

Item 7

West Knoxville Corridor (I-40/75) Study Presentation

**PRESENTER: DEXTER JUSTIS, DIRECTOR, TDOT REGION 1 PROJECT MANAGEMENT AND
BRAD THOMPSON, VICE PRESIDENT, STV, INC.**

NO ACTION REQUIRED



Knoxville Interstate 40 (I-40) Corridor Priority Investment Project

Knoxville Regional TPO Update

February 11, 2025



Study: Challenges/Keys to Success

- ▶ Develop concepts for congestion relief and safety improvements
- ▶ Analyze influence of truck volumes and weigh station traffic
- ▶ Enhance partnerships with stakeholders
 - Knoxville TPO
 - Cities and Counties
 - Railroads (NS)
 - Utilities (KUB, FUD, LCUB, WKUD, AT&T, TVA, etc.)
- ▶ Assess potential environmental impacts for concepts
- ▶ Understand public perception & priorities



I-40 at Campbell Station Road



I-40 at Cedar Bluff Road



I-40 at Walker Springs Road



I-40 at Papermill Road



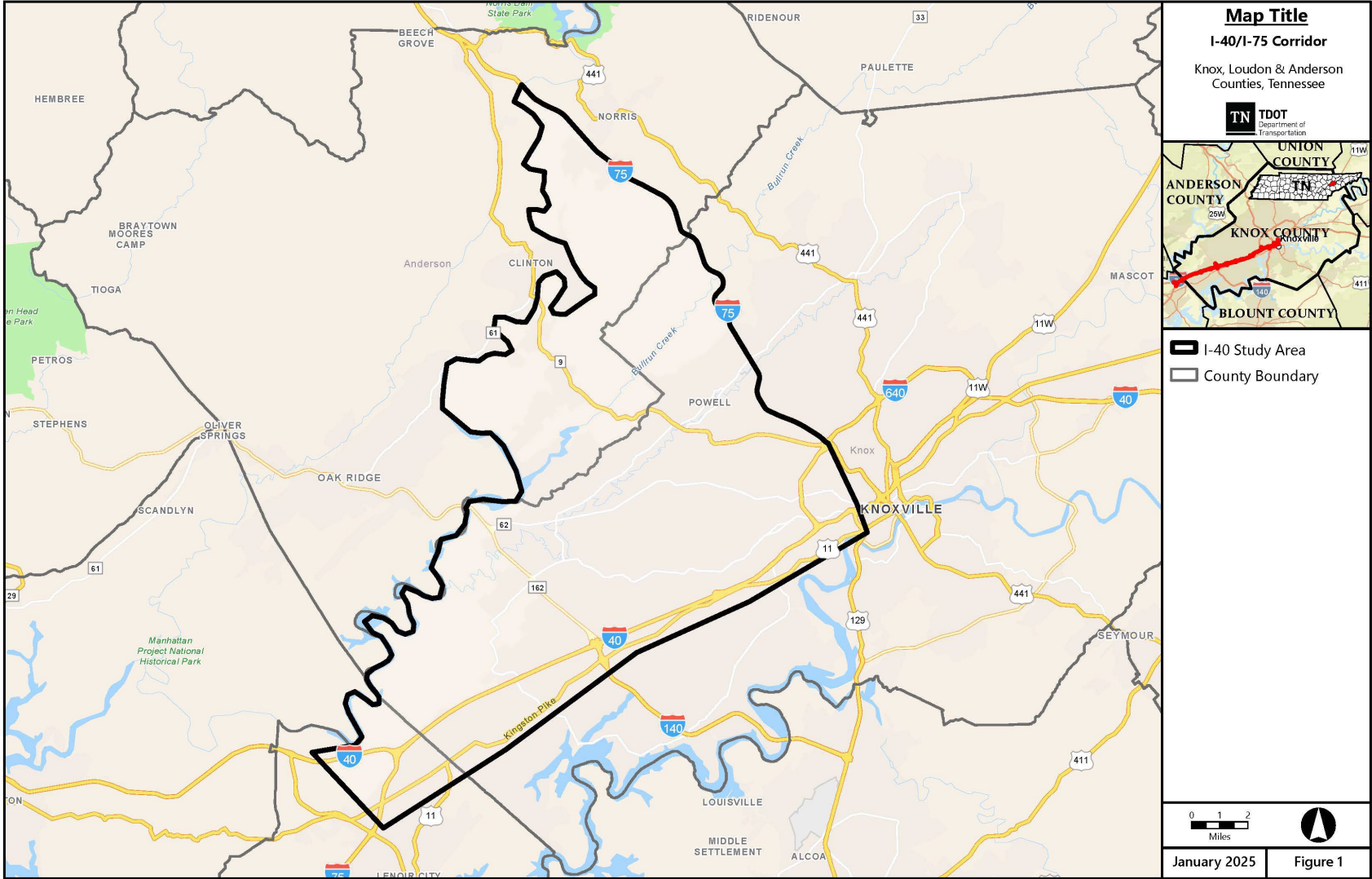
Knoxville I-40 Priority Investment (PD&E) Project Timeline through January

