Project Description:

New Britain – Hartford Busway
Project Number: 171-305

Project Scope:

The New Britain – Hartford Busway is a dedicated bus rapid transit (BRT) facility along an exclusive 9.4 mile corridor between downtown New Britain and downtown Hartford. The recommended corridor follows an abandoned railroad right-of-way from New Britain to approximately 2,000 feet south of Newington Junction (a distance of approximately 4.4 miles). From this point north, the Busway corridor lies within the active Amtrak railroad right-of-way and is, for the most part parallel to the active Amtrak rail line (a distance of approximately 5.0 miles).

A total of 11 transit stations will serve the users of the Busway. The Department is coordinating with Central Connecticut State University to make provisions for a 12th station stop to support the proposed East Campus expansion. A multi-use trail will be constructed adjacent to the north/west side of the Busway from downtown New Britain to the Newington Junction Station in Newington. This project has been divided into 6 contract sections: New Britain (H-35), Newington (H-34), West Hartford (H-46), Hartford South (H-25) and Hartford North (H-137) and Stations. Breakout contracts may be initiated for early construction at Broad St. in Hartford, to relocate the Amtrak rails to the east, and to construct the Amtrak Access Road.

Financial Sources:

- Federal: $455.2 million
- State: $113.8 million

Budget Analysis:

- Project Cost: $569 million
- Expenditures to Date: $35 million

Schedule Analysis:

- Submission of Full Funding Grant Agreement Application: November, 2009
- Receipt of Full Funding Grant Agreement (FFGA): Spring, 2010
- Start Revenue Service: December, 2013

1/12/2009
Challenges and Risks:

Design is advancing on the project and property acquisition is also underway. Successful completion of the design elements is critical to the overall cost control of the program and for obtaining environmental permits.

The lack of unanimous regional consensus on the project remains a potential barrier to obtaining the FFGA and constructing the project.

Outlook:

The department continues to advance this project through the New Starts process and is expecting an annual new starts rating relative to the cost effectiveness of this project in February.
Project Description:

I-95 New Haven Harbor Crossing Corridor Improvement Program

Project Scope:

The I-95 New Haven Harbor Crossing (NHHC) Corridor Improvement Program includes proposed improvements to approximately 11.5km (7.2 mi.) of Interstate 95 in New Haven, East Haven and Branford. The program limits extend on I-95 from Interchange 46 (Sargent Drive/Long Wharf Drive, New Haven) to Interchange 54 (Cedar St., Branford). Highway and transit improvements are broken into a series of individual contracts, the most significant of which are described below in chronological order.

State Project No. 14-173 (Contract D) (100% Complete, $44.6 million)

Contract D, located in Branford, consists of the reconstruction of approximately 3350 meters (2.1 miles) of I-95 from the western project limit at the eastern abutment of the Lake Saltonstall Bridge to the eastern project limit at Interchange 54 (Cedar Street). The reconstruction, completed in July 2004, provides three travel lanes in each direction, increased shoulder widths and a new median barrier throughout the project. The project includes two new retaining walls, replacement/rehabilitation of two bridges, three culverts, new drainage systems, signing, lighting and noise barrier walls as well as improvements to Cedar Street (Interchange 54) and a new commuter parking lot at Interchange 55.

State Project No. 43-122 (Contract C1) (100% Complete, $67.6 million)

Contract C1, located in East Haven, consists of the reconstruction of approximately 2,000 meters (1.25 miles) of I-95 from the western project limit at the New Haven/East Haven town line to the eastern project limit at the east abutment of the Lake Saltonstall Bridge.

The reconstruction, completed in August 2006, provides three travel lanes in each direction, full shoulders and a new median barrier throughout the project. The project includes new retaining walls, replacement of four bridges, two culverts, new drainage systems, signing and lighting as well as full reconstruction of the Frontage Roads in East Haven.

1/12/2009
State Project No. 92-581 (Contract E1)(100% Complete, $30.2 million)

Contract E1, located in New Haven, consists of the construction of soil preloading, soil settlement monitoring, and associated drainage and utility relocations required to complete the proposed roadway and bridge improvements in the Contract E area. The work, including installation of test piles, pile load tests and vibration/settlement testing/analysis of the Cowles Building, was completed in January 2007.

