



Connecticut Department of Transportation

NAUGATUCK RAILROAD COMPANY

TIGER Discretionary Grant Application

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Project Information (K)

- i. Type of Project
Freight Rail
- ii. Project Location
Waterbury, Watertown, Thomaston, Litchfield, and Torrington, Connecticut, within the 1st and 5th Congressional Districts
- iii. Project Area
Suburban and Rural
- iv. Amount of Grant Funds Sought
\$4,830,000
- v. DUNS Number
807854583
- vi. Central Contractor Registration Confirmation Number
QZX9NA

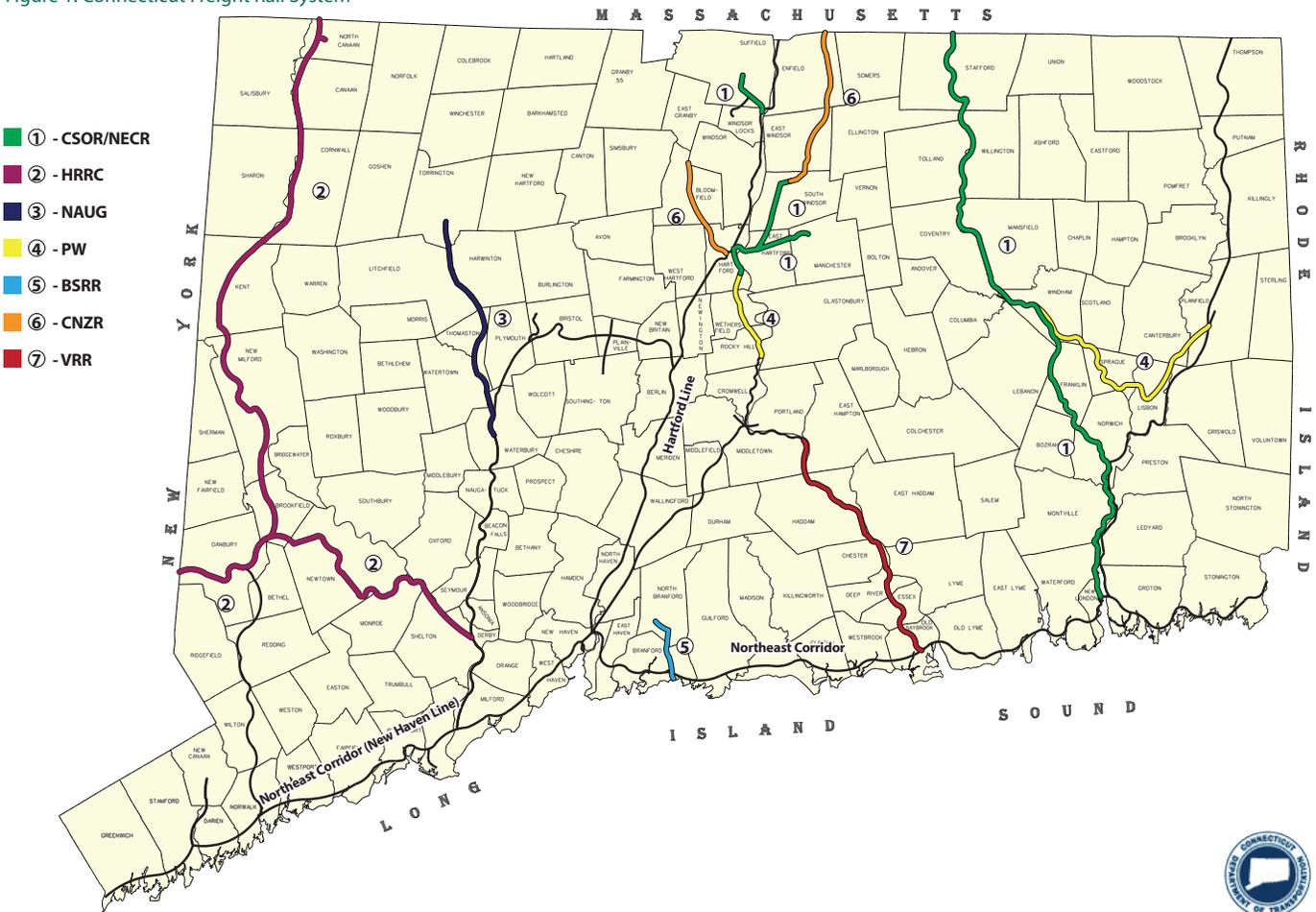
Ladies and Gentlemen of the Selection Committee:

Thank you for the opportunity to request ARRA TIGER Discretionary Grant funding (TIGER funding) for Connecticut's continuing efforts to improve our statewide freight rail network. Over the past ten years, the Connecticut Department of Transportation (ConnDOT) has directly invested over \$282.5 million into the freight rail network. This investment has allowed ConnDOT to incrementally improve the rail infrastructure. In addition, the State has invested over \$1.56 billion in the New Haven Main Line (NHML), a key segment of the Northeast Corridor. The NHML investments, targeted for passenger rail service, also secondarily benefit freight rail by permitting increased freight train speeds. Numerous upgrades and improvements are still necessary however, to make the overall system economically viable for the future. In some cases, urgent repairs and upgrades are needed in order to provide a more cost effective, safe, and sustainable means of efficiently transporting goods.

The receipt of the requested funding from the TIGER Discretionary Program, which is significantly less than the investment already made by the state, will provide the much needed incremental funding to completely address priority improvements in the system. To ensure that the greatest needs are addressed, ConnDOT has partnered with seven of the freight rail operators in the state to determine which projects have the highest priority and ability to leverage past investment in the network. The projects associated with each of these freight rail operators will be submitted as a separate application, for a total of seven applications. These projects, which are in keeping with the intent of the TIGER Grant program and will benefit operations on over three-quarters of the state freight rail system (Figure 1), are:

- › Central New England Railroad (CNZR): Rail improvements to Armory Line and Griffin Line to increase operating speeds.
- › Housatonic Railroad (HRRC): Replacement of track and crossings, bridge modifications, upgrades to crossings, and access to businesses along several key segments of their 83-mile system.
- › Naugatuck Railroad Company (NAUG): Upgrades to the 19.5-mile Torrington Line, including culverts, ties and ballast, and grade crossing improvements.

