

TDOT MEASUREMENT REPORT

Fiscal Year 2012

(July 1, 2011– June 30, 2012)



About This Report

The FY 2012 Tennessee Department of Transportation Measurement Report (TMR) contains annual results for the department's key performance measures for the state fiscal year beginning July 1, 2011 and ending June 30, 2012.

The TMR has historically been used internally to provide management with an overview of the department's overall performance in both strategic and operational areas. To increase transparency and accountability to the public, it is the department's intent to issue the TDOT Measurement Report on the Internet on an annual basis.

FY 2012 TDOT Measurement Report

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Introduction

The Tennessee Department of Transportation (TDOT) reviews and updates its performance measures on a continuing basis. The FY 2012 TDOT Measurement Report (TMR) contains an annual tabulation of results for the department's key performance measures for the state fiscal year (FY) ending June 30, 2012. The TMR is prepared by the Office of Strategic Planning to provide management with an overview of TDOT's overall performance in both strategic and operational areas. This report is designed to assist TDOT's leaders as they:

- assess if TDOT is attaining objectives and meeting performance targets
- evaluate if progress is being made towards achieving TDOT's strategic goals
- make decisions about resource allocation that are based on facts and data
- identify where critical improvements may be needed

The Fiscal Year 2012 TMR presents results for 36 unique performance measures of which 20 originate from TDOT's FY 2012 Agency Strategic Plan submission to the Tennessee Department of Finance and Administration (F&A) on July 1, 2010. *A summary of FY 2012 results for all measures is provided on page 3.*

In compliance with the 2002 Tennessee Government Accountability Act performance-based budget initiative, performance targets were set for the 20 strategic and budget allotment code performance measures included in the FY 2012 Agency Strategic Plan. F&A guidance also provides that:

- Each measure corresponds to one of TDOT's budget allotment code areas. *See the Appendix for a description of each code and the program area to which it corresponds.*
- TDOT must have at least 1, but no more than 2, measures for each code.
- Results should indicate how effectively and efficiently services are being delivered.
- The General Assembly has final approval of all budget performance measures.

Agency Plans can be viewed at <http://www.tn.gov/finance/bud/planning/strategic2012.shtm>

Performance Measurement Framework

TDOT's performance measurement results are organized in this report by the five performance perspectives which were defined and incorporated into TDOT's performance measurement framework in 2004. These categories enable TDOT to conduct a balanced assessment of organizational performance from the following key perspectives:

1. Customer - focuses on overall customer service and satisfaction.
2. Financial - considers TDOT's budget and funding information, returns on investments, efficiency of programs and services, and efforts to reduce or contain costs.
3. Organizational Effectiveness - focuses on effectiveness of key internal processes, use of innovative technology and management practices, productivity, and efficiency.
4. Transportation System - assesses the performance of the statewide transportation system with a focus on the operation, preservation, and maintenance of the system.

5. Workforce - focuses on the quality of the workplace environment and TDOT's capability to achieve its mission and strategic direction.

Overview of Information Provided for each Measure

This report describes each measure, the level of performance desired, and the performance target, if established, for the measure.

Each measure also includes an analysis of results and any historical data to reflect trends that are occurring. Arrows signify which direction results should move.

A summary of TDOT's overall performance results for FY 2012 is provided on the following pages.

A Glossary of common terms used in TDOT's performance management system is provided in the Appendix.

Summary of FY 2012 Performance Measure Results

In FY 2012, TDOT used 36 unique performance measures to convey agency progress across a variety of areas. These measures help us to (1) track our progress in meeting strategic goals and (2) determine how effective we are in meeting our mission. A summary of these measures, their performance targets, and FY 2012 results are provided on the following pages.

Performance targets were set for approximately sixty-four percent (23) of the 36 measures. Of these 23 measures, 9 met or exceeded their targets. Of the 14 measures not meeting their performance targets, seven missed their targets by less than five percent. Seven measures missed their targets by five percent or more. TDOT continues to review and refine its process for setting realistic performance targets based on historical data.

Results reporting at times may vary from the standard State Fiscal Year (FY) reporting period due to data collection cycles and lag times in data availability. These variations are noted on the following summary of results as well as on the individual performance measure charts provided.

CY – Calendar Year

FFY – Federal Fiscal Year

Additional information on fiscal year cycles is available in the Glossary.

An asterisk (*) denotes a performance measure that was published in TDOT's FY 2012 Agency Strategic Plan submitted to the Tennessee Department of Finance and Administration (F&A) on July 1, 2010.

Category	Performance Measures	Final FY 11	Final FY 12	FY 12 Target	% Variance from Target
Customer (8 unique measures)	*Fatality Rate	1.46 (CY 10)	1.34 (CY 11)	1.43	+6%
	*Reduction in Fatality Rate	0% (CY 10)	9% (CY 11)	2%	+350%
	Number of Traffic Fatalities on TN Roadways	1,032 (CY 10)	937 (CY 11)	N/A	N/A
	*Seat Belt Usage	87%	84%	85%	-1%
	Transit Vehicle Revenue Miles (results lag by 1 year)	3.1% (FY 10)	7.3% (FY 11)	1%	+600%
	Number of Crashes in TN Work Zones	2,776 (CY 10)	3,059 (CY 11)	N/A	N/A
	*ARRA-Funded Completed Projects in EDA Areas	131	148 cumulative	150	-1%
	Highway/Rail Grade Crossing Fatal Crashes	2 (CY 10)	2 (CY 11)	N/A	N/A

Category	Performance Measures	Final FY 11	Final FY 12	FY 12 Target	% Variance from Target
Financial (1 unique measure)	Variation from State Transportation Improvement Program (STIP) Estimation to Actual Bids	18%	8%	Within 30%	0%

Category	Performance Measures	Final FY 11	Final FY 12	FY 12 Target	% Variance from Target
Organizational Effectiveness (10 unique measures)	*Construction Contracts Completed by Original Date	73%	74%	78%	-5%
	*Construction Contracts Completed by Extension Date	88%	86%	92%	-7%
	*Garage Work Hours Charged to Work Orders	74%	78%	75%	+4%
	*Research Projects Aligned with Strategic Direction	100%	100%	90%	+10%
	*Highway Incidents Cleared within 90 Minutes- HELP	94%	94%	98%	-4%
	Bridge Inspections on a 2-Year Cycle	99%	100%	95%	+5%
	ARRA-Funded Projects - Contracts Completed by Original Date	61%	72%	N/A	N/A
	Projects in 3-Year Program (State Transportation Improvement Program - STIP) On Schedule	78%	65%	N/A	N/A
	Environmental Assessments Processing Time	50 Months	34 Months	N/A	N/A

Category	Performance Measures	Final FY 11	Final FY 12	FY 12 Target	% Variance from Target
	Environmental Impact Statement Processing Time	69 Months	None Complete	N/A	N/A

Category	Performance Measures	Final FY 11	Final FY 12	FY 12 Target	% Variance from Target
Transportation System (12 unique measures)	*Interstate Mileage Managed by ITS Infrastructure	455	465	482	-4%
	*Biofuels (B20 And E85) Refueling Pumps	60	60	95	-37%
	*Statewide Transit Passenger Trips Increase (results lag by 1 year)	6.2-% (FY 10)	2% (FY 11)	2.5%	-20%
	*Maintenance Rating Index (MRI) – Combined Interstate & State Roads	89.2	89	90	-1%
	*Interstate IRI (Roughness Index) Pavement Rating	93% (CY 10)	94% (CY 11)	95%	-1%
	*Bridges– Not Structurally Deficient - On-System	96%	96%	95%	+1%
	*Shortline Rail Track Miles Capacity	39%	41%	43%	-5%
	Pavement Quality Index (PQI) for State Routes and Interstates	3.88 State 4.41 Istate	3.67 State 4.27 Istate	N/A	N/A
	Highway Lane Miles Receiving a Preservation Treatment	2,442 (CY 10)	2,295 (CY 11)	N/A	N/A
	*ARRA-Funded Projects – Lane Miles Improved	1,656	1,656 cumulative	1,855	-11%
	*ARRA-Funded Projects – Bridges Constructed/Replaced	54	84 cumulative	99	-15%
	*ARRA-Funded Projects – Buses & Vans Purchased	318	348 cumulative	352	-1%

Category	Performance Measures	Final FY 11	Final FY 12	FY 12 Target	% Variance from Target
Workforce (5 unique measures)	*TDOT Strategic Workforce Plan-Percent Developed	50%	100%	100%	0%
	Minority Representation in TDOT's Workforce	17%	17%	N/A	N/A
	TDOT Vacancy Rate	15%	19%	N/A	N/A
	TDOT Turnover Rate	8.1%	10%	N/A	N/A
	TDOT Employees – On the Job Injuries	337	255	N/A	N/A

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Performance Measurement Perspective:

CUSTOMER

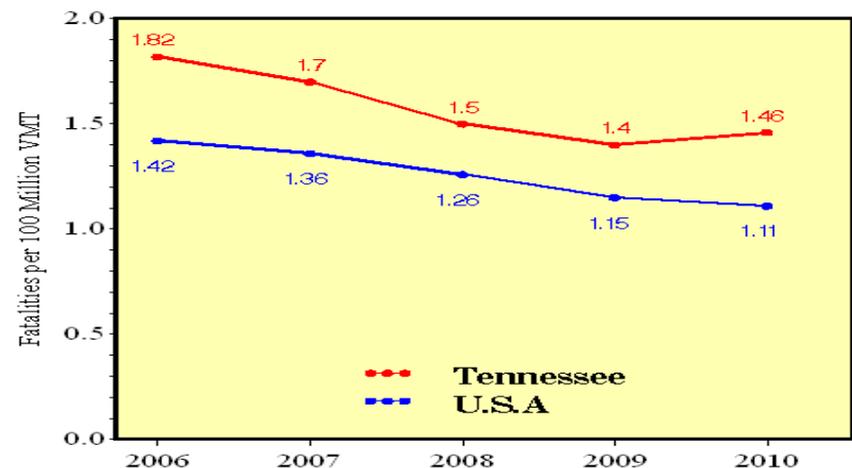
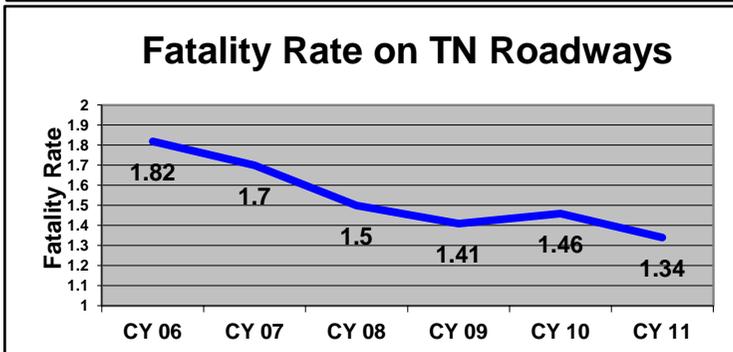
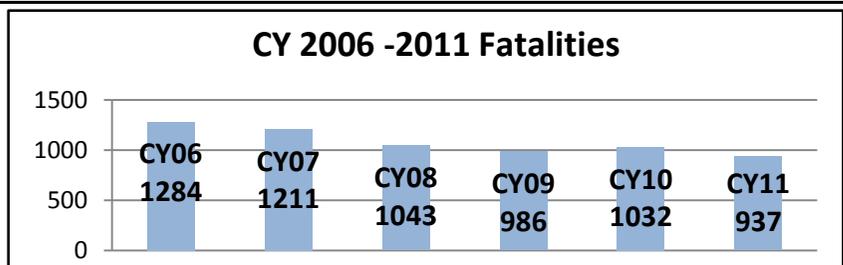
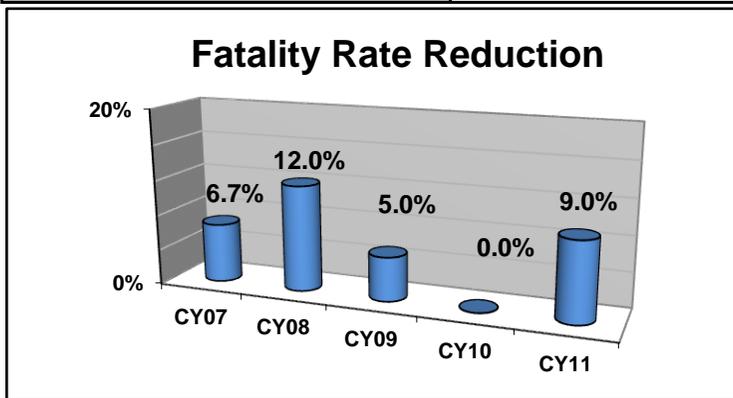
This assessment focuses on TDOT customers' perceptions of the quality of goods and services, the effectiveness of delivery, and overall customer service and satisfaction.

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TDOT MEASUREMENT REPORT

1. Fatality Rate on TN Roadways
2. Percent of Reduction in the Fatality Rate
3. Actual Number of Fatalities

Customer	"Fatality Rate" Variance from Target: +6% "Reduction in Fatality Rate" Variance from Target: +350%
Performance Standard: Reduce the fatality rate by 2% annually on TN roadways Continue to reduce fatalities on Tennessee roadways each year	Description: The fatality rate is the measurement of highway deaths per 100 million vehicle miles traveled (VMT). Fatalities are reported in the Fatality Analysis Reporting System (FARS). To be counted, a crash must involve a motor vehicle traveling on a roadway usually open to the public and result in a person's death within 30 days of the crash. Results are periodically adjusted as data is gathered from a census of reports such as police accident reports, vehicle registration and drivers' licensing files, vital statistics and death certificates.
Target: Reduce the fatality rate by 2% annually FY 2012 (Calendar Year 2011) fatality rate target: 1.43	Analysis: Tennessee traffic fatalities declined sharply in Calendar Year (CY) 2011, reaching their lowest figure in 49 years. Almost 100 fewer people were killed; 1,032 fatalities in 2010 on Tennessee roads decreased to 937 estimated fatalities in 2011. The state fatality rate of 1.34, based on the actual number of fatalities and the amount of Vehicle Miles Traveled, dropped 9% from 2010. The fatality rate in urban areas was double the rate in rural portions of the state. Tennessee's fatality rate still exceeds the national fatality rate.
Historical Performance: There was a 12% fatality rate reduction from CY 2007 to 2008. Finalized data shows that 986 fatalities occurred in CY 2009. The fatality rate was 1.4 and a reduction from CY 2008. In CY 2010, the actual number of fatalities and the fatality rate on Tennessee roadways increased.	In FY 2010, TDOT, the Department of Safety, and their partners worked to update the Strategic Highway Safety Plan. Their goal to have less than 900 fatalities on TN roadways by the end of 2012 was almost accomplished in 2011. TDOT's Safety Office continues road safety audits and safety improvements to make TN's transportation system safer. The Governor's Highway Safety Office utilizes public information and education campaigns to impact drivers' behavior, such as using seatbelts and child safety seats while avoiding texting, speeding, and driving while impaired or sleepy. TDOT also facilitates emergency responses and works to reduce fatalities through the use of its Intelligent Transportation System, Note: CY 2011 fatality data is based on preliminary information available before results are finalized by the Department of Safety. Results will not be official until 2013.

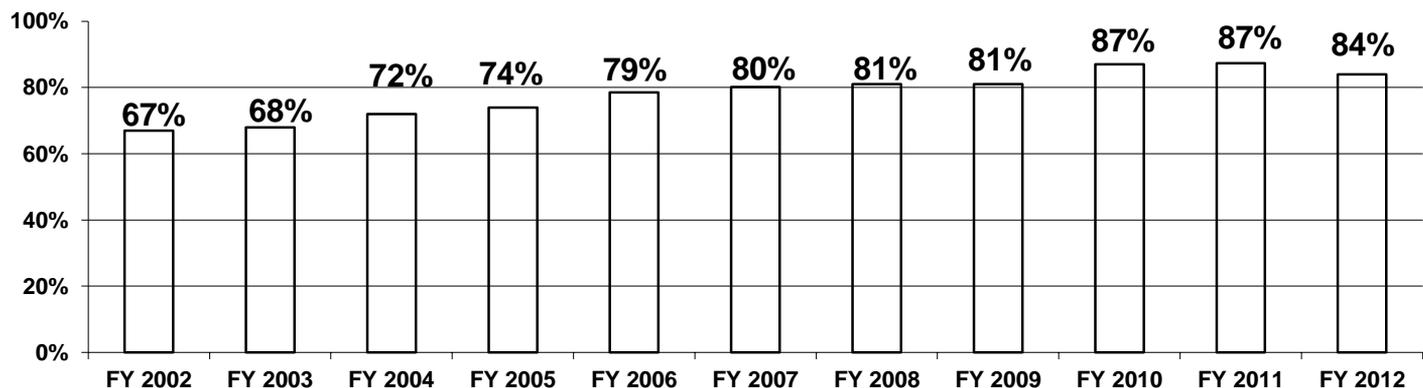


TDOT MEASUREMENT REPORT

Percent of Usage of Seat Belts in Tennessee

Customer	Variance from Target: -1%	Desired Trend:
Performance Standard: Increase seat belt usage in Tennessee by 2% annually	Description: Measure results are based on annual statewide surveys of seatbelt usage. Surveys follow research guidelines set by the National Highway Traffic Safety Administration (NHTSA) and are performed by the University of TN Transportation Center. The National Occupant Protection Use Survey (NOPUS) is conducted each June. NOPUS is the only probability based observational survey of seat belt use in the United States.	
Target: 85% usage in TN in FY 2012		
Historical Performance: FY 2003 performance was 68% Although the FY 2006 Budget reported FY 2004 and FY 2005 seat belt usage as 68% and 72%, respectively, updated information was obtained after the Budget document was printed. FY 2006 results were 79% FY 2007 results were 80% FY 2008 results were 81.49% FY 2009 results were 80.64% FY 2010 and FY 2011 results increased to 87%	Analysis: In 2011, Tennessee reached a record high of 87.4% seat belt usage. Results remain high at 84% in the 2012 survey. The slight decline from 2011 is due to multiple factors including: lower seat belt usage, the inclusion of survey observations on local roads that were not included previously (other states also used this new method established by NHTSA), and reduced federal funding for Occupant Protection. Tennessee exceeded the 2011 national average seat belt usage rate of 84%. Seat belt usage has consistently increased since TN passed a primary seat belt enforcement law in 2003 (motorists can be ticketed solely for not using belts). As of July 2011, TN was 1 of 33 states with primary enforcement laws. Studies show that seat belt usage is higher in states with primary laws and that they tend to have lower fatality rates. TDOT's Governor's Highway Safety Office plans to aggressively address seat belt issues via grants and media campaigns once new funding from NHTSA is received, as a result of the passage of MAP-21 highway bill. TDOT partners with NHTSA, TN's Department of Safety, local law enforcement agencies and others to promote safety, encourage enforcement of the state Primary Seat Belt Legislation, and sustain media coverage throughout the year. NHTSA reports that research shows using lap/shoulder seat belts can reduce the risk of fatal injury to front-seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%. In 2009 alone, seat belts saved an estimated 12,713 lives (Traffic Safety Facts: 2009 Data, DOT HS 811 390). As seat belt usage increases in Tennessee, fatalities and injuries should decline.	

