# **Tracking the Dollars 2012-2015:**

# A Review of Planned Transportation Investments in Connecticut and what it says about Connecticut's transportation priorities

The Connecticut Department of Transportation's (ConnDOT) \$4.26 billion statewide transportation improvement program (STIP) outlines transportation projects which the agency plans to commit federal, state and local funds in the four years from 2012 through 2015. The STIP serves as a blueprint for transportation investments and is a key tool to understanding the state's transportation policies and priorities.

Tri-State Transportation Campaign analyzed ConnDOT's 2012-2015 STIP<sup>2</sup> to understand what types of projects the State intends to prioritize over the period and to determine how the State's priorities have, and have not, shifted from previous years. Since 2000, Connecticut's road and bridge conditions have improved, though the State still has a backlog of maintenance and repair needs. Connecticut's major roadway miles in less than good condition<sup>3</sup> dropped by 8.5 percent from 2000 to 2009 (most recent data available). However, almost three quarters of the state's major roadway miles are not in good condition. And, in 2012, over a third of Connecticut's bridges were classified as deficient, further demonstrating the need to prioritize the maintenance and repair of the state's existing infrastructure.

TSTC went line-by-line through the STIP and categorized projects into 15 categories:

- Bicycle/Pedestrian
- Environmental
- Ferry
- Intelligent Transportation Systems (ITS)
- Road or Bridge

- Expansion
- Road or Bridge Maintenance
- Road or Bridge
   Minor Expansion
- Transit Capital
- Transit Operating
- Safety
- Signage
- Signals
- Streetscape/
   Landscape
- Transportation
   Demand

Management (TDM)

(TDM) Other

Category definitions and examples are online at

http://tstc.org/reports/CTSTIP/CTSTIP-2013-methodology.php

### **Findings**

- Of the \$4.26 billion program, 52.6 percent (\$2.24 billion) of the total STIP is going towards transit (capital and operating) and 47.4 percent (\$2.02 billion) is going towards non-transit investments.
- While spending on road or bridge expansion has decreased to 14.7 percent from 20.0 percent in the 2010-2013 STIP, too much money is still being spent on expansion projects.
   Nearly 41 cents of every dollar spent on a road or bridge project will go towards expansion.

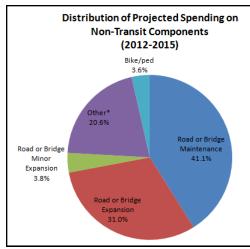


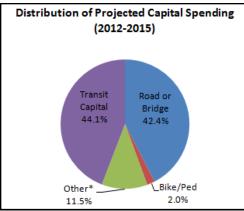
- Although fix-it-first projects consume a larger share of STIP funds, 72.4 percent of roadways were in less than good condition in 2009 and 35.1 percent of bridges were rated deficient in 2012.
   More resources must be applied to fix-it-first to reduce these percentages.
- Transit capital investments still comprise the largest chunk of the STIP although their share of the STIP has decreased from the previous STIP. Two transit projects make up 24.9 percent of transit capital dollars (the New Haven-Hartford-Springfield Rail Line and CTfastrak).
- The percentage of funds going towards pedestrian and bicycle projects has increased from TSTC's last analysis. However, a higher percentage of these projects are paid for with federal earmark funds, foreshadowing a funding problem given that MAP-21, the current transportation law, eliminates federal earmarks.
- Transit projects are receiving a smaller share of flexible federal funds than they have in the past.
   However, MAP-21 provides funding that the State could "flex" to pay for transit and maintenance projects.

#### **Recommendations**

- Decrease spending on road or bridge expansion projects. Expansion projects consume too much of the State's limited transportation dollars. When built, they require maintenance adding to the State's backlog of maintenance needs. Though "congestion relief" is often a goal of expansion, studies show adding additional travel lanes increases congestion in the long run.
- Continue to commit to a fix-it-first program.

