

# Connecticut... *on the move!*



**TRANSPORTATION FAST FACTS**

Transportation Fast Facts 2015  
*All information represents most recent data available*

Inquiries about this fact book may be directed to:  
Judd Everhart  
Director of Communications  
Connecticut Department of Transportation  
2800 Berlin Turnpike  
Newington, CT 06131  
(860) 594-3062

For more information please visit [www.ct.gov/dot](http://www.ct.gov/dot)



## TABLE OF CONTENTS

General Information .....	4
Funding and Projects .....	6
Planning .....	10
Highway System .....	12
Transit and Ridesharing .....	26
Passenger Rail Services .....	30
State Ferry Service .....	34
Bicyclists and Pedestrians .....	38
Freight .....	42
Airports .....	49

## Connecticut Department of Transportation (CTDOT)

### Vision

The vision of the Department of Transportation is to lead, inspire and motivate a progressive, responsive team, striving to exceed customer expectations.

### Mission

The mission of the Connecticut Department of Transportation is to provide a safe and efficient intermodal transportation network that improves the quality of life and promotes economic vitality for the State and the region.

### Values

**Measurable Results:** We will endeavor to utilize the latest technology and preserve the integrity of our current assets to provide a safe, efficient, integrated, multimodal, transportation system that offers options for mobility.

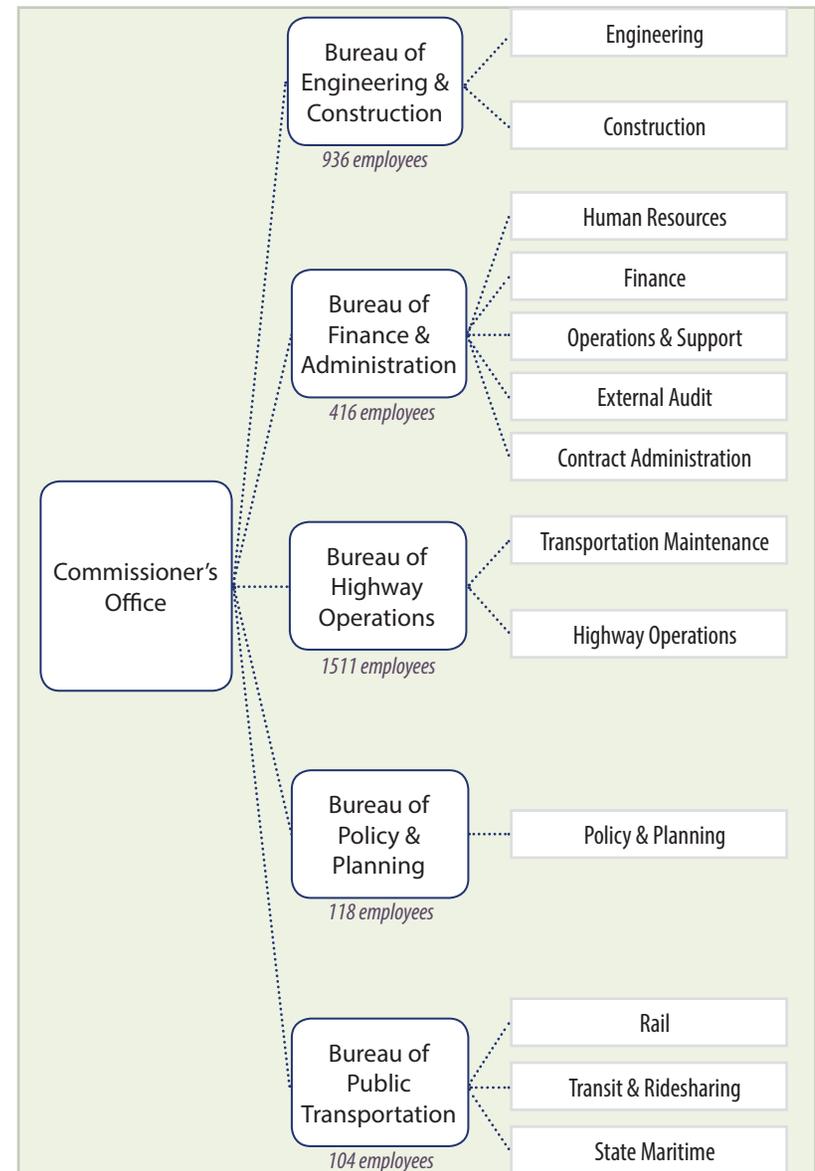
**Customer Service:** We are committed to consulting with our internal and external stakeholders in an open and transparent decision-making process; and to being responsive by providing timely information on services and programs.

**Quality of Life:** We will strive to maintain and enhance the quality of life in the State and the region by maintaining the character of our communities, supporting responsible growth, and by enhancing and being sensitive to the environment.

**Accountability & Integrity:** We will prudently manage and invest the human and financial resources entrusted to the Department using sound criteria and efficient, cost-effective methods that put safety and preservation first.

**Excellence:** We will demand excellence in all we do to fulfill our mission by being solution-oriented and focused on project delivery. We will continuously re-evaluate our mission, values, performance and priorities to ensure that the Department and its employees are innovative and responsive to changing needs.

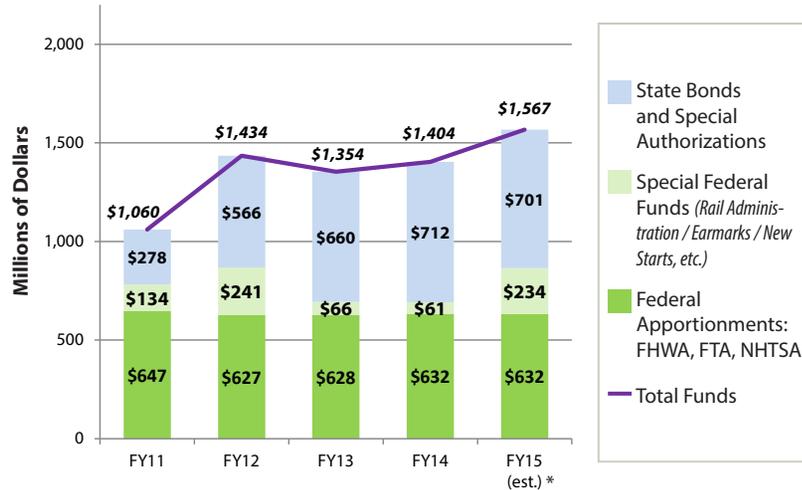
## CTDOT Organizational Chart



Note: Total employees = 3,085. Employee numbers listed are as of July 1, 2015.

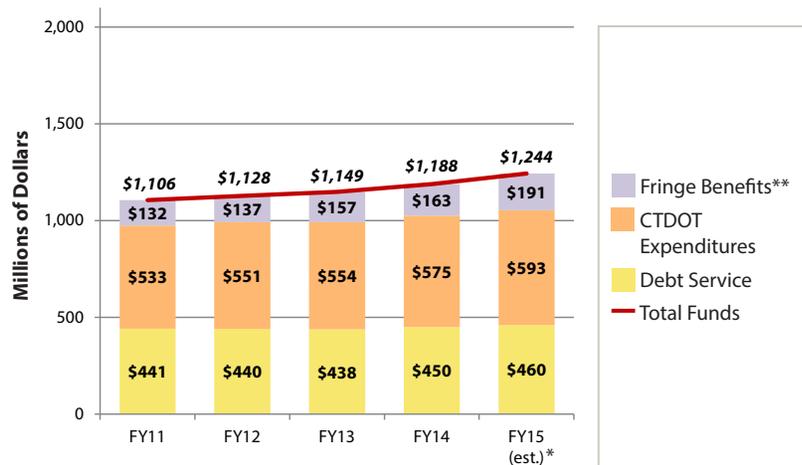
## CTDOT Capital Funds FY11 - FY15

The capital funds reflected here represent new funds made available to CTDOT each year for projects, whereas CTDOT's Capital Plan (not shown) represents funds programmed by year for specific projects. These capital funds apply to all transportation modes, except aviation.



## CTDOT Operating Funds FY11 - FY15

The operating funds reflected here represent CTDOT appropriated expenditures, including debt service, public transportation operations, highway operations, and personnel.

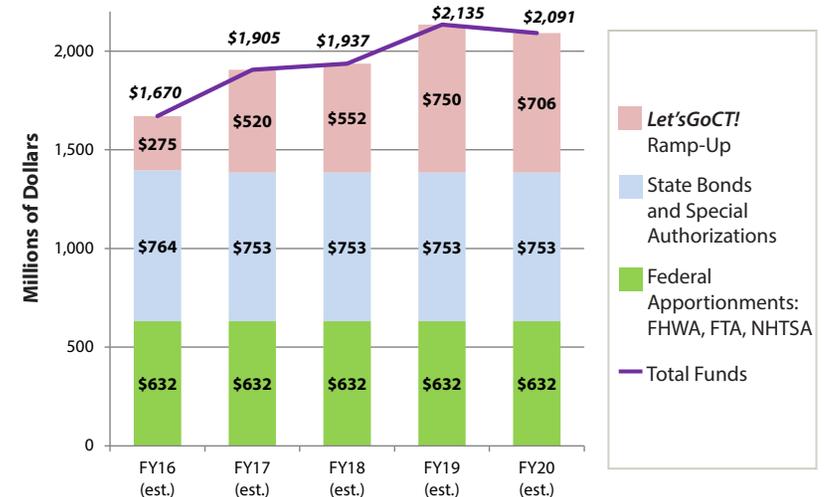


\*FY15 funds are tentative/estimated (subject to final adjustments by the Office of the State Comptroller).

\*\*Fringe Benefits figures represent all Special Transportation Fund fringe expenditures (i.e., including DMV, with majority DOT).

## CTDOT Capital Funds FY16 - FY20 (Anticipated)

The capital funds reflected here represent anticipated funds made available to CTDOT each year. In June 2015, the legislature approved an additional **\$2.8 billion (Ramp-Up)** over the next five years as part of the *Let'sGoCT!* initiative.



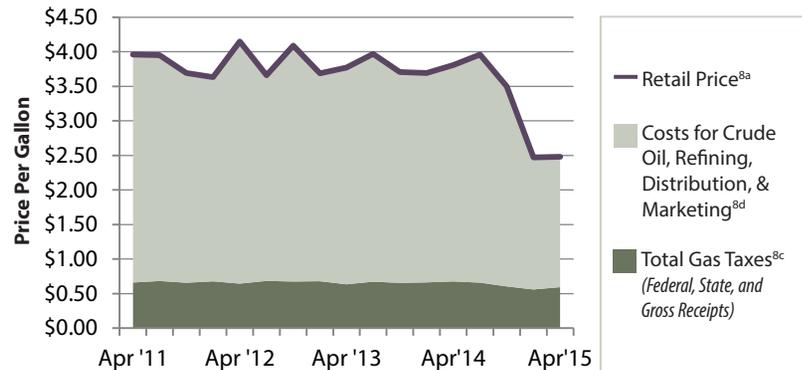
## Major Capital Project Updates

	CONSTRUCTION		
	START YEAR	END YEAR	APPROX. COST (In Millions)
I-95 New Haven Harbor Crossing (Q-Bridge)	2008	2015	\$550
Moses Wheeler Bridge Replacement	2011	2016	\$250
Hartford Line Rail	2015	2017	\$600
I-84 Waterbury Reconstruction	2015	2020	\$340
Stamford Parking Garage (TOD)	2015	2018	\$40
Rt. 8 Bridge Replacements	2015	2016	\$40
West River Bridge Replacement	2014	2018	\$130
Atlantic Street Bridge Replacement	2016	2019	\$60
Rt. 15 Stamford-New Canaan	2013	2015	\$70
New Haven Rail Yard Facility Improvements	2008	2025	\$1,180
I-84 Hartford Viaduct	2021	2033	\$4,000 - \$6,000
Waterbury Bus Maintenance Facility	2015	2017	\$100
Walk Bridge Replacement	2016	2021	\$670

## Fueling Transportation

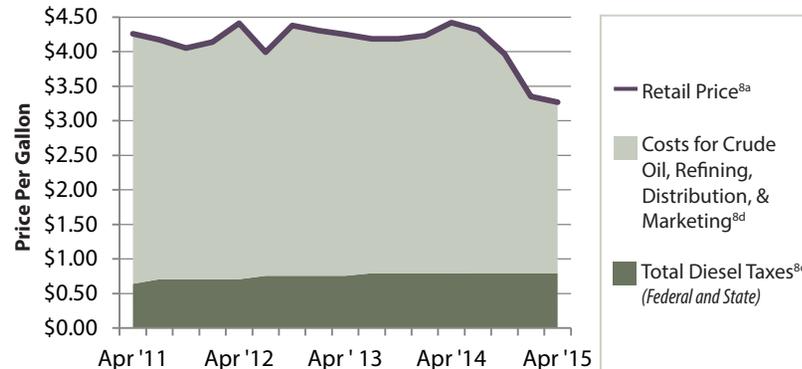
More than **60%** of Connecticut's Special Transportation Fund (STF) revenue comes from State motor fuel and oil company taxes. While oil prices fluctuated up and down over the last several years, motor fuel taxes remained relatively flat.

