



# TDOT 25-YEAR LONG-RANGE TRANSPORTATION POLICY PLAN

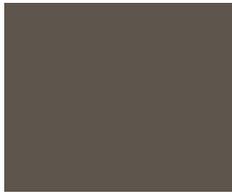


**TN** TDOT  
Department of  
Transportation





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*The 25-Year Long-Range Transportation Policy Plan was developed prior to the passage of Fixing America's Surface Transportation Act (FAST Act) signed into law December 4, 2015.*

**List of Technical Documents:**

25-Year Policy Plan – Eight Policy Papers  
10-Year Strategic Investment Plan  
Plan Development Document  
Public & Stakeholder Outreach and Engagement Document  
Potential Environmental Mitigation Strategies Document



The Tennessee Department of Transportation (TDOT) is responsible for developing, maintaining, and operating our state's system of transportation facilities and services. This responsibility requires more than just resources—it requires a vision and strategy. The TDOT 25-Year Long-Range Transportation Policy Plan responds to this challenge by offering the necessary guidance to meet the changing needs of our state.

The 25-Year Policy Plan provides a foundation for prioritizing transportation investments across the state and helps accomplish TDOT's vision *to serve the public by providing the best multimodal transportation system in the nation*. This emphasis on planning for multiple travel modes is a direct response to changes in public opinion, demographics, industry needs, funding, and travel patterns. It is also a recognition that investing in multimodal transportation is an investment in our future.

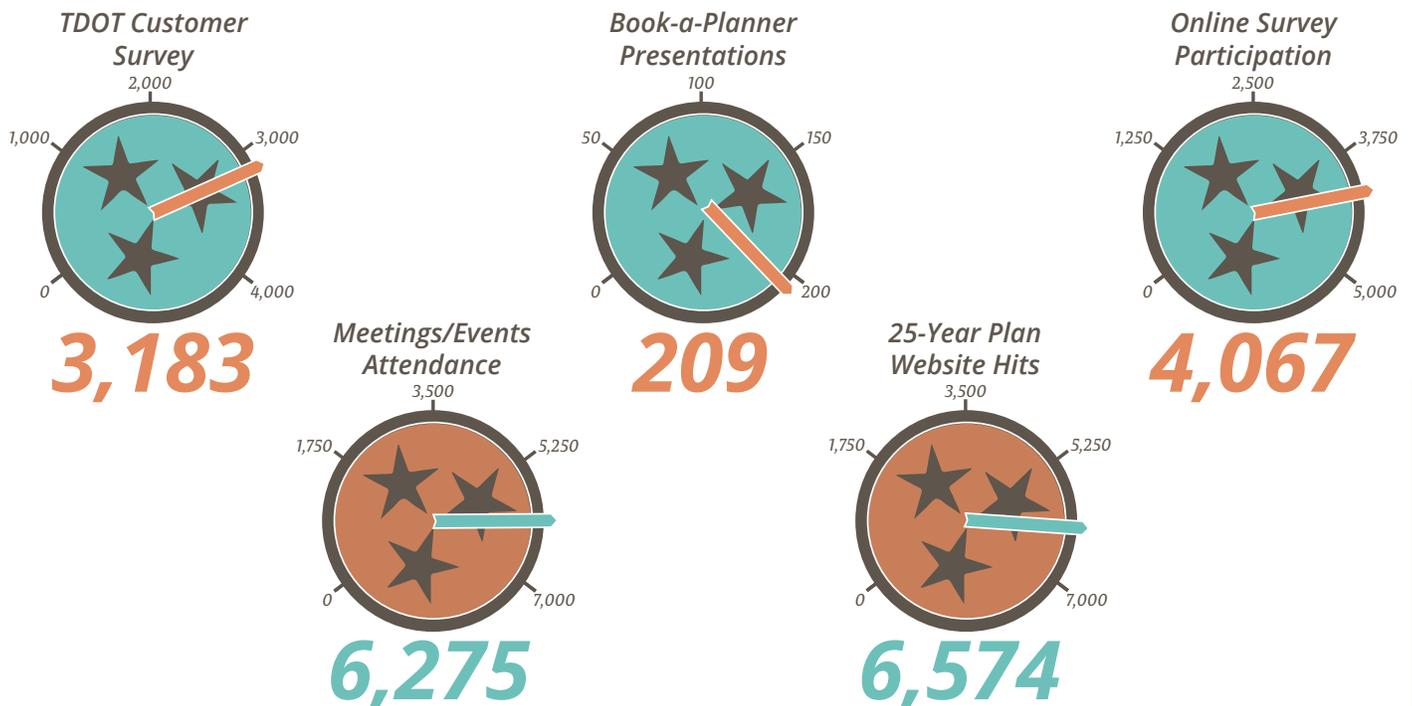
A comprehensive mindset has guided the development of the 25-Year Policy Plan. While many competing interests should be considered, three primary objectives remain:

