

# CAPITOL REGION TRANSPORTATION PLAN

## - EXECUTIVE SUMMARY -

### A GUIDE FOR TRANSPORTATION INVESTMENTS THROUGH 2040



The Capitol Region Transportation Plan defines a comprehensive program for improving our transportation system to meet travel needs through the year 2040. It is a *systems level* plan that provides general policy guidance. It defines the Region's greatest needs, identifies which problems are the Region's highest priorities, and recommends how the Region should spend its limited capital funds.

The Transportation Plan reaffirms the Council's commitment to policies established in earlier editions, including better transit, improved bike & pedestrian systems, a commitment to linking land use and transportation planning to create a sustainable transportation system, support for Bradley International Airport, a commitment to a freight planning program and a continuation of our program to address environmental justice issues.

**The goals** upon which all other recommendations are based continue to be:

- **provide more & better travel choices**, and
- **emphasize better management & operations over building new roadways**

This Plan has added recommendations from the Northwest Corridor Transit Study, the Route 195 Corridor Study, the Route 305 Corridor Study, the updated Regional Pedestrian Bicycle Plan, the updated Locally Coordinated Human Services Transportation Plan, the Route 175/Route 9 Area Traffic Study, the Interstate 84 Viaduct Study, and the Transportation Monitoring & Management Report.

Finally, the Plan continues to respond to requirements that are part of the latest federal transportation legislation:

- consult with State & local agencies to assure consistency between land use & transportation plans,
- describe environmental mitigation activities, if any,
- emphasize management & operations, including congestion management, and
- emphasize safety & support the State Strategic Highway Safety Plan.

This **Executive Summary** serves as an outline of the issues, policies and recommendations that comprise the Capitol Region Transportation Plan. More detail and discussion is found in the complete document that can be obtained from the CRCOG offices by calling 860-522-2217, or downloaded from the Transportation Page of the CRCOG website: [www.crcog.org/transportation](http://www.crcog.org/transportation).

**Capitol Region Council of Governments**

Adopted: May 4, 2011

**CAPITOL REGION COUNCIL OF GOVERNMENTS**  
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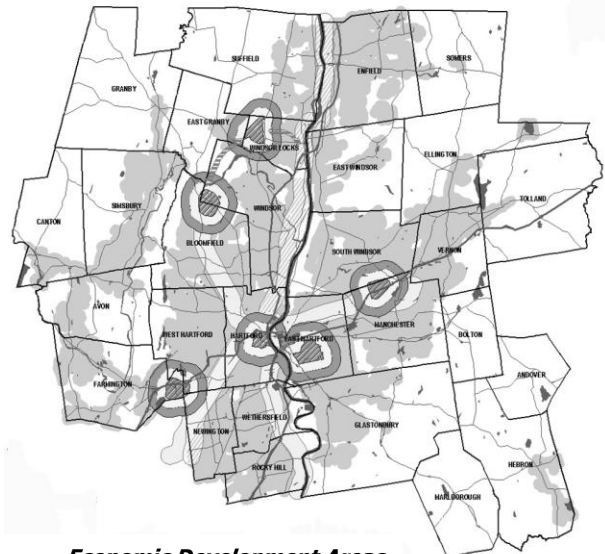
Preparation of this report has been financed in part through a grant from the U. S. Department of Transportation, Federal Highway Administration and a grant from the State of Connecticut Department of Transportation. The contents of this report reflect the views of the Capitol Region Council of Governments, which is responsible for facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policy of the U. S. Department of Transportation and/or the Connecticut Department of Transportation. This report is disseminated under the sponsorship of the U. S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for the contents or use thereof.

# 1. A SUSTAINABLE TRANSPORTATION SYSTEM



The 2011 Regional Transportation Plan continues to link land use planning with transportation planning. In 2009, CRCOG endorsed the creation of Sustainable Capitol Region, an initiative with a mission that seeks to further integrate all activities of the agency to work toward a region with vibrant, healthy communities, protected natural resources and open spaces, equitable access to opportunities and economic competitiveness. Creating a sustainable transportation system is about balance – not only balance amongst modes of transportation, but also balance between transportation investments and development priorities. Recommendations that will help achieve this balance are listed below.