State Project No. 92-596 (Farnam Court Noise Wall)(100% Complete, $1.5 million)

The Farnam Court Noise Wall contract includes embankment construction and installation of a timber noise barrier from Bridge No. 3083 (I-91 over Grand Avenue) to Bridge No. 3086 (I-91 over Exit 3 Ramp). The work, completed in May 2007, is a breakout from the I-95 SB to I-91 NB 2-Lane Connection.

State Project No. 43-125 (Contract D1)(100% Complete, $6.1 million)

Contract D1, located in Branford and East Haven, consists of final milling, paving and striping of I-95 SB in the Contract D area. The work, completed in November 2008, also includes resetting catch basins and guide rail as well as milling, joint replacement and repaving of Bridge No. 00186 (I-95 over Lake Saltonstall), installation of ROW fencing and wetland mitigation plantings in Branford, and installation of a noise barrier wall in the vicinity of the Farm River in East Haven.

State Project No. 92-533/92-569 (Contract C2)(100% Complete, $94.4 million)

Contract C2, located in New Haven, consists of the reconstruction of approximately 1,500 meters (1.0 mile) of I-95 from the western project limit just east of Stiles Street in New Haven to the eastern project limit at the New Haven/East Haven town line.

The construction, completed in October 2008, includes the reconfiguration of Interchange 49 and Interchange 50 into a single interchange accessed by a connector road between Stiles Street and Woodward Avenue. The reconstruction will accommodate five travel lanes in each direction from the western project limit to the reconfigured Stiles/Woodward Interchange, and from that point four travel lanes to the eastern project limit. Full shoulders and a new median barrier will be provided throughout the project. Replacement of five bridges, construction of retaining walls, new drainage systems, signing and lighting will also be included.

State Project No. 92-613 (GNHWPCA Force Main Contract)(80% Complete, $24.6 million)

The GNHWPCA Force Main Contract includes the installation of new twin 42 inch diameter HDPE sanitary force mains under New Haven Harbor via directional drilling due to concerns about possible damage to the existing force main pipes during construction of the new Q-Bridge in Contract B.
State Project No. 92-618 (Contract B1)(8% Complete, $163.6 million)

Contract B1, located in New Haven, consists of stage 1 foundation construction for the new Pearl Harbor Memorial Bridge main span. This includes partial construction of construction access trestles, marine enclosures, foundation templates, drilled shafts and tower footings. In addition, construction of footings, piers, structural steel and deck for portions of the NB West Approach and Ramp I are included as well as local roadway improvements in the west shore area and retaining wall and trunkline installations adjacent to Forbes Avenue on the east shore.

State Project No. 92-619 (Contract E2)(1% Complete, $113.9 million)

Contract E2, located in New Haven, is a breakout from Contract E that includes construction of the I-95 NB to Route 34 WB ‘Flyover’ Bridge (Ramp H) along with the reconstruction of the Route 34 WB Bridge over Brewery Street, Abutment I for Bridge No. 00172 and three retaining walls. The work will also include roadway improvements on I-95 NB and SB in the Long Wharf area, required to shift traffic onto the new Ramp H fly-over structure and open Ramp F to 2-Lanes of traffic. The Long Wharf improvements include relocation of the Interchange 46 ramps to the south along I-95, construction of an operational lane on I-95 SB from I-91 SB to Interchange 45, and widening of Bridge No. 00166 (I-95 over Long Wharf Drive Extension).

State Project No. 92-532 (Contract B)

Contract B, located in New Haven, consists of the construction of a new Pearl Harbor Memorial Bridge (Q-Bridge) carrying Interstate 95 over the Quinnipiac River. The project includes approximately 1,500 meters (1.0 mile) of I-95 from the western project limit at approximately East Street to the eastern project limit just east of Stiles Street.

