## STATE OF NEW HAMPSHIRE SITE EVALUATION COMMITTEE

Docket No. 2015-01

In re: ) SEA-3, INC., ) Request for Exemption )

Testimony of Stephen Sawyer, Frederick Fraini and Robert Davids, Sebago Technics

For Peter Roth, Counsel for the Public, New Hampshire Department of Justice

## Please state your name, profession and business address.

My name is Stephen S. Sawyer, Jr. I am a principal at Sebago Technics in South Portland, Maine. I am a licensed professional engineer, and for the past 40 years I have specialized in Transportation Engineering.

My name is Robert Davids. I am a principal at Sebago Technics in South Portland, Maine. I am a professional track design advisor and railroad inspector. From July 1978 until June 2003 I was a Railroad Safety Inspector – Track for the U.S. Department of Transportation. Prior to that I was employed for 15 years by the Delaware and Hudson Railroad in a variety of positions.

My name is Frederick D. Fraini, Jr. I am a principal with Sebago Technics in South Portland, Maine. I am a Special Railroad Consultant. From July 2003 until April 2013 I was a Supervisory Railroad Safety Specialist with the Federal Railroad Administration. Prior to that I was employed by the U.S. Department of Transportation as an Assistant Crossing & Trespasser Regional Manager. Prior to that I was employed by the Boston & Maine Railroad Police Department.

## What is the purpose of your testimony?

We have been retained by Peter Roth, Counsel for the Public to provide an independent assessment of certain safety issues associated with the Sea-3 project and the Portsmouth Newington Industrial Track (the "Track") used by it to deliver liquefied propane gas to Sea-3's facility in Newington, New Hampshire..

## What are your qualifications for assessing safety at the facility and rail line?

Our resumes are provided as an appendix to our report. Collectively we have over 100 years of experience in evaluating safety issues associated with railroad operations and the handling of LPG in railroad facilities.

## Please explain how you evaluated safety at the facility and rail line?

As explained in greater detail in our <u>Safety Assessment – Sea 3, Inc. Expansion of Propane</u> <u>Shipments</u> report, dated September 16, 2015 (the "Report"), we reviewed a large amount of safety data about the facility, the Track and railroads in general, we visited the facility, inspected records there and consulted with Sea-3's employees. We reviewed portions of the record in this case, chiefly testimony filed by Sea 3. We inspected the Track from Rockingham Junction to the Sea-3 facility, and we visited with and inspected records at Pan Am.

## Please summarize your conclusions concerning safety of the Sea 3 facility and the rail line.

As it is presently configured and operated, the Sea 3 facility and the Track, appear generally to be in compliance with applicable safety regulations of the Federal Railroad Administration, and they appear to have a generally safe record of operation from the data we obtained. While additional facilities at Sea-3 and increased traffic on the Track may raise additional and increased safety risks, we cannot opine about those due to a lack of operating history and a clear understanding of the reconfigured project.

Of primary concern at present is that first responders in the area lack adequate training, resources and coordination to effectively respond to much more than a minor incident at the facility or on the Track. In addition, while grade crossings along the Track are , for the most part, in compliance with applicable rules, additional volumes of traffic along the Track may increase risks associated with vehicle and train encounters. Local governments are primarily responsible for ensuring safe crossings and warning systems and they may wish to consider whether additional enhanced safety systems at those crossing should be installed and operated.

## Safety Assessment – Sea 3 Inc. Expansion of Propane Shipments



Sebago Technics, Inc. September 16, 2015

## **Executive Summary**

Sebago Technics, Inc. (Sebago) was retained by Counsel for the Public, appointed pursuant to RSA 162-H:9, to conduct an independent safety assessment of Sea 3's proposal to expand its propane storage and transloading facilities at its waterfront marine terminal in Newington. This proposal is before the State's Site Evaluation Committee and this Report is aimed at providing supporting technical information to the Committee in its deliberations on this matter. The Sea 3 proposal will increase rail shipments of propane to its terminal over Railroad tracks owned by Pan Am Railways. As such this Report includes an



assessment of these facilities, as well, from Rockingham Junction in Newfields to the Sea 3 terminal in Newington, a distance of approximately 13 miles.

The scope of this Study was developed in consultation with the Counsel for the Public and includes the following tasks:

- A description and site inspection of rail segments between Rockingham Junction and Sea 3, including a review of the Federal Railroad Administration's (FRA's) accident records on reportable train accidents on these segments.
- 2. An inspection of track facilities within the Sea 3 Terminal and review of past records and inspection and maintenance of these facilities.
- 3. A review of Hazardous Materials Programs and Procedures at both the Sea 3 Terminal and along the Pan Am tracks as they relate to proposed deliveries to the Sea 3 Terminal from Rockingham Junction. In addition, a database review into LPG risk assessments by USDOT, NRC, FRA, PHMSA, and NAR.
- 4. A review of FRA's Highway Grade Crossing Inventory to determine accident history and accident prediction data, as well as a site inspection of all existing grade crossings.
- 5. A review of USEPA's Risk Management Plan database and the USCG's operating and emergency procedures records regarding the existing Terminal's operation and safety performance. A review of the Sea 3 facility improvement plans and proposals concerning potential safety issues at the facility as proposed.
- 6. Conduct meetings with emergency response staff in the following communities Dover, Newington, Portsmouth, Stratham, Greenland, and Newfield to determine their

preparedness in the event the Project moves forward and what education and/or equipment may be needed to handle potential incidents with LP gas.

This Report is organized in Sections, each addressing the six above-described tasks. A summary of our findings and recommendations resulting from this investigation follows:

- 1. The Pan Am Track servicing the Sea 3 Terminal is considered a Class 1 route with an allowable maximum speed of 10 miles per hour.
- A site inspection of the Portsmouth and Newington Industrial Tracks did not reveal any conditions which would render them out of compliance with the requirements for Class 1 track under the Federal Track Safety Standards. There was evidence of recent significant track facilities improvements, i.e. new crossties and ballast; and the rails themselves had been inspected by an independent agency in 2014 and 2015.
- 3. Pan Am's Bridge Management Records revealed that inspections were being conducted annually, and that underwater inspections had been performed within the past three years. No structural deficiencies were noted.
- 4. A review of the train accident records for the Portsmouth and Newington Industrial Tracks from 1999 through 2014 indicated that there had not been a reportable train accident on these two rail lines in the last fifteen years.
- 5. A site inspection of the railroad tracks within the Sea 3 Terminal was made and did not reveal anything out of compliance with Class 1 railroad safety standards. There was evidence of recent maintenance work on these tracks, but no official inspection records were available. As such, it is our recommendation that Sea 3 initiate a formal annual rail inspection program.
- 6. Meetings were conducted on August 18, 2015 with Pan Am Railway officials, and, on September 3, 2015, with SEA-3 officials to review their Hazard Materials Programs and Procedures. As a result of those meetings, it appears that both entities were in compliance with the USDOT Hazardous Materials Regulations.
- Pan Am Railways provided us their New England LPG Distribution Map, which indicates that there are a total of 30 rail distribution points, including Sea 3, in Maine, New Hampshire, Vermont and Massachusetts presently.
- 8. Several national databases were researched for information regarding the potential risks associated with the transport of LPG gas via rail. We found that nationally in 2015 there were twenty-one LPG incidents involving rail transportation with twenty of those classified as non-accident releases (NAR's), and, one as a result of a derailment. In New Hampshire there have been no rail LPG HazMat incidents between 2010 and 2015. Pan Am Railways has had two NAR's involving LPG one in 2008 in MA and the other in 2010

in ME. Both incidents were attributed to the shipper preparation and no injuries were recorded with either incident.

- 9. A site inspection of all public highway-rail grade crossings was performed along the Portsmouth Industrial Branch and the Newington Industrial Branch lines and all appeared to be in compliance with Federal Highway regulations.
- 10. A review of Sea's Risk Management Plan revealed that the facility appears to be in compliance with all current EPA regulations.
- 11. Meetings with local area emergency response staff revealed that additional training specific to an LPG incident, including coordination among responders, the railroad and the facility, is necessary, as there is limited knowledge with regard to this type of incident in the area presently.

Sebago's staff that performed this Study were Fred D. Fraini, Jr., Robert Davids, and Stephen Sawyer, Jr. Messrs. Fraini and Davids were the primary investigators and Study authors, with Mr. Sawyer providing final report editing. Resumes of all three individuals are contained in Appendix I at the rear of this Report.

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## Section 1 - Pan Am Railroad Track - Rockingham Junction to Sea 3

## 1.1 Description of the Infrastructure

Rail freight service to the Sea-3 facility is provided by Pan Am Railway. Access is via a railroad line beginning at Rockingham Junction, a railroad connection located in the Town of Newfields, New Hampshire. Rockingham Junction is the connection to Pan Am's Freight Main Line, the principal route between Portland, Maine and the Greater Boston area. The Freight Main Line is also the route of the Amtrak Downeaster passenger train.

From Rockingham Junction, a secondary line named the Portsmouth Industrial Track continues 10 miles to the City of Portsmouth, New Hampshire. In Portsmouth, a small freight yard used for storage and switching of freight cars connects the Portsmouth Industrial Track with the Newington Industrial Track. The Newington Industrial Track extends 3 miles to and beyond the Sea-3 facility.

See Figure 1 – Study Area on the following page.

There is no train control signal system in place on the Portsmouth and Newington Industrial Tracks. Train operations are controlled as described in the following section.

## **1.2 Railroad Operations**

Pan Am Railway is a member of the Northeast Operating Rules Advisory Committee (NORAC), an organization comprised of numerous railroads. NORAC provides written rules, which govern how operations of trains and other on-track equipment are conducted on member railroads.

Train occupancy and operation on the Portsmouth Industrial Track is authorized verbally by a train dispatcher located at Pan Am Railway headquarters in North Billerica, Massachusetts. NORAC operating rules specify how the communications between train crews and dispatchers are conducted and recorded. These operating rules are designed to provide protection from train collisions or unauthorized operations on lines such as the Portsmouth Industrial Track.

Trains operate in Portsmouth Yard and on the Newington Industrial Track under the requirement that the train be able to stop within one half of the range of vision.

Other on-track equipment such as hi-rail vehicles and maintenance machinery occupy and move on these industrial tracks under the same rules and procedures as trains.

The maximum authorized speed for trains and other on-track equipment on the Portsmouth and Newington Industrial Tracks is 10 miles per hour.

A train entering Rockingham Junction (CPF 256) from the Portsmouth Industrial Track does not directly enter the single track of the Freight Main Line. That train, after receiving authorization, passes over a crossover which connects the Freight Main Line to a controlled siding. The train enters the controlled siding which is parallel to and east of the Freight Main Line. The controlled

## Legend

Pan Am Freight Main Line (Amtrak Downeaster Route) Pan Am Newington Industrial Track Pan Am Portsmouth Industrial Track Approximate 1 mile offset

Sprague Terminal

Greenland

Newington

Portsmouth Regional Hospital

Rockingham Jct.

Great Bay Discovery Center

Newfields

Squamscot Trestle

Stratham



**Scale** 1 Inch = 6/10 Mile



siding extends approximately two miles westward to CPF 258, where a turnout connects it to the Freight Main Line.

The Freight Main Line carries five westbound and five eastbound Amtrak Downeaster passenger trains each day. Annual ridership on this service is approximately 500,000 passengers. These trains operate at up to 79 miles per hour. Pan Am Railways operates approximately four to six freight trains on this same route daily. Pan Am's trains operate at up to 40 miles per hour.

Sea-3 has proposed expanding its facility to be able to connect 16 tank cars at one time. Sea-3 anticipates having Pan Am Railways continue to deliver and place tank cars once per day. If the maximum of 16 tank cars were delivered in one day, it would not necessarily increase the frequency of one daily round trip between Rockingham Junction and Sea-3. However, there is nothing to prohibit the Railroad from making additional trips to Sea-3 with fewer tank cars per trip if there was reason to do so.

## 1.3 Track Maintenance and Safety

The track owner, in this case the Boston and Maine Railroad, owned by Pan Am Railways, is responsible for the inspection, maintenance and safety of its tracks.

The United States Department of Transportation, Federal Railroad Administration has promulgated rules which address track inspection, maintenance and safety. Those rules, contained in 49CFRPart 213, are known as the Federal Track Safety Standards.

There are nine classes of track contained in the Federal Track Safety Standards. Track is classified according to the maximum operating speeds of trains set by the track owner. Each track class has specific conditional and inspection requirements addressed in the Federal Track Safety Standards.

The maximum authorized speed of freight trains operating on the Portsmouth and Newington Industrial Tracks is 10 miles per hour. That maximum speed puts those rail lines in Class 1 of the Track Safety Standards. Passenger trains are not operated on these lines presently.

The Track Safety Standards also require the track owner to conduct regular inspections of all tracks on which trains operate. Those inspections must be conducted by individuals who meet minimum requirements for experience/education and who have been designated as qualified by the track owner.

The Track Safety Standards also specify the minimum frequency of the track inspections. Class 1 main tracks must be inspected at least weekly, or before being used if train frequency is less than weekly. Tracks other than main tracks and sidings, such as yard tracks, must be inspected monthly. Also, "in the event of fire, flood, severe storm or other occurrence which might have damaged track structure, a special inspection shall be made of the track involved as soon as possible after the occurrence and, if possible, before the operation of any train over that track".

The Federal Railroad Administration employs Track Safety Inspectors who monitor the track owner's compliance with the Track Safety Standards. The Track Safety Inspector conducts

compliance inspections of track within his or her assigned territory to determine if the track owner's inspections identify conditions which do not comply with the Standards. The Track Safety Inspector also determines whether the track owner is taking proper remedial action for any conditions which do not comply with the Standards. The Track Safety Inspector also reviews the inspection records maintained by the track owner to determine if the inspections are being made and recorded as required and that defects recorded by the track inspector are receiving remedial action.