Figure 1. Connecticut Freight Rail System



- › Providence & Worcester Railroad (PW): Rail improvements to Willimantic and Middletown Branches to increase operating speeds.
- › RailAmerica’s Connecticut Southern Railroad Company (CSO) and New England Central Railroad (NECR): Bridge work, replacement of ties and ballast, surfacing, and switch rebuilding over 76 miles of track.
- › Tilcon/Branford Steam Railroad (BSRR): Replacement and repowering of locomotives and replacement of hopper railcars.
- › Valley Railroad Company (VRR): Resurrection of a key dormant section of the line and track rehabilitation along the remaining segments.

These upgrades and improvements will:

- › Reduce the number of truck trips and amount of carbon emissions associated with cargo shipment
- › Create new jobs throughout the state
- › Not require any additional environmental permits
- › Not be contingent upon the completion of any other projects
- › Be immediately ready to begin work with all funds being utilized prior to February 2012.

This application specifically addresses the Naugatuck Railroad Company (NAUG) project, which includes upgrades to the 19.5 mile Torrington Line, including culverts, ties and ballast, and crossing upgrades. The sections of the statewide freight rail network included in this application are shown in Figure 2.

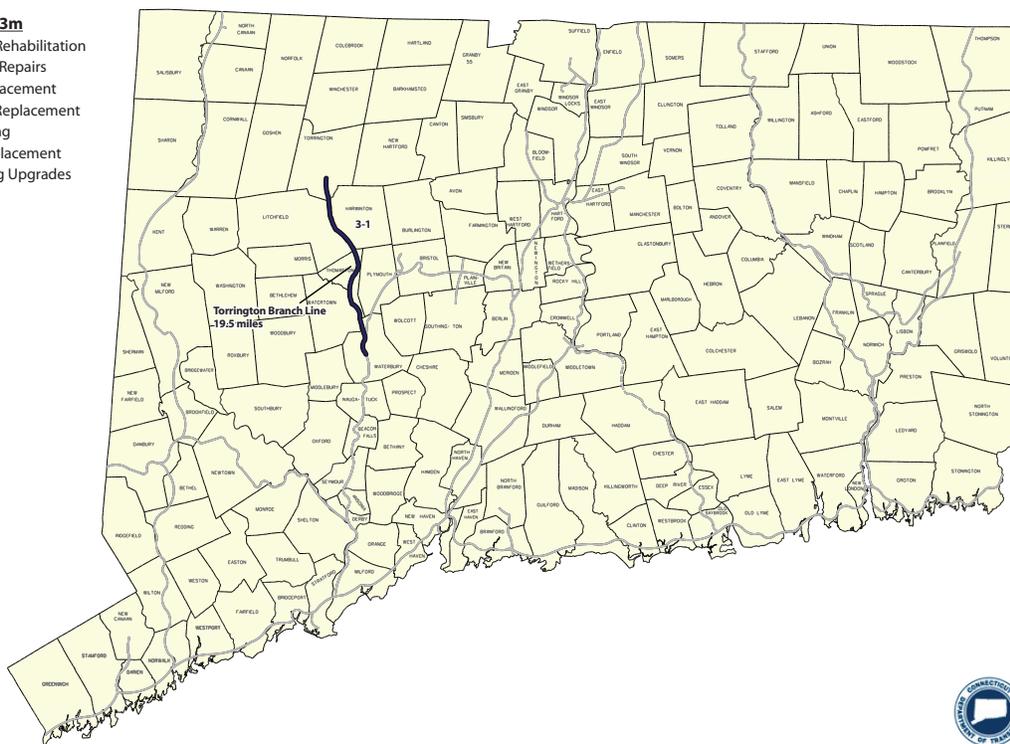
Application Overview

The application document responds specifically and in detail to the interim notice published in the Federal Register on May 18, 2009 and the operative notice published June 17, 2009. This application consists of two parts.

1. The first describes the needs of the state freight rail system and the broad-based resultant benefits from TIGER funding for the entire State of Connecticut.
2. The second addresses the Naugatuck Railroad Company project and its specific application for the TIGER Grant funding. This project will cost \$4,830,000 and is a critical piece of the repair needed for the statewide freight rail network.

Figure 2. Naugatuck Railroad Company

- 3-1 \$4.83m**
- Bridge Rehabilitation
 - Culvert Repairs
 - Tie Replacement
 - Ballast Replacement
 - Surfacing
 - Rail Replacement
 - Crossing Upgrades



Background of Project and Existing Condition of Freight Rail Network

The Connecticut freight rail network is a critical component of the northeast regional rail system. Freight rail service is an important component of the American industries supply chain and a vital component to Connecticut's economy. Connecticut moves 3.6 million tons of freight over 10 freight railroads annually. This network connects with the Ports of New York and New Jersey, which are critical to the continued economic growth and success of the Northeast region.

The Connecticut freight rail system needs infrastructure upgrades and repairs immediately in order to meet the need to move freight more efficiently and ensure its continued role in the movement of goods throughout the state and the northeast region. Portions of the rail lines are so severely worn that they are at the end of their serviceable life. Older, under-maintained tracks result in reduced operating speeds, which slow the movement of cargo and ultimately increase costs for the consumer. Bridges and track structure require strengthening and clearances increased to meet the demands of today's higher capacity rail equipment. Inadequate grade crossing protection systems create conditions that are less desirable for pedestrians, vehicles, and trains and result in unnecessary delays to both vehicular and train traffic.