**Gas Prices in Connecticut 2011-2015**



Federal Gas Tax = 18.4 cents per gallon (since 1993)<sup>8a</sup>  
 State Gas Tax = 25 cents per gallon (since 2001)<sup>8c</sup>  
 Gross Receipts Tax = 8.1% of wholesale price (adjusted in 2013 with assessment capped at \$3.00)<sup>8c</sup>

**Diesel Prices in Connecticut 2011-2015**



Federal Diesel Tax = 24.4 cents per gallon (since 1993)<sup>8a</sup>  
 State Diesel Tax = 50.3 cents per gallon (7/1/15-6/30/16)<sup>8c</sup>

**Notes:** If indexed to inflation, in 2015, the federal gas tax would be about 30 cents per gallon, the federal diesel tax would be about 40 cents per gallon, and the State gas tax would be about 34 cents per gallon. The State diesel tax is assessed annually to reflect wholesale fuel trends. State diesel tax from 7/1/14-6/30/15 was 54.5 cents per gallon.

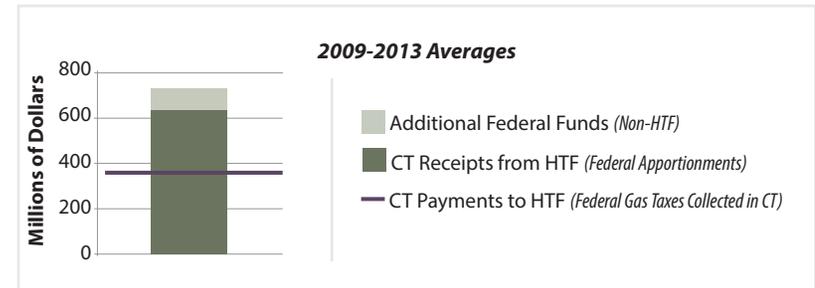
<sup>8a</sup>AAA Connecticut Fuel Gauge Prices <sup>8b</sup>FHWA Highway Statistics - Table FE-101A  
<sup>8c</sup>Connecticut Department of Revenue Services Annual Reports <sup>8d</sup>Oil Price Information Service

## Funding Transportation

### Connecticut and the Federal Highway Trust Fund (HTF)<sup>9a</sup>

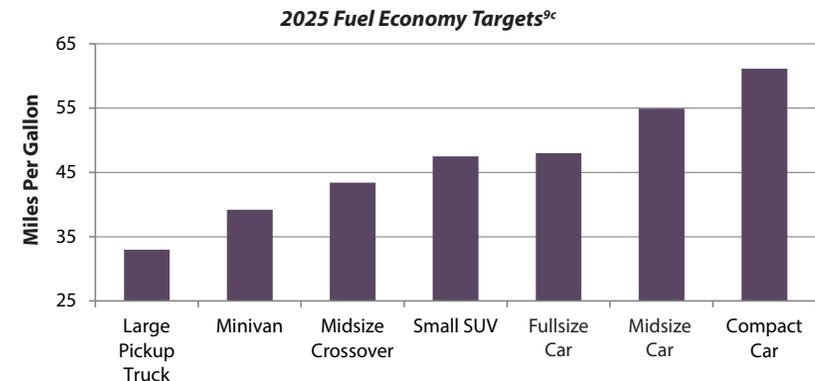
Over the last several years, Connecticut has received almost twice as much Federal funds than it contributed in motor fuel and other tax payments to the HTF. However, due to the insolvency of the HTF, today, most (if not all) states receive more apportionment funding from the HTF than they contribute in tax payments to the HTF. Since 2008, in the absence of a sustainable revenue source for the HTF, Congress has approved transfers of almost **\$60 Billion** from other funds to the HTF to keep it afloat.

**Rule of Thumb:** A 1¢ increase in the federal gas tax generates about \$1.5 B for the HTF



### Corporate Average Fuel Economy (CAFÉ) Standards

Federal fuel efficiency standards, along with consumer demand for more fuel efficient vehicles, are resulting in a more fuel efficient fleet. While this trend improves our nation's energy security, saves consumers money at the pump, and reduces greenhouse gas (GHG) emissions, the increased fuel efficiency decreases gas sales and therefore reduces motor fuel taxes collected.



<sup>9a</sup>FHWA Highway Statistics - Table FE-9 <sup>9b</sup>2013 Connecticut Comprehensive Energy Strategy  
<sup>9c</sup>EPA and NHTSA Fuel Economy Standards

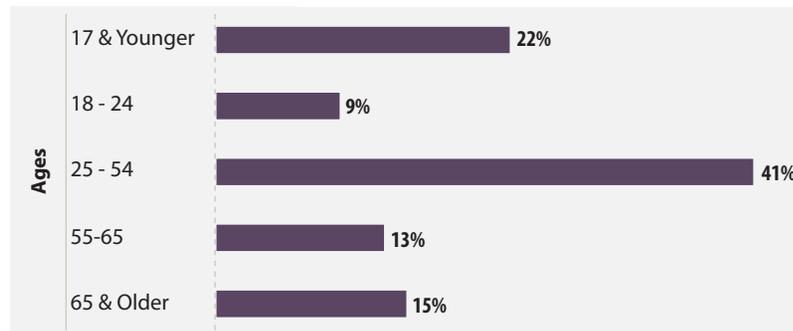
## Planning Overview

In order to accommodate the State's transportation needs, CTDOT must understand the population that it serves. The collection and analysis of demographic, economic, social, and housing information enables CTDOT to plan for projects and investments that will meet present and future needs.

## Population

Total Population <sup>10a</sup>	3,583,561
Estimated Growth Over the Next 10 Years <sup>10b</sup>	↑ 4.5%

### Age Composition<sup>10a</sup>



Connecticut's life expectancy at birth is **80.8 years**, the 3rd highest in the nation.<sup>10c</sup> Over the next 20 years, the 65 and older population will increase by **55%**, making it the fastest growing segment of the State's population.

## Employment Status

CIVILIAN POPULATION 16 YEARS AND OVER <sup>10d</sup>	2,880,551
In Labor Force	66.3%
Employed (Percentage of Labor Force)	94.6%
Unemployed (Percentage of Labor Force)	5.4%
Not in Labor Force	33.7%

<sup>10a</sup>U.S. Census Bureau, American Community Survey, 2009-2013. <sup>10b</sup>CT State Data Center at the University of CT, 2012. <sup>10c</sup>Measure of America, A Project of the Social Science Research Council, 2013-2014 Data Set

<sup>10d</sup>Bureau of Labor Statistics, Employment Status, States and Selected Areas, July 2015

## Housing and Income

HOUSING AND INCOME <sup>10a</sup>	
Total Number of Households	1,355,849
Owner Occupied	68%
Renter Occupied	32%
Median Household Income	\$69,461
Mean Household Income	\$97,650
Per Capita Income	\$37,892

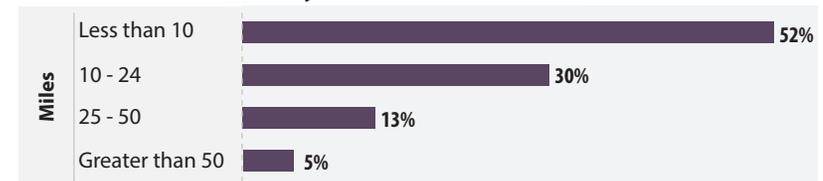
### Income Spent on Housing and Transportation

(County Percentages Based on Median Household Income from Core Based Statistical Areas)<sup>11a</sup>

COUNTY	HOUSING	TRANSPORTATION	REMAINING INCOME
Fairfield	36%	16%	48%
Hartford	29%	19%	52%
Litchfield	31%	21%	48%
Middlesex	34%	21%	45%
New Haven	34%	21%	45%
New London	30%	21%	49%
Tolland	31%	22%	47%
Windham	28%	23%	49%

## Commuting

### Jobs by Distance from Home<sup>11b</sup>



The average travel time to work in Connecticut is **24.8 minutes**.<sup>10a</sup>

COMMUTING BY MODE <sup>10a</sup>	
Drove Alone	79%
Carpooled	8%
Public Transportation	5%
Worked at Home	4%
Walked	3%
Other Means (including bicycle)	1%

<sup>11a</sup>Center for Neighborhood Technology's Housing and Transportation (H+T) Affordability Index

<sup>11b</sup>U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, 2011



## Highway System Overview

CTDOT is responsible for all aspects of the planning, development, maintenance, and improvement of the state roadway transportation system.

## Sources of Highway and Bridge Capital Funding



SOURCES OF FUNDS (In Millions)	FY11	FY12	FY13	FY14	FY15 estimated
<b>Federal Apportionments [1]</b>	\$493	\$473	\$470	\$468	\$468
<b>Federal "Special" Funds [2]</b>	\$8	\$52	\$10	\$2	\$2
<b>State Bonds &amp; Authorizations</b>	\$178	\$336	\$392	\$398	\$307
State Highways [3]	\$167	\$167	\$259	\$277	\$167
State Soil Remediation	\$11	\$13	\$11	\$5	\$21
Fix-It-First	-	\$155	\$122	\$116	\$115
Special Authorizations	-	-	-	-	\$3
<b>"Local" Bonds*</b>	\$30	-	\$30	\$120	\$115
State Town Aid Road [4]	\$30	-	\$30	\$60	\$60
LOTICIP	-	-	-	\$45	\$45
Local Bridge	-	-	-	\$15	\$10
<b>Total</b>	<b>\$709</b>	<b>\$861</b>	<b>\$903</b>	<b>\$988</b>	<b>\$891</b>

NOTE: The funding amounts reflected here represent new funds made available to CTDOT each year, whereas CTDOT's Capital Plan (not shown) represents funds programmed by year for projects.

[1] For FY15 it is assumed funds will be level with FY14, including a \$12 million additional ceiling that will be received at year-end as a result of the annual August Redistribution. ARRA Funds are not included.

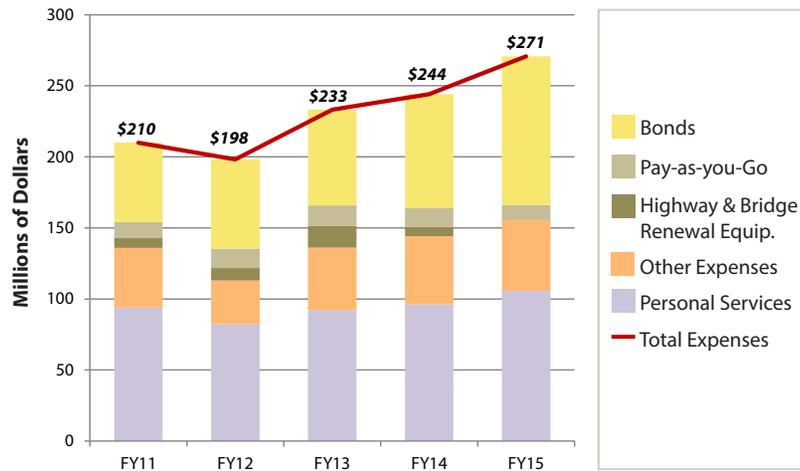
[2] Includes apportionment amounts for federal earmarks, Emergency Relief funds and other allocated federal funds.

[3] State Highways (Bonds Authorized) includes: Bridge, Urban, Interstate, Intrastate, and Resurfacing bonds.

[4] In FY12, Town Aid Road program was funded out of appropriated funds.