The main harbor crossing will be a 308.7 meter “extradosed” cable-stayed bridge consisting of a 157 meter main span and two 75.9 meter back spans. The West Approach will be a 9 span, 500 meter composite steel plate girder viaduct. The East Approach will be a 10 span, 600 meter composite steel plate girder viaduct. The new Pearl Harbor Memorial Bridge and approaches can accommodate five travel lanes in each direction as well as full inside and outside shoulders.

State Project No. 92-531/622/627 (Contract E)

Contract E, located in New Haven, consists of the reconstruction of the I-95/I-91/Route 34 Interchange. The project includes the reconfiguration of the Interchange to eliminate left lane exit and entrance ramps and provide for two lane interstate-to-interstate connections to the extent possible. The project includes reconstruction of approximately 1,600 meters (1 mile) of I-95 from Interchange 46 (Sargent Drive/Long Wharf Drive) to the eastern project limit near East Street and approximately 1100 meters (3500 feet) of I-91, to the northern project limit at Bridge No. 03043 (I-95 over Ives Street).
To provide a two-lane interstate to interstate connection from I-95 SB to I-91 NB, improvements to I-91 NB from Ives Street to Interchange 3 are required. The I-95 SB to I-91 NB 2-Lane Connection includes construction of a 1,200 meter operational lane from the Ramp P junction to a lane drop at Interchange 3. Widening of three bridge structures, construction of retaining walls and installation of noise barrier are required along with drainage, illumination, signing and IMS modifications.

The reconstruction will provide three travel lanes with full shoulders on I-95 through the Interchange and includes construction of sixteen bridges and eighteen retaining walls, new drainage systems, signing and lighting.

<table>
<thead>
<tr>
<th>Financial Sources:</th>
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<tbody>
<tr>
<td>• Federal: 87%</td>
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<tr>
<td>• State: 13%</td>
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<tr>
<th>Budget Analysis:</th>
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<tbody>
<tr>
<td>• Expenditures to date: $474 million</td>
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<tr>
<th>Schedule Analysis:</th>
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<tbody>
<tr>
<td>• % completed: Design 85%, Rights-of-Way 97%, Construction 17%</td>
</tr>
<tr>
<td>• Scheduled completion date: November 2016</td>
</tr>
<tr>
<td>• Forecasted completion date: November 2016</td>
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<tr>
<th>Challenges and Risks:</th>
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</thead>
<tbody>
<tr>
<td>• Managing bidding process with national contractors and joint ventures for Contract B and Contract E</td>
</tr>
<tr>
<td>• Managing resources such as labor and federal/state funds during peak construction of Contract B and Contract E</td>
</tr>
<tr>
<td>• Significant delay or no-bid to Contract E poses a risk to Contract B which will start ahead of Contract E but is dependent upon Contract E work to finish</td>
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<tr>
<th>Outlook:</th>
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<tr>
<td>Advertisement for Contract B for the construction of the main bridge span represents the next significant milestone on this project.</td>
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</table>
**Project Description:**

M-8 Rail Cars  
Project No. 300-0116

**Project Scope:**

The Connecticut Department of Transportation (CTDOT) in partnership with MTA Metro-North Railroad (MNR) has awarded a contract to Kawasaki Rail Car, Inc. (KRC) for the manufacture and delivery of three hundred (300) M-8 rail cars, and related spare parts. The new cars will replace the aging EMU fleet (M2 rail cars built in the 1970s) that are currently in operation on the New Haven Line (NHL). The M-8 contract also provides for an option order for up to additional 80 rail cars.

The M-8 procurement will provide rail cars required to meet existing ridership levels and future ridership growth. The M-8s will also be capable of operating on Amtrak’s Northeast Corridor (NEC) for deployment on the Shore Line East (SLE) commuter service.

