



# PERFORMANCE MEASURES

2011 Quarter 2 (April 1 to June 30)

**LEGEND**

Performance

- Performance is Improving
- Performance Remains Similar
- Performance is Declining

Updated this Quarter (y/n)	Sheet No.	Sheet Name	Performance Measure(s)	Target	Comparative Reporting Period	Latest Reporting Period	Performance	Target Met or On-Track
<b>HIGHWAYS</b>								
<b>Safety</b>								
n	PM-01	Highway Fatalities	Rate of Annual Highway Fatalities per 100 million vehicle miles traveled (VMT), CTDOT	< 1.0	0.83 (CY-2008)	0.71 (CY2009)		✓
			Rate of Annual Highway Fatalities per 100,000 population	< 7.7	7.5 (CY-2008)	6.34 (CY2009)		✓
y	PM-02	Seat Belt Usage	Percent of Seat Belt Usage	90%	88% (CY-2010)	88% (CY2011)		
<b>Pavements</b>								
n	PM-03	Highway Ride Quality	Percent of NHS Roads with Good Ride Quality	Increase %	44% (CY-2009)	49% (CY2010)		✓
			Percent of Entire Network with Good Ride Quality	Increase %	20% (CY-2009)	20% (CY2010)		
<b>Bridges</b>								
n	PM-04	Highway Bridge Condition	Percent of CTDOT Roadway Bridges in Good Condition	Increase %	34% (CY2009)	32% (CY2010)		
y	PM-05	Highway Bridge Maintenance	Number of Bridge Work Items Completed	Maximize Completion of Work Items	184 (CY2011-Q1)	230 (CY2011-Q2)		
			Number of Backlogged Bridge Work Items	Zero Increase in Backlog	3,970 (CY2011-Q1)	4,001 (CY2011-Q2)		
<b>Multi-use Facilities</b>								
y	PM-06	Bicycle/ Pedestrian Access	Percent of Funds Expended for Bicycle/ Pedestrian Access	>= 1.0%	1.1% (SFY2010)	2.80% (SFY2011)		✓
<b>Capacity</b>								
y	PM-07	Highway Capacity	Percent of Road Network with Traffic Volumes Greater than Capacity	Reduce Congestion	8.80% (CY2009)	8.67% (CY2010)		✓
<b>CHAMP Program</b>								
y	PM-08	CHAMP Motorist Assists	Number of CHAMP Motorist Assists	Maintain ability to assist >= 5,000 qtr.	4,499 (CY2011-Q1)	5,943 (CY2011-Q2)		✓
<b>RAIL</b>								
<b>Fleet</b>								
y	PM-09	Rail Fleet Reliability	Mean Distance Between Failures (Rail) - Locomotives	35,000	34,959 (CY2011-Q1)	35,771 (CY2011-Q2)		✓
			Mean Distance Between Failures (Rail) - Coaches	280,000	273,473 (CY2011-Q1)	215,015 (CY2011-Q2)		
			Mean Distance Between Failures (Rail) - EMU M2	90,000	35,392 (CY2011-Q1)	86,396 (CY2011-Q2)		
			Mean Distance Between Failures (Rail) - EMU M4	65,000	23,841 (CY2011-Q1)	85,397 (CY2011-Q2)		✓
			Mean Distance Between Failures (Rail) - EMU M6	65,000	19,726 (CY2011-Q1)	83,618 (CY2011-Q2)		✓
			Mean Distance Between Failures (Rail) - EMU M8	140,000	76,826 (CY2011-Q1)	130,894 (CY2011-Q2)	N/A	
y	PM-10	Rail On-Time Performance	Percent of Rail On-Time Performance (NHL)	97.0%	92.6% (CY2011-Q1)	96.7% (CY2011-Q2)		
			Percent of Rail On-Time Performance (SLE)	95.0%	90.5% (CY2011-Q1)	92.7% (CY2011-Q2)		
<b>Passengers</b>								
y	PM-11	Rail Passenger Trips	Number of Rail Passengers (NHL)	9,595,002	8,698,549 (CY2011-Q1)	9,797,510 (CY2011-Q2)		✓
			Number of Rail Passengers (SLE)	134,977	135,476 (CY2011-Q1)	161,676 (CY2011-Q2)		✓
<b>BUS</b>								
<b>Fleet</b>								
y	PM-12	Miles Between Road Calls (Bus)	Average Miles Between Road Calls (Bus)	5,000 Miles	4,848 (SFY2011-Q3)	4,059 (SFY2011-Q4)		
n	PM-13	Age of Bus Fleet	Average Age of Bus Fleet (State)	6.0 Years	7.6 (CY2009)	6.9 (CY2010)		
			Average Age of Bus Fleet (Transit Districts)	6.0 Years	5.8 (CY2009)	6.8 (CY2010)		
<b>Passengers</b>								
y	PM-14	CTTransit Passenger Trips	Number of CTTransit Passenger Trips	25,000,000 yr (Approx. 6,250,000 qtr)	6,119,601 (CY2011-Q1)	6,714,423 (CY2011-Q2)		✓

Updated this Quarter (y/n)	Sheet No.	Sheet Name	Performance Measure(s)	Target	Comparative Reporting Period	Latest Reporting Period	Performance	Target Met or On-Track
<b>Airport</b>								
<b>Pavements</b>								
n	PM-15	Airport Pavement Condition	Percent of Airport Pavement Rated Good or Excellent (General Aviation)	100%	90% (CY2009)	90% (CY2010)	⚡	
			Percent of Airport Pavement Rated Good or Excellent (Bradley International)	100%	100% (CY2009)	100% (CY2010)	⚡	✓
<b>Passengers</b>								
y	PM-16	Bradley International Airport Passengers	Number of Bradley International Airport Passengers	>= Same Qtr in Prev. Yr.	1,372,015 (CY2010-Q2)	1,484,302 (CY2011-Q2)	↗	✓
<b>Parking</b>								
y	PM-17	Bradley International Airport Parking	Revenue Generated from Bradley International Airport Parking	>= Same Qtr in Prev. Yr.	\$4,921,663 (CY2010-Q2)	\$5,628,054 (CY2011-Q2)	↗	✓
<b>ADMINISTRATION</b>								
<b>Agreements</b>								
y	PM-18	Agreements Executed in Under 60 Days	Percent of Agreements Executed in Under 60 Days	Increase Percentage	41% (SFY2011-Q3)	36% (SFY2011-Q4)	↘	
<b>Contracts</b>								
y	PM-19	Construction Contracts Awarded within 60 Days of Bid Opening	Percent of Construction Contracts Awarded within 60 Days of Bid Opening	100%	91% (SFY2011-Q3)	100% (SFY2011-Q4)	↗	✓
y	PM-20	Construction Contracts Completed within Budget	Percent of Construction Contracts Completed within Budget	Increase Percentage	67% (CY2011-Q1)	66% (CY2011-Q2)	↘	
y	PM-21	Construction Contracts Completed on Time	Percent of Construction Contracts Completed on Time	Increase Percentage	51% (CY2011-Q1)	52% (CY2011-Q2)	↗	✓
<b>Finance</b>								
y	PM-22	Project Closeouts	Number of Project Closeouts	300 [SFY 2011]	124 (SFY2011-Q3) [221] [YTD]	124 (SFY2011-Q4) [345] [SFY2011]	↗	✓
<b>CT Recovery</b>								
y	PM-23	CT RECOVERY Projects Completed On-Time	CT RECOVERY Percent of Stimulus Projects Completed On-Time	Maximize Percentage	90% (CY2011-Q1)	84% (CY2011-Q2)	↘	
y	PM-24	CT RECOVERY Dollars Expended	CT RECOVERY Percent Dollars Expended	100 % (\$462 million)	58.5% (CY2011-Q1)	64.70% (CY2011-Q2)	↗	↗
y	PM-25	CT RECOVERY Jobs Created / Sustained	CT RECOVERY Number of Jobs Created / Sustained	Increase Jobs Created/Sustained	36,118 (CY2011-Q1)	41,365 (CY2011-Q2)	↗	✓

Mode:  
Highway

Asset/Topic:  
Safety

Focus:  
Fatalities

### Highway Fatalities

**Strategic Objective(s) Met:**

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)	Target Value:	Current Value: (CY 2009)
Fatalities per 100 million vehicle miles traveled (VMT)	<= 1.0	0.71
Fatalities per 100,000 population	<= 7.7	6.34

Source: Bureau of Policy and Planning - Ms. Maribeth Wojenski & Mr. Joseph Crisalli

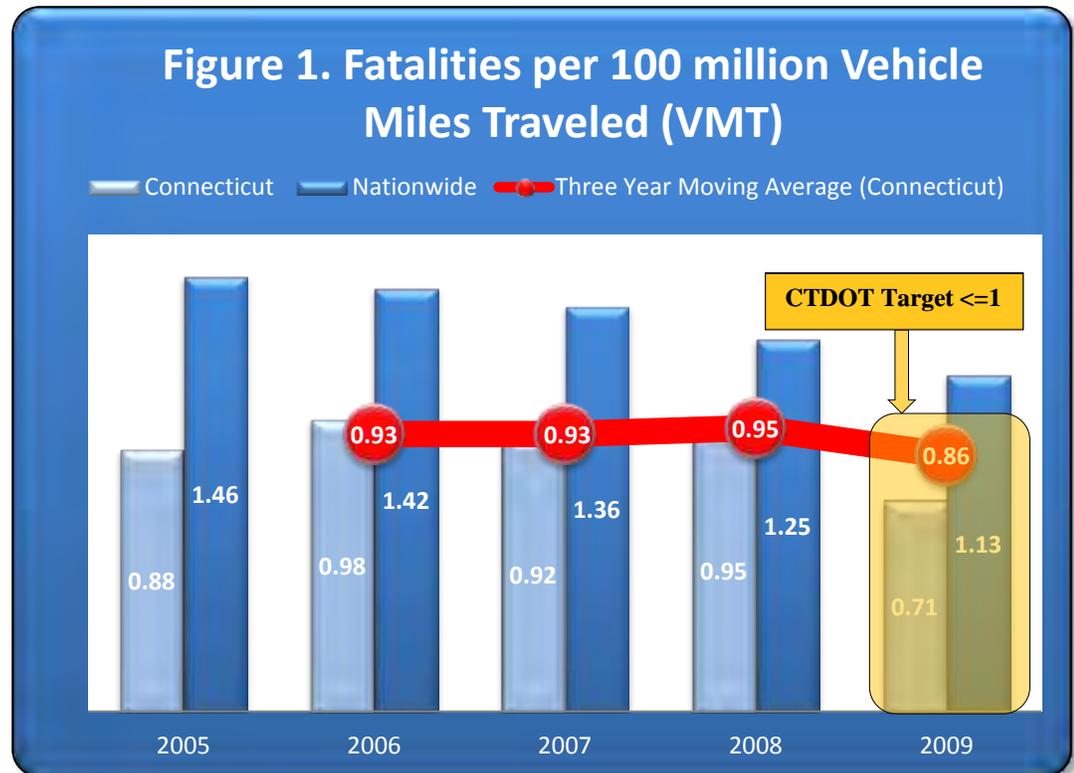
Note: Initial fatality counts published by NHTSA are preliminary as of April 30<sup>th</sup> for the previous calendar year. Final counts are published one year later, for the same calendar year. (For example, calendar year 2008 data are published initially in April 2009, and finalized in mid 2010.) The latest data set used for this posting, covers the time period from 1/1/2009 through 12/31/2009.

**Purpose/Description of measure:**

This measure tracks the fatality rate on Connecticut's roadways. By tracking fatality rates, the Department is able to gather information necessary to develop effective programs that ensure the safety and security of the traveling public.