**Promote Efficiency      Increase Effectiveness**  
**Emphasize Economic Competitiveness**

The 25-Year Policy Plan accommodates our continued growth in a way that reflects our state's values. A balanced approach that connects people to communities, people to businesses, businesses to each other, and visitors to our prized assets positions us for continued prosperity.

## Many Voices

The plan has been thoughtfully crafted over a two-year period with input from participants throughout the state. The voices that shaped the plan include a variety of groups representing citizens, advocates, industries, commerce, and transportation experts. The unprecedented, multi-level outreach used a variety of techniques to engage residents and community leaders across the state. These techniques included online surveys, meetings and special events, guest presentations (Book-a-Planner), and web-based interaction.



*More than 20,000 community inputs were gathered during the outreach*

*Transportation connects us. It is our most visible and widely recognized infrastructure system. Its presence and effectiveness influences everything from our economic competitiveness to our quality of life. These characteristics suggest that our transportation system is one of our most important assets.*

This document is a summary of our 25-Year Long-Range Transportation Policy Plan, which is built on a foundation laid through an extensive public engagement process, the Department's vision statement and Guiding Principles, and eight policy papers and their corresponding recommendations. It highlights information that informed the process and recaps key deliverables organized around the following sections:

**Section 1: Changing Landscapes** - explores the demographic shifts and funding trends that affect our state.

**Section 2: Our Course of Action** - communicates recommendations through Guiding Principles, Policy Papers, and Emphasis Areas.

**Section 3: Moving Forward** - describes a fiscal outlook for Tennessee and establishes a direction for investing in the State's transportation system to promote Efficiency, Effectiveness, and Economic Competitiveness.





# changing landscapes

The transportation landscape across the country and in Tennessee is changing as demographics shift and technology improves. Much like many states across the country, Tennessee is working to maintain existing infrastructure while trying to address priorities such as traffic congestion, safety, access, mobility, and economic development. This section focuses on the external forces and trends that influence the changing needs of our state.

In the next 25 years, Tennessee is projected to grow by 2 million more people and add nearly 2 million more jobs.



