction of the 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 will cease. The Tennessee Division of Archaeology and recognized Native American tribes will be contacted immediately so that their representative may have the opportunity to examine and evaluate the materials. Refer to **Table 5** for more details regarding archaeological effects, 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. If the contractor must permanently remove an area of mixed forest for temporary use (i.e. construction staging), it would be replaced with plantings of native tree species within the affected area.

[37] https://www.tn.gov/tdot/tdot-construction-division/transportation-construction-division-resources/2021-standard-specifications.html

- **Wetlands** – Construction activities would be confined within permitted limits to prevent unnecessary disturbance of adjacent wetland areas. Potential temporary effects on 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 5** for more details regarding wetland effects 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 occur during active construction of the proposed Build Alternative.

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 the existing travel lanes and shoulders on SR-19, it is not anticipated that fuel impacts related to the proposed Build Alternative would be more than the No-Build Alternative post construction.

4.1.3 Identification of Significant Impacts for Direct Effects

Following the analysis of effects, as described in **Table 5** and **Section 4.1.1**, the following effect determinations have been made for the No-Build Alternative and the Build Alternative:

- **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-19 project area.
- **Build Alternative** – The Build Alternative would have no significant direct effects on the social, economic, physical, and natural resources identified within the SR-19 project area.

4.1.4 Measures to Minimize or Mitigate Any Direct Effects

Measures to minimize or mitigate any direct effects are presented in **Table 5** and **Section 4.1.1**.

4.2 Environmental Permits

The following permits would be required from the USACE and the Tennessee Department of Environment and Conservation (TDEC) for implementation of the Build Alternative:

- **Clean Water Act Section 404 Permit**[38]- 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, blueline 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.
- **Section 401 Water Quality Certification**[39] - Required to ensure that activities requiring Federal permits or licenses would not cause pollution in violation of State water quality standards.
- **Aquatic Resource Alteration Permit (ARAP)**[40] - 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 blueline 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.

[38] https://www.spl.usace.army.mil/Missions/Regulatory/Jurisdictional-Determination/Section-404-of-the-Clean-Water-Act/
[39] https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html
[40] https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html

- **National Pollutant Discharge Elimination System (NPDES)**[41] - 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.
- **Storm Water Pollution Prevention Plan (SWPPP)**[42] - Developed for the project in accordance with the conditions of the Construction General Permit (CGP) (TDEC's Division of Water Resources issues NPDES permits[43]).

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[41] https://www.tn.gov/content/tn/environment/permit-permits/water-permits1/npdes-permits1/npdes-stormwater-permitting-program/npdes-stormwater-construction-permit.html
[42] https://www.tn.gov/environment/permit-permits/water-permits1/npdes-permits1/npdes-stormwater-permitting-program/npdes-stormwater-construction-permit.html
[43] https://www.tn.gov/environment/permit-permits/water-permits.html

5.0 Agency Coordination and Public Involvement

Throughout the development of the proposed 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 its intent to initiate the NEPA process for the proposed SR-19 project and develop an EA to comply with NEPA. 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 SR-19 project.

Copies of TDOT's December 11, 2024, Letter of Intent to Initiate NEPA and FHWA's December 12, 2024, Concurrence Letter are included in **Appendix J**.

5.2 Agency Coordination

5.2.1 Early Coordination

On April 11, 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 a transmittal letter, project location map, and a copy of the Coordination and Public Involvement Plan (CPIP). The transmittal letter requested that recipients review the enclosed materials and provide input/comments on the proposed project.

Additionally, in accordance with 23 USC 139[44], the transmittal letter invited Federal, State, and local agencies with an interest in in the proposed project to serve as Participating

[44] https://www.govinfo.gov/app/details/USCODE-2024-title23/USCODE-2024-title23-chap1-sec139

Agencies[45] for the proposed project. The USACE was invited also invited to become a Cooperating Agency[46].

