



Connecticut Department of Transportation

HOUSATONIC RAILROAD COMPANY

TIGER Discretionary Grant Application

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Project Information (K)

- i. Type of Project
Freight Rail
- ii. Project Location
Western Connecticut from Derby to Danbury (Maybrook Line) and from New Milford to Massachusetts border (Berkshire Line), within the 4th and 5th Congressional Districts
- iii. Project Area
Urban and Rural
- iv. Amount of Grant Funds Sought
\$20,600,000
- v. DUNS Number
807854583
- vi. Central Contractor Registration Confirmation Number
QZX9NA

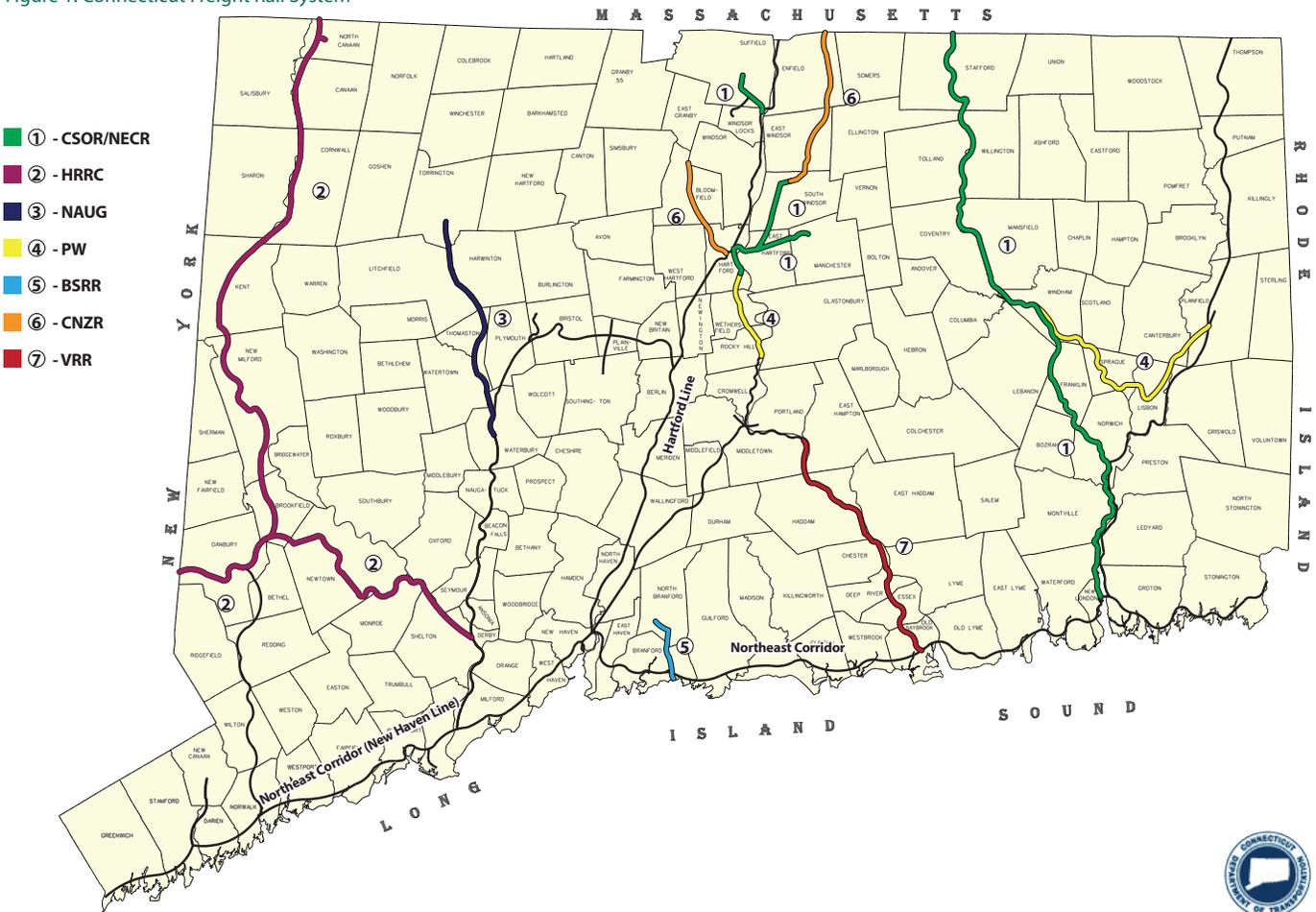
Ladies and Gentlemen of the Selection Committee:

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 Housatonic Railroad Company project, which includes the replacement of rail and ties, surfacing, bridge modifications to maintain 286,000 pound carload capacities, renew grade crossings, a new passing siding in Canaan, and improved rail access to existing customers. 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 Housatonic Railroad Company project and its specific application for the TIGER Grant funding. This project will cost \$20,600,000 and is a critical piece of the repair needed for the statewide freight rail network.

