



Connecticut Department of Transportation

Quarterly Performance Measures Summary

2014 Quarter 3 (July 1 to September 30)

Legend

- ▲ Performance is trending in positive direction
- Performance is relatively constant
- Performance is trending in a negative direction
- ✓ Target has been met
- - - Target Line
- Trend Line

Performance Measure	Result	Period	Target	Trend / Score	Analysis of Trend
Rate of Annual Highway Fatalities per 100 million vehicle miles traveled (VMT), CTDOT	0.84	CY12	0		<p>In 2012, there were 248 reported fatal motor vehicle crashes in which 264 persons were killed. The 264 fatality total includes drivers, passengers, pedestrians and cyclists. The 2012 Connecticut fatality rate was 0.84 fatalities per 100 million vehicle miles traveled (VMT). The three year rolling average for the 2010-2012 time period was 0.86 fatalities per 100 million VMT. The 2012 national fatality rate was 1.13 fatalities per 100 million VMT. The Connecticut rate continues to be lower than the national rate.</p>
Rate of Annual Highway Fatalities per 100,000 population	7.35	CY12	0		<p>The population for Connecticut in 2012 was 3,590,347. The 2012 Connecticut fatality rate was 7.35 fatalities per 100,000 population. The 2012 national fatality rate was 10.69 fatalities per 100,000 population. The Connecticut rate continues to be lower than the national rate.</p>
Percent of Seat Belt Usage	85.1%	CY14	90.0%		<p>The seatbelt use rate has seen a slight decrease from last year. The Highway Safety Office will continue working with law enforcement agencies statewide with the "Click it or Ticket" campaigns in May and November to ensure a shift in the trend toward the goal of 90%.</p>
Percent of State Maintained Roads with Acceptable or Better Ride Quality (NHS Only)	85.0%	CY13	Increase Percentage		<p>The large increase in this value reflects a combination of an extensive 2012 pavement preservation program on National Highway System (NHS) roads, and, to a lesser degree, improvements in data collection procedures implemented in 2013. The NHS, comprising roadways important to the nation's economy, defense, and mobility, was expanded from 963 to 1392 centerline miles by federal legislation (MAP-21). All ride quality data for this performance measure have been retroactively recalculated accordingly. (For More information on Ride Quality in Connecticut Click Here)</p>
Percent of State Maintained Roads with Acceptable or Better Ride Quality (Entire Network)	78.5%	CY13	Increase Percentage		<p>The large increase in this value reflects an extensive 2012 pavement preservation program on the National Highway System (NHS) as well as improvements in data collection procedures implemented in 2013. The entire roadway network in Connecticut consists of approximately 3734 state-maintained routes and roads and includes both NHS and non-NHS roadways. (For More information on Ride Quality in Connecticut Click Here)</p>
Percent of CTDOT Roadway Bridges in a State of Good Repair	91.7%	CY13	95.0%		<p>The percentage of bridges in a State of Good Repair has increased due to additional staff and budget resources allocated to bridges over the past couple years and improved project delivery time from initial project identification. An additional 3 to 5 years is needed to fully reflect the impact of the allocation of these resources.</p>



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Number of Bridge Work Items Completed	433	CY14-Q3	Maximize Completion of Work Items		There was a 10% increase in the number of line items completed in the 3rd quarter of 2014 as compared to the 2nd quarter of 2014.
Number of Backlogged Bridge Work Items	4,162	CY14-Q3	Strive for Zero Growth in Backlog		Backlogged bridge work items have only increased by 0.5% during the 2nd quarter of 2014 but are up by 3.5% since the 2nd quarter of 2013. There was a 7.3% increase in the number of bridge work items received in the first three quarters of 2014 as compared to the same time during 2013.
Percent of Funds Expended for Bicycle/Pedestrian Access	1.23%	FY14	1%		Thirty-eight projects awarded in SFY 2014 included elements for pedestrians or bicyclists, such as sidewalks, ramps, pedestrian signals, push-buttons, signs, and pedestrian/bicycle trails. The total dollars being expended for these items is approximately \$7.3 million, which is approximately 1.23% of the total funds awarded for the construction, maintenance and repair of roads in the state. The 1% target, established by Public Act No. 09-154 in 2009, has been achieved each year and the Department will continue to strive to exceed this target on an annual basis.
Mean Distance Between Failures (Miles) - Locomotives	19,400	CY14-Q3	35,000		MDBF for P-32 locomotives on the New Haven Line fell short of the target this quarter. With delays in the completion of the overhaul program for the P-32 locomotives, the trend has been negative.
Mean Distance Between Failures (Miles) - Coaches	479,257	CY14-Q3	295,000		MDBF for coaches on the New Haven Line was above the target this quarter. This trend is in a positive direction and is a direct result of an overhaul program on Bombardier coaches completed in 2010.
Mean Distance Between Failures (Miles) - Electric Multiple Unit (EMU) M2	63,899	CY14-Q3	60,000		MDBF for the fleet of M2 Electric Multiple Units (EMU's) on the New Haven Line was above the target this quarter. A reduced number of M2 EMU coaches will continue to be used in revenue service through mid-2015 when the remaining coaches will be retired.