The New Hampshire Department of Transportation also employs a Track Safety Inspector who has been certified by the Federal Railroad Administration. That inspector has the same authority to enforce the Track Safety Standards as federal inspectors.

## 1.4 Bridge Safety

The Federal Railroad Administration has promulgated rules which address the safety of railroad bridges. Those rules are contained in 49CFR Part 237.

Those rules require track owners to have a bridge management program which addresses the safe use, inspection, maintenance, modification and oversight of railroad bridges.

Track owners must designate qualified bridge engineers, bridge inspectors and bridge supervisors. Track owners must also determine the safe load carrying capacity of each of its railroad bridges.

Railroad bridges must be inspected at least once in each calendar year. A railroad bridge must be inspected more frequently if a railroad bridge engineer determines that it is necessary, based on data from previous inspections, etc. Bridges must also be inspected after an occurrence which might have affected the ability of the bridge to function safely - such as a storm, flood, fire, impact from a vehicle or boat, etc.

Track owners must keep a record of each bridge inspection performed.

## 1.5 Reportable Train Accidents on the Portsmouth and Newington Industrial Tracks

The Federal Railroad Administration requires railroads to submit reports of train accidents which exceed a specific threshold for damages in dollars. That threshold currently is \$10,500 in damage to rolling stock (cars and locomotives) and track. That threshold has increased over years due to inflation.

A review of the train accident records for the Portsmouth and Newington Industrial Tracks from 1999 through 2014 indicated that there had not been a reportable train accident during this fifteen year period.

For context, the FRA Office of Safety Analysis publishes reportable train accident data for all of NH and Figures 2 and 3 provide this information for all NH trackage (2000 through 2014) and for just mainline trackage (2000 through 2014).

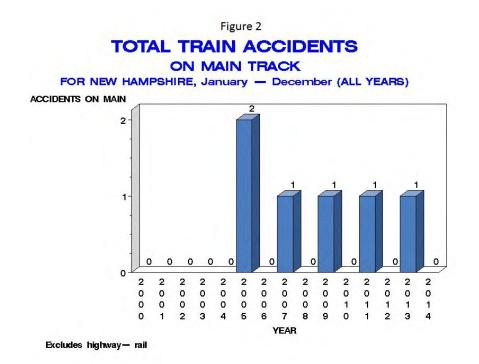
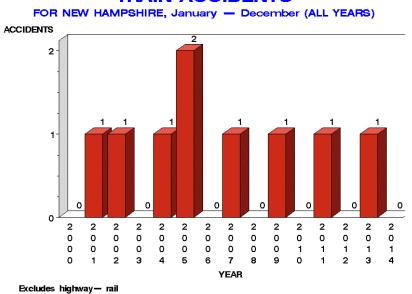


Figure 3



## TRAIN ACCIDENTS

September 15, 2015

## 1.6 Inspection of the Portsmouth and Newington Industrial Tracks

An inspection of the Portsmouth Industrial Track, the main track through Portsmouth Yard and the Newington Industrial Track up to the Sea-3 facility was conducted on September 4, 2015. That inspection was performed by Robert Davids, a Sebago Technics employee with over 50 years of experience in railroad engineering, safety and inspection.

The September 4 inspection was performed using a hi-rail vehicle and was accompanied by three representatives of the Engineering Department of Pan Am Railways. The inspection did not reveal any conditions which did not comply with the requirements for Class 1 track under the Federal Track Safety Standards.

The inspection found that there had been significant recent track work performed on the routes inspected. The Pan Am Railways representatives shared data on the work performed. During the 2014 work season, 3,794 crossties were replaced with new crossties, 105 pieces of switch timber were replaced and 2,975 tons of stone ballast was applied to the track. The entire route was resurfaced with a tamper/liner, with some areas receiving more than one pass of the tamper/liner.

In 2014, Sperry Rail Service, a rail inspection contractor, performed two inspections of the rail on these routes, marking any rail which contained a defect. In 2015, the rail was again inspected by Sperry Rail Service.

The September 4 inspection found that additional track work would be necessary to bring track conditions into compliance with a track class higher than Class 1. At a minimum, additional crosstie renewals, rail joint maintenance and track geometry (track gauge, surface and alignment) improvements would be required. The scope of this study did not include quantifying the extent of upgrades needed to meet FRA Class 2 track.

### 1.7 Pan Am Inspection Records

Track owner inspection records for the Portsmouth Industrial Track, the Newington Industrial Track and Portsmouth Yard for 2015 were examined. Those inspection records indicated that the Pan Am inspector was identifying and recording both noncomplying conditions as well as other conditions of concern. The records also indicated that proper remedial action had been taken on those items.

### 1.8 Pan Am's Bridge Management Program

Pan Am Railways bridge inspection force is conducting annual inspections of the railroad bridges on the route from Rockingham Junction to Sea-3. Underwater inspections have been performed within the past three years.

The bridge inspections have not revealed any significant structural deficiencies. Items identified by the inspections have been corrected through routine maintenance. There have been no bridges found to need inspections more frequently than once a year.

## **1.9 Environmental Concerns**

A concern has been raised regarding leakage of petroleum products such as fuel or lubricants from trains operating on these routes.

During the inspection, it was noted that Pan Am Railways has installed fabric designed to contain any leakage where locomotives are parked in Portsmouth and at Rockingham Junction. At the time of the September 4 inspection, a locomotive was seen stationary in Portsmouth and it was parked over that fabric.

Mr. Davids looked for evidence of leakage of petroleum as he conducted on-ground inspections of the track and did not find any. We have no way of quantifying the amount of petroleum, which may escape during train operations, or in the event of a derailment or other incident.

## Section 2 – Railroad Track within the Sea 3 Terminal

## 2.1 On-Site Track Inspection

On September 3, 2015, Mr. Davids conducted a walking inspection of the track facilities owned and maintained by Sea-3. During that inspection, Mr. Davids did not find any items which did not comply with Class 1 under the Federal Track Safety Standards.

In response to a request for records of track maintenance, a representative of Sea-3 provided documentation of track maintenance that was performed in 2015. A track contractor installed 90 new crossties, gauged the track and performed track surfacing as necessary.

## 2.2 Recommendations

The representatives of Sea-3 provided documentation of recent maintenance work on the tracks owned by Sea-3, but no records of inspection of those tracks were available.

Although the Federal Track Standards do not specifically require periodic inspection of private industry track, inspections by a qualified inspector will enhance the safe use of those tracks.

It is recommended that Sea-3 arrange for inspection of the track facilities that it owns, on a frequency of at least once per year, and document these findings.

# Section 3 – Review of Hazardous Materials Programs and Procedures and LPG Risk Assessment Research

## 3.1 Overview

The United States Department of Transportation's (USDOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) is the primary source of statistical data record keeping, promulgation of regulations, enforcement activities, investigations, and regulatory compliance in the implementation of the Federal Hazardous Material Law.

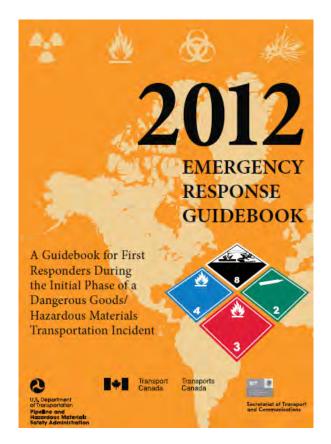
Within the USDOT, implementation of the HazMat law is coordinated through PHMSA and by inspectors trained and certified from each of the transportation modes (rail, water, highway, and air) within their area of expertise and familiarity. The modes work to achieve consistency, equity, and fairness in their enforcement activities with the goal of improved safety in the transportation of hazardous materials.

Any release of a hazardous material is required to be reported to the National Response Center (NRC) immediately or in lessor circumstances by written reports. The NRC is staffed by the United States Coast Guard (USCG) who are part of the Department of Homeland Security. The NRC generated reports are shared by all modes of transportation where upon notification investigations into the causes can be initiated.

SEA-3 and Pan Am Railways hazardous material compliance programs were directly overseen (2003-2013) by Sebago employee Mr. Fraini while employed by the USDOT Federal Railroad Administration as a Supervisory Railroad Safety Specialist of Hazardous Materials within FRA's Region 1. This oversight encompassed reviewing detailed field inspection reports, facility site inspections, training with both the rail carrier and the fixed SEA-3 facility, and, assisting in all HM rail compliance matters throughout the ten year period. This relationship with both rail carrier and shipper proves invaluable in our review of their compliance programs.

Meetings were conducted on August 18, 2015 with Pan Am Railway officials, and, on September 3, 2015, with SEA-3 officials. As a result of those meetings, it was determined that little had changed with their HazMat compliance programs, and they both appear to be in compliance with the USDOT Hazardous Materials Regulations.

3.2 Response to a Railroad Derailment



## ERG2012 USER'S GUIDE

The 2012 Emergency Response Guidebook (ERG2012) was developed jointly by Transport Canada (TC), the U.S. Department of Transportation (DOT), the Secretariat of Transport and Communications of Mexico (SCT) and with the collaboration of CIQUIME (Centro de Información Química para Emergencias) of Argentina, for use by fire fighters, police, and other emergency services personnel who may be the first to arrive at the scene of a transportation incident involving dangerous goods. It is primarily a guide to aid first responders in quickly identifying the specific or generic hazards of the material(s) involved in the incident, and protecting themselves and the general public during the initial response phase of the incident. For the purposes of this guidebook, the "initial response phase" is that period following arrival at the scene of an incident during which the presence and/or identification of dangerous goods is confirmed, protective actions and area securement are initiated, and assistance of qualified personnel is requested. It is not intended to provide information on the physical or chemical properties of dangerous goods.

This guidebook will assist responders in making initial decisions upon arriving at the scene of a dangerous goods incident. It should not be considered as a substitute for emergency response training, knowledge or sound judgment. ERG2012 does not address all possible circumstances that may be associated with a dangerous goods incident. It is primarily designed for use at a dangerous goods incident occurring on a highway or railroad. Be mindful that there may be limited value in its application at fixed facility locations.

In the event of a railroad derailment involving hazardous material tank cars, the initial response by first responders would be to first consult the United States Department of Transportation's Emergency Response Guide (ERG), which is specifically "designed for use at a dangerous goods incident occurring on a highway or railroad."

As an example, the initial responder (Fire Chief) would have to determine what the train's makeup was or in railroad terms what was in the train's "consist". The federal regulations require the train crew to be in possession of the train's manifest of hazardous materials, and, where those hazardous are located within their train.

Simultaneously, first responders would be evaluating the dangers to the public and determining whether an evacauation is warrented and any other immediate assistance that may be required. An important part of this process is in cooperation with the railroad who may be asked to move damaged cars out of harms way in order to present a safer environment in the mitigation process. Contact may be initiated with the shipper of the product who can offer specifics on what actions should be taken to safeguard the public and the first responders.

After examining the shipping papers, the fire chief would determine what the proper shipping name, UN ID number, and emergency telephone number for the shipper of the tank car are, and, consult the ERG.

In this example using the guide for LPG or ERG Guide 115, gives detailed information concerning the hazards, (fire vs large spill), public safety information, potential hazards, protective clothing, and, evacuation limits.

The fire chief would after initial response, determine if an Incident Command (IC) requires activation, (usually in large events), where many other experts are employed to assist the Incident Commander.

Once the immediate danger (fire or major leak) is contained, the railroad will commence the rerailing operation usually non-stop until the rail cars and track are restored.

The railroad typically handles the derailment of cars loaded with hazardous materials in the following way. This procedure would be appropriate if the derailment were to occur on the Squamscot Trestle or in other areas where access by land adjacent to the railroad is not an option.

Tanks cars loaded with LPG are heavy and difficult to lift with on-track rerailing cranes. Typically, a railroad will remove all cars which did not derail and bring empty LPG cars to the site of the incident. Placing that car or cars as close as possible to the derailed car(s), piping and portable pumps will be used to transfer the LPG from the derailed equipment to the cars on track.

Once as much LPG as can be transferred from the derailed car(s) as possible has been accomplished, the derailed car(s) can be lifted using on-track cranes of up to 250 tons capacity.

In areas where ground conditions adjacent to the track allow use of crawler equipment, side boom equipped crawler tractors can be used to lift and move tank cars. Pan Am Railways has maintained such equipment at its East Deerfield, Massachusetts yard. There are also railroad response specialty companies located around the United State which are equipped to handle derailments of LPG cars.

### 3.3 Response to Non Accident Releases (NAR's)



## **Definition of a NAR**

"The unintentional release of a hazardous material while in transportation, including loading and unloading while in railroad possession, that is not caused by a derailment, collision or other rail related accident. NARs consist of leaks, splashes, and other releases from improperly secured or defective valves, fittings, and tank shells, and also include venting of non-atmospheric gases from safety relief devices."

Atmospheric gases: air, nitrogen, oxygen, argon, krypton, neon, xenon

Non Accident Releases (NAR's) of hazardous materials while in rail transportation continue to be the largest source of hazardous material releases in the rail mode nationally. The Federal Railroad Administration closely monitors those reported releases through National Response Center (NRC) reports and reviewing all USDOT 5800.1 reports filed with the Pipeline and Hazardous Materials Safety Administration (PHMSA).

Between 1999(419) and 2013 (265), there was a 60% decline in NAR's primarily due to focused efforts by government regulators, railroads, and, industry combined.

In FRA Region 1, Mr. Fraini initiated a "zero tolerance" policy for his inspection force that required a thorough investigation of the cause of all non-accident releases, and, the submission of a violation report against the shipper for a failure to properly prepare the rail car before offering it into transportation if warranted and legally sufficient.

The zero tolerance policy was very successful in the reduction of NAR's within the region, and, statistically proved to improve transportation safety. FRA Region 1 has the lowest NAR rate in the nation which can be directly attributed to focused enforcement, quality field investigations, and, the violation process.