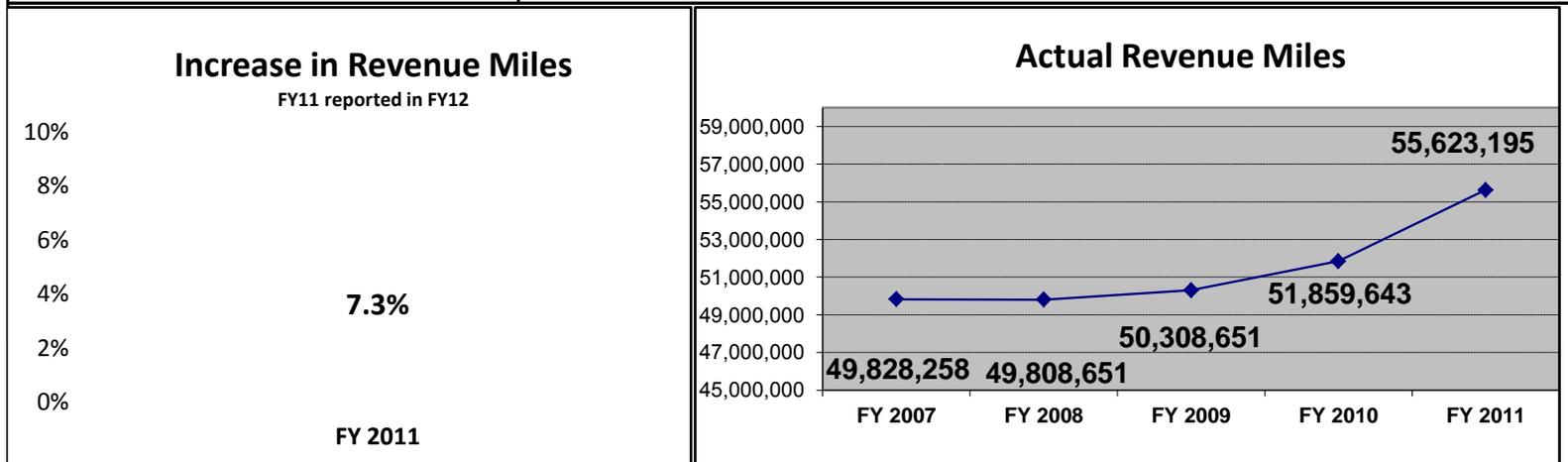
Seat Belt Usage Survey Results



TDOT MEASUREMENT REPORT

Percent Increase in Statewide Transit Vehicle Revenue Miles

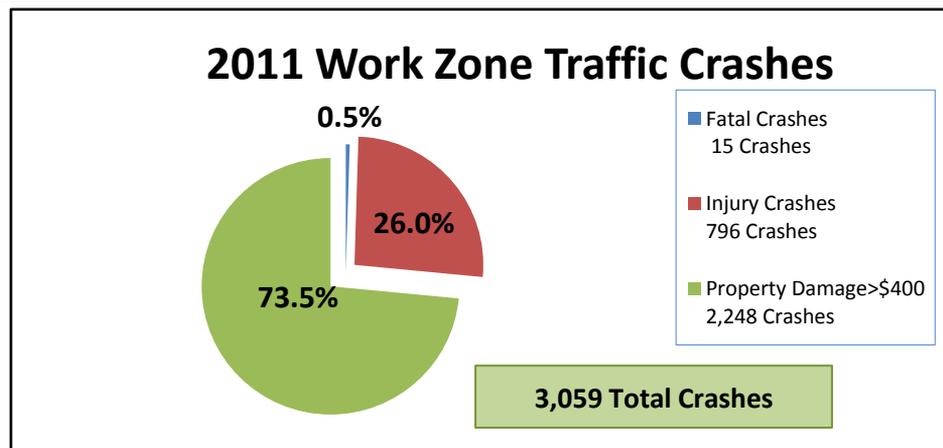
Customer	Variance from Target: +600%	Desired Trend:
Performance Standard: Increase Revenue Miles by 1% annually to reduce urban congestion and increase air quality and accessibility	Description: Vehicle revenue miles are miles traveled when transit vehicles are available to the general public and there is an expectation of carrying paying passengers. Vehicles operated in fare-free service are considered in revenue service. Revenue service excludes school bus service and charter service. For conventionally scheduled services, vehicle revenue miles are comprised of running miles only. Results are based on a state fiscal year reporting cycle.	
Target: 1% annual increase	Analysis: Statewide transit revenue mileage increased 3% from FY 2010 to FY 2011 and rose another 7.26% from FY 2011 to FY 2012, exceeding the target in both years. Concurrently, almost half of the nationwide transit agencies cut services or raised fares in response to the recession and budget restrictions.	
Historical Performance: FY 2008 results, reported in FY 2009, showed that vehicle revenue miles decreased slightly by .04% FY 2009 results, reported in FY 2010, showed a 1.0% increase statewide. FY 2010 results, reported in FY 2011, showed a 3.1% increase statewide. There is a time lag of one fiscal year for reporting state transit data. 2011 data is therefore reported in FY 2012.	<p>Several rural transit agencies significantly increased their revenue miles: Southeast Tennessee Human Resource Agency (SETHRA) in Dunlap (39%), and the Upper Cumberland Human Resource Agency (UCHRA) (34%).</p> <p>One urban transit agency significantly decreased revenue miles: Bristol, Tennessee Transit System (BTTS) (36%)</p> <p>Fuel costs and the economy may impact transit users' behaviors, as well. Citizens appear to be taking advantage of the increase in transit revenue miles offered across the state; ridership in Tennessee has gone up. Despite national cuts by transit agencies, which could make transit less appealing for users, ridership at a national level has also increased.</p> <p>Vehicle revenue miles is often considered a measure of transit availability since it captures the number of service miles of transit. Studies show that as service levels and vehicle revenue miles increase, passenger ridership tends to increase, as well. Therefore, expanding Statewide Transit Vehicle Revenue Miles has the potential to impact public satisfaction, reduce congestion, and improve air quality.</p>	



TDOT MEASUREMENT REPORT

Number of Motor Vehicle Crashes in Tennessee Work Zones

Customer	Variance from Target: N/A	Desired Trend:
Performance Standard: Reduce the number of crashes and injuries within work zones	Description: This is a measurement of the crashes in Tennessee work zones each calendar year. Results include on and off-system crashes in construction, maintenance, utility, and other work zones. Safety of the traveling public in work zones has been an agency priority. Reducing crashes reflects improved agency safety management practices and increased public awareness.	
Target: An annual target was not set for this measure.	Analysis: Preliminary results, as of April 2012, were 3,059 total crashes in Tennessee work zones during the 2011 Calendar Year. These incidents resulted in 15 fatal crashes. Although the total number of crashes has risen in the last four years, work zone traffic crashes have decreased significantly in the last decade; results are significantly lower than in 2003 when 5,780 work zone crashes were recorded. These results are not limited to TDOT work zones. They include work zones put in place for utility work and other improvements.	
Historical Performance: In addition to 2,365 crashes, 11 fatalities occurred in TN work zones in 2008, according to the Work Zone Safety Clearinghouse as reported in the Fatality Analysis Reporting System (FARS). In FY 2010, final CY 2009 results were 2,390 crashes occurring in work zones. In FY 2011, final CY 2010 results indicated an increase in work zone crashes to 2,776.	<p>TDOT continually strives to improve safety in work zones. The agency's Work Zone Committee has been tasked to address improvements in this area and to identify how the agency can most effectively reduce the negative impact of work zones on the traveling public.</p> <p>TDOT's Governor's Highway Safety Office provides funding to support law enforcement efforts to improve safety and education.</p> <p>The agency is collaborating with the Federal Highway Administration and other partners to implement solutions. A combination of activities may be most effective in further reducing work zone crashes and injuries.</p>	



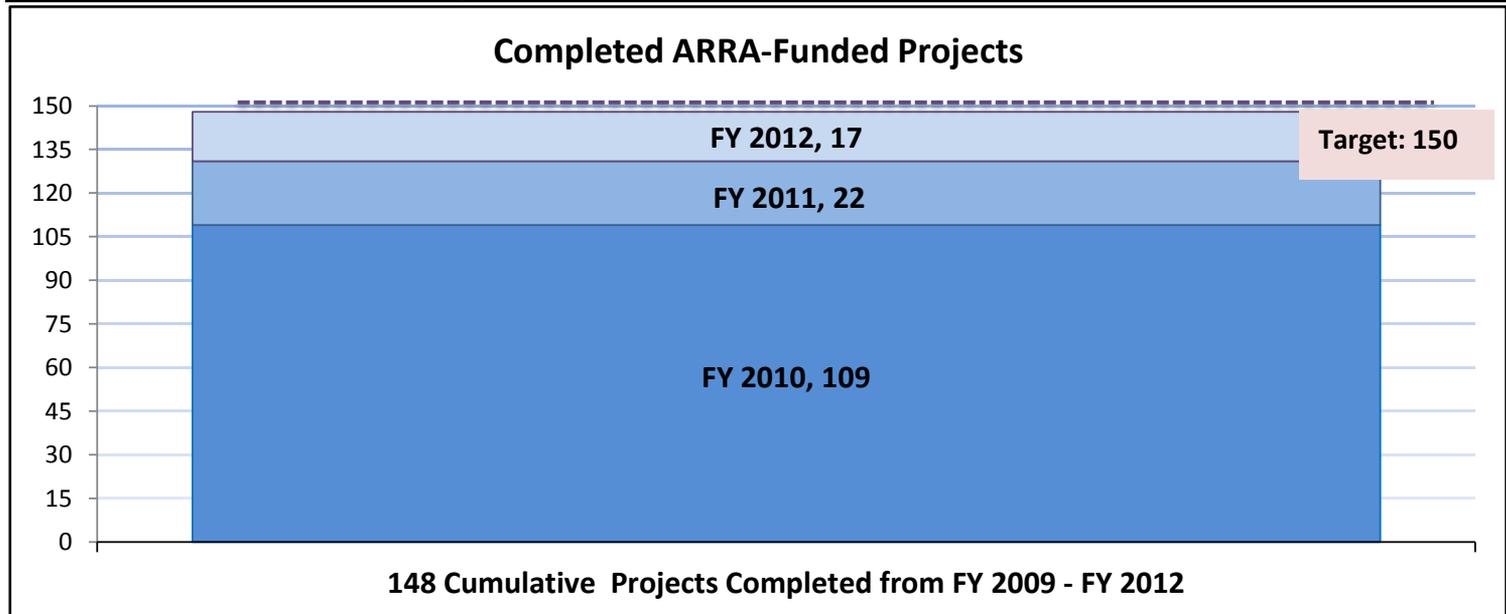
Four Year Trend Data:	Incident Event	2008	2009	2010	2011
	Fatal	9	13	7	15
	Injury	614	636	708	796
	Property Damage >\$400	1,742	1,741	2,061	2,248
	Total	2,365	2,390	2,776	3,059

Source: TN Dept of Safety & Homeland Security; Research, planning, and Development, 11 April 2012.

TDOT MEASUREMENT REPORT

Number of Completed Recovery Act Projects in Economically Distressed Areas (EDA) of Tennessee

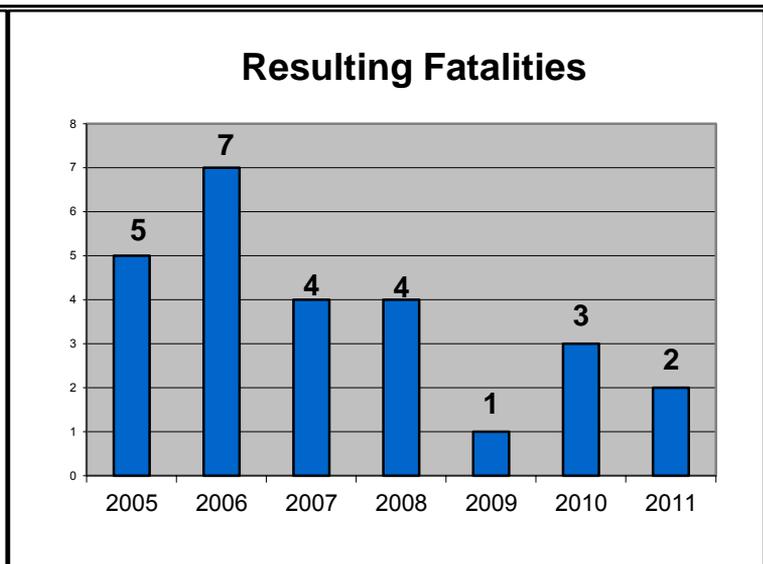
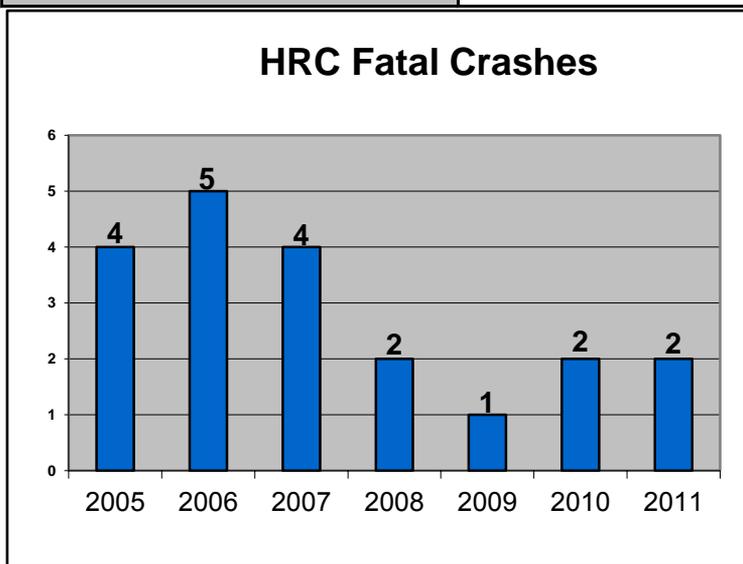
Customer	Variance from Target: -1%	Desired Trend: ↗
Performance Standard: At least 50% of TDOT state projects selected for ARRA funding are located within an Economically Distressed Area	Description: This measure assesses the cumulative sum of ARRA-funded state projects in Economically Distressed Areas that are let to contract as of the end of each state fiscal year and the cumulative sum of the number of projects in an Economically Distressed Area that are completed as of the end of each state fiscal year. Funds provided by the 2009 American Recovery and Reinvestment Act (ARRA) enhance job opportunities and investments in the local area economy.	
Target: FY 2012: 150 total cumulative projects.	Economically Distressed Areas occur where the unemployment rate is 1% or more above the national average or the per capita income is 80% or less than the national average.	
Historical Performance: TDOT began collecting data after the 2009 American Recovery and Reinvestment Act (ARRA) passed. In FY 2010, 109 projects were completed. In FY 2011, an additional 22 projects were completed, bringing the cumulative total to 131 completed projects from FYs 2009-2011.	Analysis: This measure missed the final performance target by only two projects. At the conclusion of FY 2012, 148 ARRA-funded construction projects were complete. Of these projects, 17 were completed in FY 2012. Targets established originally in July 2009 included projects identified by local governments on ARRA projects. These were subsequently removed from calculations in 2010. In addition, the methods for calculating results were adjusted as Federal guidance evolved during ARRA implementation. Performance targets, therefore, were also revised. Note: This measure reflects only ARRA projects selected by TDOT, including locally-owned bridges.	



TDOT MEASUREMENT REPORT

Fatal Crashes at Public Highway-Rail Grade Crossings (HRC)

Customer	Variance from Target: N/A	Desired Trend:
Performance Standard: Annual reduction in fatal crashes	<p>Description: A highway-rail grade crossing (HRC) is an intersection where a roadway crosses railroad tracks at the same level or grade. Tennessee had over 4,600 highway/rail grade crossings in 2010, of which approximately 2,800 were public crossings. Collisions between highway vehicles and trains have historically been the greatest source of injuries and fatalities in the railroad industry, although this trend is changing. This measure helps to monitor the success of safety improvements (upgrading warning devices, roadway geometry and sight distance at all existing public HRCs) and of controlling standards for new public highway/rail grade crossings.</p> <p>Analysis: CY 2011 data, reported in FY 2012, shows that 2 fatal crashes involving motor vehicles and trains led to the deaths of 2 vehicle occupants. The actual number of fatalities is influenced by the number of people in the vehicle. The number of fatal crashes at public highway-rail grade crossings has remained stable over the last four years with two or fewer fatal crashes occurring. This is below the 7-year average of 3 fatal crashes but leaves opportunities for improvement.</p> <p>The September 2009 updated State of Tennessee Strategic Highway Safety Plan outlines two strategies to improve safety at highway-rail grade crossings: to provide appropriate warnings at all highway-rail grade crossings and to increase enforcement at intersections and highway-rail grade crossings. TDOT's Highway-Rail Grade Crossing Program seeks to identify and evaluate eligible crossings and possible safety improvements that can be made.</p> <p>TDOT utilizes Section 130 Program funds provided by the Federal Highway Administration (FHWA) to complete safety upgrade projects. Continued investments can drive efforts to improve highway/rail grade crossing safety in the future.</p>	
Target: An annual target was not set for this measure.		
Historical Performance: 2005: 4 crashes led to 5 fatalities at public crossings. 2006: 5 crashes led to 7 fatalities. 2007: 4 crashes led to 4 fatalities. 2008: 2 crashes led to 4 fatalities. 2009: 1 crash led to 1 fatality. 2010: 2 crashes led to 3 fatalities		



Performance Measurement Perspective:

FINANCIAL

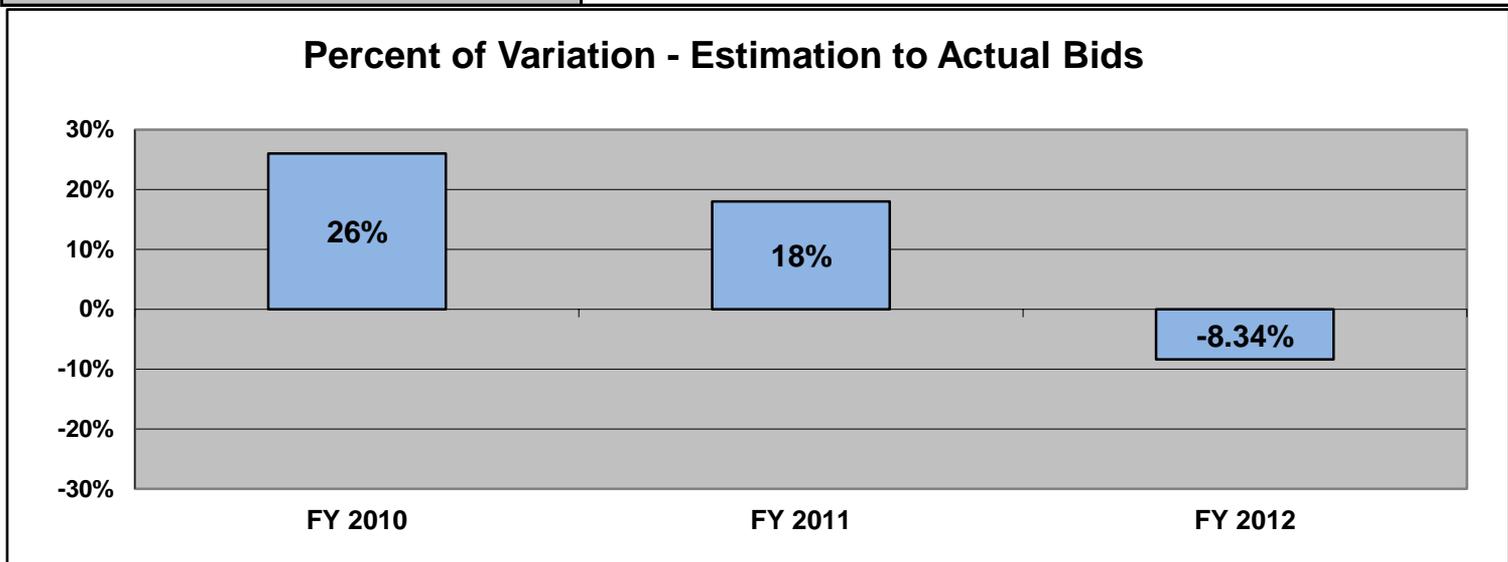
The assessment in this perspective considers TDOT's organizational budget and funding information and issues such as the return on investment, efficiency of TDOT's programs and services, and efforts to reduce or contain costs.