**Financial Sources:**

- Federal: $0
- State: $494,224,207 (Total Contract Value: $760,344,933 including MNR share)

**Budget Analysis:**

- Project Budget: $494,224,207
- Forecast to complete: $494,224,207

**Schedule Analysis:**

- Final Design (FDR): 95%
- Scheduled delivery date Pilot Cars: September 2009
- Scheduled completion date: June, 2012 for 300 M-8 rail car order

**Challenges and Risks:**

The delivery schedule for the project was initially challenged due to the availability of steel for the carbody structure. This impact has been mitigated and the pilot cars are expected in September, 2009. The schedule for this project remains aggressive with an anticipated delivery of 10 to 12 trains per month. CTDOT officials continue to work closely with Metro North and Kawasaki to ensure schedule attainment.

1/12/2009
The M8 is a “state-of-the-art” EMU rail car utilizing the latest technologies available in the industry. Testing and qualifying the M-8 rail cars and their subsystems for passenger revenue service will pose a significant challenge due to the three different power systems and territories in which they will operate. On the New Haven Line (NHL), the M-8s will be tested while operating on both an overhead catenary AC power system at 12.5kV and a DC third rail 750 volt power system. On Amtrak’s NEC between New Haven and New London, the M-8s will be tested on the 25kV AC overhead catenary power system for deployment in Shore Line East commuter service.

**Outlook:**

The manufacture and delivery of the new M-8 cars is essential to State’s desire to improve capacity and reliability on the Connecticut commuter rail system.
Project Description:

New Haven Rail Yard Facility Complex
Project Number: 301-0088

Project Scope:

Rail car maintenance facilities are being constructed as part of the 2005 program to purchase new rail cars for the New Haven Line. The new maintenance facilities are critical to providing reliable service and overnight storage for both the new M-8 cars as well as continued upkeep for the existing fleet. The present facilities and systems infrastructure (tracks, signals) are severely antiquated and there is insufficient track storage and maintenance shop space to maintain the growing rail car fleet.

Hill International has recently completed a "Review and Analysis of Proposed New Haven Rail Maintenance Facility Expansion Project" report. The Department of Transportation (the Department) is currently focusing its efforts to implement the initial phases of this report. The Department in conjunction the Office of Policy and Management will develop a financing plan for Tier One improvements to be presented to the General Assembly in January.

Project scope includes:

M-8 Acceptance Facility (under construction)
EMU and CSR Shop improvements (under construction)
Component Change Out Facility
Diesel Storage Yard
Renovate EMU Annex for Maintenance of Way
Stores Building Demolition
Running Repair Shop Upgrades
West End Yard
EMU/Program Shop Upgrades
East End Yard
Main Line Signal System Modification

Employee Parking
Purchase and Fit Out Off Site Warehouse
Independent Wheel Truing Facility
Fuel Cells for CCO Facility
Pedestrian Bridge
Yard Signal System
Convert CSR Shop to Paint & Heavy Repair Shop
Car Wash Facility
Final Track Completion

1/12/2009
Financial Sources:
- Federal: $134,000,000
- State: To be determined based on updated financial plan

Budget Analysis:
- A comprehensive budget analysis is currently being developed as part of the project financing plan

Schedule Analysis:
- Scheduled Completion Date: 2020 (Entire Program)

Challenges and Risks:
The Department is currently undergoing a comprehensive review of the recommendations in the Hill International Report. Specifically, the deferral or elimination of Tier 2 and 3 items is being reviewed to assess the impact they will have to ongoing operating costs and the long term maintenance of the rail car fleet.

The critical path on this project is the building of the Component Change Out (CCO) Facility. The Department must complete a financing plan and seek funding to allow the CCO to be bid in late spring of 2009 to support the arriving M-8 car fleet. This financing plan will include other critical elements of the program that will be bid over then next several years, including the Diesel Storage Yard and Independent Wheel Truing Facility.

The Department is finalizing the process to obtain FTA approval of the Environmental Assessment document needed for Federal funding and must secure all necessary permits, easements, and utility relocations for the CCO.

The Department must ensure that any redesign efforts related to the Hill International Report do not delay critical elements of the project and that the competitive bids for the CCO are obtained in a timely manner. Because of the length and complexity of the project, significant risk will exist related to schedule and cost throughout this project. It is critical that the construction of the CCO begin in late 2009 to ensure that this facility is available for ongoing maintenance of the M-8 cars.

