

Connecticut Department of Transportation

Quarterly Performance Measures Summary

2015 Quarter 2 (April 1 to June 30)



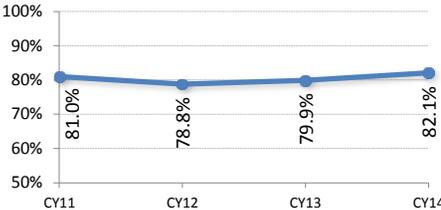
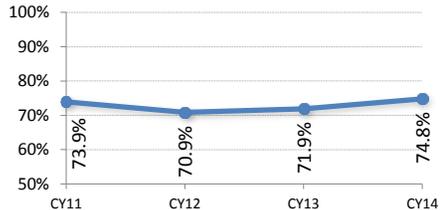
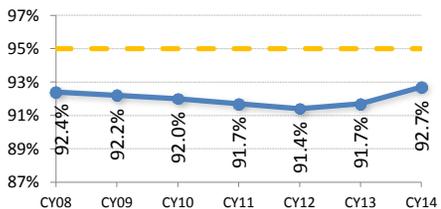
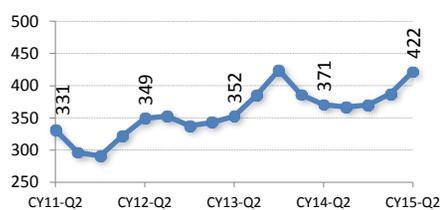
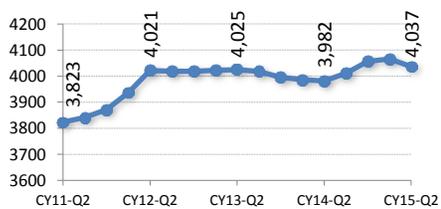
Performance Measure	Period	Period Data	Result	Target	Trend	Analysis of Trend
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Provide Safe & Secure Travel

<p>Rate of Annual Highway Fatalities per 100 million vehicle miles traveled (VMT), CTDOT</p>	CY13	0.92	0.84 5 yr. Moving Avg.	0		<p style="text-align: right;">Preferred Trend ↓</p> <p>In 2013, there were 265 reported fatal motor vehicle crashes in which 286 persons were killed. The 286 fatality total includes drivers, passengers, pedestrians and cyclists. The 2013 Connecticut fatality rate was 0.92 fatalities per 100 million vehicle miles traveled (VMT). The five year rolling average was 0.84 fatalities per 100 million VMT. The 2013 national fatality rate was 1.09 fatalities per 100 million VMT. The Connecticut rate continues to be lower than the national rate.</p>
<p>Rate of Annual Highway Fatalities per 100,000 population</p>	CY13	7.95	7.34 5 yr. Moving Avg.	0		<p style="text-align: right;">Preferred Trend ↓</p> <p>The population for Connecticut in 2013 was 3,596,080. The 2013 Connecticut fatality rate was 7.95 fatalities per 100,000 population. The 2013 national fatality rate was 10.35 fatalities per 100,000 population. The Connecticut rate continues to be lower than the national rate.</p>
<p>Percent of Seat Belt Usage</p>	CY15	85.4%	85.4%	90%		<p style="text-align: right;">Preferred Trend ↑</p> <p>The seatbelt use rate has seen an increase 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>

Performance Measure	Period	Period Data	Result	Target	Trend	Result:  Target: 	Analysis of Trend
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Preserve & Maintain the Transportation Network

