

New Britain – Hartford Busway

Hartford, Connecticut

(November 2009)

The Connecticut Department of Transportation (ConnDOT) proposes to construct the New Britain-Hartford Busway, an 11-station, 9.4-mile exclusive bus rapid transit (BRT) system operating primarily in existing and abandoned railroad right-of-way between downtown New Britain and Hartford’s Union Station. The busway would run parallel to Interstate 84 (I-84), the primary transportation link between New Britain, West Hartford, and downtown Hartford. The project’s operating plan calls for a number of bus routes to operate on the busway, including services that enter and exit the facility to reach destinations well outside of the immediate corridor without the need for a transfer. The project scope includes the procurement of 30 new buses and construction of six park-and-ride lots along the alignment.

Existing transit service between New Britain and Hartford is slow and limited. I-84 connects the two cities. It is currently, and is forecast to remain, the region’s most congested highway. A trip between New Britain and Hartford on public transportation can be made at present by transfers between local routes, or by travel on a single express route, which is circuitous and slow. Both Hartford and New Britain have large populations of transit dependents—approximately one-third and 16 percent, respectively. The proposed busway is intended to provide faster transit travel time between major activity centers throughout the corridor, improve mobility and accessibility for the corridor’s relatively large transit-dependent population, and promote redevelopment opportunities in older urban centers along the project alignment.

Summary Description	
Proposed Project:	Bus Rapid Transit 9.4 Miles 11 Stations
Total Capital Cost (\$YOE):	\$572.69 Million (Includes \$12.04 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$275.30 Million (48.1%)
Annual Forecast Year Operating Cost:	\$22.06 Million
Ridership Forecast (2030):	16,300 Average Weekday Boardings 4,900 Daily New Riders
Opening Year Ridership Forecast (2013):	13,400 Average Weekday Boardings
FY 2011 Local Financial Commitment Rating:	Medium
FY 2011 Project Justification Rating:	Medium
FY 2011 Overall Project Rating:	Medium

ConnDOT’s schedule anticipates receipt of a Full Funding Grant Agreement (FFGA) in Spring 2010. There are a number of items that must be addressed before an FFGA will be considered: FTA must complete the risk assessment and the financial capacity assessment; ConnDOT must maintain a sufficient New Starts rating; and, ConnDOT must submit an executed agreement addressing the cost of the permanent easement for Amtrak right of way, executed construction and protective services agreements with Amtrak, a Force Account plan for construction, and a detailed utility relocation plan.

Project Development History and Current Status

The 1994 regional transportation plan prepared by the Capitol Region Council of Governments identified the I-84 corridor west of Hartford as one of the metropolitan area’s high priority corridors. A major investment study in the corridor was completed in 1999, which resulted in the selection of a BRT system between New Britain and Hartford as the locally preferred alternative. FTA approved the New Britain - Hartford Busway into preliminary engineering (PE) in January 2000. The project received a Federal environmental Record of Decision (ROD) in March 2002. In order to address changes in project scope since issuance of the ROD, ConnDOT twice conducted reevaluations of the Final Environmental Impact Statement for the project, the first of which FTA concurred with in June 2006, and the second of which FTA concurred with in September 2008. FTA approved final design for the project in October 2006.

Significant Changes Since FY 2010 Evaluation (November 2008)

ConnDOT developed a new service plan, which resulted in changes to the operating and capital costs and the calculation of project benefits.

Project Justification Rating: Medium

The project justification rating is based on the weighted average of the ratings assigned to each of the following criteria: the cost-effectiveness criterion is weighted 20 percent; the transit supportive land use criterion is weighted 20 percent; the economic development criterion is weighted 20 percent; the mobility improvements criterion is weighted 20 percent; the environmental benefits criterion is weighted 10 percent; and the operating efficiencies criterion is weighted 10 percent. Per FTA’s 2006 *Final Guidance on New Starts Policies and Procedures*, once a project has been approved into final design, the project is not subject to any changes in New Starts policy, guidance, and procedures. Thus, the revised weighting of the project justification criteria that took effect in September 2009 was not required to be applied to this project, but was done so at the project sponsor’s request.

Cost Effectiveness Rating: Medium

The cost effectiveness rating reflects the level of travel-time benefits (4,300 hours each weekday) relative to the project’s annualized capital and operating costs based on a comparison to a baseline alternative.

Cost Effectiveness Rating	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$24.54*
Incremental Cost per Incremental Trip	\$23.28

*Indicates that measure is a component of Cost Effectiveness rating

Transit-Supportive Land Use Rating: Medium-Low

The land use rating reflects the population and employment densities within ½-mile of proposed station areas.

- Population density within ½-mile of the station areas is approximately 5,645 people per square mile and employment in project station areas is approximately 81,000 jobs.
- The project serves four jurisdictions between the downtown areas of Hartford and New Britain. Intermediate stations serve residential neighborhoods of varying urban and suburban character, with low to medium densities, as well as a mix of auto-oriented commercial and industrial development and undeveloped land. The busway is in a transportation corridor and the stations

- Parking rates are in the medium range in downtown Hartford and New Britain, while parking is free and generally available at other stations.

Economic Development Rating: Medium

The economic development rating is based upon the average of the ratings assigned to the subfactors below.