This image shows the relationship between the freight rail network and the regional electric grids. NAUG is hauling over-dimension and over-weight electric transformers to Northeast Utility's Watertown Substation, which feeds Fairfield County. Repairs and improvements to the network are imperative to ensure the ability to move over-size loads.

Project Benefits

The combined benefits of these seven initiatives include reducing truck trips and carbon emissions, creating jobs, providing economic growth opportunities, and improving safety measures within the statewide freight rail system. Each rail car carries the equivalent of four trucks. Enabling the increased use of freight rail will reduce the number of truck trips necessary along the roads of New England, thereby reducing traffic congestion, reducing crashes and saving lives, and reducing carbon emissions.

Thank you for your time and consideration of our submission.

Sincerely,

James P. Redeker
Bureau Chief – Public Transportation

C. Project Description

Overview

Connecticut plans to increase rail freight shipments by 25 percent over the next two decades to support economic growth and reduce the volume of truck traffic. The state currently moves 3.6 million tons of freight over 10 freight railroads annually. To realize a 25 percent increase, upgrades and improvements are urgently needed to repair or replace aging infrastructure and equipment.

Connecticut is strategically located between the major northeastern urban centers of New York City and Boston, offering the state unlimited opportunities for shipping cargo. Its rail system also assures workable freight rail access to the Ports of New York and New Jersey, as well as the corridor related to the North American Free Trade Agreement. Over the past ten years, the state has

invested over \$282.5 million in the network to improve the movement of freight rail. Among the many projects is the reconstruction and relocation of the main rail spur on the east side of the Port of New Haven to achieve a direct rail connection to this strategic port. Direct port to rail connections in the state will serve the rapidly growing container segment of rail traffic to help remove long-haul trucks from highways and deliver products to consumers faster, as well as offer an alternate to the larger ports (New York and New Jersey).

Implementing the proposed upgrades and infrastructure improvements to the state's freight rail network will allow the continued growth of the freight industry and will result in a reduction in the number of truck trips made on the regional highways. Trucks have a significant effect on highway traffic conditions, particularly



This image shows a track worker conducting much needed maintenance. An NAUG track worker is jacking and leveling the track in preparation for the tamping machine to vibrate and compact the stone ballast around and beneath the wooden crossties.

along the highly congested I-84, I-91, and I-95 corridors in Connecticut. Much of the congestion occurs at the bottlenecks in the Hartford and New Haven areas. The congestion results in increased fuel usage, increase green houses gas emissions, increased travel time, and thus increased cost to the consumer.

The freight rail network improvements will also result in fewer carbon dioxide emissions being released. The movement of cargo by rail produces much lower emissions than the movement of the same amount of cargo by truck. On average, it takes four trucks to move the same amount of cargo that one rail car can move.

There are a number of jobs that would be created as a result of these infrastructure improvements. In addition to new positions within each freight rail company, there would be a number of construction positions, for both the rail construction and any subsequent induced developments, as a result of the improvements. Using the standard formula for stimulus job creation, where a \$50,000 investment creates one full-time job (2080 work-hour per year basis), 2,180 jobs will be created by the proposed improvements and repairs for the statewide freight rail network. Follow-on jobs will also occur in other regions and businesses, fueled by the growth of transport throughout the state. These follow-on jobs will include positions in the manufacturing and supply industry. Private companies are increasingly seeking to transport cargo via rail due to its cost savings and environmental benefits. The improvements and upgrades to the statewide freight rail system are required to stay competitive with the market.

Detailed Description of Statewide Rail Infrastructure Improvements

ConnDOT has partnered with seven freight rail operators to determine the most critical repairs that need to be made to improve the network. These freight rail companies and their projects include:

- › Central New England Railroad is a short-line railroad that operates in Connecticut over the Department's Griffin Line between Hartford and Windsor (8.7 miles) and over the Department's Armory Branch Line between South Windsor and the Massachusetts State Line in Enfield (13.5 miles). CNZR priority projects include rail improvements to the Armory Line and the Griffin Line to increase operating speeds.
- › Housatonic Railroad Company (HRRC) is a regional short line that operates in the western part of Connecticut and in Massachusetts and New York along the Berkshire Line (50.0 miles) and the Maybrook Line (33.5 miles). These two lines form a portion of a critical rail route in western Connecticut. Priority improvements for HRRC include replacement of track and crossings, bridge modifications, upgrades to at-grade crossings, and improved rail access to businesses.
- › Naugatuck Railroad Company (NAUG) is a shortline railroad that operates over the Department's Torrington Branch Line between Waterbury and Torrington (19.5 miles). Torrington Line improvements include repairing or replacing culverts, ties and ballast, and grade crossing improvements.
- › Providence and Worcester Railroad Company (PW) is a regional Class II railroad that operates in southern New England, and as far south as New York City. In Connecticut, PW operates over 238.5 miles of track. Priority projects for PW include track improvements to the Willimantic Branch and the Middletown Secondary to increase operating speeds and improve system interconnectivity.
- › Rail America, Incorporated has two subsidiaries that operate in Connecticut: the New England Central Railroad (NECR), and the Connecticut Southern Railroad (CSOR). NECR operates on their own line between New London and Stafford (55.8 miles) and on to East Alberg, Vermont where they connect with the Canadian National Railroad. CSOR operates on CSX from West Springfield to Springfield, Massachusetts, and on Amtrak from Springfield to North Haven (53 Miles). CSOR owns and operates the Manchester Secondary Line (9.6 miles), the Armory Branch Line (6.8 miles), and the Sufield Branch Line (4.4 miles). They also operate on the spur track to Bradley Airport that is owned by the state (2.4 miles). Work for NECR and CSO includes bridge improvements, replacement of ties and ballast, surfacing, and switch rebuilding to improve operating speeds and rail areas to existing and potentially new customers.
- › (Tilcon) Branford Steam Railroad (BSRR) is a subsidiary of Tilcon Connecticut, Incorporated, and provides service between their trap rock quarry in North Branford and their barge loading facility on Long Island Sound in Branford (7.2 miles). Priority projects for BSRR include replacement and upgrade of locomotives and replacement of hopper railcars.