One hundred twenty-four individuals representing 54 Federal, State, local agencies (including local officials) received the April 11, 2025, Early Coordination package. Recipients of the early coordination package were requested to provide responses and input regarding the proposed project by May 12, 2025. Two responses to the early coordination package were received:

- The mayor of Ripley responded with a letter dated May 6, 2025, supporting the improvements to SR-19 and agreeing with safety as a need for the proposed project. The mayor also stated that the purpose and need for the project extended beyond safety and included improved access to Ripley and its businesses, along with the surrounding farms and businesses that support the agricultural industry critical to the rural community.
- The Tennessee Valley Authority (TVA) responded via email on April 30, 2025, that the agency did not have any jurisdiction or authority with respect to the proposed project and therefore chose not to be designated a Participating Agency.

See **Appendix J** for copies of the early coordination package and responses received.

5.2.2 Coordination and Public Involvement Plan

A project-specific CPIP was developed in April 2025 to define the process by which information about the proposed SR-19 project would be communicated to the agencies and the public and how input would be solicited and considered. As discussed in **Section 5.2.1**, a copy of the April CPIP was distributed as part of the early coordination package sent to agencies, organizations, and government officials for their review and comment. No comments were received on the CPIP.

5.3 Tennessee Environmental Streamlining Agreement

During preparation of the early coordination packages in April 2025, TDOT and FHWA determined that the proposed SR-19 project did not warrant involvement in the Tennessee Environmental Streamlining Agreement (TESA) process due to anticipated

[45] https://www.govinfo.gov/content/pkg/USCODE-2024-title23/pdf/USCODE-2024-title23-chap1-sec139.pdf
[46] https://www.ecfr.gov/current/title-23/chapter-I/subchapter-H/part-771/section-771.107

minimal adverse effects to the resources that are protected under the jurisdiction of the agencies that are parties to TESA. However, in order to provide Cooperating and Participating agencies opportunities to provide input and to keep the agencies informed, TDOT did establish the following coordination points for the proposed project:

- Coordination Point 1 (CP 1): Review of draft Purpose and Need and Range of Alternatives
- Coordination Point 2 (CP 2): Review of draft EA and draft Preliminary Mitigation Plan
- Coordination Point 3 (CP 3): Review of Final Mitigation Plan

Copies of CP 1 were distributed to agencies on October 29, 2025. The agencies were asked to review and comment on the CP 1 document by November 28, 2025. Agencies receiving copies of CP 1 and their responses are shown in **Table 6**.

Copies of CP1 and agency correspondence can be found in **Appendix J**.

CP 2 and 3 will be distributed at a later date when they are available.

Table 6 CP 1 Agency Distribution and Responses

Agency	Agency Response	TDOT Response
FHWA	November 5, 2025 – Requested revision to Section 2.0 "Logical Termini and Independent Utility" to identify SR-87 within the proposed project area as a Major Collector.	Revised in EA.
USACE, Memphis District	October 30, 2025 – Concurred with CP1 via concurrence letter.	October 30, 2025 – Concurrence letter accepted.
USFWS	October 29, 2025 - Due to a lack of appropriations funding, office personnel are currently out of the office on furlough and will return once appropriations funding is approved by Congress and the Government returns to normal operation.	No response.
USGS	October 29, 2025 - Due to the lapse in appropriations, staff is prohibited from conducting work as a Federal employees, including returning phone calls and emails, until further notice.	No response.
USDA, Natural Resource Conservation Service (NRCS)	November 11, 2025 - Given that there is no NRCS involvement in the project, NRCS has no additional comments. Deferring to the Tennessee State Historic Preservation Officer, federally recognized tribes, and other interested parties concerning the project.	December 1, 2025 – TDOT will continue to coordinate with the Tennessee State Historic Preservation Officer, federally recognized tribes, and other interested parties concerning the proposed project as it develops.
US Environmental Protection Agency (USEPA)	November 14, 2025 – Based on preliminary review, EPA concurs with Coordination Point 1.	November 17, 2025 – Concurrence received.
Advisory Council on Historic Preservation (ACHP)	No response.	No response.
TDEC	November 25, 2025 – TDEC has reviewed Coordination Point 1 and offers the following comments regarding the Build Alternative: Air Quality Impacts: Several actions could negatively impact air quality on a short-term basis. TDEC recommends that you evaluate such potential impacts prior to any clearing, demolition, or construction. Such impacts may include, but are not limited to, air pollution from construction equipment, open burning associated with land clearing activities, and fugitive	December 3, 2025 – Air Quality: To mitigate temporary construction-related pollutant emissions, TDOT's construction specifications will apply to this proposed project. Construction procedures will be governed by TDOT's Standard Specifications for Road and Bridge Construction, as amended by the most recent applicable supplements. All construction equipment shall be maintained,

