

On January 20, 2025, President Trump signed Executive Order (E.O.) 14148 --Initial Rescissions of Harmful Executive Orders and Actions and E.O. 14154 – Unleashing American Energy. The E.O.s revoked E.O. 13990 – Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (January 20, 2021) and E.O. 14008 – Tackling the Climate Crisis at Home and Abroad (January 27, 2021). Subsequently on January 29, 2025, Secretary Duffy signed a Memorandum for Secretarial Offices and Heads of Operating Administrations – Implementation of Executive Orders Addressing Energy, Climate Change, Diversity, and Gender. On February 25, 2025, the Council on Environmental Quality (CEQ) published an Interim Final Rule removing the CEQ’s National Environmental Policy Act (NEPA) implementing regulations, effective April 11, 2025 (90 Fed. Reg. 10610). As a result of these actions, FHWA will not include greenhouse gas emissions and climate change analyses in the federal environmental review process. Any purported greenhouse gas emissions and climate change impacts were not considered in the federal decision. Accordingly, no greenhouse gas emissions or climate change analyses are included in this EA.

Also on January 20, 2025, President Trump signed Executive Order (E.O.) 14148 --Initial Rescissions of Harmful Executive Orders and Actions and E.O. 14154 – Unleashing American Energy. The E.O.s revoked E.O. 14096 – Revitalizing Our Nation’s Commitment to Environmental Justice for All (April 21, 2023). Subsequently on January 21, 2025, President Trump signed E.O. 14173 – Ending Illegal Discrimination and Restoring Merit-Based Opportunity. This E.O. revoked E.O. 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994). On February 25, 2025, the Council on Environmental Quality (CEQ) published an Interim Final Rule removing the CEQ’s National Environmental Policy Act (NEPA) implementing regulations, effective April 11, 2025 (90 Fed. Reg. 10610).

As a result of these actions, all federal environmental justice requirements are revoked and no longer apply to the federal environmental review process. FHWA, FTA and FRA’s Joint NEPA regulations (23 CFR part 771) and the agencies Interim Final Guidance on “Section 139 Environmental Review Process: Efficient Environmental Reviews for Project Decision-making and One Federal Decision” (12/17/2024) do not require an environmental justice analysis. Accordingly, no analysis of environmental justice is included in this EA. Any purported environmental justice impacts were not considered in the federal decision. Social, economic, and community impacts will continue to be disclosed where applicable in accordance with 23 CFR 771.

As a result of E.O. 14148, E.O. 14154, E.O. 14173, and the removal of the Council on Environmental Quality’s regulations, all federal environmental justice requirements are revoked and no longer applicable to the federal environmental review process. Accordingly, this EA does not consider public comments regarding environmental justice.



# NEED AND PURPOSE MEMORANDUM

I-24 SOUTHEAST CHOICE LANES PROJECT

November 2025





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## ISSUE AND REVISION RECORD

Revision	DATE	Preparer(s)	PMC Reviewer(s) <sup>1</sup>	PMC Approver <sup>2</sup>	Description/NOTES
			TDOT REVIEWER(S)	TDOT APPROVER	
RD	11/1/2025	Erin McGehee	Sunita Nadella, Joy Riley	David Dye	Revised final version for incorporation into EA per FHWA review
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# 1. INTRODUCTION

This document presents the development of the need and purpose for the I-24 Southeast Choice Lanes project. The need and purpose memo explains why the project is necessary and worthwhile. It also drives the process for alternatives consideration, in-depth analysis and ultimate selection of a recommended preferred alternative. The purpose element of the statement explains the problem the project is intended to address. The need element includes the data substantiating that a problem currently exists.

Data from previous planning studies was utilized in defining the key problems and potential solutions to address future needs within the study area. This information is summarized in the following sections.