\* "Local" bonds are State bonds used for local projects

## Use of Operations and Maintenance Funding



USE OF FUNDS (In Millions)	FY11	FY12	FY13	FY14	FY15
<b>CTDOT Appropriated Expenditures</b>					
<b>Personal Services</b>	<b>\$94</b>	<b>\$82</b>	<b>\$92</b>	<b>\$96</b>	<b>\$106</b>
Snow	\$19	\$6	\$17	\$20	\$24
Non-snow maintenance	\$75	\$76	\$75	\$76	\$82
<b>Other Expenses</b>	<b>\$42</b>	<b>\$31</b>	<b>\$44</b>	<b>\$48</b>	<b>\$50</b>
Snow	\$16	\$6	\$15	\$19	\$23
Non-snow maintenance	\$26	\$24	\$29	\$28	\$27
<b>Highway &amp; Bridge Renewal Equip.</b>	<b>\$7</b>	<b>\$9</b>	<b>\$15</b>	<b>\$6</b>	<b>\$0</b>
<b>Pay-as-you-Go Projects</b>	<b>\$11</b>	<b>\$14</b>	<b>\$15</b>	<b>\$13</b>	<b>\$11</b>
Highway Operation Centers & CHAMP	\$1	\$1	\$1	\$2	\$1
Maintenance Overload	\$6	\$7	\$5	\$7	\$6
Tree Cutting	\$0	\$0	\$1	\$1	\$1
Bridge Repairs	\$4	\$6	\$7	\$4	\$2
Miscellaneous	\$0	-\$1	\$0	\$0	\$0
<b>Subtotal - Appropriated Funds</b>	<b>\$154</b>	<b>\$135</b>	<b>\$166</b>	<b>\$164</b>	<b>\$166</b>
<b>CTDOT Bond Expenditures</b>					
Highway & Bridge Renewal Equipment	-	-	-	-	\$3
Capital Resurfacing	\$55	\$59	\$51	\$58	\$68
State Bridge and Fix-it-First Roads/Bridges	\$1	\$4	\$17	\$22	\$34
<b>Subtotal - Bond Funds</b>	<b>\$56</b>	<b>\$63</b>	<b>\$67</b>	<b>\$80</b>	<b>\$105</b>
<b>TOTAL</b>	<b>\$210</b>	<b>\$198</b>	<b>\$233</b>	<b>\$244</b>	<b>\$271</b>

## Highway Safety

### Motor Vehicle Crash Data

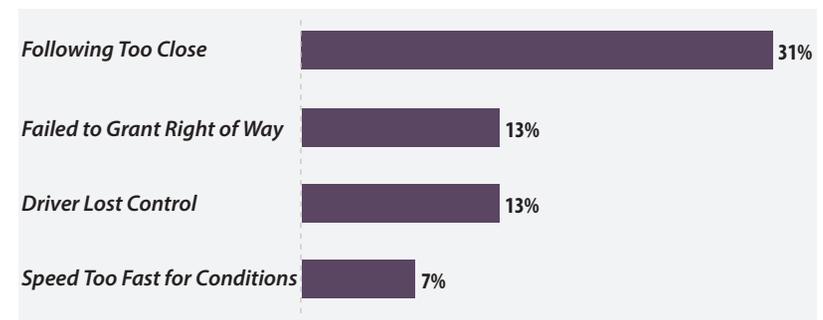
	2014*	2012-2014 AVERAGE
<b>Total Crashes</b>	<b>96,592</b>	<b>95,978</b>
Fatal <sup>15a</sup>	232	247
Injury	22,795	23,245
Property Damage Only	73,565	72,486
Work Zone	901	911
<b>Fatalities<sup>15a**</sup></b>	<b>246</b>	<b>265</b>
Rate (per 100 Million VMT)	0.79	0.86
Unrestrained Passenger	67	66
Involving Driver with BAC > .08g/dL***	49	88
Speeding Related	61	63
Motorcyclist	54	52
Un-Helmeted Motorcyclist	34	28
Involving Drivers 20 Years or Younger	21	28
Single Vehicle	143	157
Roadway Departures	143	146
Intersection Related	47	60
<b>Injuries</b>	<b>31,842</b>	<b>32,517</b>
Serious Injuries	1,357	1,553
Serious Injury Rate (per 100 Million VMT)	4.36	5.00
<b>Observed Seatbelt Usage in Passenger Vehicle (Front Seat)</b>	<b>85%</b>	<b>86%</b>

\*All 2014 numbers are preliminary until all pending cases are closed by December 31, 2015.

\*\*Fatalities may be attributed to more than one crash type

\*\*\*BAC = Blood Alcohol Concentration

### Top Causes of All Auto Accidents



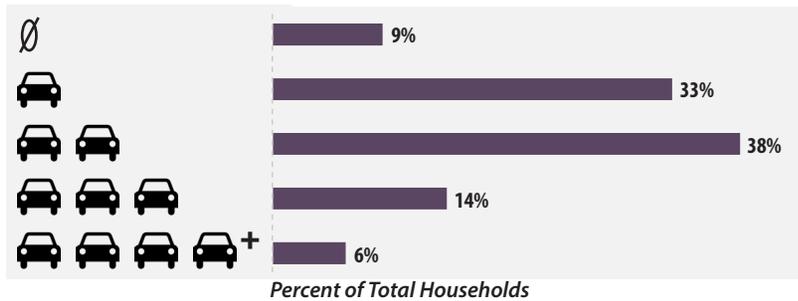
Note: Percentages are based on 2012-2014 averages

<sup>15a</sup>FARS Annual Report File, Preliminary for 2014

## Driver Statistics

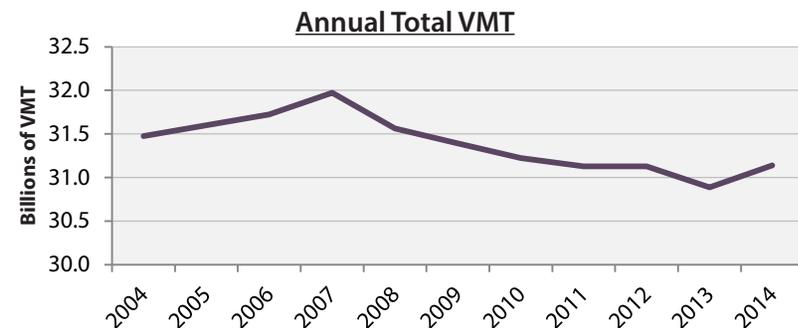
FY2014 LICENSE & REGISTRATION INFORMATION <sup>16a</sup>	
<b>Total Licensed Drivers in CT</b> (Includes CDL and Non-CDL)	<b>2,534,090</b>
As a Percentage of Total Driving Age Population	87%
<b>Total Registered Vehicles in CT</b>	<b>2,825,191</b>
Automobiles	2,286,489
Motorcycles	89,332
Buses	12,444
Trucks	436,926

Number of Vehicles Per CT Household<sup>16b</sup>



## Vehicle Miles Traveled (VMT)

2014 VMT	
<b>Total Annual VMT</b>	<b>31.1 Billion</b>
Annual VMT Per Vehicle	11,022
<b>Total Daily VMT</b>	<b>85.3 Million</b>
Daily VMT Per Vehicle	30



<sup>16a</sup>Connecticut Department of Motor Vehicles, FY2014

<sup>16b</sup>U.S. Census Bureau, American Community Survey, 2009-2013

## Trips and Traffic

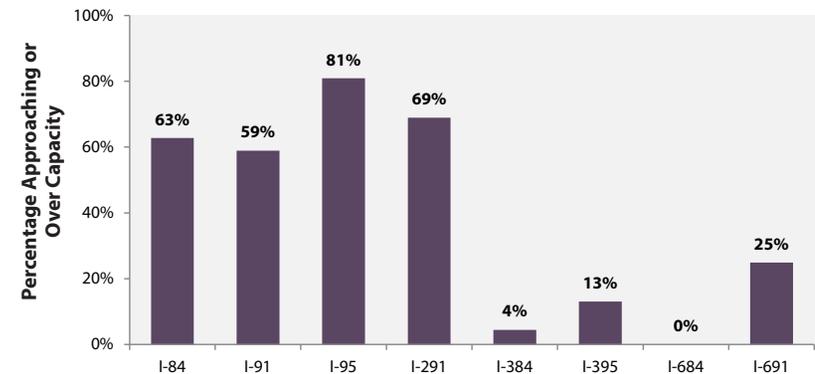
Percentage of "Through State" Vehicles

INTERSTATE	TOWN	PERCENTAGE
I-95	Greenwich	19%
I-95	North Stonington	36%
I-84	Danbury	26%
I-84	Union	40%
I-91	Enfield	14%
I-395	Thompson	7%

Highest Average Daily Traffic (ADT) Volumes by Route

INTERSTATE/EXPRESSWAY	TOWN	ADT
I-84	Hartford	172,500
I-95	Bridgeport	162,500
I-91	Hartford	152,200
Rt. 8	Bridgeport	106,300
Rt. 15	Milford	80,400

Highway Congestion on Interstates



Note: "Approaching or Over Capacity" is defined as greater or equal to 80% of 2011 volume-to-capacity ratios.

Annually, the average motorist in Connecticut spends **40 hours** stuck in traffic, which costs residents and businesses over **\$1.6 billion** in lost time and wasted fuel.<sup>17a</sup>

<sup>17a</sup>Connecticut Transportation by the Numbers, TRIP, Dec. 2014

## Roadway Mileage

CLASSIFICATION	MILES
<b>Grand Total Roadway Mileage (Federal, State, Town)</b>	<b>21,508</b>
<b>Total State (and Federal) Road Miles</b>	<b>4,143</b>
<b>State (and Federal) Non-NHS*</b>	<b>2,751</b>
State Routes	2,329
State Park Roads	72
State Forest Roads	179
State Institution Roads	56
U.S. Defense, Federal Service, and Indian Roads	115
<b>State NHS</b>	<b>1,392</b>
Interstate	346
Other NHS*	1,046
<b>Total Town Road Miles</b>	<b>17,366</b>
NHS*	50
Non-NHS*	17,316

Note: Approximately 75% of Vehicle Miles Traveled (VMT) in CT occurs on State roads and 25% occurs on Town roads.

\*NHS = National Highway System

## Lane Mileage

CLASSIFICATION	MILES
<b>Total Lane Mileage: Without Ramps or Connectors</b>	<b>45,115</b>
State Lane Miles: Without Ramps	9,836
Town Lane Miles	35,279
<b>Total Lane Mileage: With Ramps or Connectors</b>	<b>45,594</b>
Additional State Lane Miles: Ramps	479

## Other Mileage

CLASSIFICATION	MILES
Limited Access Highway	659
Unpaved Town Roads	521
High Occupancy Vehicle (HOV)	19
Ramps Serving as Mainline	14
Ramps, Turning Roadways, and Connectors	426

Data listed is as of June 2015

## Various Highway Components (State Roads)

### Signals, Signage, Markings, Lighting, and Guiderail

CTDOT INVENTORY	
Traffic Signals	2,500
Flashing Beacons	233
Signs With Flashers	291
Controlled Intersections	850
Traffic Signs	263,000
Miles of Pavement Markings	16,000
Individual Highway Lights	25,000
Miles of Guiderail	21,431

### Intelligent Transportation Systems (ITS)

Roadway with ITS - Interstates: 84, 91, 95, 384, 395 / Routes: 2, 3, 8, 9, 15

ITS PHYSICAL COMPONENTS	
Closed Circuit Television Cameras (CCTV)	324
Traffic Flow Monitoring (TFM) Detectors	256
Variable Message Signs (VMS)	137
Highway Advisory Radio (HAR) Stations	11
Roadway Weather Information Systems (RWIS)	14
Computerized Traffic Signals	944
TRAFFIC MONITORING PROGRAM	
Weigh-in-Motion Sites	36
Traffic Monitoring System (TMS) Classification Sites	67
Automatic Traffic Recorder (ATR) Stations	40

### Rest Areas and Service Plazas

Total Rest Areas (no fuel or food)	7
Total Service Plazas (fuel and food)	23

### Commuter Parking Facilities

NON-RAIL COMMUTER PARKING FACILITIES	
<b>Parking Facilities for Carpoolers, Vanpoolers, and Bus Riders</b>	<b>178</b>
Parking Lots Exclusively For Carpooling and Vanpooling	42
Parking Lots For Express Bus Service	49
Parking Lots For Local Bus Service	87
Total Parking Spaces	16,200

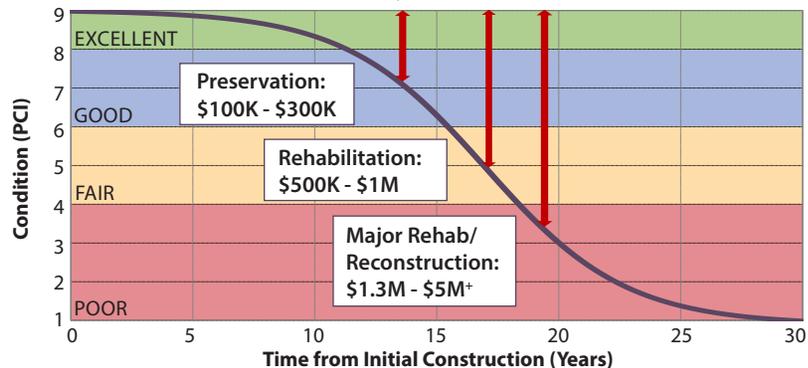
# Pavement

## Pavement Condition Index (PCI)

The PCI attempts to categorize the overall condition of a section of pavement based on environmental and structural distresses. Pavement Condition is calculated based on five components: cracking, rideability (as expressed by the International Roughness Index/IRI), rutting (distortion in the wheelpaths), raveling, and drainability.