**Discussion of trend:**

Highway fatality statistics for years 2005 through 2009, as reported by the National Highway Traffic Safety Administration (NHTSA), are presented in Figures 1 and 2\*. In 2009, Connecticut's reported fatality rate is 0.71 fatalities per 100 million vehicle miles traveled compared with the national figure of 1.13 fatalities (see Figure 1). This is a significant reduction in the accident rate compared with each of the previous three years. This variability illustrates the limitation of using a 1 year accident rate. In order to smooth the data set, a three-year moving average rate is also plotted in Figure 1 (as the red line). (continued)

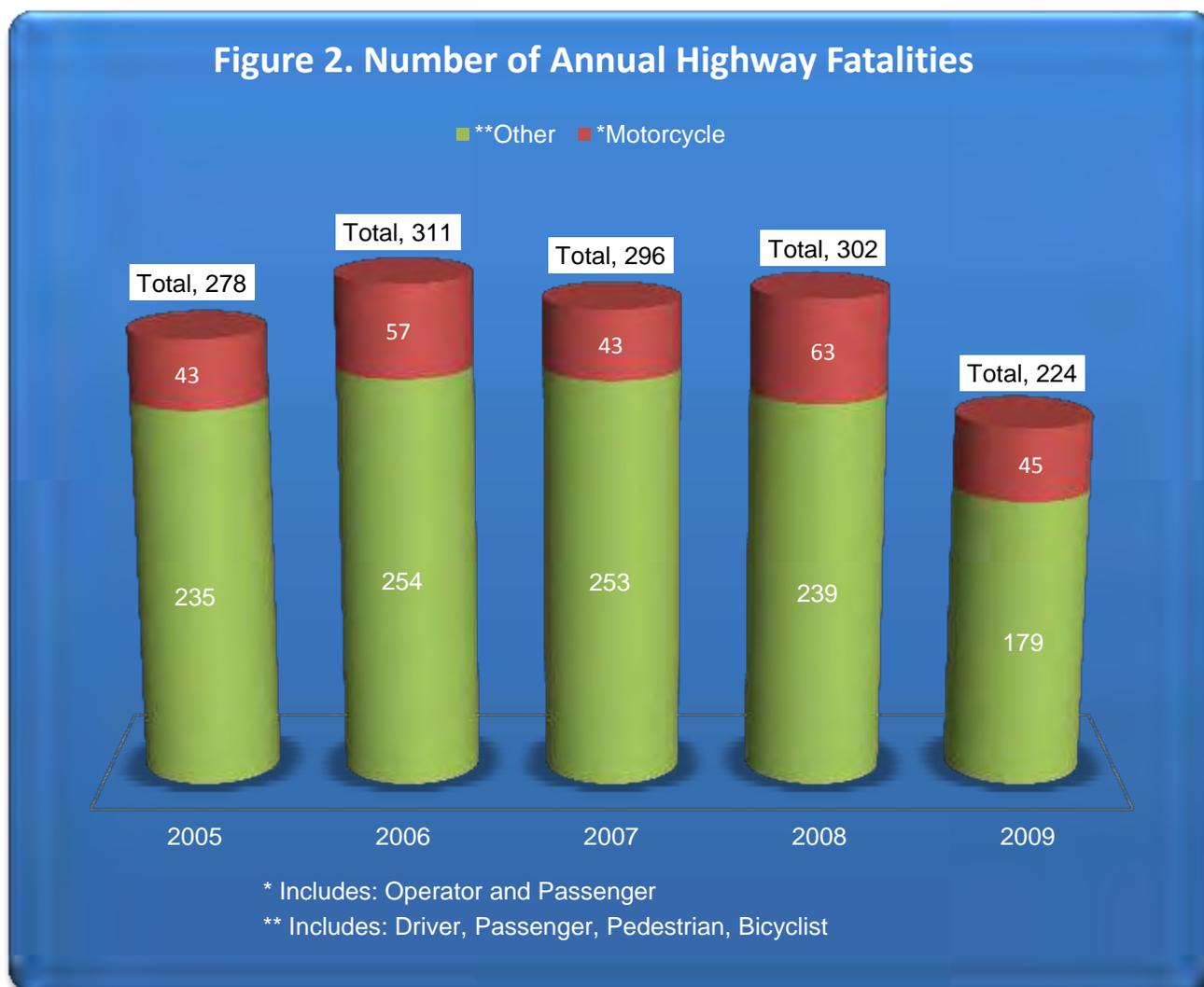


\*From NHTSA Traffic Safety Facts CT 2005-2009, FARS 2005-2008 Final and FARS 2009 Annual Report File. ([http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/STSI/9\\_CT/2009/9\\_CT\\_2009.pdf](http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/STSI/9_CT/2009/9_CT_2009.pdf))

**Discussion of trend (continued):**

In 2009, there were 210 fatal motor vehicle crashes in which 224 persons were killed (see Figure 2). This number (224) includes operators, passengers, motorcycle operators, pedestrians and cyclists. It is not clear why there was a significant drop in overall fatalities in 2009. Unfortunately, early data indicates that fatalities in 2010 will be closer to the levels experienced in 2006 through 2008.

In 2009, a total of 45 motorcycle operators and passengers were killed on Connecticut roadways, representing 20 percent of the state's total traffic fatalities. Based on 94,246 registered motorcycles, the fatality rate per 10,000 registered motorcycles was 4.8.





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Highway

Asset/Topic:  
Safety

Focus:  
Utilization

## Seat Belt Usage

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Target Value:

Current Value:  
(CY 2011)

Percent of Seat Belt Use (Observed)

90%

88%

Source: Bureau of Policy and Planning - Mr. Joseph Cristalli

Note: Data for this measure, based on sampling, becomes available for reporting annually in September for the current Calendar Year. The latest data set used for this posting covers the time period from 1/1/2011 through 12/31/2011.

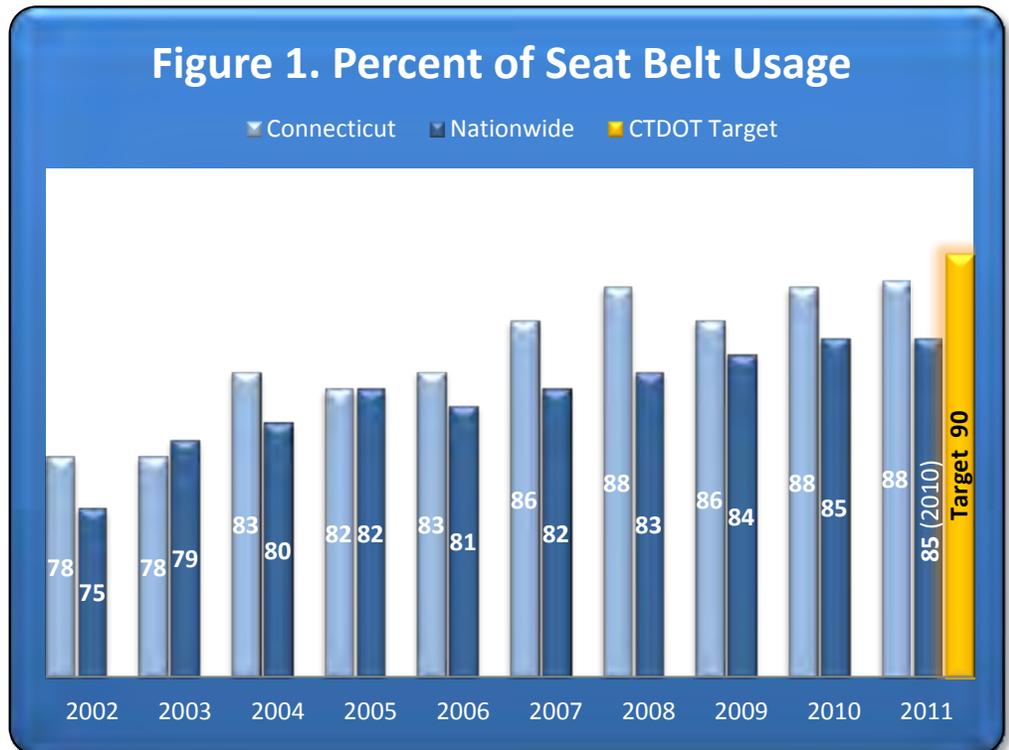
### Purpose/Description of measure:

This measure tracks seat belt usage by Connecticut's motorists. Drivers, front seat passengers and all rear seat passengers aged 4 to 16 are required to wear seat belts. Connecticut's primary enforcement law carries a fine of \$92 for not wearing a seat belt. When worn correctly, seat belts reduce the risk of fatal injury to front seat occupants by 45 percent. In 2009, seat belts saved an estimated 12,713 lives in the United States (Traffic Safety Facts: 2009 Data, NHTSA).

### Discussion of trend:

The latest scientific survey of belt observations was conducted in June 2011. It provides the most accurate and reliable statewide estimate of seat belt use available in Connecticut that is comparable to the 1995 baseline estimate accredited by NHTSA in September of 1998 and the statewide survey conducted in 1998. Seat belt use was 88.4% in 2011, the highest level in the past ten years (along with 2008 and 2010). The first comparable safety belt use survey in Connecticut was done in 1995 and recorded a 59 percent belt use rate. The rate reached an all-time high of 88% in 2008, dropped slightly to 86 percent in 2009 only to go back to 88% in 2010 and 88.4% in 2011.

### Figure 1. Percent of Seat Belt Usage





# Performance Measures

## 2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Highway

Asset/Topic:  
Pavement

Focus:  
Condition

### Highway Ride Quality

#### Strategic Objective(s) Met

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)	Target Value:	Current Value: (CY 2010)
Percent of <b>NHS Roads</b> with Good Ride Quality	Increase Percentage of Good Pavements	<b>49%</b>
Percent of <b>Entire Network</b> with Good Ride Quality	Increase Percentage of Good Pavements	<b>20%</b>

Source: Bureau of Engineering and Construction - Mr. Edgardo Black, P.E.

Note: Data for this measure becomes available for reporting annually in June for the previous Calendar Year. The latest data set used for this posting covers the time period from 1/1/2010 through 12/31/2010.

#### Purpose/Description of measure:

This measure tracks the roughness (complement of smoothness) of pavements on Connecticut's state-maintained roads. 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 vehicle delay costs, fuel consumption and both vehicle and roadway maintenance costs. The Department 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. The lower the IRI number, the smoother the ride. The Federal Highway Administration (FHWA) requires that all states measure and submit IRI data annually for the National Highway System (NHS). The NHS in Connecticut includes approximately 963 miles of interstate and other routes identified as having strategic defense characteristics, as well as routes providing access to major ports, airports, public transportation and intermodal facilities.

#### Discussion of trend:

Figure 1 shows that ride quality on Connecticut's NHS routes has gradually been improving. The percentage of NHS Routes rated good has increased from 44 percent in 2006 to 49 percent in 2010, while the percentage of roads rated poor has remained relatively stable over the same period. The goal is to continue to increase the percent of roads in good condition by implementing pavement preservation principles and fully utilizing CTDOT's Pavement Management System.

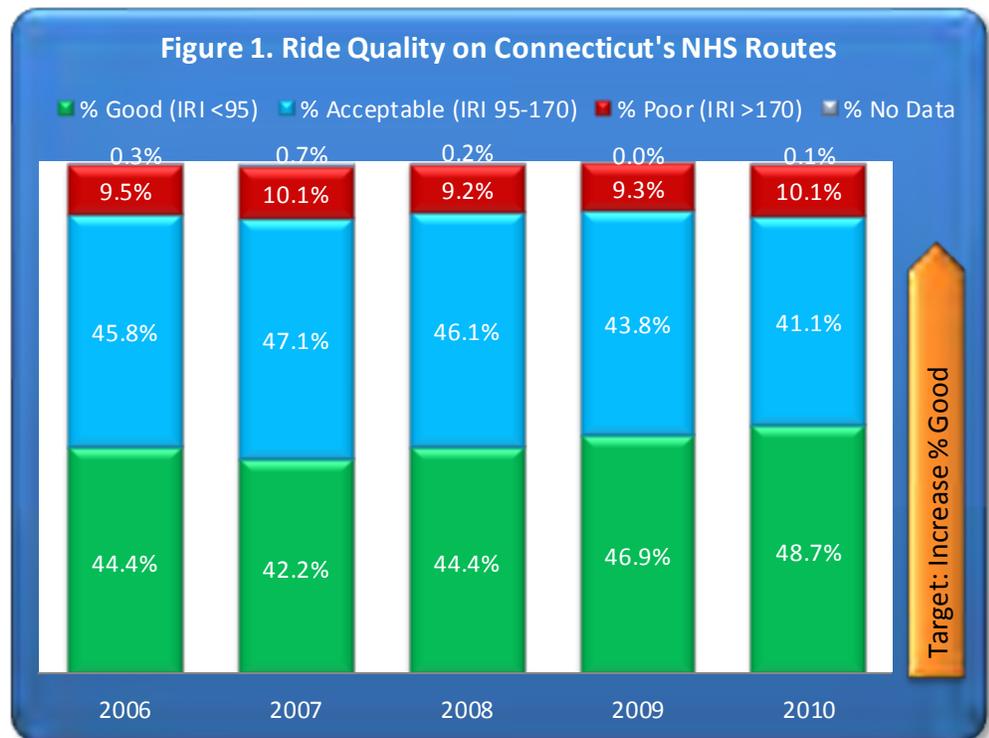
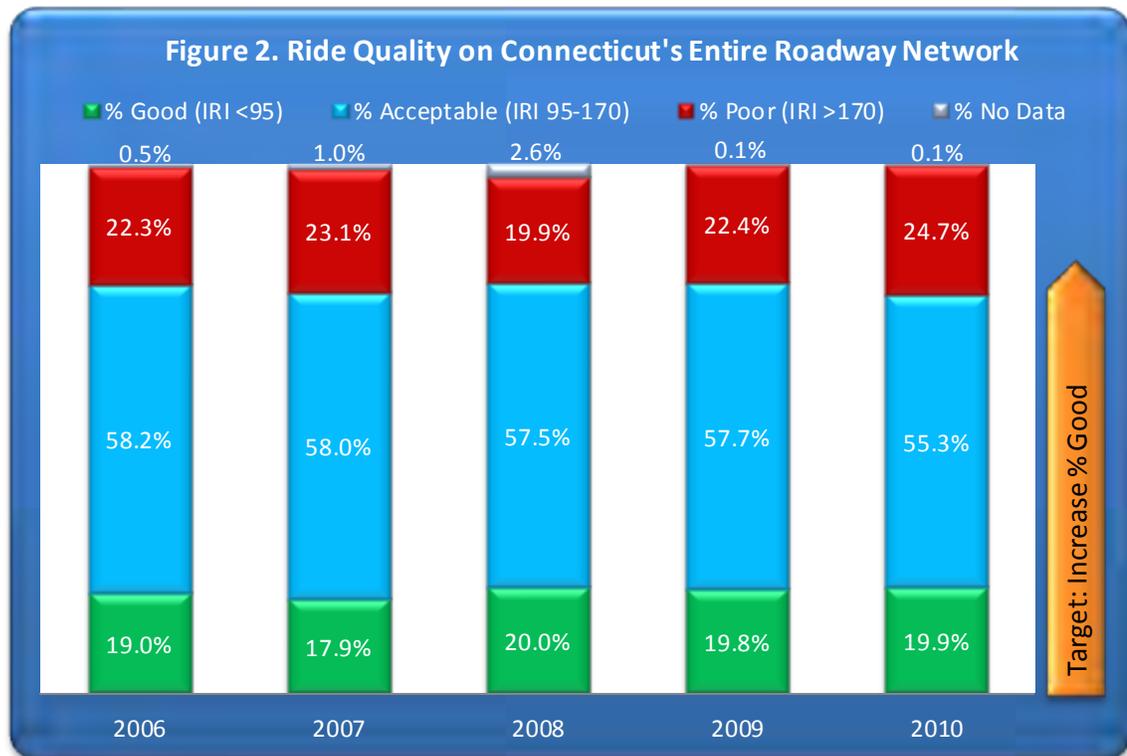


Figure 2 (Below) shows the ride quality of Connecticut's entire state maintained roadway network (approx. 3,744 miles) for calendar years 2006 through 2010. The entire roadway network includes both NHS and non-NHS roadways that are the maintenance responsibility of the Connecticut DOT. As shown in this graph, when the non-NHS roadways are factored in, the percent of the roads with good ride quality is reduced significantly.