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TDOT MEASUREMENT REPORT

Percent of Variation in the Construction Phase from Estimates when Projects First Enter the 3-Year Program (State Transportation Improvement Program -STIP) to Actual Letting Cost

Finance	Variance from Target: 0%	Desired Trend:
Performance Standard: Keep the variation from original STIP estimates to letting costs within 30%	Description: This is a measurement of the original State Transportation Improvement Program (STIP) construction cost estimate verses the actual bid letting cost. Providing accurate construction cost estimating allows TDOT to evaluate transportation investments and utilize limited funding to provide maximum dollars to overall transportation needs. With federal rescissions and other funding concerns, TDOT must be as accurate as possible with estimates to efficiently use available funds.	
Target: Keep costs within 30% of estimates		
Historical Performance: FY 2007: Underestimation of bid letting costs by 23% added an additional \$8,358,104 to TDOT. FY 2008: Original STIP estimates were within 20% of actual bid costs. FY 2009: TDOT's estimated construction costs were higher than bid letting costs by 12%. Project bids were approximately \$30 million less than expected. In FY 2010 the estimate and cost varied by 26%. This dropped to an 18% variance in FY 2011.	Analysis: In FY 2012, TDOT spending for construction costs was more closely aligned with original estimates than in the prior five years. TDOT tries to limit the amount of variability from the estimate and to ensure that work is accomplished as planned. Spending also came in below estimates by 8.34%. This means TDOT had more funds remaining than expected. Alternately, when letting costs are higher than the agency expects, TDOT has fewer funds to allocate to other projects and agency plans must be revised. Spending was higher than estimated in both FY 2010 and FY 2011 but remained within acceptable ranges of variance. TDOT actual construction bid costs continue to be within 30% of the budgeted estimate, as they have since data reporting began in FY 2006.	



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Performance Measurement Perspective:

ORGANIZATIONAL EFFECTIVENESS

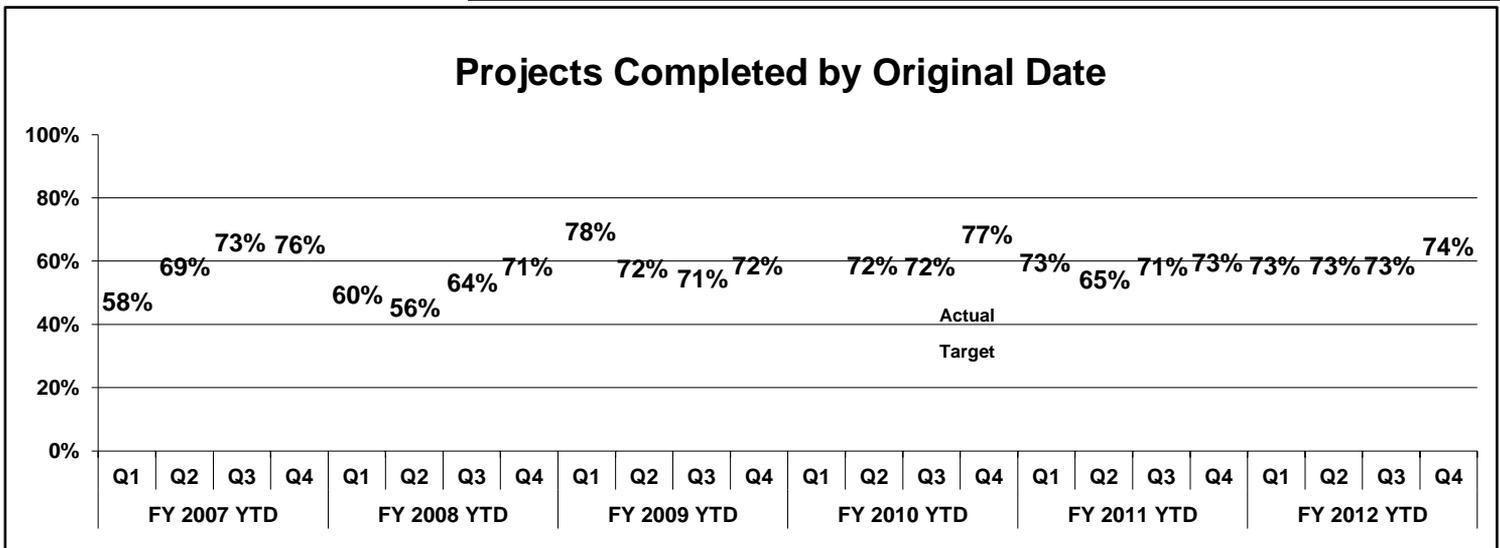
This perspective focuses on key internal processes and TDOT's use of innovative technology and management practices to achieve intended results. Assessing TDOT's ability to achieve intended results includes monitoring the effectiveness of processes, examining productivity, and scheduling performance and efficiency.

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TDOT MEASUREMENT REPORT

Percent of Construction Projects Completed by Original Contract Completion Date

Organizational Effectiveness	Variance from Target: -5%	Desired Trend:																									
Performance Standard: 78%	<p>Description: Construction project contracts stipulate a completion time for every project. This measure assesses the percent of construction projects completed by the original contract completion date and does not include project extensions that TDOT grants to contractors.</p> <p>Projects may be open to traffic months or a year prior to final resolution of all bills so only projects "closed out" during the state fiscal year are used to calculate results. This criterion for assessing completion is consistent with other states. Regions expect Site Manager to improve final record close out time.</p>																										
Target: FY 2012: 78%																											
Historical Performance Statewide: FY 2007: 76% FY 2008: 71% FY 2009: 72% FY 2010: 77% <i>Data was not available for Quarter 1</i> FY 2011: 73%	<p>Analysis: Of 345 total projects which were completed and closed (paid off by the Finance Division) in FY 2012, 74% were completed on time; 252 projects were completed by the original construction contract completion date. This is a 1% improvement from FY 2011. Of the remaining projects, 44 were completed by an approved extension date and 49 were assessed liquidated damages.</p> <p>Region performance impacts statewide results. Both Regions 1 and 2 improved in FY 2012 after declining in FY 2011. Regions 3 and 4 declined in FY 2012.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;"><u>Region</u></th> <th style="text-align: center;"><u>FY09</u></th> <th style="text-align: center;"><u>FY10</u></th> <th style="text-align: center;"><u>FY11</u></th> <th style="text-align: center;"><u>FY12</u></th> </tr> </thead> <tbody> <tr> <td>Reg 1</td> <td style="text-align: center;">60%</td> <td style="text-align: center;">74%</td> <td style="text-align: center;">61%</td> <td style="text-align: center;">66%</td> </tr> <tr> <td>Reg 2</td> <td style="text-align: center;">71%</td> <td style="text-align: center;">82%</td> <td style="text-align: center;">70%</td> <td style="text-align: center;">84%</td> </tr> <tr> <td>Reg 3</td> <td style="text-align: center;">81%</td> <td style="text-align: center;">83%</td> <td style="text-align: center;">86%</td> <td style="text-align: center;">80%</td> </tr> <tr> <td>Reg 4</td> <td style="text-align: center;">74%</td> <td style="text-align: center;">69%</td> <td style="text-align: center;">69%</td> <td style="text-align: center;">66%</td> </tr> </tbody> </table> <p>The agency is assessing a variety of ways to improve performance and complete projects in a more timely manner.</p>		<u>Region</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	Reg 1	60%	74%	61%	66%	Reg 2	71%	82%	70%	84%	Reg 3	81%	83%	86%	80%	Reg 4	74%	69%	69%	66%
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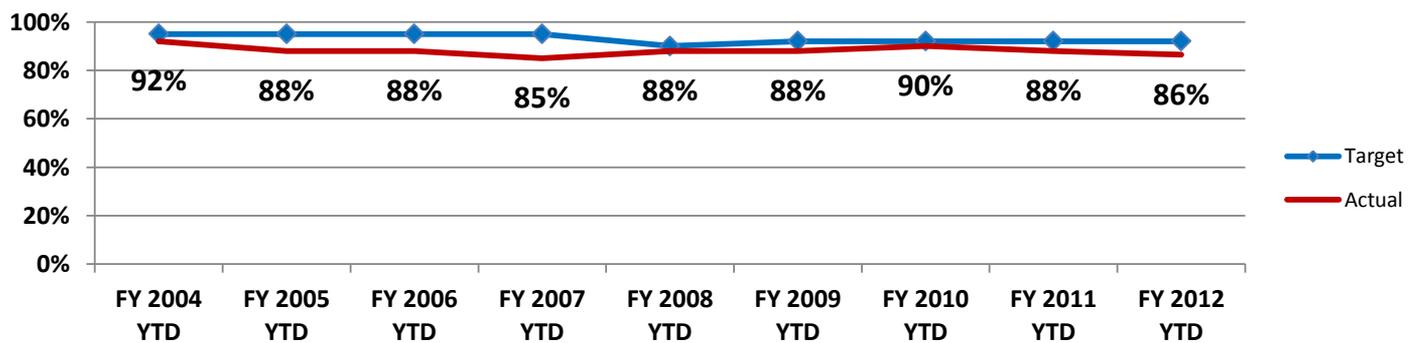


TDOT MEASUREMENT REPORT

Percent of Construction Projects Completed by Original Contract Completion Date Plus TDOT Approved Time Extensions

Organizational Effectiveness	Variance from Target: -7%	Desired Trend:																									
Performance Standard: 92%	Description: This measures how well each region helps TDOT adhere to project schedules. This measure also shows the percent of projects completed without contractors being assessed penalties for being late. Penalties are assessed if TDOT determines that project delays were within the contractor's control.																										
Target: FY 2012: 92%	Analysis: Of 345 total projects in FY 2012, 252 projects were completed by their original construction contract completion dates. Of the remaining 93 projects, 86% (44 projects) were completed by approved contract extended completion dates. There were 49 additional projects which were assessed liquidated damages. Compared to FY 2011, performance declined 2% statewide for completion of projects by their extension dates.																										
Historical Performance: FY 2004: 92% FY 2005: 88% FY 2006: 88% FY 2007: 85% FY 2008: 88% FY 2009: 88% FY 2010: 90% FY 2011: 88%	<p>Region performance impacts statewide results. Performance rose significantly in both Regions 1 and 2 dropped slightly in Region 3, and declined 11% in Region 4 during FY 2012.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: left;">Region</th> <th style="text-align: center;">FY09</th> <th style="text-align: center;">FY10</th> <th style="text-align: center;">FY11</th> <th style="text-align: center;">FY12</th> </tr> </thead> <tbody> <tr> <td>Reg 1</td> <td style="text-align: center;">85%</td> <td style="text-align: center;">89%</td> <td style="text-align: center;">80%</td> <td style="text-align: center;">86%</td> </tr> <tr> <td>Reg 2</td> <td style="text-align: center;">86%</td> <td style="text-align: center;">92%</td> <td style="text-align: center;">90%</td> <td style="text-align: center;">97%</td> </tr> <tr> <td>Reg 3</td> <td style="text-align: center;">90%</td> <td style="text-align: center;">92%</td> <td style="text-align: center;">91%</td> <td style="text-align: center;">88%</td> </tr> <tr> <td>Reg 4</td> <td style="text-align: center;">93%</td> <td style="text-align: center;">88%</td> <td style="text-align: center;">90%</td> <td style="text-align: center;">79%</td> </tr> </tbody> </table> <p>The agency is assessing a variety of ways to improve performance and complete projects in a more timely manner.</p> <p>Only projects "closed out" (paid off by the Finance Division) during the state fiscal year are considered in calculating these percentages. This criterion for assessing completion is consistent with other states. Since only closed out projects are included in results, reducing the time it takes to close projects in Finance would improve leadership's ability to make timely assessments of how well any improvements impact performance.</p>		Region	FY09	FY10	FY11	FY12	Reg 1	85%	89%	80%	86%	Reg 2	86%	92%	90%	97%	Reg 3	90%	92%	91%	88%	Reg 4	93%	88%	90%	79%
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Projects Completed by Extension Date

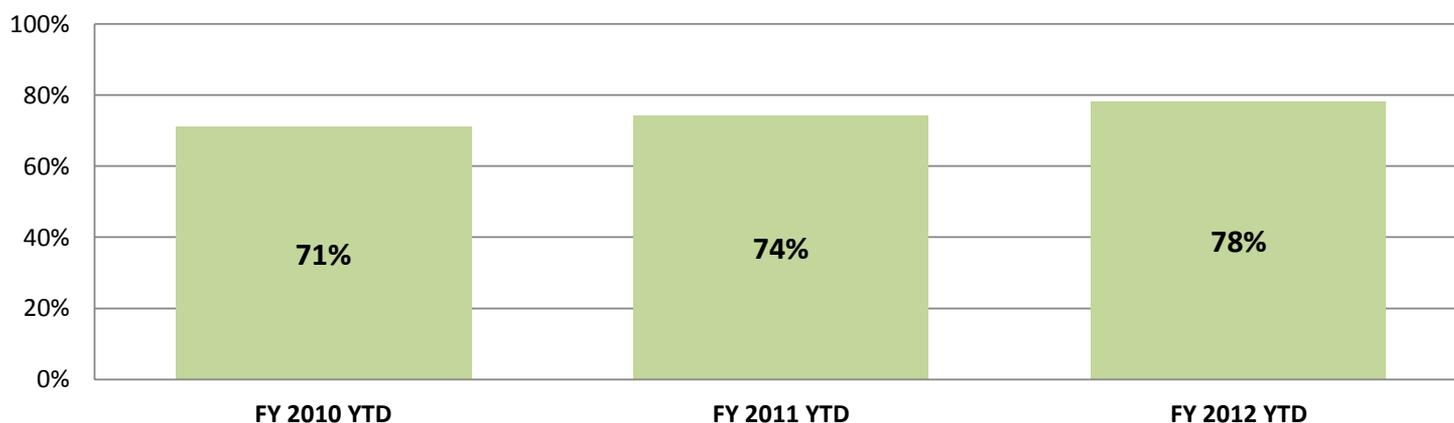


TDOT MEASUREMENT REPORT

Percent of Total Mechanic Available Work Hours Charged to Garage Work Orders for the Maintenance, Service, or Repair of Vehicles in the State System

Organizational Effectiveness	Variance from Target: +4%	Desired Trend:
Performance Standard: 75% of available time will be charged to work orders.	Description: This measure tracks and compares the amount of garage labor hours charged on work orders from the Equipment Management Section of the Maintenance Division to the number of garage mechanic positions assigned to each garage. TDOT garages maintain over 4,000 mobile fleet units for TDOT, in addition to the State of Tennessee Motor Vehicle Management fleets.	
Target: 75% in FY 2012		
Historical Performance: In FY 2010, garages officially began tracking this measure and found that 71% of work hours were being charged to garage work orders. In FY 2011, this number increased slightly to 74%.	<p>Analysis: In FY 2012, mechanics billed over 150,000 labor hours across the state. Garages exceeded the statewide goal by 3% and improved performance 4% from FY 2011. Regional performance was typically at or above the goal. Region 2 had the highest percentage of available hours billed to work orders per mechanic.</p> <p>Region 1: 76% Region 2: 85% Region 3: 76% Region 4: 73%</p> <p>Fifteen of 22 garages statewide exceeded 75%. Employees are informed of scores in each garage to encourage competition, highlight improvement opportunities, and to share best practices that may lead to more effective performance. Management also continues to train mechanics, as needed, on the use of Fleet Focus and to base management decisions on actual results obtained.</p> <p>Garage Mechanics have an industry specified time allowed for replacing parts and making repairs to vehicles and equipment. This measure should reflect mechanics' ability to make repairs in the allotted time, as well as the percent of time that mechanics are working on vehicles and equipment to indicate the level of efficiency and productivity being achieved.</p>	

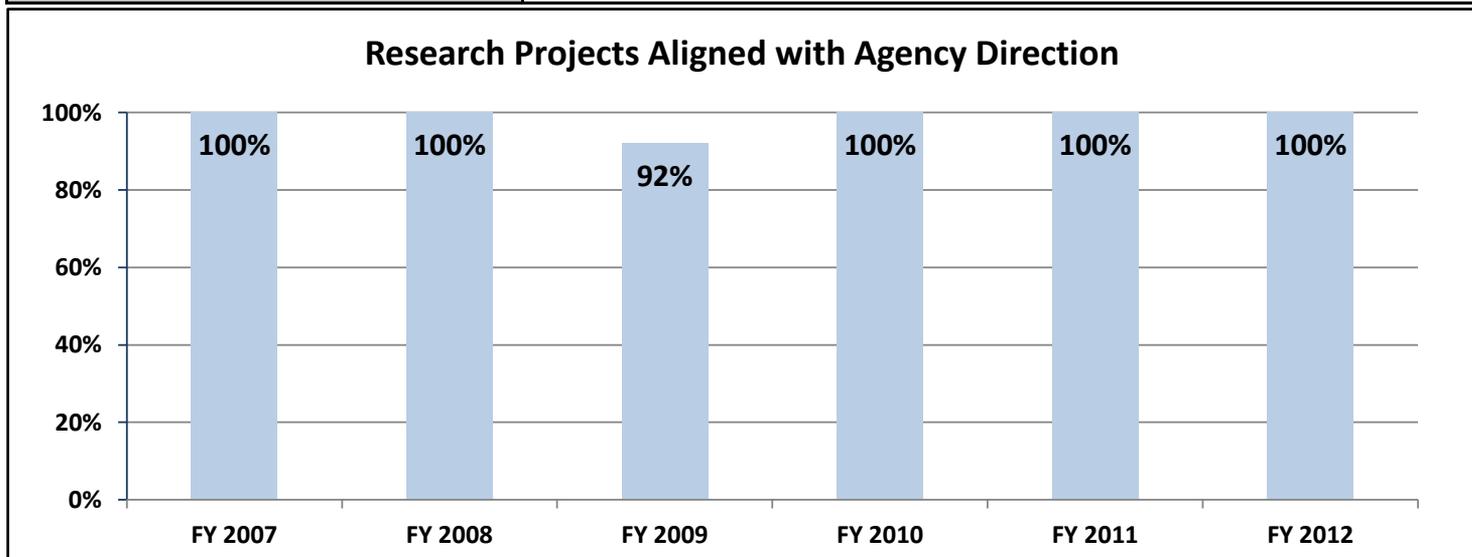
Mechanic Hours Charged to Garage Work Orders



TDOT MEASUREMENT REPORT

Percent of Funded Research Projects that Align with the Agency Strategic Emphasis Areas

Organizational Effectiveness	Variance from Target: +10%	Desired Trend: →
Performance Standard: 85% of new projects will address TDOT's priority areas	Description: This performance measure demonstrates the level to which TDOT is conducting research in the areas identified by its leadership team as critical to the department's success.	
Target: 90% of research projects address TDOT's strategic emphasis areas in FY 2012	TDOT uses federal State Planning and Research (SPR) funds for research, development and technology transfer. Projects are sponsored by division directors across numerous functional areas. In an effort to align the department's research focus with its strategic direction, this measure tracks the percent of research projects that address a strategic emphasis area identified by leadership in TDOT's FY 2008-2011 Strategic Direction.	
Historical Performance: FY 2006 - 61% FY 2007 - 100% FY 2008 - 100% FY 2009 - 92% FY 2010 - 100% FY 2011 - 100%	Analysis: TDOT's Research and Policy Office funds transportation research that can support the agency's mission and goals. 100% of new research projects in FY 2012 were in alignment and support of these four key areas: <ol style="list-style-type: none"> 1. Increasing Transportation System Safety 2. Addressing Customer Needs and Priorities 3. Maximizing and Managing Resources 4. Developing Workforce Capabilities and Capacity <p>TDOT conducts in-house research projects and also collaborates with leading university researchers across the state to find efficient, funding-conscious solutions to complex transportation issues. Each year, TDOT develops a State Planning & Research Work Program according to federal regulations and provides grants to university researchers to help accomplish needed research objectives.</p>	