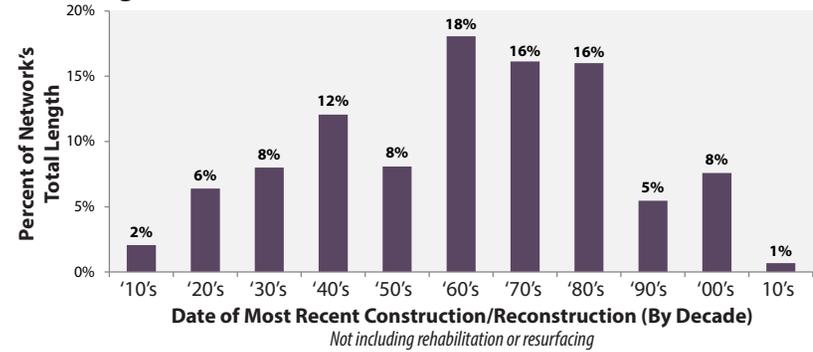
CLASSIFICATION	RATING	DESCRIPTION
EXCELLENT	8 - 9	Exhibits zero to minimal quantities of the measured distresses and low distress severities. Tends to be recently paved and does not require a project to improve the condition.
GOOD	6 - <8	Exhibits minimal quantities of the measured distresses and low to moderate distress severities. Requires a pavement preservation project to maintain or improve the condition and delay a costlier project.
FAIR	4 - <6	Exhibits moderate to large quantities of the measured distresses and a range of distress severities. Tends to be beyond the scope of a preservation project and requires a pavement rehabilitation project to improve the condition when the PCI values are at the lower end of this range.
POOR	<4	Exhibits large quantities of the measured distresses and high distress severities, in particular structural failures. Beyond the scope of a preservation project and requires a major rehabilitation or pavement construction project to improve the condition.

## Pavement Project Life-Cycle Costs Per 2-Lane Mile



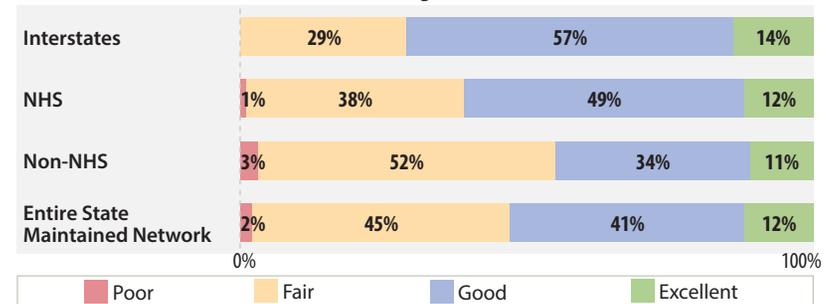
Note: The majority of existing State maintained roads were built with a 20-year structural design life. Through rehabilitation and resurfacing programs, CTDOT has managed to extend original expectations.

## Age of Current Pavement Network (State Roads)<sup>21a</sup>



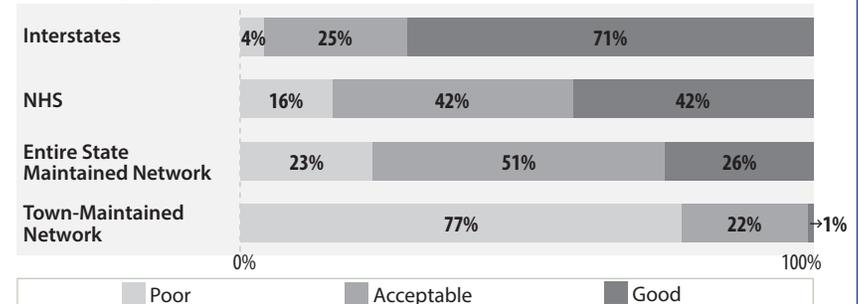
## State Maintained Highway Network Condition<sup>21a</sup>

(According to PCI)



## Ride Quality (IRI Only)<sup>21a</sup>

The International Roughness Index (IRI) is a standardized measurement of pavement smoothness/ride quality and is one of the five components used to calculate overall PCI. In general, the percentage of pavements with poor ride quality (IRI) in Connecticut is higher than pavements with poor overall pavement condition (PCI).



<sup>21a</sup>Pavement Management System data, 2014

## Bridges

<b>Total Number of Roadway Bridges and Structures</b>	<b>7,406</b>
Routinely Inspected by CTDOT*	5,286
Maintained by CTDOT	3,998
Maintained by Others, Greater Than 20ft Long	1,288
Not Routinely Inspected by CTDOT and Maintained by Others**	2,120

\*2014 Inventory Data (NBI Submittal to FHWA in April 2015)

\*\*Inventory approximate as of April 1, 2015. CTDOT inspected these bridges 1991-1992 and will inspect again 2015-2016.

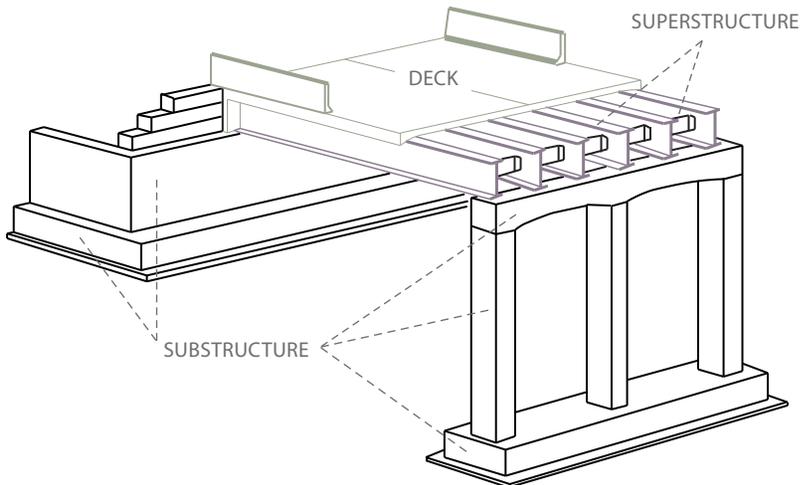
## Bridge Inspections

All bridges having spans greater than **20 feet**, whether state or town-maintained, are included in the National Bridge Inventory (NBI). Federal law requires all states to inspect roadway bridges greater than 20 feet every two years. However, structures that are in poor condition can be inspected as frequently as every month. CTDOT reports on the condition of the NBI to the Federal Highway Administration (FHWA) on an annual basis.

CTDOT also collects "Element Level" bridge inspection data that is now included with the annual report to FHWA. Element level data provides quantities of varying condition states. This information will be used to improve deterioration modeling and planning of preservation/rehabilitation work.

## Bridge Ratings

**Components of a Typical Highway Bridge<sup>22a</sup>**



<sup>22a</sup>Michigan Department of Transportation

## Structural Condition Ratings<sup>23a</sup>

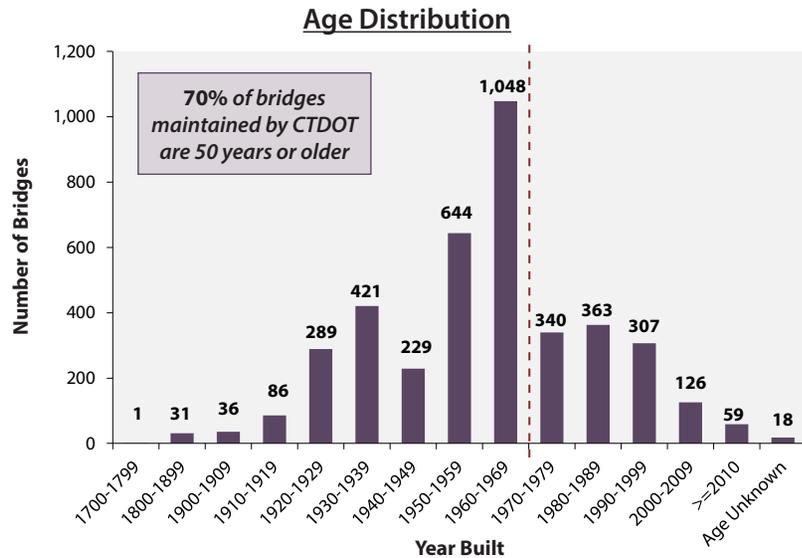
The three major components (*deck, superstructure, and substructure*) are comprised of a number of elements. Each major component is evaluated based on an aggregate of its elements and then assigned a numerical rating from zero to nine. The lowest rating among the three main components becomes the bridge's overall rating.

CLASSIFICATION	RATING		DESCRIPTION
GOOD	9	<i>Excellent</i>	New
	8	<i>Very Good</i>	No problems noted.
	7	<i>Good</i>	Some minor problems.
FAIR	6	<i>Satisfactory</i>	Structural elements show some minor deterioration.
	5	<i>Fair</i>	All primary structural elements are sound, but may have minor section loss, cracking, spalling, or scour.
POOR	4	<i>Poor</i>	Advanced section loss, deterioration, spalling, or scour.
	3	<i>Serious</i>	Section loss, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
	2	<i>Critical</i>	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.
	1	<i>"Imminent" Failure</i>	Major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic, but corrective action may put back in light service.
	0	<i>Failed</i>	Out of service, beyond corrective action.

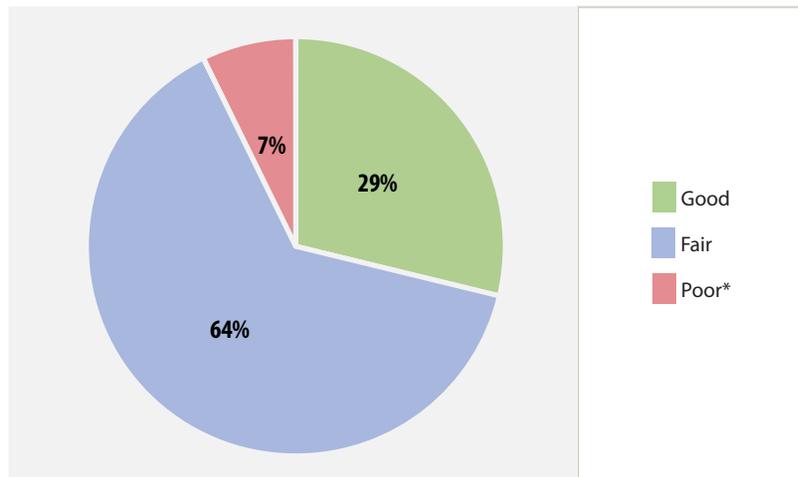
<sup>23a</sup>FHWA Bridge Condition Rating System

## Bridges Maintained by CTDOT (Inspected by CTDOT)<sup>24a</sup>

A majority of existing bridges were built with an expected **50-year** structural design life. Bridges built today have a **75-year** structural design life.