- Valley Railroad Company (VRR) operates between Old Saybrook and Haddam along the right-of-way owned by the Connecticut Department of Environmental Protection. Priority repairs for VRR include the restoration of a 10-mile dormant segment of the line and track and bridge improvements along the remainder of the corridor.



This image shows NAUG crosstie insert machine making repairs.

The proposed projects for VRR and the PW Middletown Secondary are along the same freight rail corridor and when completed, will provide an alternate route for freight rail movements between Old Saybrook and Hartford via Middletown that does not currently exist. This new route will remove freight rail traffic from the Northeast Corridor between Old Saybrook and New Haven as well as along the Hartford Line between New Haven and Hartford. It will also reduce freight shipment miles by 22.7 miles by traveling from Old Saybrook to Middletown to Hartford (44.6 miles) versus Old Saybrook to New Haven to Hartford (67.3 miles). This will not only reduce the short line operating cost as a result of reduced travel miles and avoidance of access fees on the Northeast Corridor, but it will also reduce congestion on the Northeast Corridor and benefit passenger rail that shares that corridor.

This application addresses improvements and repairs for portions of the statewide freight rail network operated by NAUG. The proposed improvements and repairs include bridge and culvert updates, track structure, and at-grade crossings. Bridge improvements include Hancock Brook Bridge in Waterbury, Chases Bridge in Waterville, and Jericho Bridge in Thomaston. Six culverts are also in need of replacement. The project includes the rehabilitation of the Torrington passing siding including heavier rails, 17,500 ties, and 800-900 tons of ballast. These improvements will bring the entire Torrington Line into a State of Good Repair. The project also includes two railroad crossing improvement projects, State Route 262, Frost Bridge Road in Watertown and Common Court Road in Waterbury. All of this work will be performed on existing railroad infrastructure components.

Addressing Urban and/or Rural Area Needs

The statewide freight rail system navigates through both urban and rural populations. The projects address needs critical to both areas through implementing quick turnaround strategies for modernizing operations, thereby creating a more efficient system and improving safety. These steps will ensure the continued movement of freight into and out of urban and rural areas in Connecticut and throughout the surrounding region.

Freight rail improvements will foster economic growth and development in the state. Connecticut has nine municipalities that are categorized as Economically Distressed Areas (EDAs) within the eight Comprehensive Economic Development (CED) regions. The municipalities include Bridgeport; New Britain; Waterbury; New Haven; New London; Hartford; East Hartford; Torrington; and Windham. Per the U.S. Census Bureau Factfinder (2007), these municipalities either have a per capita income that is less than 80 percent of the national per capita income or have unemployment rates that are at least 1 percent greater than the national unemployment rate. Four of the seven projects serve an EDA. Furthermore, the freight railroad industry as a whole is in distress and needs the proposed improvements and upgrades to regain its place in the market and be able to maintain its current levels of employment.

Transportation Challenges that the Project Aims to Address

The infrastructure improvements to the freight rail system seek to address the transportation challenge of moving freight in a cost effective, sustainable, and timely manner. Achieving this includes:

- Increasing load-bearing capabilities of rail bridges
- Decreasing travel times and operating costs
- Improving rail-to-rail connections
- Improving port-to-rail connections

Attaining travel time reductions and increases in load-bearing capabilities of rail bridges to be competitive with alternate modes of freight movements, specifically trucking goods on congested highways, is critical to the growth and success of the state's freight rail network. The proposed improvements and repairs will enable portions of the rail network to handle a 286,000 pound rail car load, while ensuring that the remaining portions of the network will continue to handle this load. While some vertical clearance projects have been funded by the freight operators, RailAmerica completed one on the NECR Palmer Line and PW completed one on the Norwich Line (Plainfield Secondary), additional increases to vertical clearances are needed within the network to accommodate modern loading practices and will be included as

part of this project. Connecticut's freight rail system needs updates and infrastructure improvements in order to be economically competitive in facilitating the movement of goods into and through the state, specifically in comparison to transporting cargo via trucks.



This image shows the first Connecticut double-stack container, operated by RailAmerica, Inc. Increased vertical clearances enable double-stack containers, which increase shipment volumes.

Transportation is a major consumer of energy and a significant contributor of carbon dioxide emissions, both of which are a factor in the rise in green houses gases and resultant climate changes that are increasingly causing concerns globally. Moving freight by rail results in fewer carbon emissions and green house gases due to the amount of truck trips one freight train can displace. This then results in decreased congestion on the highway network and improved safety measures on the roadway. The roadway network becomes safer as a result of less traffic congestion overall, as well as fewer trucks.

D. Project Parties

The primary project parties are the State of Connecticut and the Connecticut Department of Transportation. The Naugatuck Railroad Company is another important project party since they own and/or operate freight rail over the portion of the state's freight rail network that is being considered. The State of Connecticut (www.ct.gov) would be the official grant recipient, and the Connecticut Department of Transportation (ConnDOT) (www.ct.gov/dot) would be administering the grant funds and managing the project in partnership with Naugatuck Railroad Company.

E. Grant Funds and Sources and Uses of Funds

The Connecticut Department of Transportation is seeking 100% funding for the proposed improvements and repairs identified in this application for each of the seven freight rail operators. These funds are intended to leverage the \$282.5 million the state has invested in the freight rail network over the past ten years. The receipt of the requested funding from the TIGER Discretionary Program, which is significantly less than the \$282.5 million investment already made by the state, will provide the much needed incremental funding to completely address priority improvements in the system.