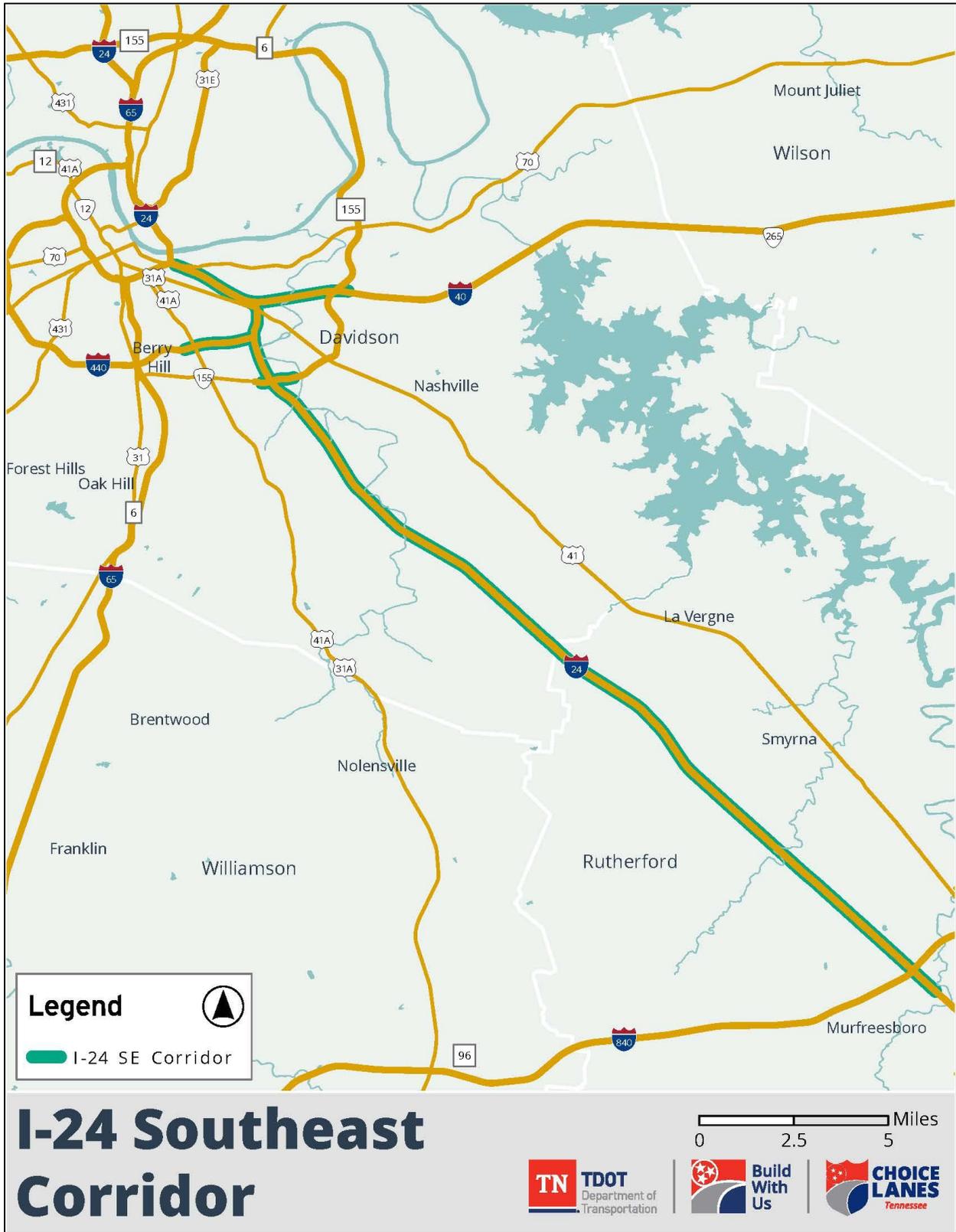
## 1.1. Project Background

The I-24 corridor, a critical transportation route in Middle Tennessee, has been in operation since the 1970s and plays a vital role in regional mobility primarily between the cities of Chattanooga and Nashville. It is one of the primary east-west interstate connections in the area, linking key urban centers and serving as a major freight and commuter route. The next closest comparable interstate corridors are I-40 to the north and I-840 to the south, which provide alternate regional access but do not directly serve the same travel patterns as I-24.

## 1.2. Project Corridor

The proposed Project is located along approximately 26 miles of I-24 between I-40 near downtown Nashville (Davidson County) and I-840 near Murfreesboro (Rutherford County) as depicted in **Figure 1-1**. The proposed Project would provide I-24 mainline improvements as well as improvements at the system-to-system interchanges at I-40 and I-440.

Figure 1-1: Project Location Map



## 1.2.1. Existing Conditions

### TRAVEL CONDITIONS

The I-24 Southeast corridor is a critical corridor for Middle Tennessee, carrying approximately 150,000-180,000 vehicles per day, including up to 25,000 trucks, and provides regional connectivity across Middle Tennessee. Typical traffic congestion occurs along I-24 from the State Route (SR) 266 (Sam Ridley Parkway) interchange to the northern Project limits extending to I-40/I-24 toward downtown Nashville. Substantial and prolonged congestion impacting times beyond peak hour periods occurs on I-24 from south of SR 155 (Briley Parkway) to the I-40 at I-24 interchange, with additional congestion added to the network from the I-440 at I-24 interchange. The corridor currently includes High-Occupancy Vehicle (HOV) lanes<sup>1</sup>, which are part of the existing infrastructure and are intended to promote carpooling and improve person-throughput; however, congestion persists for both HOV and general purpose lanes despite the presence of HOV lanes. As outlined below, continued population and employment growth will further worsen existing conditions. **Figure 1-2** and **Figure 1-3** present existing congestion on the I-24 corridor during the AM and PM peak hours.