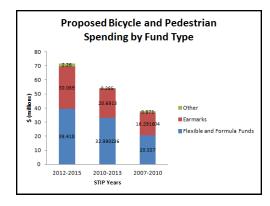
  While Connecticut has ensured that more roadway miles are in good condition, there is still a backlog of road and bridge repair needs. More





Source: TSTC analysis of ConnDOT Statewide Transportation Improvement Program, 2012-2015.

\* Other includes environmental expenses, ferry, ITS, signage, signals, safety, streetscape/landscape, TDM, and unclassifiable projects.



Source: TSTC analysis of ConnDOT Statewide Transportation Improvement Programs, 2012-2015, 2010-2013 and 2007-2010. resources must be used to repair and maintain existing road and bridge infrastructure.

- projects. From 2009 through 2011, 100 pedestrians lost their lives on Connecticut's streets. Sidewalks and bike lanes are relatively low cost investments that save lives for pedestrians, bicyclists, and motorists. These investments promote active, healthy lifestyles, bolster the economy, reduce congestion and are assets to communities.
- Use flexible funding available in MAP-21 to invest in more pedestrian, bicycling and transit infrastructure. While the federal share of flexible federal dollars going to pedestrian and bicycle projects has increased, the share of these dollars going to transit projects has decreased. With federal funding for these projects decreasing, flexibility is key to augmenting the State's investments.
- transparent manner. Including more detailed descriptions of projects in the STIP would help the public understand the State's transportation priorities and plans. Increased transparency in the STIP benefits all parties: ConnDOT, elected officials, the federal government, advocacy organizations, and most importantly the taxpaying public.

**Bridge Conditions in Connecticut and** 

**Neighboring States** 

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

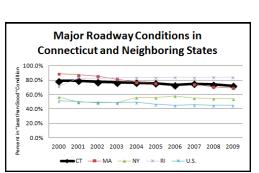
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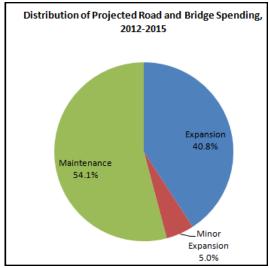
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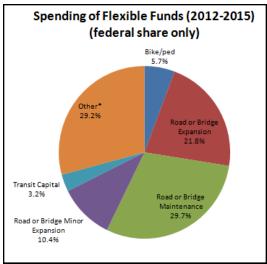
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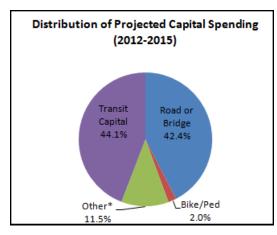


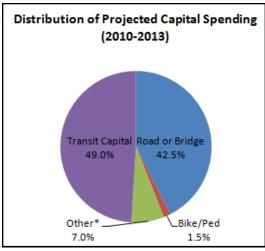
Source: TSTC analysis of ConnDOT State-wide Transportation Improvement Programs, 2012-2015 and 2010-2013.

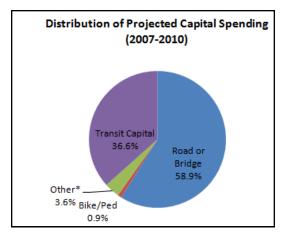
\* Other includes a variety of projects such as environmental, signage, safety and streetscape/landscape expenses.

Source: Federal Highway Administration (FHWA), Highway Statistics Series, 2000-2009, HM-64 and FHWA, Deficient Bridges by State and Highway System, 2000-2012. U.S. includes Washington, D.C. and Puerto Rico.