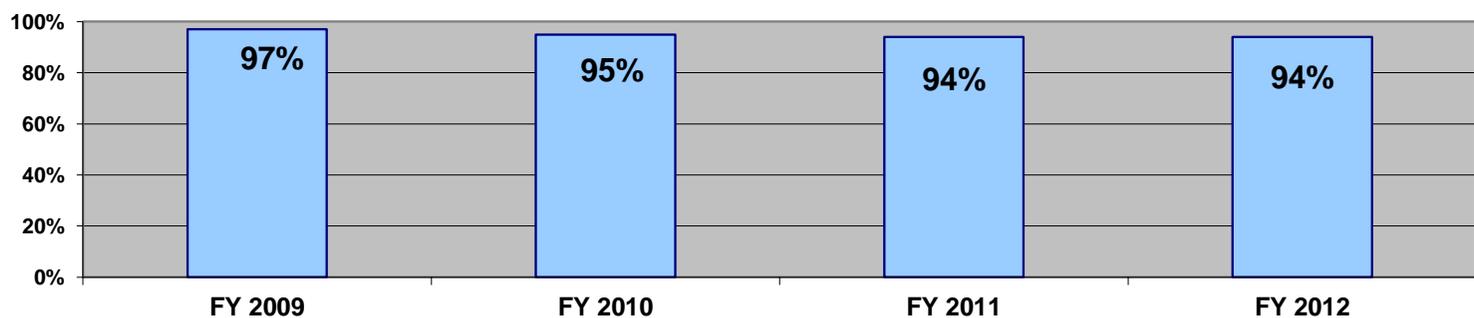


TDOT MEASUREMENT REPORT

Percent of Highway Lane Blockage Incidents in Urban HELP Service Areas That Were Cleared Within 90 Minutes

Organizational Effectiveness	Variance from Target: -4%	Desired Trend: ↗
Performance Standard: 97% of highway incidents cleared in 90 minutes or less	<p>Description: TDOT operates HELP trucks on Tennessee's most heavily traveled highways in Chattanooga, Knoxville, Memphis and Nashville. When the HELP program turned 10 years old in 2009, it had responded to over a million calls for assistance in the state's urban areas. The mission of TDOT's HELP program is to minimize traffic congestion, promote the safe movement of people and products, and improve the travel environment. They work in partnership with emergency response agencies and other TDOT units as part of a highway incident management team.</p> <p>A highway incident is defined as an intrusion into normal traffic operation that results in one or more lanes of a multi-lane interstate section being closed to traffic. They may be caused by vehicle stalls or collisions, debris, animals, or other impediments to the free flow of traffic on a public road. Lanes closed for either construction or maintenance activities are not included when calculating this measure.</p>	
Target: 98% of all highway incidents will be cleared within 90 minutes in FY 2012		
Historical Performance: TDOT's Office of Incident Management collects data regarding the total number and type of incidents that occurred, roadways impacted by lane closures, and number of HELP service patrol stops.	<p>Analysis: HELP-assisted lane blockage incidents were cleared within 90 minutes for 94% of incidents statewide. Around 80% of incidents were cleared in less than 30 minutes and approximately 92% were cleared within 60 minutes. Overall results remain unchanged from FY 2011 to FY 2012. The total length of time that a highway incident exists is impacted by multiple factors, many of which are outside of TDOT's span of control.</p> <p>HELP truck operators are usually the first responders at the scene of an incident. They work closely with other emergency responders and local towing companies to clear the roadways quickly and to ensure public safety. Incident management teams are frequently comprised of multiple agencies which must combine resources and communicate efficiently in order to quickly resolve roadway incidents. Fatality investigations, hazardous material spills, wrecker/cargo issues, and other situations take time to resolve even if coordination efforts are streamlined and successful.</p> <p>Effectively managing incidents reduces their impact on roadway users and the likelihood that congestion and secondary incidents will occur.</p>	
FY 2009: 97% of all incidents were cleared within 90 minutes		
FY 2010: 95% of all incidents were cleared within 90 minutes		
FY 2011: 94%		

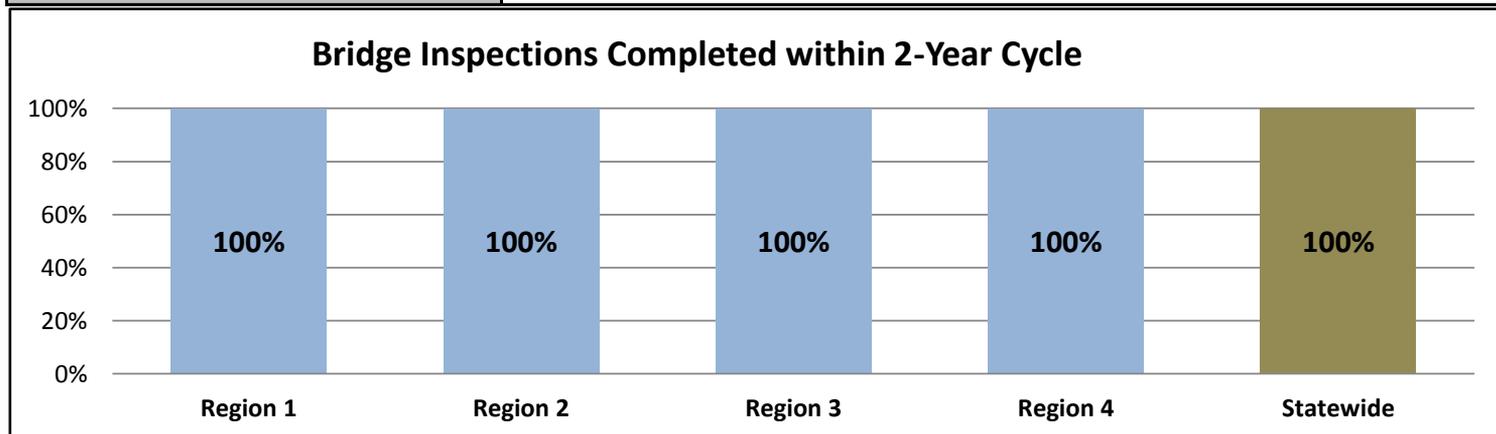
Quick Clearance of Highway Incidents



TDOT MEASUREMENT REPORT

Percent of Bridges Inspected Within 2-Year Cycle

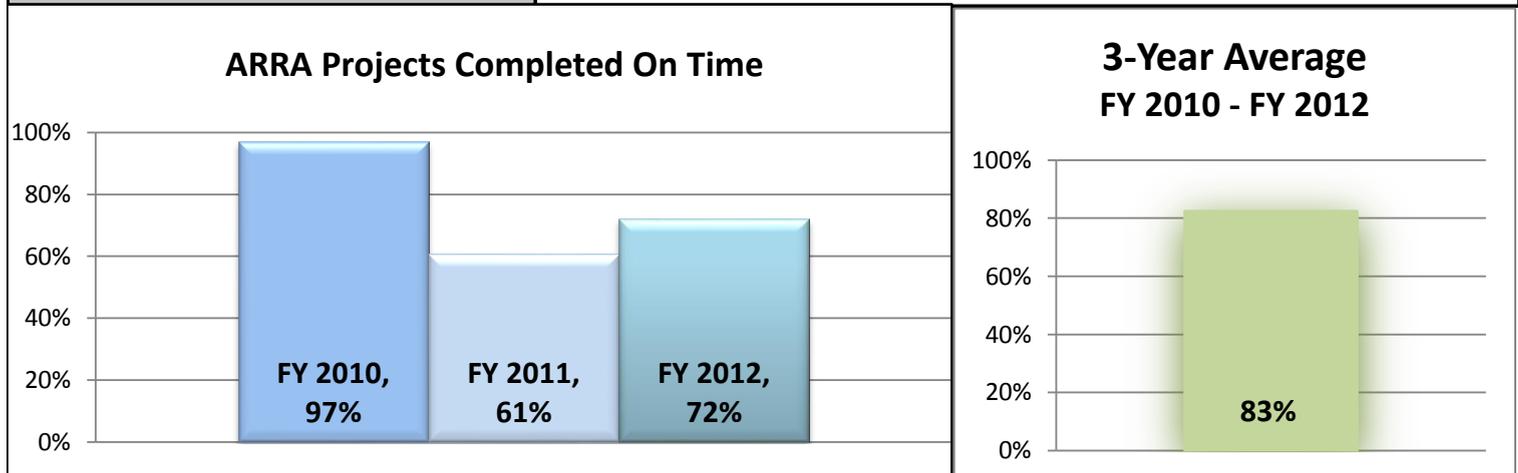
Organizational Effectiveness	Variance from Target: +5%	Desired Trend:
<p>Performance Standard: 95% of bridges in each region are inspected on a 2-year cycle</p> <p>Target: 95% of bridges in each region are inspected on a 2-year cycle</p>	<p>Description: This is an operational measure which shows the management effectiveness of the Regional Bridge Inspection programs to comply with the requirement of maintaining a two-year cycle for bridge inspections. FHWA guidelines allow for repeat inspections to occur within 22 to 25 months from the time of last inspection.</p> <p>Inspections are performed by certified bridge inspectors on all structures and culverts spanning a distance greater than 20 feet. On-schedule refers to the time frame that a bridge inspection is performed in relation to its latest inspection. Calculations do not include underpass inspections that are conducted for structures over a highway, for sign inspections, or small culvert inspections.</p>	
<p>Historical Performance:</p> <p>This data is available from the TDOT Structures Division and the four TDOT Regional offices.</p> <p>FY 2009 - FY 2010: 99.1%</p> <p>FY 2010- FY 2011: 99.2%</p> <p>Tennessee's bridge inspection program has been cited as one of the nation's best in recent years; TN was 1 of only 3 states to inspect all bridges on time, according to a review by MSNBC. This is more significant given that TN has the 10th largest number of bridges in the nation.</p>	<p>Analysis: Overall, 100% of all Tennessee bridges were inspected within the two-year cycle that spans from 7/1/2010 to 6/30/2012. Out of 19,688 bridges across the state, 19,684 bridges were inspected. Results over the last several years are consistent with this exceptional performance and are even more impressive considering major flooding in several portions of the state in this timeframe. Regions are exceeding federal requirements for bridge safety and proactively monitoring bridges to prevent future problems.</p> <p>In February 2011, the Federal Highway Administration (FHWA) implemented a data-driven, risk-based process to assess compliance with National Bridge Inspection Program (NBIS) regulation. 23 metrics that represent NBIS requirements were chosen that could help identify national risks and improvement opportunities in each State. FHWA reviewed each State bridge inspection program in 2011, and each metric was assessed. The only measure that TDOT was "out-of-compliance" on related to Inspection Procedures for Scour Critical Bridges. TDOT has adjusted procedures to ensure that the agency is in compliance with this measure.</p> <p>According to FHWA, the average bridge in the nation was built to last 50 years and is approaching its expected lifespan. Transportation for America reported in 2011 that Tennessee was among the top 10 states for bridge condition. TDOT can help maintain the safety and condition of the State's 20,000 bridges by staying vigilant to their existing status.</p>	



TDOT MEASUREMENT REPORT

Percent of ARRA Projects Completed by Original Contract Completion Date

Organizational Effectiveness	Variance from Target: N/A	Desired Trend:
Performance Standard: 100% of ARRA projects will be completed by original contract completion date	<p>Description: TDOT strives to use ARRA projects to enhance and provide job and investment opportunities in economically distressed areas of the state. This measure tracks the efficiency of project completion for projects in Tennessee's Economically Distressed Areas (EDA) which were selected by TDOT and funded, in whole or in part, with funding made available by the 2009 American Recovery and Reinvestment Act (ARRA). EDAs exist where an area's unemployment rate is 1% or more above the national average or the per capita income is 80% or less than the national average. Due to the dynamic nature of data used to qualify areas/ counties as "economically distressed", designations periodically change.</p> <p>Project data is reported cumulatively as of the State fiscal year end-date in which projects were completed as defined in the Recovery Act Data System (RADS).</p>	
Target: An annual target was not set for this measure.	<p>Analysis: From FY 2010- FY 2012, 83% of ARRA projects were completed by their original contract completion dates. Of 18 total ARRA projects completed and closed out by the Finance division in FY 2012, 72% (13 projects) were completed by their original completion dates. Of the remaining projects which were granted extensions in FY 2012, 94% were completed by their extension dates.</p>	
Historical Performance: TDOT began collecting data for this measure after the 2009 American Recovery and Reinvestment Act (ARRA) was passed. FY 2010: 97% FY 2011: 61%	<p>Performance in FY 2011 may have been less than when ARRA projects were first started in FY 2010 and from when ARRA projects were wrapped up in FY 2012 for a variety of reasons. Many "project-ready" and smaller, less complex projects were started and completed first. The primary type of work changed from resurfacing projects to bridge replacement and other projects. Resurfacing jobs are more easily finished on time and have fewer issues that could extend time needed.</p> <p>In addition, calculations only include projects which have been paid off completely so results for this measure are not available until that time, even if work was completed in the prior year. Generally, for contracts that were completed early and on time, final bills were able to get processed in FY 2010; and for contracts that overran, their final bills were not processed until FY 2011. The usefulness of comparing results across years is limited.</p>	

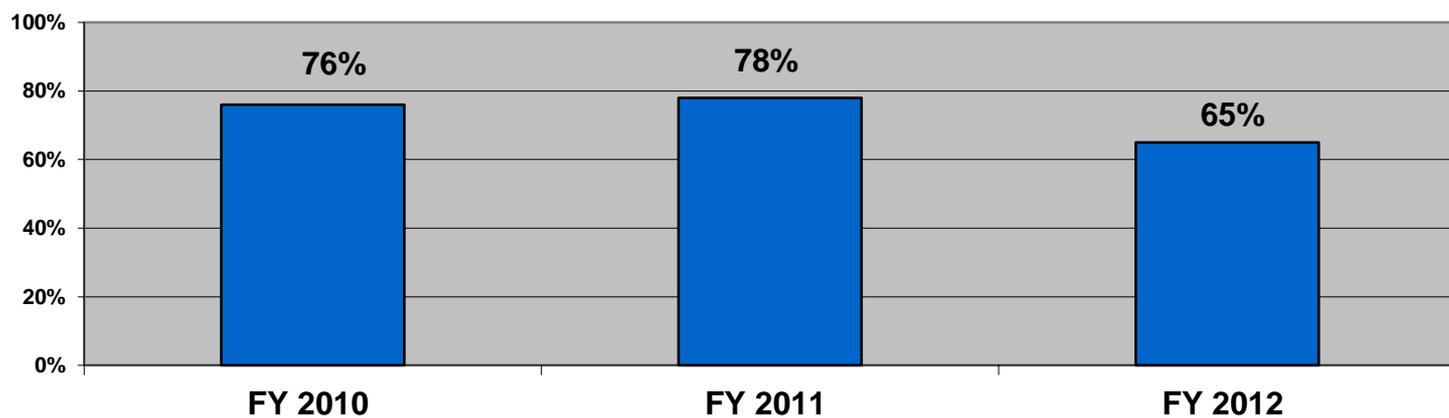


TDOT MEASUREMENT REPORT

Percent of Projects in the 3-Year State Transportation Improvement Program (STIP) that Meet Project Schedule Milestones

Organizational Effectiveness	Variance from Target: N/A	Desired Trend:
Performance Standard: 100%	Description: This measure can help the department assess the percent of budgeted project phases that are accomplished within the budgeted fiscal year. Additionally, data can be used to determine the percent of variation between the total number of project phases budgeted in a fiscal year and the number of project phases not meeting set milestones.	
Target: An annual target was not set for this measure.	When working on the budget program the department must select project phases that will most likely meet the existing schedule. This data could be used to help the Budget program team identify if budget estimating in previous years was successful and where more research is needed if some sections are not meeting set schedule milestones.	
Historical Performance: FY 2010 was the first year to collect baseline results. 76% of projects met scheduled milestones. FY 2011: 78%	Analysis: Of all milestones outlined in advance for project schedules, 65% were met in the 2012 federal fiscal year (October 1 - September 30). Obstacles encountered throughout agency projects can influence the department's ability to meet all milestones. Program development issues can impact whether or not TDOT can authorize a phase during the fiscal year. More frequent monitoring of this measure throughout the year could facilitate agency progress in meeting schedules and identifying issues before they hinder performance.	