The first responder community, elected officials, rail carriers, and, the general public can enhance the safe movement of these rail tank cars by insisting that FRA investigate and prosecute all NAR's that happen while they are in transportation. FRA Region 1 has a toll free telephone number (800) RAIL 991 to report problems or make inquiries.

As LPG shipments increase on the Portsmouth and Newington industrial rail lines in New Hampshire, NAR's will most likely follow as the primary risk while in transportation. Pan Am Railways has emergency response contractors on-call listed on their web-site that respond to NAR's incidents.

<b>Emergency Response Contractors</b>	Office Phone #	Other Phone #
Central & East: ENPRO	(800)-966-1102	(888)795-1400
West: W.MASS ENV	(866)-662-2622	(413)315-0657

The rail carrier also notifies the shipper via the emergency response telephone number listed on the shipping paper (bill of lading/waybill) required by 49 CFR 172.600. The emergency response telephone number on the shipping paper is one of the most valuable tools available to the first responders. The shipper possess the most knowledge and responsibility concerning the product and can offer the best ways in which to mitigate a release. In some cases they will travel to the scene to assist in mitigation efforts.

In the two NAR's involving LPG on Pan Am Railways lines in Deerfield, Massachusetts and Auburn, Maine, in 2008 and 2010 respectively, the primary cause was due to loose closures of valves that are required by federal regulation to be "tool tight" before transportation.

The Deerfield, Massachusetts incident reported that the release was discovered by a Federal Railroad Administration HazMat Inspector during a routine field visit. The response was mitigated by coordinating with the first responders and the shipper/consignee to stop the release.

### PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE

 Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

### Describe:

While doing a routine inspection in the East Deerfield Yard, an FRA Inspector found that tank car (AMOX 033763)was leaking vapors from the vapor valve and notified Pan Am Railways. Pam Am railways responded by cordoningoff the tank car to prevent possible ignition, contacted the Deerfield Fire Department and a technician from AmeriGas. The fire department as well as the Ameri Gas technician responded to the incident. The technician was able totighten the valve and stopped the leak.

### PART III - PACKAGING INFORMATION

24. Check Packaging Type (check only one - if more than one, list type of packaging, copy Part III, and complete for each type: Tank Car

25. See instructions and enter the appropriate failure codes found at the end of the instructions. Be sure to enter the codes from the list that corresponds to the particular packaging type checked above. Enter the number of codes as appropriate to describe the incident.

Enter the most important failure point in line 1. If there are more than two failure points, provide in this format in part VI. What Failed: 158 - Vapor Valve How Failed: 308 - Leaked Causes of Failure: 526 - Loose Closure, Component, or Device

26a. Provide the packaging identification markings, if available.

Identification Markings: AMOX 033763, DOT112J340W (Examples: 1A1/Y1.4/150/92/USA/RB/93/RL, UN31H1/Y0493/USA/M9339/10800/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)

The Auburn, Maine incident reported that the HazMat response team from the local area mitigated the response by climbing onto the tank car, discovering the source of the leak, and, closing the valve. The release was discovered by a rail employee while inspecting his train, and, mitigated by the HazMat reponse team that were familiar with rail tank cars. This incident and the effective mitigation is directly a result of hands-on training with rail tank cars by responders.

### PART III - PACKAGING INFORMATION

24. Check Packaging Type (check only one - if more than one, list type of packaging, copy Part III, and complete for each type:

Tank Car

25. See instructions and enter the appropriate failure codes found at the end of the instructions. Be sure to enter the codes from the list that corresponds to the particular packaging type checked above. Enter the number of codes as appropriate to describe the incident.

Enter the most important failure point in line 1. If there are more than two failure points, provide in this format in part VI. What Failed: 127 - Inlet (Loading) Valve

What Failed: 127 - Inlet (Loading) Valve How Failed: 308 - Leaked

Causes of Failure: 515 - Human Error

#### 26a. Provide the packaging identification markings, if available. Identification Markings: DOT112J340W

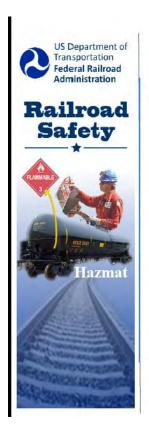
(Examples: 1A1/Y1.4/150/92/USA/RB/93/RL, UN31H1/Y0493/USA/M9339/10800/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)

### **PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE**

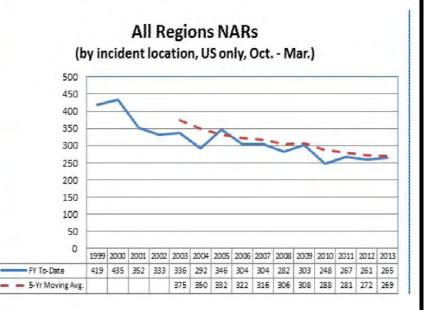
 Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

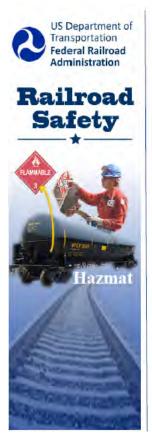
#### Describe:

In the process of walking an inspecting of the train the Conductor noticed a odor of gas and heard a hissing sound. The Conductor notified Pan Am Railways Operations and Local Emergency Responders were notified and arrived at the location. When the local hazmat team inspected the tank car they that a valve was not seated and were leaking vapor gas. The hazmat team tighten the valve and the leak was contained.







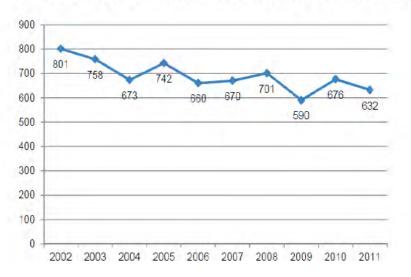


# **NAR Inspections**

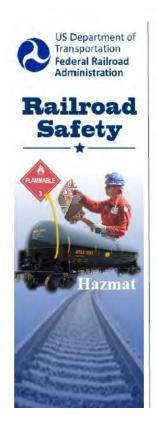
- Regional Specialists receive reports of NARs that originated or occurred in their region.
- Regional Specialists communicate with other affected regions and prioritize and assign responsibility for investigation, as appropriate given resources and circumstances.
- Facilities with recurrent NARs may be subject to more frequent inspections.



# **Historical Overview**

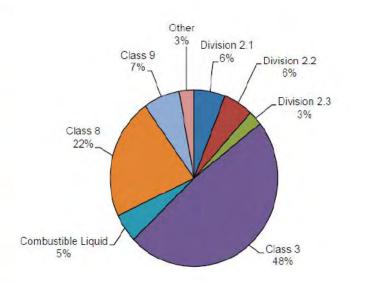


Number of Tank Car Non-Accident Releases, U.S. and Canada: 2002-20'



## **Hazard Class**

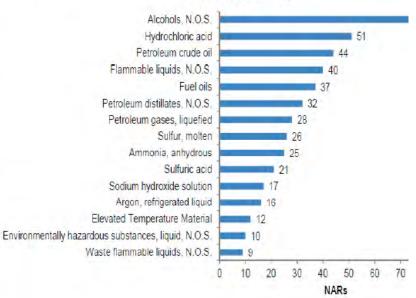
Tank Car Non-Accident Releases by Hazard Class, U.S. and Canada: 2



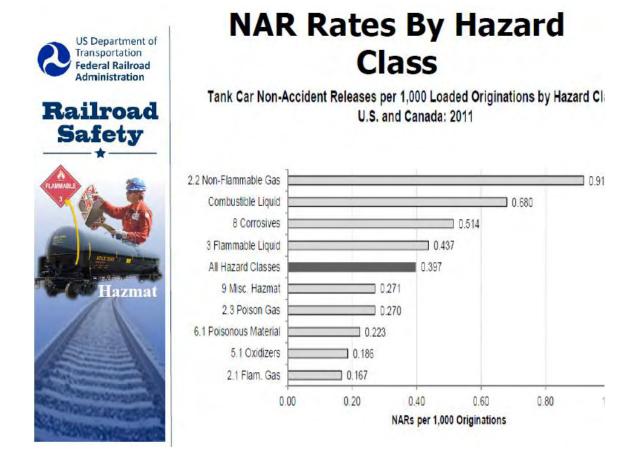


Commodity

Top 15 Commodities Involved in Tank Car Non-Accident Release: U.S. and Canada: 2011



September 15, 2015



## U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Hazardous Material Safety Incident Detail Report Total Incidents: 21

Incident Number	Date	Inciden t Street Address	City	Stat e	Mode Of Transportatio n	Transportatio n Phase	Carrier
<u>E-</u> <u>201502035</u> <u>2</u>	2/12/201 5	705 N. Henry Ford Ave.	WILMINGTO N	СА	FRA-RALWAY	IN TRANSIT	PACIFIC HARBOR LINE, INC.
<u>I-</u> 201501039 1	1/9/2015	MP226	PADUCAH	KY	FRA-RAILWAY	IN TRANSIT STORAGE	PADUCAH & LOUISVILLE RAILWAY, INC.
<u>X-</u> <u>201501021</u> <u>4</u>	1/3/2015	Unknown	Roseville	СА	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> 201501022 1	1/14/201 5	Unknown	Bellevue	ОН	FRA-RAILWAY	IN TRANSIT	NORFOLK SOUTHERN RAILWAY COMPANY

September 15, 2015

<u>X-</u> <u>201501022</u> <u>4</u>	1/20/201 5	Unknown	Lancaster	PA	FRA-RAILWAY	IN TRANSIT	NORFOLK SOUTHERN RAILWAY COMPANY
<u>X-</u> 201502005 <u>4</u>	1/4/2015	Unknown	Roseville	СА	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> 201502006 <u>4</u>	2/3/2015	Unknown	Camden	NJ	FRA-RAILWAY	IN TRANSIT	CONSOLIDATED RAIL CORPORATION
<u>X-</u> 201502012 5	1/21/201 5	Unknown	Baytown	ТХ	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> <u>201503010</u> <u>2</u>	2/12/201 5	Unknown	Lakeland	FL	FRA-RAILWAY	IN TRANSIT	CSX TRANSPORTATION , INC.
<u>X-</u> <u>201503010</u> <u>8</u>	2/7/2015	Unknown	Bloomington	СА	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> 201503010 9	2/8/2015	Unknown	Roseville	CA	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> 201503011 0	2/8/2015	Unknown	Bloomington	CA	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> 201503011 1	2/10/201 5	Unknown	Portland	OR	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> 201503012 2	2/10/201 5	Unknown	Bloomington	СА	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> <u>201503025</u> <u>9</u>	3/22/201 5	Unknown	Mingo Junction	ОН	FRA-RAILWAY	IN TRANSIT	NORFOLK SOUTHERN RAILWAY COMPANY
<u>X-</u> <u>201503030</u> <u>2</u>	2/20/201 5	Mile Post 7.91, Navasota	SPRING	ТХ	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> <u>201504006</u> <u>8</u>	4/1/2015	Unknown	Walbridge	ОН	FRA-RAILWAY	IN TRANSIT	CSX TRANSPORTATION , INC.
<u>X-</u> <u>201505004</u> <u>9</u>	4/30/201 5	Unknown	Lancaster	PA	FRA-RAILWAY	IN TRANSIT	NORFOLK SOUTHERN RAILWAY COMPANY
<u>X-</u> 201505007 5	4/21/201 5	Unknown	Memphis	TN	FRA-RAILWAY	IN TRANSIT	ILLINOIS CENTRAL RAILROAD COMPANY
<u>X-</u> 201506009 9	5/22/201 5	Unknown	Roseville	СА	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC
<u>X-</u> 201506010 1	5/25/201 5	Unknown	Pine Bluff	AR	FRA-RAILWAY	IN TRANSIT	UNION PACIFIC RAILROAD COMPANY INC

Source: Hazmat Intelligence Portal, U.S. Department of Transportation. Data as of 9/15/2015.

## 3.4 Examples of LPG Container Rail Cars

Appendix F contains examples of rail car types configured for the shipment of LPG.

## 3.5 Pan Am Railways LPG Distribution Network in New England

Pan Am Railways provided their "New England LPG Distribution Network" map which allows a pictorial overview of the number of LPG shippers/consignees in the Northeast. There currently are over thirty rail distribution points, including SEA-3, within Maine, New Hampshire, Vermont, and, Massachusetts. A copy of this map is included in Appendix E of this document. LPG rail traffic is expected to expand as markets change.

## 3.6 Government Database Research

The research into PHMSA's HazMat Intelligence Portal (HIP) concerning hazmat incidents provided statistical data associated with all modes of transportation. There have been no rail LPG HazMat incidents in New Hampshire during the period 2010 – 2015. Nationally in 2015 there were twenty-one LPG incidents involving rail transportation with twenty of those classified as NAR's, and, one as a result of a derailment.

Pan Am Railways reported two NAR's involving LPG on their lines (Deerfield, MA in 2008 and Auburn, ME in 2010). Both reported incidents were the result of loose closures and poor shipment preparation by the shipper. There were no injuries as a result of those incidents. Copies of these incident reports are contained in Appendix G of this Report.

PHMSA ranks injuries from rail HM transportation in the following table with 62.50% attributed to Ammonia and Chlorine. No injuries in the transportation of LPG by rail.

Rank	Commodity Name	nmodity Name Hazard Class			
1	AQUA AMMONIA	CORROSIVE MATERIAL	3	37.50%	
2	CHLORINE	POISONOUS GAS	2	25.00%	
3	ALCOHOLS, N.O.S.	FLAMMABLE - COMBUSTIBLE LIQUID	1	12.50%	
3	OTHER REGULATED SUBSTANCES, LIQUID, N.O.S.	MISCELLANEOUS HAZARDOUS MATERIAL	1	12.50%	
3	PETROLEUM CRUDE OIL	FLAMMABLE - COMBUSTIBLE LIQUID	1	12.50%	

#### U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Hazardous Material Safety 2015 FRA-RAILWAY Commodity Summary by All Injuries

In the following table of "Commodity Summary by Damages" LPG is ranked 10th or .07% of total damages.