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<sup>1</sup> The existing HOV lanes along the corridor have occupancy restrictions (i.e., must have more than one occupant in the vehicle) during peak periods. However, outside of the peak periods, any vehicle including those with less than one occupant, may use the HOV lane.

Figure 1-2: Existing Congestion on I-24 - AM Peak Hour



Source: RITIS

**Figure 1-3: Existing Congestion – PM Peak Hour**



Source: RITIS

## GROWTH IN POPULATION AND EMPLOYMENT TRENDS

**Table 1-1** shows the population trends at the county level using data from the U.S. Decennial Census from 2000, 2010 and 2020. County-level population growth projections are from the University of Tennessee and show estimates through 2045.<sup>2</sup> The population of both counties grew between 2000 and 2020, with the largest growth rate in Rutherford County. Projections show population growth continuing through 2045 for both counties. For Rutherford County, projections show the population expanding by approximately 1.6 times its 2020 level over the next 25 years.

**Table 1-1: Population Estimates and Projections to 2045 for Davidson County and Rutherford County**

REGION	POPULATION				PERCENT CHANGE		
	2000	2010	2020	2045	2000-2010	2010-2020	2020-2045
Davidson County	569,891	626,681	715,884	832,218	10	14	16
Rutherford County	182,023	262,604	341,486	546,129	44	30	60

Source: U.S. Census,<sup>3,4,5</sup> University of Tennessee<sup>6</sup>

The U.S. Census Bureau’s 2024 American Community Survey (ACS) 1-Year Estimates<sup>7</sup> show that more than 442,511 of the 596,730 individuals (16 years and older) who live in Davidson County are employed. In Rutherford County, there are 294,430 residents over the age of 16, of whom 215,175 are employed. Of the 418,280 employed residents within Davidson County, 352,969 residents work in the same county. Of the 201,353 employed residents within Rutherford County, 133,448 residents work in the same county.<sup>8</sup> **Table 1-2** shows employment in 2017 and projected employment in 2045 for Davidson and Rutherford

<sup>2</sup> Cook, Craig. “Boyd Center Population Projections.” Tennessee State Data Center. Accessed December 2023.

<sup>3</sup> U.S. Census Bureau – United States Summary: 2000, Accessed March 2024.

<sup>4</sup> U.S. Census Bureau. “RACE.” Decennial Census, DEC Redistricting Data (PL 94-171), Table P1, 2020, Accessed December 2023.

<sup>5</sup> U.S. Census Bureau. “RACE.” Decennial Census, DEC National Redistricting Data, Table P1, 2010, Accessed December 2023.

<sup>6</sup> Tennessee State Data Center, University of Tennessee Boyd Center for Business and Economic Research, Accessed February 2024.

<sup>7</sup> U.S. Census Bureau. “Selected Economic Characteristics.” ACS 1-Year Estimates Data Profiles, Table DP03, 2024, Accessed October 2025.

<sup>8</sup> U.S. Census Bureau. “Sex of Workers by Place of Work--State and County Level.” ACS 1-Year Estimates Subject Tables, Table B08007, 2024, Accessed October 2025.

counties, according to data available from the Greater Nashville Regional Commission (GNRC).

**Table 1-2: Jobs located in Davidson and Rutherford Counties (2017 and 2045)**

GEOGRAPHY	EMPLOYMENT (2017)	EMPLOYMENT (2045)	PERCENT CHANGE
Davidson	638,277	863,700	35%
Rutherford	171,478	272,141	59%
<b>Total</b>	<b>809,755</b>	<b>1,135,841</b>	<b>40%</b>

Source: [GNRC Urban Sim Land Use Forecasting Model](#), (n.d.), Accessed February 2024.

### 1.3. Transportation Planning Process

The GNRC is the federally designated Metropolitan Planning Organization (MPO) and is responsible for developing and updating the Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) to meet federal requirements and address local needs. The proposed Project is included in the Fiscal Year (FY) 2023-2026 TIP by reference number NSH 2025-82-001 (refer to **Appendix A**).

Over the past decade, TDOT and the GNRC have undertaken a series of comprehensive studies and feasibility assessments to address explosive population growth and congestion along the I-24 corridor. These studies, summarized in the following sections, systematically evaluated a range of multimodal approaches and managed lane strategies—including HOV and High Occupancy Toll (HOT) lanes—with an emphasis on cost-effectiveness due to limited funding.