- ▶ April 2024
 - 3-year plan released identifying the project
 - 4/5 media event held at I-40 west bound weigh station announcing the project
- ▶ June 2024
 - 6/3 Advertise for consultant
 - 6/17 Pre-Proposal Meeting with potential firms
- ▶ July 2024
 - 7/9 Proposals received
 - 7/15 Team Interviews
 - 7/31 Consultant Selection Committee
- ▶ August 2024
 - 8/12 Selected Consultant Notification
- ▶ September 2024
 - 9/13 Kickoff/Alignment Meeting
 - Week of 9/23 STV team held internal field visit to develop corridor understanding
- ▶ October 2024
 - 10/21 Draft Scoping Document
- ▶ November 2024
 - 11/7 Final Scoping Document and Start of Fee negotiations
- ▶ January 2025
 - 1/7 Agreement on Fee for early work package

Project Team

- ▶ HNTB – Project Management Support for TDOT
- ▶ STV – Project Lead Consultant and Design
- ▶ Stantec – Traffic and Environmental
- ▶ CDM Smith – Traffic and Design for I-75 Relocated
- ▶ Cannon & Cannon – Utility Coordination
- ▶ Robert G. Campbell & Associates – Survey
- ▶ Parsons – Cost Estimating

Initial Study Area



Knoxville I-40

Priority Investment Project

Phase 1 Objectives

- ▶ Review of existing and previous plans for the corridor
- ▶ Survey inventory of assets and conditions
- ▶ Identification of right-of-way and utilities along the corridor
- ▶ Assessment of existing and future corridor traffic and regional traffic patterns
- ▶ Evaluate safety issues along the corridor
- ▶ Identification and evaluation of needs and solutions
- ▶ Development of design options
- ▶ Environmental screening of design options (PEL)
- ▶ Constructability assessment
- ▶ Estimated project costs for each design recommendation
- ▶ Recommendations on funding, financing, and construction delivery options
- ▶ Public involvement and stakeholder coordination