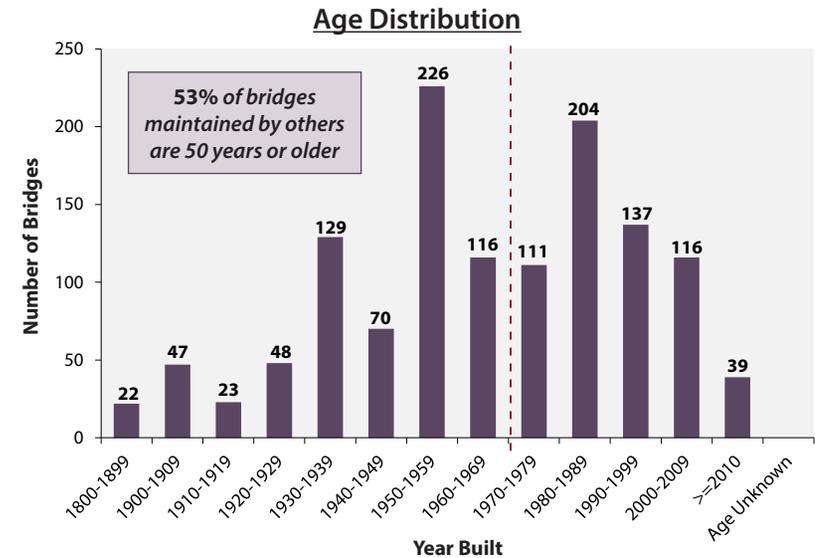
### Bridge Conditions



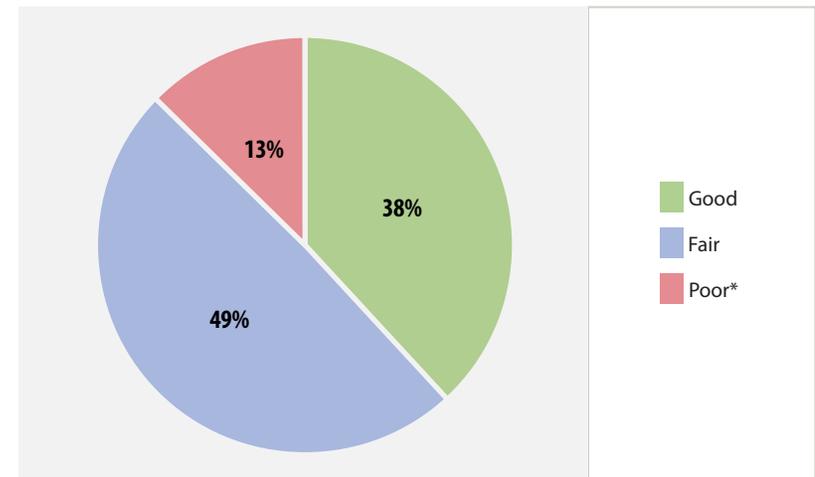
<sup>24a</sup>2014 Inventory Data (NBI Submittal to FHWA in April 2015) \* "Poor" bridges continue to be inspected and maintained, and are safe for the traveling public while CTDOT develops plans for their rehabilitation or replacement.

## Bridges Maintained by Others (Inspected by CTDOT)<sup>25a</sup>

CTDOT routinely inspects all bridges having spans greater than **20 feet**, whether state, town, or privately maintained.



### Bridge Conditions



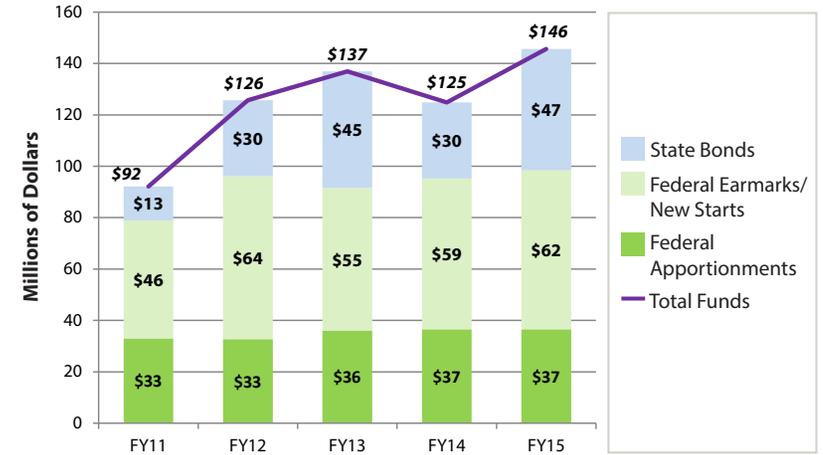
<sup>25a</sup>2014 Inventory Data (NBI Submittal to FHWA in April 2015) \* "Poor" bridges continue to be inspected and maintained, and are safe for the traveling public while CTDOT develops plans for their rehabilitation or replacement.



## Transit and Ridesharing Overview

CTDOT oversees and financially supports public bus, paratransit, and ridesharing services and assets.

### Sources of Capital Funding



### Inventory

#### FLEET AND FACILITIES

Fixed, Express, and Shuttle Route Vehicles	700
Paratransit Vehicles	400
Bus Maintenance Facilities	10

### Age of Bus Fleet

The average age of the existing fleet is between **7 and 9 years old**.

SIZE OF BUS	TYPICAL EXPECTED SERVICE LIFE
35 - 40 feet	12 years
30 feet	10 - 12 years
Under 30 feet	7 - 10 years

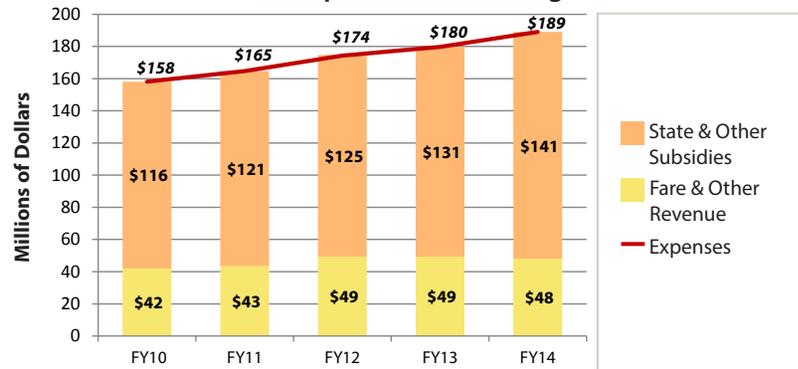
### Condition of Bus Fleet

The average number of miles between service road calls is **13,009**.\*

\*Based on 4-quarter rolling averages from January 2014 through March 2015.

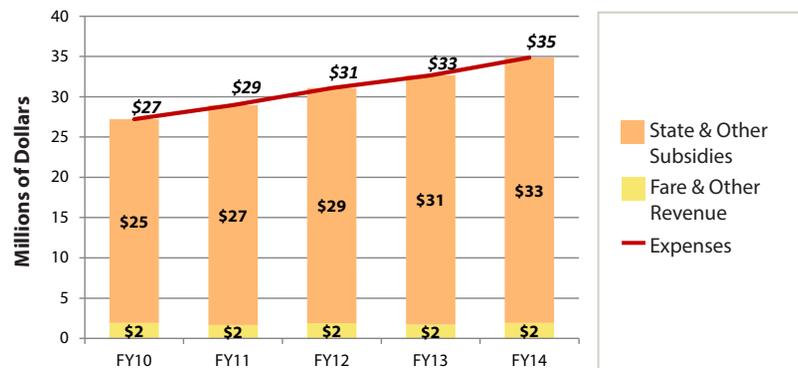
## Operational Funding

### Bus Operational Funding



FY 14	Ridership (Passenger Trips)	42 Million
	Fare Box Recovery per Dollar	\$0.21
	Bus Hours	2 Million
	Miles	25 Million

### Paratransit Operational Funding



FY 14	Ridership (Passenger Trips)	1 Million
	Fare Box Recovery per Dollar	\$0.05
	Bus Hours	567 Thousand
	Miles	8 Million

Note: Federal law requires paratransit service to be provided within a half mile of every fixed route transit service.

## Transit Services

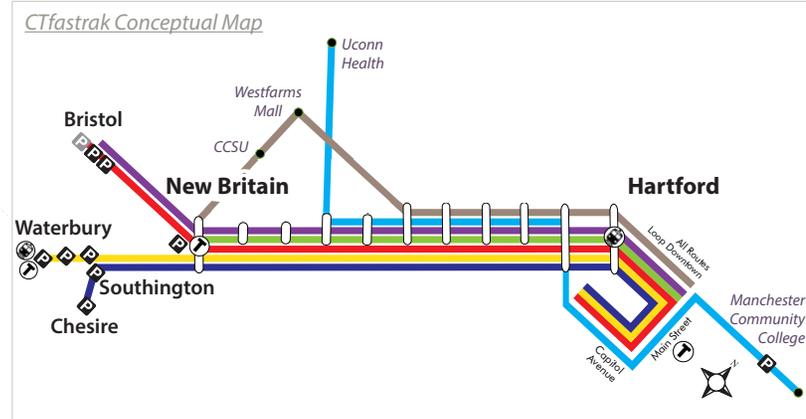
### Service Providers

URBAN, RURAL, AND ADA PARATRANSIT SERVICES	
CTTRANSIT Divisions	8
Local Transit Districts	14
Paratransit Operators	12

### CTfastrak

BUS RAPID TRANSIT BETWEEN HARTFORD AND NEW BRITAIN	
Average Weekday Ridership in Corridor (passengers)*	14,000
Length of Guideway (miles)	9.4
Stations Along Guideway	10
Number of Routes Using Guideway	12

\*CTfastrak service added approximately 6,000 new riders to the corridor.

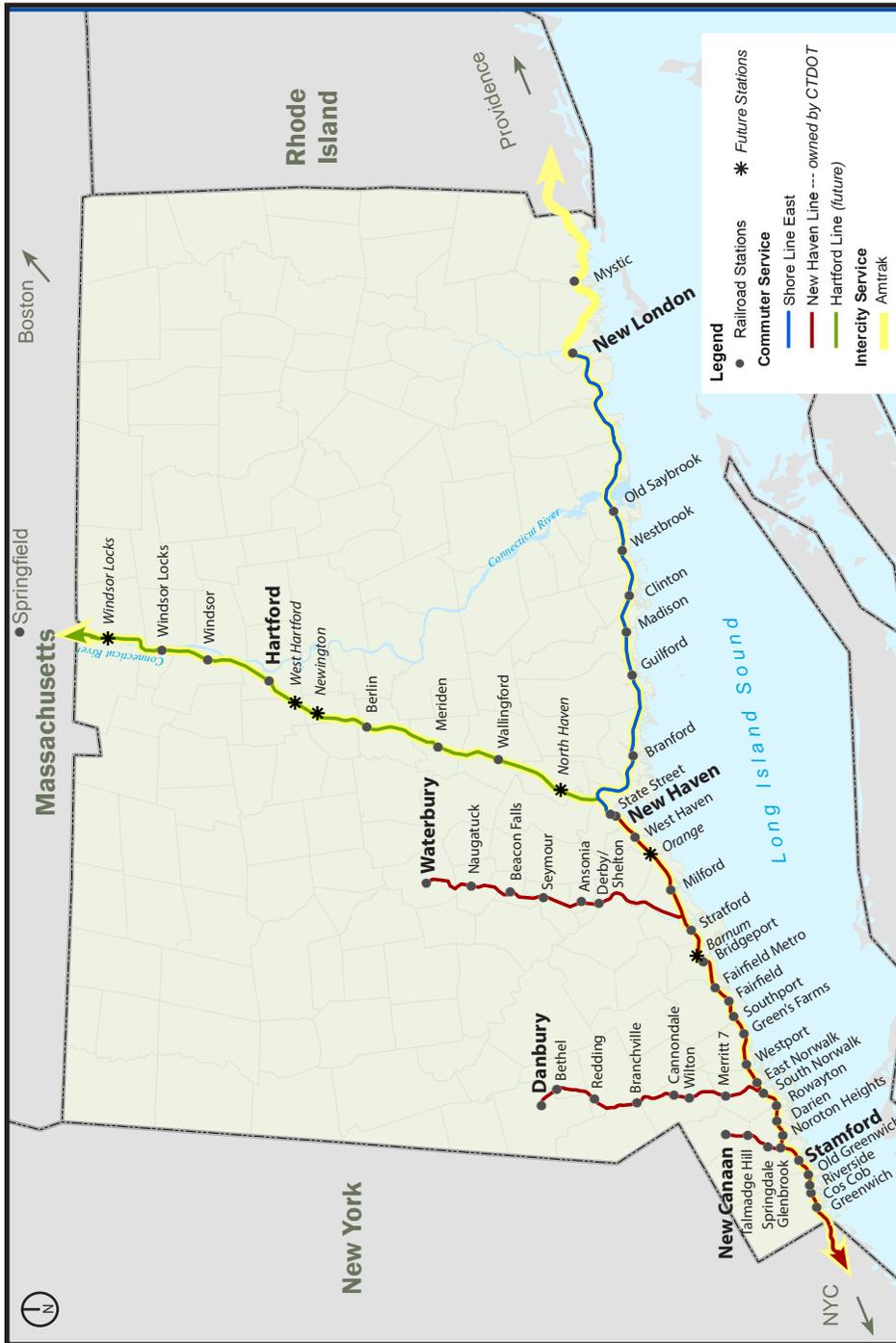


### CTrides Ridesharing

CTrides is an incentive-based program that provides information on commuting options in the State, including all travel modes and telework.