Agency	Agency Response	TDOT Response
	dust. Local air quality conditions are available online at https://www.airnow.gov/. Asbestos: If this project involves the demolition of structures, be advised that there are federal regulations enforced by the EPA and TDEC's Division of Air Pollution Control regarding asbestos renovation and demolition activity. These regulations apply to any building or structure known to contain asbestos and to any facilities proposed to be demolished. When any structures are proposed to be demolished, an asbestos demolition notification must be provided in advance, and proper pre demolition surveys must be conducted to identify any regulated asbestos containing material (ACM) present. Prior to any building demolition, all facilities must be examined for ACM, and all potential ACM in the buildings proposed for demolition must be handled and disposed of in accordance with the applicable Federal, state, and local regulations. Tennessee's asbestos regulations can be found in Chapter 1200-03-11 of the Tennessee Air Pollution Control Regulations (TAPCR). Idling: Truck traffic associated with construction projects generate emissions of PM, CO, NO2, SO2, VOC, and CO2, and TDEC recommends the operation of trucks with up-to-date emission control technologies and proper maintenance to minimize vehicle and equipment emissions. The Department also recommends the adoption of best practices to minimize vehicle idling to minimize the impact of mobile source emissions on ambient air quality. Open Burning: If disposal of trees or vegetation is necessary during construction, TDEC recommends the evaluation of alternatives to open burning. Tennessee's open burning regulations can be found at https://publications.tnsosfiles.com/rules/1200/1200-03/1200-03-04.pdf.	repaired, and adjusted to keep it in full satisfactory condition. Asbestos: In accordance with TDEC Rules Chapter 1200-01-20, ACM abatement work will be performed by an accredited contractor using accredited abatement workers and supervisors. Abatement of these materials should be accomplished per SP202ACM Special Provision Regarding Removal of Asbestos-Containing Material. ACM abatement should be completed prior to any demolition activities if possible. Prior to the demolition or rehabilitation of any structure (bridge or building), the contractor will be required to submit the National Emission Standards for Hazardous Air Pollutants standard 10-day notice of demolition to the TDEC Division of Air Pollution Control (per TDOT Standard Specifications for Road and Bridge Construction (January 1, 2021) Sections 107.08 D and 202.03). Idling: To mitigate temporary construction-related pollutant emissions, TDOT's construction specifications will apply to this project. Construction procedures will be governed by TDOT's Standard Specifications for Road and Bridge Construction, as amended by the most recent applicable supplements. All construction equipment shall be maintained, repaired, and adjusted to keep it in full satisfactory condition. Open Burning: TDOT will consider disposal of landscape waste material other than open burning. If open burning is necessary, BMPs will