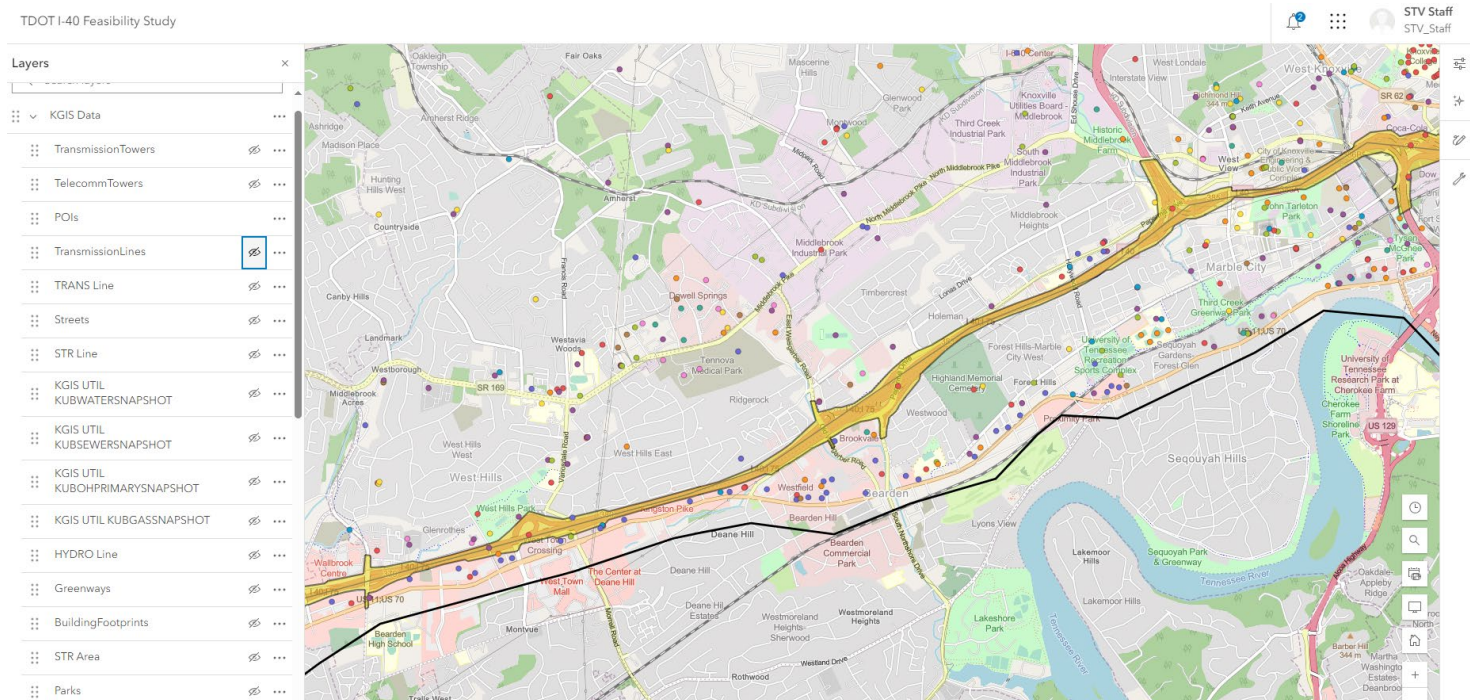
Environmental Data Collection

► GIS Mapping

- Central data and mapping
- Includes data from multiple sources and agencies:
 - Socioeconomic
 - Natural environment
 - Public lands
 - Transportation Infrastructure
 - Utilities (in progress)
 - KGIS