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Highway

Asset/Topic:  
Bridge

Focus:  
Condition

## Highway Bridge Condition

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

### Measure(s)

Percent of CTDOT Roadway Bridges in Good Condition

### Target Value:

Increase percent of bridges in good condition

### Current Value: (CY 2010)

32%

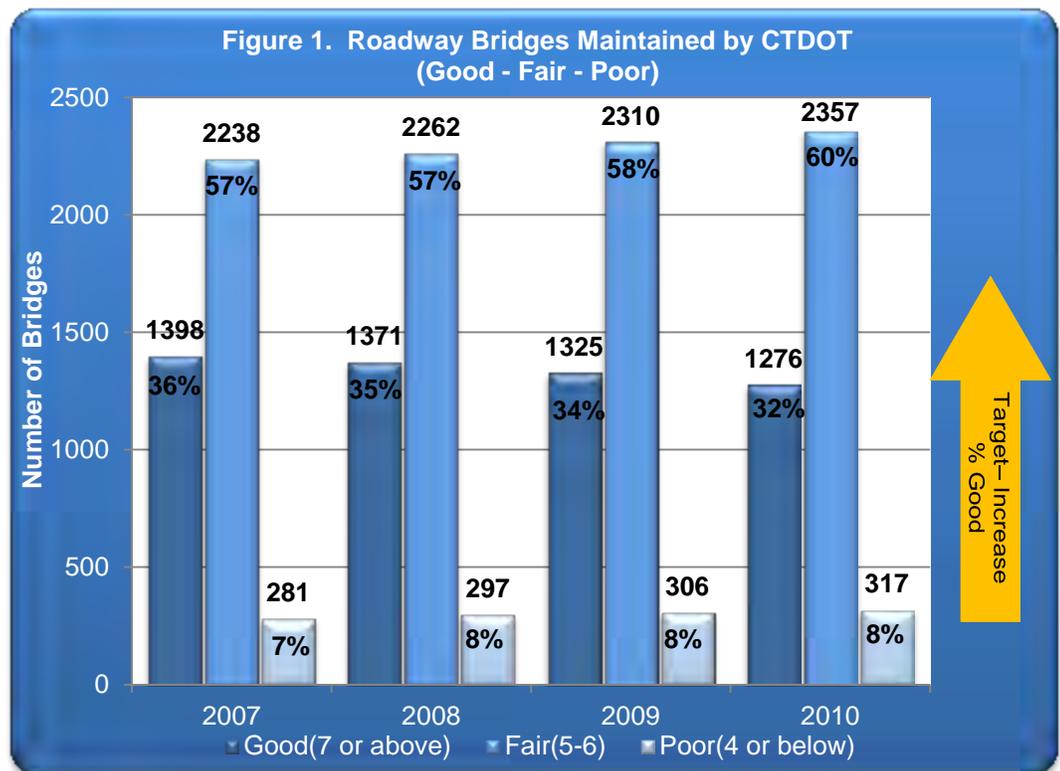
Source: Bureau of Engineering and Construction - Mr. Robert Zaffetti, P.E.

Note: Data for this measure becomes available for reporting annually in July for the previous Calendar Year. The latest data set used for this posting covers the time period from 1/1/2010 through 12/31/2010.

### Purpose/Description of measure:

This measure tracks the condition of roadway bridges maintained by the Connecticut Department of Transportation (CTDOT). The Department is directly responsible for almost 4,000 bridges, including all Connecticut National Bridge Inventory (NBI), Connecticut Non-NBI, Adopted and Orphan bridges. The Department also inspects and maintains several special structures (i.e. Tunnel and Pedestrian Bridges) which are not included in this measure. Almost 1,300 additional bridges owned by Connecticut's Municipalities or the Connecticut Department of Environmental Protection or located on Private Property are inspected by CTDOT but are not considered in this measure since they are not maintained by CTDOT. The condition of all bridge decks, superstructures and substructures are rated on a scale from 0 (failed condition) to 9 (excellent condition). The lowest rating becomes the bridge's

(continued)



**Purpose/Description of measure: (continued)**

overall rating. Whenever the condition rating of a bridge falls into the "Poor" category (4), the Department further reviews its condition, assesses the inspection frequency, adds the structure to the Bridge Program List and initiates a project to address the needs.

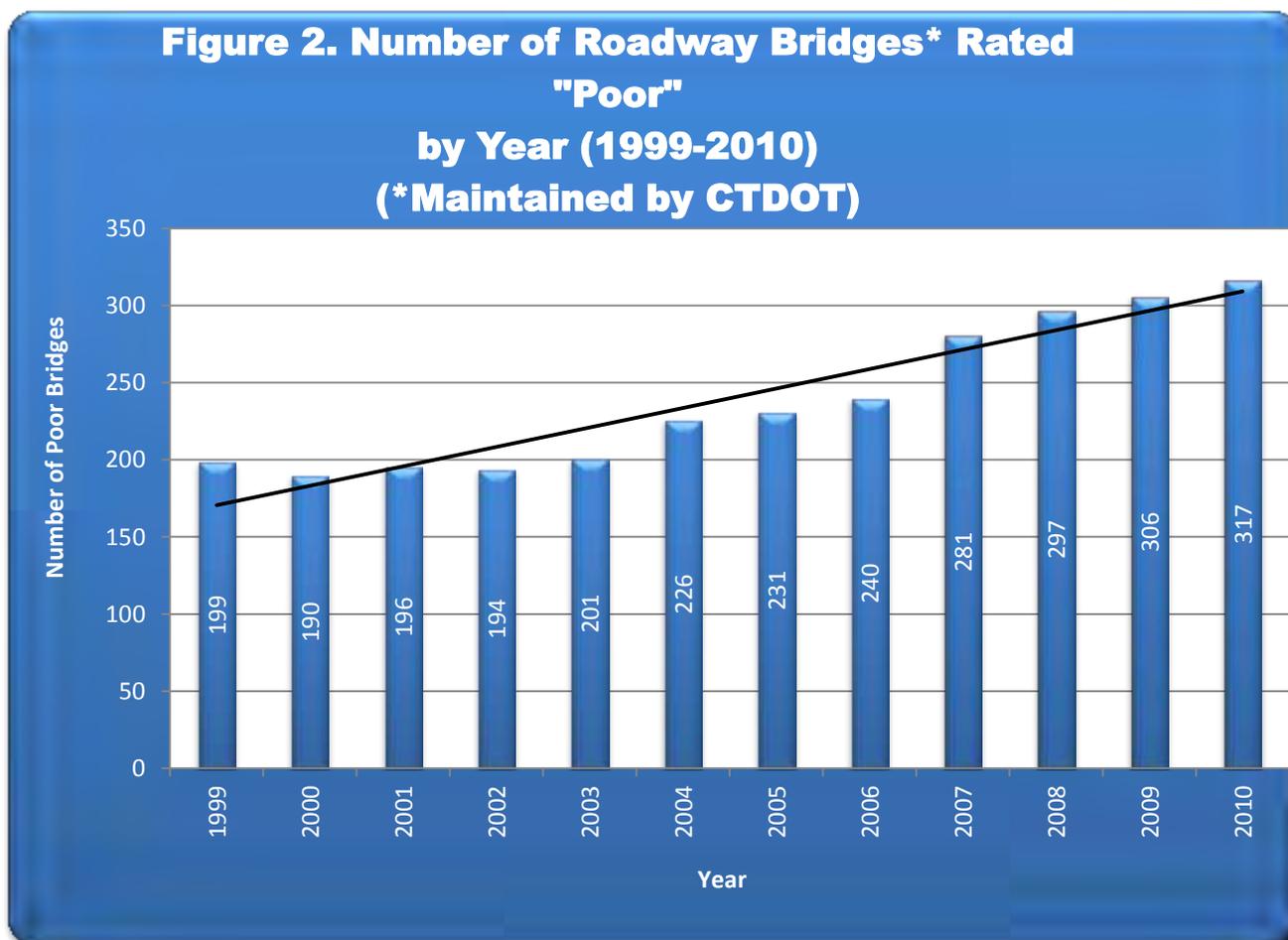
**Discussion of trend:**

Figure 1 shows that the percent of bridges in good condition declined by approximately one percent per year from 2007 to 2010. As indicated in Figure 2, the number of bridges rated "Poor" has been increasing since 1998 due in part to the aging infrastructure. The Department has recently allocated additional resources into bridge maintenance projects to try to reverse CTDOT's trend and align the Department with national trends of yearly increases in the number of bridges rated "Good".

Mode:  
Highway

Asset/Topic:  
Bridge

Focus:  
Operations

### Highway Bridge Maintenance

**Strategic Objective(s) Met:**

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

<u>Measure(s)</u>	<u>Target Value:</u>	<u>Current Value:</u> <u>(2011 Q2)</u>
Number of Bridge Work Items Completed	Maximize completion of work items.	<b>230</b>
Number of Backlogged Work Items	Strive for zero growth in backlog.	<b>4001</b>

Source: Bureau of Highway Operations - Mr. Richard VanAllen, P.E.

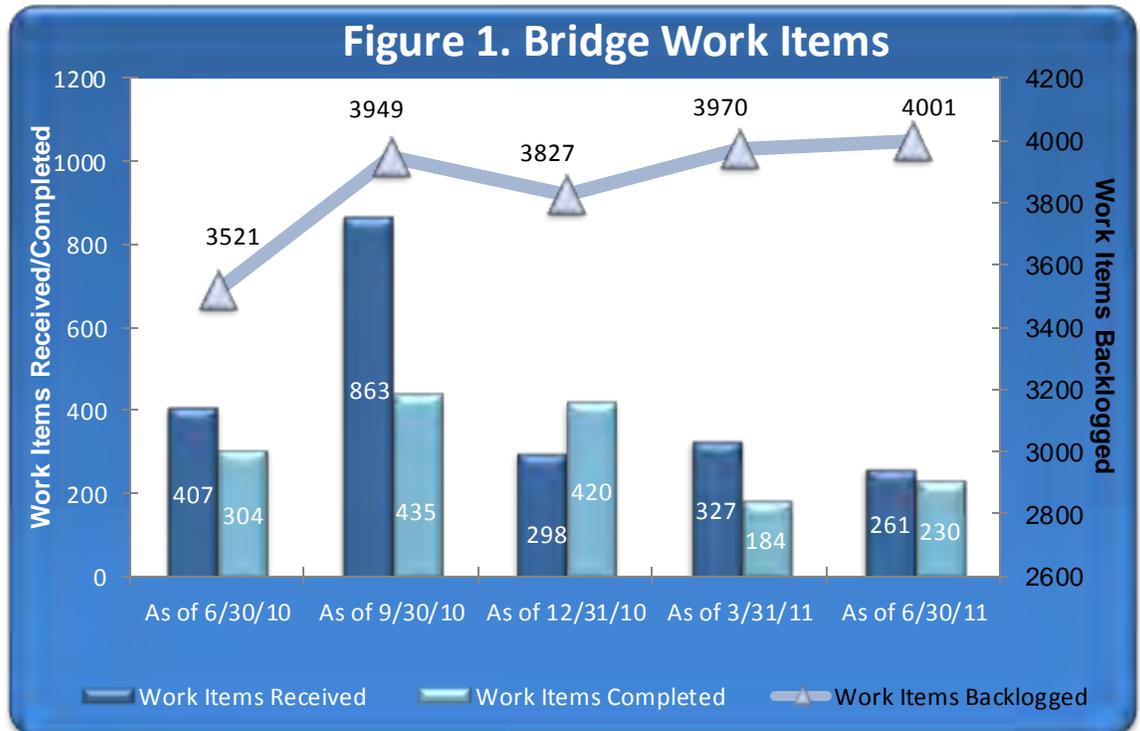
Note: Data for this measure becomes available quarterly. The latest data set used for this posting covers the calendar year second quarter from 4/1/2011 through 6/30/2011.