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Mean Distance Between Failures (Miles) - Electric Multiple Unit (EMU) M4	27,035	CY14-Q3	60,000		<p>▲ Preferred Trend</p> <p>MDBF for the fleet of M4 EMU's on the New Haven Line fell short of the target this quarter. A reduced number of M4 EMU coaches will continue to be used in revenue service through mid-2015 when the remaining coaches will be retired.</p>
Mean Distance Between Failures (Miles) - Electric Multiple Unit (EMU) M6	69,532	CY14-Q3	60,000		<p>▲ Preferred Trend</p> <p>MDBF for the fleet of M6 EMU's on the New Haven was above the target this quarter. A reduced number of M6 EMU coaches will continue to be used in revenue service through mid-2015 when the remaining coaches will be retired.</p>
Mean Distance Between Failures (Miles) - Electric Multiple Unit (EMU) M8	331,904	CY14-Q3	280,000		<p>▲ Preferred Trend</p> <p>Three hundred and eighty (380) M8 rail cars have been delivered with 372 M8s tested, accepted and deployed in New Haven Line service (as of the end of September 2014). An additional 25 M8 Single Coaches will be delivered periodically through 2015. (Connecticut will own 274 of the M8 fleet). The investment program began in 2009 when 405 cars were ordered. The MDBF for the M8 fleet was above the target this quarter. .</p>
Percent of Rail On-Time Performance (OTP)-New Haven Line (NHL)	93.8%	CY14-Q3	93%		<p>▲ Preferred Trend</p> <p>On-time Performance (OTP) for the New Haven Line was above the target this quarter. M8 equipment reliability has improved the OTP.</p>
Percent of Rail On-Time Performance (OTP)-Shore Line East (SLE)	87.7%	CY14-Q3	95%		<p>▲ Preferred Trend</p> <p>This quarter the OTP for the Shore Line East fell below the target. Interference of other trains and late train turns were the primary reasons for late SLE trains for this quarter.</p>
Number of Rail Passengers New Haven Line (NHL)	10,267,439	CY14-Q3	10,100,253		<p>▲ Preferred Trend</p> <p>Ridership on the New Haven Line was above the target this quarter.</p>



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Number of Rail Passengers Shore Line East(SLE)	180,492	CY14-Q3	183,066	<p>▲ Preferred Trend</p>	Ridership on the Shore Line East did not meet the target for this quarter.
Average Miles Between Road Calls (Bus)	13,154	CY14-Q3	16,000	<p>▲ Preferred Trend</p>	A new target for Average Miles Between Road Calls (Bus) of 16,000 was initially established based upon a change in FTA's definitions or in their interpretation. Road call stats are performing below that target. Moving forward, the target will be re-examined to reflect those changes and real-world performance. Stats are also performing below the same quarter last year. Fleet age and a significant use of contingency fleet for emergency services might be reasons.
Average Age of Bus Fleet (State)	6.7	CY14	6	<p>▼ Preferred Trend</p>	The expected life of heavy-duty transit buses is 12 years. The State's target is a fleet with an average in-service age of six years. Older buses tend to require a higher level of maintenance to keep them operating efficiently and reliably. Variability of procurement cycles will cause variances from the goal
Average Age of Bus Fleet (Transit Districts)	8.8	CY14	6	<p>▼ Preferred Trend</p>	The expected life of heavy-duty transit buses is 12 years. The State's target is a fleet with an average in-service age of six years. Older buses tend to require a higher level of maintenance to keep them operating efficiently and reliably. Variability of procurement cycles will cause variances from the goal.
Number of CTTransit Passenger Trips	7,233,149	CY14-Q3	6,250,000	<p>▲ Preferred Trend</p>	Ridership continues to perform slightly above budget and with a slight increase compared to same quarter last year even though fares were increased.
Percent of Agreements Executed in Under 60 Days	80.77%	FY15-Q1	90%	<p>▲ Preferred Trend</p>	All results were recalculated back to FY10 Q4 to exclude agreements that went to the Office of Policy and Management and/or the State Properties Review Board, since that process alone typically takes longer than 60 days. The target was reset to reflect that change. There was a slight increase in percentage this quarter due to the mix of agreements submitted. Also, the use of the template agreements from the Attorney General's Office decreased the processing time.