1. **Support sustainable and livable community goals**, at all levels of the planning process by:
  - adhering to context sensitive planning and design principles,
  - placing an emphasis on developing “complete streets” that serve all users of the transportation network,
  - supporting the inclusion of green infrastructure elements in project design where possible,
  - continuing to include a strong land use element in CRCOG corridor studies, and
  - providing opportunities for training in policies, techniques, and practices that help achieve these goals.
  
2. **Continue to work with State land use and environmental agencies on items of mutual interest.**
  
3. **Support Regional Plan of Conservation and Development goals**, especially:
  - supporting economic development and transportation investment at the six Economic Development Areas of Regional Significance.<sup>1</sup>
  - supporting revitalization of Hartford & older urban centers.
  - supporting preservation of community character & natural resources.
  - supporting more transportation choices for diverse needs.
  
4. **Continue planning coordination** between CRCOG’s Transportation and Policy Development & Planning departments.
  
5. **Avoid areas of environmental concern**, as much as is possible. Investigate mitigating measures when necessary.
  
6. **Support for transit oriented development (TOD)** by
  - developing a long range strategy for the Region that encourages both transit and transit-supportive land use,
  - making station area planning a part of the general planning process for all rapid transit lines,
  - working with planners and the developers to integrate TOD into their plans and development projects,
  - building support for transit among community groups, business leaders, and other stakeholders, and
  - working to advance TOD plans for the New Britain Busway and the New Haven Hartford Springfield Rail System.
  
7. **Continue regional access management program**, as recommended in the Highway System section.
  
8. **Maintain & update CRCOG’s land use & zoning databases**, and continue to develop better land use forecasting tools.



**Economic Development Areas of Regional Significance**

<sup>1</sup> At the same time, recognize the fact that many other aspects need to be considered when transportation investments are proposed, including but not limited to safety, quality of life, and equity among communities.

**9. Improve CROG's travel forecast model, by**

- Continuing to use sensitivity testing with alternative land use scenarios when evaluating specific transportation project proposals
- Making other improvements to increase its functionality and performance.

**10. Work with others to secure periodic re-flights of orthophotography data, and update current datasets.**

**2. TRANSIT SYSTEM**



The private automobile is not the only way to travel within the Capitol Region. Alternative travel modes to the private automobile include local and express bus service, paratransit services provided for elderly and disabled residents, and rideshare services. These services play an important role in meeting the travel needs of our residents.

The Council of Governments recognizes that while transit is a small part of a much larger transportation system, it is a critical part nonetheless. And it is likely to become even more important as our roadways become more congested over time and people seek alternative ways to travel. Recommendations to place more emphasis on transit improvements as a way to improve mobility for those who rely on transit, provide viable travel choices for everyone, and reduce congestion on our streets are listed below:

**1. Support the advancement, construction and operation of the New Britain – Hartford Busway.**

**2. Work to expand a rapid transit system in the Capitol Region** by supporting initiatives:

- to build ridership the Griffin Busway corridor, by establishing a transit hub at the Poquonnock park n ride lot in Windsor with shuttles to area employers and express service from suburban locations.
- in the Hartford East Busway corridor, in the near term by operating buses in the I-84 HOV lanes and in the long term by constructing a second busway in the CT Southern Railroad corridor (not including the Manchester Industrial Spur).
- Re-examine potential for rapid transit in the Rocky Hill corridor (Hartford to Old Saybrook) after the New Britain - Hartford Busway is operational.

**3. Support the advancement of the New Haven – Hartford – Springfield Passenger Rail** service with a connection to Bradley Airport.

**4. Support efforts to improve, upgrade and enhance Union Station as the major multi-modal transportation center in the Region,** and as the central station for the Region's rapid transportation system.

**5. Preserve the existing rail rights-of-way for future transportation,** while allowing for interim use by other transportation functions such as multi-use trails.