Figure 2. Housatonic Railroad Company

2-1 \$20.6m

- Tie Replacement
- Rail Replacement
- Restore Crossing Surfaces
- Bridge Rehabilitation
- Passing Siding (Canaan)
- Drainage Repairs



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).



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.

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 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 Suffield 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 upgrading and strengthening a portion of main line track in western Connecticut operated by the HRRC. 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). Priority improvements for HRRC include replacing 7.5 miles of rail at locations between Derby and Danbury; installing 9 miles of rail between Canaan and New Milford; expanding

a storage track in Canaan; renewing three railroad crossings in Canaan; renewing access to Specialty Minerals and Becton Dickenson rail users and employees; installing 92,000 new ties, restore road crossing surfaces; restoring two overhead bridges; repairing culverts and drainage systems; restoring two small overhead bridges; and rehabilitating a major rail bridge over the Housatonic River between Shelton and Derby.

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 Housatonic Railroad Company (HRRC) 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 the HRRC.

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.
- › **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 Housatonic Railroad Company.

TIGER GRANT APPLICATION SUBMISSION
TO THE
CONNECTICUT DEPARTMENT OF TRANSPORTATION
IN SUPPORT OF
HOUSATONIC RAILROAD COMPANY
HOUSATONIC RAIL REHABILITATION PROJECT

SEPTEMBER 1, 2009

OVERVIEW

The proposed project will upgrade and strengthen 62 miles of main line track in central and western Connecticut, 35 of which belongs to the State of Connecticut. The rail lines to be upgraded were lines that were ignored for many many years by predecessor railroads that chose not to continue operations in Connecticut rail. As a result maintenance and capital were deferred for as long as 40 years or in some cases longer. To preserve the rail services the lines must be updated so that they can be maintained on a normal schedule. Without substantial rehabilitation they cannot continue for the long term, and in the case of the Housatonic Railroad cannot maintain it's 286,000 lb rating, a critical competitive factor in today's market. Therefore all or nearly all of the rail traffic that is handled is considered divertible to truck or to rail reload centers located farther from the Connecticut market. The result of not performing the work is ultimately the diversion of rail traffic to the highway systems resulting in increased fuel consumption, increased highway maintenance costs and degradation of the environment. An estimate of the truck loads that would be added to the highway system and its associated increase in fuel usage is attached to this summary.

The period covering the past 12 months has been particularly difficult for railroads in Connecticut due to the collapse of the economy. For the impact analysis and car load diversion analysis a base year of 2007 was used to provide a representative year.

GENERAL DESCRIPTION: The Housatonic Rail Rehabilitation Project as proposed will complete a substantial and critical revitalization of both the state-owned, north/south rail corridor (from New Milford to the Massachusetts border) and the east/west rail corridor (from Derby to Danbury).

- It will replace 7.5 miles of rail at several locations between Derby and Danbury where rail is so severely worn that it is at the end of its serviceable life and no longer safe.
- The Project will include the installation of 9 miles of rail between Canaan and New Milford replacing some that is 133 years old (6 miles of which are already in Housatonic inventory and will be contributed to this project. Rail being provided by Housatonic was originally supplied by the State of Connecticut for infrastructure improvement primarily on the state owned portion of the railroad. The total rail contribution totals approximately 1478 tons of rail and in today's

- market has an estimated value of \$950 per ton or a total contribution value to the project of \$1,404,100.)
- It will expand a storage track in Canaan to minimize storage of rail cars in the downtown area, renew three railroad crossings in Canaan and renew access to Specialty Minerals and Becton Dickenson major rail users and employers in the region.
 - The project will provide for the installation of 92,000 new ties, restore road crossing surfaces where impacted, and improve drainage and culverts.
 - The project includes restoration of two small overhead bridges and substantial rehabilitation of a major rail bridge over the Housatonic River between Shelton and Derby.

LINE DESCRIPTION: The Berkshire Line runs south from Canaan through the towns of Falls Village, Cornwall, Kent and through New Milford to Danbury. It generally parallels Route 7 and the Housatonic River. It is the heart of the Housatonic Railroad's main line and is a key route in Connecticut for moving heavy (286,000 lb) rail cars as well as cars that are over dimension. In Danbury the line connects with the railroad's Maybrook line which runs east/west from the New York border through Danbury, Newtown, Monroe and Shelton to Derby where it connects to the state-owned Waterbury branch.

COST: The estimated cost for the entire Housatonic Rail Rehabilitation Project is \$20.6 million.