## People

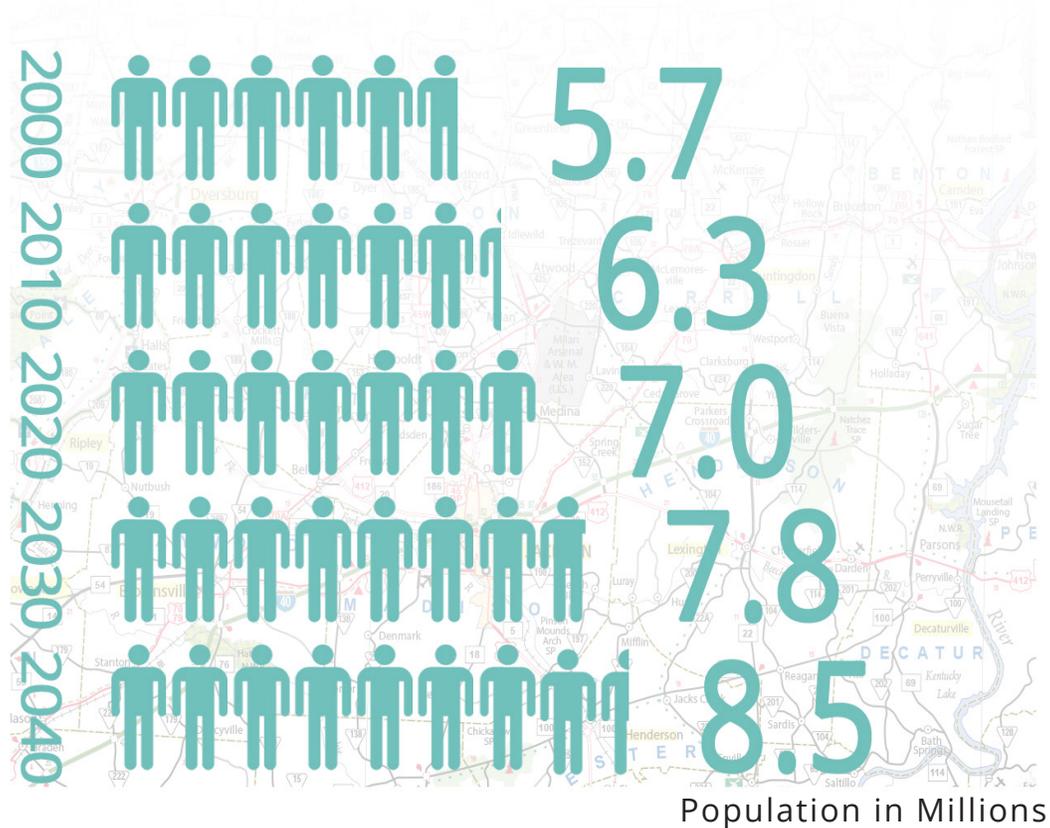
Looking in detail at existing demographics and anticipating future trends allows TDOT to better understand those who will use its facilities, programs, services, and systems. This understanding also helps TDOT to adapt to the state’s changing needs and implement policies and programs to support its vision to serve the public by providing the best multimodal transportation system in the nation.

## Population

By 2040:

- Additional 2 million people
- 70 percent of growth will occur in urban counties
- 36 percent of total population will be in rural areas

## Historic and Projected Population Changes in Tennessee



When making transportation investments, TDOT will need to consider a variety of factors including:

- increased demands of a growing population
- needs and desires of existing and future residents
- new economic development opportunities
- freight movements
- system maintenance
- increased transportation choices



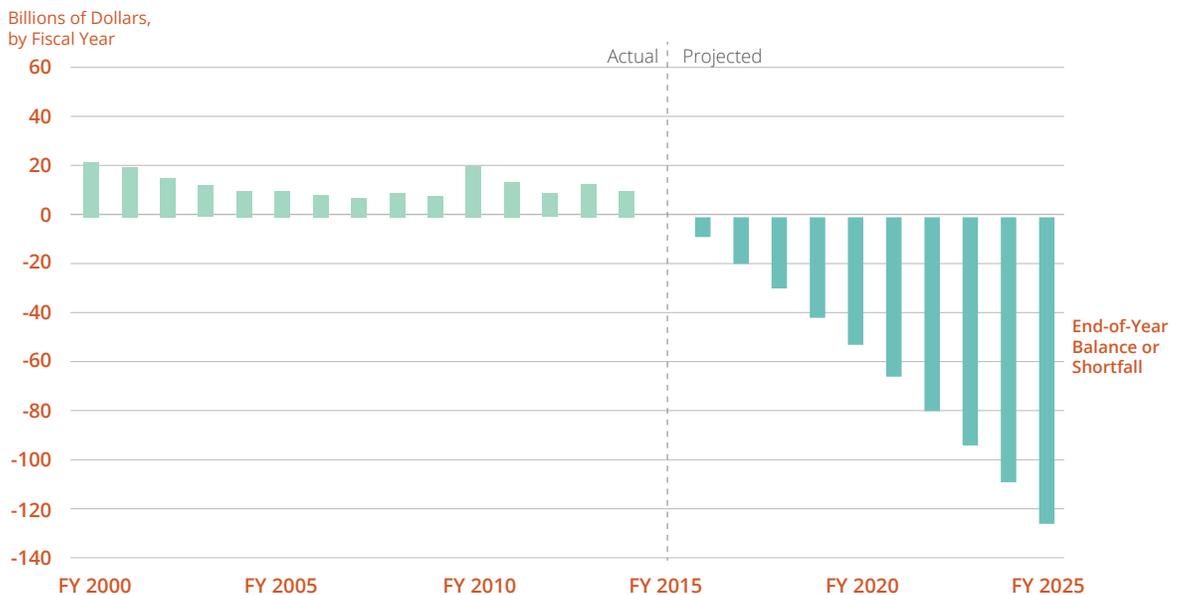
### Aging Population

Over the next 25 years, the state will see a larger portion of its population retiring from the workforce. The increased needs of seniors (those age 65 and over) will need to be taken into consideration as we design our transportation system. While our seniors are less likely to travel during peak commute hours, some may require urban and rural transit service or walking and biking facilities to maintain independence. Within the state, urban centers will continue to have the highest number of seniors followed by suburban counties.