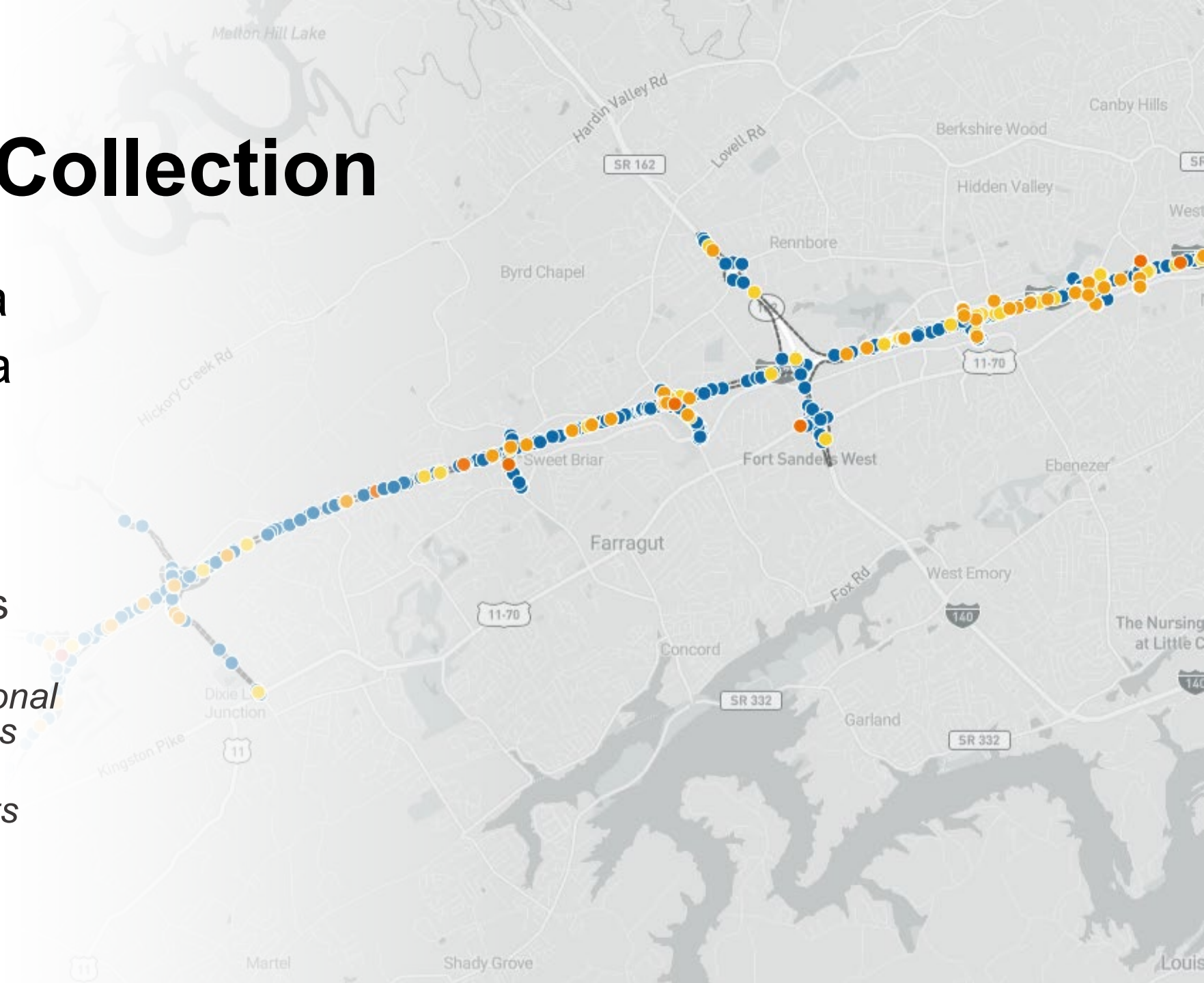
► Desktop survey of environmental features

► Purpose and Need Statement



Traffic Data Collection

- ▶ Safety/Crash Data
- ▶ Freight/Truck Data
- ▶ Origin and Destination
- ▶ Traffic Counts
 - 181 total locations
 - 8-day Counts
 - 48-hour Bidirectional and Ramp Counts
 - 48-hour Turning Movement Counts