Transit-Supportive Plans and Policies: Medium

- The State of Connecticut has passed a series of laws and enacted policies and programs supporting growth management, including most recently the provision of funding for a pilot transit-oriented development (TOD) program, to which the Cities of Hartford and New Britain are applying for grants. This program was created in support of state legislation passed previously requiring designation of areas for compact, transit accessible, pedestrian-oriented mixed use development. A rigorous land use planning effort, the *New Britain-Hartford Station Planning Project*, was conducted for the busway and has produced conceptual transit-oriented station area plans, although implementation is largely still pending. The City of Hartford is implementing significant infrastructure improvements to enhance the pedestrian environment.
- Progress in implementing plans is most evident in recent zoning changes designed to promote TOD. The Town of West Hartford has adopted a Special Development District Designation, which provides bonus floor area for buildings close to transit terminals, and the City of Hartford has implemented an Industrial Residential Overlay District, allowing the conversion of industrial space to residential and mixed uses. New Britain is in the process of rezoning its downtown to allow increased densities and development with transit-supportive characteristics, including reducing parking requirements.

Performance and Impacts of Policies: Medium

- Significant redevelopment is under way in downtown Hartford, reflecting recovery from a long period of economic decline. Major components have been completed of the 30-acre Adriaen's Landing site project, which includes a new Connecticut Convention Center, Downtown Marriott Hotel, an entertainment district, residential development, and the Connecticut Center for Science and Exploration.
- Multiple development projects are either recently completed or under construction in downtown Hartford station areas and the rehabilitation of industrial buildings in the Parkville Station area is proceeding.
- A substantial increase in employment and more modest but solid population growth are projected in station areas and the rating for total employment served by the system will increase from low to medium-low by 2030, as a result of projected growth.

Mobility Improvements Rating: Medium		
Transportation System User Benefit Per Passenger Mile (Minutes)	<u>New Start vs. Baseline</u>	
	4.3	
	Number of Transit Dependents Using the Project	
		5,600
Transit Dependent User Benefits per Passenger Mile (Minutes)	3.7	
Environmental Benefits Rating: High		
<u>Criteria Pollutant Status</u> 8-Hour Ozone (O ₃)	<u>EPA Designation</u> Moderate Non-attainment Area	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.71	\$0.62

Local Financial Commitment Rating: Medium

The local financial commitment rating is based on the weighted average of the ratings assigned to each of the following criteria: the New Starts share of project costs is weighted 20 percent; the strength of the capital finance plan is weighted 50 percent; and the strength of the operating finance plan is weighted 30 percent.

Section 5309 New Starts Share of Total Project Costs: 48.1%

Rating: Medium-High

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$275.30	48.1%
Section 5307 Urbanized Area Formula Funds	\$18.20	3.2%
Section 5309 Fixed Guideway Modernization Funds	\$21.18	3.7%
Section 5309 Bus Discretionary FHWA Flexible Funds (CMAQ and STP)	\$25.92	4.5%
FHWA NHS Funds	\$112.75	19.7%
	\$6.00	1.0%
State:		
State Transportation Fund (STF)	\$113.34	19.8%
Total:	\$572.69	100.0%

NOTE: The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of the figures may differ from the total as listed due to rounding.

Capital Finance Plan Rating: Medium

The capital finance plan rating is based upon the weighted average of the ratings assigned to each of the subfactors below. The agency capital condition is weighted 25 percent, the commitment of capital funds is weighted 25 percent, and the capital cost estimate, planning assumptions and capital funding capacity subfactor is weighted 50 percent.

Agency Capital Condition: High

- The average age of ConnDOT’s Statewide bus fleet is 7.6 years, while the average age of the Hartford Division’s bus fleet is 6.5 years, which is in line with the industry average.
- ConnDOT’s Special Tax Obligation bond ratings, issued in January 2009, are as follows: Moody’s Investors Service A1, Standard & Poor’s AA, and Fitch AA-.
- There have been no service reductions.

Commitment of Capital Funds: Medium

- Approximately 51 percent of non-New Starts funding is committed or budgeted. Federal funding sources include Section 5307 Formula funds, Section 5309 Fixed Guideway Modernization funds, Section 5309 Bus Discretionary funds, flexible funds including CMAQ and STP, and FHWA National Highway System funds. State funding sources include revenues from the State Transportation Fund and funds committed in Public Act 06-136.

Capital Cost Estimates, Planning Assumptions, and Financial Capacity: Medium-Low

- While assumptions regarding federal funding are reasonable, growth in state funding sources assumed in the plan are more optimistic than history.
- The project’s financial plan shows annual deficits in the State Transportation Fund beginning in 2010, and a negative fund balance beginning in 2014. Although the Legislature is compelled to maintain a minimum positive fund balance for a rolling five-year horizon, the financial plan does not describe any means by which these deficits would be eliminated.
- The capital cost estimate of the project is considered current and reliable, but risks must be closely monitored as the project continues in final design including railroad agreements, right-of-way acquisition, and utility relocation.

Operating Finance Plan Rating: Medium

The operating finance plan rating is based upon the weighted average of the ratings assigned to each of the subfactors listed below. The agency operating condition is weighted 25 percent, the commitment of operating funds is weighted 25 percent, and the operating cost estimates, planning assumptions and operating funding capacity subfactor is weighted 50 percent.

Agency Operating Condition: Medium-High

- The current ratio of assets to liabilities as reported for the Special Transportation Fund in its most recent audited financial statement is 5.6. ConnDOT has a history of being able to draw funds as required from the State Transportation Fund.
- ConnDOT has increased service in recent years

Commitment of Operating Funds: Medium

- Less than 50 percent of operating funding is committed. Most of the “planned” sources of funds derive from the State Transportation Fund, which cannot be committed more than a year in advance.

Operating Cost Estimates, Planning Assumptions, and Financial Capacity: Medium-Low

- The operating plan is based on optimistic assumptions regarding growth in operating subsidies and passenger revenues.
- The project’s financial plan shows annual deficits in the State Transportation Fund beginning in 2010, and a negative fund balance beginning in 2014. Historically, the State has acted to balance the State Transportation Fund.