**6. Maintain and improve existing levels of bus, paratransit and vanpool services.**

**7. Assure that the transit system is accessible to bicyclists.**

**8. Continue the Jobs Access Program.**

**9. Continue the Locally Coordinated Human Services Transportation planning process.**



**10. Support the construction of a paratransit facility, as proposed by the Greater Hartford Transit District.**

11. **Support improvements to the existing bus system**, including more hours of service, more timed transfer centers with increased service frequency, increased service frequency on express routes, new routes to provide for greater suburb to suburb service, circulators within activity centers, a circumferential route in the region's inner ring suburbs, modifications to create more direct service, and integration of alternate fueled vehicles in the transit fleet as soon as practicable. New routes to provide crosstown service within the City of Hartford should also be evaluated.
12. **Support integrating advanced technologies (ITS)** into current transit and paratransit operations to improve their operational efficiency. Opportunities exist in the New Britain Busway project, the regional bus service and the elderly and disabled paratransit services.
13. **Continue to support the Downtown Circulator for Hartford.**
14. **Support recommendations of the Northwest Corridor Transit study** concerning a downtown transit center and modifications to the bus routes that serve it.
15. **Support the development of a multi-modal transportation center and enhanced bus service in the Buckland Hills area.**
16. **Examine the potential benefits of reorienting service in downtown Hartford.**
17. **Support improvements at bus stops and stations.**
18. **Support transit oriented development along transit lines, as described in the earlier A Sustainable Transportation System section.**

### 3. HIGHWAY SYSTEM

The regional highway system consists of a hierarchy of road types: freeways, arterials, and collector (or local) roadways. The freeways are limited access, grade-separated facilities whose function is to serve longer distance trips and through traffic. Arterial roadways are not limited access and generally have at-grade intersections. They typically serve a dual purpose of carrying longer distance trips, but also serve shorter trips and provide access to abutting land uses. The primary function of collector and local roads is to provide access to abutting properties.

*Primary emphasis is on better operation & management of the existing system, and not on widening or new construction.*

The focus of the Regional Transportation Plan is on the portion of the highway network that is of regional significance – the freeway and arterial roadways. It is the goal of the Plan to manage the system in a manner that the network can continue to function in a safe and efficient manner to serve the growing demand for travel in the future.

**Freeways** are the most important part of the Region's roadway system. While they constitute only 3.0% of the total road miles in the Region, but they carry just about half of the total traffic. Recommendations that place the primary emphasis on safety and operational efficiency include:

1. **Continue to develop the Congestion Management Program** for the Hartford area, and incorporate performance-based measures.
2. **Continue a regional Safety Management Program**, by:
  - including safety considerations in all CRCOG studies & for all modes of travel,
  - continuing to monitor safety conditions & trends,
  - support traffic incident management efforts as a safety tool, and
  - support the CT Strategic Highway Safety Plan.
3. **Support statewide and regional incident management initiatives.**
4. **Support completion of the traffic management system and ITS projects.** Assure that the Regional ITS Architecture is kept current.

5. **Support findings of the I-84 Viaduct study**, including coordination with other area transportation plans & projects; and identification of next steps toward implementation.

6. **Continue discussions regarding the reconstruction/rehabilitation of the Putnam Bridge**, including consideration of retrofitting the bridge with a sidewalk.

7. **Support operational improvements in the Buckland Development Area**, by monitoring development and including an "allotment" for future improvements in the list of unfunded needs.

8. **Support operational improvements to I-84 from Hartford to Farmington**, as follows:

- reconstructing the Rt4/Rt6/Rt9 interchange,
- constructing operational lanes,
- reconfiguring interchange at Flatbush, and
- investigating access needs at Sisson Avenue in conjunction with I-84 Viaduct planning.

9. **Complete a corridor study / plan for existing Route 6**, due to the fact that the environmental issues concerning a relocated highway are not expected to be resolved in the near future.

10. **Complete the study of transportation problems in the Buckland area of Manchester**, and obtain endorsements from municipalities and CRCOG's Policy Board.