Bottleneck Areas of Concern

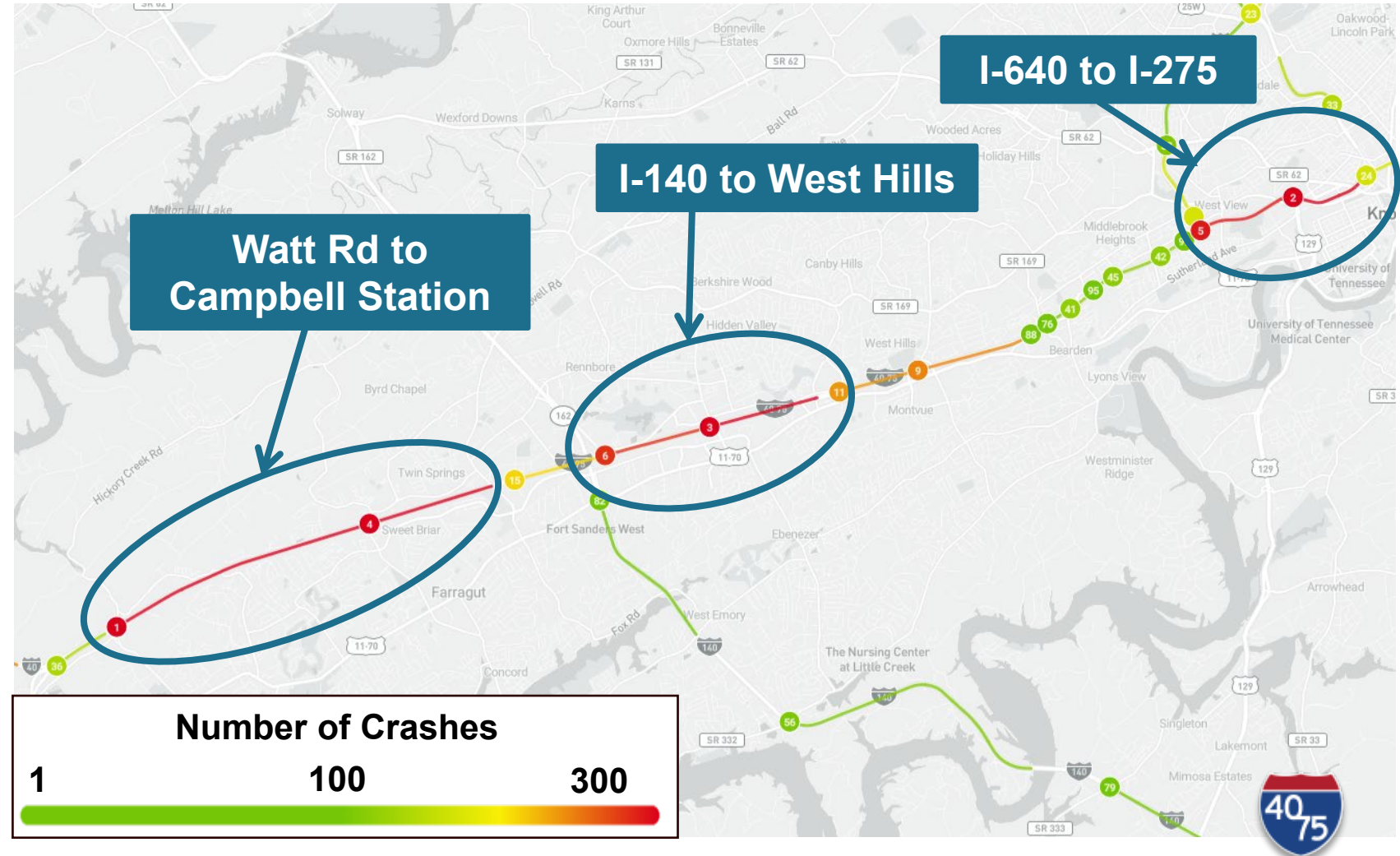
- ▶ Top 20 Rankings Region 1
 - Top 11 within project
 - 14 total within project
 - Top 3 traveling WB
- ▶ Top 20 Rankings Statewide
 - 3 within project



Safety Areas of Concern

► Crash Hotspots

- Region 1
 - 9 of Top 20 within project limits
 - Top 6 within project limits
- Statewide
 - Ranked 5th: Watt Rd (Exit 369) to Campbell Station Rd (Exit 374)
- Incidents in corridor contribute to 41% of congestion



Solutions for Consideration

- ▶ Capacity Additions to Existing Corridor
- ▶ Interchange Optimization/Redesign
- ▶ ITS
- ▶ Truck Only Lanes
- ▶ Weigh Station Solutions
- ▶ I-75 Alternative



Initial Design Concepts Include:

- ▶ I-40/I-75 Mainline
 - General purpose lane addition
 - C/D road
 - Choice Lanes
- ▶ I-75 Alternative Alignment
 - Separation of I-40 and I-75
- ▶ Weigh Stations
 - Potential relocation