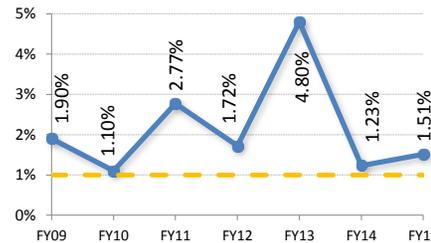
Percent of State Maintained Roads with Acceptable or Better Ride Quality (NHS Only)	CY14	84.0%	82.1% 3 yr. moving avg.	Increase Percentage		<p>↑ Preferred Trend</p> <p>The National Highway System (NHS) ride quality trend continued in the positive direction, as the three-year moving average of state maintained roads with acceptable or better ride quality increased from 79.9% in 2013 to 82.1% in 2014. This is likely due to the \$135.9 million invested in pavement preservation between 2011 and 2013, which is now being fully realized in ride quality trends. Pavement preservation treatments have focused on these high-value NHS roadways. (For More information on Ride Quality in Connecticut Click Here)</p>
Percent of State Maintained Roads with Acceptable or Better Ride Quality (Entire Network)	CY14	77.5%	74.8% 3 yr. moving avg.	Increase Percentage		<p>↑ Preferred Trend</p> <p>The ride quality trend for the entire network generally shadowed the NHS trend, but at lower percentages. The three-year moving average of state maintained roads with acceptable or better ride quality increased from 71.9% in 2013 to 74.8% in 2014. Approximately 37% of the entire network consists of NHS roadways, so it is not surprising that their trends were similar. The fact that pavement preservation treatments have focused on NHS roadways explains why the percentages were lower for the entire network. (For More information on Ride Quality in Connecticut Click Here)</p>
Percent of State Maintained Roadway Bridges in a State of Good Repair	CY14	92.7%	92.7%	95%		<p>↑ Preferred Trend</p> <p>The percentage of State Maintained Roadway 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>
Number of Bridge Work Items Completed	CY15-Q2	581	422 2yr. (8qtr) moving avg.	Maximize Completion of Work Items		<p>↑ Preferred Trend</p> <p>During the most recent quarter, the 2 year moving average of the bridge work items completed was 422. This represents a 13.7% increase in the number of work items completed as compared to the same quarter a year ago. This is consistent with our target to Maximize Completion of Work Items.</p>
Number of Backlogged Bridge Work Items	CY15-Q2	3,788	4,037 2yr. (8qtr) moving avg.	Strive for Zero Growth in Backlog		<p>↑ Preferred Trend</p> <p>During the most recent quarter, the 2 year moving average of the backlogged bridge work items was 4,037; this represents a slight (1.4%) increase in the number of backlogged work items as compared to the same quarter a year ago. Our immediate target is to strive for Zero Growth in Backlog. The 1.4% can be attributed to the increased number of work items received as well as the types and complexity of the work items.</p>

Performance Measure	Period	Period Data	Result	Target	Trend	Result:  Target: 	Analysis of Trend
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Provide Mobility Choice, Connectivity & Accessibility

Percent of Funds Expended for Bicycle/
Pedestrian Access

FY15 1.51% 1.51% 1%

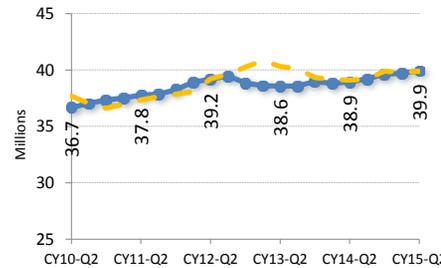


↑ Preferred Trend

Thirty-five projects awarded in SFY 2015 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 \$12.5 million, which is approximately 1.51% of the total funds awarded for the construction, restoration, rehabilitation, or relocation 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. Large fluctuation in this measure is to be expected as a single large value initiative will drastically affect the measure.

Number of Rail Passengers -
New Haven Line (NHL)

CY15-Q2 10,355,171 39,917,643 39,888,016
12 mo. 12 mo.
moving total moving total

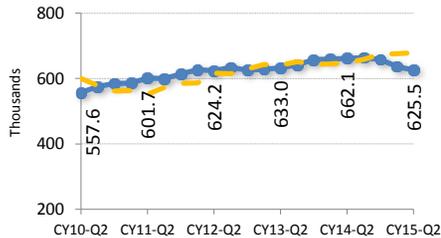


↑ Preferred Trend

Ridership on the New Haven Line was above budgeted ridership this quarter. The overall trend continues to indicate rising ridership. Growth in both commuter tickets and discretionary rides as well as continued service reliability especially in the peak periods are the primary factors for this positive trend.

Number of Rail Passengers-
Shore Line East (SLE)

CY15-Q2 154,106 625,498 678,607
12 mo. 12 mo.
moving total moving total

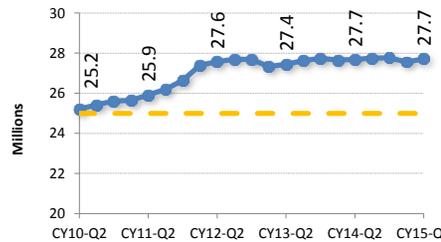


↑ Preferred Trend

Ridership on the Shore Line East fell short of the budgeted ridership for this quarter. The recent trend indicates a decrease in ridership. Service reliability was impacted by the severe winter weather, and negatively impacted ridership. The continued need for locomotive overhaul and systems upgrades needed on the coach fleet continues to negatively impact service performance and negatively impact ridership. Recent growth in discretionary rides and the continued positive growth in the New London and weekend markets has helped stabilize the ridership losses and will improve the negative trend.