Adhering to guidance established by the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO)<sup>9,10</sup>, implementing Choice Lanes<sup>11</sup> is aligned with the region’s current long-range transportation plan<sup>12</sup> and has been a recommended solution in transportation planning documents since 2014.

<sup>9</sup> FHWA | [Public-Private Partnership Oversight: How FHWA Reviews P3s](#) (2015).

<sup>10</sup> AASHTO's [Practitioners Handbook 3 | Managing the NEPA Process for Toll Lanes and Toll Roads](#) (2016).

<sup>11</sup> [TDOT Choice Lanes](#).

<sup>12</sup> [RTP 2021-2045, February 17, 2021, Update, GNRC](#).

### 1.3.1. I-24 Multimodal Corridor Study (TDOT, 2014)<sup>13</sup>

The 2014 I-24 Multimodal Corridor Study investigated a range of multimodal solutions to address future travel demands, with an emphasis on managing congestion, improving safety, maximizing the potential for freight diversion and preserving and enhancing the corridor's economic benefits. The purpose of the study was to recommend a range of cost-effective projects and strategies that would make I-24 safer and more efficient. The study evaluated a wide range of multimodal strategies to address mobility issues along the entire I-24 corridor from the Kentucky state line to the Georgia state line.

In addition to the cost-effective recommended projects such as, on and off I-24 system capacity improvements, ramp improvements, Intelligent Transportation Systems (ITS) and bridge improvements, dedicated truck lanes, new and modified interstate access points, rock fall/slide mitigation projects and other miscellaneous projects, TDOT identified managed lane strategies for evaluation. Much of the existing corridor includes approximately 50 miles of HOV lanes; however, the Multimodal Corridor Study recommended various strategies to improve or provide mobility and access benefits. Recommended strategies included increasing enforcement of HOV restrictions, evaluating options to transition to daily instead of peak hour HOV operation, providing direct HOV lane access and egress at selected locations, evaluating ramp metering locations, enacting legislation for managed lanes that include allowable access restrictions, express lanes and variable pricing options and determining if automated tag enforcement is allowable.

Funding is a major challenge for the I-24 Corridor improvements and concluded that TDOT could not afford to continue adding lanes to interstates as the only solution to reduce congestion in urban areas. While the study identified a wide range of needed projects, most are not currently funded and will require significant new resources, innovative financing, or phased implementation.

### 1.3.2. Nashville Area MPO Managed Lanes Preliminary Feasibility Assessment (2015)

The purpose of the 2015 Nashville Area MPO Managed Lanes Preliminary Feasibility Assessment (Assessment) was to profile potential managed lanes concepts for the Nashville area and to determine which of those concepts might be viable in the region. The Assessment introduced the concept of managed lanes, described existing managed lanes in use outside Tennessee and identified facilities and strategies for a pilot program within Tennessee. The Assessment also included data from 2012 on existing HOV lanes in the Nashville metro area (i.e., violation rates and speeds). It reviewed both high-cost (e.g., new HOV, HOT, or express lanes) and lower-cost strategies (e.g., hard shoulder running), noting

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<sup>13</sup> [I-24 Multimodal Corridor Study](#). Accessed April 2024.

that while lower-cost options are quicker to implement, they do not address long-term infrastructure needs. The Assessment also analyzed 2012 HOV lane data, described pricing mechanisms (dynamic, fixed-variable, static), and discussed P3 models, revenue sharing, and anticipated costs. Many goals and options from the Assessment were incorporated into the broader MPO policy framework, including the consideration of a managed lane system along I-24.

### 1.3.3. Tennessee Congestion Action Plans (2022)<sup>14</sup>

As a result of previous planning studies, TDOT continued studying traffic congestion and commissioned the development of Congestion Action Plans (CAP) in 2019, starting with the Middle Tennessee region (Nashville), followed by other areas including Chattanooga, Knoxville and Memphis in 2021. The purpose of the CAP was to expand on the results of the previous planning studies and develop data-driven methodologies to quantify urban congestion and eventually provide recommendations for regional managed lanes and operational improvements. The CAP consisted of preliminary cost estimates, concept plans, summary documents for each project and stakeholder engagement.