11. **Implement access improvements**, by:

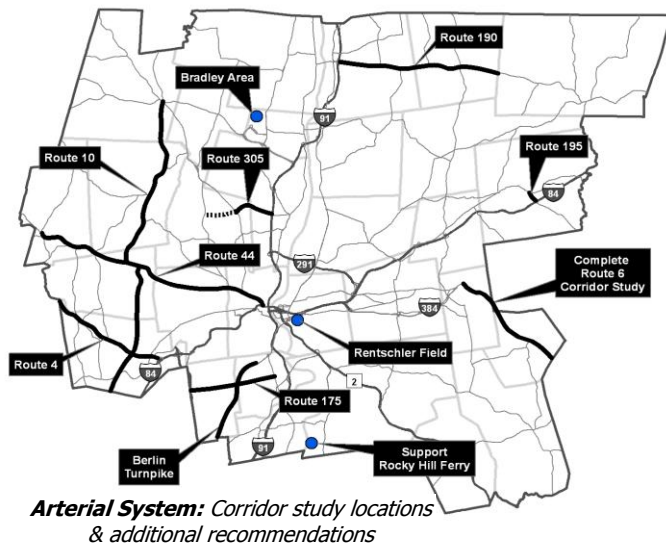
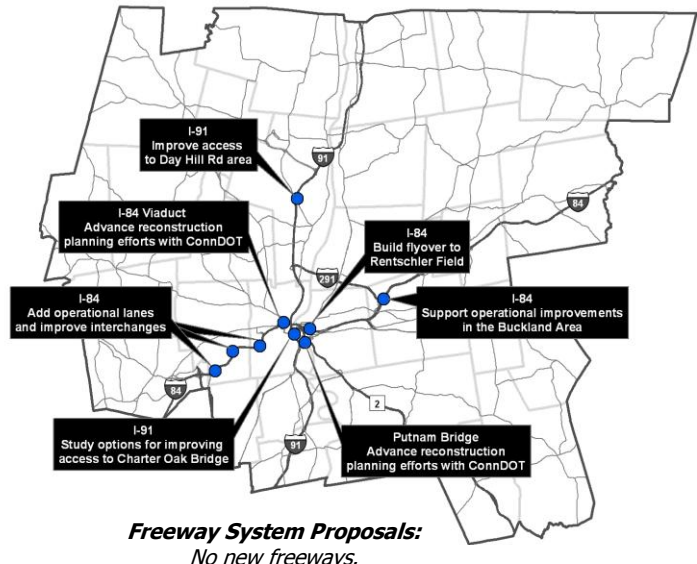
- building the flyover connection between I-84 and Rentschler Field,
- improving access to the Flatbush-Parkville-Elmwood redevelopment area from I-84, and
- improving access to the Day Hill - Griffin development area from I-91.

12. **Study the need for operational improvements** at the I-84/I-91 interchange, and the length of Route 2 especially at the I84-I91 interchange and at the Route 3 interchange.

**Arterial roadways** are the second most important part of the regional highway network. The arterial network comprises only 13.9% of the road network, but it carries about 30% of the total traffic. The Region recognizes the need to continue to maintain and improve its arterial roadways. Our approach to improving the roadway system is based on a planning requirement to include consideration of community concerns and an emphasis on better management of existing roads. Recommendations emphasizing safety and operational efficiency include:

1. **Continue to include Context Sensitive Design in corridor studies.**

2. **Improve and expand the regional network of computer controlled traffic signal systems.**



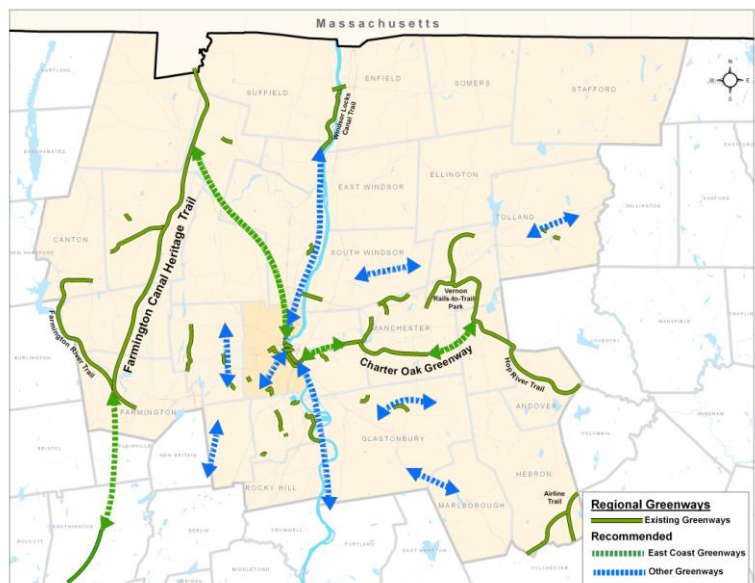
3. **Support roadway improvements proposed in previously adopted studies**, including the Bradley Area; Rt 4 in Farmington; Rt 10 from Granby to Farmington; Rt 44 from Hartford to Canton; Rt 175 in Wethersfield and Newington; the CCSU Area, Rt 190 Study in Enfield and Somers; Rt. 195 in Tolland; Rt. 305 in Windsor and Bloomfield; the Berlin Turnpike in Wethersfield and Newington; and Rentschler Field in East Hartford.
4. **Support funding initiatives for town bridges.**
5. **Prepare a summary of bridge mapping and identification** within our Congestion Management Program (currently being updated).
6. **Continue to implement access management programs and policies**, by:
  - providing funding for access management plans, usually as part of a corridor study, and
  - requiring access management issues to be addressed as part of the design phase of any roadway improvement project.
7. **Complete the transportation study of the Route 6 corridor**, and include the relocation of Rt 6 in the “unfunded needs” list.
8. **Support continued operation of the historic Rocky Hill – Glastonbury ferry**, with adequate hours of operation and a reasonable fare.

