Connecticut’s Bold Vision and Call to Action for a Transportation Future

May 2015
## Definitions

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<td>TransformCT</td>
<td>Connecticut’s strategic long-range transportation planning and outreach.</td>
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<td>Let’s GO CT!</td>
<td>Governor’s bold vision and call to action for a transportation future.</td>
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<td>Base Capital Program</td>
<td>Presumed continuation of current level capital investments, approximately $1.4 billion annually, combination of State &amp; Federal funds.</td>
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<td>5 Year Ramp-Up</td>
<td>Governor’s proposed projects &amp; authorizations to enhance the base capital program with additional State funding (FY 2016 – 2020) reaching capital investment levels of $2 billion annually.</td>
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Proposal:

• Bold vision for transportation in CT

• **Based on:** technical analyses & public outreach done as part of TransformCT
  
  o 18-month strategic planning process
    
    • **Needs:** identify basic needs,
    
    • **Vision:** define a bigger vision:
      
      o do more than just fixing problems
      
      o ‘**Best in Class**’
    
    • **Strategy:** develop plan to achieve vision
      
      o Engaged public to help define the vision

• **Outcome:** *Let’s Go CT!*
• CT created the first highway department in the country 120 years ago

• Always struggled to adequately invest in infrastructure.

• Rarely invested sufficiently to meet growing demand & spur economic growth

• In 1921 the Commissioner warned that:
  o road conditions must be improved & congestion fixed
  o enormous investment was needed to fix the problem.

• Governor recognizes that we need to create a plan bold enough to avoid repeating history.

• We need to plan for the future, not just fix existing problems.
Where We are Today

Existing Conditions
Our Transportation Infrastructure Is Large & Diverse

**Challenge:** Keeping it operating, in good condition, & safe is a major challenge

**Highway System:**
- 85 million vehicle miles traveled per day
- 21,800 miles of state & local roads and ramps
- 7,400 state & local bridges
- 50 state highway maintenance garages
- 630 plow trucks

**Transit System**
- 42 million bus passenger trips per year
- 1,100 transit buses and paratransit vehicles
- 41 million rail passenger trips per year
- 226 route miles of passenger railroad
- 203 New Haven Line bridges
- 500 rail coaches and cars
- Bike/Ped Mode Share 3.4%
Condition of our Infrastructure

Condition forecasts:

• We cannot sustain even existing conditions

Already showing impacts of underinvestment

Bridges

• 24% of CT’s bridges are functionally obsolete, 10% are structurally deficient

Roadways

• 41% of all state & local roads are in “poor” condition.

• Cost to drivers: an additional $661/year in operating costs due to road conditions.

Rail

• 100-year old bridges  Four movable bridges  on nation’s busiest commuter rail line are over 100 years old
70% of State maintained bridges built before 1970

I-84 viaduct in Hartford
# Highway Bridges in Poor Condition

10-year bridge program after Mianus River bridge collapse

Reflects recent increases in bridge program
Postponed investments also place our economy & quality of life at risk

- Drivers in Connecticut spend up to one work-week sitting in traffic – over $1.6 B in lost time & wasted fuel

- Deficient roads & bridges cost CT drivers $2.6 B per year in higher operating costs & accidents
Let’s Go CT!

30-Year Vision
**Best in Class Vision**

- **30-year plan**: all critical preservation & enhancement needs
- **5-year ramp-up**: projects within the 5-year budget cycle to jump start investment
- **Lock Box**
- **Cost:**
  - 30-year *Vision*: $100 Billion investment
  - 5-year ramp up: $10 Billion investment
    - **Base Capital Program** is $7.2 Billion (fed + state)
    - **Ramp-Up** funds $2.8 Billion (additional state)
Actions To Improve Project and Service Delivery

- **Project delivery:** provide tools needed for more efficient delivery
  - Design/Build, CMAR, GMGC, Accelerated Bridge Construction, P3
- **Service delivery:** implement more effective contracting methods
- **Core DOT capacity:** operations, engineering, technology, support staff supplemented by consultants and contractors
- **More cash funding for regular capital programs**
  - Supports basic repair & preservation programs
- **100% state-funded design**
  - Use state funds for design; state and federal funds for construction
  - More efficient, faster, stretches dollars farther & grows program
Project Delivery