Another \$1.56 billion has been invested by the state in the New Haven Main Line for infrastructure improvements, such as track, signals and power, and bridges. This work provides a secondary benefit to freight rail because it allows the freight rail trains that operate on the New Haven Line to increase their operating speeds, reducing transit times. In total, the TIGER Discretionary Program requests represent a small portion of the total state rail investment but will provide tremendous benefit through renewed connectivity and increased productivity to the state rail freight system.



This image shows the construction work on the Waterfront Street Rail Extension at the Port of New Haven.

The improvements and repairs proposed for TIGER funding will benefit approximately three-fourths of the statewide freight rail network at an investment that is significantly lower than previous investments made by ConnDOT for the freight rail system.

F. Selection Criteria Compliance

Continuing to improve the statewide freight rail network is consistent with the goals and objectives of the TIGER Grant funding.

1. Primary Selection Criteria

a. Long-Term Outcomes

- › **State of Good Repair:** The proposed repairs and/or improvements to the statewide freight rail network will minimize life cycle costs, as operational efficiency will be improved and new equipment will require less fuel and maintenance. Right-of-way work and tie and rail replacements will return portions of the network to a State of Good Repair. In addition, the removal of trucks from the state highway system will extend the life cycle of roads and bridges by reducing the wear and tear caused by frequent truck traffic. These improvements coincide with the State Rail Plan and rehabilitate portions of the rail line that urgently require attention to avoid threatening their economic future.
- › **Economic Competitiveness:** The projects proposed for the statewide freight rail network will provide long-term contributions to growth in employment, as well as the more efficient movement of goods, which results in cost competitiveness. Repair and replacement of equipment and track will increase operating speeds and reduce the cost of moving freight. The connection of the Middletown Secondary and the Valley Railroad will reduce operating costs via reduced travel miles and access fees by avoiding a section of the Northeast Corridor. These changes will reduce costs for the freight operator and the supplier, thereby making goods more cost competitive in the marketplace. Job growth will continue beyond the duration of construction, as the improved operations will result in additional positions with the freight operator, positions with suppliers who will be able to move more cargo, and follow on positions in other regions as a result of increased operations.
- › **Livability:** The repairs and/or improvements to the statewide freight rail system will significantly improve the availability of goods to the state, including nine municipalities designated as EDAs. The proposed projects will take truck traffic off of the roads on the arterial and interstate roadway system, thereby reducing congestion and emissions. This will also make the roadway network safer for drivers, particularly senior citizen drivers who may be averse to driving alongside trucks. The engines on the proposed new equipment will exceed the Tier II emissions standards and also reduce noise associated with the movement of the freight trains. The combined efforts of VRR and PW will provide an alternate route for freight rail movements between Old Saybrook and Hartford, which will reduce freight rail traffic on the NEC, thus benefiting passenger rail traffic on that corridor.
- › **Sustainability:** The proposed repairs and improvements to the statewide freight rail network will improve energy efficiency through improved operating speeds and by permitting the through routing of the modern rail car. Replacing outdated and inefficient equipment will reduce the operators' dependence on oil, since they will be traveling the same distance using less fuel. The projects contribute to a decrease in the movement of goods by less energy efficient vehicles by providing strengthened bridges and cleared routes for 286,000 pound rail car loads and double stack shipments. The proposed projects also avoid adverse environmental impacts since they are simply replacing or repairing existing infrastructure and equipment. Environmental benefits include decreased green house gas emissions and improved air quality, as a result of replacing old and inefficient equipment, and the subsequent reduction in truck trips from the highway network. Net emissions reductions of Volatile Organic Compounds (VOC), Nitrogen Oxide (NOx), and green house gas emissions (CO2) have been calculated, with the results posted at: http://www.ct.gov/dot/lib/dot/documents/dcommunications/stimulus/tiger/freightrail/Project_Emission_Analysis.doc.
- › **Safety:** Removing truck traffic from the arterial and interstate roadway system will improve the overall safety of the roadway system. Studies have shown and concluded that a reduction in truck traffic will increase the overall safety of roadway facilities. Improvements and repairs to at-grade railroad crossings throughout the statewide freight rail system will make these crossings safer for pedestrians, vehicles, and trains.
- › **Evaluation of Benefit Cost Analysis:** The benefits associated with the proposed improvements and repairs will result in travel and transit time savings, improved operations and safety, removal of trucks from highways, reduced emissions and green house gases, and an increase in the use of freight rail, more than substantiating the costs associated with the project.
- › **Evaluation of Project Performance:** Key criteria will be tracked and reported accordingly to effectively evaluate the performance after the proposed repairs and improvements have been implemented.

b. Job Creation and Economic Stimulus

Using the standard formula for stimulus job creation, 2,180 new jobs will be created as a result of the total project investments on the statewide freight rail network. The majority of the created jobs will be in the construction trade workforce. Additional positions will be created within the freight companies as a result of expanded coverage or an increased volume of shipments. Follow on jobs within and outside of the region as a result of the increased operations will also be created, although these are not accounted for in the estimated total.

- › **Project Schedule:** The projects are ready to start construction immediately upon receipt of a TIGER Grant, and the monies will be steadily spent throughout construction, with the projects being completed by February 2012.

- › Environmental Approvals: All work will be completed within the existing right-of-way; no new approvals are anticipated as part of the proposed work.
- › **Legislative Approvals:** Legislative approval is not needed for the proposed work.
- › State and Local Planning: The proposed improvements are consistent with the Statewide Rail Plan and the business plans for each of the individual freight line operators. Furthermore, the improvements are being incorporated into the Connecticut TIP per the Commissioner's letter located at: http://www.ct.gov/dot/lib/dot/documents/dcommunications/stimulus/tiger/freightrail/Inclusion_Document_for_STIP.pdf.
- › **Technical Feasibility:** All of the projects consist of typical railroad construction techniques, materials, and equipment. None of the proposed repairs or improvements is contingent upon the completion of another project. The projects coincide with the State Rail Plan and are ready for immediate implementation.
- › **Financial Feasibility:** Cost estimates have been prepared as shown in each application. TIGER Grant funding is necessary for the implementation of each of these projects.