Overall coordination of multiple contractors will pose a considerable challenge for this project, particularly since the work will take place in an active rail year. CTDOT has identified a full time dedicated Project Manager for this effort and will staff a project team commensurate to the technical and management requirements of the job.

Outlook:
There is work progressing on two significant elements of this project at this time. The construction and re-constructing activities will be ramping up considerable in late 2009.
Project Description:

Shore Line East (SLE) Train Service Expansion

Project Scope:

Shore Line East (SLE) rail service has made substantial progress in expanding to meet growing customer needs, ahead of the schedule proposed in the Department of Transportation (CTDOT) paper of January 1, 2007 to the Legislature titled “Expanding Rail Service on Shore Line East”. The report offered a three-phase approach to SLE service expansion:

- Phase 1 – Expand service between New Haven and Old Saybrook
  - Introduced and increased weekend service – July 2008
  - Increased midday and evening service – October 2007/April 2008
  - Expanded Cross-honoring of SLE tickets totaling 6 Amtrak New London trains
  - **Phase 1 - Completed 6 months ahead of schedule**
- Phase 2 – Expand SLE service to New London
- Phase 3 – Provide regularly scheduled bi-directional train service (2013)

Ridership on SLE has increased **18 percent year to date in 2008**.

- October 2008 weekday ridership was up nearly 14 percent over October 2007. This resulted in 2,200 weekday riders.
- Weekend Ridership is strong. On average over 4,000 riders were carried each month since permanent weekend ridership was introduced. In August 2008, SLE provided 5,800 weekend trips.

CTDOT continues to make progress in its goal to expand SLE service to New London (Phase 2). The Department has been working intensively over the past year with Amtrak to coordinate future scheduling efforts for Amtrak intercity and SLE service on the Northeast Corridor (NEC) between New Haven and New London. On December 30, 2008, Amtrak informed CTDOT that it is still refining the NEC Master Plan 2030 Service to incorporate comments from other stakeholders and expects to finalize the plan in the first quarter of 2009. Once completed Amtrak will be able to finalize a bridge opening analysis of the three moveable bridges (Connecticut River, Niantic River and Shaw’s Cove) on the extension. This analysis is required determine impacts on commercial and recreational boating traffic.
CTDOT, in conjunction with Amtrak, plan to meet with DEP and other stakeholders in early 2009 to review potential impacts caused by the increased number of bridge closings. Phase 2 will require concurrence of the DEP and other stakeholders. Other stakeholders and organizations involved will include the Marine Trade Association, United States Coast Guard, the Connecticut Legislature, Amtrak, Southeastern Connecticut Council of Governments and others.

<table>
<thead>
<tr>
<th>Financial Sources:</th>
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<tbody>
<tr>
<td>• State: $5.7 million appropriated for Phase 1 and 2 operating costs.</td>
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<tr>
<th>Budget Analysis:</th>
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<tr>
<td>• Final operating costs will be negotiated with Amtrak for Phase 2</td>
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<tr>
<th>Schedule Analysis:</th>
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<tr>
<td>• Phase 1 completed (ahead of schedule)</td>
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<td>• Phase 2: currently under review with Amtrak</td>
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<tr>
<th>Challenges and Risks:</th>
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<tr>
<td>Because this line is owned by Amtrak, CTDOT must work cooperatively with Amtrak to finalize the bridge closing plan. This plan which includes both Amtrak and SLE trains is critical to gain both consensus and approval of the SLE Phase 2 expansion to New London. Any further delay in the completion of this plan will likely delay Phase 2 implementation.</td>
</tr>
<tr>
<td>On November 14, 2008, Amtrak advised CTDOT that an extensive tie replacement project on track 2 between New Haven and Old Saybrook will begin in 2009. The Department will continue to work with Amtrak to assess the impacts of this program on Phase 2 implementation.</td>
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<tr>
<th>Outlook:</th>
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<tr>
<td>CTDOT will continue its intensive coordination efforts to implement the expansion of SLE service to New London.</td>
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Project Description:

Replacement of Stamford Parking Garage
Project No. 301-47

Project Scope:

Under this program, the CTDOT will demolish the existing 700 vehicle garage built in the late 1980’s and replace it with a 1,000 car parking spaces at or in close proximity to the existing facility. The existing facility, while structurally sound, was poorly built and will require extensive maintenance and reconstruction efforts in the years ahead in order to remain fully functional and safe to operate. Two primary options exist to accomplish this goal.