In the Middle Tennessee CAP, deficiency scores ranked the existing levels of congestion. The metrics used to calculate the deficiency scores included congestion levels in both travel speeds and travel time, impacts of congestion for both passenger and commercial vehicles, impacts of bottlenecks, future growth projections, congestion deterioration during peak periods and throughout the day and impacts to multimodal transportation. In the Nashville region, 20 spot locations and 57 segments were identified as bottlenecks, with the majority occurring just south of the Inner Loop. Based on this analysis, a wide range of strategies—including HOT, HOV, Express Toll Lanes, Truck-Restricted Lanes, Bus on Shoulder, Hard Shoulder Running, and Ramp Metering—were recommended for further evaluation along corridors such as I-24.

However, despite the comprehensive planning, the CAPs revealed significant funding challenges. The total estimated cost for implementing the recommended roadway and transit improvements in Middle Tennessee alone exceeded \$7.3 billion. Across all four urban areas, the CAPs identified more than \$9.5 billion in capital project needs. In parallel, TDOT's Interstate Corridor Studies recommended an additional \$6.9 billion in congestion mitigation projects on urban freeway systems. After accounting for overlaps between these studies, CAP recommendations, and TDOT's current project commitments, approximately \$13.6 billion in unfunded needs remains. When combined with existing funding commitments—approximately \$3.8 billion from IMPROVE Act projects and other in-

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<sup>14</sup> [TDOT Congestion Studies](#), Accessed April 2024.

progress efforts—the total funding needed to address urban congestion in Tennessee’s four major metropolitan areas exceeds \$17.5 billion.

Over the past decade, TDOT has undertaken and participated in numerous planning efforts to understand transportation needs in the state’s largest urban areas. The CAPs represent a culmination of these efforts, reaffirming the need for and refining recommendations for roadway and transit improvements to address growing congestion. As documented in these efforts, managing current and future multimodal transportation demands will require significant investment. Securing supplemental federal, state, and local funding to support transit system expansion, multimodal facility development, and capital project implementation will be essential to preserving the quality of life and economic vitality of Tennessee’s urban regions.

#### 1.3.4. TMA 10-Year Project Plan (2023)<sup>15</sup>

The studies summarized earlier found that increasing congestion is affecting urban and rural areas and the continued growth requires a change in priorities and transportation plans. Since the passage of the Transportation Modernization Act (TMA)<sup>16</sup> in 2023 acknowledging the challenges of rapid growth within the state, TDOT developed a 10-Year Project Plan that provided a roadmap for \$15 billion in state and federal funds and introduced a new project programming prioritization process balancing both urban and rural projects.

The methodology used to develop the 10-Year Project Plan included strategies such as:

1. Re-cost and fund all remaining engineering, right-of-way and construction phases of the current TDOT 3-Year Plan.
2. Fund all statewide programs at established levels.
3. Allocate funds for bridge replacements.
4. Allocate TMA funds in Regions 1, 2 and 3 for urban congestion and Choice Lanes projects as well as America’s River Crossing on I-55 in Region 4.
5. Balance TMA and federal and state formula funds to maximize the leveraging of potential partnerships and grants.

Following this methodology, TDOT developed six goals and corresponding evaluation criteria (refer to **Table 1-3**) to identify priority projects.

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<sup>15</sup> [TDOT 10-Year Plan](#), Accessed April 2024.

<sup>16</sup> [Transportation Modernization Act](#).

**Table 1-3: 10-Year Project Plan Prioritization Goals and Evaluation Criteria**

GOALS	EVALUATION CRITERIA
Maximize traveler safety and system reliability	Crash Reduction
Reduce congestion and manage travel demand to support an efficient system for people, goods and services	Volume to Capacity Ratio; Travel Time Reliability
Support the state’s economy	Percent Truck; Supports Intermodal Access and Connectivity; Economic Status
Preserve and protect the transportation system	Addresses bridge or pavement need
Livability and Sustainability	Supports Integrated Multimodal Systems
Accelerate Project Delivery	Time and risk estimated to deliver a project.

*Source: TDOT TMA 10-Year Plan*

Based on these goals and criteria, TDOT evaluated approximately 1,000 projects that fell within key TMA investment categories: Urban Congestion, Rural Interstate Widenings, Statewide Partnership Program and IMPROVE Act projects.