SINCE JANUARY 2005 <sup>1</sup> ...	
Participants	33,407
Shared Rides (Carpool and Vanpool)	2,801,844
Transit Trips	2,224,695

<sup>1</sup>NuRide, as of 9/10/2015



## Passenger Rail Services Overview

CTDOT oversees and financially supports the provision of two commuter rail services: the New Haven Line (NHL) and the Shore Line East (SLE). In late 2016, CTDOT will open and support a third commuter line - the Hartford Line. Additional intercity service is provided by Amtrak.

## Sources of Capital Funding



## Ownership and Mileage (CT Portions)

PASSENGER RAIL	RAIL INFRASTRUCTURE OWNER	SERVICE OPERATOR	ROUTE MILES
NHL & Branches	CTDOT	Metro-North RR	105
Shore Line East	Amtrak	Amtrak	67
Hartford Line	Amtrak	TBD	54
<b>Total</b>			<b>226</b>

## Rolling Stock

	OWNED BY CTDOT		OWNED BY OTHERS	TOTAL
	NHL	SLE		
Push/Pull Coaches	50	33	-	<b>83</b>
EMU* Cars	250	24	131	<b>405</b>
Locomotives	10	14	-	<b>24</b>

\*EMU = Electric Multiple Unit

## Maintenance Facilities

RAIL FACILITIES OWNED BY CTDOT	
New Haven Line	3
Shore Line East	1

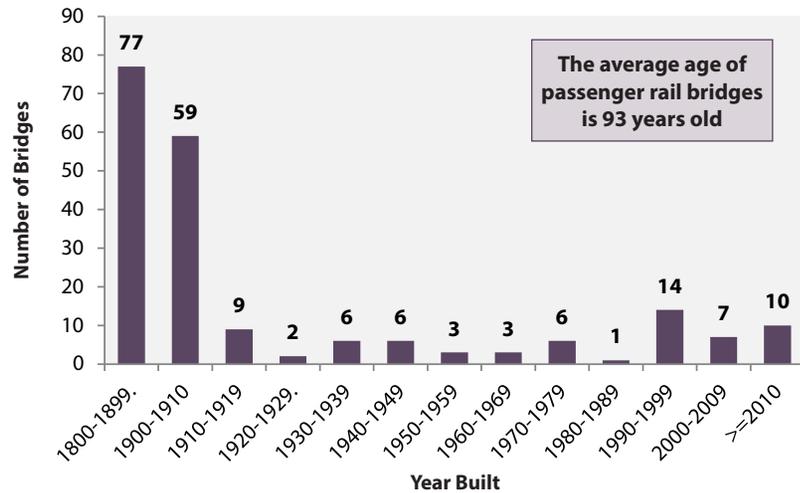
## New Haven Line Railroad Bridges

All passenger railroad bridges along the New Haven Line are owned, inspected, and maintained by CTDOT.

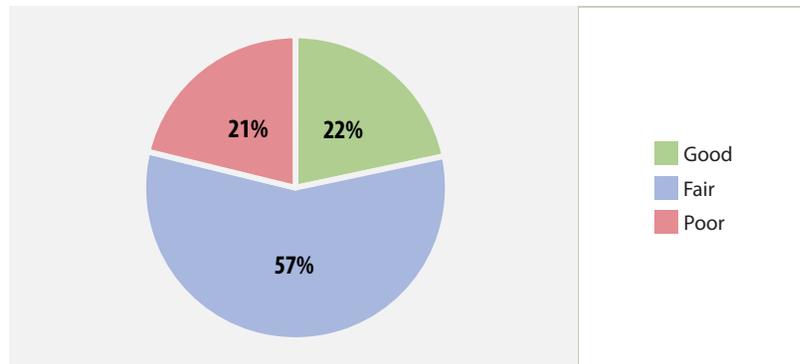
NHL PASSENGER RAILROAD BRIDGE INVENTORY	
Total Number of Bridges	203
Fixed Structures	198
Movable Structures*	5

\*4 moveable structures are more than 120 years old (draw, swing, or lift bridges)

### Age Distribution



### Bridge Conditions

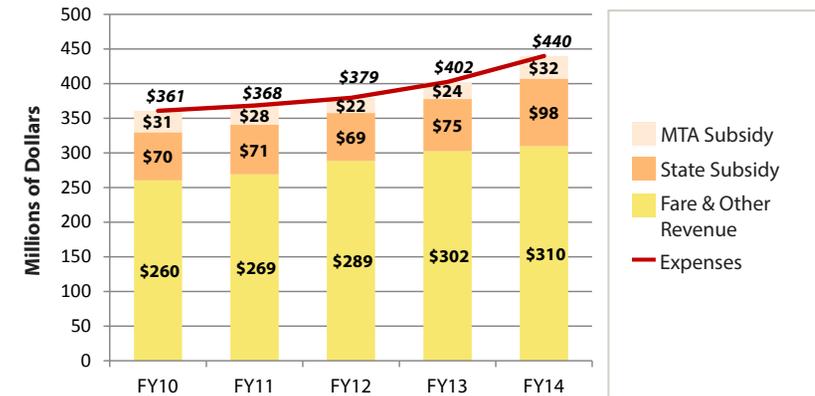


Note: New Haven Line bridge age and condition data is as of July 2015.

## Operational Funding

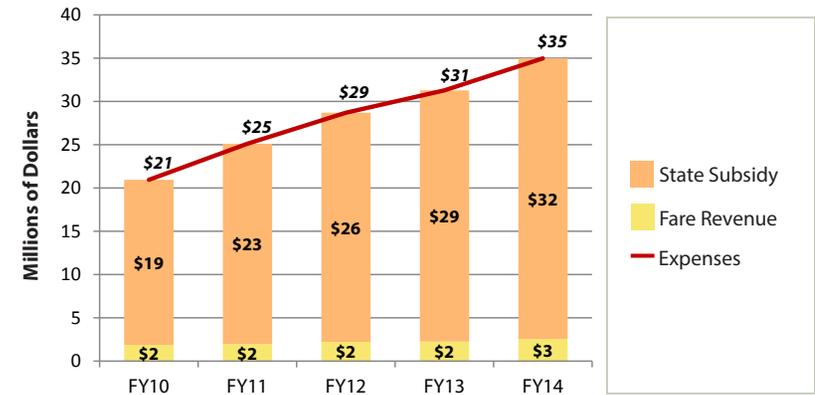
CTDOT sets the fares and service levels on the CT portions of its commuter rail lines: the New Haven Line (NHL) and the Shore Line East (SLE). Amtrak sets the fares and service levels on Amtrak's intercity service routes.

### New Haven Line



FY 14	Ridership (Passenger Trips)	39 Million
	Fare Box Recovery per Dollar	\$0.69

### Shore Line East



FY 14	Ridership (Passenger Trips)	660 Thousand
	Fare Box Recovery per Dollar	\$0.07

Note: In 2014, Amtrak transported 2 million passengers on the Northeast Corridor (NEC) in Connecticut.



## State Ferry Service Overview

CTDOT operates the Connecticut State Ferry Service comprised of two separate, seasonal ferry services across the Connecticut River: the Chester to Hadlyme Ferry and the Rocky Hill to Glastonbury Ferry. The latter of the two services is the **nation's oldest continuously running ferry service**. Both services provide some of the safest links across the Connecticut River for bicyclists and pedestrians.

### Chester - Hadlyme Ferry

The Chester to Hadlyme Ferry links state route 148. Named *Selden III*, it is 65 feet long and 30 feet wide.

### Rocky Hill - Glastonbury Ferry

The Rocky Hill to Glastonbury Ferry links state route 160. It consists of a flatboat named *Hollister III* (70 ft by 18 ft) pulled by a towboat named *Cumberland*.

## Ferry Operations

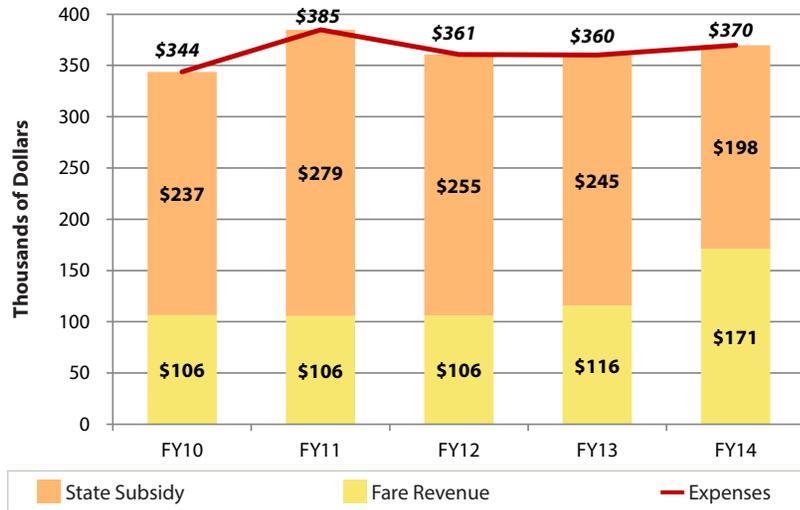
Operating Season	Apr 1 <sup>st</sup> - Nov 30 <sup>th</sup>
Weekday Hours	7:00 am - 6:45 pm
Weekend Hours	10:30 am - 5:00 pm

### Ferry Capacity

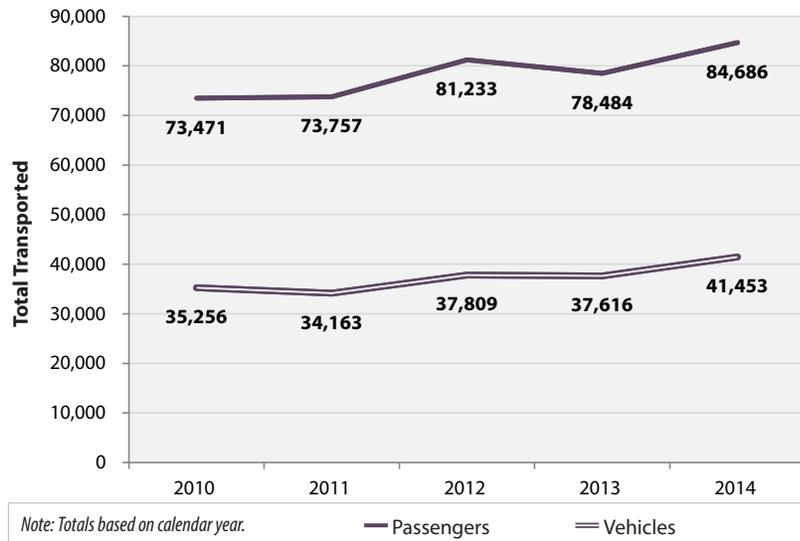
	CHESTER-HADLYME	ROCKY HILL-GLASTONBURY
Carrying Capacity		
Per Trip	49 passengers 8 autos	19 passengers 3-5 autos
Weekday Total Vehicles	1,000	500
Weekend Total Vehicles	540	250
Load Capacity		
Per Vehicle	5 tons	5 tons