- 1. ConnDOT includes information about some of the investments it plans on making in years after the years covered in the STIP. These "FYI" future year investments projects total \$1.62 billion and are not included in this analysis.
- 2. ConnDOT provides a Microsoft Excel version of their most current STIP on their website, <a href="http://www.ct.gov/dot/cwp/view.asp?a=3529&q=424892">http://www.ct.gov/dot/cwp/view.asp?a=3529&q=424892</a>. TSTC's analysis is based on the Excel document available November 2012.
- 3. To determine percentage of roadway miles in less than good condition, TSTC considered all reported major road miles with an International Roughness Index rating of 95 or greater.
- 4. To determine percentage of deficient bridges, TSTC considered both functionally obsolete and structurally deficient bridges. The majority of Connecticut's bridges are functionally obsolete not conforming to modern bridge design standards.
- 5. Major roadway miles in less than good condition analysis from Federal Highway Administration, *Highway Statistics Series*, 2000-2009, HM-64. Bridge conditions analysis from Federal Highway Administration, *Deficient Bridges by State and Highway System*, 2000-2012. US includes Washington, D.C. and Puerto Rico.
- 6. The Surface Transportation Policy Project (STPP) notes that areas that had high growth in new road capacity were not less congested than areas that had a low growth in new road capacity. ("Lessons from the 15-Year Texas Transportation Institute Study." Surface Transportation Policy Project. November 1998. <a href="http://www.daclarke.org/AltTrans/analysis.html">http://www.daclarke.org/AltTrans/analysis.html</a>.) STPP's report also notes that a previous study "found that at the metropolitan level, every 1% increase in new lane miles generated a .9 % increase in traffic in less than five years."







Source: TSTC analysis of ConnDOT Statewide Transportation Improvement Programs, 2012-2015, 2010-2013 and 2007-2010.

\* Other includes environmental expenses, ferry, ITS, signage, signals, safety, streetscape/landscape, TDM, and unclassifiable projects.

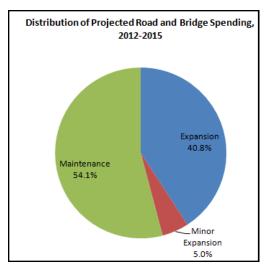
# QUICK FACTS: Transit Capital Investments Decrease in 2012-2015 STIP

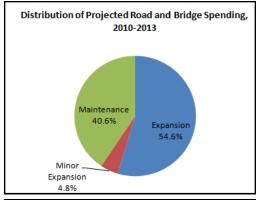
The largest investment is in transit capital projects, comprising 44.1 percent of planned capital investment in the STIP. Road or bridge projects (maintenance, minor expansion and expansion projects) make up the next largest share.

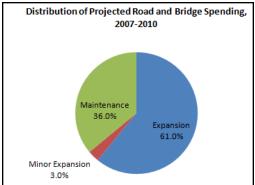
Comparing the previous STIPs (2010-2012 and 2007-2010) shows:

- The percentage of capital dollars going to pedestrian and bicycle projects has consistently increased, from .9 percent of the STIP's capital investments in 2007-2010, to 1.5 percent in 2010-2013, to 2.0 percent in the most recent STIP.
- Transit capital spending dropped from 49.0 percent of the 2010-2013 STIP to 44.1 percent, though the percentage of the dollars going towards transit capital projects is still larger than it was in 2007-2010, when a little more than a third (36.6 percent) was dedicated to these kinds of projects.
- In both the 2010-2013 STIP and the 2012-2015 STIP, about a quarter<sup>1</sup> of the dollars going to transit capital projects are dedicated to the New Haven-Hartford-Springfield Rail Line or *CTfastrak*. As these projects near completion, Connecticut must begin to contemplate the next generation of transit projects.

1. The New Haven-Hartford-Springfield Rail Line and *CTfastrak* comprise 24.9 percent of the transit capital projects in the 2012-2013 STIP and 28.9 percent of transit capital in the 2012-2015 STIP.







Source: TSTC analysis of ConnDOT State-wide Transportation Improvement Programs, 2012-2015, 2010-2013 and 2007-2010.