**Purpose/Description of measure:**

This measure tracks the progress of maintaining and improving the condition of bridges on Connecticut's highways. The Department seeks to preserve and extend the useful life of existing bridge structures. Upon completion of the bridge inspection process, a Bridge Maintenance Memorandum (BMM) is prepared that identifies deficiencies and areas of deterioration needing repair. Individual work items identified on each BMM vary in complexity from a small concrete spall to replacing bridge expansion bearings. Some items require specialized equipment and/or use of contractual services such as installing bridge deck joints. Other items such as bridge beam end painting are programmed into the federally funded Bridge Preventive Maintenance Program. The repair work is scheduled based on criticality. Due to the advanced age of Connecticut's infrastructure, both the number of bridge inspections and needed repairs continues to increase.

**Discussion of trend:**

During the most recent quarter (see Figure 1) the cumulative bridge work item backlog, was at 4,001. The short term target is to maintain a zero gain in the backlog by increasing bridge maintenance activities and resources needed to accomplish this work. The goal for subsequent years will be to significantly decrease the backlog.





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Highway

Asset/Topic:  
Multi-use Facilities

Focus:  
Operations

## Bicycle / Pedestrian Access

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

### Measure(s)

Percent of Funds Expended for Bicycle/  
Pedestrian Access

### Target Value:

>= 1.0%

### Current Value: (SFY 2011)

2.8%

Source: Bureau of Engineering and Construction - Mr. Rabih Barakat, P.E.

Note: Data for this measure becomes available for reporting annually in October for the previous State Fiscal Year (SFY). The data set used for this posting covers SFY 2011 (7/1/2010 through 6/30/2011), and includes state and municipal projects.

### Purpose/Description of measure:

This measure tracks the percent and total amount of dollars spent and/or programmed to be spent, on projects containing items that improve accessibility for pedestrians and bicyclists. Walking and bicycling promote good health, cost less than driving a motor vehicle, are good for the environment, provide freedom of travel and independence, and add to the sense of community in a town or city. In an effort to meet the public's demand for improved mobility and a better quality of life, CTDOT supports the use of bicycling and walking, and places emphasis on providing a safe and convenient environment for these transportation modes. Public Act 09-154, passed by the Connecticut General Assembly (CGA) in 2009, requires "a reasonable amount of any funds received by CTDOT or any municipality for construction, restoration, rehabilitation, or relocation of roads to be spent for facilities for all users, including at least, bikeways and sidewalks with curb cuts and ramps."

### Discussion of trend:

This year the Department again exceeded the 1 percent target set by the CGA (Figure 1). CTDOT identified 46 projects awarded in SFY2011 that include elements for pedestrians or bicyclists, such as sidewalks, audible pedestrian signals, push buttons, signs, pedestrian/bicycle trails, and ramps. Total dollars being expended for these items equals \$18 million, which was approximately 2.8 percent of total funds awarded for the construction, maintenance and repair of roads in the state. A portion of the funds spent this year were for projects that were funded through the federal American Recovery Act.

Figure 1. Percent of Funds Expended for Bicycle/Pedestrian Access





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Highway

Asset/Topic:  
Congestion

Focus:  
Utilization

## Highway Capacity

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

### Measure(s)

Percent of Road Network with Traffic Volumes Greater than Capacity

### Target Value:

Reduce Congestion Throughout the State

### Current Value: (CY 2010)

8.67% Miles Over Capacity

Source: Bureau of Policy and Planning - Mr. Michael Connors

Note: Data for this measure becomes available for reporting annually in September for the previous Calendar Year. The latest data set used for this posting covers the time period from 1/1/2010 through 12/31/2010.

### Purpose/Description of measure:

This measure tracks the congestion on Connecticut state roadways. Highway congestion is caused when traffic demand approaches or exceeds the available capacity of the highway system. Traffic demands vary significantly, depending on the season of the year, the day of the week, and even the time of day. Congestion can also be measured in a number of ways – level of service, speed, travel time, and delay are commonly used measures. CTDOT is continuously in the process of looking at new ways to monitor and alleviate congestion. Travelers, however, have indicated that more important than the severity or magnitude of congestion is the reliability of the trip travel time. People in a large metropolitan area may accept that a 20 mile freeway trip takes 40 minutes during the peak period, so long as this predicted travel time is reliable and is not 25 minutes one day and two hours the next. The state is in the process of looking at new ways to monitor congestion management.

### Discussion of trend:

Demand for highway travel continues to grow. Construction of new highway capacity to accommodate this growth in travel has not kept pace and is not likely to in the near future. Between 1980 and 1999, route miles of highways increased 1.5 percent, while vehicle miles of travel increased 76 percent.

### Figure 1. Percent of Miles Approaching or Above Capacity



2011 Data not available until October 2012

Mode:  
Highway

Asset/Topic:  
Champ Program

Focus:  
Operations

### CHAMP Motorist Assists

**Strategic Objective(s) Met:**

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Number of CHAMP Motorist Assists

Target Value:

Maintain Ability to Assist at Least 20,000 Motorist per year

Current Value:  
(2011-Q2)

5,943

Source: Bureau of Highway Operations - Mr. Harold Decker

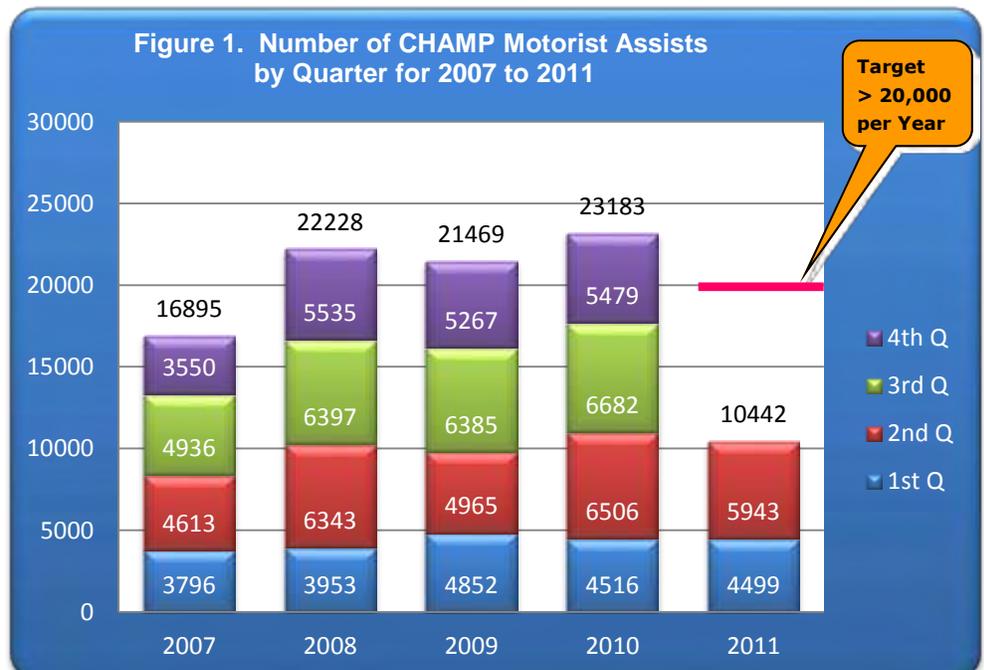
Note: Data for this measure becomes available quarterly. The latest data set used for this posting covers the 2011 calendar year second quarter (4/1/2011 through 6/30/2011).

**Purpose/Description of measure:**

This measure tracks the use of the Connecticut Highway Assistance Motorist Patrol (CHAMP) program on Connecticut's highways. CHAMP is a roadway service patrol program operated by CTDOT, which provides assistance to motorists by changing flat tires, jump starting, pushing vehicles to shoulders, providing fuel and offering shelter. The service patrols respond to highway accidents and notify Highway Operations Centers in Newington and Bridgeport of the need for State Police, medical, fire and/or other emergency response. They help provide quick clearance of incidents to reduce traffic congestion and delays. Patrol drivers also remove highway debris and dead animals, report damaged guiderail, illumination and drainage problems, and provide travel assistance to motorists on the highway. CHAMP patrols operate along the I-95 corridor statewide, I-91 (East Windsor to Meriden and New Haven), I-84 (Manchester to New York line), Route 15 (Merritt Parkway), I-395 in the southeast, I-291 (Windsor to Manchester) and on selected other routes.

**Discussion of trend:**

In Figure 1, it can be observed that the number of motorist assists for the second quarter of 2011 was lower than the second quarter of 2010 (5,943 assists compared to 6,506). Due to state budget restrictions CHAMP patrols are not always deployed for 100 percent usage, which can impact the ability to reach the target number of assists.



Mode:  
Rail

Asset/Topic:  
Fleet

Focus:  
Condition

### Rail Fleet Reliability

**Strategic Objective(s) Met:**

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Target Value:

Current Value:  
**(Through 2011-Q2)**

Mean Distance Between Failures - Locomotive	35,000 mi.	<b>35,365 mi.</b>
Mean Distance Between Failures - Coach	280,000 mi.	<b>261,166 mi.</b>
Mean Distance Between Failures – M2 EMU	90,000 mi.	<b>51,369 mi.</b>
Mean Distance Between Failures – M4 EMU	65,000 mi.	<b>39,230 mi.</b>
Mean Distance Between Failures – M6 EMU	65,000 mi.	<b>32,504 mi.</b>
Mean Distance Between Failures – M8 EMU	140,000 mi.	<b>156,502 mi.</b>

Source: Bureau of Public Transportation – Mr. Eugene Colonese

Note: Data for this measure becomes available for reporting Monthly. The data set used for this posting is through the second quarter (1/1/2011 through 6/30/2011) of calendar year 2011.

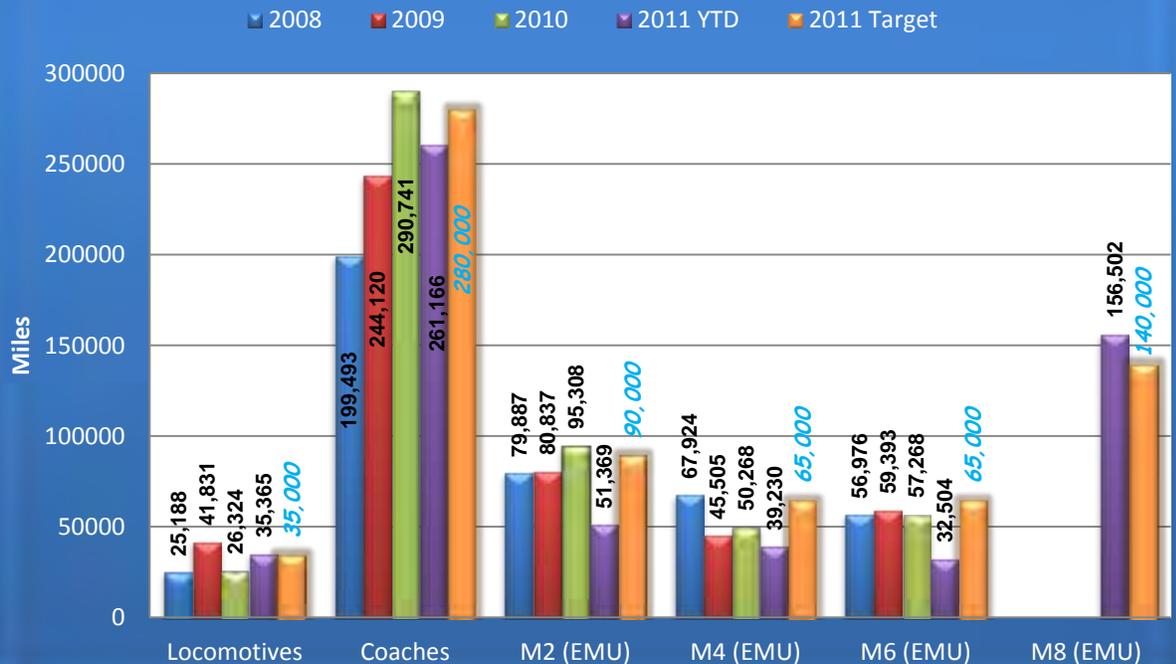
**Purpose/Description of measure:**

This measure tracks the reliability of MetroNorth train service on the New Haven Line. Mean Distance between Failures (MDBF) is an industry standard for measuring the reliability of a rail car fleet. It is calculated by dividing the total miles operated by the total number of confirmed primary failures, by car or locomotive fleet. A confirmed primary failure is defined as a failure of any duration for mechanical cause that occurs to a revenue train that is reported late at its final terminal by more than 5 minutes and 59 seconds. Generally speaking, the greater the MDBF, the better the on-time performance of train service.

