

### TDOT Update to the Transportation Modernization Board

February 26, 2024

### Overview



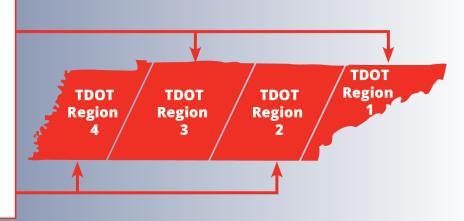
The General Assembly's historic investment of \$3.3B called for a comprehensive approach for prioritizing and programming projects across the state.

### **\$3 Billion Total**

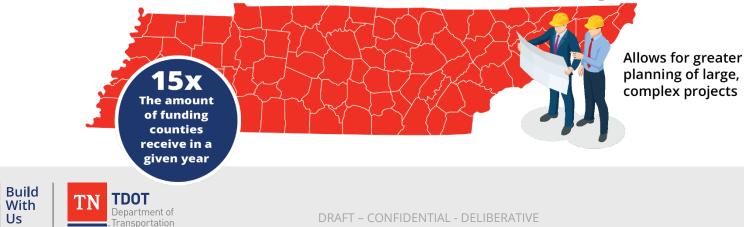
Allocated to State Transportation Projects

#### \$750 Million for EACH Region

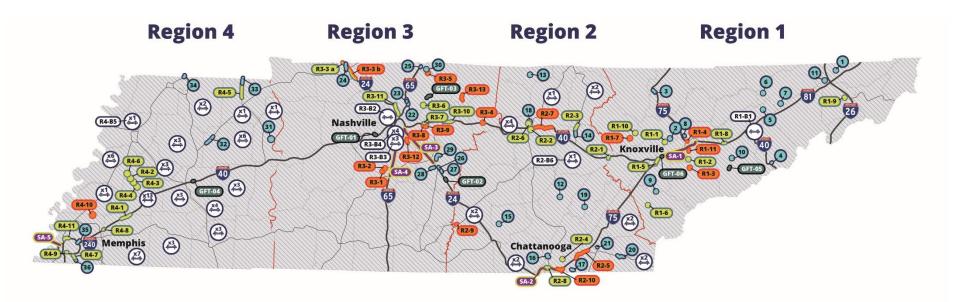
- IMPROVE Act Acceleration
- Rural Interstate Widenings
- Major Urban Congestion
   Projects
- Statewide Partnership Program Projects
- Safety and State of Good Repair Acceleration
- Economic Development
   Projects



#### Additional \$300 Million to the State Aid Program



### 10-Year Project Plan

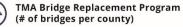


#### Legend



- Funding Projects
- Projects with TMA Funding
- General Fund Transfer (GFT)

Corridor F	riority	Investment
Projects		



Statewide Program Investments

#### **Funding Breakdown**

45%

55%

#### **Highway Program Projects**

- FY 24-26 3-Year-Plan Projects
- Traditional State and Federal Funding Projects
- Projects with TMA Funding
- Corridor Priority Investment
   Projects
- TMA Bridge Replacement Program
- General Fund Transfer (GFT)

#### Statewide Programs and State of Good Repair

- Pavement Preservation
- Bridge Preservation
- ITS/Technology
- Safety
- Advanced Engineering and Environmental Mitigation



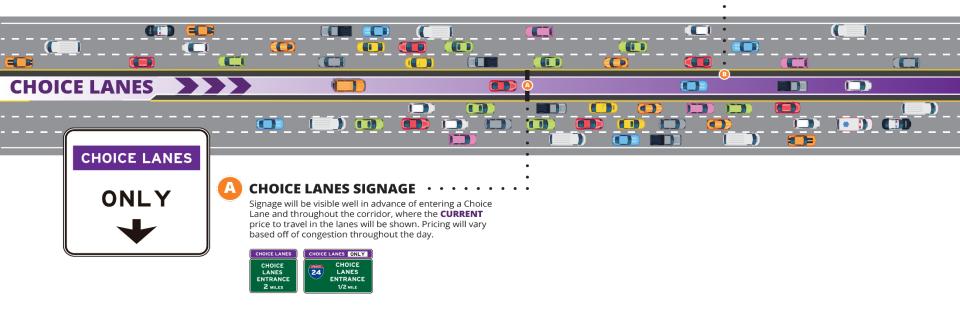
### What is a Choice Lane?