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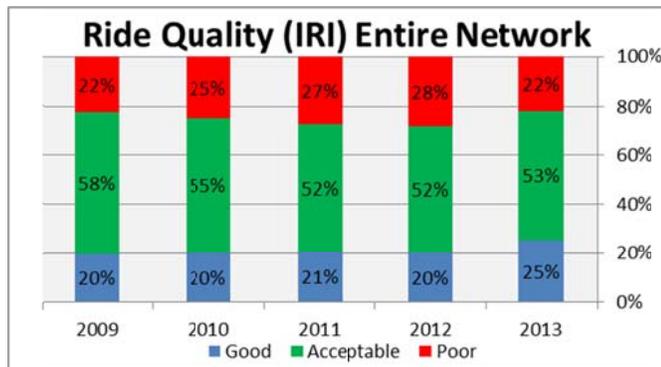
Percent of Construction Contracts Awarded within 60 Days of Bid Opening	79.0%	FY15-Q1	100%		<p>11 of 14 Construction Contracts were awarded within 60 days of bid opening.</p>
Number of Project Closeouts (Qtr)	143	FY15-Q1	100		<p>The Department is moving forward and making significant progress with the Project Closeout and Final Voucher Initiative. In the first quarter of SFY 2015, 143 projects have been closed. For SFY 2015 the goal remains at 400(100 per quarter) and we continue to decrease the backlog.</p>
Percent of Construction Contracts Completed within Budget	56%	CY14-Q3	Increase Percentage		<p>25 contracts were completed with 14 (56%) being completed within budget. For all 25 contracts the aggregate budgeted dollar value increase was 0.83%. The total completed cost of those on-time contracts was \$109.6 million which represents 81% of the total completed cost of all 25 contracts. The target is to increase the number of contracts completed within budget and limit contract budget overruns.</p>
Percent of Construction Contracts Completed on Time	64%	CY14-Q3	Increase Percentage		<p>25 contracts were completed with 16 (64%) completed on time. On contracts where delays occurred, 6 were completed within 6 months of their original time, 2 were completed between 6 months and 12 months of their original time and 1 was completed between 24 months and 30 months of its original time. The delays were due to Design Change (48.9%), Utilities (13.0%), Extra Work (13.0%), Changed Conditions (9.7%), Permits (7.4%) and other miscellaneous reasons (8.0%). The target is to increase the On-Time % Completion of construction contracts by limiting the contributing causes of delays to projects' schedules caused by the Department and others.</p>

Ride Quality on Connecticut's Roads

Ride Quality is the measurement of the roughness (complement of smoothness) of pavement. The general public's perception of a good road is one that provides a smooth ride. Roughness is an important pavement characteristic because it affects not only ride quality but also fuel consumption and both vehicle and roadway maintenance costs. CTDOT uses a worldwide standard for measuring pavement smoothness called the International Roughness Index, or IRI. This index provides a consistent and comparable measure of pavement in terms of the number of vertical bump inches per mile driven. IRI is reported as inches per mile. Essentially, the lower the IRI number, the smoother the ride.

CTDOT is directly responsible for overseeing all design, construction, maintenance, and improvements for the 3,734.28 miles of State-maintained roadways consisting of State routes, stubs, bypasses, and ramps serving as the main line. This includes 1,392.00 miles of Interstate and other Enhanced National Highway System (NHS) roadways.

The condition of the entire state-maintained roadway network is presented below. The results indicate that in 2013, 78% of the entire state-owned network roadway miles have a good-or-acceptable ride quality.

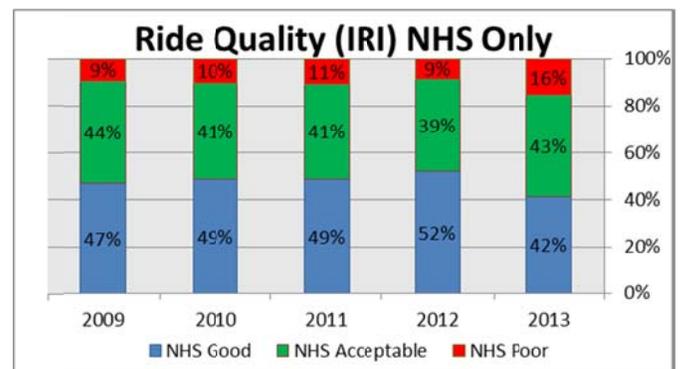


The significant increase in "Good" (and subsequent reduction in "Poor") ride quality from 2012 to 2013, reflects a combination of a) a more extensive pavement preservation program in 2012, and, to a lesser degree, b)

improvements in data collection procedures implemented in 2013.

The National Highway System (NHS) consists of roadways that have been designated as important to the nation's economy, defense, and mobility. Under current federal transportation legislation (MAP-21) the definition for NHS in Connecticut was expanded to include the roadway functional classification of "Other Principal Arterials". This added approximately 435.8 miles to Connecticut's NHS, which was previously 956.2 miles.

NHS Roadways typically carry highway volumes of traffic and tend to be maintained at a higher priority level. Therefore, when you average in the additional miles of lower functional class into the calculation for the NHS, the result is a decrease in the overall ride quality. As seen below, in 2013 85% of Connecticut's NHS roadway miles have a good-or-acceptable ride quality.



Note: Under the previous definition for the NHS, the result for this period would have been 54.2% good, continuing to show the positive impact of the pavement preservation program.

The higher-functional-class roadways included in the NHS, such as interstates and expressways, are in somewhat better condition. This reflects the prioritization of preservation projects to favor roadways with higher traffic volumes.