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## 2. PROJECT NEED AND PURPOSE

The purpose of the proposed Project is to provide a cost-feasible<sup>17</sup> transportation option that offers travel time advantages with user participation for both passenger and commercial vehicles along I-24, between I-40 south of downtown Nashville and I-840 near Murfreesboro by addressing the following transportation issues:

1. Capacity
2. Travel time
3. Limited funding and accelerate project delivery.

### 2.1. Project Need

I-24 in Nashville is a major corridor connecting the rapidly growing areas of Nashville to Chattanooga. Growth in the region has resulted in substantial increases in urban congestion caused by insufficient capacity, which can be defined and measured by slow travel speeds accompanied by high travel demand, weaving issues due to traffic density and geometric constraints at system-to-system interchanges and bottlenecks in critical areas along the corridor. Independent research from Heartland Forward ranked Nashville as the 9<sup>th</sup> fastest-growing metropolitan city in the nation in 2023,<sup>18</sup> averaging 86 people per day moving into the region. The Nashville Convention and Visitors Corporation reports that tourism in Nashville continues to experience rapid growth, with 16.8 million visitors in 2023, and expects steady growth to 18.1 million per year by 2027.

Rapidly increasing congestion negatively affects quality of life for both residents and visitors and can dampen economic development. To mitigate these impacts, TDOT chose to develop Congestion Action Plans (CAPs) as a coordinated, statewide response that would ultimately result in a more formal strategies to manage congestion on the freeways and major arterials (refer to **Section 1.3.3**).

After the TMA was passed to address funding constraints, TDOT conducted traffic and revenue studies and industry outreach with private-sector partners to further investigate the feasibility of a managed lane system; resulting in the recommendation of I-24 between Nashville and Murfreesboro as the first Choice Lanes Project (refer to **Section 1.3.4**).

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<sup>17</sup> Cost-feasible is defined as the alternative financing mechanism (i.e., P3) that would allow for the proposed Project to progress into final design and construction phases. This terminology should not be confused with user fees, or the rates in which motorists who choose to use the Choice Lanes would pay.

<sup>18</sup> "[Most Dynamic Metros 2023](#)." Heartland Forward, April 2024.

## 2.2. Project Purpose

### 2.2.1. Increase Capacity

The proposed project would address growing congestion by increasing roadway capacity through the implementation of a managed lanes system that offers drivers travel choices. By providing additional lanes that operate under dynamic pricing, the system allows users to opt into a faster travel option when needed, while preserving general-purpose lane availability. Since 2014, managed lanes have been analyzed in various transportation planning documents and studies as a viable alternative to traditional interstate widening projects involving the addition of general-purpose lanes.

To evaluate the system's effectiveness, the analysis will measure throughput—the number of vehicles entering and exiting the network which includes all the interstates (I-24, I-40, I-440, I-840) within the study area of influence and the crossroads and interchanges over a three-hour simulation period. This includes assessing total network throughput and identifying improvements at key locations along I-24 where managing demand is critical. Additionally, origin-destination travel patterns will be analyzed to support future scenario planning and ensure the system meets long-term regional mobility needs.

### 2.2.2. Improve Travel Times

Long travel times would be addressed along the I-24 Southeast corridor by providing managed lanes as additional travel options. As documented in previous planning efforts and traffic forecasting data, simply adding general-purpose lanes is not a sustainable solution to the region's long-term transportation challenges. Traffic congestion and the inability to effectively manage demand along I-24 are expected to worsen due to rapid population growth and expanding economic opportunities.

Average travel time (minutes) will be modeled to help demonstrate the effectiveness of the managed lanes by reducing travel times during the peak periods for users compared to the general purpose lanes. Average travel time reflects the overall operational performance of the corridor and would help assess where congestion is most pronounced under baseline conditions and how these conditions improve as a result of project implementation.

The proposed managed lane system offers a travel time advantage through dynamic pricing and demand management. A key component of this strategy is the enforcement of a minimum speed, established through contractual agreements between TDOT and the Developer,<sup>19</sup> To maintain this minimum speed, the Developer will implement dynamically priced user fees—adjusted based on real-time traffic volumes and speeds—to regulate the

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<sup>19</sup> A Developer is a private entity who is contracted with the owner (i.e., TDOT) who is responsible for the delivery of the projects that is traditionally held by public agencies.

number of vehicles entering the lanes. This approach would help control congestion by maintaining travel times for users. By shifting a portion of demand to the managed lanes, the system not only improves travel times for those who opt in but also alleviates congestion in the general-purpose lanes, enhancing mobility across the entire corridor.

### **2.2.3. Accelerate Project Delivery and Leverage Funding Mechanisms Afforded by the TMA**

Recognizing Tennessee's policies have generated economic opportunity, bringing job creation and an overall increase in population, this growth is outpacing the state's transportation system to provide the necessary mobility and infrastructure for its commuters and tourists who may travel along I-24. There are limited funding and financing options as gas tax revenues decline mainly due to inflation and more fuel-efficient vehicles, which means fewer projects, slower progress and less benefit to communities and economies. As a result, the duration of congestion has increased with travel speeds and travel times worsening in recent years.