## Dollars and Sense

Tennessee historically has used a “pay as you go” strategy that allows the State to refrain from incurring transportation debt, but also makes the state reliant on highway user fees such as motor fuel taxes and motor vehicle fees. User fees account for the largest share of TDOT’s budget. The state experienced a steady decline in motor fuel tax revenue from 2007 to 2012 and is expected to continue this trend as fuel efficiency increases and travel behaviors continue to change. Similarly, there is considerable concern about the solvency of the Federal Highway Trust Fund (HTF) due to declining proceeds from motor fuel taxes, which provide around 90 percent of the HTF’s total revenues. With the current funding outlook, alternative strategies may need to be explored as a means of meeting Tennessee’s growing transportation demands.



By 2015, the Congressional Budget Office estimates the highway account of the HTF will have insufficient revenues to meet its obligations.

## Community Priorities

As our state continues to grow, we will need to consider a more complete approach when addressing our transportation needs. The financial outlook requires TDOT to do all that it can to accommodate existing and future users on the transportation system. In addition, the expansion of the system will need to be done in a way that maximizes our return on investment. Generally, this approach requires the alignment of transportation investments with community priorities by providing increased efficiency, opportunities for enhanced economic vitality, and increased mobility choices. The greatest advantage will be achieved when local land use policies, economic development opportunities, and transportation initiatives are closely aligned and supported by communities.



A coordinated strategy can be achieved through improved partnerships with industry and local governments and ongoing opportunities for public engagement to ensure that investments are maximized. Some of the methods being considered include:

- Increased efforts in working with city, county, and regional organizations relative to land use, transportation, and economic vitality.
- Formalizing a comprehensive Access Management Program for Tennessee which includes technical resources for local governments on access management.
- Developing a Multimodal Access policy and program that emphasizes the accommodation of all transportation system users.
- Continuing coordination of public and private industry in the efficient movement of freight across the state and in our local communities.

The expected result of these approaches is enhanced integration between community initiatives, industry needs, and the agencies responsible for planning, operating, and maintaining transportation systems within Tennessee. It will also begin to align our transportation systems with the changing needs of our residents and businesses through improved access, enhanced operations and safety, and increased mobility choices.



# our course of action



Given the unique and diverse geography of Tennessee and the State's growing and expanding transportation demands, it was important to clearly communicate the intent of the 25-Year Policy Plan among participants and policymakers. The 25-Year Policy Plan builds upon the Department's 2013 established vision: ***to serve the public by providing the best multimodal transportation system in the nation.*** The plan offers guidance for those who will be making decisions and creating policies in the decades to come. To guide the Department in aligning with this vision, its seven Guiding Principles were reevaluated to ensure the promotion of priorities such as fiscal responsibility, efficiency, sustainability, safety, economic vitality, preservation of assets, and protection of resources. These Guiding Principles serve as the foundation upon which the 25-Year Long-Range Transportation Policy Plan and its recommended policies are based.

**TDOT's Vision: to serve the public by providing the best multimodal transportation system in the nation.**

## Guiding Principles

The Guiding Principles represent seven interrelated value statements that express the major priorities of TDOT and provide tangible actions as the Department works towards their vision. The 25-Year Long-Range Transportation Policy Plan is formed using a framework of Policy Papers to review and discuss key policy topics relevant to TDOT's vision and Guiding Principles. Through this process, each Guiding Principle is supported by a number of initiatives and policies spanning important policy paper topics.

**Preserve and Manage the Existing System** | Protect existing assets and maintain efficiency of the system through cost-effective management and new technologies.

**Support the State's Economy** | Make transportation investments that support economic growth, competitiveness and tourism; build partnerships with communities and regions to link employment, commercial/retail areas and other key activity centers.