### QUICK FACTS: Road and Bridge Expansion Still too High in 2012-2015 STIP

Expansion projects comprise a decreasing share of STIP dollars going towards road or bridge projects, but still make up **40.8 percent of all planned road and bridge spending** — **nearly 41 cents of every dollar going to road or bridge projects.** This is down from 54.6 percent in the 2010-2013 STIP and 61.0 percent in the 2007-2010 STIP.

Expansion projects tend to be very costly to build, requiring much of the State's limited transportation resources. Moreover, once they are built, expansion projects must be maintained, adding to the State's backlog of maintenance needs.

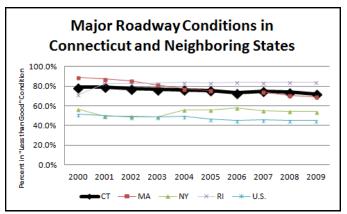
In the 2012-2015 STIP, the expansion elements of one project — the Pearl Harbor Memorial Bridge (Q-Bridge/I-95 megaproject) — make up 82.9 percent of all expansion expenses.

ConnDOT is investing more in maintenance projects, which is important given the State's backlog of road and bridge maintenance and repair needs. The 2012-2015 STIP dedicates 54.1 percent of its road and bridge dollars to road or bridge maintenance projects, up from 40.6 percent in the 2010-2013 STIP and 36.0 percent in the 2007-2010 STIP.

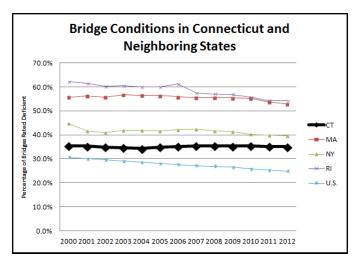
In 2009, 72.4 percent of Connecticut's major roadway miles were in less than good condition<sup>1</sup> and in 2012, 35.1 percent of Connecticut's bridges were deficient.<sup>2</sup>

<sup>1.</sup> To determine percentage of roadway miles in less than good condition, TSTC considered all reported major road miles with an International Roughness Index rating of 95 or greater. Federal Highway Administration, *Highway Statistics Series, 2000-2009*, HM-64.

<sup>2.</sup> To determine percentage of deficient bridges, TSTC considered both functionally obsolete and structurally deficient bridges. The majority of Connecticut's bridges are functionally obsolete – not conforming to modern bridge design standards. Federal Highway Administration, *Deficient Bridges by State and Highway System, 2000-2012*.



Source: Federal Highway Administration (FHWA) . *Highway Statistics Series*, 2000-2009, HM-64. U.S. includes Washington, D.C. and Puerto Rico.



Source: FHWA. *Deficient Bridges by State and Highway System, 2000-2012*.U.S. includes Washington, D.C. and Puerto Rico.

## QUICK FACTS: More Progress Needed on Road and Bridge Conditions in 2012-2015 STIP

Many of the State's roads and bridges are in need of maintenance and repair.

Although Connecticut has cut its major roadway miles in less than good condition by 8.5 percent from 2000 to 2009 and lowered its percentage of deficient

bridges by 1.0 percent from 2000-2012, it still lags behind its neighbors.

Massachusetts and New York, as well as the nation as a whole, have a higher percentage of roadway miles in better condition. In 2012, Connecticut had the tenth highest percentage of deficient bridges in the nation.

In 2009, 72.4 percent of the state's major roadway miles were in less than good condition, with an International Roughness Index rating of 95 or greater. In 2012, 35.1 percent of Connecticut's bridges were either functionally obsolete or structurally deficient.<sup>2</sup>

The American Automobile Association (AAA) estimates that "driving on roads in need of repair costs U.S. motorists \$54 billion per year in extra vehicle repairs and operating costs -- \$275 per motorist" and U.S. PIRG notes that Connecticut residents spend an additional \$313 per year due to the state's road conditions. AAA points out that "outdated and substandard road and bridge design, pavement conditions and safety features are factors in 30% of all fatal highway crashes." 5