Number of CTtransit Passenger Trips

CY15-Q2 7,190,209 27,715,913 25,000,000
12 mo. 12 mo.
moving total yr.

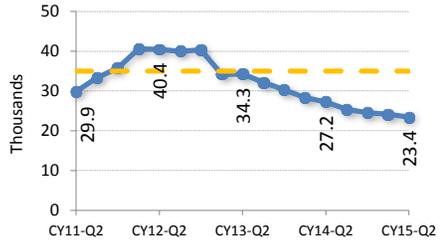
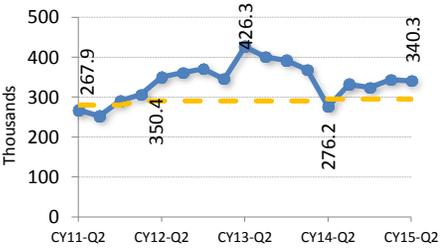
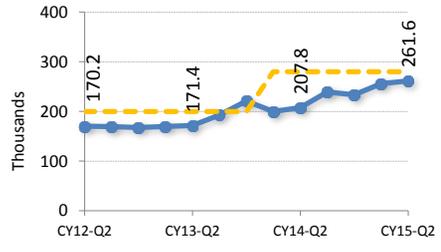
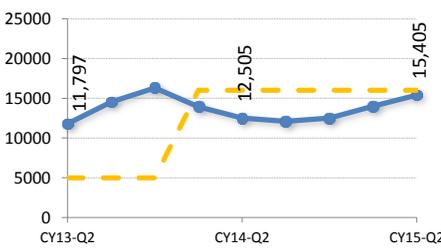


↑ Preferred Trend

This measure is used to determine utilization of transit bus services. Quarterly data shows a slight increase compared to the same quarter last year, most likely due to the additional ridership generated by the start-up of CTfastrak on March 28, 2015. The Department continues to seek out methods to increase and attract ridership by routinely evaluating services and coverage, by gradually expanding marketing efforts, and introducing new technology tools such as on-line trip planning.

Performance Measure	Period	Period Data	Result	Target	Trend	Result:  Target: 	Analysis of Trend
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Improve Efficiency & Reliability

Mean Distance Between Failures (Miles) - Diesel Locomotives	CY15-Q2	28,388	23,446 12 mo. moving avg.	35,000		<p>↑ Preferred Trend</p> <p>MDBF for P-32 Diesel locomotives on the New Haven Line fell short of the target this quarter. Delays in the completion of the overhaul program for the P-32 locomotives, and the time since overhaul of the earliest locomotives in the program, have combined to cause a negative MDBF trend.</p>
Mean Distance Between Failures (Miles) - Coaches	CY15-Q2	333,330	340,303 4 qtr. moving avg.	295,000		<p>↑ Preferred Trend</p> <p>MDBF for coaches on the New Haven 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.</p>
Mean Distance Between Failures (Miles) - Electric Multiple Unit (EMU) M8	CY15-Q2	232,805	261,562 4 qtr. moving avg.	280,000		<p>↑ Preferred Trend</p> <p>Three hundred eighty (380) M8 rail cars (190 pairs) have been delivered with 380 M8s tested, accepted and deployed in New Haven Line service (as of the end of June 2015). An additional 25 M8 Single Coaches were ordered, with 25 delivered and 25 tested, accepted and deployed. (Connecticut owns 274 cars of the M8 fleet). The investment program began in 2009 and a total of 405 M8 cars were ordered. The MDBF for the M8 fleet was below the target this quarter; however, it continues on a positive trend.</p>
Average Miles Between Road Calls (Bus)	CY15-Q2	16,276	15,405 4 qtr. Moving avg.	16,000		<p>↑ Preferred Trend</p> <p>This measure is used to determine the reliability and availability of equipment. Average Miles Between Road Calls are trending slightly above target this quarter and show an increase compared to the same quarter last year. In order to continue this favorable trend CTDOT plans to continue its fleet replacement program.</p>

Performance Measure	Period	Period Data	Result	Target	Trend	Result:	Target:	Analysis of Trend
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Improve Efficiency & Reliability (Continued)