**Discussion of trend:**

Figure 1 shows the MDBF for six types of rail vehicles for calendar years 2008 through the second quarter of 2011 along with their respective 2011 yearly target. The first of the new M-8 model EMUs have been put into service to replace and complement the existing EMUs in the existing fleet.

**Figure 1. Mean Distance Between Failures  
Calendar Year 2008 through 2011 Q2**



Mode:  
Rail

Asset/Topic:  
Fleet

Focus:  
Operations

### Rail On-Time Performance

**Strategic Objective(s) Met:**

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Target Value:

Current Value:  
(2011-Q2)

Percent of Rail On-Time Performance – New Haven Line (NHL)  
Percent of Rail On-Time Performance – Shore Line East (SLE)

97.0%

96.7%

95.0%

92.7%

Source: Bureau of Public Transportation – Mr. Eugene Colonese

Note: Data for this measure becomes available for reporting Monthly. The data set used for this posting covers the second quarter (4/1/2011 through 6/30/2011) of calendar year 2011.

**Purpose/Description of measure:**

This measure tracks the On-Time Performance (OTP) of Connecticut's commuter rail service on the New Haven Line (NHL) and the Shore Line East (SLE). OTP is a key measure for service reliability to its customers and is the industry standard used to compare existing services with other similar competitors. A commuter train is considered "on-time" if it reaches its final destination within 5 minutes and 59 seconds of its scheduled arrival time.

**Discussion of trend:**

Figures 1 and 2 illustrate the quarterly on-time performance of NHL and SLE for calendar years 2008 through the second quarter of 2011. The NHL OTP has surpassed the target of 97 percent on many of the quarters during the previous three year period. In the second quarter of 2011 the 97 percent target was essentially met. Severe winter weather is often the cause for quarters that do not meet the target. The overall OTP record for the NHL makes this one of the most reliable heavy-rail commuter services in the U.S.

The SLE OTP target of 95 percent was not meet this quarter. AMTRAK is the contracted operator for the SLE service. SLE OTP is dependent upon AMTRAK designated speeds during track and bridge maintenance and repairs.

**Figure 1. New Haven Line - Percent On-Time**



**Figure 2. Shore Line East - Percent On-Time**





# Performance Measures

## 2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Rail

Asset/Topic:  
Passengers

Focus:  
Utilization

### Rail Passenger Trips

#### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

#### Measure(s)

#### Target Value:

#### Current Value: (2011-Q2)

Number of Rail Passengers –  
New Haven Line (NHL)

9,595,002

9,797,510

Number of Rail Passengers –  
Shore Line East (SLE)

134,997

161,676

Source: Bureau of Public Transportation – Mr. Eugene Colonese

Note: Data for this measure becomes available for reporting Monthly. The data set used for this posting covers the second quarter (4/1/2011 through 6/30/2011) of calendar year 2011.

#### Purpose/Description of measure:

This measure tracks the usage of Connecticut's commuter rail passenger service on the New Haven Line (NHL) and the Shore Line East (SLE). CTDOT is committed to improving rail service through a significant investment in new equipment, new rail cars, new train stations, and improved repair facilities. The New Haven Line is one of the busiest commuter lines in North America, carrying over 37 million passengers in 2010. The NHL (operated by Metro North Railroad) serves stations along the shoreline from New Haven to Greenwich and on to Grand Central Terminal in New York City. Shore Line East trains are owned and operated by CTDOT under contract with AMTRAK, to provide daily rail operations from New London to New Haven, with select trains continuing to Bridgeport and Stamford. Additional information about NHL and SLE is available at <http://www.ct.gov/dot/cwp/view.asp?a=1386&q=316722>

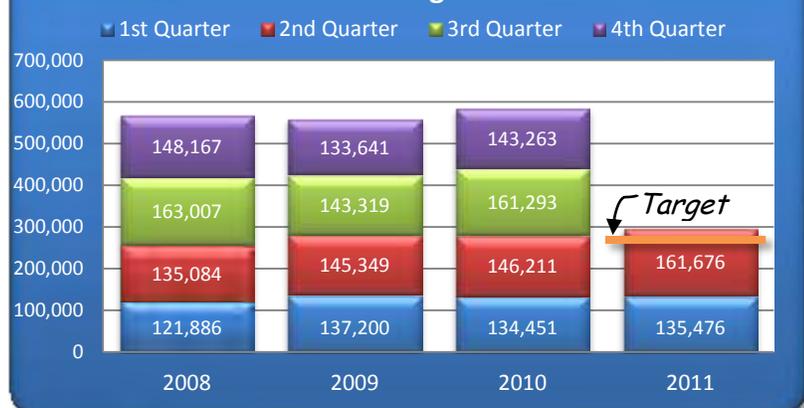
#### Discussion of trend:

Figures 1 and 2 provide calendar year quarter comparisons for ridership from 2008 through the second quarter of 2011 for the NHL and SLE, respectively. This quarter ridership increased by 2.8% on the NHL, and by over 10% on the SLE compared to the second quarter of 2010. Both the NHL and SLE surpassed the target this quarter. These numbers offer hope for increases in ridership in future quarters as Connecticut recovers from the economic downturn.

#### Figure 1. New Haven Line - Number of Rail Passengers



#### Figure 2. Shore Line East - Number of Rail Passengers





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Bus

Asset/Topic:  
Fleet

Focus:  
Condition

## Miles Between Road Calls (Bus)

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Target Value:

Current Value:  
SFY 2011-Q4 (CY 2011-Q2)

Average Miles Between Road Calls

5,000 Miles

4,059 Miles

Source: Bureau of Public Transportation - Mr. Michael Sanders

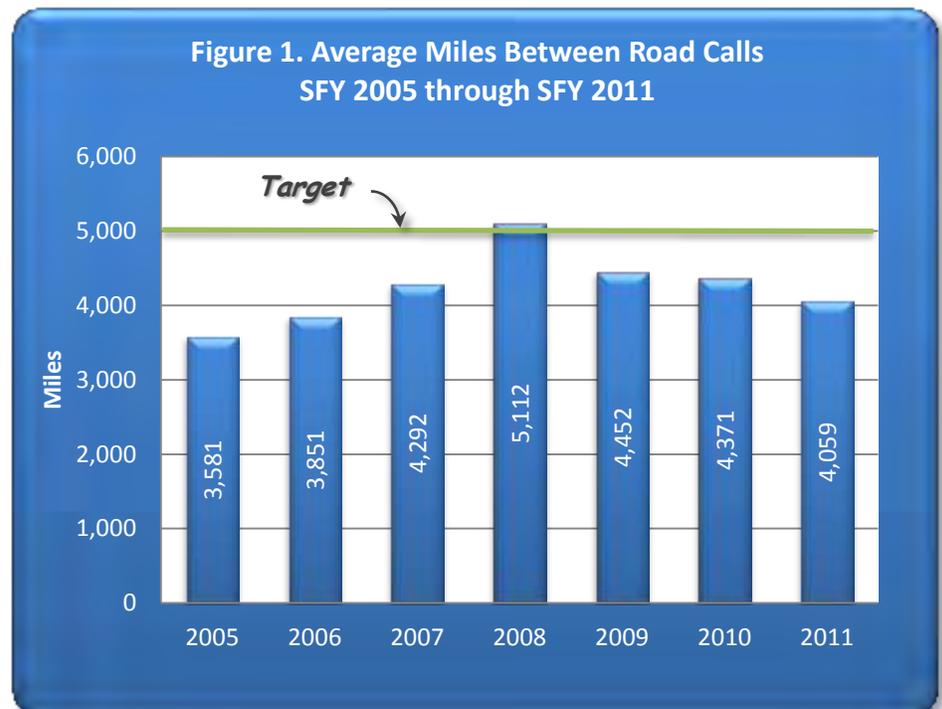
Note: Data for this measure is reported quarterly based on the State Fiscal Year (SFY) (July 1 through June 30). The latest data set used for this posting is a year-to-date average through June 30, 2011, which is quarter 4 of SFY 2011 (This is equivalent to quarter 2 of calendar year (CY) 2011).

### Purpose/Description of measure:

This measure tracks the reliability of CTTransit bus service. Miles Between Road Calls (MBRC) is the industry standard performance metric used nationally by bus operators to measure availability and reliability of equipment. Road calls are traditionally counted when a bus misses one of its scheduled trips. In any given time period, the number of road calls can be affected by the age of the fleet, the occurrence of fleet-wide defects on a certain model or model year of buses, the weather, and other factors.

### Discussion of trend:

Figure 1 shows the trend in MBRC for CTTransit buses in the Hartford, New Haven and Stamford Divisions (CTTransit's largest operating divisions), for state fiscal years (SFY) 2005 through 2011. The decline in MBRC after SFY 2008 was due primarily to the increase in average age of the bus fleet. However, this trend should begin to increase as the older buses are replaced and supplemented with new ones, purchased with federal stimulus funds.



Mode:  
Bus

Asset/Topic:  
Fleet

Focus:  
Condition

### Age of Bus Fleet

**Strategic Objective(s) Met:**

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Target Value:

Current Value:  
CY 2010

Average Age of Bus Fleet  
(State Owned Fleet)

6.0 Years

**6.9 Years**

Average Age of Bus Fleet (Transit  
District Owned Fleet)

6.0 Years

**6.8 Years**

Source: Bureau of Public Transportation - Mr. Michael Sanders

Note: Data for this measure becomes available for reporting annually in December for the current Calendar Year. The latest data set used for this posting covers the time period ending 12/31/2010.

**Purpose/Description of measure:**

This measure tracks the average age of Connecticut's transit fleet of buses. The average age statistic is important, as older buses tend to require a higher level of maintenance to keep them operating efficiently and reliably. As the owner of the CTTtransit bus system, the CTDOT purchases capital assets through the State procurement process for the majority of the local transit, Americans with Disabilities Act (ADA) paratransit and commuter express operations. The expected life of heavy-duty transit buses is 12 years. The Federal Transit Administration (FTA) uses a guideline that full-sized heavy-duty transit buses are eligible for replacement at 12 years of age. Under an ideal situation, one-twelfth of the buses would be replaced every year, with an average fleet age of 6 years, which is the performance target value. Due to financial constraints, the Department typically initiates the procurement process for new equipment in year 12, with delivery completed by year 14. Due to variable procurements in the past, the fleet age is not uniformly distributed from new to old (0 to 12 years), but rather is concentrated in certain age ranges.

**Discussion of trend:**

Figure 1 is a plot of the average age of buses for both state owned and transit district operators, for calendar years 2005 through 2010. The average overall combined bus fleet age at the end of 2010 is approximately 6.9 years. Over the period 2005 through 2009, the average age of state-owned buses had increased by approximately two years. However, the increasing age trend for state-owned buses began to reverse in 2010 due to a program to replace buses using federal stimulus (ARRA) funds.

**Figure 1. Average Age of Bus Fleet**





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Bus

Asset/Topic:  
Passengers

Focus:  
Utilization

## CTTransit Passenger Trips

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Target Value:

Current Value:  
(2011-Q2)

Number of CTTransit Passenger Trips

25,000,000 /year  
(Approx. 6,250,000/qtr.)

6,714,423

Source: Bureau of Public Transportation – Mr. Michael Sanders

Note: Data for this measure becomes available for reporting quarterly. The latest data set used for this posting covers the time period from 4/1/2011 through 6/30/2011. The data provided is for CTTransits Hartford, Stamford and New Haven Divisions only.

### Purpose/Description of measure:

This measure tracks passenger ridership on the CTTransit fleet. Each person boarding a bus is counted as one passenger trip. CTTransit provides fixed-route bus service for Hartford, New Haven and Stamford. In the greater Hartford area, commuter express bus service from surrounding areas is also provided by CTTransit. CTDOT has consistently run advertising campaigns to market the bus systems, and has been increasing service options and coverage. Use of newer, cleaner, more energy efficient hybrid electric, low sulfur diesel, and hydrogen fuel cell buses also has made “taking the bus” a more attractive and ‘greener’ option. Additional information on transit can be found at <http://www.cttransit.com>.

### Discussion of trend:

Figure 1 shows the CTTransit quarterly ridership data for calendar years 2007 through the second quarter of 2011. Ridership this quarter surpassed the approximate quarterly target of 6,250,000 passenger trips. Ridership this quarter was higher than it has been in the same quarter of the previous five years. The yearly target of 25 million passenger trips has been met 3 out of the past 4 years.

Figure 1. CTTransit Passenger Trips by Quarter





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Airport

Asset/Topic:  
Pavement

Focus:  
Condition

## Airport Pavement Condition

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

### Measure(s)

Percent of Airport Pavement Rated Good or Excellent (General Aviation Airports)

### Target Value:

100% Good or Excellent

### Current Value: (CY 2010)

90%

Percent of Airport Pavement Rated Good or Excellent (Bradley International Airport)

100% Good or Excellent

100%

Source: Bureau of Aviation and Ports - Mr. Robert Bruno

Note: Data for this measure becomes available for reporting annually in December for the current Calendar Year. The latest data set used for this posting covers the time period from 1/1/2010 through 12/31/2010.