Choice Lanes provide another option for motorists to bypass congestion allowing motorists to maintain consistent travel speeds. The Choice Lanes would be new, optional lanes designed, built, financed, operated and maintained by a private sector partner through a Public-Private Partnership (P3).

#### **BARRIERS**

- Choice Lanes will be separated
- from the existing lanes with either
- a concrete barrier or delineator.



Note: Signage is illustrative only and should not be considered as final roadway signage.



### **Choice Lanes Result in Transit Success**

73%

More customers due to improved travel reliability



# 10%

Increase in ontime performance **68%** 

Reduction in travel times



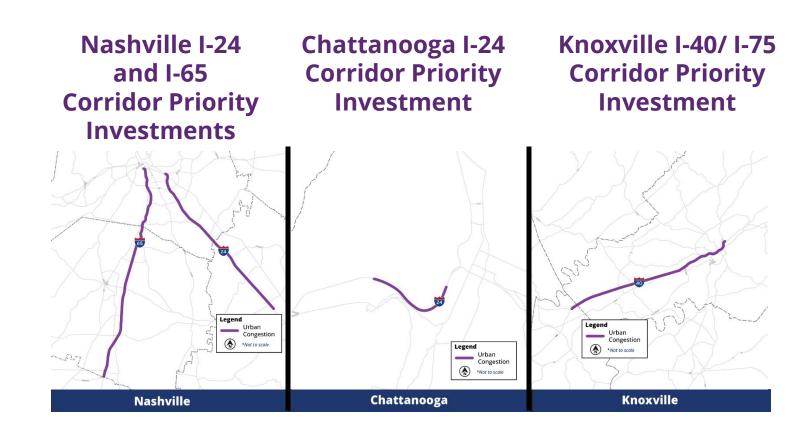






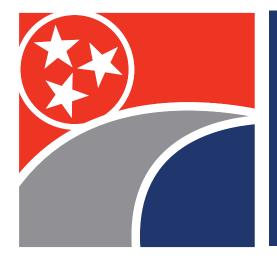


### **Potential Choice Lanes Corridors**







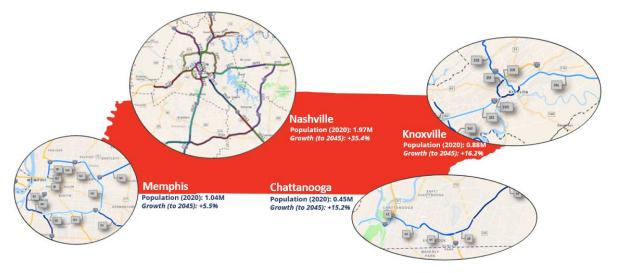


# Initial Project Development

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### Initial Feasibility Analysis

### **Regions Covered in Feasibility Analysis – Total 63 Segments**



This analysis found Nashville to have 21 out of the top 30 corridors, including the top 11. Knoxville, Chattanooga, and Memphis all had 3 corridors in the top 30.

#### **Top 30 Segment Rankings**

Rank	FID	Region	Corridor	Limits
1	2013	Nashville	I-24	I-440 to SR-255
2	2061	Nashville	I-24	SR-255 to SR-266
3	2011	Nashville	I-24	I-40 to I-440
4	2141	Nashville	I-24	I-65 to I-65
5	2081	Nashville	I-65	SR-45 to SR-174
6	2031	Nashville	I-65	I-40 to SR-255
7	2051	Nashville	1-65/1-40	I-24 to I-24
8	2102	Nashville	I-440	US-431 to I-65
9	2021	Nashville	I-65	SR-255 to SR-248
10	2062	Nashville	I-24	SR-266 to I-840
11	2123	Nashville	I-40	I-440 to I-65
12	313	Knoxville	I-40	SR-162 to I-640
13	2101	Nashville	I-440	I-40 to US-431
14	2111	Nashville	I-65	SR-248 to SR-396
15	2091	Nashville	SR 386	I-65 to SR-6
16	44	Chattanooga	I-24	US-41 to I-75
17	2161	Nashville	I-65	SR-174 to SR-76
18	2191	Nashville	I-24	Harper Rd to SR-45
19	2122	Nashville	I-40	US-70 to I-440
20	2063	Nashville	I-24	I-840 to US-231
21	42	Chattanooga	I-24	US-72 to US-27
22	312	Knoxville	I-40	I-75 to SR-162
23	2041	Nashville	I-65	I-24 to SR-45
24	2231	Nashville	I-24	US-231 to SR 64
25	3131	Knoxville	I-40	I-640 to SR-139
26	43	Chattanooga	I-24	US-27 to US-41
27	2171	Nashville	I-40	SR-109 to US-70
28	121	Memphis	I-240	I-55 to US-78
29	131	Memphis	I-240	SR-385 to US-79
30	171	Memphis	SR 385	I-240 to Riverdale Rd