Option 1: Demolish the existing 700 vehicle parking garage and construct a new 1,000 space parking garage on the existing footprint. Provide temporary parking near the station during the construction of the permanent 1,000 space parking garage. CTDOT must complete the Connecticut Environmental Policy Act (CEPA) documentation for this project.

Option 2: Develop a request for expressions of interest (RFEI) to gauge interest of private partner(s) in transit oriented development (TOD) opportunities in the area of the Stamford Transportation Center. Following a RFEI process, a request for proposal (RFP) would be released to identify the most attractive alternative to pursue. This process will solicit potential developers to offer 1,000 replacement parking spaces within walking distance of the train station while developing the site of the existing 700 vehicle parking garage and other state owned property. CTDOT believes that potential developers would propose a holistic TOD solution that improves the overall access to the station for pedestrians and automobiles, provides a commercial development that augments the existing station and increase the number of parking spaces available to commuters. The planning for the RFEI is underway and will complement the current effort of the City of Stamford’s Request for Qualifications #501, which was released December 16, 2008.

The design of the replacement garage (Option 1) will be done concurrently with RFP process. This will ensure that if development opportunities (Option 2) are not in the best interest of the state, CTDOT is prepared to bid the demolish and replacement project during 2010.
Financial Sources:
- Federal: $0
- State: $4 million for design
  $35 million for construction

Budget Analysis:
The Department is currently pursuing two approaches in parallel to meet the parking needs around the Stamford Station. As the design of Option 1 is developed and the RFP process progresses, a detailed construction budget will be developed. The current construction budget is base on a planning study.

Schedule Analysis:
The Department will advertise for expressions of interest (RFEI) in the spring of 2009. Construction is expected to commence in late 2010 regardless of the option selected.

Challenges and Risks:
If Option 1 is selected, a temporary parking solution will be required for the period of demolition and construction of the new parking facility. The availability and location of temporary parking solution have been identified. Many of these locations are part of planned developments and may not be available at the time of demolition.

Option 2 has a considerably higher potential risk/reward factor. Success and timely completion of a comprehensive and beneficial TOD type program for the area around the Stamford Station will require cooperation between the State, City, Commuter Rail Council, Regional MPO (SWRPA), businesses, commuter rail customers and the general public. The Department will continue to work with DECD and OPM on this and other TOD opportunities.

CTDOT is committed to ensure that the number of current parking spaces is maintained throughout all phases of demolish and construction. Traffic management around the station during construction will be a considerable challenge, particularly in light of recent and expected growth in the area.

Outlook:
The Department will issue the RFEI in the spring of 2009. We will continue to work with all stakeholders and have scheduled partnering sessions to determine the overall program objectives and needs for the months ahead.
Project Description:

Route 7 Brookfield Bypass
Project No. 18-113

Project Scope:

The project purpose is to construct a four-lane limited access expressway, as a continuation of the existing four-lane Route 7 highway which currently terminates at Route 202 (Federal Road) in Brookfield. The new expressway will carry traffic around the Brookfield Four Corners commercial center and will terminate near the Brookfield/New Milford Town line. The finished project will:

1) Increase roadway capacity for adequate handling of the high volumes of traffic.
2) Improve traffic flow by reducing conflicts resulting from turning movements at businesses.

By diverting traffic around the Four Corners, the project results in significant improvements for traffic, since destination points are largely areas north and south of Brookfield. Relocation of commuter traffic out of the Four Corners area will also allow the Town of Brookfield to plan and begin downtown/historical revitalization projects in the Four Corners area.

The Route 7 Brookfield Bypass will include two lanes northbound and two lanes southbound, a diamond interchange at the southern terminus, three bridge structures, two retaining walls and a new access drive to the industrial park in Brookfield.