**Maximize Safety and Security** | Reduce injuries and fatalities in all modes of transportation; minimize construction-related safety incidents; improve disaster preparedness and incident response.

**Provide for the Efficient Movement of People and Freight** | Optimize the movement of people and goods by providing greater access to transportation services for all people and by building better connections among different modes of transportation.

**Build Partnerships for Sustainable and Livable Communities** | Provide early and ongoing opportunities for broad public input on plans and programs; work closely with local public and private planning efforts; coordinate land use and transportation planning.

**Protect Natural, Cultural, and Environmental Resources** | Maintain the integrity of communities and historical sites; minimize impacts on natural resources and conserve energy.

**Emphasize Financial Responsibility** | Provide accountability; maximize Tennessee's share of federal transportation funding; develop alternative funding strategies; select projects based on identified regional needs; allow flexibility in local management of projects where feasible.

## Policy Papers

TDOT's 25-Year Long-Range Transportation Policy Plan provides the foundation for prioritizing transportation investments across the State. As previously stated, the 25-Year Policy Plan is organized around eight policy papers that cover a range of topics. Each topic area provides insight regarding how we are performing and opportunities for improvement. Engagement with various divisions and the Executive Leadership of TDOT as well as the general public occurred throughout the development of the eight policy papers. Furthermore, each paper offers a set of policy recommendations influenced by peer state comparisons, TDOT's strategic and operational goals, the Department's Guiding Principles, and more than 20,000 community inputs gathered through public and stakeholder outreach.



**Demographics and Employment Changes and Trends**



**Accessibility: Land Use Planning, Access Management, Multimodal Access, and Health and Environment**



**Mobility: Public Transit, Transportation Demand Management, and Non-Motorized Modes**



**Safety, Security, and Transportation Resilience**



**Coordination, Cooperation, and Consultation**



**Freight Logistics and Planning**



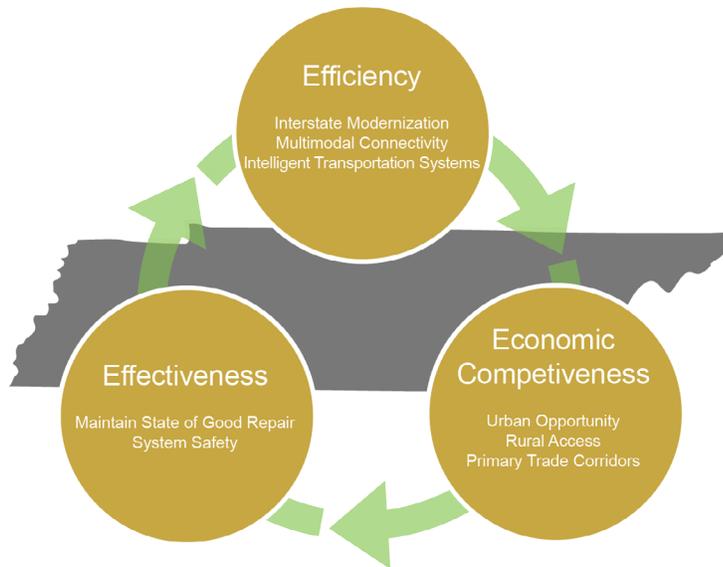
**Travel Trends and System Performance**



**Financial Revenues and Fiscal Outlook**

## Emphasis Areas

The culmination of the engagement process and the final policy directives outlined in the 25-Year Policy Plan yielded three distinct strategic emphasis areas: Efficiency, Effectiveness, and Economic Competitiveness. These emphasis areas are envisioned to guide the overall programmatic approach to transportation investments by TDOT.



**Efficiency** | Efficiency relates to ways in which the Department can impact the reliability, availability, and accessibility of the transportation system through the delivery of services as well as the management of the system as a whole. How efficiently TDOT provides and manages the transportation system to its users directly impacts how efficiently people and goods are able to move throughout the state as well as within urban cities and rural communities. As such, the program areas of Efficiency consist of investments in interstate modernization, multimodal connectivity, and Intelligent Transportation Systems.

**Effectiveness** | Effectiveness relates to how successful TDOT's investments are. It pertains mainly to spending the limited funding available on transportation system improvements that provide the largest return on investment. The two program areas associated with Effectiveness are system safety as well as maintaining state of good repair.