### Purpose/Description of measure:

This measure tracks the overall pavement condition of CTDOT's Airports. For all the General Aviation Airports (GAA) combined (total pavement area 903,000 square yards (SY)), 90 percent of the pavement is rated as good or excellent. For Bradley International Airport (total pavement area 1,378,167 SY), 100 percent of the pavement is rated good or excellent.

### Discussion of trend:

The goal of the Bureau of Aviation and Ports is to bring the percentage of the good and excellent pavements at the General Aviation Airports to 100 percent. The percentage of the pavement ranked poor has been steadily decreasing in the recent years, going down to 10 percent this year, and is now limited to lightly used aprons in most cases under lease to private operators. A detailed breakup is provided below.

### Waterbury-Oxford Airport (218,000 SY)

Good or Excellent=88%

### Groton-New London Airport (267,000 SY)

Good or Excellent=77%

### Hartford Brainard Airport (209,000 SY)

Good or Excellent=100%

### Windham Airport (151,000 SY)

Good or Excellent=100%

### Danielson-Killingly Airport (58,000 SY)

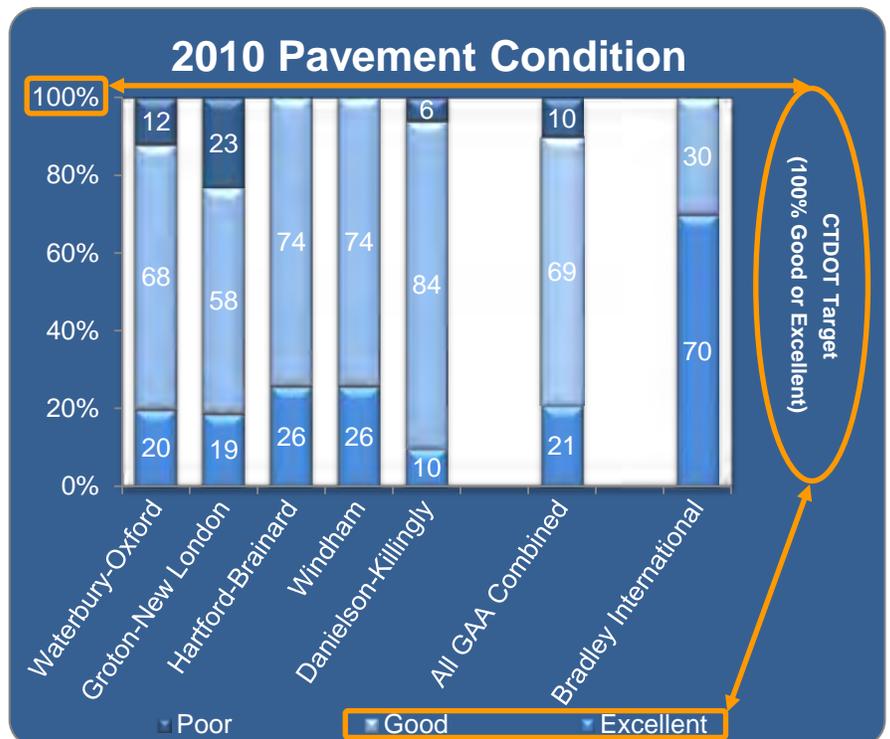
Good or Excellent=94%

### All General Aviation Airports (combined)

Good or Excellent=90%

### Bradley International Airport (1,378,167 SY)

Good or Excellent=100%





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Airport

Asset/Topic:  
Passengers

Focus:  
Utilization

## Bradley International Airport Passengers

Measure(s)	Target Value:	Current Value: (2011-Q2)
Number of Bradley International Airport Passengers	Maintain or Exceed 2010-Q2 Passengers (1,372,015)	1,484,302

Source: Bureau of Aviation and Ports - Mr. Jeffrey Stewart

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Note: Data for this measure becomes available monthly from the Bradley Board of Directors Budget Report. The latest data set used for this posting covers the calendar year 2011 second quarter (4/1/2011 through 6/30/2011).

### Purpose/Description of measure:

This measure tracks the total number of passengers (sum of enplanements and deplanements) at Connecticut's Bradley International Airport (Bradley). Bradley, New England's second largest airport, is owned by the State of Connecticut, and operated by the CTDOT Bureau of Aviation and Ports. CTDOT is committed to making Bradley a best-in-class operation that delivers the highest level of service to all its passengers, and functions as a powerful driver of the State's economy - and its future. Additional information about Bradley can found at [www.bradleyairport.com](http://www.bradleyairport.com)

### Discussion of trend:

Figure 1 illustrates the quarterly and annual number of airport passengers at Bradley between January 2008 and June 2011. The 2011 second quarter value is 8.2 percent higher than the target value. There were 112,287 more total passengers served in quarter 2 of 2011 than for the same three-month period in 2010. This is the fourth consecutive quarterly increase in passengers.

Figure 1. Bradley Airport Passengers by Quarter for 2008-2011





# Performance Measures

## 2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Airport

Asset/Topic:  
Parking

Focus:  
Utilization

### Bradley International Airport Parking

#### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

#### Measure(s)

#### Target Value:

#### Current Value: (2011-Q2)

Revenue Generated from Bradley International Airport Parking

Maintain or Exceed Year 2010-Q2 Values

(\$4,921,663)

**\$5,628,054**

Source: Bureau of Aviation and Ports - Mr. Jeffrey Stewart

Note: Data for this measure becomes available monthly from the Bradley Board of Directors Budget Report. The latest data set used for this posting covers the calendar year 2011 second quarter (4/1/2011 through 6/30/2011).

#### Purpose/Description of measure:

This measure tracks the use of state-owned parking facilities at Bradley International Airport (Bradley) via parking revenue. Bradley currently receives revenue from one parking garage (containing both long- and short-term parking) and seven surface parking lots. The Airport's Master Plan includes a new future parking garage in conjunction with the replacement of Terminal B (Murphy Terminal). As Bradley continues its expansion and modernization program, along with increased marketing efforts, parking revenue is projected to trend upward in the coming years in conjunction with increased usage of the airport.

#### Discussion of trend:

Parking revenue tends to correlate with the number of passengers served. Figure 1 illustrates the quarterly and yearly parking revenue from 2007 through 2011. The parking revenue for the second quarter (April through June, 2011) increased by 14.4 percent over the same three-month period in 2010, therefore, surpassing the target. This is the fifth consecutive quarterly increase in parking revenue.

### Figure 1. Bradley Parking Revenue by Quarter for 2007-2011





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Administration

Asset/Topic:  
Agreements

Focus:  
Operations

## Agreements Executed in Under 60 Days

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

### Measure(s)

Percent of Agreements Executed in Under 60 Days

### Target Value:

Increase Percentage

### Current Value: (Through SFY 2011-Q4)

40% (36%-Q4)

Source: Bureau of Finance and Administration - Mr. Charles Roman

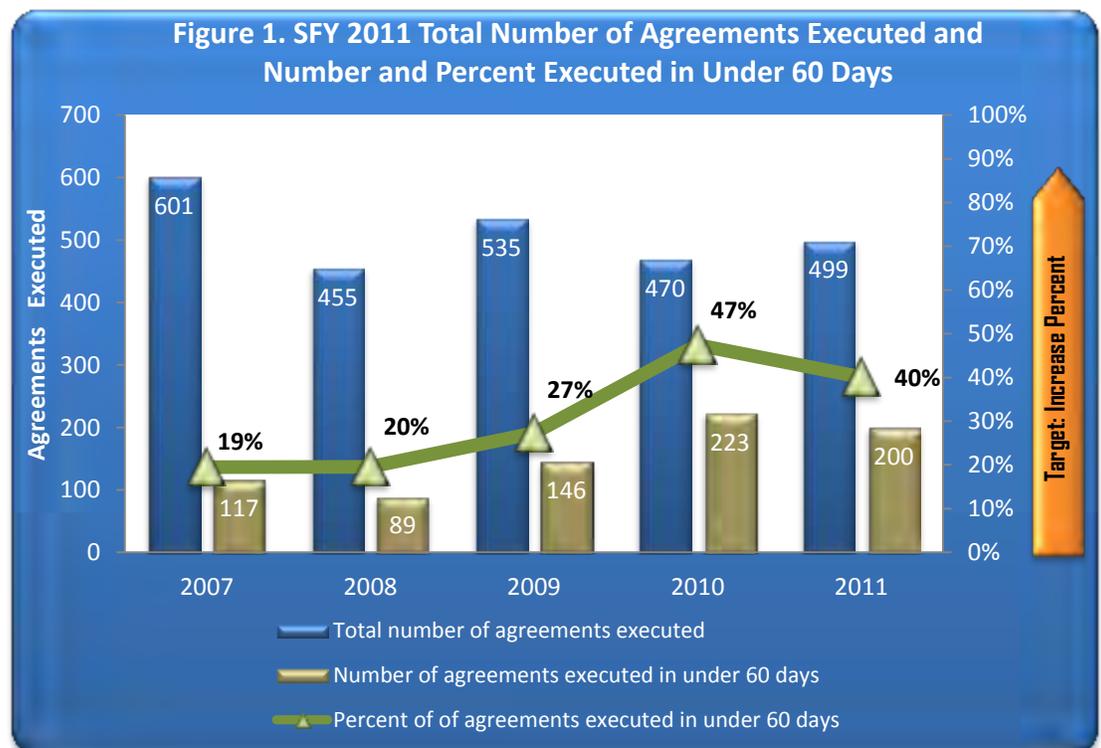
Note: Data for this measure is reported quarterly based on the State Fiscal Year (SFY) (July 1 through June 30). The latest data set used for this posting covers the time period from July 1, 2010 through June 30, 2011, which is through quarter 4 of SFY 2011 (this is equivalent to quarter 2 of calendar year (CY) 2011).

### Purpose/Description of measure:

This measure tracks the improvement in the processing and execution of various types of agreements that the Department enters into. CTDOT executes a large number of agreements annually including: consultant agreements for architectural, engineering, planning, surveying; force account; local bridge; municipal design and construction; maintenance encroachment; traffic signals and railroad grade crossings; rights of way; utilities; rail leases; public transportation operating; grants; ground transportation; air carriers; concession license, etc. The time it takes to execute an agreement is critical to project schedules, funding, project costs and convenience to the traveling public.

### Discussion of trend:

In SFY 2011, the Department executed 200 out of 499 total agreements or 40 percent in under 60 days (Figure 1). This is a significant improvement over previous years, and is in part related to the use of the boiler plate agreement template instituted in the fourth quarter of SFY 2009, which enables certain agreements to be executed within a two week timeframe.





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Administration

Asset/Topic:  
Contracts

Focus:  
Project Delivery

## Construction Contracts Awarded within 60 Days of Bid Opening

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

### Measure(s)

Percent of Construction Contracts Awarded within 60 Days of Bid Opening

### Target Value:

100%

### Current Value: (Through SFY 2011-Q4)

93% (100% Q4)

Source: Bureau of Finance and Administration - Mr. Mark Daley

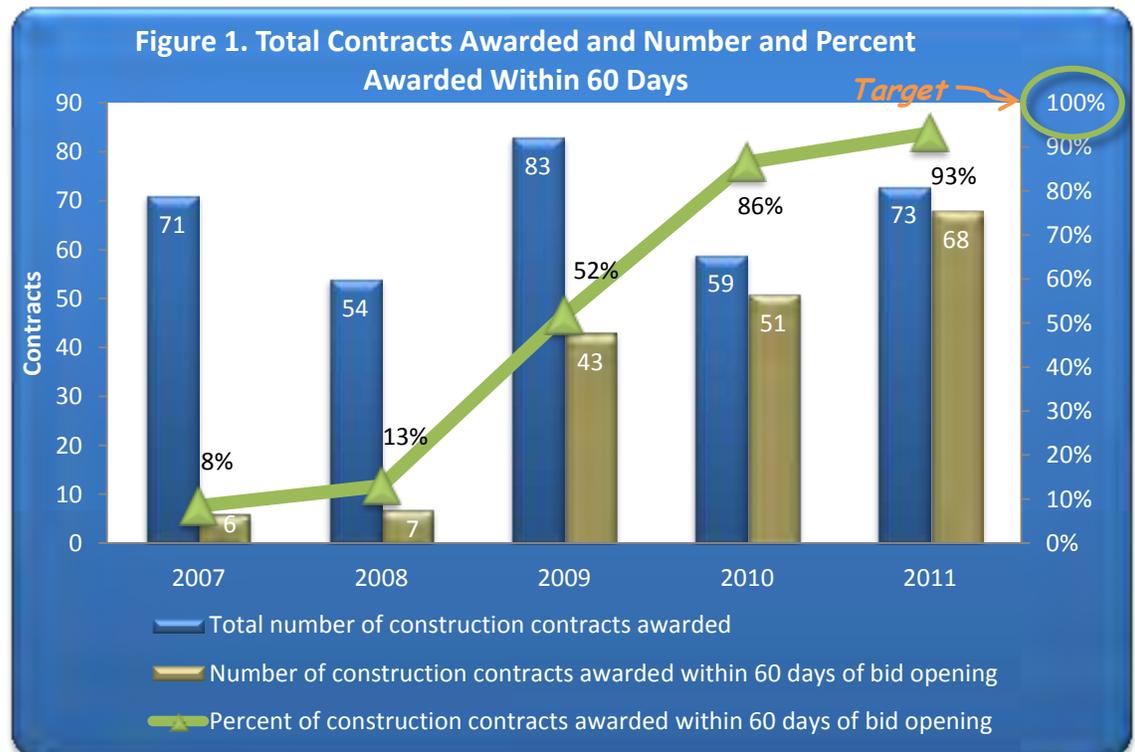
Note: Data for this measure is reported quarterly based on the State Fiscal Year (SFY) (July 1 through June 30). The latest data set used for this posting covers the time period from July 1, 2010 through June 30, 2011, which is through quarter 4 of SFY 2011 (this is equivalent to quarter 2 of calendar year (CY) 2011).