## U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Hazardous Material Safety

2015 FRA-RAILWAY Commodity Summary by Damages

Rank	Commodity Name	Hazard Class	Total Damages	%
1	PETROLEUM CRUDE OIL	FLAMMABLE - COMBUSTIBLE LIQUID	\$29,776,120	92.15%
2	SODIUM HYDROXIDE, SOLUTION	CORROSIVE MATERIAL	\$856,592	2.65%
3	HYDROCHLORIC ACID	CORROSIVE MATERIAL	\$853,119	2.64%
4	DICYCLOPENTADIENE	FLAMMABLE - COMBUSTIBLE LIQUID	\$139,976	0.43%
5	N,N-DIMETHYLFORMAMIDE	FLAMMABLE - COMBUSTIBLE LIQUID	\$126,000	0.39%
6	ALCOHOLS, N.O.S.	FLAMMABLE - COMBUSTIBLE LIQUID	\$53,334	0.17%
7	GASOLINE INCLUDES GASOLINE MIXED WITH ETHYL ALCOHOL, WITH NOT MORE THAN 10% ALCOHOL	FLAMMABLE - COMBUSTIBLE LIQUID	\$47,924	0.15%
8	DIESEL FUEL	FLAMMABLE - COMBUSTIBLE LIQUID	\$27,654	0.09%
9	PAINT INCLUDING PAINT, LACQUER, ENAMEL, STAIN, SHELLAC SOLUTIONS, VARNISH, POLISH, LIQUID FILLER AND LIQUID LACQUER BASE	FLAMMABLE - COMBUSTIBLE LIQUID	\$26,396	0.08%
<mark>10</mark>	PETROLEUM GASES, LIQUEFIED OR LIQUEFIED PETROLEUM GAS	FLAMMABLE GAS	<mark>\$22,880</mark>	<mark>0.07%</mark>
11	PROPYLENE	FLAMMABLE GAS	\$21,290	0.07%
12	AMMONIUM NITRATE, WITH NOT MORE THAN 0.2% OF COMBUSTIBLE MATERIALS, INCLUDING ANY ORGANIC SUBSTANCE CALCULATED AS CARBON TO THE EXCLUSION OF ANY OTHER ADDED SUBSTANCE	OXIDIZER	\$21,000	0.06%
13	ELEVATED TEMPERATURE LIQUID, N.O.S., AT OR ABOVE 100 C AND BELOW ITS FLASH POINT (INCLUDING MOLTEN METALS, MOLTEN SALTS, ETC.)	MISCELLANEOUS HAZARDOUS MATERIAL	\$20,450	0.06%
14	FLAMMABLE LIQUIDS, N.O.S.	FLAMMABLE - COMBUSTIBLE LIQUID	\$16,971	0.05%
15	N-PROPANOL OR PROPYL ALCOHOL, NORMAL	FLAMMABLE - COMBUSTIBLE LIQUID	\$16,070	0.05%
16	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	CORROSIVE MATERIAL	\$14,885	0.05%
17	MONOETHANOLAMINE	CORROSIVE MATERIAL	\$14,600	0.05%
18	SULFURIC ACID WITH MORE THAN 51 PERCENT ACID	CORROSIVE MATERIAL	\$13,586	0.04%
19	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.	MISCELLANEOUS HAZARDOUS MATERIAL	\$13,401	0.04%
20	PETROLEUM DISTILLATES, N.O.S. OR PETROLEUM PRODUCTS, N.O.S.	FLAMMABLE - COMBUSTIBLE LIQUID	\$13,390	0.04%
21	PHOSPHORIC ACID SOLUTION	CORROSIVE MATERIAL	\$11,808	0.04%
22	DISINFECTANTS, LIQUID, CORROSIVE N.O.S.	CORROSIVE MATERIAL	\$11,800	0.04%

23	OTHER REGULATED SUBSTANCES, LIQUID, N.O.S.	MISCELLANEOUS HAZARDOUS MATERIAL	\$11,500	0.04%
23	XYLENES	FLAMMABLE - COMBUSTIBLE LIQUID	\$11,500	0.04%
25	BUTADIENES, STABILIZED OR BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED CONTAINING MORE THAN 40% BUTADIENES	FLAMMABLE GAS	\$10,300	0.03%
26	CORROSIVE LIQUIDS, N.O.S.	CORROSIVE MATERIAL	\$10,000	0.03%
26	METHYL ACRYLATE, STABILIZED	FLAMMABLE - COMBUSTIBLE LIQUID	\$10,000	0.03%
26	TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.	\$10,000	0.03%	
29	SULFUR, MOLTEN	MISCELLANEOUS HAZARDOUS MATERIAL	\$8,822	0.03%
30	ACETONE	FLAMMABLE - COMBUSTIBLE LIQUID	\$7,500	0.02%
30	PROPIONALDEHYDE	FLAMMABLE - COMBUSTIBLE LIQUID	\$7,500	0.02%
32	CORROSIVE LIQUIDS, TOXIC, N.O.S.	CORROSIVE MATERIAL	\$7,380	0.02%
33	ARGON, REFRIGERATED LIQUID (CRYOGENIC LIQUID)	\$7,192	0.02%	
34	BISULFITES, AQUEOUS SOLUTIONS, N.O.S.	CORROSIVE MATERIAL	\$7,004	0.02%
35	HAZARDOUS WASTE, SOLID, N.O.S.	MISCELLANEOUS HAZARDOUS MATERIAL	\$5,900	0.02%
36	TOLUENE	FLAMMABLE - COMBUSTIBLE LIQUID	\$5,340	0.02%
37	CHLORINE	POISONOUS GAS	\$5,000	0.02%
37	ETHYL ACRYLATE, STABILIZED	FLAMMABLE - COMBUSTIBLE LIQUID	\$5,000	0.02%
37	METHYL METHACRYLATE MONOMER, STABILIZED	FLAMMABLE - COMBUSTIBLE LIQUID	\$5,000	0.02%
40	SULFUR, MOLTEN	FLAMMABLE SOLID	\$4,878	0.02%
41	FORMIC ACID WITH NOT LESS THAN 5% BUT LESS THAN 10% ACID BY MASS	CORROSIVE MATERIAL	\$4,580	0.01%
42	OXIDIZING LIQUID, CORROSIVE, N.O.S.	OXIDIZER	\$4,200	0.01%
43	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.	MISCELLANEOUS HAZARDOUS MATERIAL	\$4,056	0.01%
44	HYDROGEN PEROXIDE, STABILIZED OR HYDROGEN PEROXIDE AQUEOUS SOLUTIONS, STABILIZED WITH MORE THAN 60 PERCENT HYDROGEN PEROXIDE	OXIDIZER	\$3,500	0.01%
44	PHOSPHOROUS ACID	CORROSIVE MATERIAL	\$3,500	0.01%
44	RESIN SOLUTION, FLAMMABLE	FLAMMABLE - COMBUSTIBLE LIQUID	\$3,500	0.01%
47	PAINT RELATED MATERIAL INCLUDING PAINT THINNING, DRYING, REMOVING, OR REDUCING COMPOUND	FLAMMABLE - COMBUSTIBLE LIQUID	\$2,676	0.01%
48	FUEL, AVIATION, TURBINE ENGINE	FLAMMABLE - COMBUSTIBLE LIQUID	\$2,500	0.01%
48	ISOPRENE, STABILIZED	FLAMMABLE - COMBUSTIBLE LIQUID	\$2,500	0.01%
48	METHANOL	FLAMMABLE - COMBUSTIBLE LIQUID	\$2,500	0.01%

Source: Hazmat Intelligence Portal, U.S. Department of Transportation. Data as of 9/16/2015.

In the "Commodity Summary by Incidents" LPG is ranked 3rd or 7.49%.

## U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Hazardous Material Safety

2015 FRA-RAILWAY Commodity Summary by Incidents

Rank	Commodity Name	Hazard Class	Incidents	%
1	PETROLEUM CRUDE OIL	FLAMMABLE - COMBUSTIBLE LIQUID	26	11.45%
2	ALCOHOLS, N.O.S.	FLAMMABLE - COMBUSTIBLE LIQUID	23	10.13%
<mark>3</mark>	PETROLEUM GASES, LIQUEFIED OR LIQUEFIED PETROLEUM GAS	FLAMMABLE GAS	<mark>17</mark>	<mark>7.49%</mark>
4	FLAMMABLE LIQUIDS, N.O.S.	FLAMMABLE - COMBUSTIBLE LIQUID	13	5.73%
5	HYDROCHLORIC ACID	CORROSIVE MATERIAL	11	4.85%
6	PETROLEUM DISTILLATES, N.O.S. OR PETROLEUM PRODUCTS, N.O.S.	FLAMMABLE - COMBUSTIBLE LIQUID	10	4.41%
7	ARGON, REFRIGERATED LIQUID (CRYOGENIC LIQUID)	NONFLAMMABLE COMPRESSED GAS	6	2.64%
7	GASOLINE INCLUDES GASOLINE MIXED WITH ETHYL ALCOHOL, WITH NOT MORE THAN 10% ALCOHOL	FLAMMABLE - COMBUSTIBLE LIQUID	6	2.64%
7	SULFUR, MOLTEN	MISCELLANEOUS HAZARDOUS MATERIAL	6	2.64%
10	PAINT INCLUDING PAINT, LACQUER, ENAMEL, STAIN, SHELLAC SOLUTIONS, VARNISH, POLISH, LIQUID FILLER AND LIQUID LACQUER BASE	FLAMMABLE - COMBUSTIBLE LIQUID	5	2.20%
10	SODIUM HYDROXIDE, SOLUTION	CORROSIVE MATERIAL	5	2.20%
10	SULFURIC ACID WITH MORE THAN 51 PERCENT ACID	CORROSIVE MATERIAL	5	2.20%
13	DIESEL FUEL	FLAMMABLE - COMBUSTIBLE LIQUID	4	1.76%
13	XYLENES	FLAMMABLE - COMBUSTIBLE LIQUID	4	1.76%
15	AMMONIUM NITRATE, WITH NOT MORE THAN 0.2% OF COMBUSTIBLE MATERIALS, INCLUDING ANY ORGANIC SUBSTANCE CALCULATED AS CARBON TO THE EXCLUSION OF ANY OTHER ADDED SUBSTANCE	OXIDIZER	3	1.32%
15	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	CORROSIVE MATERIAL	3	1.32%
15	CORROSIVE LIQUIDS, N.O.S.	CORROSIVE MATERIAL	3	1.32%
15	CORROSIVE LIQUIDS, TOXIC, N.O.S.	CORROSIVE MATERIAL	3	1.32%
15	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.	MISCELLANEOUS HAZARDOUS MATERIAL	3	1.32%
15	PHOSPHORIC ACID SOLUTION	CORROSIVE MATERIAL	3	1.32%
15	SULFUR, MOLTEN	FLAMMABLE SOLID	3	1.32%

# Source: Hazmat Intelligence Portal, U.S. Department of Transportation. Data as of $\frac{8}{31}$

## U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Hazardous Material Safety 2015 FRA-RAILWAY Hazmat Summary by Hazardous Materials Class

2013 FKA-KAILWAT Hazinat Summary by Hazardous Materials Class

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Hazard Division	Hazard Class	Incidents	Hospitalized	Non- Hospitalized	Fatalities	Damages
3	FLAMMABLE - COMBUSTIBLE LIQUID	123	0	2	0	\$30,318,825
8	CORROSIVE MATERIAL	45	2	1	0	\$1,015,747
<mark>2.1</mark>	FLAMMABLE GAS	<mark>21</mark>	0	0	O	<mark>\$54,470</mark>
9	MISCELLANEOUS HAZARDOUS MATERIAL	15	0	1	0	\$64,129
2.2	NONFLAMMABLE COMPRESSED GAS	8	0	0	0	\$9,556
5.1	OXIDIZER	6	0	0	0	\$30,315
6.1	POISONOUS MATERIALS	4	0	0	0	\$12,854
4.1	FLAMMABLE SOLID	3	0	0	0	\$4,878
2.3	POISONOUS GAS	2	1	1	0	\$5,000
COMBUSTIBLE LIQUID	COMBUSTIBLE LIQUID	2	0	0	0	\$848

Source: Hazmat Intelligence Portal, U.S. Department of Transportation. Data as of 9/16/2015.

The 2015 summary data chart below depicting the cause of all HazMat releases in the rail transportation mode will document the causes for the release.