- **Alternative Project Delivery**
  Design/Build, CMAR, GMGC

- **Alternative Funding/Delivery**
  Public/Private Partnerships

- **Innovative Construction**
  Accelerated Bridge Construction

- **More cash funding for regular capital programs**
  Supports basic repair & preservation programs

- **100% state-funded design**
  Use state funds for design; state and federal funds for construction
Core DOT Capacity

• Current staffing inadequate to expand program beyond existing levels – staffing lower than in 2011.
• Biennial budget includes incremental staff capacity
• Primary changes add engineering support disciplines
• Bridge maintainers to reduce cost of implementing bridge projects
Core DOT Capacity

- Consultant service critical to introduce new project delivery methods and support expansion during ramp up.
- Key efficiencies a focus of LEAN initiatives
- Strategic evaluation of future core organization design underway as part of Let’s GO CT!
Best in Class *highlights*

- Statewide Programs
- Corridors
Statewide Programs
Highways & Bridges: Preservation Programs

Best-in-Class pavement preservation program:
- $7 Billion over 30 years
- To achieve & maintain good state of repair

Best-in-Class bridge preservation program
- $25 Billion over 30 years
- To achieve & maintain good state of repair
Bus Program

• Improve & expand urban bus service by 25%, providing urban residents access to bus service within half-mile of home

• Integrate operating services, information and customer service statewide including consolidated, coordinated para-transit (dial-a-ride) services

• Upgrade bus maintenance facilities

• State-of-the-art service & information delivery, i.e. real time multimodal information & smart card fare collection systems
Bike & Pedestrian

- **Design for Bikes & Pedestrians**
  Support livable & walkable communities:
  - complete streets policy
  - context sensitive designs that respect community values.

- **Trail Program**
  Expand program to fill gaps in the regional trail system & maintain existing trails.

- **Urban Bike/Ped Connectivity Program**
  New program to improve accommodations for pedestrians in community centers.
Ports & Maritime

• Create best-in-class statewide Port Authority with thriving freight, intermodal, commercial, & tourism portfolio,

• Fully utilize land-side advantages of rail & highway linkages including renovating piers, adding crane & warehousing infrastructure, & regular maintenance dredging,

• Significantly expand local maritime economy across CT.
Municipal

• Double the State’s investment in municipal roadways
• Double the State’s investment in municipal bridges
• New municipal traffic signal replacement program
• New urban bike/ped connectivity program to make urban centers more bikeable, walkable, safe, livable and prosperous
• Support Transit-Oriented Development in community centers
Freight

- Upgrade highway bridges to meet 100,000 lb. national standard,
- Expand overnight parking for trucks,
- Implement fully-automated truck permitting for wide & heavy loads,
- Expand Rail Freight Improvement Program:
  - upgrade freight rail lines across the entire state
  - upgrade rail facilities to 286,000 lb. national standard
  - upgrade & maintain freight lines to preserve potential for passenger service
- Increase intermodal connections:
  - Improve intermodal facilities & infrastructure
  - improve deep-water ports (New London, New Haven, Bridgeport)
Corridor & Regional ‘Strategies’

- New Haven–Hartford–Springfield corridor
- NY-Hartford corridor
- NY-New Haven corridor
- Eastern CT
Key Corridor Objectives

- Reduce congestion on I-95 & Rt 15 (CT’s most congested corridor)
- Improve access to NYC (rail is primary means)
- Improve mobility & choices (goal in every corridor)
HIGHWAY highlights

- **Widen I-95**: from NY to New Haven
  - Start with most congested segment: *Bridgeport to Stamford*
  - Institute congestion management practices

- **Major preservation** projects such as:
  - **I-95**: Complete reconstruction of West River Bridge in New Haven
  - **RT 15**: Reconstruct/replace *West Rock Tunnel* ($235M) in Woodbridge

- **Fix traffic bottlenecks**: like RT 7/RT 15 interchange & RT 8 in Shelton-Derby area
RAIL highlights