However, with the passage of the TMA in 2023, TDOT can now utilize alternative delivery and finance models that provide a cost-feasible solution, allowing projects to be built faster with more funding flexibility. The proposed Project would use the P3 model, where the state (i.e., public) would partner with a private entity that allows motorists an option of paying a voluntary user fee in exchange for faster travel speeds and trip times. The P3 model also leverages the potential for innovations in design, flexibility during construction, as well as the revenue-generating mechanism of priced Choice Lanes, enabling accelerated project delivery. Through the use of the P3 model, the infrastructure improvements to I-24 can be opened to the public earlier, which is vital to the continued success of Tennessee's growing economy and population.

## **2.3. Measures of Effectiveness: Analyzing Project Need**

Several performance measures, also referred to as "measures of effectiveness (MOE),"<sup>20</sup> have been developed to assess how the Project Needs have been addressed. The MOEs for the Project's first two needs are related to traffic analysis and can be either field measured or calculated by modeling tools (i.e., VISSIM<sup>21</sup>). For these needs, there would be 1) corridor-level measures and 2) system-level performance metrics. The corridor-level measures would help evaluate the Project study area, whereas the system-level performance metrics would evaluate the overall efficiency of the broader transportation network, including I-24,

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<sup>20</sup> Measures of Effectiveness (MOE) are defined as traffic performance metrics used to quantify the achievement of a project's traffic operations objectives.

<sup>21</sup> VISSIM is a microscopic traffic simulation software used to model and analyze traffic flow, including vehicles, pedestrians, and public transport.

I-40, I-440, I-840 and arterials within the Project study area. This section and Table 2-1 provide a high-level summary of the measurements that would be used to analyze the ability to meet the Project Needs.

1. Increase Capacity:
  - a. **Corridor-level measures** would analyze the increase of corridor throughput at critical locations along I-24 for both Choice Lanes and general purpose lanes compared to the No-Build condition.
  - b. **System-level performance metrics** would analyze the increase in network throughput (vehicles) from No-Build to Build condition, i.e., the total number of vehicles able to enter and exit the network during the three-hour analysis period.
2. Improve Travel Times:
  - a. **Corridor-level measures** would be measured separately for the Choice Lanes and general purpose lanes by the freeway corridor average travel time (minutes). Travel time would be maintained by contractual travel speeds.<sup>22</sup>
  - b. **System-level performance metrics** will show the average time savings per vehicle per year (hours).
3. Accelerate Project Delivery and Leverage Funding Mechanisms:

This need has been demonstrated and documented in previous planning studies, the current RTP and the Transportation Planning Work Program (TPWP), which serves as a more focused roadmap for how transportation planning funds will be used to improve the Nashville transportation system for fiscal years 2026-2027.<sup>23</sup> The TPWP has a specific goal to address the lack of funding for transportation investments in the region and to develop a regional growth management study to help identify transportation revenue options to manage rapid growth and development. By incorporating the proposed Project into TDOT's 10-Year Project Plan as a P3, TDOT and the GNRC can measure project delivery timelines and the amount of additional funds that have been leveraged and potentially added to future RTPs because of this delivery and funding approach, while remaining fiscally constrained.

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<sup>22</sup> The Developer would be contractually obligated to maintain travel speeds along the I-24 Southeast corridor at a minimum of 45 mph.

<sup>23</sup> [Transportation Planning Work Program, FY 2026-2027, GNRC.](#)

**Table 2-1: Project Needs and Measures of Effectiveness**

<b>NEED</b>	<b>MEASURES OF EFFECTIVENESS</b>
<b>Increase Capacity</b>	Throughput and modeled volumes (vph)
<b>Improve Travel Time</b>	Modeled Average Travel Time (minutes) through the Corridor
<b>Accelerate Project Development with Limited Funding Options</b>	Utilize Alternative Delivery to accelerate project development



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### 3. LOGICAL TERMINI AND INDEPENDENT UTILITY

FHWA regulations outlines three guiding principles, also referred to as a three-pronged approach, which are used to evaluate alternatives and avoid commitments to transportation improvements before they are fully evaluated. These three guiding principles are:

- Connect Logical Termini and be of sufficient length to address environmental matters on a broad scope;
- Have independent utility; and
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

The proposed Project would meet these three factors for logical termini as described in the following section.