### U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Hazardous Material Safety 2015 Hazmat Summary by Mode of Transportation / Cause

### Summary Report

Cause	Incidents	Hospitalized	Non-Hospitalized	Fatalities	Damages
ABRASION	2	0	0	0	\$5,916
BROKEN COMPONENT OR DEVICE	7	0	0	0	\$17,284
CAUSE NOT REPORTED	1	0	0	0	\$0
CORROSION - EXTERIOR	1	0	0	0	\$2,500
CORROSION - INTERIOR	2	0	0	0	\$39,256
DEFECTIVE COMPONENT OR DEVICE	35	0	0	0	\$128,512
DERAILMENT	8	0	1	0	\$30,786,733
DETERIORATION OR AGING	25	2	1	0	\$77,749
FIRE, TEMPERATURE, OR HEAT	5	0	1	0	\$29,727,860
FORKLIFT ACCIDENT	1	0	0	0	\$6,500
HUMAN ERROR	15	1	1	0	\$54,898
IMPACT WITH SHARP OR PROTRUDING OBJECT (E.G., NAILS)	3	0	0	0	\$10,168
IMPROPER PREPARATION FOR TRANSPORTATION	10	1	0	0	\$31,557
INADEQUATE BLOCKING AND BRACING	1	0	0	0	\$5,300
INADEQUATE MAINTENANCE	2	0	0	0	\$5,500
INADEQUATE PREPARATION FOR TRANSPORTATION	19	0	0	0	\$46,479
INADEQUATE TRAINING	1	0	0	0	\$15,000
LOOSE CLOSURE, COMPONENT, OR DEVICE	81	0	2	0	\$154,853
MISALIGNED MATERIAL, COMPONENT, OR DEVICE	11	0	0	0	\$28,353
MISSING COMPONENT OR DEVICE	9	0	0	0	\$6,170
OVER-PRESSURIZED	5	0	0	0	\$829,271
OVERFILLED	10	0	0	0	\$64,414
STUB SILL SEPARATION FROM TANK (TANK CARS)	1	0	0	0	\$48,945
THREADS WORN OR CROSS THREADED	1	0	0	0	\$6,000
TOO MUCH WEIGHT ON PACKAGE	1	0	0	0	\$4,580
VALVE OPEN	25	0	0	0	\$38,817
VEHICULAR CRASH OR ACCIDENT DAMAGE	5	0	0	0	\$857,392

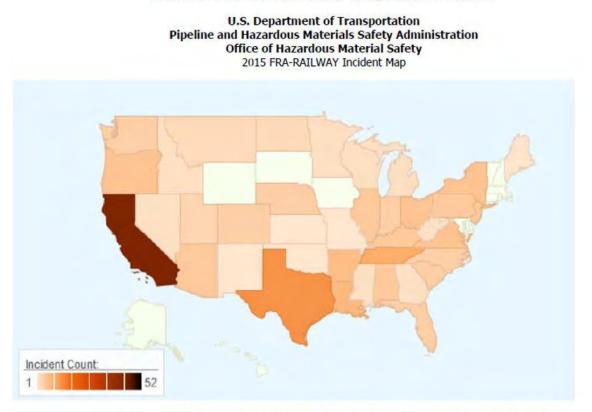
The 2014 summary data chart below depicting the cause of all HazMat releases in the rail transportation mode will document the causes for the release.

### U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Hazardous Material Safety 2014 Hazmat Summary by Mode of Transportation / Cause

### Summary Report

Cause	Incidents	Hospitalized	Non-Hospitalized	Fatalities	Damages
ABRASION	4	0	0	0	\$8,883
BROKEN COMPONENT OR DEVICE	22	0	0	0	\$104,906
CAUSE NOT REPORTED	15	0	0	0	\$29,112
CONVEYER OR MATERIAL HANDLING EQUIPMENT MISHAP	1	0	0	0	\$26,747
CORROSION - EXTERIOR	1	0	0	0	\$0
CORROSION - INTERIOR	1	0	0	0	\$8,500
DEFECTIVE COMPONENT OR DEVICE	117	0	2	0	\$306,317
DERAILMENT	13	0	0	0	\$19,927,653
DETERIORATION OR AGING	84	0	0	0	\$241,413
FIRE, TEMPERATURE, OR HEAT	2	0	0	0	\$5,000
FORKLIFT ACCIDENT	1	0	0	0	\$0
FREEZING	1	0	0	0	\$2,500
HUMAN ERROR	33	1	2	0	\$120,645
IMPACT WITH SHARP OR PROTRUDING OBJECT (E.G., NAILS)	9	0	0	0	\$29,284
IMPROPER PREPARATION FOR TRANSPORTATION	75	0	2	0	\$2,545,654
INADEQUATE BLOCKING AND BRACING	11	0	0	0	\$37,711
INADEQUATE MAINTENANCE	1	0	0	0	\$0
INADEQUATE PREPARATION FOR TRANSPORTATION	78	0	2	0	\$439,199
INCORRECTLY SIZED COMPONENT OR DEVICE	1	0	0	0	\$3,000
LOOSE CLOSURE, COMPONENT, OR DEVICE	237	0	1	0	\$616,166
MISALIGNED MATERIAL, COMPONENT, OR DEVICE	30	0	1	0	\$76,456
MISSING COMPONENT OR DEVICE	37	0	0	0	\$108,881
OVER-PRESSURIZED	24	0	3	0	\$297,513
OVERFILLED	12	0	0	0	\$67,448
ROLLOVER ACCIDENT	2	0	0	0	\$517,460
THREADS WORN OR CROSS THREADED	4	0	0	0	\$11,491
TOO MUCH WEIGHT ON PACKAGE	4	0	0	0	\$7,764
VALVE OPEN	71	0	0	0	\$271,757
VEHICULAR CRASH OR ACCIDENT DAMAGE	1	0	0	0	\$62,872
WATER DAMAGE	1	0	0	0	\$2,500

Rows 1 - 30 (All Rows)



Incident Occurred Year 2015 Mode Of Transportation FRA-RAILWAY

Source: Hazmat Intelligence Portal, U.S. Department of Transportation. Data as of 9/5/2015.

The NRC data base was researched for New Hampshire reported incidents from 2012 – 2015. It revealed no reports involving SEA-3 or Pan Am Railways. The 2014 & 2015 results are below.

DATE TIME COMPLETE	RESPONSIBLE COMPANY CITY		STATE
1/12/2014 17:13	AGS SERVICES INC	HENNIKER	NH
1/13/2014 10:56	HOWE MOTORS INC.	CLAREMONT	NH
1/15/2014 14:00	ATLANTIC FUEL, INC.	RYE	NH
3/13/2014 16:04	UNITED STATES AIRFORCE	NEW BOSTON	NH
3/27/2014 10:09	PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE	PORTSMOUTH	NH
3/30/2014 18:33		GOSHEN	NH
4/15/2014 15:53	PUBLIC SERVICE OF NEW HAMPSHIRE	MANCHESTER	NH
4/15/2014 17:44	PUBLIC SERVICE OF NEW HAMPSHIRE	MANCHESTER	NH
4/28/2014 8:18	BROOKFIELD POWER	PORTSMOUTH	NH
5/7/2014 11:35	HOOKSETT WASTE TREATMENT PLANT		NH
5/8/2014 13:29	VALVALINE OIL CHANGE	HOOKSETT	NH
5/16/2014 13:29	SPRAGUE ENERGY	NEWINGTON	NH
5/17/2014 17:12	CARE ENVIRONMENTAL CORP		NH
5/27/2014 16:15	PUBLIC SERVICE OF NEW HAMPSHIRE	MANCHESTER	NH

5/28/2014 7:48	PUBLIC SERVICE OF NEW HAMPSHIRE	MANCHESTER	NH
6/2/2014 12:00		HUDSON	NH
6/12/2014 12:10	BROOKFIELD RENUABLE ENERGY	BERLIN	NH
6/23/2014 15:18		SEABROOK	NH
6/30/2014 13:47	PUBLIC SERVICE OF NH	MANCHESTER	NH
7/22/2014 10:26	PUBLIC SERVICE OF NEW HAMPSHIRE	NEWINGTON	NH
7/23/2014 15:07		PORTSMOUTH	NH
7/29/2014 9:24	NEW HAMPSHIRE ELECTRIC CO-OP	PLYMOUTH	NH
8/1/2014 16:56	M/V CELIA THAXTER- J&J CRUISE LINE ENTER	PORTSMOUTH	NH
8/27/2014 15:15		HUDSON	NH
9/5/2014 22:36		PEMBROOK	NH
9/9/2014 22:57	SPRAGUE	NEWINGTON	NH
9/19/2014 12:34	IRVING OIL TERMINALS INC	PORTSMOUTH	NH
10/10/2014 13:09	AUTO PLEX LLC	HUDSON	NH
10/27/2014 19:57	IRVING ENERGY	LEBANON	NH
10/28/2014 15:48	NEW HAMPSHIRE DOT		NH
11/5/2014 11:06	BROOKFIELD RENEWABLE ENERGY	BURLING	NH
11/5/2014 13:07	RICHMOND 4 CORNERS		NH
11/7/2014 23:39	IRVING ENERGY	WEST LEBANON	NH
11/28/2014 14:06	PUBLIC SERVICE OF NEW HAMPSHIRE		NH
12/9/2014 14:05	OLD. E. DUBE	MERRIMACK	NH
12/13/2014 11:27		ROCHESTER	NH
12/30/2014 13:01	NEW HAMPSHIRE DEMOLITION	AUBURN	NH
12/31/2014 10:56	PUBLIC SERVICE OF NEW HAMPSHIRE	MANCHESTER	NH

SEQNOS	DATE TIME	DATE TIME	RESPONSIBLE	ORG TYPE	CITY	ZIP
SEQINUS				UNGITTE	CIT	ZIP
	RECEIVED	COMPLETE	COMPANY			
1105530	1/13/15	1/13/15		PRIVATE	PEMBROKE,	03275
	9:48	9:51		CITIZEN	NH	
1106313	1/22/15	1/22/15	MINE FALLS	PRIVATE	NASHUA, NH	03062
	10:59	11:08	HYDROELECTRIC	ENTERPRISE		
1107376	2/4/15	2/4/15	PUBLIC SERVICE	PUBLIC	MANCHESTER,	03105
	21:19	21:30	OF NEW	UTILITY	NH	
			HAMPSHIRE			
1107821	2/10/15	2/10/15	PARK AND GO	PRIVATE	BRISTOL, NH	
	17:42	17:46	MARKET	ENTERPRISE		
1109524	3/3/15	3/3/15	SHAFT MASTER	PRIVATE	NEWINGTON,	03801
	14:00	14:04	FISHING	ENTERPRISE	NH	
			COMPANY			
1109815	3/6/15	3/6/15		PRIVATE	ROCHESTER,	
	13:35	13:48		CITIZEN	NH	
1110281	3/11/15	3/11/15		PRIVATE	MERIDEN, NH	
	12:33	12:44		CITIZEN		
1111670	3/25/15	3/25/15	TOWN OF	OTHER	SALEM, NH	
	9:58	10:07	SALEM/UNNAME			
			D CONTRACTOR			

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1113889	4/17/15	4/17/15	STURM RUEGER	PRIVATE	NEWPORT, NH	
	12:29	12:37	AND COMPANY	ENTERPRISE	,	
			INC.			
1114294	4/21/15	4/21/15		PRIVATE	CHICHESTER,	
	16:59	17:04		CITIZEN	NH	
1114569	4/24/15	4/24/15		PRIVATE	SALEM, NH	
	10:15	10:25		CITIZEN		
1114872	4/28/15	4/28/15	BURGER KING	PRIVATE	MILFORD, NH	
	4:21	4:32		ENTERPRISE		
1115200	5/1/15	5/1/15		PRIVATE	COLEBROOK,	
	8:52	9:03		ENTERPRISE	NH	
1116040	5/10/15	5/10/15	TRANSFORMER	PRIVATE	CONCORD, NH	
	11:14	11:24	SERVICE	ENTERPRISE		
1117053	5/20/15	5/20/15	BLACKDOG	PRIVATE	PORTSMOUTH	03801
	11:55	12:05	DIVERS	ENTERPRISE	, NH	
1117559	5/26/15	5/26/15		PRIVATE	MADISON, NH	
	11:57	12:00		CITIZEN		
1117576	5/26/15	5/26/15	NOAA SHIP	OTHER	NH	
	12:54	13:03	FERDINAND			
			HASSLER			
1117838	5/28/15	5/28/15	TRIANGLE	PRIVATE	DERRY, NH	03038
	12:47	12:54		ENTERPRISE		
1118220	6/1/15	6/1/15	PUBLIC SERVICE	STATE	ROCHESTER,	
	8:37	8:45	OF NEW	GOVERNMEN	NH	
			HAMPSHIRE	Т		
1118411	6/2/15	6/2/15	HHP INC	PRIVATE	HENNIKER, NH	
	13:56	14:02		ENTERPRISE		
1119407	6/11/15	6/11/15		PRIVATE	NH	
	8:57	9:06		CITIZEN		
1119527	6/12/15	6/12/15		PRIVATE	NH	
	11:04	11:14		CITIZEN		

## Section 4 – Review of Highway Grade Crossings

#### 4.1 Portsmouth Industrial Track & Newington Industrial Track

There are ten railroad grade crossings on the Portsmouth Industrial Track and sixteen on the Newington Industrial Track. Railroad grade crossings are identified as either "public" or "private" as required by the national inventory database maintained by the USDOT Federal Railroad Administration. Public highway-rail grade crossings are those where the public has a right of access and maintained by a public authority and the railroad carrier. Private highway-rail grade crossings are on roadways not open to use by the public nor maintained by a public authority.

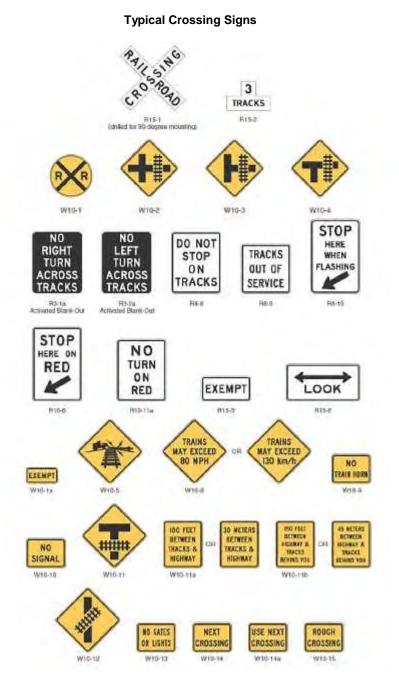
The Federal Highway Administration states... "The highway agency having jurisdiction at the crossing is the only entity that can legally control traffic. Even though the railroads retain the responsibility for the installation and maintenance of crossbuck signs at "passive" crossings and for the design, construction, operation, and maintenance of railroad crossing signals, state transportation and regulatory agencies have the responsibility to assure that the standards set forth in MUTCD (Manual on Uniform Traffic Control Devices) and elsewhere in federal regulations are followed. The street or highway agency is also responsible for the installation and maintenance of all traffic control devices on the approaches to the crossing; for the design, construction, operation, and maintenance of highway traffic signals that may be interconnected with the grade crossing signals; and for the installation and maintenance of certain passive signs at the crossing, such as STOP signs or "Do Not Stop on Tracks" signs.