## Chester-Hadlyme Ferry

### Operational Funding

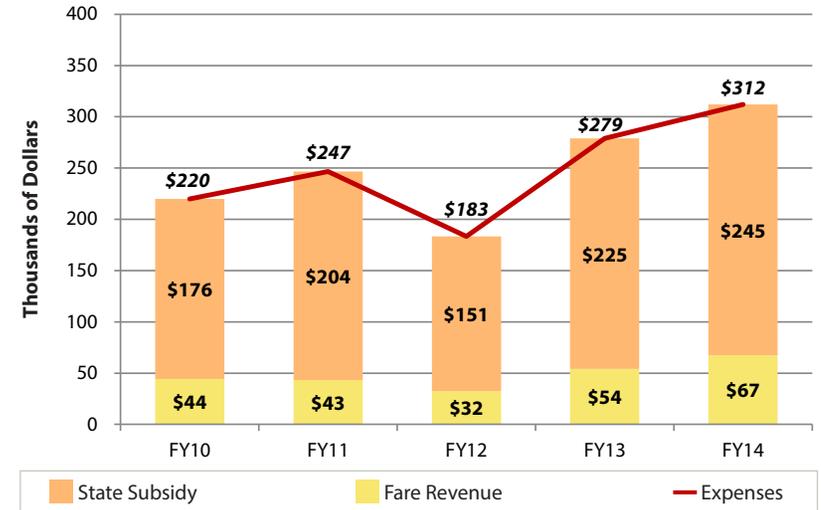


### Annual Ridership

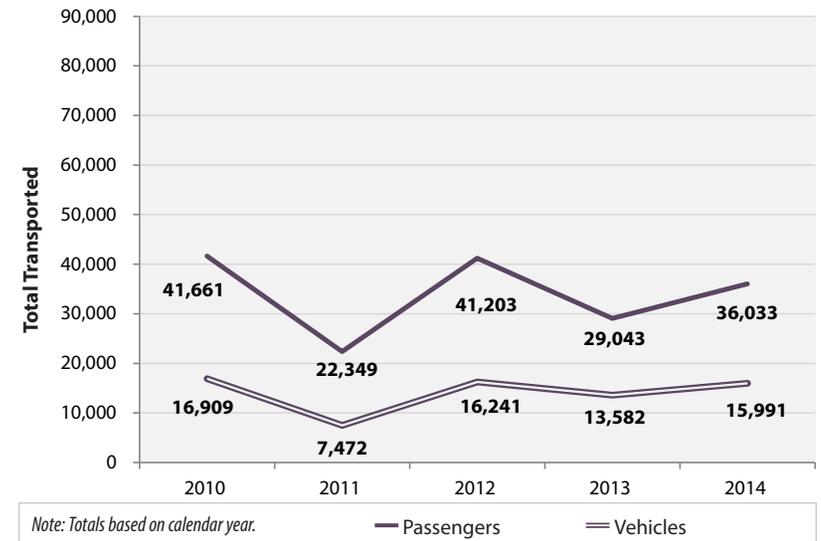


## Rocky-Hill Glastonbury Ferry

### Operational Funding



### Annual Ridership



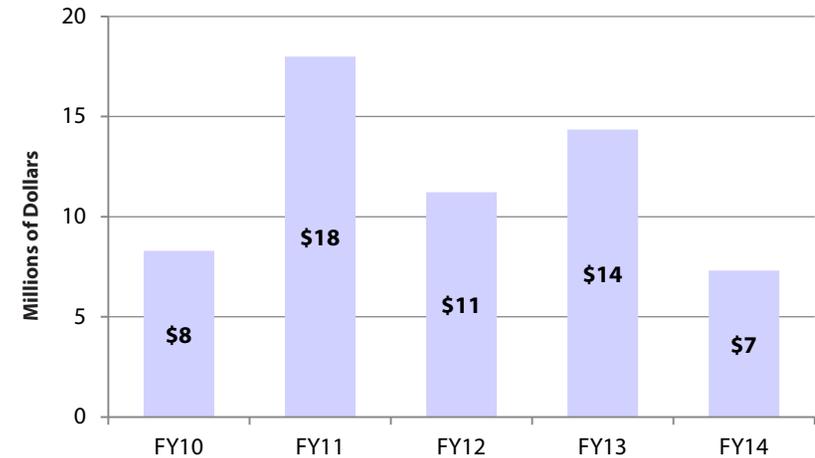


## Bicyclists and Pedestrians Overview

Non-motorized facilities are an integral part of the Connecticut transportation system. In an effort to reflect the routine accommodation of all users, CTDOT has developed and continues to develop best practice policies and design guidelines that support the creation of infrastructure and programs for all users, including bicyclists, pedestrians, and persons with disabilities. CTDOT's vision for non-motorized transportation can be found in the Connecticut Statewide Bicycle and Pedestrian Transportation Plan (2009).



## Capital Funds Awarded\*



	FY10	FY11	FY12	FY13	FY14
Bike/Ped Funds Awarded (Millions)	\$8	\$18	\$11	\$14	\$7
Percent of Total Funds Awarded	1%	3%	2%	5%	1%
Number of Projects Awarded With Bike/Ped Elements	42	46	41	46	38

\* Funds noted are estimates and may not reflect all bike/ped elements.

Note: CTDOT is required to report the amount spent on bicycle and pedestrian accommodations, which **should not equal less than 1%** of the total amount of any funds received in a fiscal year.

## State Road Bicycle and Pedestrian Suitability<sup>40a</sup>

CLASSIFICATION	ADT* (NO. OF VEHICLES)	SHOULDER WIDTH (IN FT)	PERCENT OF STATE ROADS**
MOST SUITABLE	Less than 2,500	3 to 6	7%
	Less than 10,000	Greater than 6	
MORE SUITABLE	Less than 2,500	1 to 3	33%
	2,500 to 7,500	3 to 6	
	Greater than 10,000	Greater than 6	
SUITABLE	2,500 to 5,000	1 to 3	32%
	Greater than 7,500	3 to 6	
LESS SUITABLE	Greater than 5,000	1 to 3	27%
LEAST SUITABLE	--	0	<1%

\*ADT = Average Daily Traffic

\*\*Percentage does not include state expressways.

## Community Connectivity Program

The most recently approved state budget includes the creation of a new funding program for urban bike/ped connectivity designed to make urban centers more bikeable, walkable, safe, livable, and prosperous. This program will help pay for various improvements such as the construction of sidewalks, crossings, intersection improvements, ADA accommodations, bike lanes, sharrows, parking and wayfinding, etc.

## Safe Routes To School (SRTS)

The SRTS Program was initiated under SAFETEA-LU in 2005 to encourage walking and biking to school for students in kindergarten through eighth grade. Every year, additional schools throughout the State become active on the front of safe travel for students. Schools that do not coordinate with CTDOT directly often still utilize SRTS resources.

### In 2014...

The Connecticut SRTS team provided direct assistance to **43** schools throughout the State, including safety education, development of local SRTS programs, and promotional items.

In addition to the Walk to School event in October, there was a Bike to School event in May in which **10** schools actively coordinated with the SRTS team.

**1** regional workshop was hosted to train local partners.

**13** public events were attended by the team.

<sup>40a</sup>Index is from 2009 Connecticut Bicycle and Pedestrian Transportation Plan

## Trails

The State of Connecticut has almost **2,000 miles** of recreational trails. The most recently approved state budget includes the creation of new funding programs for trail gap closures and trail maintenance. These new programs will provide continued funding for the strategic infill of the State's prioritized trail network, including the spine of the East Coast Greenway and major regional trail systems. The programs will also help address a longstanding issue of deferred trail maintenance.



## Bicyclist and Pedestrian Safety

	2014*	2012-2014 AVERAGE
<b>Percent of Motor Vehicle Crashes Involving Bicyclists</b>	<1%	<1%
Bicyclist Fatalities <sup>41a</sup>	4	4
Bicyclist Fatalities as Percent of Total Fatalities	2%	1%
Bicyclist Injuries	513	522
Bicyclist Injuries as Percent of Total Injuries	2%	2%
<b>Percent of Motor Vehicle Crashes Involving Pedestrians</b>	1%	1%
Pedestrian Fatalities <sup>41a</sup>	47	42
Pedestrian Fatalities as Percent of Total Fatalities	19%	16%
Pedestrian Injuries	1,020	1,034
Pedestrian Injuries as Percent of Total Injuries	3%	3%

\*All 2014 numbers are preliminary until all pending cases are closed by December 31, 2015.

<sup>41a</sup>FARS Annual Report File, Preliminary for 2014

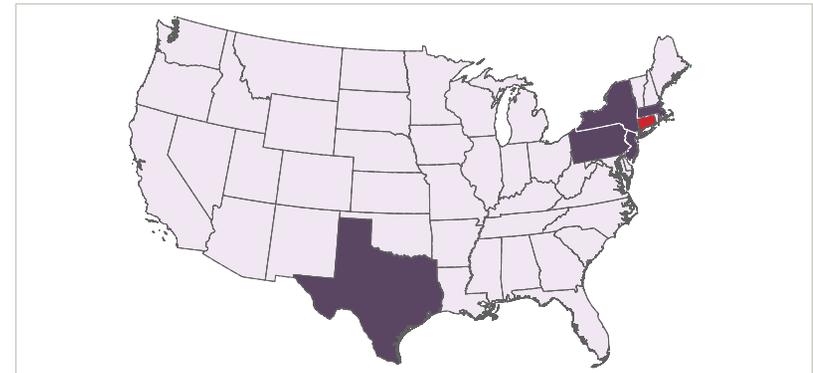


## Freight Overview

Connecticut's transportation network must meet the needs of businesses and individuals by supporting the efficient movement of goods throughout the State. Federal and State law encourages transportation strategies that improve access to regional, national, and global economies. Facilitating interstate and intrastate commerce is vital to enhancing Connecticut's economic competitiveness and regional synergy. The State strives to accommodate a multimodal freight system that allows for seamless connections between land, air, and water.

## Economic Snapshot (Domestic Trade)<sup>43a</sup>

### Top Trading Partners



INBOUND	VALUE	OUTBOUND	VALUE
New Jersey	\$12.47 B	New York	\$18.38 B
Massachusetts	\$12.31 B	Massachusetts	\$12.33 B
New York	\$11.67 B	Pennsylvania	\$ 7.70 B
Texas	\$ 7.32 B	New Jersey	\$ 6.63 B
Pennsylvania	\$ 6.75 B	Texas	\$ 5.18 B

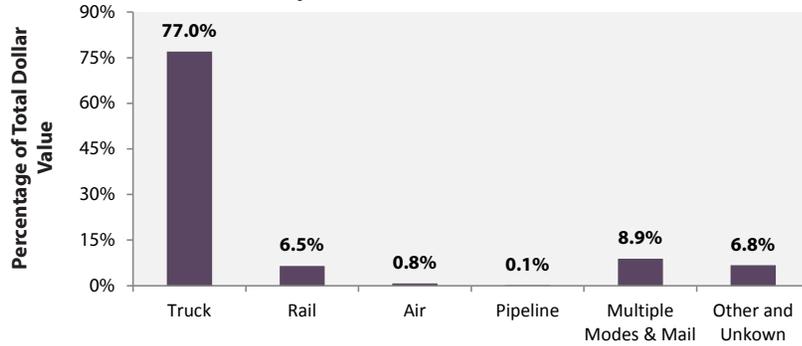
### Top Commodities

IMPORTS	VALUE	EXPORTS	VALUE
Misc. Mfg. Products	\$2.20 B	Base Chemicals	\$1.93 B
Newsprint/Paper	\$1.87 B	Machinery	\$ .91 B
Electronics	\$1.62 B	Electronics	\$ .82 B
Base Metals	\$1.41 B	Cereal Grains	\$ .58 B
Gasoline	\$1.23 B	Plastics/Rubber	\$ .56 B

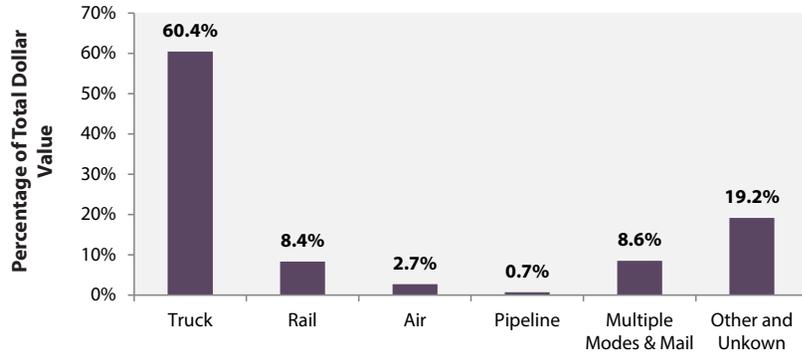
<sup>43a</sup>U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 3.4, 2012