### Purpose/Description of measure:

This measure tracks the progress of awarding construction contracts once the bids have been received. The Department of Transportation executes a significant number of construction contracts annually with an approximate average value of \$385 million. These contracts involve the construction of roads, bridges, buildings, transportation-related public works projects, demolition, or other transportation-related matters. The timely execution of contracts is critical not only to ensure a safe and efficient infrastructure for the traveling public but also to disburse funds quickly and minimize overall project costs.

### Discussion of trend:

So far this year 68 out of 73 or 93 percent of construction contracts were awarded within 60 days of the bid opening (Figure 1). In the current quarter 21 of 21 or 100 percent of construction contracts were awarded within 60 days of the bid opening. This is a significant increase from SFY 2007 where only 8 percent of construction contracts were awarded within 60 days of the bid opening. Many factors, including various process refinements and timely funding approvals, contributed to reduce the number of days it takes to award a contract.



Mode:  
Administration

Asset/Topic:  
Contracts

Focus:  
Project Delivery

### Construction Contracts Completed within Budget

**Strategic Objective(s) Met:**

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Target Value:

Current Value:  
(2011-Q2)

Percent of Construction  
Contracts Completed  
Within Budget

Increase percent

66%

Source: Bureau of Engineering and Construction - Mr. James P. Connery, P.E.

Note: Data for this measure becomes available for reporting quarterly based on calendar year. The latest data set used for this posting covers the time period from 04/01/2011 through 06/30/2011.

**Purpose/Description of measure:**

This measure compares the cost of completed projects with the original contract budget. The original contract budget is defined as the awarded original contract value plus 10% contingency. Projects are accepted when all construction work has been satisfactorily completed, and all required documentation has been submitted and approved. There were twenty-nine (29) contracts completed during this quarter. These include contracts for Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and Federal Aviation Administration (FAA) construction projects.

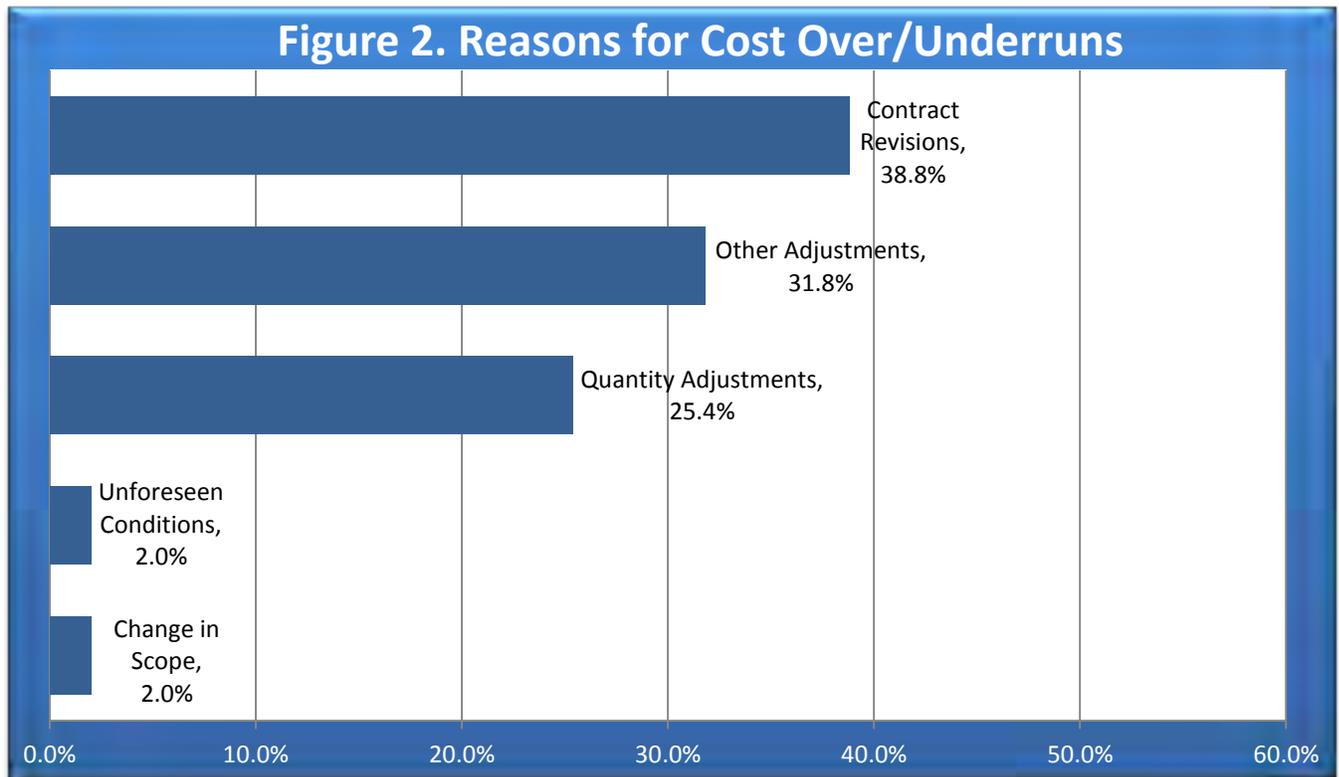
**Discussion of trend:**

As shown in figure 1, sixty-six percent (66%) of the contracts completed during the 2nd Quarter of 2011 were within budget. This represents nineteen (19) of the twenty-nine (29) contracts. Figure 2 shows the trend analysis for the cost overruns and underruns. The Department efforts to minimize cost overruns on contracts, include being proactive in design phase reviews to address constructability issues, encourage contractor's innovative ideas and value engineering.  
(continued)

**Figure 1. Construction Contracts Completed within Budget During Second Quarter of 2011**



- Number of Construction Contracts Completed within Budget
- Number of Construction Contracts Completed that Exceeded Budget

**Discussion of trend: (continued)****Change Order Reasons-Definitions:**

**Contract Revisions** – Changes in the original design initiated by design or construction which fall within the original scope of the project and do not alter the basic character of the project.

**Other Adjustments** – Revisions to the contract or plans to correct foreseeable changes which reasonably could have been expected, such as work shown on the plans for which no pay item was provided, contract revisions to comply with Environmental permits or Rights of Way agreements, and an elevation bust resulting in extra work to correct.

(Includes Incentives/Disincentives, Liquidated Damages, Material Adjustments, R.O.W., etc..)

**Quantity Adjustments** – Minor increases or decreases less than 10% of the original quantities, and the value is less than \$5000.00, which are not attributable to any of the above explanations.

**Unforeseen Conditions** – Additional work necessitated by encountering reasonably unforeseeable conditions which differ materially from those indicated in the contract, or unusual conditions differing from those normally encountered.

**Change in Scope** – Changes from the original intent or purpose of the project, extension of projects limits, elimination of contract work, and work not normally associated with the type of work originally bid.

Mode:  
Administration

Asset/Topic:  
Contracts

Focus:  
Project Delivery

### Construction Contracts Completed On-Time

**Strategic Objective(s) Met:**

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Percent of Construction Contracts Completed On-time

Target Value:

Increase percent

Current Value:  
(2011-Q2)

52%

Source: Bureau of Engineering and Construction - Mr. James P. Connery, P.E.

Note: Data for this measure becomes available for reporting quarterly based on calendar year. The latest data set used for this posting covers the time period from 04/01/2011 through 06/30/2011.

**Purpose/Description of measure:**

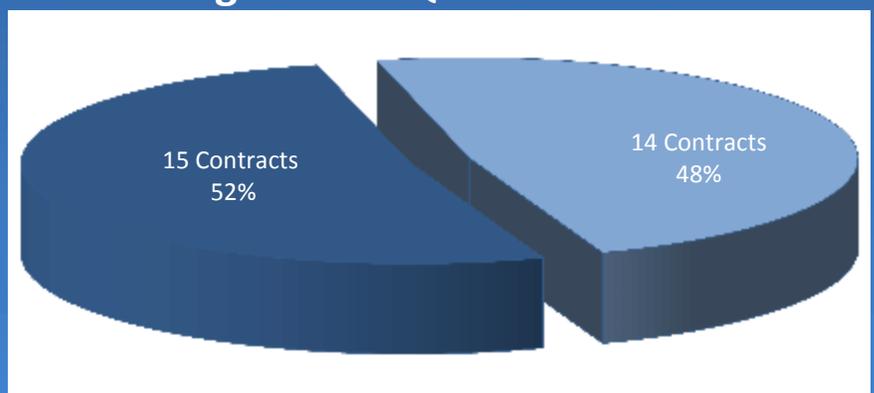
This measure tracks the percentage of CTDOT Construction contracts that were completed on time, which is defined as time within 100 percent of the original scheduled duration in calendar days, as specified in the contract. There were twenty-nine (29) contracts completed during this quarter. These include contracts for Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and Federal Aviation Administration (FAA) construction projects.

**Discussion of trend:**

As shown in figure 1, during the 2nd Quarter of 2011, CTDOT completed a total of twenty-nine (29) contracts, and fifty-two (52%) of those contracts were on time. CTDOT efforts to reduce time overruns on contracts include: improve coordination of contract activities; improve utility relocation efforts; improve communication with various stakeholders; closely monitor performance of construction activities and address issues in a timely manner. Figure 2 shows an analysis of reasons for time overruns.

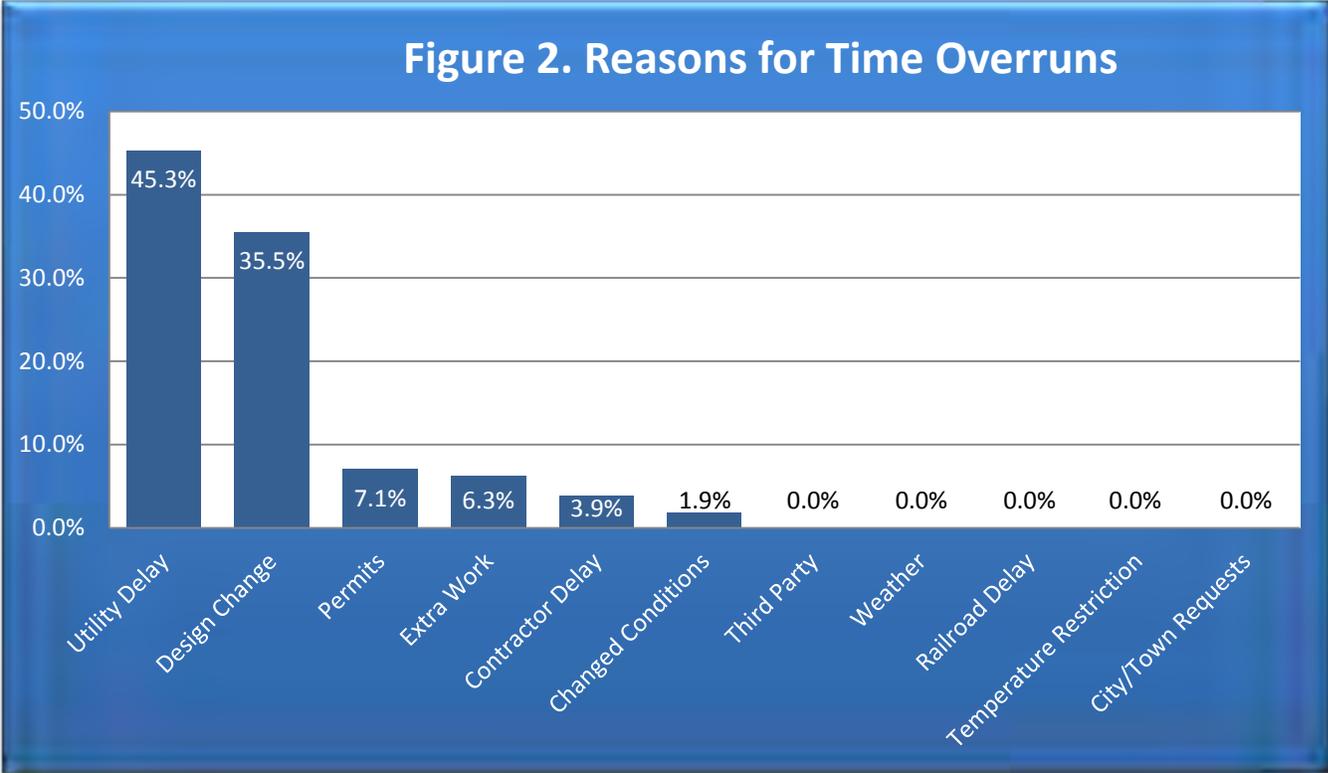
(Continued)

**Figure 1. Construction Contracts Completed on Time During Second Quarter of 2011**



- Number of Construction Contracts Completed on Time
- Number of Construction Contracts Completed that Exceeded Time

Discussion of trend: (continued)



Time Extension Reasons-Definitions:

**Changed Conditions-** Delays caused by subsurface or latent field conditions that could not have been known before construction, or unusual underground soil conditions.