Financial Sources:
- Federal: 80%
- State: 20%

Budget Analysis:
- Expenditures to date: $63 million

Schedule Analysis:
- Scheduled completion date: November, 2009

Challenges and Risks:
As a result of inaccurate survey data, the existence of unanticipated protected species as well as other environmentally sensitive issues, a 900 foot section of this project required a redesign effort. The
redesign effort was completed in early 2009. The critical path on this project is the construction of an arch bridge to accommodate the seasonal migration of certain protected species by the Spring 2009.

Outlook:

The Department is currently reviewing the prime contractor’s critical path schedule and associated work plan required to complete this section of the project.
Project Description:

Danbury Centralized Train Control & Signalization Project
Project Number: 302-007

Project Scope:

This project will install Centralized Train Control and a signal system on the Danbury Branch. Currently, the Danbury Branch has no signal system and trains operate under a system known as a manual block. Therefore, multiple train movements on the branch are limited by the blocks established. Switches at Norwalk, Wilton and Branchville must be manually operated by a train crew member.

The CTC Signal System includes a remote control of train movements and switches from Metro-North’s Control Center in Grand Central Terminal and will enable staff at GCT to monitor train movement on the branch. The sidings at Norwalk, Wilton, Branchville and Danbury will function as fully automatic control points (CP’s). Signals at these sidings will operate in the same manner as signals on the New Haven Mainline. These signals indicate to a train to stop or proceed based on the on-board cab signal indications. Also the signals and switches are interlocked for positive control of train moves. Lastly, the branch will be electrically segmented into approximately 1 mile long blocks which provide the cab signal indication based on conditions of the track ahead. The project includes a passing siding at Bethel. The project currently includes electrified electronic track circuits and pole line. Once completed, the Danbury Line signal system will be consistent with the New Haven Main Line.

This project is currently being redesigned to allow it to be constructed in phases and for the later phases (Wilton to Danbury) to be constructed utilizing a less expensive buried cables. Phase I (Norwalk to Wilton) will utilize the existing pole line design. This will enable to project to be built in phases as construction funds are made available.

Financial Sources:
- FTA: $13,323,000

Budget Analysis:

Schedule Analysis:
- Design change to buried cable and electronic track circuits.
- Phase I Design: Completed
- Phase I Notice to Proceed: Spring 2010
- Phase I (Norwalk to Wilton) Construction Completed: Summer 2012
- Phase II and Phase III Final Design (with buried cables): Fall 2010
- Phase II and Phase III Construction: TBD, depending on availability of funds

**Challenges and Risks:**

Phase II and Phase III are being redesigning to accommodate buried cable method instead of a pole line to reduce construction cost. Because the pole line design is already completed, Phase I will be advanced with as designed to ensure that it is eligible for stimulus funds.

The project is being re-designed to allow phased construction of the project, this will enable the system to be constructed incrementally when adequate funding is available.

**Outlook:**

Full funding for Phase must be identified quickly in order to improve the operational of the Danbury line. The Department continues to work closely with the FTA on financial requirements of the project. Future phases will be constructed as funding is identified.
Project Description:

I-95 Speed Change Lanes at Interchanges 11, 12, 13 Darien
Project Number 35-188

Project Scope:

In order to improve overall traffic operations and safety along the I-95 corridor, the CTDOT is overseeing the construction of the speed change lanes between the successive on and off ramps in Darien:

- exits 11 and 12 northbound and southbound, and
- exit 13 northbound

As part of this project, a noise barrier wall is being constructed from exit 11 to exit 13 northbound which is intended to shield and diminish the noise impacts from traffic on I-95.

Financial Sources:

- State: $19,410,000

Budget Analysis:

- Expenditures to date: $2,847,016
- Forecast to complete: $19,410,000

Schedule Analysis:

- % Complete: 20%
- Forecasted completion: Summer, 2010

Challenges and Risks:

Addressing design changes and parameters for a double-wall design for the sound barrier have been resolved.