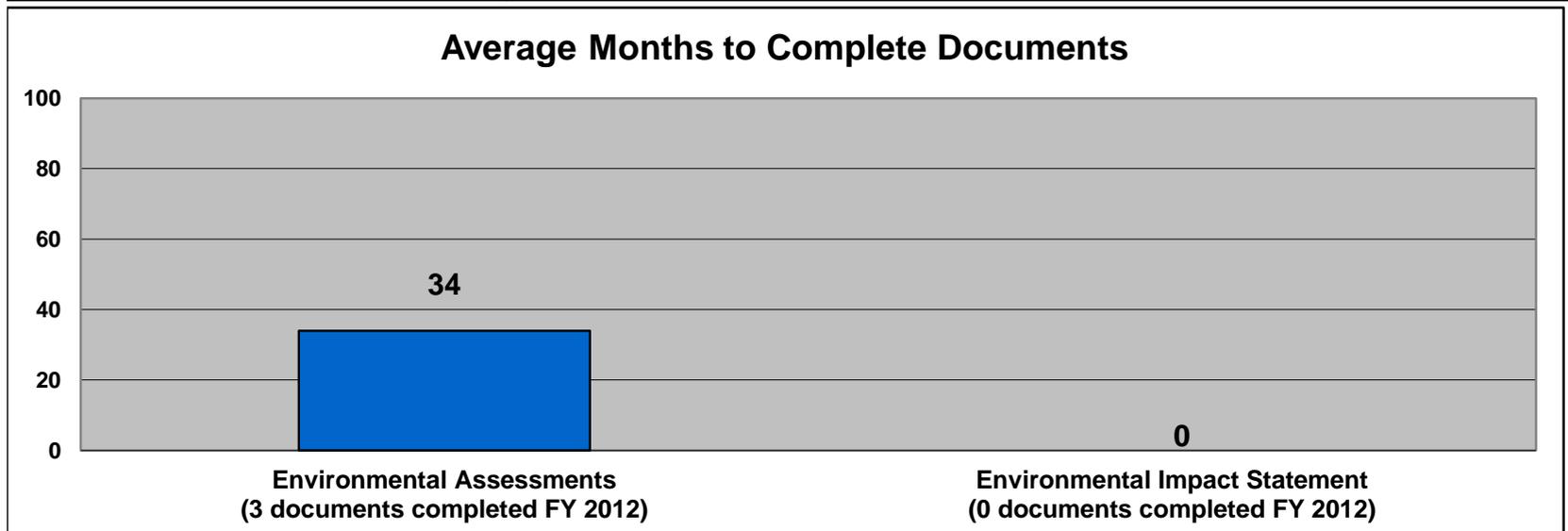
Projects Meeting Scheduled Milestones



TDOT MEASUREMENT REPORT

Processing Cycle Time for Environmental Documents: Environmental Assessments (EA) and Environmental Impact Statements (EIS)

Organizational Effectiveness	Variance from Target: N/A	Desired Trend:
Performance Standard: To get processing time down to 42 months	Description: These documents describe why a project is being proposed, alternatives being considered for a project, potential environmental impacts of each alternative, the existing environment that could be affected by the project, and proposed avoidance, minimization, and/or compensation measures.	
Target: Annual targets were not set for these measures.	These measures assess TDOT's efficiency in completing environmental documents based on time taken to process them. Documents completed within the Federal Fiscal Year (Oct 1-Sept 30) are included in annual averages. The first measure shows the average number of months that were taken to complete Environmental Assessments (EA), including Findings of No Significant Impact (FONSI). The second measure shows the average time taken to complete Environmental Impact Statements (EIS), including Records of Decision (ROD).	
Historical Performance: <u>Environmental Assessments</u> FFY 2006: 47 months FFY 2008: 74 months FFY 2010: 62 months for 7 completed FONSI's, taking a range of 9 to 111 months. The longest EA took over 9 years and was started in June of 2000. FFY 2011: It took an average of 50 months to complete four environmental assessments. <u>Environmental Impact Statements</u> FFY 2006: 68 months FFY 2008: No data - none completed FFY 2010: One EIS document was completed. It took 91 months. FFY 2011: One document was completed, taking 69 months (rather than 61 months as originally reported).	Analysis: Completing these documents takes years so evaluating performance on an annual basis makes meaningful analyses difficult, however, awareness of the overall time required to complete the documents can help TDOT make informed decisions about projects and resources. There are multiple phases to accomplish along the way. FHWA and TDOT meet every other month to discuss the status of EAs and EISs. EA documents - Three EAs were completed in FY 2012 with an average duration of 34 months. This is a significant improvement from FY 2011 when it took on average 50 months to complete four projects (derived from using their start dates and the FHWA document approval dates). EIS documents - TDOT did not complete an EIS in FY 2012. An EIS is required by the National Environmental Policy Act (NEPA) for certain actions "significantly affecting the quality of the human environment". In 2003, the Federal Highway Administration established a national goal to reduce the average processing time for EISs to 36 months. Note: In FY 2011, one EIS document was completed. Its duration was derived from using the start date and the date upon which the document itself was completed by TDOT. This criteria for calculations was based on recommendation of leadership at that time. Technically, completion dates for environmental documents are based on FHWA's formal Record of Decision. FHWA did not actually issue the ROD until December 2010. Therefore, the time to complete that project is revised to reflect a duration of 69 months	



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Performance Measurement Perspective:
TRANSPORTATION SYSTEM

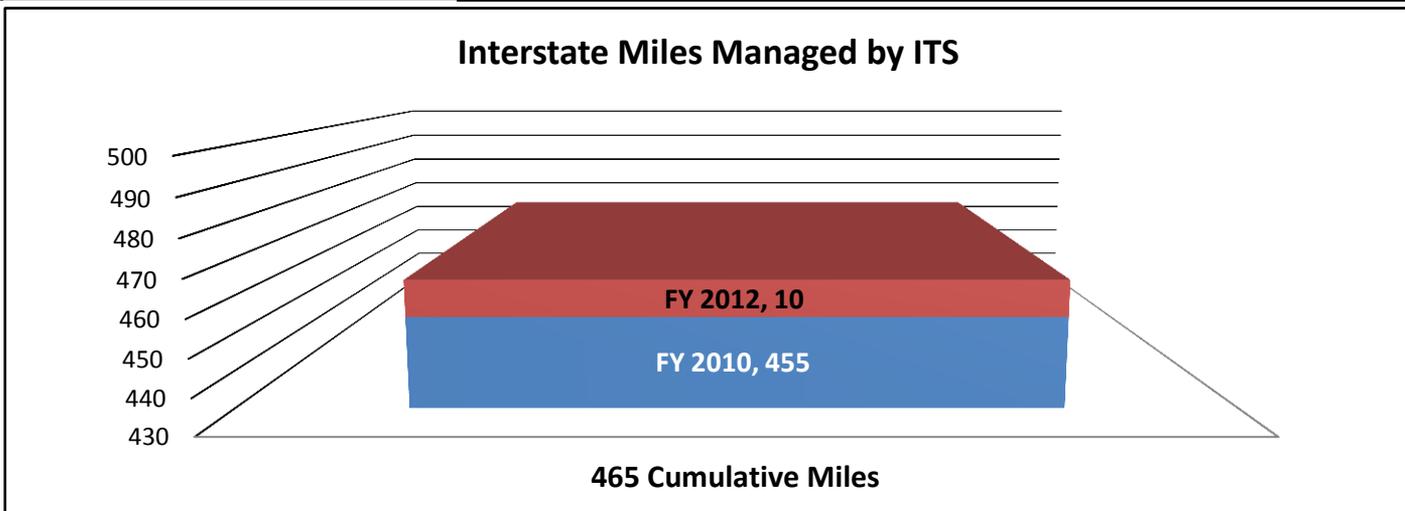
This perspective assesses the performance of the statewide transportation system with focus on the operation, preservation and maintenance of the system.

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TDOT MEASUREMENT REPORT

Miles of Interstate Freeway that are Managed by Intelligent Transportation System (ITS) Infrastructure to Provide Real-time Traffic and Incident Management Information

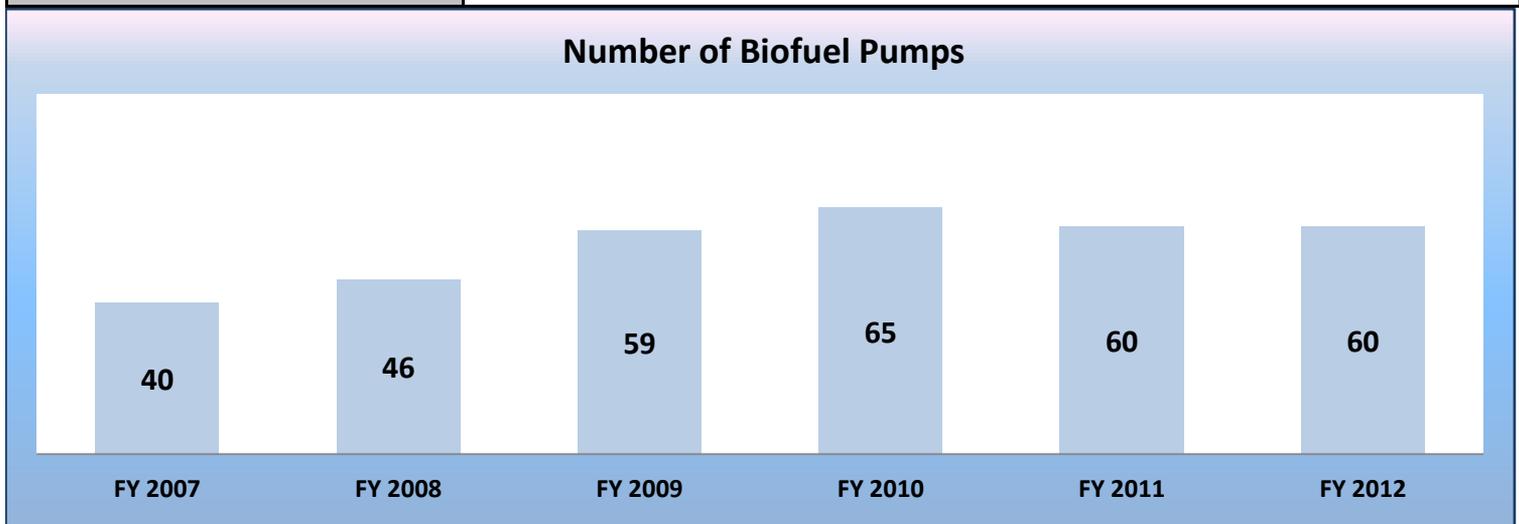
Transportation System	Variance from Target: -4%	Desired Trend:
Performance Standard: A standard was not defined for this measure.	Description: Tennessee's Intelligent Transportation System (ITS) Infrastructure exceeds 1,000 roadway traffic sensors to collect traffic counts, speed and travel time, 400 cameras, and 150 dynamic message signs (DMS), along with four Traffic Management Centers and other technology used to keep state travelers informed of roadway conditions.	
Target: 482 miles in FY 2012	TDOT works with FHWA and metropolitan planning organizations (MPOs) to promote operations planning, regional architecture use, and adoption and integration of operations projects at local levels. TDOT and FHWA cooperate to ensure that projects are consistent with the National Intelligent Transportation System (ITS) Architecture and standards are fully integrated.	
Historical Performance: FY 2010: 455 FY 2011: 455	Analysis: The cumulative number of miles of interstate managed by ITS in FY 2012 progressed to 465. ITS system implementation is slowly occurring. Miles are counted as having ITS deployment completed once all of the ITS infrastructure is in place. In addition to 16 in-state participating counties, TDOT SmartWay operates or has plans to operate in several counties in surrounding states, such as Arkansas, Georgia, Kentucky, and Mississippi. Efforts to improve segments of rural roadways in east Tennessee include installation of overhead DMS and highway advisory radio transmitters on mountainous terrain, as well as construction on rural interstate interchanges: I-40 / I-75 interchange in Loudon County; I-140 / U.S. Highway 129 (Alcoa Hwy) in Blount County; I-40 / I-81 in Jefferson County; and I-81 / I-26 in Sullivan County.	



TDOT MEASUREMENT REPORT

Number of Publicly Accessible Biofuels (B20 and/or E85) Refueling Pumps in Tennessee's Biofuel Green Island Corridor System

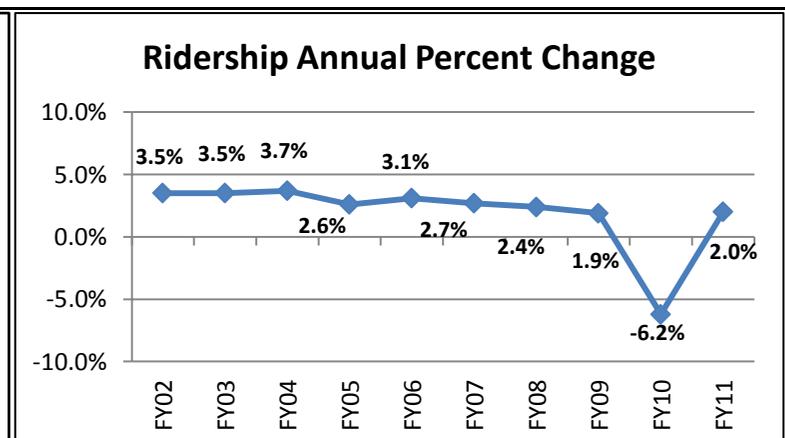
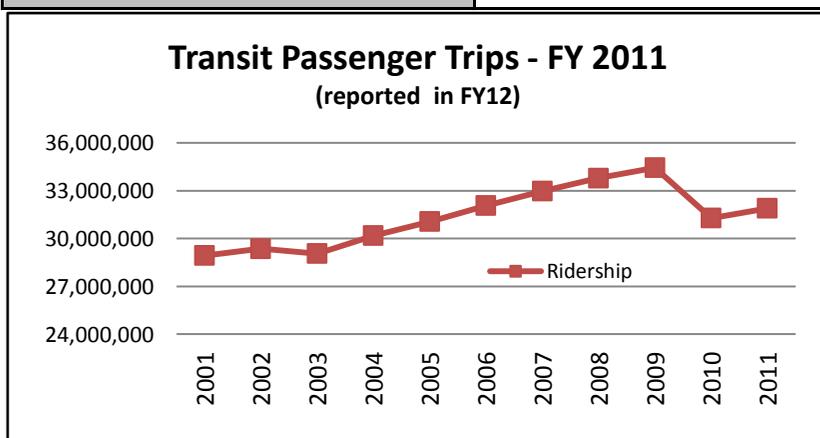
Transportation System	Variance from Target: -37%	Desired Trend:
Performance Standard: To have no more than 100 miles between biofuel pumps along Tennessee's transportation corridors	Description: The National Governors Association selected Tennessee to participate in a multi-state effort to establish more retail ethanol pumps. TDOT has established public-private partnerships with private sector fuel stations to convert or install biofuels storage and fuel dispensing equipment along major interstates and highways. TDOT covers up to 80% of the total cost of purchasing, installing or converting equipment for biofuel use. TDOT originally targeted 27 counties as priorities for establishing E85 and B20 pumps.	
Target: 95 total pumps in FY 2012		
Historical Performance: FY 2007: 40 FY 2008: 46 FY 2009: 59 FY 2010: 65 FY 2011: 60	<p>Analysis: As of FY 2012, Tennessee had 60 biofuel pumps open and accessible to the public along the interstate corridors. This is a decrease from 65 pumps in FY 2010.</p> <p>Multiple factors continue to block TDOT's ability to increase the total number of state biofuel pumps. A drop in oil prices made it harder for biofuels to compete with traditional fuels. The Great Recession stunted the growth of the Biofuel industry and still influences prices and biofuel usage. According to the Cleantech Group, refineries closed and venture capital funding for biofuels dwindled from \$1.08 billion in 2007 to \$524 million in 2009. In addition, negative media coverage claims that companies making ethanol from corn contribute to worldwide increases in food prices.</p> <p>TDOT was mandated by the legislature to reduce our usage of petroleum 20% by January 2010, but this did not occur. Many fueling stations accept the State's fuel cards and TDOT updates the "Find a Pump" link on the BioTenn.org web site, however, increasing biofuel availability is a crucial step in increasing its use. TDOT's Environmental Division continues to encourage businesses and citizens to use biofuels and works to improve access to stations across the state that sell biofuels.</p>	



TDOT MEASUREMENT REPORT

Annual Percent Increase in Total Statewide Transit Passenger Trips

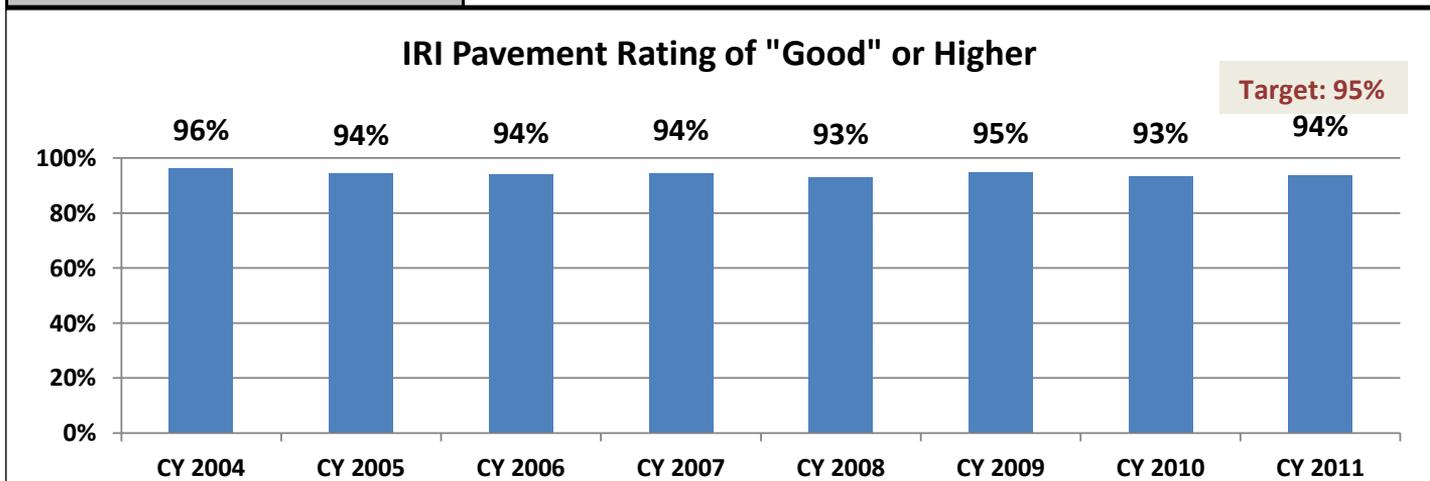
Transportation System	Variance from Target: -20%	Desired Trend:
<p>Performance Standard: Increase 1.5% annually to reduce urban congestion and increase air quality</p> <p>Target: Increase transit passenger trips by 2.5% from 2010 to 2011 (reported in FY 2012)</p>	<p>Description: This measure of transit ridership tracks the number of passenger trips reported by all urban and rural public transit systems in Tennessee. Specifically, the measure represents “unlinked passenger trips,” which counts transit vehicle boardings. A passenger who boards “Bus A” then transfers to “Bus B” has completed two unlinked passenger trips.</p> <p>Transit agencies across the state submit data to the National Transit Database (NTD), the Federal Transit Administration’s (FTA’s) primary compilation of statistics on the transit industry. For a given NTD Reporting Year (e.g. RY 2011), the reporting period varies by agency (calendar year, state fiscal year, federal fiscal year, or other period). Given the variance in the start and end dates of agencies’ reporting years and the amount of time required for transit data to be collected and validated, there is a lag time prior to the release of NTD data. The most recent validated data is for Reporting Year 2011.</p>	
<p>Historical Performance:</p> <p>FY 2002: 3.5% increase FY 2003: 3.5% increase FY 2004: The F&A Strategic Plan reported a 1.7% increase due to a reporting error on Memphis rail usage. The 2004 TN Public Transportation Report correctly showed a 3.7% increase. FY 2005: 2.6% FY 2006: 3.1% FY 2007: 2.7% FY 2008: 2.4% FY 2009: 1.9%</p> <p>There is a time lag of one fiscal year for reporting state transit data. 2011 data is therefore reported in FY 2012.</p>	<p>Analysis: As of August 15, 2012, statewide Transit Ridership results showed a 2% increase from Reporting Years 2010 to 2011. Every category of transit agency had an overall increase in passenger trips: large and small urban and rural areas, and agencies serving tourist destinations. In RY 2011, almost 32 million passenger trips took place on transit in Tennessee.</p> <ul style="list-style-type: none"> • Among large urban agencies, total passenger trips were nearly flat between 2010 and 2011. The largest gains occurred in Nashville MTA (7%), RTA of Middle TN (21%), Knoxville (7%), and Chattanooga (5%). • Small urban agencies, serving cities with a population over 50,000 and less than 200,000, experienced an overall increase in ridership of 7%. • A 17% overall increase in passenger trips was achieved by the rural public transit agencies (excludes SW Human Resource Agency due to data issues.) • Transit agencies serving tourist destinations (Pigeon Forge and Gatlinburg) each experienced a 4% increase in ridership. <p>National ridership has increased, as well. American Public Transportation Association officials attribute increases to two factors: rising fuel prices; and improvements in employment so more Americans are traveling to work using all modes of transportation, including transit.</p> <p>Note: Recent issues with the accuracy of passenger counts that agencies report to the NTD have required adjustments to data. Nashville MTA will shift away from providing data based on estimated trips. Their future NTD reports will originate from a count based on farebox data. Due to an inaccuracy in ridership reported to the NTD in 2012, the Southwest HRA is excluded from this year’s analysis for this measure. Their RY 2009 and RY 2010 ridership was over-reported due to an unresolved issue with newly implemented RouteMatch software.</p>	



TDOT MEASUREMENT REPORT

Percent Of Interstate Mileage With An International Roughness Index (IRI) Pavement Rating Of Good Or Very Good