Agency	Agency Response	TDOT Response
	Fugitive Dust: If fugitive dust will be generated from construction activities, TDEC recommends the use of wet suppression or other measures to minimize the generation of fugitive dust. General Comments For any permitting inquiries, please contact the appropriate TDEC division directly. For an understanding of the impact that the clearing of any trees or other natural obstructions may have to rare, threatened, or endangered plant and animal species, please refer to the TDEC's Division of Natural Areas (DNA) Environmental Review webpage.	be used and TDOT will coordinate with the appropriate agencies per TDOT's Standard Specifications for Road and Bridge Construction, as amended by the most recent applicable supplements. Fugitive Dust: Construction activities will generate intermittent and temporary construction-related pollutant emissions and dust. Contractors will be required to follow the procedures in TDOT's Standard Specifications for Road and Bridge Construction, as amended by the most recent applicable supplements to minimize construction impacts. General Comments: TDOT will contact the TDEC division for all permitting inquiries as the proposed project continues to develop. The proposed project has been reviewed by TDOT Ecology Section Staff and it was determined that Condition #1 of the Memorandum of Agreement between TDOT, FHWA, and TDEC-DNA is met resulting in no adverse effects to state listed plant species or their habitats.
Tennessee Wildlife Resources Agency (TWRA)	No response.	No response.
Tennessee State Historic Preservation Office (TN-SHPO)	No response.	No response.
Tennessee Department of Economic and Community Development	No response.	No response.
Tennessee Department of Tourism	No response.	No response.

Agency	Agency Response	TDOT Response
Tennessee Department of Labor and Workforce Development	No response.	No response.
Tennessee Department of Human Services	No response.	No response.
Tennessee Department of Education	November 6, 2025 - There are no schools that are on SR-19, in which school traffic should not be directly impacted. Haywood Middle School is the closest to the proposed construction site. Expansion of the roadway in regards to shoulders would greatly benefit the safety of student transportation via a school bus as it allows for more room to avoid crashes. There are also portions of this roadway that have steep drainage ditches that increase the potential for school bus rollover accidents due to the limited shoulder space available. One item of consideration here is the fact that Haywood and Lauderdale County School Districts may need to be notified in advance of the initiative in order to provide ample time for any modification of school bus routing as both districts have transportation services on this roadway on a daily basis.	November 7, 2025 – TDOT will comply with the TDOT Work Zone Design Manual (2022) to ensure all relevant stakeholders—including nearby school districts—are notified of any construction activities that could affect existing school bus routes within the project area.
Southwest Tennessee Rural Planning Organization (RPO)	October 30, 2025 – No comments or concerns after review of floodplain management references and rural connections.	October 30, 2025 – Response received.
West Tennessee RPO	No response.	No response.

5.4 Public Involvement

5.4.1 Public Meeting February 27, 2025

On February 27, 2025, TDOT hosted a public meeting at Ripley High School located at 254 South Jefferson Street, Ripley, Tennessee. The purpose of the public meeting was to provide the public with updates on the status of the proposed project and NEPA review as well as the opportunity to comment on the purpose and need for the proposed project and the range of alternatives under consideration in the EA.

5.4.1.1 Meeting Advertisement

The February 27, 2025, public meeting was publicized in several ways:

- A public meeting postcard was mailed to property owners adjacent to the project area on February 12, 2025;
- A public notice was posted to TDOT's SR-19 website[47];
- A public notice was advertised in *The Brownsville States-Graphic* on February 19, 2025; and
- A public notice was advertised in the *Lauderdale County Enterprise* on February 20, 2025.

Copies of the public notices and meeting postcard are included in the SR-19 Public Comment Summary included in **Appendix J**.

5.4.1.2 Public Meeting

During the public meeting, project information was provided through a pre-recorded looped PowerPoint presentation and project displays in an open house forum where members of the TDOT project team were available to discuss the proposed project and review displays with members of the public. As each member of the public arrived, they were asked to sign in and given a project informational handout and a comment card.

A total of 65 members of the public signed the sign-in sheets. Nineteen TDOT representatives/consultants attended the public meeting.