Outlook:

Operational change speed lanes have been very successful to date. Work on this project has been progressing according to schedule. Similar work in Stamford (Exits 8 & 10 southbound) and Darien (Exits 10 & 11 northbound) have proven highly successful. Design work is ongoing for similar work in Norwalk (Exits 14 and 15) is 90% complete and will be finished in September, 2009.
Project Description:

New Haven – Hartford – Springfield Commuter Rail Service

Project Scope:

This project was authorized by the Connecticut General Assembly pursuant to P.A. 06-136 “An Act Concerning The Roadmap to Connecticut’s Economic Future” (“Roadmap”), which called for the restoration commuter rail service on the New Haven-Hartford-Springfield line (NHHS), including providing shuttle bus service between the rail line and Bradley International Airport.

The project would include stops at 9 cities and towns along the existing 62 mile corridor between New Haven and Springfield, Massachusetts. Stops will be located in North Haven, Wallingford, Meriden, Berlin, Newington, Hartford, Windsor, Windsor Locks and Enfield.

In 2005, Wilbur Smith conducted an implementation study which identified 2 potential options for commuter rail service along the corridor. Presently, the Department is examining a total of 4 options for service as described below:

Option A – Introductory Service

- Implemented as Categorical Exclusion (CE)
- No EA/EIS
- 4 trips per day
- Additional service negotiated with Amtrak utilizing CTDOT equipment
- Amtrak requires commitment for rebuilding of Hartford Viaduct and CT River Bridge
- Longest travel time (trip time)
- Highest subsidy per passenger
- Overall reliability would be challenged due to length of existing single track operation
Option B – Introductory Service

- Could be implemented as a CE (No EA/EIE)
- Involves minimal dual tracking
- 7 trips per day
- Minimal parking expansion program
- Additional service negotiated with Amtrak utilizing CTDOT equipment
- Amtrak requires commitment for rebuilding of Hartford Viaduct and CT River Bridge
- Longest travel time (trip time)
- Highest subsidy per passenger
- Overall reliability would be challenged due to length of existing single track operation

Option C – Start Up 30 Minute Peak Headways

- EA/EIE required due to wetlands and flood plan impacts
- Major construction and reconstruction effort: dual tracking (23 miles); parking lots; property acquisition; platforms; bridge replacement
- Purchase of additional trains
- Improved travel time (trip time)
- Lower subsidy per passenger
- High operational reliability
- High capital investment for construction and reconstruction efforts

Option D – Full Build 15 Minute Peak Headways

- EA/EIE required
- Major construction & reconstruction effort
- Service levels would exceed New Haven Line levels
- Purchase of additional trains
- Improved travel time (trip time)
- Lowest subsidy per passenger
- High operational reliability
- Highest capital investment for construction and reconstruction efforts

The Department is currently conducting an Environmental Assessment (EA) associated with the possible implementation of Options C & D described above. The EA is scheduled for completion in February, 2010.
Financial Sources:
- State: $2.0 million (Environmental Analysis)

Budget Analysis:
- Capital investment requirement would depend on implementation option selected. Overall operational subsidy would also be dependent on option selected with the highest overall subsidy associated with Option D.

Schedule Analysis:
- Implementation of Options A and B could be achieved in the short term (within 1 year). CTDOT is currently reviewing information recently received from Amtrak related to ongoing infrastructure improvements.

Challenges and Risks:
The existing right of way between Hartford and Springfield is currently owned, operated and maintained by Amtrak. Amtrak currently operates 12 daily trains on this alignment. In addition, there are 10 freight movements per day. CTDOT is currently discussing potential service implementation scenarios with Amtrak. Issues of rail line ownership, operational cost and subsidy requirements as well as the condition of the existing infrastructure and the resultant impact on travel time, ridership and service quality are currently under evaluation.

Outlook:
CTDOT recently received cost information related to infrastructure conditions which is presently under review. The department is preparing a “New Haven – Hartford – Springfield White Paper” which will outline the advantages, disadvantages and order of magnitude costs associated with the options described above. Cooperation from Amtrak will be required for this effort.