### Market Related Considerations

#### Level of congestion and bottlenecks

- o Duration and intensity of congestion and the ability to generate revenue.
- Nashville region and particularly I-24 has more bottlenecks.

### • Future growth

• Nashville region has higher population and employment growth (based on UT Boyd Center forecasts).

#### Market interest

- Network considerations for Nashville region.
- More design choice allows Developers to bring additional value (tie into I-40, I-440, and high volume radial freeways).
- Clear indication of lower public sector contribution requirements in region 3 (I-24 in particular).



# Congestion (I-24 Nashville vs. Other Corridors)

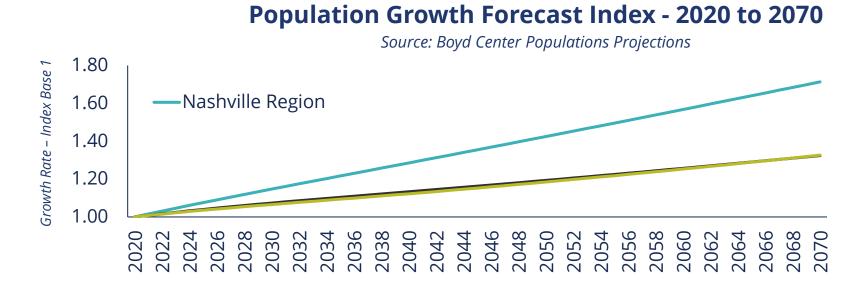
The below table uses INRIX 2022 data to compare congestion between I-24 in Nashville and the other corridors (I-65 Nashville, I-40 Knoxville, I-24 Chattanooga) by looking at the intensity, duration, and extent of congestion across these corridors:

	Intensity	Duration	Extent
	Min Speed (mph)	Hours with Speed Below 30 mph	Contiguous Miles with Speed Below 30 mph
I-24 WB (Nashville)	15	7	7
I-24 EB (Nashville)	11	7	8
I-65 NB (Nashville)	12	4	3
I-65 SB (Nashville)	29	1	1
I-40 WB (Knoxville)	18	3	2
I-40 EB (Knoxville)	17	2	4
I-24 WB (Chattanooga)	21	3	1
I-24 EB (Chattanooga)	15	4	6

- Intensity Minimum speed is the minimum hourly congested speed observed on any segment.
- **Duration** The measure of duration is the maximum number of contiguous hours any segment stays below 30 mph.
- Extent The measure of extent is the number of miles where segments stay below 30 mph



### **Future Population Growth Comparison**



 The Boyd Center forecasts population in the Nashville region to grow at a rate of 2x the population growth in Knoxville and Chattanooga and add over 1 million more people over the next 35 years



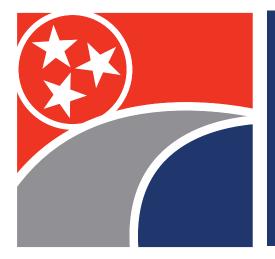
### I-24 Southeast Corridor





Note: Proposed project limits are under evaluation and are subject to change.





## Next Steps

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2024	2025
<ul> <li>Detailed-level project screening on I-24 including advancing:         <ul> <li>environmental work</li> <li>design work</li> <li>level II traffic and revenue study</li> </ul> </li> <li>Continue with high-level screening on I-40 in Knoxville and I-24 in Chattanooga</li> </ul>	<ul> <li>Initiate Procurement on I-24:         <ul> <li>shortlist RFQ respondents</li> <li>finalize environmental work</li> <li>launch RFP</li> </ul> </li> <li>Advance detailed-level screening on second project (e.g., I-40 Knoxville).</li> </ul>