Transportation System	Variance from Target: -1%	Desired Trend:
Performance Standard: 93% of the rated road segments have a pavement rating of good or very good	<p>Description: This item measures irregularities in the roadway pavement surface that adversely affect vehicle ride quality on the Interstate Highway System. IRI results are collected by contractors annually. Approximately 4,400 lane miles of Interstate road segments are rated. An IRI rating of "good" or "very good" is greater than "94." IRIs are collected in every state from calibrated measurement devices that meet industry-set standards.</p> <p>TDOT's Interstate Resurfacing program works to maintain smoothness at an acceptable level. Smoother roadways last longer, are safer and lead to reductions in vehicle delay costs, fuel consumption, and maintenance costs. The primary method for improving roadway smoothness is to physically overlay or mill and overlay roads with an asphalt mixture to keep roads in good condition, prevent potholes, preserve the road bed structure, and provide a safe driving surface.</p>	
Target: The interstate IRI will be rated "good" or "very good" on 95% of rated road segments in FY 2012 (CY 2011)		
Historical Performance: CY 2004: 96% CY 2005: 94% CY 2006: 94% CY 2007: 94% CY 2008: 93% CY 2009: 95% CY 2010: 93%	<p>Analysis: The Calendar Year 2011 (reported in FY 2012) IRI survey data was collected for the entire Interstate system, the same as it has been for years. Results show 94% of Interstate road segments are rated as Good or Very Good, which is only 1% short of the performance target. Over the last seven years, IRI results have consistently ranged within 3% points (93%-96%.)</p> <p>Proposed performance targets are projections based on trends and on funding levels. Funding is expected to remain the same for Interstates and to increase for State Routes. IRI data can be used as one criterion to guide the planning and implementation of appropriate strategies for roadway maintenance, rehabilitation, or reconstruction. IRI performance results are furnished to the Regions for use in regional planning.</p>	

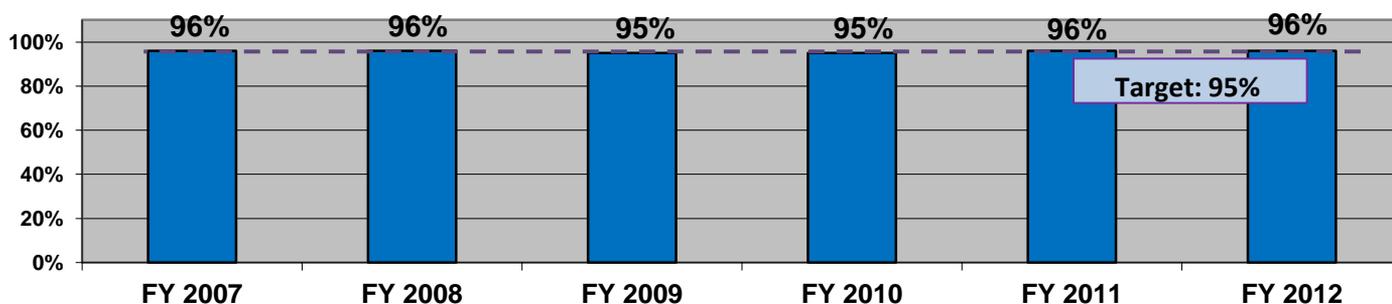


TDOT MEASUREMENT REPORT

Percent of Bridge Deck Area on All Bridges Maintained by TDOT that is not Structurally Deficient

Transportation System	Variance from Target: +1%	Desired Trend:
Performance Standard: The sum of the deck area for those bridges not classified as structurally deficient will be 94% or greater of the total deck area for all bridges	Description: Tennessee has almost 20,000 bridges on its public roads. On-system bridges are those maintained, owned, and operated by the state. They are found on the Interstate system, the National Highway System, and the State Route System. TDOT conducts periodic safety inspections on all public highway bridges owned and maintained by the State of TN.	
Target: The sum of the deck area will be at least 95% in FY 2012	A bridge may be classified as "Structurally Deficient" (SD) based on condition and appraisal ratings. A deficient bridge may not be dangerous, but it does require significant maintenance, rehabilitation, or replacement. Insufficient waterway adequacy can be a contributing factor for either deficiencies or obsolescence.	
Historical Performance: FY 2007 and FY 2008 actuals rounded to 96% FY 2009 and FY 2010 actuals rounded to 95% FY 2011 actual rounded to 96% In prior years, TN's overall bridge population was ranked 6th in the nation for the least number of SD bridges. This is more significant given that TN has the 10th largest number of bridges in the nation.	Analysis: Fewer than 5% of Tennessee bridges maintained by TDOT were classified as structurally deficient in FY 2012. The annual performance target was exceeded. The Federal Highway Administration (FHWA) developed a "23 Metric" approach in 2011 to assess compliance with National Bridge Inspection regulations. FHWA is now grading each State on these measures annually to track national and state performance. Process adjustments can help states ensure that the safety and quality of the nation's bridges is maintained. Tennessee's structurally deficient bridges are located across the state system on interstates, U.S. highways, and state routes. TDOT has taken advantage of lower interest rates and construction costs to maximize the use of American Recovery and Reinvestment Act funds and Bridge Bond funds. As a result, TDOT is working to replace or repair a significant portion of Tennessee's SD bridges in a much shorter time frame than could otherwise be accomplished.	

Bridge Deck Area - Not Structurally Deficient - TDOT Maintained

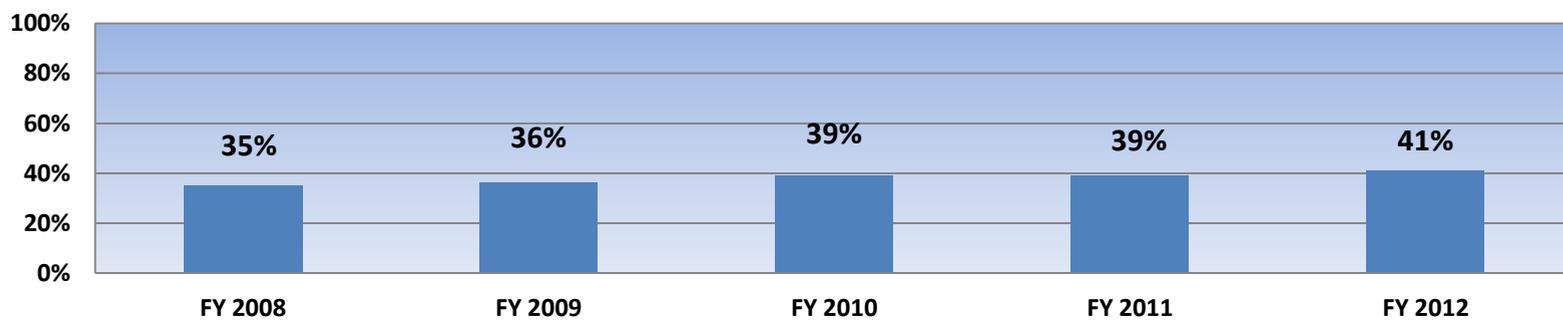


TDOT MEASUREMENT REPORT

Percent of Shortline Track Miles With a Capacity Over 286,000 Pounds

Transportation System	Variance from Target: -5%	Desired Trend: ↗
Performance Standard: To increase the number of shortline track miles in Tennessee capable of supporting 286,000 pound railcars by 2%-5% per year	<p>Description: Shortline railroads constitute almost 1/3 of the miles of railroad track in Tennessee. A track is rated for its capacity to handle railcars of varying weights at varying speeds. Most of the state's shortline railroads were built when standard track was designed to accommodate 263,000 pound rail cars. However, Class I railroads have upgraded their track to accommodate railcars of 286,000 pounds or higher. As congestion on the Class I rail system increases, Class I carriers will become less willing to serve carloads of 263,000 pounds. In order to remain viable long-term as part of the nation's railway system, shortline railroads will need to upgrade to 286,000 pound track capacity. Hence, the percent of state shortline track miles that have reached this standard is an appropriate performance measure for TDOT.</p> <p>Railcars loaded to 286,000 pounds are approximately 15% more efficient than railcars loaded to 263,000 pounds. In some cases, that difference in efficiency impacts a shipper's decision to use rail transportation versus trucks. Shippers on TN's shortlines benefit from improvements that raise the shortline tracks' carload capacity to 286,000 pounds because they can achieve greater efficiencies and move their products under safer conditions. The State of Tennessee benefits when heavy freight moves by rail rather than highway due to the impact of this heavy freight on pavement conditions.</p>	
Target: 43% in FY 2012		
Historical Performance: FY 2008: 35% FY 2009: 36% FY 2010: 39% Track upgrades were delayed in FY 2010, in part, due to emergency repairs from flooding damages in May of 2010. FY 2011: 39%* *This is revised from original reporting in the FY 2011 TDOT Measurement Report.	<p>Analysis: During FY 2012 the amount of 286,000 pound capacity track increased from approximately 307 miles to 324 miles out of a total of 793 track miles that were included in TDOT's shortline railroad rehabilitation program. This represents a 5.7% increase over FY 2011, exceeding the stated standard to have a "2-5% increase per year." Between 2010 and 2011 there had not been an increase in 286,000 pound compliant track, largely due to damage caused by the flooding in May 2010.</p> <p>The metric of "track miles at 286,000 pound carload capacity" alone does not fully represent the degree of improvement of the state's shortline railroads because it fails to adequately reflect critical bridge improvements. Improvements that enable bridges to support railcars at 286,000 pounds may be a very short distance but are very expensive. A parallel analysis of bridge conditions would enhance this evaluation of track capable of supporting 286,000 pound carloads.</p> <p>Until this time, the Multimodal Division has been dependent on the engineering firms hired by the railroad authorities to supply the track condition data each year. Going forward, this data will be acquired from the engineers on a continual basis and incorporated into a geographic information system (GIS) so the TDOT can better assess the condition of track and bridges and the location of needs in relation to existing or prospective shippers.</p> <p>Note: This data corrects a data error in the FY 2011 TMR, which incorrectly identified 44% of the state's track-miles as having capacity to support 286,000 pound railcars. A review of past data has shown that 39% of the state's track miles in the shortline program were 286,000 pound compliant at the end of FY 2011.</p>	

Rail Capacity Over 286,000 Pounds

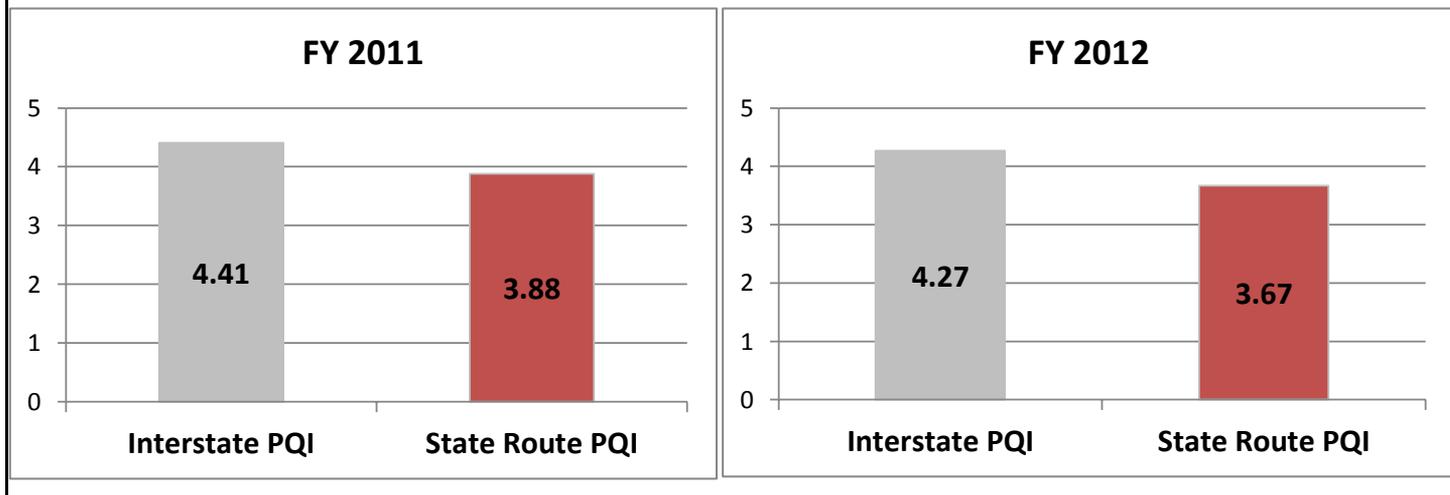


TDOT MEASUREMENT REPORT

Tennessee Roadway Pavement Quality Index

Transportation System	Variance from Target: N/A	Desired Trend:
Performance Standard: For interstate routes, 100% of roadway miles have a PQI above 3.5 and 0% of the miles have a PQI less than 2. For state routes, 96% of roadway miles have a PQI above 3.5 and 0% have a PQI less than 2.	Description: TDOT determines the schedule for road resurfacing based on a Pavement Quality Index (PQI) standard. The index is on a scale of 1 to 5, with 1 being low (in need of resurfacing) and 5 being high (not a priority for resurfacing). The PQI is used to determine annual spending priorities but is not the only factor used to select resurfacing candidates. The PQI is calculated based on the Pavement Distress Index (PDI) and Present Serviceability Index (PSI). The PDI encompasses the largest portion of this index because Pavement Distresses indicate current problems and future deterioration of the roadway surface.	
Target: An annual target was not set for this measure.	Analysis: Since distress data is collected every other year, the FY 2012 overall Pavement Quality Index is a composite of the calendar years 2010 and 2011 data cycles. Tennessee's statewide average PQI provides data for the Interstate system and the State Route system. The State's PQI is above the standard level of performance desired for both roadway systems even though performance on both systems declined slightly.	
Historical Performance: Prior results are available from the Materials and Tests Division. FY 2010 PQI (CY 2009): 4.07 (combined results for Interstate and State routes) FY 2011 PQI (CY 2010) Interstate routes: 4.41 State routes: 3.88	Each agency responsible for maintaining roadways faces the problem of insufficient funding to perform all of the necessary repairs on pavement sections. Some states use a pavement rating system that is based solely on visible surface distresses, while others use an index based on ride quality to evaluate pavements and to select projects. Increasingly, many states including TDOT use a combination of distress and ride quality. The Pavement Quality Index for pavements incorporates aspects of (1) ride quality and (2) surface distress to evaluate pavement performance and identify sections with a need for rehabilitation or maintenance. Using both key factors is a more comprehensive approach to help TDOT set priorities and choose projects for improvement.	

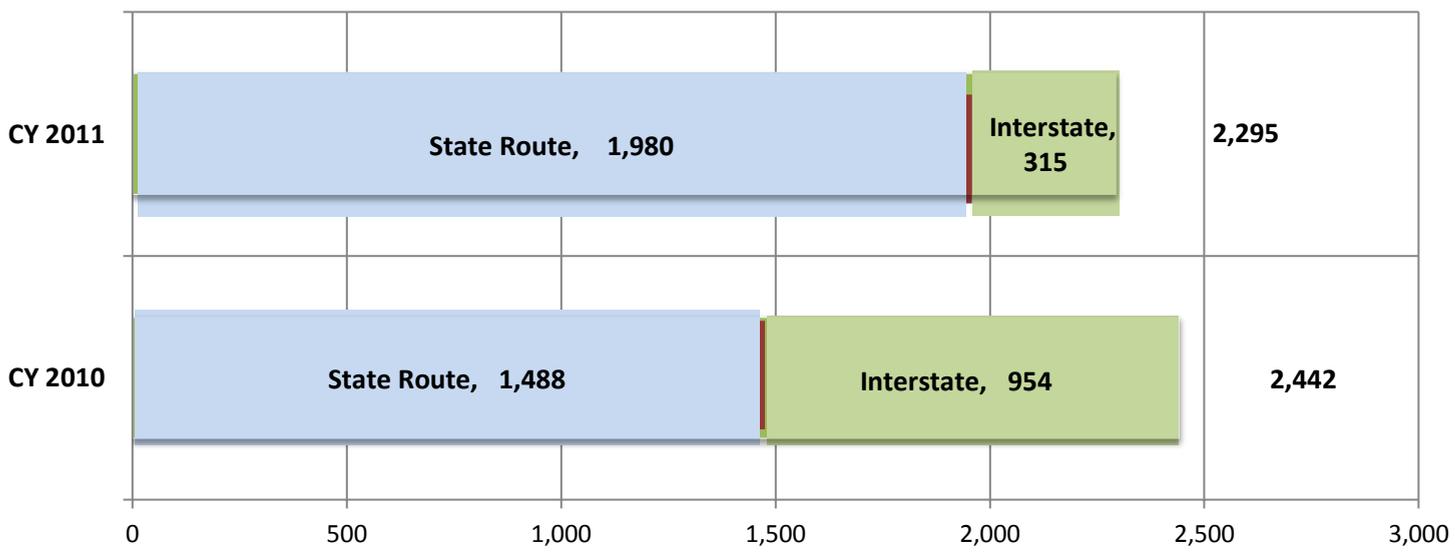
Pavement Quality Index



TDOT MEASUREMENT REPORT
Highway Lane Miles Receiving a Preservation Treatment

Transportation System	Variance from Target: N/A	Desired Trend: ↗
Performance Standard: A standard was not set for this measure.	<p>Description: TDOT's pavement preservation program focuses on maintaining and extending the life of TN roads. Pavement treatments include overlays, microsurfacing, chip seal (bituminous seal coat, scrub seal, slurry seal), crack seal, and other treatment types.</p> <p>Results are based on work performed by contractors, as well as by State Maintenance Forces. The majority of lane mile resurfacing is done by contractors selected through competitive bidding (Let) as part of TDOT's annual resurfacing program. Paving of lane miles is also routinely included as part of multi-faceted highway construction projects (included in construction). Repair resurfacing of lane miles may be performed by contractors (In-Place) or in-house by TDOT (Maint Forces).</p>	
Target: An annual target was not set for this measure.	<p>Analysis: TDOT has responsibility for 13,877 miles of Tennessee roadway; 1,104 miles are interstate and 12,773 miles are state routes. This equates to over 36,000 lane miles; if a roadway has two lanes, the number of lane miles is double the roadway miles.</p>	
Historical Performance: Prior results are available from the Construction Division.	<p>The overall total number of treated lane miles spiked in CY 2009, dropped significantly in CY 2010, and continued to decline in CY 2011.</p> <p>CY 2009 Total Treated Lane Miles: 3,460 CY 2010 Total Treated Lane Miles: 2,442 CY 2011 Total Treated Lane Miles: 2,295</p>	
<p>Calendar Year (CY) 2009 State Route treated lane miles: 2,535 Interstate treated lane miles: 925</p> <p>Calendar Year (CY) 2010 State Route treated lane miles: 1,488 Interstate treated lane miles: 954</p>	<p>Differences over the last few years have been partially due to funding via the 2009 American Recovery and Reinvestment Act, which led to hundreds of resurfacing projects being let to contract statewide.</p> <p>The number of route lane miles receiving a treatment on State routes increased in CY 2011, while it decreased on Interstates.</p> <p>State Routes: 1,980 (increase of 500 lane miles; 10-year average: 2,043) Interstates: 315 (decrease of 639 lane miles; 10-year average: 420)</p> <p>Applying pavement preservation treatments can improve pavement ride quality, user satisfaction, and driver safety. In addition, treatments reduce overall life-cycle costs because they are more economical than rehabilitating or reconstructing existing pavements.</p>	