**Utility Delay-** Construction delayed waiting for utility companies to move their facilities.

**Extra Work-** Additional work made necessary by Engineer’s changes of the Contract plans or specifications, which was not contemplated in the original contract work.

**Design Change-** Foreseeable work that was either the result of a defect in the original design or not included in the contract.

**Third Party-** Any delay caused by the actions of a third party not more specifically defined in any other category, such as an owner of adjacent property, manufacturers, suppliers.

**Weather-** Delays due to allowed work that cannot be completed due to period of unusual weather.

**Permits-** Construction delays due to time required to modify or issue a permit such as Army Corp., DEP, United States Coast Guard, local Conservation Commission, etc.

**Railroad Delay-** Delays caused by railroad companies.

**Temperature Restriction-** Delays due to restriction for temperature sensitive materials.

**Contractor Delay-** Delays caused solely by the Contractor and Liquidated Damages were assessed.

**City/Town Requests-** Requests made by a municipality during construction for work not included in the contract.



# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Administration

Asset/Topic:  
Finance

Focus:  
Operations

## Project Closeouts

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

### Measures

Number of Project Closeouts

### Target Value:

300 SFY 2011  
(75 per Quarter)

### Current Value: Through SFY 2011-Q4

345 YTD (124 Qtr)

Source: Bureau of Finance and Administration - Mr. Robert Card

Note: Data for this measure is reported quarterly based on the State Fiscal Year (SFY) (July 1 through June 30). The latest data set used for this posting covers the time period from July 1, 2010 through June 30, 2011, which is the final report for SFY2011 (equivalent to quarter 2 of calendar year (CY) 2011).

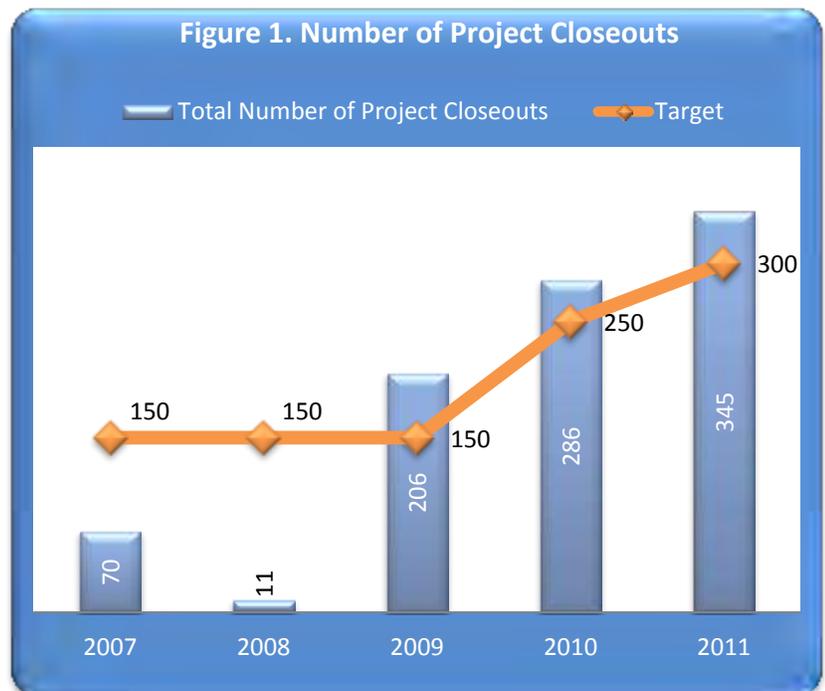
### Purpose/Description of measure:

This measure tracks the progress made on the project closeout of Federal Highway Administration (FHWA) funded projects. The Department seeks to closeout projects and release unused state and federal funding for obligation on new projects. When projects are requested for closeout by project managers, they are put on an assignment list for project closeout and final voucher. With the transition to the State's new financial management system (Core-CT) and the implementation of a new federal billing system, the Department was unable to closeout FHWA funded projects efficiently for several years. In October 2008 a project closeout team, with representatives from the Department's operational areas and FHWA, identified a number of projects that were candidates for closeout. The Department also initiates many new projects each year. The goal is, with experience and an appropriate amount of resources, the Department will begin to closeout more projects than are initiated in a year.

### Discussion of trend:

The Department is moving forward and making significant progress with the Project Closeout and Final Voucher Initiative. In the fourth quarter of SFY 2011, 124 projects have been closed bringing the total for SFY 2011 to 345. (Figure 1). For SFY 2011 the goal was increased to 300 and we have exceeded this goal during the fourth quarter. For SFY 2012 the goal will remain at 300. We are beginning to experience the need for more Final Voucher adjustments, but business process improvements made should help minimize the impact of this increase. Currently the number of projects that have expired federal authorization is approximately 1,027 and will become candidates for closeout in the future. Since the closeout initiative started in Oct 2008 we have closed 859 projects through June 30, 2011. We have 85 Final Vouchers prepared and proceeding through the closeout process and 318 assigned for Final Voucher preparation as of June 30, 2011.

Figure 1. Number of Project Closeouts





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Administration

Asset/Topic:  
CT RECOVERY

Focus:  
Project Delivery

## CT Recovery Projects Completed On-Time

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

Target Value:

Current Value:  
(2011-Q2)

CT Recovery - Percent of Stimulus Projects Completed On-Time

Maximize %

**84%**

Source: Office of the Commissioner - Mr. Philip Scarrazzo

Note: Data for this measure becomes available monthly. The latest data set used for this posting covers the time period October 1, 2009 through June 30, 2011.

### Purpose/Description of measure:

This measure tracks the percent of CTDOT American Recovery and Reinvestment Act (ARRA) 2009 projects that are completed before, or within 30 days beyond, the original scheduled contract completion date. Excluding ARRA projects sub-allocated to regional planning agencies, there are 71 projects being tracked. These include projects for highways, bridges, enhancements, transit and rail. Only projects funded from the original ARRA allocation are included here. Additional information on all CTDOT Recovery projects can be accessed on the website at [www.ct.gov/dot](http://www.ct.gov/dot).

### Discussion of trend:

On-time completion of projects indicates how well CTDOT adheres to project schedules. Some project delays are inevitable, as unexpected events or unforeseen work can be encountered once a project is started that are outside the control of CTDOT, or were impossible to predict in advance. Under these circumstances the anticipated scheduled completion dates are extended. The data presented in Table 1 is based on the actual completion date compared to the original scheduled completion date, plus a thirty day allowance. Reporting in this manner stresses the importance of making every effort to anticipate unforeseen issues during the design of a project. Thirty-Seven ARRA projects have been completed to date. Thirty-one were completed within thirty days of the original scheduled end date.

Table 1. Status of CTDOT Stimulus Projects (as of June 30, 2011)	
Total Number of Projects under ARRA	71
# of Projects Awarded to Date	66
# of Projects Completed to Date	37
# of Projects Completed On-Time	31
Percent of Projects Completed On-time	84% (31 of 37)
# of Projects Completed Ahead of Schedule	10



# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Administration

Asset/Topic:  
CT RECOVERY

Focus:  
Economic Development

## CT Recovery Dollars Expended

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

### Measure(s)

CT Recovery – Percent of Dollars Expended

### Target Value:

100%  
(\$462 million)

### Current Value: (Through 2011-Q2)

64.7%  
(\$299,009,325)

Source: Office of the Commissioner – Mr. Philip Scarozzo

Note: Data for this measure becomes available monthly. The latest data set used for this posting covers the time period from June 1, 2009 through June 30, 2011.

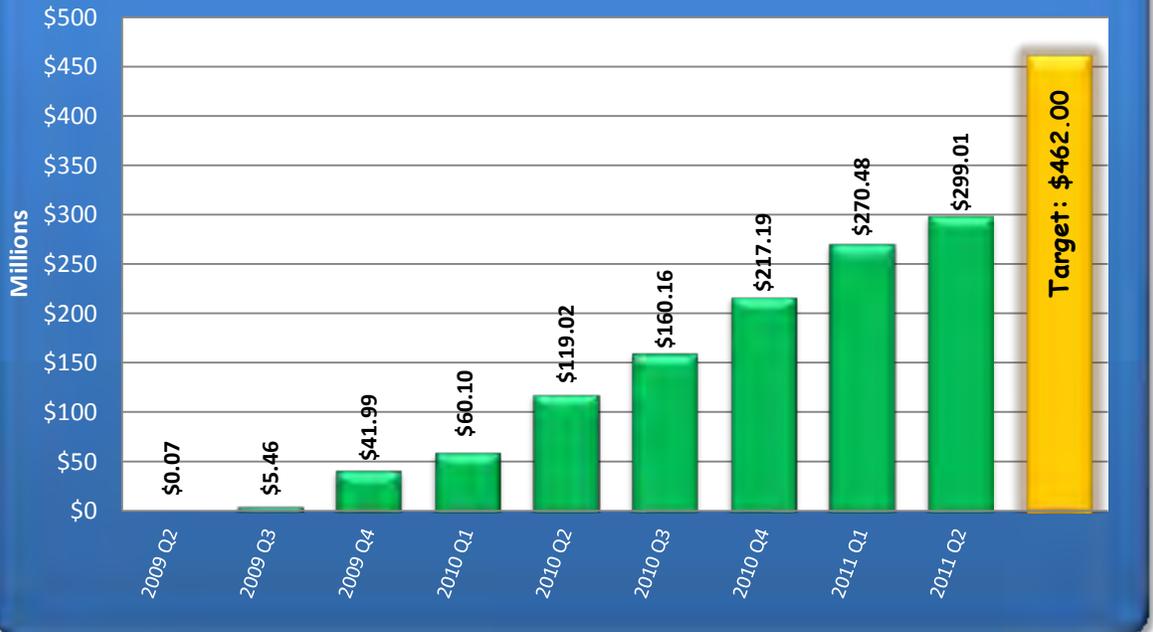
### Purpose/Description of measure:

This measure tracks the progress being made in spending American Recovery and Reinvestment Act (ARRA) 2009 project dollars. This measure includes ARRA dollars spent on highways, bridges, transit, rail, and enhancements on CTDOT and Regional Planning Agency projects. Additional information on CTDOT Recovery projects can be accessed on the website at [www.ct.gov/dot](http://www.ct.gov/dot) by clicking on the CTRecovery icon.

### Discussion of trend:

As of June 30, 2011 more than \$299 million (64.7%) of Connecticut's stimulus funds have been expended on 173 projects that have been awarded. In order to utilize the full \$462 million allocated to Connecticut, all funds are expected to be expended by early 2014.

### Figure 1. Cumulative Dollars Outlaid (Spent) on Recovery Act Projects





# Performance Measures

2011 Quarter 2 (April 1 to June 30, 2011)



Mode:  
Administration

Asset/Topic:  
CT RECOVERY

Focus:  
Economic Development

## CT Recovery Jobs Created/Sustained

### Strategic Objective(s) Met:

- Provide Safe and Secure Travel
- Reduce Congestion and Maximize Throughput
- Preserve and Maintain our Transportation Infrastructure
- Provide Mobility Choice, Connectivity and Accessibility
- Improve Efficiency and Reliability
- Preserve and Protect the Environment
- Support Economic Growth
- Strive for Organizational Excellence

Measure(s)

CT Recovery - Number of Jobs Created / Sustained

Target Value:

Increase Jobs

Current Value:  
(Through 2011-Q2)

41,365

Source: Office of the Commissioner - Mr. Philip Scarozza

Note: Data for this measure becomes available monthly. The latest data set used for this posting covers the time period from June 1, 2009 through June 30, 2011.

### Purpose/Description of measure:

This measure tracks the number of jobs created and/or sustained in Connecticut on transportation projects as a direct result of the American Recovery and Reinvestment Act (ARRA) 2009. This measure includes jobs created/sustained with ARRA dollars spent on highways, bridges, transit, rail, and enhancements on CTDOT and Regional Planning Agency projects. This listing is for direct jobs only, and does not include indirect jobs created as a result of material manufacturing and delivery to projects, or jobs that may be created in the local economy as a result of ARRA project employed workers. The statistics for number of jobs created/sustained are supplied by the contractors who employ the workers on active projects. Additional information on CTDOT Recovery projects can be accessed on the website at [www.ct.gov/dot](http://www.ct.gov/dot) by clicking on the CTRecovery icon.

### Discussion of trend:

As of June 30, 2011, 41,365 jobs have been created or sustained in Connecticut on ARRA funded projects. This also represents 1,320,981 total job hours created or sustained at a payroll of \$53,228,805 for the job hours created/sustained with Recovery Act funds.

(Note: Jobs reported in Figure 1 are not converted to Full-Time Equivalent positions)

### Figure 1. Cumulative Number of Direct On-Project Jobs Created/Sustained by Recovery Act Funds