Table One: Percentage of Major Roadway Miles in Less than Good Condition<sup>1</sup>

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Change '00 to '09
СТ	79.1%	79.5%	77.6%	76.9%	76.6%	75.7%	73.3%	75.2%	73.9%	72.4%	-8.5%
MA	88.9%	87.4%	85.7%	81.2%	77.4%	75.9%	$X^6$	74.3%	71.0%	69.5%	-21.9%
NY	56.5%	49.6%	49.6%	49.0%	56.2%	55.7%	57.7%	55.3%	54.8%	54.2%	-4.0%
RI	71.4%	82.9%	82.8%	83.2%	83.9%	83.4%	84.2%	84.0%	84.1%	84.1%	17.8%
U.S.	51.3%	50.0%	48.5%	48.5%	49.6%	46.7%	45.4%	45.6%	45.4%	44.9%	-12.5%

### **Table Two: Percentage of Deficient Bridges<sup>2</sup>**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change '00 to '12
СТ	35.4%	35.3%	34.9%	34.6%	34.3%	35.0%	35.2%	35.4%	35.5%	35.3%	35.3%	35.1%	35.1%	-1.0%
MA	55.7%	56.2%	55.8%	56.7%	56.4%	56.4%	55.9%	55.5%	55.5%	55.4%	55.2%	53.8%	52.9%	-5.2%
NY	44.8%	41.7%	40.9%	41.8%	41.8%	41.7%	42.1%	42.4%	41.7%	41.3%	40.3%	39.9%	39.5%	-11.7%
RI	62.1%	61.4%	60.2%	60.4%	59.9%	59.9%	61.3%	57.4%	57.1%	56.8%	55.6%	54.3%	54.3%	-12.6%
U.S.	30.7%	30.1%	29.6%	29.1%	28.6%	28.2%	27.7%	27.2%	26.9%	26.5%	25.9%	25.4%	24.9%	-18.8%

<sup>1.</sup> To determine percentage of roadway miles in less than good condition, TSTC considered all major road miles with an International Roughness Index rating of 95 or greater. Federal Highway Administration, *Highway Statistics Series, 2000-2009*, HM-64. U.S. includes Washington, D.C. and Puerto Rico.

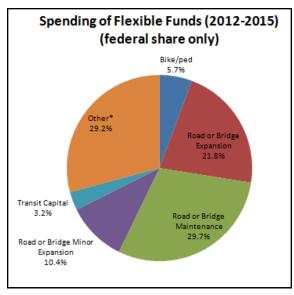
<sup>2.</sup> To determine percentage of deficient bridges, TSTC considered both functionally obsolete and structurally deficient bridges. The majority of Connecticut's bridges are functionally obsolete – not conforming to modern bridge design standards. Federal Highway Administration, *Deficient Bridges by State and Highway System, 2000-2012*. U.S. includes Washington, D.C. and Puerto Rico.

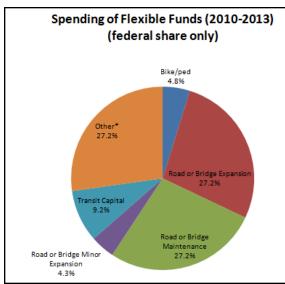
<sup>3. &</sup>quot;Aging Infrastructure." American Automobile Association. <a href="http://makingamericastronger.aaa.com/issues/aging-infrastructure">http://makingamericastronger.aaa.com/issues/aging-infrastructure</a>.

<sup>4.</sup> Madsen, Travis, Benjamin Davis and Phineas Baxandall. "Road Work Ahead Holding Government Accountable for Fixing America's Crumbling Roads and Bridges." U.S. PRIG. April 2010. <a href="http://www.uspirg.org/sites/pirg/files/reports/Road-Work-Ahead.ndf">http://www.uspirg.org/sites/pirg/files/reports/Road-Work-Ahead.ndf</a>

<sup>5. &</sup>quot;Aging Infrastructure." American Automobile Association.