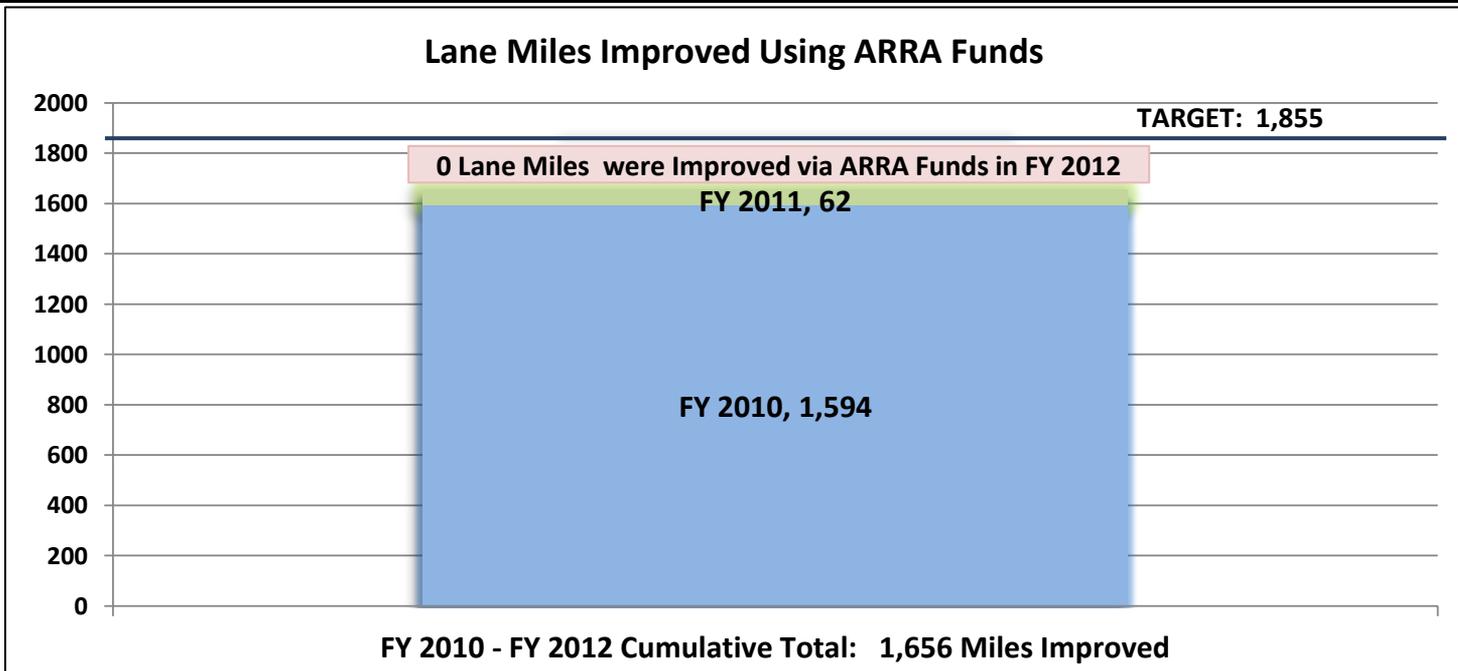
Lane Miles Receiving Preservation Treatment



TDOT MEASUREMENT REPORT

Transportation Infrastructure Improvements Accomplished with ARRA Funds - Number of Lane Miles Improved

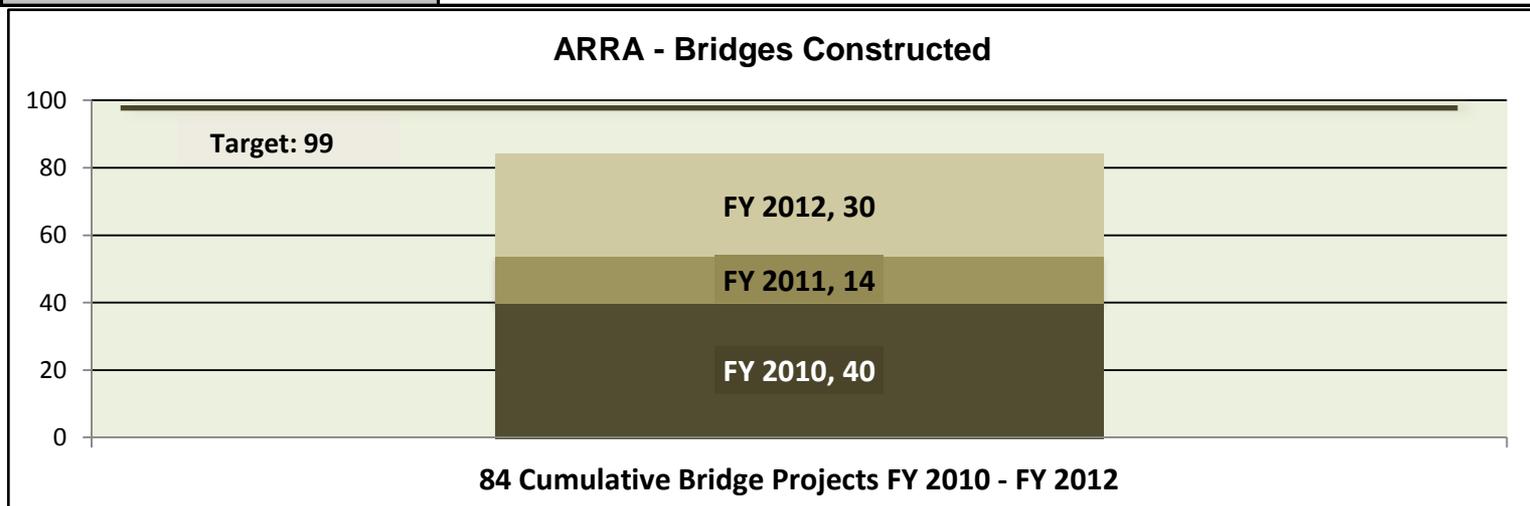
Transportation System	Variance from Target: -11%	Desired Trend:
Performance Standard: 100% of ARRA project lane miles will be improved by June 30, 2012.	Description: This measure of the number of lane miles improved using funding made available by the 2009 American Recovery and Reinvestment Act (ARRA). This measure reflects only ARRA projects selected by TDOT and does not include projects selected by local governments or projects developed with ARRA discretionary funds. Project data is reported cumulatively as of the fiscal year end-date in which the project is completed as defined in the Recovery Act Data System (RADS).	
Target: A total of 1,855 miles will be improved by the end of FY 2012	Analysis: No additional lane miles were improved on Tennessee's transportation system in FY 2012 using ARRA funds. By the end of FY 2011, ARRA-funded projects had improved 1,656 lane miles of Tennessee's highway system through resurfacing, widening, and reconstruction activities. This is 62 additional miles from the 1,594 miles improved during FY 2010. A majority of resurfacing projects were able to start and finish quickly so many more miles were improved in FY 2010 than in FY 2011.	
Historical Performance: TDOT began collecting data for this measure after the 2009 American Recovery and Reinvestment Act (ARRA) was passed. In FY 2010: 1,594 In FY 2011: 62 additional miles for a total of 1,656 miles improved	<p>To provide travelers across the state with a smoother riding surface can additionally reduce traffic congestion, increase roadway capacity, and improve safety.</p> <p>Note: This measure does not include bridge replacement projects. As of April 2010, FHWA published performance measurement results based on roadway mileage from beginning to end points, without regard for the number of lanes included in any segments of roadway. Because TDOT includes each roadway lane in its calculations, the performance results reported by TDOT are higher than the numbers being calculated by the Federal Highway Administration (FHWA).</p>	



TDOT MEASUREMENT REPORT

Transportation Infrastructure Improvements Accomplished with ARRA Funds - Number of New or Replaced Bridges

Transportation System	Variance from Target: -15%	Desired Trend:																		
Performance Standard: 100% of ARRA bridge replacements completed by June 30, 2012.	Description: This is a measure of the number of bridges selected by TDOT to be (1) constructed and/or (2) replaced utilizing funding made available by the 2009 American Recovery and Reinvestment Act (ARRA). TDOT is improving the state highway infrastructure system by addressing the structural deficiency and functional obsolescence of state bridges.																			
Target: FY 2012: 99 The original estimated performance target set in TDOT's FY 2012 Strategic Plan was "80". It was adjusted to "99" after a more thorough review of project plans.	Analysis: In FYs 2010-2012, a total of 84 bridges were repaired or replaced through the use of ARRA funds. This is 15 bridges short of accomplishing the revised performance target of 99, however, the repairs and replacements are in progress and are expected to be completed by 9-30-13. Some State projects have more than one bridge; therefore, this measure counts number of bridges, not projects. There are 7 projects ongoing that have the 15 "outstanding" bridges in them. They include actual bridge projects, as well as widening and new construction projects. They are located in the following counties:																			
Historical Performance: TDOT began collecting data for this measure after the 2009 American Recovery and Reinvestment Act (ARRA) was passed. FY 2010: 40 FY 2011: 14 additional bridges for a total of 54	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">County</th> <th style="text-align: right; border-bottom: 1px solid black;"># of Bridges</th> </tr> </thead> <tbody> <tr><td>Campbell County</td><td style="text-align: right;">1</td></tr> <tr><td>Coffee County</td><td style="text-align: right;">1</td></tr> <tr><td>Gibson County</td><td style="text-align: right;">3</td></tr> <tr><td>Marshall County</td><td style="text-align: right;">4</td></tr> <tr><td>Polk County</td><td style="text-align: right;">4</td></tr> <tr><td>Dickson County</td><td style="text-align: right;">1</td></tr> <tr><td>Shelby County</td><td style="text-align: right;">1</td></tr> <tr style="border-top: 1px solid black;"><td>Total Bridges</td><td style="text-align: right;">15</td></tr> </tbody> </table> <p>This measure reflects only ARRA bridges selected by TDOT, including those on locally-owned roads. Project data is reported cumulatively as of the fiscal year end-date in which the project is completed as defined in the Recovery Act Data System (RADS).</p> <p>As of April 2010, the Federal Highway Administration (FHWA) was publishing performance measurement results based on stand-alone bridge replacement projects without regard to the number of bridges included in major reconstruction ARRA projects. Because TDOT includes each bridge in measurement calculations, TDOT's results are higher than the calculations performed by FHWA.</p>		County	# of Bridges	Campbell County	1	Coffee County	1	Gibson County	3	Marshall County	4	Polk County	4	Dickson County	1	Shelby County	1	Total Bridges	15
County	# of Bridges																			
Campbell County	1																			
Coffee County	1																			
Gibson County	3																			
Marshall County	4																			
Polk County	4																			
Dickson County	1																			
Shelby County	1																			
Total Bridges	15																			

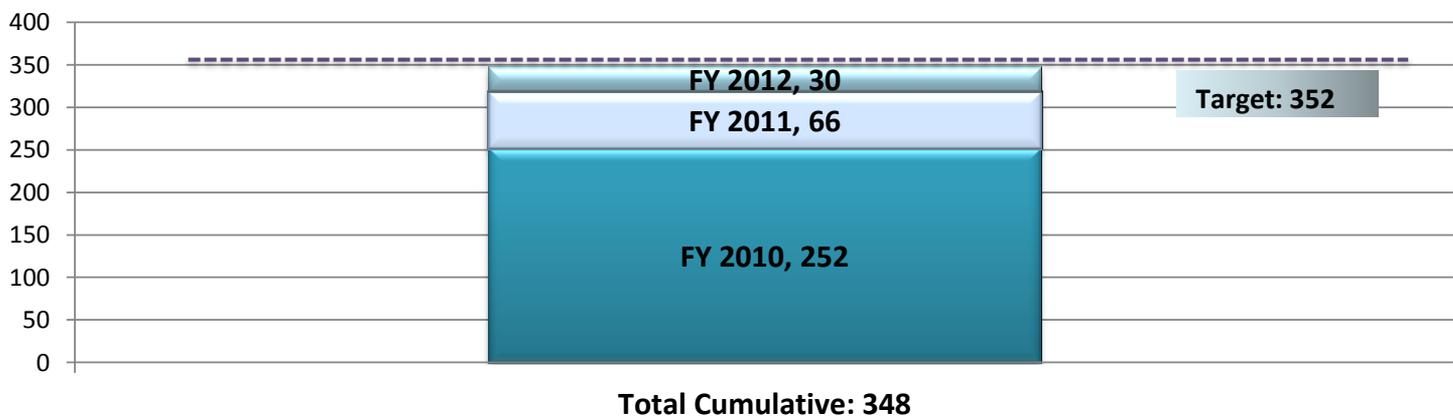


TDOT MEASUREMENT REPORT

Transportation Infrastructure Improvements Accomplished with ARRA Funds - Number of Buses and Vans Purchased in Non-Urbanized Areas

Transportation System	Variance from Target: -1%	Desired Trend:
Performance Standard: 100% of ARRA funded vehicles purchased by February 2012.	Description: This is a measure of the cumulative number of public transit vehicles (buses, vans, support vehicles) purchased for non-urbanized areas utilizing funding made available by the 2009 American Recovery and Reinvestment Act (ARRA). These vehicles were obtained to replace older vehicles that have reached the Federal Transit Administration's definition of "useful life" and to increase the number of usable vehicles available in TN's public transit fleet. The ARRA program ends in 2012.	
Target: FY 2012: 352	Analysis: From FY 2010 through the end of FY 2012, 348 buses, vans, and other public transit vehicles had been purchased using Recovery Act Funds. 30 additional vehicles were purchased in FY 2012. Final results were slightly lower than the target of 352 vehicles. Purchases were made in an effort to improve the public transportation infrastructure within non-urbanized areas. These vehicles will increase the total number of public transit vehicles available for use and may also improve public safety by replacing high mileage vehicles that may be less reliable with newer vehicles.	
Historical Performance: TDOT began collecting data for this measure after the 2009 American Recovery and Reinvestment Act (ARRA) was passed. FY 2010: 252 FY 2011: 66 additional vehicles purchased for a total of 318	<p>This measure indicates only one component of how the State has benefited from the use of ARRA funds. For example, this measure does not differentiate between the costs of various vehicle types (i.e., passenger van, bus, hybrid) even though the total number of vans that could be purchased for a set amount of money would be higher than the number of buses that could be purchased for the same money.</p> <p>This measure only captures the ARRA-funded portion of TDOT's overall transit improvement program via projects administered by TDOT. This performance measure does not include any data for Tennessee's urbanized areas or projects developed with ARRA discretionary (TIGER) funds.</p>	

ARRA - Buses and Vans Purchased



Performance Measurement Perspective:

WORKFORCE

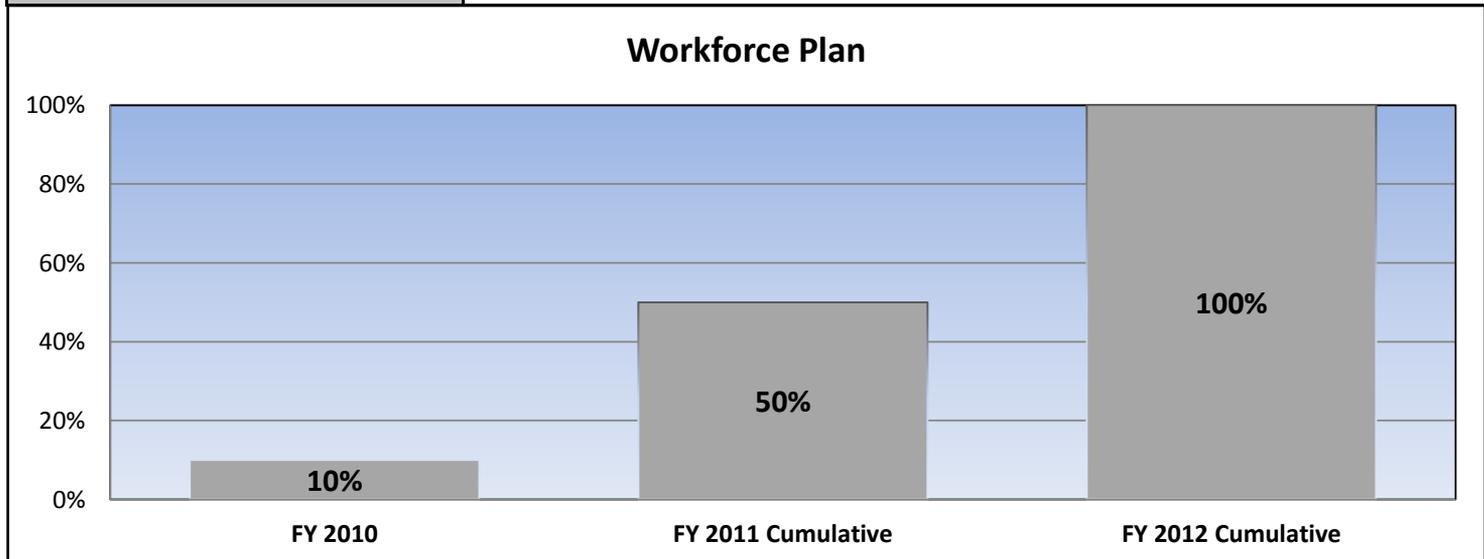
The focus of this perspective is on the quality and culture of the workplace environment and TDOT's capacity and capability to achieve our mission and strategic direction. This includes having the right people in the right jobs and the resources to achieve high quality results.

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TDOT MEASUREMENT REPORT

Percent of TDOT Strategic Workforce Plan Developed

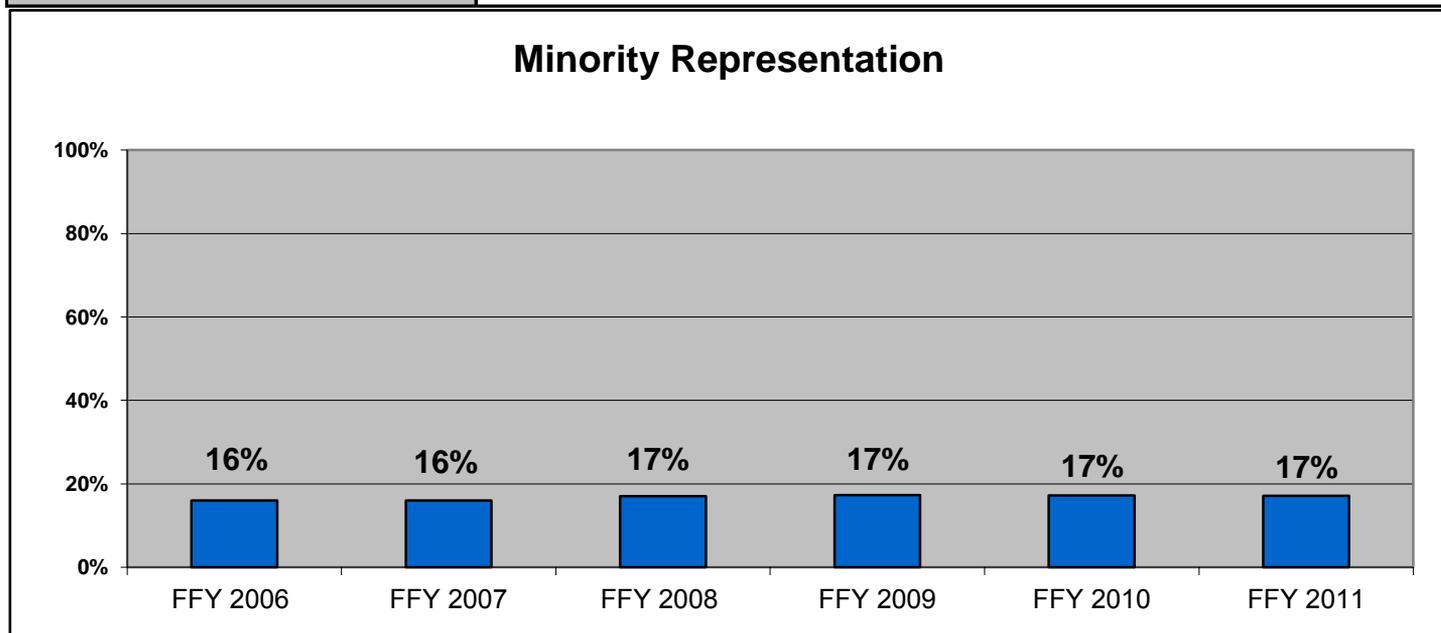
Workforce	Variance from Target: 0%	Desired Trend:
Performance Standard: By FY 2012, a comprehensive TDOT workforce plan will be completed.	<p>Description: Workforce Planning is the process used to manage the staffing levels and skill mix needed to meet an agency's strategic mission. It involves actively managing to get "the right people in the right place at the right time".</p> <p>Workforce Planning provides a systematic assessment of agency staffing needs and actions to address these needs. TDOT's strategic workforce planning components include a workforce profile, analysis of staffing trends, identification of gaps, and recommendations for actions to improve the agency's workforce.</p>	
Target: 100% complete in FY 2012		
Historical Performance: FY 2010: 10% FY 2011: 50%	<p>Analysis: As of FY 2012, TDOT had completed key components for an agency workforce plan. Demographic data was collected on TDOT's workforce, literature from other states was reviewed for best practices, the potential impact of federal surface transportation reauthorization legislation on the agency was assessed, and TDOT identified potential strategies and actions for improving TDOT's workforce. The basic framework for TDOT's workforce planning is based on models used in Texas, Tennessee Department of Human Resources, and Washington.</p> <p>A comprehensive Employee Retirement Eligibility Analysis was completed in March 2012 as part of the strategic workforce planning effort. Functional areas across the organization were provided retirement eligibility statistics to help them plan for potential loss of critical skills and knowledge due to pending retirements.</p> <p>Changes in workforce processes due to passage of the TEAM Act by the General Assembly, as well as TDOT's Top to Bottom Review recommendations require a review and update to TDOT's strategic workforce planning components.</p>	