**Economic Competitiveness** | As it relates to the economics of a state, competitiveness is indicative of how productively a state can sell and supply goods and services relative to other states. TDOT plays a significant role in determining the economic competitiveness of Tennessee as transportation infrastructure and services are directly linked to how efficiently people and freight can move throughout the state. As such, the program areas associated with Economic Competitiveness are urban opportunity, rural access, and primary trade corridors.

## Policy Recommendations

While the seven Guiding Principles provide the foundation for the 25-Year Long-Range Transportation Policy Plan, the three emphasis areas of Efficiency, Effectiveness, and Economic Competitiveness emerged as easily-identifiable strategic objectives for the 25-Year Policy Plan's recommended initiatives and policy directives. These "3 E's" link the recommended initiatives from each policy paper to the Guiding Principles by providing programmatic areas for investment that align with TDOT's core values.

Policy Paper recommendations include a variety of initiatives and directives to guide TDOT's strategic direction - some are continuing actions while others are entirely new efforts for TDOT. The many continuing activities, put forth as recommendations from the policy papers, are summarized below and provide a holistic view of the Department's ongoing commitments to furthering their stated vision. As such, TDOT will continue to:

- Increase efforts in working with city, county, and regional organizations relative to land use and transportation in order to proactively plan for and accommodate future transportation demands. This will include creating technical resources, processes, and training to build capabilities internally as well as with Tennessee communities.
- Move forward in the Department's interactions with Rural Planning Organizations (RPO) to create a process that fosters a more needs-based approach including land use and transportation.



- Promote and enhance Tennessee’s Environmental Streamlining Agreement (TESA).
- Advance the Department’s current practices in the area of sustainability as a means of maximizing return on investment.
- Make available the latest planning data and tools and provide these resources to the Department’s many planning partners (e.g., Metropolitan Planning Organizations (MPO), RPOs, Tennessee Department of Economic & Community Development (ECD), transit agencies, etc.).
- Administer the Department’s customer survey periodically and use findings to track performance and re-evaluate customer priorities based on their level of satisfaction.
- Increase center-to-center communication between Traffic Management Centers (TMCs) and incident management partners to facilitate greater day-to-day coordination and cooperation.
- Coordinate with surrounding states, specifically in the implementation of Traffic System Management & Operations (TSM&O) practices for multi-state MPO areas.
- Work through Tennessee’s Freight Advisory Committees and local communities to increase knowledge of and efficiencies in freight movements in Tennessee.
- Increase RPO responsibilities to encompass more multimodal considerations (e.g., transit planning, non-motorized, etc.).

- Enhance the sharing of safety-related data among and between all agencies including local and regional governments.
- Enhance partnerships further with local and regional agencies to better evaluate behavioral and engineering safety needs.
- Use peer exchange forums to advance best practices in behavioral and engineering roadway safety in Tennessee.
- Implement the use of the American Association of State Highway and Transportation Officials (AASHTO) Highway Safety Manual to increase the effectiveness of safety analysis and evaluation of Tennessee's highways.
- Explore and implement emerging technologies (e.g., Intelligent Transportation Systems (ITS), TSM&O, Active Transportation and Demand Management (ATDM), etc.) that enhance safety and security for all modes of transportation.
- Seek opportunities to educate elected officials regarding legislation impacting roadway safety.
- Evaluate training and standard procedures on environmental compliance as the Department delivers and maintains the transportation system.
- Employ process improvement practices for continuous improvement of TDOT's oversight and involvement in project environmental review.
- Promote asset management as a means of maintaining and preserving Tennessee's transportation infrastructure in a state of good repair (i.e. to desired target conditions).
- Increase capabilities and technical resources in asset management to advance greater understanding and investments in Tennessee's transportation infrastructure.



## Priority Initiatives

A variety of new initiatives are proposed within the eight policy papers that will promote TDOT's vision, Guiding Principles, and the three program areas of emphasis. The following represent new policy initiatives that the Department is committed to undertaking by 2018.