2. Secondary Selection Criteria

- › **Innovation:** The proposed improvements include replacing outdated locomotives and rail cars. This will not only ensure significantly reduced emissions, but it will also reduce fuel consumption. The new locomotives are innovative in their design, featuring power on demand engine systems, regenerative dynamic braking, a smokeless start engine, and clean emissions through a clean-burning MOH Tier 3 Engine with self-cleaning ceramic particulate filters.
- › **Partnership:** The State of Connecticut is fully supportive of each individual project and has worked individually and collaboratively with each of the freight rail operators towards the overall goal of creating an efficient and effective regional freight rail system that plays an integral role in the overall transportation infrastructure and Connecticut in the region.

G. Federal Wage Requirement

ConnDOT certifies that it will be in compliance with the requirements of subchapter IV of chapter 31 of title 40, United States Code (Federal wage rate requirements), as required by the Recovery Act. A letter from the Commissioner, stating ConnDOT's compliance with the Federal Wage Requirement, is located at: http://www.ct.gov/dot/lib/dot/documents/dcommunications/stimulus/tiger/Federal_Wage_Certification_082509.pdf.

H. National Environmental Policy Act (NEPA) Requirement

None of the proposed improvements or repairs will significantly impact the natural, social, and/or economic environment. As the projects involve replacement of existing equipment or track components and repairs to existing structures, they are anticipated to fall within Federal Railroad Administration's Categorical Exclusion (CE) category under the NEPA protocol.

I. Environmentally Related Federal, State, and Local Actions

None of the projects for the statewide freight rail network will require actions by other agencies, as the projects include replacement and/or repairs to existing rail equipment and infrastructure.

J. Protection of Confidential Business Information

Information provided in ConnDOT's TIGER Discretionary Grant application is public information and is not considered confidential.

IX. Reporting Requirements

ConnDOT understands that entities receiving TIGER Discretionary Grants will be required to report on grant activities on a routine basis. Reporting categories include maintenance of effort, reports on use of funds, and environmental reporting. ConnDOT ensures that the appropriate reporting would be submitted in conjunction with the Grant Funding.

X. Certification Requirements

ConnDOT understands that it must comply with the Certification requirements of the Recovery Act.

The following section includes the project specific portion of the application for the Naugatuck Railroad Company.

**TIGER Grant Application
September 3, 2009**

Naugatuck Railroad Company
P.O. Box 400
Thomaston, CT 06787-0400
860-283-7245

TIGER Grant Points of Contact for the Naugatuck Railroad:

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Naugatuck Railroad Corporate Officers:

Howard Pincus, President
Allan Galanty, Vice-President
Louis Edmonds, Treasurer
William Sample, Secretary

**Upper Naugatuck Valley Rail Line Rehabilitation Project
Torrington Line**

The Torrington Line extends approximately 20 miles from Waterbury to Watertown to Thomaston to Litchfield to Torrington. The entire rail line is owned by the State of Connecticut and operated via lease by the Naugatuck Railroad. The Naugatuck Railroad is a common-carrier (freight and passenger) railroad owned by the Railroad Museum of New England.

The Naugatuck Railroad started operations over this line in 1996. Since that time, it has invested considerable resources in upgrading, improving and maintaining of the Torrington Line. The rail line crosses the Naugatuck River on three major bridges, and crosses smaller waterways as well. The railroads previously operating this line (through both lease from State of Connecticut, as well as prior ownership) made few, if any, capital improvements in the last 50+ years. This proposed rehabilitation project will significantly improve the state-owned rail line and associated infrastructure, by making the capital investments needed for future regional growth.

Specifically, some previous investments in the rail corridor infrastructure since the Naugatuck Railroad began operations included the following:

- Connecticut Department of Transportation (CDOT) funded partial tie replacement project covered approximately 10 miles of the railroad in 1996.
- CDOT bridge pier stabilization project was completed on Jericho Bridge, in 1997.
- Naugatuck Railroad funded a surfacing and ballasting project, which covered 10 miles of the railroad in 1997.

- Naugatuck Railroad funded rebuilding of Thomaston passing track in 1997.
- CDOT funded partial tie replacement project was completed in 1999 for approximately 4 miles of the railroad.
- Naugatuck Railroad funded major brush cutting and right-of-way clearing along 12 miles of the railroad in 2000.
- Naugatuck Railroad funded a partial tie replacement project that covered 8 miles of the railroad in 2001.
- CDOT funded ditching project in the Thomaston Dam north rock cut was completed in 2003.
- Naugatuck Railroad funded re-timbering/re-decking of three smaller bridges was completed in 2005
- Naugatuck Railroad funded rebuilding of Waterville passing track was completed in 2008-2009.
- Naugatuck Railroad maintenance of way expenditures for the period January 1, 2000 to September 1, 2009 totaled over \$564,000.
- The Naugatuck Railroad has funded the Thomaston Shop Facility Project from the years 2000 through 2009. This involved clearing, blasting, grading and fencing the three acre site, constructing 5 turnouts and 2500+ feet of track, constructing a two-track, 180x65 steel shop building with all utilities (power, heat, light, air, crane, etc.). This shop facility is used for locomotive, railcar and maintenance-of-way equipment maintenance and repair. Over \$500,000 has been expended to date on this project.
- A partial rehabilitation of the Thomaston passenger station was funded through a grant from the Thomaston Savings Bank: 1997, complete roof replacement, \$90,000; 2001, rebuilding of platform canopies on building, \$52,000.