TDOT MEASUREMENT REPORT

Percent of Minority Representation in TDOT's Workforce

Workforce	Variance from Target: N/A	Desired Trend:
Performance Standard: To maintain or increase minority representation to within 5% of the minority representation in the U.S. Census' Civilian Labor Force Data	Description: This measure looks at the percent of minorities, including all ethnicities, in TDOT's current workforce. This percent is compared to the percent of minorities identified by the U.S. Bureau of the Census' Civilian Labor Force Data for the State of Tennessee. Parity is achieved when the percent of minorities within TDOT's workforce equals or exceeds the percent of non-whites within Tennessee's population. Data is reported for this measure based on the federal fiscal year (FFY).	
Target: An annual target was not set for this measure.		
Historical Performance: Prior results are available from TDOT's Civil Rights Office. Federal Fiscal Year 2010: 17%	Analysis: As of June 30, 2012, 17.1% of TDOT's workforce was comprised of minorities. The total minority population for TDOT's workforce has remained around 17% for the last several years. TDOT's Civil Rights Office established long-term Affirmative Action goals in the agency's 2007-2012 Federal Affirmative Action Plan. The agency's goals were to increase minority and women representation to 20% and 23%, respectively, by October of 2012 (the end of FFY 2012). These goals were set based on a standard to have agency minority representation that is within 5% of the 2000 Census' Civilian Labor Force percentage of 20%. TDOT's Civil Rights Office continues to compare the agency's workforce against an Affirmative Action Census Data Supplement to the 2000 Census. More recent comparable Census data is still not available to employers and is not expected to be published until the end of 2012. TDOT can increase workforce diversity by recruiting qualified minority employees, monitoring the new hire and promotion opportunities for minorities, and promoting the advantages of diversity within the workforce.	

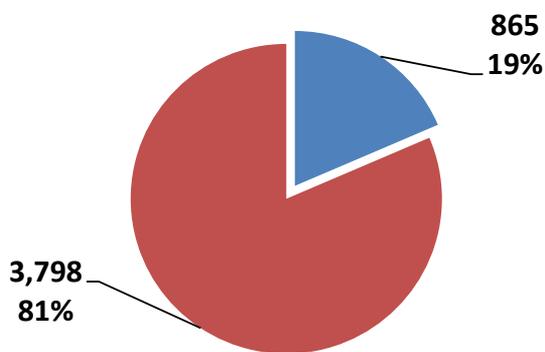


TDOT MEASUREMENT REPORT

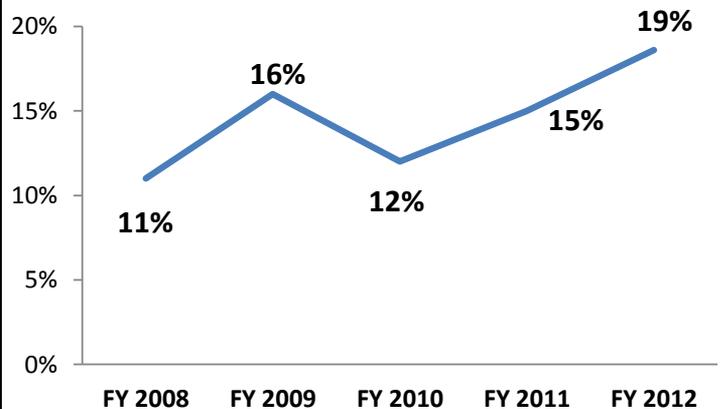
Agency Vacancy Rate

Workforce	Variance from Target: N/A	Desired Trend:
Performance Standard: Track and report TDOT's vacancy rate monthly	Description: The agency vacancy rate is the percentage of all vacant positions at a given time. Results are used for succession planning, as well as budgetary planning. TDOT monitors its vacancy rate to try to ensure that an adequate number of employees exist to successfully accomplish the agency's mission. This data is reported on a monthly basis to the Chief of TDOT's Administration Bureau.	
Target: An annual target was not set for this measure.	Analysis: TDOT's overall vacancy rate rose again in FY 2012 to 19%. There has been a steady increase over the last few years in the number of positions within the agency that have not been filled. Data is based on 4,663 authorized/budgeted positions and 865 vacancies as of July 1, 2012. This is an increase from 712 vacancies at the end of FY 2011.	
Historical Performance: This information is available from TDOT's Human Resources Division.	<p>As the workforce decreased in size, TDOT's leaders have had to assess how it could best continue to accomplish the agency mission and serve users of the state's transportation system. In many instances, work has been reassigned to remaining employees who compensate for personnel losses. TDOT also increased its use of consultants to supplement existing staff and to help the agency provide services.</p> <p>TDOT tries to ensure that any reductions in products and services provided are minimal. Criteria for maintaining a sufficient number of employees depends on the skills that current employees have and the agency's needs and requirements for them.</p> <p>TDOT published its Top to Bottom Review results in February 2012. Shifts in staffing for efficiency will focus on less reliance on consultants, as well as on enhancing internal staff capabilities.</p>	

**TDOT FY 2012
Filled and Vacant Positions**



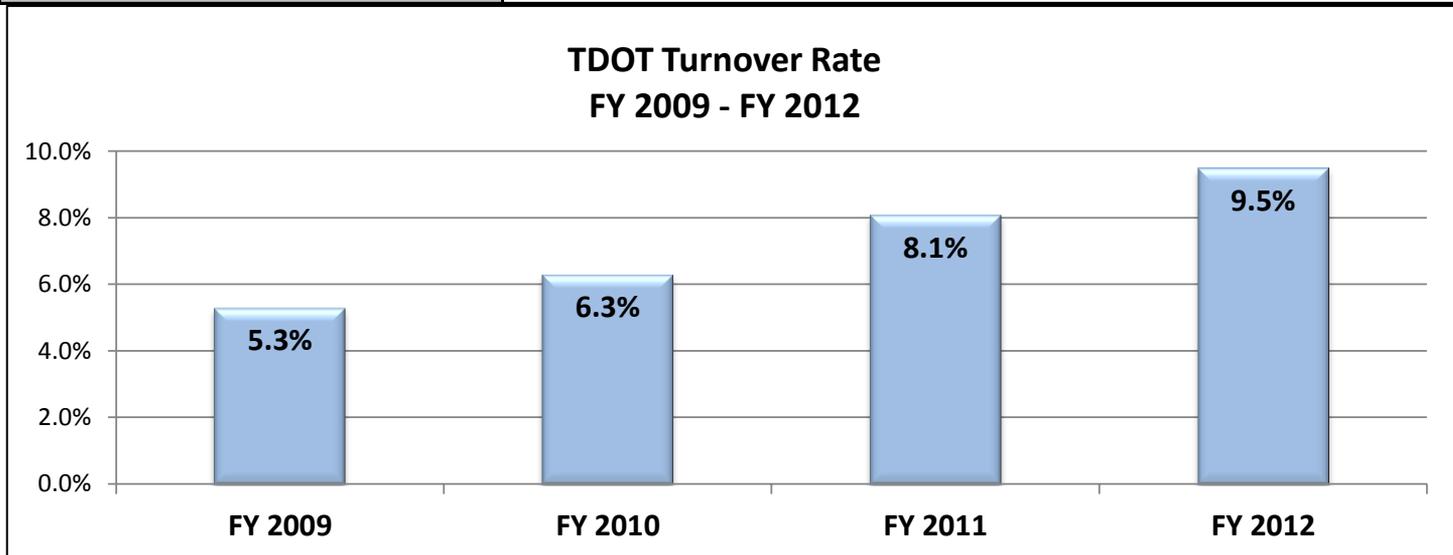
**TDOT Agency Vacancy Rate
FY 2008 - FY 2012**



TDOT MEASUREMENT REPORT

Agency Turnover Rate

Workforce	Variance from Target: N/A	Desired Trend:
Performance Standard: Track and report TDOT's annual turnover rate	Description: The employee turnover/separation rate reflects the percent of employees the department loses on both a voluntary and involuntary basis. Analysis of employee turnover can assist with pinpointing why employees are leaving and what can be done to retain the best employees. Reducing turnover can decrease operational costs and help TDOT provide services at the appropriate level of output with a high level of public satisfaction.	
Target: An annual target was not set for this measure.	Analysis: The statewide employee turnover rate for July 1, 2011 - June 30, 2012 was 9.5%. TDOT had 369 separations of 3,883 employees in FY 2012.	
Historical Performance: This information is available from TDOT's Human Resources Division.	<p>TDOT's turnover rate has almost doubled from FY 2009 and it continues to rise. Voluntary turnover includes resignations and retirements, while involuntary turnover reflects dismissals. Both types of turnover are included in this measure. Retirements can be expected to continue to impact turnover significantly. Approximately 50% of TDOT's employees are eligible to retire by 2017.</p> <p>Due to economic downturns, a modified hiring freeze was implemented at TDOT in January 2007. All TDOT positions with the exception of those in field maintenance were "frozen" when they were vacated.</p>	



TDOT MEASUREMENT REPORT

Number of TDOT Employee On-the-Job Injuries

Workforce	Variance from Target: N/A	Desired Trend:
Performance Standard: Reduce the number of on-the-job employee injuries and the amount of work time lost each year	Description: This measure captures all reported work-related illnesses or injuries needing medical treatment, beyond first aid, by a licensed physician. An annual report of work-related injuries and time spent out of work is sent to the U.S. Department of Labor, Occupational Safety & Health Administration (OSHA) Division.	
Target: An annual target was not set for this measure.	Analysis: The total number of accidents reported for Calendar Year 2011 was 255. This is down from the spike in CY 2010 of 337. Results document minor injuries such as slips and falls, as well as more severe injuries and fatalities. Two TDOT employees were killed in the line of duty in calendar year 2011. The agency's Work Zone Safety Committee is actively working to address how to prevent tragedies like these from happening again.	
Historical Performance: This information is available from TDOT's Human Resources Division. Calendar Year 2008: 299 Calendar Year 2009: 262 Calendar Year 2010: 337	<p>TDOT strives to proactively maintain a safe working environment and prevent accidents and injuries. TDOT continues to focus training efforts on safety and prevention of injuries. The agency also continues to provide on-going training for directors, managers, supervisors, and clerks on how to respond to job-related injuries (legal procedures, medical care, paper work, etc.).</p> <p>A safety team comprised of employees from TDOT headquarters, as well as each Region, tracks training and safety data for the agency. TDOT can utilize this data to identify areas that have excessive injury rates and to make safety improvements.</p>	



APPENDIX

TDOT's Five Perspectives for Measuring Performance

TDOT's five performance perspectives are:

- **Customer Perspective**

This assessment focuses on the customer perceptions of the quality of goods and services, the effectiveness of delivery, and overall customer service and satisfaction.

- **Financial Perspective**

The assessment in this perspective considers the organizational budget and funding information and issues such as the return on investment, efficiency of TDOT's programs and services, and efforts to reduce or contain costs.

- **Organizational Effectiveness Perspective**

This perspective focuses on key internal processes, TDOT's use of innovative technology and management practices to achieve intended results. Assessing TDOT's ability to achieve intended results includes monitoring the effectiveness of processes, examining productivity, and scheduling performance and efficiency.

- **Transportation System Perspective**

This perspective assesses the performance of the statewide transportation system with focus on the operation, preservation and maintenance of the system.

- **Workforce Perspective**

The focus of this perspective is on the quality and culture of the workplace environment and TDOT's capacity and capability to achieve our mission and strategic direction. This includes having the right people in the right jobs and the resources to achieve a high-quality result.

TDOT's FY 2012 Budget Allotment Codes and Program Areas

401 Headquarters This program provides funding for the commissioner's office, legislative services, and specific divisions and offices under the direction of the commissioner. Civil Rights, Community Relations, Legal, and Internal Audit provide general management and staff support to the total department. The divisions of Project Management, and Aeronautics oversee activities and capital improvements projects related to the expansion and betterment of Tennessee's transportation infrastructure. Related activities within each of these divisions are also funded in this program.

The sales tax collected on gasoline and diesel fuel is distributed through the Transportation Equity Fund (TEF) (Tennessee Code Annotated (TCA) 67-6-103) under this program. This program also provides funding for the Facilities Revolving Fund mandated by the Department of Finance and Administration, as well as payment of Risk Management Fund premiums assessed by the Department of Treasury for insurance claim awards. The state uses an actuarial estimate of the value of projected property losses, as well as the type of building construction, occupancy usage, fire protection class, and exposure information to determine each department's annual premiums.

402 Bureau of Administration In accordance with TCA 4-3-2303, the bureau provides funding for the administrative activities of the department in the areas of Finance, Central Services, Human Resources (HR), Information Technology (IT), and Strategic Planning. These areas provide general management support to the department. The bureau also provides funding for the Governor's Highway Safety Office (GHSO) and the funds associated with managing the state and community highway safety funds allocated under Title 23 USC, Section 402 and Chapter 4.

403 Bureau of Engineering The bureau provides for the administration and operational activities related to transportation programming, roadway and bridge design and construction, right-of-way acquisition, and scheduling of all preconstruction activities of TDOT's construction work. It also provides for development of construction standards, administration, and related activities of highway and bridge maintenance, regulation and control of traffic, regional outdoor advertising control, and maintenance of acceptable materials standards. This program includes the funding requirements for the construction or replacement of plant facilities throughout the state that accommodate the various activities of the department such as costs for land and site development, fencing, drainage, building, and completing major repairs and renovations of existing facilities.

405 Bureau of Environment and Planning The bureau provides funding for transportation planning, environmental administrative, and related operational activities of the department. Functions include Environmental Compliance, Highway Beautification, Environmental Planning and Permitting, Statewide and Regional Transportation Planning, GIS Mapping and Data, Research and Policy, Safety Planning, Conceptual and National Environmental Policy Act (NEPA) Planning, and Multimodal Transportation Resources.

412 Field Engineering This code provides funds for the administrative costs and salaries of engineering and administrative personnel in each of the four regional offices and engineering personnel in each of the 22 district locations throughout the state. The code also provides funds for the associated activities of field personnel that are responsible for the preliminary engineering, utility relocation, right-of-way, construction, and maintenance areas that are under the statewide system of highways. Major areas of operational responsibilities include right-of-way, bridge maintenance, construction, intelligent transportation systems, materials testing, and traffic engineering.

418 Field Construction This code funds salaries and benefits for all construction units and their related activities. This occurs mainly in the areas of road and bridge construction within each of the four regions.

419 Field Maintenance Operations This code is the mechanism whereby the state's large investment in the highway system is protected. This code funds bridge repair services and the routine maintenance, marking, and resurfacing of state highways. These activities are performed by departmental personnel assigned to district and regional offices throughout the state, as well as through awarded contracts. Costs charged to this code include salaries, equipment usage, and materials. TDOT also provides funding for the maintenance of designated state park roads through this code.

430 Equipment Purchases and Operations In accordance with TCA 4-3-2303, the code provides funds for administrative costs of the region and district garages that provide proper mobile equipment maintenance. Inventory and equipment costs are reallocated to other codes based on usage. This code also provides funds to replace presently owned mobile equipment on the basis of expiration of the useful life of each vehicle and for the purchase of additional equipment to meet new service and maintenance responsibilities.

TDOT Performance Management Glossary of Terms

Actual. A real (factual, as opposed to planned or estimated) value

Algorithm. A mathematical expression(s) that describes precisely how results for a measurement are computed from underlying data

Allotment Code. A Budget code assigned to state agency programs

Baseline. A set of data used as a reference point for performance measures against which changes over time can be measured

Benchmark. The process of comparing one set of measurements to another
This may be done for various reasons, such as to determine trends in a process over time, or to compare one organization's efficiency to another's.

Business Plan. A tool that organizations can use to align themselves with the agency's overall strategic direction, help set realistic goals, allocate resources, measure results of actions, and make decisions

Category. Strategic perspectives that organizations can use to make balanced assessments of progress and results
TDOT's five performance perspective categories are: Customer, Financial, Organizational Effectiveness, Transportation System and Workforce.

Desired Outcome. A vision of what a group wants to achieve and where success is realized

Estimate. Expected level of performance or target to achieve by the end of a reporting cycle

Federal Fiscal Year (FFY). A one year budgetary and accounting cycle used by the United States Government that begins on October 1 and extends to September 30 of the following calendar year

If a fiscal year covers more than one calendar year it is designated by the calendar year in which it ends.

Fiscal Year (FY). An entity's reporting year, covering a 12 month accounting period
See *State Fiscal Year*

Performance-based Budget. A budget that incorporates program statements and corresponding measures of performance. TDOT creates an annual performance-based budget to comply with the TN Government Accountability Act of 2002.

Performance Measure. A quantitative or qualitative indicator used to assess performance, such as the dimension, capacity, quantity, or amount of organization activities or other attributes that can help organizations monitor progress towards goals and conduct other performance improvement activities

Types of measures include input, output, outcome, efficiency, and quality measures.

Performance Measurement. The structured and systematic assessment of an organization's progress in meeting its goals

Program. As defined by the 2002 Government Accountability Act, it is "a set of activities undertaken in accordance with a plan of action organized to realize identifiable goals and objectives. Such program shall be a budget unit included in the budget document for which an appropriation is provided in the general appropriations act."

Outcome. An indicator of the actual impact or public benefit of a program, service, or activity

Output. Actual service or product delivered by a state agency

Standard. The desired performance level for a program, measured by output or outcome, which also represents the highest level of performance that can be achieved

State Fiscal Year. Tennessee State Government uses a one-year budgetary and accounting cycle that runs from July 1 of one calendar year to June 30 of the next calendar year. If a fiscal year covers more than one calendar year it is designated by the calendar year in which it ends.

Strategy. Planned actions specifically developed and initiated to support achievement of an organization's strategic agenda and goals over time

Status. An indicator of whether or not a measure met a predetermined target for performance

Target. The highest level of performance on a measure that an organization can reasonably strive to achieve, in order to be labeled successful, given existing and budgeted resources

Government Accountability Act of 2002. A Tennessee law mandating State agencies to submit a strategic plan that identifies statutory objectives; obstacles and means of overcoming them; means of maximizing revenues and avoiding costs; future challenges and opportunities; mandated and optional services; and performance standards and measures

Variance. The difference between two data values which are typically measures of the same parameter at different points in time, or a comparison of the planned value for the parameter versus the actual value