Although the railroads retain responsibility for the construction, reconstruction, and maintenance of the track structure and the riding surface at the highway-rail intersection, their obligation for the roadway usually ends within a few inches of the outside ends of the ties that support the rails and the crossing surface. The street or highway agency has responsibility for the design, construction, and maintenance of the roadway approaches to the crossing, even though these approaches may lie within the railroad's right of way." http://safety.fhwa.dot.gov/xings/com\_roaduser/07010/

Highway-rail grade crossings are further distinguished by either being classified as "active" or "passive" in the types of warning signs or devices that are in place for a particular crossing.

- Active warning devices may consist of a combination of flashing lights, gates, bells, regulatory signs, warning signs, pavement markings and more.
- Passive traffic control devices may consist of regulatory signs, warning signs, guide signs, and supplemental pavement markings.

Federal law requires that, as a minimum, each state shall provide signs at all "public" crossings. The railroad crossbuck sign and other supplemental signs attached to the crossbuck mast are usually installed and maintained by the railroad company. The agency responsible for maintenance of the roadway is normally responsible for advance warning signs and pavement markings.



#### Source: Manual on Uniform Traffic Control Devices. Washington, DC: Federal Highway Administration.

According to the U.S. Department of Transportation National Highway-Rail Crossing Inventory, there were 97,306 private crossings in the United States in 2005. Usually, an agreement between the land owner and the railroad governs the use of the private crossing.

The number of collisions at private crossings represents a small portion of all crossing collisions. Very few private crossings have active traffic control devices and many do not have signs, nor are they required too. Typically, they are in industrial areas or on narrow gravel roads, often with poor roadway approaches.

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In our review of the Portsmouth Industrial Branch and the Newington Industrial Branch crossings, the focus was upon the "public" crossings verses the "private" crossings in that in most cases these were not assessable to the general public. The two "private" crossing exceptions were Depot Road, Greenland and the NH Port Authority, Portsmouth. The remaining "public" highway-rail grade crossings on the Portsmouth Industrial Branch totaled nine; the Newington Industrial Branch had six.

#### 4.2 Highway-Rail Grade Crossings Collision Records 2005-2015

The Federal Railroad Administration (FRA) reported fourteen collisions in NH during the ten year period (2005-2015), with three injuries and no fatalities. Analysis of the accident reports revealed that motor vehicle driver inattention was the primary cause for these minor collisions. Ten of the collisions occurred at public crossings and three were at private crossings; two were listed in Rockingham County. Of the total collisions, one was categorized by FRA as "other" with one injury in Coos County.

	т	otal	s		At	Public	Crossin	ng		At Priv	ate Cro	ossing	
NH County				Moto	or Veh	icle		Other		Motor Vehicle			
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	
CARROLL	5	-	-	3	-	-	-	-	-	2	-	-	
COOS	2	-	1	1	-	-	1	-	1	-	-	-	
GRAFTON	1	-	-	1	-	-	-	-	-	-	-	-	
HILLSBOROUGH	2	-	2	2	-	2	-	-	-	-	-	-	
ROCKINGHAM	2	-	-	1	-	-	-	-	-	1	-	-	
STRAFFORD	2	-	1	2	-	1	-	-	-	-	-	-	
Total	14	-	4	10	-	3	1	-	1	3	-	-	

# Table 1Highway-Rail Grade Crossing Collisions (2005-2015)

Cnt = count; Kld = killed: and Inj = injured

Figure 4 that follows depicts the public grade crossings on the Portsmouth Industrial Branch and the Newington Industrial Branch by USDOT crossing ID number.

Through our review of FRA information, we noted that the current FRA crossing inventory does not include Bay Shore Drive, Greenland, which is considered a "public" highway-rail grade

## Legend

Pan Am Freight Main Line (Amtrack Downeaster Route) Pan Am Newington Industrial Track Pan Am Portsmouth Industrial Track At Grade Crossings

Sprague Terminal

054138B

Newington

Portsmouth Regional Hospital

Rockingham Jct.

054425 N

Squamscot Trestle

Scale

1 Inch = 6/10 Mile

Stratham

SEBAGO T E C H N I C S

Newfields

054424 G

054423A

Great Bay Discovery Center

054421L

Bay Shore Drive

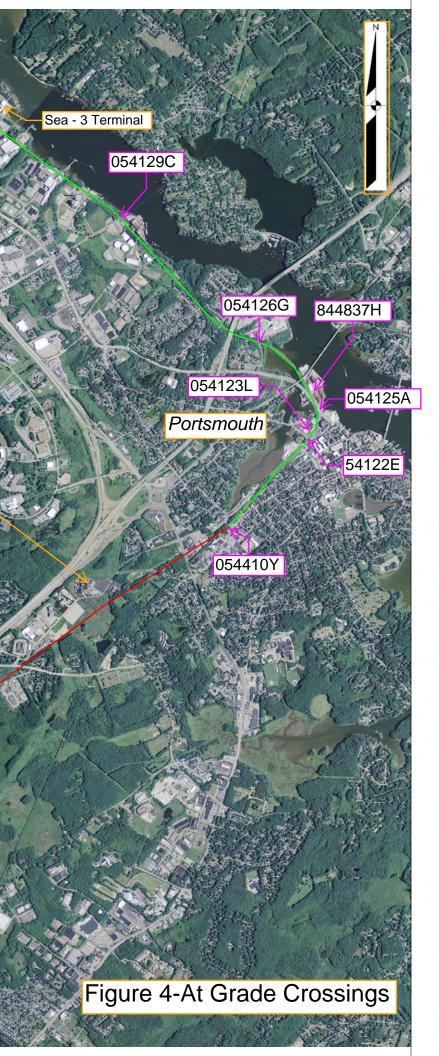
054418D

054416P

054415H

Greenland

054417W



crossing. It is suggested that the FRA be notified about this, so that they may update their records.

Table 2 below presents FRA Web Based Accident Prediction (WBAPS) generated data that ranks the crossings from both a state and county configuration along with the total accident history that is available for those grade crossings over a thirty-five year period.

According to the FRA ..."WBAPS generates reports listing "public" highway-rail intersections for a State, County, City or railroad ranked by predicted collisions per year. WBAPS is a computer model which provides the user an analytical tool, which combined with other site-specific information, can assist in determining where scarce highway-rail grade crossing resources can best be directed. This computer model does not rank crossings in terms of most to least dangerous. Use of WBAPS data in this manner is incorrect and misleading."

USDOT ID	City/Town	Collisions	Injuries/Fatalities	WBAPS By State	WBAPS By County	Status
Maplewood Ave 054122E	Portsmouth	4	0	307	29	Active
Market Street 054125A	Portsmouth	2	0	294	28	Active
Depot Road 054425N	Greenland	0	0	Private	Private	Passive
Dearborn Road 054424G	Greenland	0	0	114	12	Passive
Bay Ridge Road 054423A	Greenland	0	0	96	10	Passive
Great Bay Road 054421L	Greenland	0	0	113	11	Passive
Bayside Road 054418D	Greenland	0	0	112	13	Passive
Bay Shore Drive	Greenland	0	0		Not in Inventory	Passive
Tide Mill Road 054417W	Greenland	0	0	227	21	Passive
Portsmouth Ave 054415H	Greenland	0	0	179	20	Active

Table 2FRA WBAPS Highway Crossing Data for Study Area

Greenland Road 054416P	Greenland	0	0	7	1	Active
Barberry Lane 054410Y	Portsmouth	1	0	123	15	Passive
Green Street 054123L	Portsmouth	0	0	252	22	Passive
NH Port Auth 844837H	Portsmouth	0	0	Private	Private	None
Michael Succi 054126G	Portsmouth	0	0	268	23	Passive
Gossling Road 054129C	Portsmouth	0	0	274	26	Passive
Patterson Lane 054138B	Newington	0	0	271	25	Passive

See Appendix B for more detailed information on WBAPS data and crossing accident reports.

## 4.3 Highway-Rail Grade Crossings Inventories and Photos



Maplewood Ave. – USDOT 054122E (no gates)



Market Street - USDOT 054125A (no gates)



Depot Road - USDOT 054425N



Dearborn Rd - USDOT 054424G



Bay Ridge Rd - USDOT 054423A



Great Bay Rd - USDOT 054421L



Bayside Rd - USDOT 054418D



Bay Shore Dr - USDOT (not in USDOT inventory)

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Portsmouth Ave – USDOT 054415H (no gates)



Greenland Rd - USDOT 054416P (no gates)



Greenland Rd - USDOT 054416P (no gates)



Barberry Ln - USDOT 054410Y



Barberry Ln - USDOT 054410Y



Green St - USDOT054123L

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Green St - USDOT054123L



NH Port - USDOT 844837H

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NH Port - USDOT 844837H



Michael Succi - USDOT 054126G



Gossling Rd - USDOT 054129C



Gossling Rd - USDOT 054129C

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Patterson Ln - USDOT 054138B



Patterson Ln - USDOT 054138B

See Appendix A for detailed grade crossing inspection reports.

#### 4.4 Highway-Rail Grade Crossing Recommendations

Specific areas needing attention:

- Great Bay Passive Warning Sign (bent) requires attention.
- Barberry Lane Advanced Warning Sign requires attention. Overgrown brush near signage.
- Green Street Passive Warning Sign (broken) requires attention.

#### **General Considerations:**

The public highway-rail grade crossings reviewed and located on the Portsmouth Industrial Branch and the Newington Industrial Branch lines are in compliance with Federal Highway regulations. As stated herein, the responsibility for determining the level of traffic control that is provided at each crossing lies with the state and local communities. As rail traffic increases on the Portsmouth Industrial and Newington Industrial lines, the potential exists for increased exposure to grade crossing motor vehicle collisions and trespasser incidents. There are two courses of action that can be considered to respond to this situation:

- The state and municipalities can reexamine all of the crossings on these lines and decide if enhancements to the existing traffic control are warranted. For example, the installation of gates might be a consideration at the busier road crossings.
- 2) The local communities can work with the National "Operation Lifesaver' organization and its New Hampshire State partner to begin an active campaign involving local first responders (police/fire/EMS), local schools, school bus companies, commercial drivers, and, the public before new traffic increases. See the information below on both programs.

# Highway-Rail Grade Crossing and Trespass Prevention

The U.S. railroad system consists of over 750 railroads running on 140,000 miles of track. Every day trains travel across more than 212,000 highway-rail grade crossings.

A Grade Crossing is a location where a public highway, road, street, or private roadway, including associated sidewalks, and pathways, crosses railroad tracks at grade (same level as the street). There are over 38,000 locations were railroad tracks and roadways cross at different levels.

There have been about 270 deaths a year at public and private grade crossings. FRA, through the efforts of its Highway-Rail Crossing and Trespasser Prevention Division is committed to reducing that number. With the assistance of FRA's programs, the number of fatalities has gone down by 54 percent over the last two decades.

Trespassing along railroad rights-of-way is the leading cause of rail-related deaths in America. Nationally, more than 431 trespass fatalities occur each year, and nearly as many injuries, the vast majority of which are preventable.

The reality is that nearly every 180 minutes in America, someone is hit by a train. Combined, highway-rail crossing and trespasser deaths account for 95 percent of all rail-related deaths and most of these deaths are avoidable.



Operation Lifesaver, Inc., Rail Safety Education

Rail Safety for Emergency Responders (RSER)

Operation Lifesaver's classroom course, Rail Safety for Emergency Responders (RSER), is available nationally for training emergency response professionals including fire, EMS, emergency management agencies, military and homeland security personnel. The program teaches first responders the key safety elements involved when they work around dangers inherent in a railroad environment. Our RSER course provides emergency responders with information critical for railroad incident response including: Safe response; knowledge of railroad electrical, fuel and air systems; hazardous materials; identifying rolling. stock; pinch points; stopping a train; high/low pressure tank cars, and other on-scene dangers.

Operation Lifesaver's close partnership with the law enforcement community throughout America has strengthened and improved public safety.

It's critical that when highway-rail intersection collisions do occur, law enforcement officers-often the first responders--are familiar with both railroad operations and highway-rail grade crossing conditions. Operation Lifesaver offers a special course teaching officers how to ensure their personal safety, both while responding to rail collision incidents and throughout the investigation.

If your community contains railroad tracks, your officers could be involved in a specialized highway-rail grade crossing collision investigation. Operation Lifesaver's Grade Crossing Collision Investigation (GCCI) course is designed to inform and prepare your department for that

eventuality. Our GCCI training was developed for the North American law enforcement community with cooperation from the International Association of Chiefs of Police.



## Section 5 – Review of Sea 3's Risk Management Plan

#### 5.1 EPA's Risk Management Program

If a tank, drum, container, pipe, or other "process" at a facility contains any of the extremely hazardous toxic and flammable substances listed in the Code of Federal Regulations (CFR) at 40 CFR 68.130 in an amount above the "threshold quantity" specified for that substance, the facility is required to develop and implement a risk management program under a rule issued by the U.S. Environmental Protection Agency (EPA). The rule, "Chemical Accident Prevention Provisions" (Part 68 of Title 40 of the CFR), applies to a wide variety of facilities that handle, manufacture, store, or use toxic substances, including chlorine and ammonia and highly flammable substances such as propane (flammable substances used solely as fuel or sold by retailers are not covered).