- Work towards establishing policies and procedures for traffic impact analysis requirements for reviewing development proposals seeking state highway access approval.
- Move forward with the development of a Comprehensive Statewide Access Management Program for the state's highway system.
- Develop a Multimodal Access Policy and Program, which will include internal guidelines and training. To expand on the Multimodal Access Policy, TDOT will work to provide technical resources for local municipalities.
- Partner with other State agencies to explore opportunities for leveraging resources and programs that support economic development, aging, health, the disabled, and smart growth practices.
- Support a program for multimodal freight investments (e.g., first mile/last mile connections-air, water, rail; bottlenecks; safety; ITS; truck parking; etc.) in the 3-Year Work Program.
- Develop a new Statewide Strategic Transit Plan for Tennessee.
- Support a program for congestion reduction investments (e.g., chokepoints, TSM&O, ITS, signal timing, ATDM, etc.) in the 3-Year Work Program.
- Adopt performance measures specific to monitoring congestion (e.g., speed, delay, throughput, travel time reliability, etc.).

# moving forward



The best way for Tennessee to express how we are moving forward is through our investments. A major outcome of the 25-Year Long-Range Transportation Policy Plan is a 10-Year Strategic Investment Plan. The investment plan responds to what we heard and what we learned. It is a strategic direction for investing in Tennessee’s multimodal transportation system to advance the priorities established during the planning process.



## Moving Forward

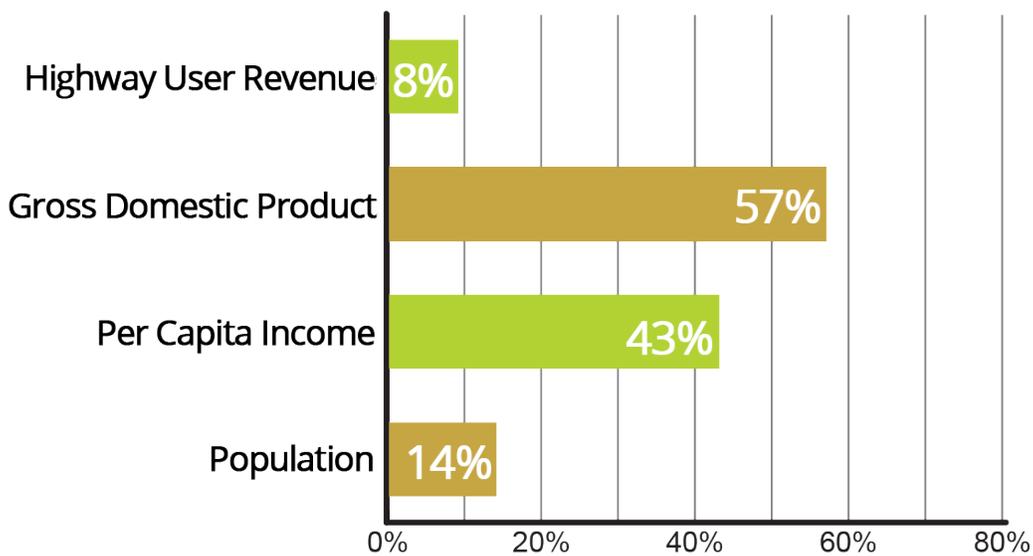
## Funding Outlook

Over the past 100 years, TDOT has continued to serve the State by providing a safe, reliable, and convenient transportation system. Managing, maintaining, and providing this quality transportation system is a challenge today and will continue to be one in the future. TDOT has traditionally funded many investments in our transportation system through a variety of sources such as taxes on fuel and vehicle registration fees. The ability to keep up with growing demands on our transportation system is directly tied to these funding sources, which are impacted by issues such as:

- Increased fuel efficiency of vehicles,
- Emergence of alternative fuels, and
- Reduced growth in vehicular travel.

Tennessee has averaged \$1.8 billion in annual funding for transportation over the past 10 years. While TDOT's budget has remained fairly constant over this timeframe, infrastructure demands and growing costs of providing a quality transportation system continue to grow. As seen below, Tennessee's Gross Domestic Product (GDP), per capita income, and population have been increasing at substantial rates. When compared to these key economic variables, the growth rate of revenues from highway user fees (such as gas taxes) falls short.