5.4.1.3 Methods of Public Comment

Throughout the February 27, 2025, public meeting and the 21-day public comment period that followed, the public was able to submit official comments and/or questions to TDOT in several ways:

[47] https://www.tn.gov/tdot/projects/region-4/state-route-19.html

- **Email**: The public could email questions and comments to TDOT.comments@tn.gov using the subject line "State Route 19 Project".
- **Comment Card**: Comment cards were distributed to everyone at the public meeting. The public could leave their completed comment card with the TDOT project team at the public meeting or take the comment card with them to mail at a later date. Additionally, the comment card was available for download via the project website for people to print and mail later during the public comment period.
- **Online Comment Form**: Following the public meeting, public comments could also be submitted online via an online comment form available on the project website.
- **Mail**: The public could submit a letter with their comments/questions to:

  NEPA Public Meeting
  Attn: SR-19 Project
  Tennessee Department of Transportation
  Suite 700, James K. Polk Building
  505 Deaderick Street
  Nashville, TN 37243-03312

All public meeting materials were posted to the TDOT project website following the February 27, 2025, Public Meeting. The comment period closed on March 20, 2025.

See **Appendix J** for a copy of the SR-19 Public Meeting Summary that includes additional information on the February 27, 2025, Public Meeting.

5.4.2 Public Comment Summary

During the official comment period for the February 27, 2025, public meeting (February 27, 2025, through March 20, 2025), a total of 12 official comment responses were received. **Table 7** provides a summary of the comments received. A full record of public input and official TDOT responses is available in **Appendix J**.

Table 7 Comment Summary

Public Input	
Public Meeting Attendees	65
Comments Received by Format	
Comment Cards	5
Online Comment Cards	5
Phone Comments	2
Email Comments	0
Letters	0
Total Comment Responses Received	***12***
Primary Interest in Project	
Concerned Citizen	4
Affected Resident	7
Affected Landowner	7
Affected Business	0
Comments Received by Topic	
Proposed improvements needed/more improvements are necessary	2
Support Build Alternative	2
Only add shoulders to the existing road	3
Concerned about traffic	2
Concerned about dangerous intersections	1
Concerned about noise impacts	1
Concerned about construction impacts	1
Concerned about impacts to their property	3
Note: Some respondents provided more than one answer so the totals will add up to more than 12.	

5.5 Distribution of the EA and Notice of Availability

Following FHWA approval of the EA, a Notice of Availability (NOA) for the EA document will be posted to the project website and published in the local newspapers, *The Brownsville*

States-Graphic[48] and the *Lauderdale County Enterprise*. The notice will identify where the EA will be available for public review, how the public can provide input, and who to contact with comments or for additional information.

The EA will be distributed digitally to federal, state, and local agencies, elected officials, and interested Tribes who were identified as part of the early coordination process (see **Section 5.2.1** and **Appendix J** for more information).

Copies of the EA will be made available for public inspection at the following locations:

- Lauderdale County Library
  120 Lafayette Avenue
  Ripley, TN 38063
- Elma Ross Public Library
  1011 East Main Street
  Brownsville, TN 38012

The EA document and associated technical appendices will be made available electronically via the SR-19 project website:

- https://www.tn.gov/tdot/projects/region-4/state-route-19.html

5.6 Public Hearing

Once FHWA approves the EA document and the EA is made available for public and agency review, TDOT will hold a public hearing to receive comments on the findings presented in the EA and on the proposed project. Input from the public hearing and comment period will be considered by TDOT in the decision-making process for selection of the preferred alternative and potential mitigation measures. This information will be documented in the final environmental document.

The public hearing will be held in the SR-19 project area and will be advertised in the local newspapers, *The Brownsville States-Graphic* and the *Lauderdale County Enterprise*.

[48] https://statesgraphic.com/

6.0 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(1),[49] 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.

[49] https://www.govinfo.gov/content/pkg/USCODE-2011-title23/html/USCODE-2011-title23-chap1-sec139.htm