The goal of Part 68 and the risk management program it requires is to prevent accidental releases of substances that can cause serious harm to the public and the environment from short-term exposures and to mitigate the severity of releases that do occur. Under the Clean Air Act (CAA), EPA was required to issue a rule specifying the types of actions to be taken by facilities (referred to in the law as stationary sources) to prevent accidental releases of such hazardous chemicals into the atmosphere and reduce their potential impact on the public and the environment. Part 68 is that rule.

In general, Part 68 requires the following:

- Covered facilities must develop and implement a risk management program and maintain documentation of the program at the site. The risk management program includes an analysis of the potential offsite consequences of a worst-case accidental release, a five-year accident history, a release prevention program, and emergency planning.
- Covered facilities must develop and submit a risk management plan (RMP) to EPA no later than June 21, 1999, or the date on which the facility first has more than a threshold quantity of a listed substance in a process, whichever is later. The RMP generally describes the facility's risk management program. The RMP is available to federal, state, and local government agencies and the public, with some restrictions on the availability of the offsite consequence analysis sections of the RMP.
- Covered facilities must implement the risk management program and update their RMPs periodically or when certain process or other changes occur, as required by the rule.

The phrase "risk management program" refers to all of the requirements of Part 68, which must be implemented on an ongoing basis. The phrase "risk management plan (RMP)" refers to the document describing the risk management program that must be submitted to EPA.

The Sea 3 Terminal is subject to Part 68 of Title 40 of the CFR. The program level of the facility is 3. For a Level 3 Program, a facility must:

- Analyze both a worst-case release scenario and an alternative release scenario
- Implement a prevention program
- Implement an emergency response program if facility employees will respond to a release
- File an RMP

#### 5.2 Sea 3's Risk Management Plan (RMP) Review

Sea-3's Terminal Risk Management Plan (RMP), required and approved by the U.S. Environmental Protection Agency (EPA) under Part 68 of Title 40 of the CFR, was reviewed in conjunction with a physical walk-through inspection conducted by SEA-3 officials on September 1, 2015. A copy of this document can be found in Appendix C of this Report. In addition, a copy of Sea 3's Process Hazard Analysis Report Update (2011), required by the Occupational Safety and Health Administration (OSHA), was reviewed and is included as Appendix D of this Report.

The SEA-3 officials and staff that conducted the site operational tour were professional, knowledgeable, and safety minded, given the responsibilities they have in ensuring the publics and employee well-being in hazardous material processes.

Upon entry to the facility strict security requirements are evident at the closed gate, including the USCG requirement that employees and drivers possess Transportation Worker Identification



Credential (TWIC) identification cards issued by the DHS along with background investigations. Visitors are required to sign-in and are issued a visitor ID badge to display while at the facility.

The twenty-four hour manned control room continually monitors all the processes occurring at the facility. The inspection validated many of the safeguards mentioned in the RMP, some of which are listed below.

Operating areas of the plant are monitored by combustible vapor detectors to quickly detect any leaks. Ultraviolet flame detectors monitor the plant to detect fires. The plant is attended by at least two operators 24/7. They log field operating data at two-hour intervals and monitor plant equipment using the following monitoring and control systems:

- The main control panel, located in the central control room, displays pressures, temperatures, valve positions, and flow rates and provides for remote operation and manual or automatic shutdown of valves and equipment.
- The emergency control panel, also located in the central control room, displays readings of combustible vapor detectors and fire detectors. It provides fire department notification and manual and automatic activation of water deluge and emergency shutdown systems. Back-up power is also provided as stated in RMP Section 7.4.E.12.
- A closed circuit television (CCTV) system, with displays located in the central control room, is used for surveillance and security of all portions of the terminal.
- "Sea-3 US Coast Guard Operating and Emergency Procedures Manual," covering operation of the marine transfer portion of the terminal as required by 33 CFR 127.
- "Sea-3 Contingency Plan," covering responses by facility employees, the Newington Fire and Police Departments, and the US Coast Guard. Its purpose is to minimize the effects of an incident at the terminal and to provide protection for persons and property in the area. It includes plans for sounding an alarm, initial response, determination of need for additional assistance, flammable vapor control, firefighting, evacuation of personnel and nearby residents, mutual aid support and propane industry group response.
- "Sea-3 Mooring Policy and Procedure Manual," covering the safe mooring of LPG carriers at the berth during cargo transfers.
- "Sea-3 Facility Security Plan," covering security as required by the US Department of Homeland Security.
- "Sea-3 Process Safety Management Manual," covering the elements of Process Safety Management, including employee participation, process safety information, process hazard analysis, operating procedures, training, contractor evaluation and training, truck driver (non-employee) evaluation and training, pre-startup safety reviews, equipment mechanical integrity, safe work permit system, management of change, incident investigation, and emergency preparedness.







Emergency planning and preparedness are covered in the "Sea-3 Contingency Plan," which details responses by facility employees, the Newington Fire and Police Departments, and the US

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Coast Guard. These agencies were involved in the development of the plan, which is available to all cognizant officials in the pamphlet "Sea-3 Emergency Procedures." The sections involving facility employees were developed by Sea-3 management in conjunction with the operating staff and outside consultants. All new employees are given initial training in operating and emergency procedures. Employees receive refresher training on an ongoing basis. This training is documented in accordance with the training records requirements of OSHA's Process Safety Management program and EPA's Risk Management Program.

In addition to the Sea-3 Emergency Procedures noted above, emergency response is also covered in the "Sea- 3 US Coast Guard Operating and Emergency Procedures Manual." The US Coast Guard also maintains its own written operating and emergency plan, "Liquefied Petroleum Gas (LPG) Contingency Plan," issued by the USCG Marine Safety Office in Portland, Maine.

SEA-3 contracts with outside resources for an annual facility security plan audit and a process hazard analysis which was updated and revalidated in 2011.

#### 5.2 Summary of Findings

Based on our investigation, it appears that Sea 3 is complying with all current regulations under EPA's Risk Management Program.

## Section 6 – Meetings with Area Emergency Response Personnel

#### 6.1 Local Meetings with First Responders

A meeting sponsored by the Newington Fire Chief for the area chiefs was held on September 1, 2015 at the Newington Town Hall. In attendance were Chiefs from Newington, Pease ANGB, the Dover Asst. Chief, and two Newington Town officials. The Chiefs from Portsmouth, Stratham, Greenland, and, Newfield were unable to attend. A second meeting was held with the Portsmouth Chief on September 8, 2015 and telephone interviews with the Chiefs of Stratham, Greenland and Newfield later that same day.

The general consensus was one of unity insofar as mutual aid was concerned along with the need to address equipment issues required to address an LPG tank car fire or release. There was also a comfort level with New Hampshire's HazMat Response Team generally. However, one chief remarked that he wasn't sure if the HazMat Team had looked at a rail car in the past ten-years.

A catastrophic event, e.g., major fire or explosion, would obviously cause major disruptions and evacuations, along with the employment of an Incident Command (IC) structure first led by the responding chief on scene, and, a one-mile evacuation, including closure of major highways. It was thought that it would take an hour or more to assemble and deploy HazMat teams to the scene of a major event at the SEA-3 facility or a rail tank car fire.

Most of the concerns appear to stem from a lack of specifics concerning the operation, capacity, and, emergency response plans of the SEA-3 facility and with rail tank car familiarity. Site visits along with coordinated training exercises were universally endorsed by the fire representatives.

Training costs were identified as a significant barrier to fulfilling training deficiencies when addressing LPG facility and rail tank car incidents. Discussed were the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration's (PHMSA) HMEP grants, which are designed to improve the nation's response to hazardous materials transportation incidents. Since 1993, more than 2.5 million emergency responders around the country have received training assistance using PHMSA grants. This year New Hampshire was awarded \$137,757 from these funds.

Local fire officials indicated that both SEA-3 and Pan Am Railways have in the past, and they expected would continue to in the future, offer their assistance to the first responder fire community in order to ensure safe communities in the transportation, storage, and, transloading of LPG.

LPG tank car training is available through several regional sources. The Massachusetts Fire Academy in association with the Propane Gas Association of New England; the Safety Train Organization located on CSX rail lines in West Springfield, MA., they bring their safety train to your location; and, the Transportation Technology Center Institute, Pueblo, Colorado.

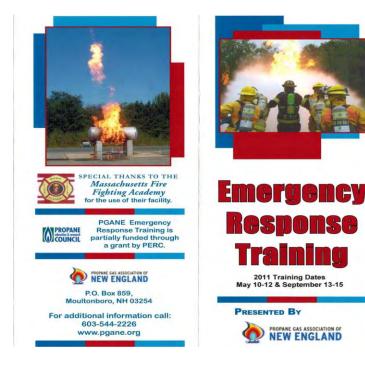
#### http://www.aar.com/

### https://youtu.be/Z9Wz1Xp\_Fk8



http://www.thesafetytrain.org







September 15, 2015



Physical properties & characteristics of propane and the importance of remembering them during a propane emergency.



Methods to control propane liquid and vapor when released into the atmosphere.



Propane container design and construction features including: DOT cylinders, ASME tanks, Bobtail, Transport, and Railcar Cargo Tanks.



New England Emergency Response Plan and how it can be utilized when an incident occurs.



- Firefighting techniques utilized to mitigate leaking propane as well as fires involving propane.
- Proper use of specialized tools and equipment when responding to a propane incident.



- Proper use of a CGI when responding to an incident.
- Discussion on "BLEVE's" and how to prevent of from occurring, and the devastating results when one does occur.



Videos and DVDs as well as props are utilized as visual aids.



 Hands-on experience dealing with simulated propane emergencies while dressed in full turnout gear.



## **APPENDICES**

Appendix A – Highway-Rail Grade Crossing Inventory Reports	A1 - A43
Appendix B – WBAPS Data Files and Crossing Inventory Reports	B1 — B11
Appendix C – Sea 3's Risk Management Plan	C1 – C12
Appendix D – Process Hazard Analysis Report for Sea 3	D1 – D21
Appendix E – Pan Am Railways New England LPG Distribution Network Map	E1 – E1
Appendix F – LPG Rail Car Types	F1 – F7
Appendix G – Pan Am LPG Incident Reports 2008 and 2010	G1 – G10
Appendix H – Pan Am Outreach Training Classes 2013-2015	H1 – H5
Appendix I – Sebago Staff Resumes	

#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



OMB No. 2130-0017

Instructions for the i Form. For private hig pedestrian station gr Parts I and II, and the I, and the Submissio updated data fields. I	ghway-r ade cro Submis n Inforr	rail grade ossings), co ssion Infor mation sec	crossing omplete mation ction. F	gs, complete the Heade section. Fo or changes	e the Hea er, Parts I r grade-se to existin	ader, and I parat g dat	Parts I and I, and the s ed highwar a, complet	l II, a Subm y-rail e the	nd the S iission Inf or pathw Header,	ubmission Infor ormation sectio ay crossings (inc Part I Items 1-	matic on. Fo cludin 3, an	on section. For or Private pathw g pedestrian sta d the Submissi	public pathwa vay grade cros ation crossings on Information	y grade sings, con ), comple n section,	crossings (inclue mplete the Hea ete the Header, I	ding ader, Part the
A. Revision Date		B. Repor		, ,.			n for Updat								DOT Crossing	
(MM/DD/YYYY)		🗆 Railro		Trans		hange	-	New		Closed		🗆 No Train	🗆 Quiet	Inv	entory Number	r
09 / 15 / 2010					Data	а	Cro	ssing				Traffic	Zone Upda	te		
		🗷 State		🗆 Othe	r □ R	e-Ope		Date		Change in Prin	nary	🗆 Admin.		054	118P	
						4		ange (		Operating RR	-+!-	Correction				
	- ''				art I: L	ocat			ssifica	tion Inform	ατιο					
1. Primary Operating Boston & Maine Co							2. State NEW H		PSHIRE			3. County ROCKINGH	AM			
4. City / Municipality	/						Block Nur	nber			_	6. Highway Ty	/pe & No.			
In □ Near PORTS	MOUTH	4			ERRY LN 'Road Nan				_   * (Bloc	k Number)	-	LS-258				
7. Do Other Railroad	s Opera	ate a Separ	rate Tra	, ,		/	No No	8. [		Railroads Opera	ate O	ver Your Track	at Crossing?	Yes 🛛	No	
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13. Line Segment			. Neare ation	st RR Time	able	1	15. Parent	RR (ij	f applical	ole)		16. Crossii	ng Owner (if ap	oplicable)		
225				NOUTH		Г	□ N/A					□ N/A				
17. Crossing Type       18. Crossing Purpose       19. Crossing Position       20. Public Access       21. Type of Train       22. Average Passenger																
	🗷 Hig	ghway		🗷 At Gra	de		(if Private	e Cros	ssing)	Freight		🗆 Transi	t		Count Per Day	
Image: Public       Pathway, Ped.       RR Under       Yes       Intercity Passenger       Shared Use Transit       Less Than One Per Day         Private       Station, Ped.       RR Over       No       Commuter       Image: Tourist/Other       Image: Number Per Day 8																
23. Type of Land Use																
□ Open Space	F E Farr	n 🛛	Resid	ential	🗆 Comn	nercia		Indus	strial	□ Institution	al	Recreation	onal 🗌	RR Yard		
24. Is there an Adjac	ent Cro							Quiet	Zone (Fi	RA provided)	-					
								_	_							
	Yes, Pro	ovide Cross					- 🖪 No	-		Partial 🗌			Date Estab			
26. HSR Corridor ID		27.	. Latitu	de in decim	•					le in decimal de			29.	Lat/Long	Source	
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30.A. Railroad Use	*								31.A. 9	State Use *		STIMATED				
30.B. Railroad Use	*								31.B. 9	itate Use *						
30.C. Railroad Use	*								31.C. 9	itate Use *						
30.D. Railroad Use	*								31.D. 9	State Use *						
32.A. Narrative (Rai	lroad U	<sup>se)*</sup> VER							32.B. I	Narrative (State	Use)	* VERIFIED				
33. Emergency Notif	ication <sup>·</sup>	Telephone	<b>No.</b> (p	osted)	34. Rai	ilroad	Contact (	Telepi	hone No.,	)		35. State Cor	ntact (Telepho	ne No.)		
												603-271-24	68			
						Pa	rt II: Rai	Iroa	d Info	rmation						
1. Estimated Number																
1.A. Total Day Thru T	Trains			al Night Th	u Trains	1.0	. Total Swi	tching	g Trains	1.D. Total Tr	ransit	Trains	1.E. Check if			
(6 AM to 6 PM)     (6 PM to 6 AM)     One Movement Per Day       0     0     How many trains per week?																
2. Year of Train Count Data (YYYY) 3. Speed of Train at Crossing																
							imetable S <sub>l</sub> d Range O <sup>v</sup>			5 1ph) From <u>5</u>		to15				
4. Type and Count of	Tracks			•	•											
	Siding _		_ Yar	d	Tran	sit		Indu	ustry							
5. Train Detection (M								_								
<ul><li>Constant Warr</li><li>6. Is Track Signaled?</li></ul>	Constant Warning Time       Motion Detection       AFO       PTC       Image: Detection       None         6. Is Track Signaled?       7.A. Event Recorder       7.B. Remote Health Monitoring															
<ul> <li>B. Is Track Signaled?</li> <li>□ Yes  ☑ No</li> </ul>							$\Box$ Yes $\Box$							le Health	MOULTOLING	
		(2	(4-)			-		-			1 10		. 20		-	