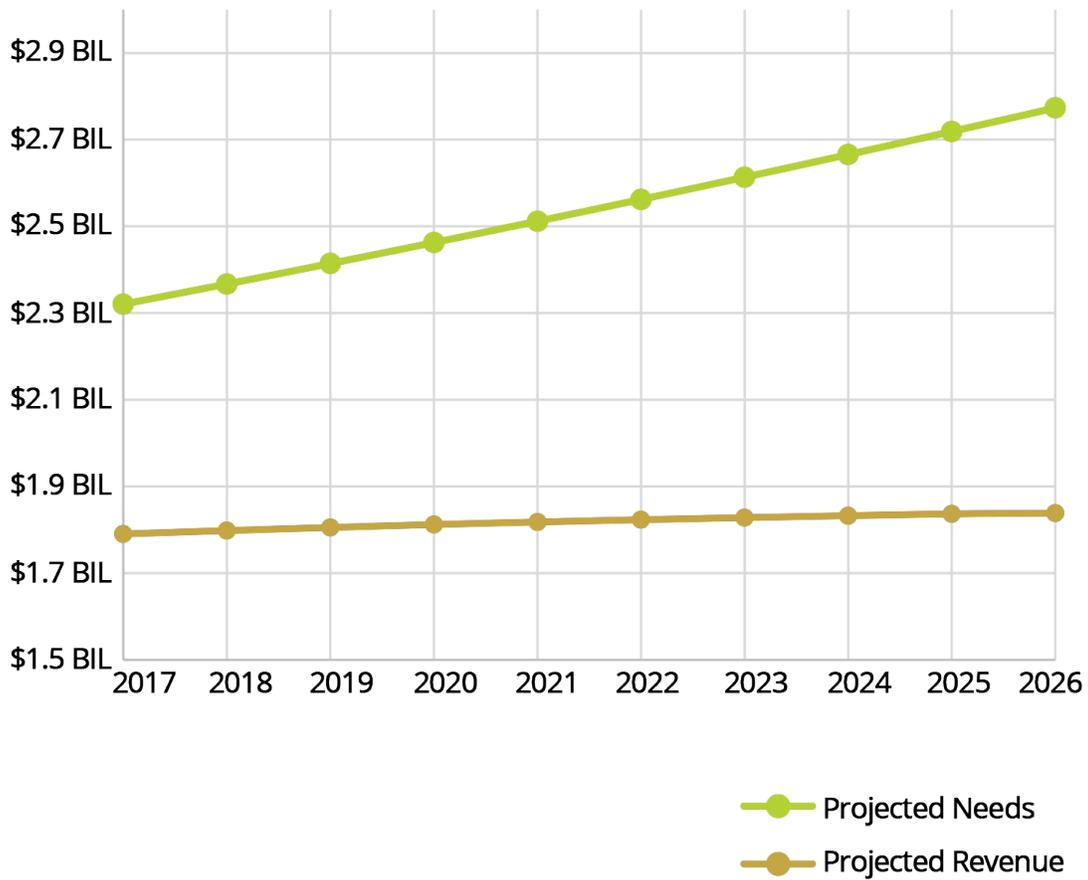
### Tennessee's Economic Growth



Source: Tennessee Comptroller's Transportation Funding Report, 2015

Simply stated, current and projected revenues cannot keep up with the transportation-related demands resulting from growth in population and our economy. At best, funding levels for transportation in Tennessee over the last decade have allowed our State to maintain what we have. Studies show that revenues for transportation are likely to remain flat, which means no new money for investing in Tennessee’s vast multimodal transportation system.

### Revenue vs. Needs



As shown above, over the next decade, we expect to have an annual shortfall of approximately \$500 million by 2017 and the shortfall will only continue to grow with inflation.



Despite the financial outlook, the 10-Year Strategic Investment Plan is based on three core concepts: Efficiency, Effectiveness, and Economic Competitiveness. These strategic emphasis areas, which support TDOT's Guiding Principles, will ultimately guide investments with whatever dollars are available to serve the public by providing the best multimodal transportation system in the nation. The 10-Year Strategic Investment Plan provides the next steps in supporting and responding to future growth and development in the State and offers the necessary foundation for long-term mobility for Tennessee residents, businesses, and visitors.



# 25-Year

## Long-Range Transportation Policy Plan



[www.tn.gov/tdot/section/25-year-transportation-plan](http://www.tn.gov/tdot/section/25-year-transportation-plan)