The Torrington Line of the Naugatuck Railroad is entirely contained within two economic development regions that meet the criteria as Economically Distressed Areas under Section 301 of Public Works and Economic Development Act of 1965 (42 USC 3161). Specifically, the two Economic Development regions through which the Torrington Line runs are the Naugatuck Valley (Waterbury area), and Litchfield Hills/Northwest Connecticut region (the remainder of the line). This information regarding the Economic Development regions and their qualification as being designated economically distressed was provided to the Naugatuck Railroad by the State of Connecticut, with information derived from the Factfinder/US Census Bureau.

The Naugatuck Railroad is a strong supporter of the local communities in which it does business and works in partnership with the local economic development authorities, town/city governments, and local business, fostering relationships that improve the economic viability of the region. The Naugatuck Railroad has received a strong letter of endorsement for this project, as a high priority infrastructure project, from the Northwest Connecticut Economic Development Corporation. The railroad has also received a strong letter of support for this project from the Town of Watertown Economic Development Commission. These letters are included as attachments to this application.

In order to maximize the local and regional benefit of this capital investment, to the best of our ability the railroad will hire employees from the local area to perform much of the work, and utilize local/regional contractors and material suppliers. The Naugatuck Railroad management feels strongly that in the spirit of the ARRA, any federal appropriations that are awarded to the region should stay in the region.

The Association of American Railroads (AAR), using RIMS II methodology from the U. S. Department of Commerce, has determined that every one billion dollars in freight rail infrastructure investment creates 20,000 primary and secondary new jobs. Based on full funding of this capital request, this would equate to approximately 100 primary and secondary jobs being created in the region.

The investment in the railroad will bring the entire Torrington Line into a state of good repair. The long-term benefits of this are numerous. Keeping a viable rail transportation system in good repair leaves many long-term transportation options for movement of excess weight commodities, providing a more environmentally sound means of transporting goods and materials in and out of northwest Connecticut, and leaving the long term option for additional passenger service between Waterbury and Torrington. The Torrington Line is the only over-dimension and over-weight rail line to serve the Northeast Utilities substations at Torrington and at Watertown, which provides the vast majority of electrical power to Fairfield County. Fairfield County is home to a large amount of national defense contractors, government facilities, and global financial institutions.

Two railroad grade crossing improvement projects are also included with this proposal. These projects are critical to highway and rail safety. With projected increases in both rail and highway traffic at these crossings, and the Naugatuck Railroad's commitment to safety underscore the need to make these crossings as safe as practical for the protection of life and property.

Rail transportation is a proven sustainable, efficient means of transporting large quantities of goods and commodities. In addition, the additional benefit of keeping extra truck traffic off roadways improves living and working standards by reducing noise and pollution.

Over the next 2 to 3 years, rail freight traffic is expected to experience a significant increase. Current Naugatuck Railroad estimates project a freight traffic increase of approximately 1500 carloads per year. With an estimate of 4 truckloads per rail car, a 1500 railroad carload increase would result in a reduction of 6000 heavy truck trips on area roadways.

This project overall is a small, but critical, investment in the rail infrastructure in Northwest Connecticut. As such, the Naugatuck Railroad requests a waiver from presenting a detailed Benefit-Cost Analysis, as the grant request is significantly less than \$20 million dollars.

All of the work outlined is work to an existing rail line. There are no new rail lines being conducted. As such, it appears that no environmental approvals are anticipated for the proposed work, and that it likely falls under the categorical exclusion provision of NEPA.

This initial small investment is truly that, an initial investment. If this transportation corridor were to be allowed to deteriorate, the cost to return this corridor to a good state of repair years from now would be astoundingly higher. This capital investment will make rail freight transportation in Northwest Connecticut a much more economically and environmentally viable transportation mode as compared to other alternative modes of transportation.

There are three major areas proposed for rehabilitation and capital improvement; bridges and culverts, track structure and highway-rail crossings. These are outlined below.

Bridges

Hancock Brook Bridge (in Waterbury), 110 ft long, built 1902:

Work necessary: Re-deck, masonry repairs, steel repairs (more than minor steel work may be needed due to condition) \$355,000

Chase Bridge (over Naugatuck River in Waterville), 234 ft long, built 1907:

Work Necessary: Re-deck, masonry and minor steel repairs \$195,000

Jericho Bridge (over Naugatuck River south of Thomaston), 296 ft long, built 1907:

Work Necessary: Re-deck, masonry and minor steel repairs (this bridge is curved, which adds to the complexity of the work) \$325,000

These prices are based on current unit costs for recent comparable projects in the private sector, as of early 2009.

Culverts

Culverts along the Torrington line range in age from 125+ year-old stone box culverts to 50-year old concrete pipe culverts. 6 of these are in need of replacement, due to their advanced age and deterioration. Additional maintenance and cleaning will be performed on other culverts.

Culvert Replacement and Repair Work \$250,000

Track StructureTorrington Passing Siding

The existing 900-foot long, single-ended "Plains" side track in Torrington will be rehabilitated with newer, heavier rails (the existing rails are lightweight rails dating to 1889), and will have an additional track switch installed, giving trains the capability to perform switching moves needed for efficient freight and passenger operations into Torrington.

Rehabilitate and Upgrade Plains Passing Siding: \$175,000

Capital Tie and Surfacing Work:

Since Naugatuck Railroad commenced operations on the line in 1996, over 13,000 ties have been installed in the 19 miles of line. An additional 17,500 ties should be installed which will bring the line to a solid state of repair, ensuring continued safe operation of freight and passenger trains. This will also greatly facilitate on-going maintenance of the line. Also, approximately 800-900 tons of stone ballast will be placed per mile. The Naugatuck Railroad would hire employees to perform the majority of this work.

Capital Tie, Surfacing and Ballasting work: \$2,000,000

These prices are based on current unit costs for recent comparable projects in the private sector, as of early 2009.