**Municipal roads.** Municipalities own the vast majority of collector and local roads in the regional network. For the most part, these roads are maintained and improved with local funds. While the Region has not identified specific problems on these roads, we recognize that municipalities sometimes need financial assistance to correct the more serious problems. Therefore, the Plan’s recommendation for collector roads is to continue to allow the use of federal funds to address serious problems on town roads.

## 4. BIKES & PEDESTRIANS

In 2008, the Council of Governments took an entirely new approach to bicycle and pedestrian planning, with a focus upon **Active Transportation**. Active Transportation calls for increased investments in bicycling and walking that will produce benefits to the entire transportation system and to other aspects of our communities. The 2008 Regional Pedestrian and Bicycle Plan update quantified these benefits and laid out recommendation for achieving increases in the number of individuals walking and bicycling, including:

1. **Provide proper facilities for cyclists and pedestrians**, by
  - assist municipalities with tools to implement “Complete Streets”,
  - assist municipalities with tools to identify needed improvements to pedestrian and bicycle facilities, including safety audits and developing bike/ped friendly land use,
  - complete the Regional Greenway System, and
  - support the provision of bike racks and lockers throughout the Region.
2. **Address safety education and enforcement issues**, by educating pedestrians, bicyclists, motorists and police officers, with an emphasis on “Share the Road” and crosswalk safety.



3. **Promote a regional culture supportive of cycling and walking**, by
  - continuing the Safe Routes to Schools program,
  - sponsoring events that encourage bicycling and walking,
  - working with employers to promote wellness and active transportation programs,
  - producing a regional cycling map, and
  - working to develop a bicycle rental program.
4. **Support bike and pedestrian planning activities**, by continuing to collect data measuring bicycle and pedestrian activity in the Region and continuing to provide staff support to the regional bike and pedestrian program, including the bike and pedestrian planning committee.
5. **Secure funding for staff support and to implement these recommendations.**

## 5. BRADLEY AIRPORT

This Transportation Plan continues to recognize the importance of Bradley International Airport as both a transportation facility and as an engine of economic growth. It includes a detailed policy supportive of improving the airport, improving access to the airport, or supporting other actions needed to fully realize the economic growth benefits that the Airport can generate. Specific recommendations on how these goals can be achieved, include:

1. **Improve roadway access** by extending Bradley Park Road, improving Bradley Park Road, improving Route 75 from Route 20 to Route 140, and following an environmental review, building a 2-lane connector from Route 75 to the Route 190 bridge.
2. **Improve transit access** by including a transit connection from the airport to the proposed New Haven – Hartford – Springfield passenger rail service, and improving bus service for both air travelers and airport area workers.
3. **Support opportunities for appropriate economic development**, by
  - continuing CRCOG’s designation of the airport area as an Economic Development Area of Regional Significance, and continuing to develop policies that support economic growth in these areas,
  - implementing the roadway improvements recommended above, and
  - supporting policies that discourage noise-sensitive land uses near flight paths, and that encourage construction techniques with adequate noise insulation.
4. **Support improvements to both domestic air passenger service and support efforts to develop international air passenger service.**
5. **Support improvements to air cargo capabilities and service.**
6. **Evaluate the potential for improving rail freight access and developing support facilities for trucks to make the airport a true multi-modal facility.**
7. **Encourage community sensitive planning**, by involving local officials in the planning process.