New Haven Line:
- **Restore rail infrastructure** (movable & fixed bridges, track, catenary, etc.)
- Improve safety and reliability of service
- Reconfigure & **fully utilize all 4 tracks** to support: **2+2 concept**
  - **2 local tracks** - more frequent local “subway” type service
  - **2 express tracks** - faster express service on
- Add and modernize stations, expand parking

Branch Lines:
- Upgrade branch lines to provide full commuter service on all three lines
- Preserve option for future extension of Danbury & Waterbury branches
Key Corridor Objectives

- **Tourism:** improve access from other regions to recreational & tourism centers
- **Freight:** improve freight rail & port infrastructure for more efficient freight transport
- Reduce congestion on I-95
- Improve **Shore Line East** rail service
New York to Hartford Corridor

Key Corridor Objectives

- **Replace I-84 viaducts**
  - Waterbury
  - Hartford
  COST: $12 Billion

- **Reduce congestion on I-84**
  - Danbury
  - Waterbury
  - Hartford

- **Improve Branch rail lines**
  - Danbury
  - Waterbury
Key Corridor Objectives

- **Reduce congestion**
  
  I-91 at Charter Oak Bridge: traffic bottleneck
  
  $195 million: cost to build
  
  $880 million: benefits over 25 yrs

- **Complete Hartford Line** *(New Haven to Springfield)*

- **Complete & expand CTfastrak**

- **Enhance Bradley Airport** as key link to national & global markets
(Corridor highlights continued)

**Bus highlights**

**CTfastrak**

*Expand CTfastrak* east of the Connecticut River

*Improve access to* CTfastrak stations
**RAIL highlights**

**Hartford Line**
New Haven - Springfield

**Connections to NY, Boston, & Montreal**

- **Phase 1**: New Haven – Hartford: under construction
- **Phase 2: Hartford - Springfield**
  - Double track & rebuild infrastructure
  - New stations:
    - Enfield
    - Windsor Locks
    - Windsor
    - West Hartford
    - Newington Junction
    - North Haven
    - (Hamden)
5-Year Ramp-Up

FY 2016 – 2020

Definition of 5-Year Ramp-Up:

Governor’s proposed projects & authorizations to enhance the base capital program with additional state funding and critical additional core staff to advance program (2016-2020).
5 Year Capital Plan

(Updated every year- approx. $1.4 Billion per year, $7+ Billion over 5 years)

• Existing Programming Instrument to Deliver Transportation Program

• Project selection is primarily driven by:
  • Safety
    • Maintain the System in a Safe Condition
  • Preservation Needs
    • Maintain the Existing System in an efficient and reliable condition
Base Capital Plan Continued

Current Base 5 Year Capital Plan is funded with Federal & State Monies

- Historically, Federal funding accounted for 70-80% of the Program
- State-Federal ratio is now close to 50% with State funding including:
  - Fix it First Highway
  - Bridge Program
  - LOTCIP

State
$3.2 B
45%

Federal
$3.8 B
55%

Total Anticipated Federal Portion of the Current Program

Total Anticipated State Portion of the Current Program
Federal Funding & Eligibility

Accepting Federal Funding Comes with:

- Federal Eligibility Requirements
- Less Flexibility in Use of Funds
- Stewardship Agreements
- MAP-21 Brings:
  - State of Good Repair targets & penalties
  - Asset Management requirements
  - Performance-Based Planning requirements
Fixing Problems: Not Providing Choices

Aging systems requires the State to fix problems first before system enhancements.

- The needs of the current system mandates preservation & safety projects
- Current funding levels inadequate for existing system and do not allow for necessary enhancements

Federal program constraints increasingly restrict our ability to improve the system, due to elimination of discretionary programs.
Governor’s Call to Action Increases Capital Funds to $2 Billion/Yr during the 5-Year Ramp-up

- Safety & Preservation program backlog first
- Creating the opportunity for Enhancement Projects

Vision Level Capital Funding
- 5 Yr Ramp Up - Let's Go CT! Value = $2.8 Billion
- Proposed "Base" State Bonding Authorizations (based on recent trends)
- Past Years State Bonding Authorizations
- Assumed Federal Funding
- Current Biennial Budget
5 Year Ramp Up Capital Budget