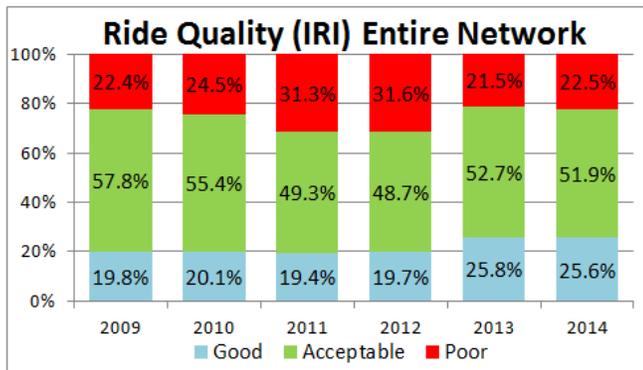
Percent of Rail On-Time Performance (OTP)-New Haven Line (NHL)	CY15-Q2	92.6%	90.6% 4 qtr. moving avg.	93%		↑	Preferred Trend	On-time Performance (OTP) for the New Haven Line fell short of the target this quarter. M8 equipment reliability has improved the OTP. Engineering issues were the primary reasons for late NHL trains.
Percent of Rail On-Time Performance (OTP)-Shore Line East (SLE)	CY15-Q2	91.2%	89.2% 4 qtr. moving avg.	95%		↑	Preferred Trend	This quarter the OTP for the Shore Line East fell below the target. Interference of other trains, late train turns and mechanical issues were the primary reasons for late SLE trains for this quarter.
Percent of Construction Contracts Awarded within 60 Days of Bid Opening	FY15-Q4 (CY15-Q2)	100%	87.9% 4 qtr. moving avg.	100%		↑	Preferred Trend	For the last quarter of fiscal year 2015, which is quarter 2 of calendar year 2015, 28 of 28 Construction Contracts were awarded within 60 days of bid opening. This meets the target of awarding 100% of contracts within 60 days. This translates to a moving average of 87.9% over the previous 4 quarters.
Percent of Construction Contracts Completed within Budget	CY15-Q2	76.0%	69.3% 4 qtr. moving avg.	Increase Percentage		↑	Preferred Trend	38 contracts were completed with 29 contracts (76%) being completed within budget. For all 38 contracts the aggregate budgeted dollar value increase was 0%. The total completed cost of those on-budget contracts was \$47.2 million which represents 36% of the total completed cost of all 38 contracts. The target is to increase the number of contracts completed within budget and limit contract budget overruns.
Percent of Construction Contracts Completed on Time	CY15-Q2	61.1%	60.0% 4 qtr. moving avg.	Increase Percentage		↑	Preferred Trend	38 contracts were completed with 23 contracts (61%) completed on time. On contracts where delays occurred, 13 contracts were completed within 6 months of their original time, 1 was completed between 6 months to 12 months of its original time and 1 was completed between 24 months to 30 months of its original time. The delays were due to Third Party (54.7%), Utility Delay (23.0%), Extra Work (10.9%), Changed Conditions (5.1%) and other miscellaneous reasons (6.3%). 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.

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 2014, 77.5% of the entire state-owned network roadway miles have a good-or-acceptable ride quality.

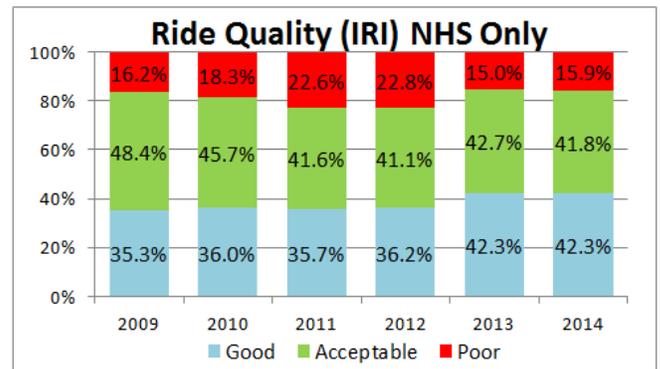


The significant increase in "Good" (and subsequent reduction in "Poor") ride quality from 2012 to 2013, reflects a combination of a) a more extensive pavement preservation

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 2014 84.1% of Connecticut's NHS roadway miles have a good-or-acceptable ride quality.



Note: The chart above shows the ride quality for the expanded NHS as defined by MAP-21. Past results were recalculated based on the expanded NHS mileage.

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.