<sup>6.</sup> The 2006 *Highway Statistic Series* reported that Massachusetts had 23.9 percent of major roadway miles in less than good condition. Given the data provided for other years, TSTC believes that this is a misrepresentation and thus did not report it here.





Source: TSTC analysis of ConnDOT Statewide Transportation Improvement Programs, 2012-2015 and 2010-2013.

\* Other includes funds for a variety of projects such as environmental expenses, signage, safety and streetscape/landscape projects.

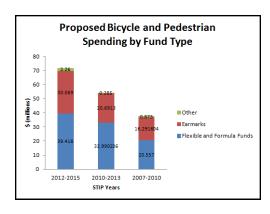
### QUICK FACTS: Mixed Progress on Flexible Funding Investments in 2012-2015 STIP

While the majority of the STIP is made up of relatively inflexible federal funds that can only be used on specific types of projects such as the National Highway System and Interstate Maintenance programs, 17.8 percent of the STIP's federal dollars are federal flexible dollars. These funds include Congestion Mitigation and Air Quality Improvement and the Highway Safety Improvement Program. Flexible funds can be used on multimodal projects.

- The percentage of flexible funds<sup>1</sup> going towards pedestrian and bicycle projects has steadily increased from 2007-2010. In the current STIP, the State dedicates 5.7 percent of these funds to pedestrian and bicycle projects, up from 4.8 percent in the 2010-2013 STIP and 2.2 percent in the 2007-2010 STIP.
- The share of flexible funds dedicated to transit capital projects has steadily decreased from the 2007-2010 STIP. In 2012-2015, the State proposes to use only 3.2 percent of its flexible funds to pay for these projects, down from 9.2 percent in the 2010-2013 STIP and 9.6 percent in the 2007-2010 STIP.

The 2012-2015 STIP relies on a higher share of federal earmark funds to pay for pedestrian and bicycle projects than did the 2010-2013 STIP. Federal earmark funds (with state and local matches) make up almost 42 percent of pedestrian and bicycle projects funding in the 2012-2015 STIP, compared to a little over 38 percent in the 2010-2013 STIP.

Earmark funds are eliminated in MAP-21, the current transportation bill, foreshadowing a funding scheme that is unsustainable for these



Source: TSTC analysis of ConnDOT Statewide Transportation Improvement Programs, 2012-2015, 2010-2013 and 2007-2010.

projects. To fund these projects in the future, the State must take advantage of programs such as the National Highway Performance Program (NHPP), which allows highway funds to be used for a variety of projects, including transit and bridge maintenance. NHPP can improve transit along Interstate and other major highway corridors, as long as a transit improvement is a more cost-effective way to reduce delays and improve traffic flow than a road project. NHPP also allows states to transfer up to 50 percent of NHPP funds to bridge repair and maintenance projects.

Potential transit candidates for NHPP include:

- Metro-North Rail (parallels I-95 between the New York border and New Haven);
- Shore Line East Rail (runs along I-95 between New Haven and New London);
- The planned New Haven-Hartford-Springfield commuter rail service (will run in the I-91 corridor);
   and
- The *CTfastrak* bus rapid transit system (parallels I-84 in stretches).

<sup>1.</sup> Unlike the rest of TSTC's analysis which looks as federal, state and local contributions to each project, TSTC examined only the federal share of the flexible funds, not the state and local match to these funds.

<sup>2.</sup> TSTC considered the following funds to be flexible: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Safety Improvement Program (HSIP), Recreational Trails (RT), Safe Routes to School (SRSI), Surface Transportation Program— Anywhere (STPA), Surface Transportation Program— Bridgeport/Stamford (STPBS), Surface Transportation Program— New Haven (STPNH), Surface Transportation Program— Other Urban (STP O), Surface Transportation Program— Rural (STPR), Surface Transportation Program— Springfield Programs (STPSP) and Surface Transportation Program— Enhancement Programs (STPT).