Base Program vs. Ramp Up

- **Base Capital Program**:
  - $3.2 Billion State
  - $3.8 Billion Federal

- **Ramp Up**:
  - $2.8 Billion - State

**Total = $10 Billion investment over the 5 year period**
5 Year Ramp Up – $2.8 B additional State Funds

Highways $613 Million

Highways 22%

- I-95 Stamford to Bridgeport
- I-95 Baldwin Br. to Gold Star Br.
- I-91/I-691/Rt 15
- I-91/Interchange 29
- I-84 Exits 3-8
- I-84 West Hartford
- Route 9 – Middletown
- Rt. 7/15 Interchange

Total Ramp Up = $2.8 Billion State Funds
5 Year Ramp Up – $2.8 B additional State Funds
Bridges $281 Million

Innovative Bridge Program
- I-84/Route 8 – Mixmaster
- I-84 Hartford Viaduct
- West Rock Tunnel & Interchange 59
- Gold Star Bridge South Bound

Total Ramp Up = $2.8 Billion State Funds
5 Year Ramp Up – $2.8 B additional State Funds

Bike/Ped/Trails $101 Million

- Trail Maintenance
- Complete Gaps in Trail Network
- Urban Bike/Ped Connectivity

Bike/Ped/Trails 4%

Total Ramp Up = $2.8 Billion State Funds
5 Year Ramp Up – $2.8 B additional State Funds

Bus $43 Million

Bus service expansion - New Buses
Real Time Location/Bus Information
Paratransit Service Coordination
CTfastrak east to Manchester
Rt. 1 CTfastrak BRT (Norwalk/Stamford)

Total Ramp Up = $2.8 Billion State Funds
5 Year Ramp Up – $2.8 B additional State Funds
Rail $1.75 Billion

Plan to Upgrade NHL capacity and speed
Real Time Audio and Video System NHL
NHL Interim Bridge Repairs
NHL Stations & Parking
NHL - New Danbury Branch Dock Yard
Waterbury Branch Signal System
NHL/SLE/NHHS Fleet Replacement
Hartford Line Expansion/Stations/Fleet
SLE Station & Parking Improvements

Total Ramp Up = $2.8 Billion State Funds
DOT Capital Investment Program

- The Current Capital Program is approximately $1.4 Billion per year, $7+ Billion over 5 years and funded by roughly 45% State Bonds and 55% Federal Funds

- **Project selection** is primarily driven by:
  - Safety
    - Maintain the System in a Safe Condition
  - Preservation Needs
    - Maintain the Existing System in an efficient and reliable condition

- **Asset management approach** – *data driven*, the right solution at the right time
- MPO/RPO (stakeholder) concurrence with the planned expenditure of federal funds, Federal mandate.
- DOT estimates that safety and preservation Capital Investment alone will require roughly $2 Billion annually as the infrastructure ages; $60+ Billion for 30 years.
- $100 B over 30 yrs assumes Capital Investment levels of $3 to 4 Billion annually; a three fold increase in the program.
Let’s GO CT! 30 Year Vision

- $100 Billion total investment portfolio
- 2/3 of program is for existing system preservation
- 1/3 for system enhancement/expansion
Governor’s Call to Action Increases Capital Funds to $2 Billion/Yr during the 5-Year Ramp-up

- Safety & Preservation program backlog first
- Creating the opportunity for Enhancement Projects
Total System Preservation Needs are $62 Billion

- Highway System: $15,610,000,000
  - Rail: $14,550,200,000
- Bridges: $24,550,000,000
- Airports: $265,000,000
- Maritime: $231,000,000
- Bike Ped: $30,000,000
- Design: $5,000,000,000
- Bus: $2,075,000,000
SUMMARY

• Base Capital Program of $7.2B requires State funding to match federal funding to address current system safety and preservation.

• 5 year ramp-up of $2.8B requires legislative authorization to address additional unmet preservation needs and begin most critical enhancement projects.

• Increased staff and consultant resources necessary to expand beyond current program delivery.
SUMMARY

• 5 year ramp-up increment above Base Capital Program increases debt service by $32M in biennium and is fully funded within existing STF resources.

• Authorization of 5 year ramp-up requires additional actions by Bond Commission on specific program funding and future biennial budget actions to continue expansion.
Thank you

www.LetsGoCT.com