PUBLIC BENEFITS: The project will upgrade and strengthen rail infrastructure used to serve major employers in Northwest Connecticut including Specialty Minerals, Becton Dickenson, Kimberly Clark and other industries. The project will also significantly improve transportation infrastructure in Canaan by replacing crossings on Routes 7 and 44 (which would otherwise have to be funded by DOT). It will enable an existing heavy stone train that moves approximately 500,000 tons of stone per year to continue operating via the Maybrook Line. Absent this rehabilitation, this train would have to be diverted over commuter lines between New Haven and Norwalk and between Norwalk and Danbury impacting commuter operations and night rehabilitation work. Alternatively, if the stone is forced onto trucks it will add approximately 50,000 truck trips to Connecticut's roads.

Strengthening rail freight service in central and western Connecticut will support the movement of increasing tonnage by rail which has important economic and environmental implications. Not only is rail freight more fuel efficient than trucks - freight trains on average use a gallon of fuel to move a ton of freight 436 miles- but reducing truck traffic reduces road maintenance costs, traffic congestion and air emissions while enhancing road safety. These considerations are particularly important on the Route 7 corridor. Housatonic is a collector and distributor for larger national railroads and serves as an important component in the effort to reduce the number of trucks on Connecticut highways.

The project will insure continuation of Connecticut's only heavy-haul and over-dimension route into central Connecticut. Loss of this freight service would eliminate a key industrial development tool for towns along these lines and put Connecticut's passenger service easement at risk of being lost.

EMPLOYMENT BENEFITS: The Association on American Railroads, using RIMS II methodology from the U.S. Dept. of Commerce, has determined that every billion dollars in freight rail infrastructure investment creates 20,000 primary and secondary new jobs, That converts to 20 jobs for every million dollars of investment. Based on that formula it is estimated that the proposed project will create 412 new jobs.

A substantial quantity of material used in the proposed work can and will be purchased from suppliers and manufactures in Connecticut. In addition, many industries rely on the competitive supply of materials by rail including many small business that utilize the stone delivered by the stone train and larger businesses that receive or ship other products by rail. Maintaining and improving efficient rail freight services will help to protect an estimated 7,000 existing jobs in the region.

READINESS: The Housatonic Rail Rehabilitation Project is truly shovel ready. Material can and will be ordered as soon as approval is received and work will begin. In fact some materials are on hand permitting some work to begin immediately.

ATTACHEMENT

Attached to this narrative is a spreadsheet depicting long term costs and impacts that result from a failure to perform the essential work. In calculating the impacts we have taken a conservative approach. For example where it is conceivably possible for a product to move by rail to another loading/unloading sight we have assumed it would move that way. The one exception is in the waste field as traffic presently handled by rail previously moved by truck and it is appropriate that without rail access the traffic would return to truck. Assumptions regarding highway maintenance costs resulting from truck traffic are based on data utilized by the Federal Surface Transportation Board in 1998 in their analysis of the sale of Conrail to CSXT and Norfolk Southern. This submission assumes that the STB costs used in 1998 have doubled in the past 11 years. It is very likely that highway maintenance costs have increased at a rate that is higher than the one used in our calculations. However, utilizing the conservative assumptions, the cost of not performing the proposed track improvements to the public exceeds \$14 million per year and when added to the indirect costs the impact is dramatically larger.

SUPPORT

The project has received strong support from Senator Andrew Roraback, Representative Roberta Willis, The Northwest Connecticut Council of Governments and the Northwest Connecticut Economic Development Commission. All of the above have sent letters of support to Commissioner Marie and copies of their letters are available.

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HOUSATONIC RAILROAD

TIGER GRANT

LONG TERM ANNUAL IMPACT FROM NO INVESTMENT IN TRACK AND STRUCTURES

COMMODITY	ANNUAL RELOAD TONS		1 WAY TRUCK TRIPS Loaded	1 WAY TRUCK TRIPS Empty	PERCENT BACKHAUL	TRUCK MILES TOTAL	ADDED NET FUEL - GALS USED	RAIL TON MILES	ADDED HIGHWAY MAINTENANCE COST PER YEAR
		*2					*3		*1
STONE	500,000	NO	25,000	25,000	0	3,610,000	902,500	722,000,000	\$812,250.00
LUMBER	147,500	YES NJ	6,413	3,206	50%	711,806	177,951		\$116,194.00
LIMESTONE	140,000	YES	6,086	6,086	0	1,217,300	304,325		\$84,087.00
WASTE	114,751	NO	4,989	4,989	0	3,961,266	990,316	91,109,118	\$13,666,367.00
PLASTICS	42,500	YES NJ	1,847	1,847	0	436,010	109,002		\$63,100.00
TOTAL	944,751		44,335	41,128		9,936,382	2,484,094	813,109,118	\$14,741,998.00

*1 Assumes \$.30 cents per loaded mile and \$.15 cents per empty mile

*2 Assumes tonnage would move to logical rail reload facility and trucked to or from point on Housatonic Railroad.

*3 Assumes 4 miles per gal for trucking and 436 miles per ton mile for rail

*Reload traffic assumes rail fuel usage is constant.