## 6. FREIGHT TRANSPORT SYSTEM

The movement of goods plays an important role in economic growth that is often not fully appreciated. The efficient movement of goods is important even in economies dominated by financial, insurance, and service industries that do not rely on goods movement for their success. The mode of transport might be different to suit the higher value – lower bulk goods being shipped, but the need to efficiently move these goods in and out of the Region still exists.



Therefore, CRCOG, together with the Central Connecticut Regional Planning Agency, the Midstate Regional Planning Agency, and the Pioneer Valley Planning Commission, has begun a freight planning effort. A comprehensive study of freight movement in and through the Hartford Metropolitan region has been completed. It identified the region’s heavy reliance on truck transport, the high volume of through traffic, and the strong imbalance of flows into the region as compared to flows out of the region. Based on information obtained through that study, recommendations for freight transport include:

1. **Continue to develop a freight-planning program.**
2. **Continue to collaborate with other organizations on freight issues,** such as neighboring RPAs, the Bradley Development League, the MetroHartford Alliance, the Hartford-Springfield Economic Partnership, etc.

## 7. SPECIAL POLICIES

There are several policies and programs the Council has adopted that warrant special mention. They are:

**Transportation Security:** The tragedy of September 11, 2001 brought a new emphasis on transportation security at the federal, State, regional and local level. As a result, CRCOG has been proactive in bringing people together to plan for the security of our regional transportation systems and is committed to continuing to conduct and/or support security forums, emergency drills and the efforts of the Capitol Region Emergency Planning Committee.

**MPO Coordination:** CRCOG is committed to working cooperatively with all its neighboring regional planning agencies. Coordination assures that major transportation projects address inter-regional needs and are not duplicative or conflicting.

**Air Quality - Transportation Policy:** The Capitol Region has conducted a full review of air quality-transportation issues, the results of which have helped us formulate much of our current transportation plan and programs in a manner that promotes better air quality. The current Plan reflects the Region’s strong desire to reduce our reliance on automobiles. CRCOG will continue to work to support alternate travel modes and efforts to reduce diesel emissions. CRCOG also supports the emerging Fuel Cell program undertaken by CT Transit.



**Demand Management Policy:** An important alternative approach for reducing congestion is to reduce, or otherwise modify, the *demand* for transportation. CRCOG will continue to encourage programs that focus on getting people to use an alternate form of transportation (bus or carpool), or to shift their travel to off-peak periods when there is excess capacity.

## 8. ENVIRONMENTAL JUSTICE

The Capitol Region Council of Governments is committed to fully integrating the basic principles of environmental justice into all of its transportation planning programs and activities. CRCOG has agreed to support items of special interest to minority and low-income households, including: access to jobs, better transit services, clean fuel vehicles, and pedestrian and bicycle safety in urban areas. And, CRCOG works to insure that environmental justice communities continue to have an opportunity to be heard in the Region’s transportation planning programs and processes.

## 9. FINANCIAL PLAN

This section provides an overview of the cost of projects recommended in the Transportation Plan and an estimate of the revenues that will be used to finance the improvements. Many of the cost estimates and most of the revenue estimates are preliminary. The intent is to prepare an approximate, but realistic, estimate of total program cost; and a similar estimate of total revenues that the Region can expect to receive over the next 30 years. A goal of this process is to prepare a 'financially constrained plan' whose costs can be paid from the 30-year revenue stream.

A summary of estimated capital costs is shown below. The total estimated cost of the proposed capital improvements is about \$2,148,000,000. The total amount of State and federal transportation capital funds that will likely flow to the Region over the next 30 years will total about \$2,167,000,000. This revenue estimate is based on continuation of *existing annual revenues* and *anticipated special discretionary funds* that the Region has applied for or already received. A complete discussion of operating and maintenance costs is provided in the Full Plan.