## Freight By Mode (Domestic Trade)<sup>44a</sup>

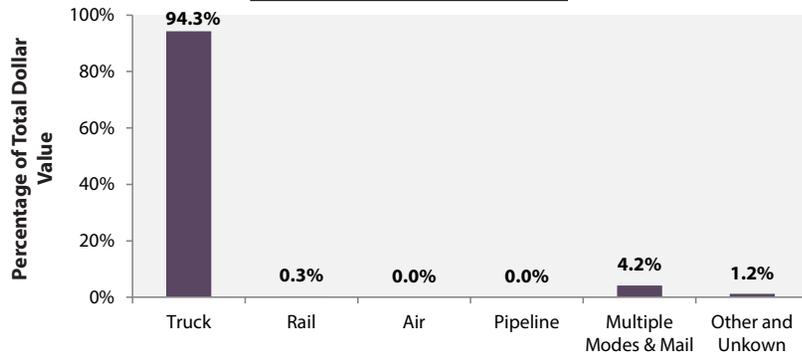
### Imports to Connecticut



### Exports from Connecticut



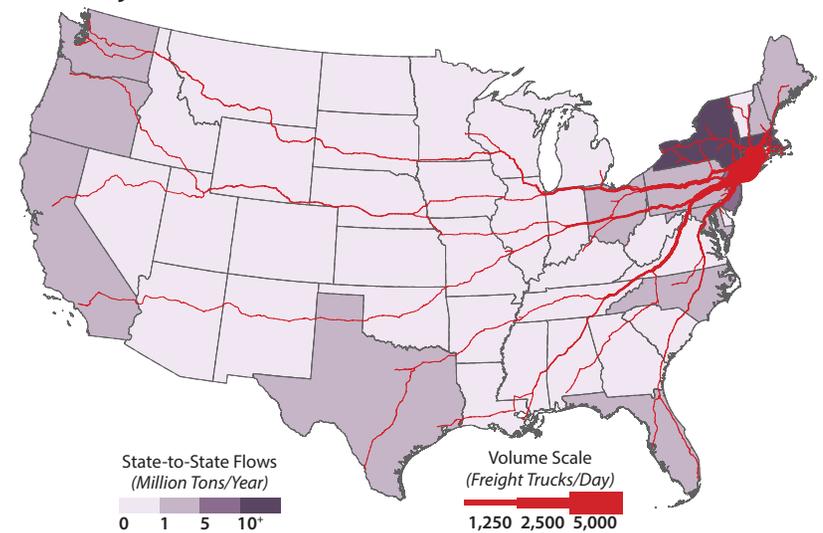
### Trade Within Connecticut



<sup>44a</sup>U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 3.4, 2012

## Truck Freight (Domestic Trade)

### Major Truck Flows To, From, and Within Connecticut<sup>44a</sup>



Note: Major flows include domestic and international freight moving by truck on highway segments with more than 25 Freight Analysis Framework (FAF) trucks per day and between places typically more than 50 miles apart. 2010

### Truck Summary<sup>45a</sup>

	TONS	TON-MILE	VALUE
IMPORTS	98.88 M	11,856	\$124.83 B
EXPORTS	94.78 M	11,606	\$130.79 B

*Top Commodities (by Value):*  
machinery, mixed freight, base metals, textiles/leather, fuel oils, precision instruments

### Major Truck Bottlenecks in Connecticut



<sup>45a</sup>USDOT, FHWA, Freight Analysis Framework, Data Tabulation Tool, 2015

<sup>45b</sup>ATRI, Freight Performance Measures Analysis of Freight - Significant Highway Locations, 2013

## Rail Freight

There are **ten** privately owned freight railroad companies operating in Connecticut. These companies own a large portion rail freight infrastructure and all of the rail freight equipment operating within the State.

### Mileage

OWNER	Route Miles
Federal ( <i>Amtrak</i> )	121
State of CT	246
Municipal ( <i>City of Bristol</i> )	2
Private	247
<b>Total</b>	<b>616</b>



### Rail Summary<sup>46a</sup>

	TONS	TON-MILE	VALUE
IMPORTS	1.34 M	1,635	\$728 M
EXPORTS	.96 M	539	\$538 M
<b>Top Commodities (by Value):</b>			
plastics/rubber, wood products, fuel oils, basic chemicals, base metals, waste/scrap			

<sup>46a</sup>U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, Data Tabulation Tool, 2015

## Deep Water Ports

Recent legislation enabled Connecticut to establish a statewide port authority as early as October 1, 2015. The goal of the Port Authority will be to increase public and private investments for port development, pursue federal and state money for dredging in order to increase cargo movements through Connecticut's ports, and market the ports to domestic and international shipping companies.

### State Pier Facility in New London<sup>47a</sup>



The State Pier Facility is located on the Thames River in New London approximately 3.8 miles north of Long Island Sound. The facility has access to Interstates 95 and 395, as well as a railroad connection which extends as far as Canada. The facility contains two piers: the Admiral Harold E. Shear State Pier and the Central Vermont Railroad (CVRR) Pier. The facility incorporates six primary structures consisting of warehouses (3), a garage, an administration building and other supporting structures.

TOTAL WAREHOUSE SPACE (SQ FT)	106,200
<b>FEDERAL CHANNEL</b>	
Controlling Depth (MLW*)	40 ft
Width	500 ft

\*MLW = Mean Low Water

### Admiral Harold E. Shear State Pier

While primarily used for break bulk and bulk cargo, the facility is also capable of handling containerized cargo. Lumber, steel, copper, salt, sand and other products such as chemicals, wood pellets and wood pulp are all principal water-borne commodities targeted to move in and out of the Facility.

FACILITY SPECIFICATIONS	
Length	1,000 ft
Berths Along Pier	2
East Berth Controlling Depth (MLW*)	35 ft
West Berth Controlling Depth (MLW*)	30 ft

### CVRR Pier

The pier accepts various types of shallow draft vessels such as barges, fishing vessels, and pilot boats,

BERTHING DEPTHS	
Minimum	16-23 ft
Maximum	26 ft

<sup>47a</sup>Connecticut's Deep Water Port Strategy Study, Sept. 2012

## Port of New Haven<sup>48a</sup>

The Port of New Haven is located on New Haven Harbor at the junction of I-95 and I-91. The port is served by freight rail and several of its terminals are connected to an extensive pipeline network. Freight rail service to the port is provided by the Providence & Worcester Railroad with connections to nine additional rail lines. The port is comprised of a cluster of privately owned terminals such as Gateway, Gulf, Magellan Midstream Partners, Motiva, R&H, and New Haven Terminal. All of the terminals handle liquid bulk cargo (petroleum, asphalt). Two of the terminals handle dry cargo, bulk (cement, sand, stone and salt); break bulk products such as steel and lumber; as well as project cargo.



MAIN CHANNEL	
Authorized Controlling Depth (MLW)	35 ft
Last Dredged	2014
Width	400-800 ft

## Port of Bridgeport<sup>48a</sup>

The Port of Bridgeport located off of I-95, is on the north shore of Long Island Sound. The majority of commercial waterfront facilities in Bridgeport are privately owned and operated, although the Bridgeport Port Authority owns the Bridgeport Regional Maritime Complex (BRMC). Other major commercial facilities include the PSE&G power plant, the former CILCO Terminal and Motiva (Shell) fuel terminal. The port mostly accommodates liquid bulk petroleum products, coal, and general cargo. Without maintenance dredging, the channel's actual controlling depth has dropped to less than its authorized depth.



MAIN CHANNEL	
Authorized Controlling Depth (MLW)	35 ft
Last Dredged	1964

<sup>48a</sup>Connecticut's Deep Water Port Strategy Study, Sept. 2012

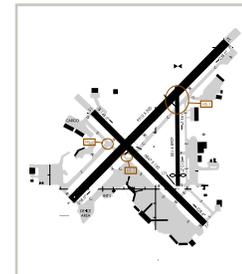
## Airports Overview

The Connecticut Airport Authority (CAA) was established in July 2011 to own, develop, improve, and operate Bradley International Airport (BDL), as well as five other state general aviation (GA) airports (Danielson, Groton-New London, Hartford-Brainard, Waterbury-Oxford, and Windham). The CAA strives to make Connecticut's airports more attractive to new airlines, establish new routes, and support Connecticut's overall economic development and growth strategy. For more information, please contact CAA Executive Director, Kevin Dillon, at 860-292-2054 or [kdillon@ctairports.org](mailto:kdillon@ctairports.org).

## Bradley International Airport/ BDL

Second largest airport in New England <sup>49a</sup>
Ranked <b>53</b> out of <b>509</b> commercial services airports <sup>49a</sup>
Economic output of <b>\$4 billion</b> , including <b>18,000</b> full-time jobs <sup>49b</sup>

Total Passengers (Enplanements & Deplanements) <sup>49b</sup>	5,875,801
Year-Over-Year Passenger Growth <sup>49b</sup>	8.4%
Number of Airlines <sup>49b</sup>	6
Number of Nonstop Destinations <sup>49b</sup>	29
Number of Acres <sup>49c</sup>	2,432
Number of Runways <sup>49c</sup>	3



FAA Diagram of BDL

BASED AIRCRAFT <sup>49c</sup>	
<b>Total</b>	<b>67</b>
Total Fixed Wing	42
Single Engine	4
Multi Engine	4
Jet	34
Helicopters	5
Military	20

Total Operations: 96,337 <sup>49b</sup>	Air Carrier	60%
	Air Taxi	22%
	GA	15%
	Military	3%

AIR CARGO <sup>49b</sup>	
Freight	113,575 tons
Mail	2,561 tons

<sup>49a</sup>Air Carrier Activity Information System (ACAIS), Calendar Year 2014

<sup>49b</sup>Connecticut Airport Authority, 2014 data <sup>49c</sup>Airport IQ 5010, Information as of July 7, 2015

## Other Airports

### CAA Airports: Economic Contribution<sup>50a</sup>

AIRPORT	JOBS	ECONOMIC OUTPUT (In Millions)
Hartford-Brainard	368	\$44.8
Groton-New London	909	\$119.5
Waterbury-Oxford	1,675	\$235.4
Windham	65	\$7.5
Danielson	25	\$2.0
<b>Total</b>	<b>3,042</b>	<b>\$409.2</b>

### State and Municipal Airport Information

AIRPORT	OWNER <sup>50b</sup>	ROLE <sup>50b</sup>	ACRES <sup>50b</sup>	TOTAL OPERATIONS <sup>50c</sup>	TOTAL BASED AIRCRAFTS <sup>50b</sup>	RUNWAYS <sup>50b</sup>	
<b>State Airports</b>							
HFD	Hartford-Brainard	CAA	R	201	81,474	136	2
GON	Groton-New London	CAA	GA	489	35,803	53	2
OXC	Waterbury-Oxford	CAA	GA	424	46,018	168	1
IJD	Windham	CAA	GA	280	14,250	68	2
LZD	Danielson	CAA	GA	257	22,602	36	1
<b>Municipal Airports</b>							
BDR	Sikorsky Memorial	Bridgeport	GA	800	67,951	190	2
DXR	Danbury Municipal	Danbury	R	248	69,424	293	2
HVN	Tweed-New Haven	New Haven	P	394	33,551	49	2
MMK	Meriden-Markham	Meriden	GA	157	*	65	1
4B8	Robertson Field	Plainville	R	39	*	57	1

**Notes:** Airport roles are listed according to Federal Aviation Administration categories of activity: primary (P), reliever (R), and general aviation (GA). Airport operations equals the number of arrivals and departures. Total based aircrafts include single engine, multi-engine, jets, gliders, helicopters, and military. \*No reported data



This document was prepared by  
the Connecticut Department of Transportation (CTDOT)  
in cooperation with the  
Federal Highway Administration (FHWA),  
and Federal Transit Administration (FTA).

All photographs are part of CTDOT's repository.

<sup>50a</sup>Connecticut Airport Authority, 2014 data <sup>50b</sup>Airport IQ 5010, Information as of July 7, 2015

<sup>50c</sup>Air Traffic Activity System (ATADS), Calendar Year 2014