Highway-Rail Crossings

State Route 262, Frost Bridge Road, Watertown

This crossing currently is protected by flashing lights, installed about 1983. The crossing surface, also installed in 1983, is rough and in need of replacement. The proposed improvement to this crossing would replace the existing signals with current standard, high-visibility flashing lights, and improve the safety of the crossing by installing gates. The track-road surface would be rebuilt to current standards and would better enable the increase in truck and bus traffic projected for the crossing.

State Route 262, Frost Bridge Road crossing- signals, gates, road surface \$300,000

This price is based on current unit costs for recent comparable projects in the private sector, as of early 2009.

Common Court Road, Waterbury

This crossing is protected by flashing lights installed in 1955. The signal light equipment is old and should be upgraded to current standard LED light heads. Additionally, the relay equipment is obsolete and should be replaced with modern equipment, and modern wiring. Some improvements in the road surface and track structure will be required as well.

Common Court Road crossing- signals and equipment, road and track surfaces \$100,000

Additional Project Items

Replace deteriorated rail on north end of rail line: Approximately 1 ¾ miles of almost-new heavy rail were removed in 1970 by the Penn Central Railroad (the owner of the line at the time) and was replaced with lighter rail in poor condition. Due to ongoing discovery of numerous internal defects, this rail needs to be replaced with heavier rail to match what was removed.

\$325,000

Contingency Allowance

Since the prices for railroad materials have experienced extreme fluctuations in the last few years, especially prices for steel, fuel, lumber, etc., all of which are major parts of this work, a contingency allowance of 20% should be included.

\$805,000

Total Project Cost for the Torrington Line Rehabilitation Project \$4,830,000

Again, all costs are based on current unit costs for recent comparable projects in the private sector, as of early 2009. The work outlined above is “shovel-ready” and work can commence as soon as funding permits, during the early part of the 2010 construction season.

Northwest Connecticut Economic Development Corporation

333 Kennedy Drive, Torrington, CT 06790
860.567.2204 - info@nwctedc.com - www.nwctedc.com

February 11, 2009

Dear Commissioner Joseph Marie,

At our Board of Directors meeting on Friday, January 23, 2009; the **Northwest Connecticut Economic Development Corporation (NWCTEDC)** unanimously endorsed upgrading the Naugatuck Railroad's rail system (*managed by the Railroad Museum of New England*) from Waterbury to Torrington.

This rail line has great economic importance to multiple towns and cities in the eastern part of Litchfield County including Waterbury, Watertown, Thomaston, Litchfield and Torrington. It has been in useable, but fair condition for a long time and has greatly inhibited productive use for both freight and passenger service. With a 50% increase in truck traffic projected over the next 20 years, NWCTEDC recognizes the need to move freight via rail whenever possible to reduce highway congestion throughout the state.

One of the major economic drivers in Northwest Connecticut is tourism. This is a region where development is discouraged and open space acquisition is encouraged. The Railroad Museum of New England (*Naugatuck Railroad*) has conducted numerous passenger trips linked with tourism. These trips have all been very well attended including the "Thomas the Train" holiday events in Thomaston and the holiday tours to the Warner Theatre in Torrington. This type of tourism helps to generate income for the entire region.

The Northwest Connecticut Economic Development Corporation serves 21 towns and cities in NW CT. It works in close cooperation with the NW CT Chamber of Commerce, the NW CT Council of Governments and the Litchfield Hills Council of Elected Officials. With renewed interest in upgrading long neglected infrastructure throughout the state and nation, this is the time to remedy a problem that has existed for far too long.

NWCTEDC considers this a high infrastructure priority for the entire region, we hope you will support this very modest request for funding.

Sincerely,

Doug Parker

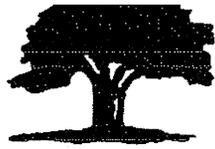
President/Executive Director

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WATERBURY
Development Corporation

RECEIVED

SEP 09 2009

NEW HAVEN
OFFICE OF RAIL

September 4, 2009

Mr. Howard Pincus, President
Naugatuck Railroad
PO Box 400
Thomaston, CT 06787

Dear Mr. Pincus,

The Waterbury Development Corporation (WDC) is a not-for-profit economic development agency that is responsible for all facets of economic development for the City of Waterbury. One of our major responsibilities is business creation and retention. Certainly having modern rail infrastructure for freight service is something we can promote more through our marketing efforts. Truck traffic on the I-95 corridor has become burdensome over the last 15 years and there has been a continual increase of overall vehicular traffic along the I-84 corridor. Businesses respond to this by seeking alternatives to truck deliveries, and, a viable rail line from Waterbury to Torrington would position the region to better handle freight volume in the future especially to benefit manufacturing and distribution.

An important fact that shouldn't go unnoticed is that over the last 8 years, the Naugatuck Railroad has handled the movement of numerous large power transformers for the region's electrical power and distribution system. These are large, oversize/overweight components that cannot effectively be transported by another means except rail. The work was accomplished in a professional, efficient fashion.

In addition, we recognize the positive impact the Naugatuck Railroad and the Railroad Museum of New England have had on Waterbury and the region north toward Torrington for well over 10 years. Tourism is a component of economic development, and events such as excursions to local vineyards, special holiday runs, the major "Thomas the Train" event and regular tours and runs between Thomaston and Waterbury have resulted in a substantial influence here. In addition, we realize your operations have positively impacted a variety of local/regional businesses such as gas stations, convenience stores, hotels, and food establishments including restaurants, luncheonettes and delicatessens, etc. We also know local contractors and other providers of goods and services have benefitted from your presence.

BUILDING WATERBURY'S FUTURE!

Therefore the WDC supports the Naugatuck Railroad's continued presence in the Naugatuck Valley and its efforts to obtain funding for improvements and repairs to the existing track, bridges and grade crossings along the line, particularly since resources for this major work have been minimal or non-existent for many years. Funding for this project would be an investment to help create opportunities and to foster economic development which will result in vitality and growth.

Sincerely,

Leo Frank (TG)

Leo Frank
Chief Executive Officer