<u>Unfunded Need</u>	<u>Cost</u>	<u>Improvement Program</u>
<b>286,340,000</b>	<b>1,183,150,000</b>	<b>Transit &amp; Ridesharing Program</b>
	10,000,000	ITS for bus system
	567,050,000	New Britain BRT
	190,400,000	Griffin BRT
	151,200,000	Manchester BRT (phases 1a, 1b, & 1c)
	242,000,000	New Haven-Springfield Rail (phases 1 and 2; regional share 55%; full cost \$440m)
55,000,000	-	New Haven-Springfield Rail (unfunded phase 2 work; regional share 55%; full cost \$100m)
54,000,000	-	New Haven-Springfield Rail (CT River Bridge)
100,000,000	-	New Haven-Springfield Rail (Hartford Rail Viaduct)
	5,000,000	Day Hill Road Transit Hub / Griffin Park and Ride (Includes buses, shuttles)
	12,500,000	Union Station Improvements
27,000,000	-	Transit Center - Hartford (requires further evaluation)
50,340,000	-	Buckland Hills Area 'Allotment'
	5,000,000	Transit Supportive Enhancements (shelters, connections, planning)
<b>1,962,000,000</b>	<b>875,215,000</b>	<b>Highway Program</b>
	106,065,000	I-84: Rt 6/Rt 9/ Rt 4
	90,000,000	I-84: Hartford - Flatbush access
	32,850,000	I-84: West Hartford - operational lanes
	38,000,000	I-84: access to Rentschler redevelopment area
	6,400,000	I-84: Manchester (auxiliary lane between 638,64/65)
462,000,000	-	I-84: Manchester / South Windsor Buckland Hills Area 'Allotment'
1,500,000,000	-	I-84: Viaduct Replacement
	20,000,000	I-91: Day Hill Road Interchange Improvements (without 'elective' improvements)
	8,100,000	Rt 2: East Hartford (Widen bridge to improve EB acceleration)
	240,000,000	Rt 2: Putnam Bridge
	210,800,000	ARTERIAL improvements (from corridor studies)
	123,000,000	MUNICIPAL roads
<b>20,000,000</b>	<b>50,000,000</b>	<b>Bicycle &amp; Pedestrian Program</b>
10,000,000	38,000,000	Complete major interregional trails
10,000,000	12,000,000	Other bike & pedestrian programs
	<b>40,000,000</b>	<b>Bradley Airport</b>
	40,000,000	Better Roadway Access
	(A)	Better Transit Access
	(B)	Other policy recommendations
	<b>0</b>	<b>Freight Transport System</b>
	(B)	Freight policy recommendations
<b>2,268,340,000</b>	<b>2,148,365,000</b>	<b>TOTAL CAPITAL COST</b>
	<b>2,167,250,000</b>	<b>TOTAL REVENUES</b>
	1,219,200,000	<b>Assumed Sources of Revenue:</b>
	106,100,000	<b>Regional Allocation:</b> CRCOG allocation from DOT statewide 20-year estimate
	32,900,000	<b>Funds for projects of statewide significance:</b> I-84/Rt 4/Rt 6/Rt 9
	275,300,000	<b>Funds for projects of statewide significance:</b> I-84 West Hartford
	65,260,000	<b>New Britain BRT:</b> FTA New Starts Funding
	114,280,000	<b>New Britain BRT:</b> FTA - Other Funds
	112,210,000	<b>New Britain BRT:</b> FHWA - Other Funds
	88,000,000	<b>New Britain BRT:</b> Non-Federal Sources
	154,000,000	<b>New Haven-Hartford-Springfield Rail:</b> Federal Sources (full amount \$160m; regional share = 55%)
	2,167,250,000	<b>New Haven-Hartford-Springfield Rail:</b> Non-Federal Sources (full amount \$280m; regional share = 55%)
		TOTAL
	<b>0</b>	<b>Shortfall: amount 'over' the budget limit</b>
	<b>18,885,000</b>	<b>Reserve: amount 'under' the budget limit</b>
(A) Costs are included in projects listed in the Transit section: NHHS Rail and Griffin Busway.		
(B) Recommendations are general policy statements and do not included specific capital improvement recommendations.		