#### 3.1. Logical Termini

The I-24 Southeast corridor serves an identified need within the regional and local comprehensive plans. It extends 26 miles between two major freeway facilities, I-40 and I-840, which serve between 152,000 (near I-840) to 174,000 (near I-440) vehicles per day in the existing conditions (2023). The proposed Project is of sufficient length to provide transportation improvements for the public traveling between the suburban residential communities located southeast of the Nashville region by connecting them to employment centers and services located in the Inner Loop. The proposed Project also has sufficient length to address environmental concerns on a broad scope. The Project study area includes areas that span the entire I-24 Southeast corridor between two other perpendicular regional interstate systems connecting the downtown Nashville region to the suburban areas south of Nashville along I-24 and I-840. The selected terminus encompasses the segment of I-24 where the proposed Choice Lanes are deemed necessary to address existing traffic congestion on I-24 as a result of the bottleneck that regularly develops at the I-24 and I-40 system-to-system interchange. Additionally, the selected termini at I-24 and I-840 are deemed logical due to the high volume of vehicles that travel this segment of roadway. The proposed termini, therefore, represents rational end points for the transportation improvement and rational end points for the review of environmental impacts. Furthermore, the proposed termini align with existing infrastructure and utilize major existing system-to-system interchanges as rational begin and end points of the system, minimizing the need for extensive modifications to adjacent roadways and minimizing potential impacts on surrounding communities.

In summary, the proposed Project possesses independent utility, capable of effectively meeting the purpose and need of the proposed Project by addressing transportation challenges across the Nashville region.

### **3.2. Independent Utility**

The proposed Project would have independent utility, meaning that it would "be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made."<sup>24</sup> Choice Lanes would provide travel time advantages through an additional travel choice option. These additional lanes would have standalone utility, as they can provide immediate congestion relief and improved and maintained travel times for motorists who choose to use them to commute to the downtown Nashville area via the I-24 Southeast corridor. TDOT is concurrently studying the potential feasibility of additional Choice Lanes projects in the Nashville region through two Planning and Environmental Linkage (PEL) studies. One PEL has been initiated on the I-65 corridor, from SR 155 (Thompson Lane) in Davidson County south to SR 99 (Bear Creek Interchange) in Williamson County. The second PEL would address as a Choice Lanes network within the Inner Loop (I-65, I-24, I-40, and I-440) and connectivity with the I-24 Southeast corridor. However, the viability of these potential future expansions and a Choice Lanes network has not yet been determined. The proposed Project would function as a standalone improvement without requiring additional improvements on the network.

### **3.3. Not Restrict Considerations of Other Reasonably Foreseeable Transportation Improvements**

The proposed Project is consistent with the recommendations outlined in TDOT's 2022 CAP<sup>25</sup> and was added to the TIP on April 1, 2025. This proposed Project would not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. Although many development scenarios are possible, the most reasonably foreseeable (fiscally constrained) projects are transportation-based. The GNRC's RTP includes many projects that are intended to address the severe and widespread traffic congestion on the interstate network. These include, but are not limited to, the [I-24/I-65 Widening Project](#), [Nolensville Pike Widening Project](#), [Donelson Pike Relocation Project](#) and [Central Pike Widening Project](#). While each project is complementary to the others, implementing one project does not require the other projects to go forward.

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<sup>24</sup> 23 CFR 771.111(f).

<sup>25</sup> TDOT, [Congestion Action Plans](#), accessed April 2025.

## 4. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

A Public Involvement & Agency Coordination Plan (PIACP) for the proposed Project has been prepared, will continue to be updated as the proposed Project progresses and meets the requirements of TDOT's *Public Involvement Plan: A Statewide Transportation Public Participation Guide*.<sup>26</sup> Included in the PIACP, an agency coordination plan has also been developed that outlines the plan and schedule for regular coordination with the GNRC, local municipalities, and environmental agencies during the development of the proposed Project.

The PIACP documents the public involvement procedures and tactics to be utilized throughout the National Environmental Policy Act (NEPA) process. The PIACP outlines a robust level of public and stakeholder engagement for this proposed Project. This plan includes community outreach strategies and tactics to offer meaningful engagement with communities, as well as quarterly stakeholder meetings to promote a transparent and engaging project development process. The PIACP will be revised accordingly to reflect updates and conditions, concerns and/or needs of the public, agencies and the Project Team.

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<sup>26</sup> [Public Involvement Plan – A statewide Transportation Public Participation Guide](#). Accessed April 2024.



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## 5. CONCLUSION

The proposed Project is located along a vital corridor that is key to maintaining Tennessee’s economic growth and ability to move people, goods and services across the state as well as into neighboring states. However, the lack of transportation choices combined with the growth would continue to create challenges to moving people, goods and services. In order to address these challenges, innovative solutions to travel time advantages and travel demand, while meeting legislative requirements under the TMA, along I-24 must be evaluated to accelerate the implementation of these solutions.



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## APPENDIX A. STIP