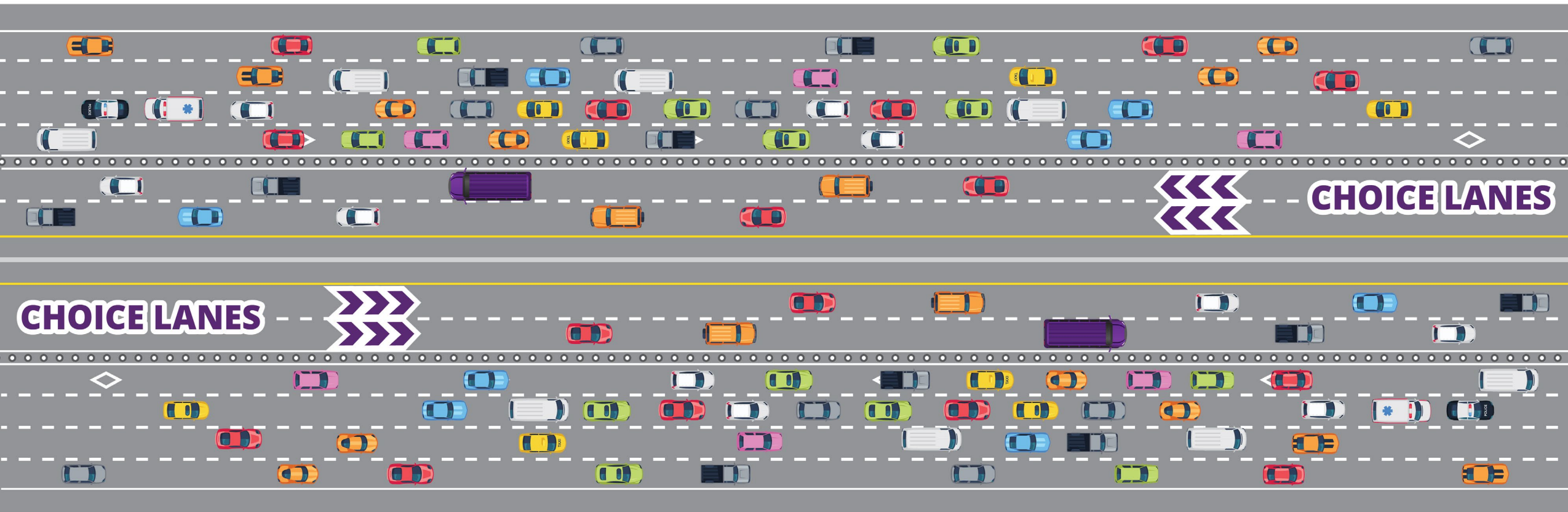


What Are Choice Lanes?

New, additional lanes

Priced managed lanes that provide users with more reliable trip times in exchange for a user fee.

Designed, built, financed, operated and maintained by a private sector partner



Choice Lanes in Other States

Future Choice Lanes in Georgia



Choice Lanes in Florida



Choice Lanes in Virginia



2025 Key Milestones for Phase I: Planning and Environmental Linkages (PEL) Study

2024		Q1 2025			Q2 2025			Q3 2025			Q4 2025		
Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
› Data Collection	› Data Collection › Visioning Workshop	› Public Involvement Plan Development	› Traffic Data Collection Report › 10-Year Plan Input	› PEL Baseline Conditions › Online Survey	› Initial Mainline and I-75 Alternatives Development	› PEL Alternatives Screening Methodology	› Weigh Station Alternatives	› Interchange Alternatives	› Submit Survey for TDOT Review	› Finalize Alternatives and Develop Cost Estimates	› Alternatives Development Tech Memo › Public Meeting 2	› Project Prioritization and Phasing Plan	› Draft PEL Report for TDOT Review
			› Purpose and Need Statement			› Public Meeting 1		› Evaluate Design Alternatives					