<b>A. Revision Date</b> (A 09/15/2010	MM/DD/YYYY)					P	AGE 2			<b>D</b> .	Crossing Inve	ntory Nun	nber (7 ch	ar.)
			Part III	: Highway	or Pat	hway	Traffic	Control De	evice		-			
1. Are there	2. Types of Pa	assive Tr	affic Con	rol Devices ass	ociated	with the	Crossing							
Signs or Signals? I Yes □ No	2.A. Crossbuc Assemblies (c		(count)	DP Signs (R1-1)	2.C. (cour	-	;ns <i>(R1-2)</i>	🛾 W10-1				l that appl 3		<i>count)</i>
2.E. Low Ground Cl	2 earance Sign	2.F. P	1 avement	Markings				□ W10-2 _ nnelization			2.H. EXEMP			Sign (I-13)
(W10-5) □ Yes (count ☑ No	)		op Lines Xing Sym	•	amic En	velope	🗆 All Ap	•	🗆 Med		( <i>R15-3)</i> □ Yes □ No		Displaye Yes No	a
2.J. Other MUTCD S	Signs		Yes 🕱 N		IE			ate Crossing			hanced Signs	(List types		
Specify Type Specify Type Specify Type		Co Co	unt unt unt				Signs (if	private)				(2.00 0) (2.00	,	
3. Types of Train A	ctivated Warnin	ng Devic	es at the	Grade Crossing	(specify	count o	f each dev	vice for all tha	t apply	)				
3.A. Gate Arms <i>(count)</i> Roadway <u>0</u> Pedestrian		□ Full Resista	(Barrier)	3.C. Canti Structure Over Traf	s <i>(count</i> fic Lane	)	🗆 Ir	ncandescent	<i>(cou</i> □ Ir	i <i>nt of n</i> ncande	Mounted Flas nasts) 2 scent hts Included	 LED	Lights	3.E. Total Count of Flashing Light Pairs 4
3.F. Installation Dat Active Warning Dev //	vices: (MM/YYY	Y) Not Red	quired	3.G. Wayside		n <i>(MM/Y</i>	YYY)	/	-	Cross	lighway Traffi ing s I∎ No	c Signals C	Controlling	3.1. Bells <i>(count)</i> 1
3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         □ Flagging/Flagman □Manually Operated Signals □ Watchman □ Floodlighting □ None       3.K. Other Flashing Lights or Warning Devices														
4.A. Does nearby H Intersection have Traffic Signals? □ Yes I No	wy 4.B. Hwy Intercon Not li For T For W	nection ntercon raffic Sig	nected	4.C. Hwy Traff		Preemp	tion	5. Highway T Yes Storage Dista Stop Line Dis	No ance *			(Check al	<i>II that app</i> Photo/Vid Vehicle Pr	ring Devices /y) eo Recording esence Detection
				Pa	art IV:	: Physi	cal Cha	racteristic	s					
1. Traffic Lanes Cros	2	Two     Two     Divi	o-way Tra ded Traffi	ffic I c	? Paved الا	Yes [	athway 🗌 No		] Yes	X	No	lights wi	thin appro	ninated? (Street x. 50 feet from s
<ol> <li>Crossing Surface</li> <li>☐ 1 Timber ▲</li> <li>☐ 8 Unconsolidate</li> </ol>	2 Asphalt	3 Aspł	halt and Ti	mber 🗌 4 0				/ and Rubber					Length * _	
6. Intersecting Roa								est Crossing A	0			8. Is Co		Power Available? *
🗌 Yes 🔳 No	If Yes, Approxir	nate Dis	tance (fee		+ \/. D.		0° – 2			X	60° - 90°		🖬 Yes	□ No
	tate Highway Sy Nat Hwy Syster			Functional Class	sificatior (0) Rur	n of Road ral ⊠ (	at Crossin 1) Urban ] (5) Majo	r Collector	3. I Sys	stem? Yes	sing on State I State		30 ☑ ₽0	ghway Speed Limit MPH osted  Statutory
. ,	al AID, Not NHS	• •		(3) Other Princ (4) Minor Arte	ipal Arte	erial 🗆					lepost *	ystem (LKS	s Roule ID)	
7. Annual Average Year 2009 AA	Daily Traffic <i>(A.</i> DT _000560	ADT)	8. Estin 00	nated Percent T		9. Reg		ed by School B Average Nu		er Day	0	10.	-	xy Services Route No
Submi	ission Infor	matio	<b>n</b> - This	information	is used	d for ac	Iministra	ative purpos	ses an	nd is n	ot availabl	e on the	public w	vebsite.
Submitted by				Organiza							Phone		Da	
Public reporting bu sources, gathering a agency may not cor displays a currently other aspect of this Washington, DC 20	and maintaining nduct or sponso valid OMB cont collection, inclu	g the dat r, and a trol num	a needed person is iber. The	and completing not required to valid OMB cont	g and rev , nor sha rol num	viewing t all a pers ber for in	he collect on be subj nformation	ion of informa ject to a penal n collection is	ition. A Ity for f 2130-0	Accordi ailure 017. S	ng to the Pap to comply wit end commen	erwork Re h, a collect ts regardin	duction Ac tion of info ng this burg	t of 1995, a federal ormation unless it den estimate or any



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



OMB No. 2130-0017

Form. For private hig pedestrian station gr Parts I and II, and the I, and the Submissio	Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Part I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2K. are required unless otherwise noted. A. Revision Date B. Reporting Agency C. Reason for Update (Select only one) D. DOT Crossing														
			g Agen	-			•	•		,		_	_		0
( <i>MM/DD/YYYY</i> ) 09 / 15 / 2010		🗆 Railroad		🗆 Transit	🗷 Cha Data	inge i		lew ssing		Clos	sed	No Train Traffic	Quiet Zone Up		Inventory Number
		🗷 State		□ Other	Data	Open		•			nge in Primary ting RR	Admin.	zone op	uate	054118P
				Ра	rt I: Loo	catio		<u> </u>			Informatio				
1. Primary Operating Boston & Maine Co							2. State NEW H	IAMF	SHIRE			3. County ROCKINGH	IAM		
4. City / Municipality	/			5. Street/R BARBER		e & B	lock Num	nber	i			6. Highway T	ype & No.		
□ Near PORTS	MOUTH	4			ad Name)	)			  * (Bloc	ck Nur	mber)	LS-258			
7. Do Other Railroad	s Opera	ite a Separate	Track		,		No				oads Operate O	ver Your Track	at Crossing?	? 🗆 Y	es 🛛 No
If Yes, Specify RR								lf	Yes, Spe	ecify R	R				
9. Railroad Division o	or Regio	<u>,</u> n	10.	Railroad Su	ubdivision	or Di	istrict		11. Bra	anch o	r Line Name	,	12. RR Mi	lepost 0000.	
□ None BOSTC	ON & M				S 3 MAP				🗆 Non		HAMPTON B			(nnnn	, , , , ,
13. Line Segment		14. Ne Statio		RR Timetat *	ole	15	. Parent I	RR (ij	fapplical	ble)		16. Crossi	ng Owner (ij	f applie	cable)
225			ГSMC	DUTH			N/A					□ N/A			
17. Crossing Type		ossing Purpos		19. Crossing			20. Public				Type of Train		_		2. Average Passenger
Public	🗷 Hig	hway hway, Ped.		I At Grade ☐ RR Under			<i>(if Private</i> □ Yes	e Cros	sing)		reight ntercity Passen	🗆 Transi ver 🗌 Share	it d Use Transi		rain Count Per Day
□ Private		tion, Ped.		RR Over			□ No				Commuter	Touris			Number Per Day 8
23. Type of Land Use															
<ul> <li>Open Space</li> <li>24. Is there an Adjac</li> </ul>	Farn		esident		Commer	rcial		Indus	trial <b>Zone</b> (Fl		Institutional	🗆 Recreati	onal	RR '	Yard
24. IS there all Aujue		ssing with a st	epulut	ie Humber.			25. Q	uicti		na pro	macay				
	Yes, Pro	vide Crossing					🖪 No	_	24 Hr			go Excused	Date Est		
26. HSR Corridor ID		27. Lat	titude	in decimal	degrees			28.	Longitud	de in d	lecimal degrees	S	2	9. Lat/	/Long Source
	_□ N/A	(WGS8	34 std:	nn.nnnnn	<sub>nn)</sub> 43.00	6559	36	(Wo	GS84 std.	: -nnr	n.nnnnnnn) <sup>-70</sup>	.7785889		Actu	al 🛛 Estimated
30.A. Railroad Use	*								31.A. 9	State I	Use * AADT E	STIMATED			
30.B. Railroad Use	*								31.B. S	State l	Use *				
30.C. Railroad Use	*								31.C. 9	State l	Jse *				
30.D. Railroad Use	*								31.D. 9	State	Use *				
32.A. Narrative (Rai	ilroad U	<sup>se)*</sup> VERIFI	ED						32.B. I	Narrat	t <b>ive</b> (State Use)	* VERIFIED			
33. Emergency Notif	ication 1	Telephone No	. (post	ted)	34. Railro	oad C	ontact (7	relepł	hone No.	)		35. State Co	ntact (Telep	hone l	No.)
												603-271-24	68		
				L	F	Part	II: Rai	roa	d Info	rmat	tion				
1. Estimated Number	r of Daily	y Train Moven	nents												
1.A. Total Day Thru T	Frains			Night Thru	Trains	1.C. 1	Fotal Swit	ching	g Trains	1.	D. Total Transit	Trains	1.E. Check		
(6 AM to 6 PM) 0		(6 PN 0	А to 6.	AM)		0							One Move		Per Day 🗌
2. Year of Train Coun	t Data (1	YYYY)		3.A.	peed of Tr Maximun	n Tim	etable Sp	beed (					nowindi	y truin	<u> </u>
4. Type and Count of	Tracks			3.B.	Typical Sp	peed	Range Ov	/er Cr	ossing (n	nph)	From 5				
	Siding		Yard		Transit			Indi	ustry						
5. Train Detection (M															
Constant Warr	<u> </u>	ne 🗌 Motio	n Dete	ection	AFO D P					Non	e		<b></b>		
<ol> <li>6. Is Track Signaled?</li> <li>□ Yes  ☑ No</li> </ol>					7		ivent Reco Yes 🛛							note H es 🗆	Iealth Monitoring ] No
	00 74	1	- \					_							

<b>A. Revision Date</b> ( <i>N</i> 09/15/2010	ЛМ/DD/YYYY)					P	AGE 2			<b>D</b> .	Crossing Inve	ntory Nur	<b>nber</b> (7 ci	har.,	)
		Pa	art III:	Highway o	or Pat	hway	Traffic C	Control De	evice l						
1. Are there	2. Types of Pa	ssive Traf	fic Contro	ol Devices ass	ociated	with the	Crossing								
Signs or Signals? I Yes □ No	2.A. Crossbuc Assemblies (c	ount) (	(count)	Signs ( <i>R1-1</i> )	2.C. (cour	-	gns <i>(R1-2)</i>	🛾 W10-1					_ 🗆 W	10-2	
2.E. Low Ground Clo	2	1 2 E Dav		arkings			2 C Char	W10-2 nelization		_	2.H. EXEMP		W 2.I. ENS		
(W10-5)			ement M	Ū			Devices/I	Medians			(R15-3)	i sign	Display		1 (1-13)
□ Yes <i>(count</i> I No	)	□ Stop □ RR Xi	Lines ng Symbo		amic En ne	velope	🗆 All Apj 🗆 One A		Media     Mone		□ Yes □ No		🗆 Yes 🗷 No		
2.J. Other MUTCD S	Signs	🗆 Ye	s 🕱 No					te Crossing	2.L. LI	ED Er	nhanced Signs	(List types	5)		
Specify Type Specify Type		Coun	t t				Signs (if µ	,							
Specify Type		Coun	t												
3. Types of Train A	ctivated Warnir	ng Devices	at the G	rade Crossing	(specify	count o	f each devi	ce for all tha	t apply)						
3.A. Gate Arms (count)	3.B. Gate Con	figuration		3.C. Canti Structure			ged) Flashir	ig Light			Mounted Flasl nasts)_2	ning Lights	5		E. Total Count of shing Light Pairs
Decidence O	□ 2 Quad	🗆 Full <i>(B</i>	,	Over Traf	fic Lane	0	🗆 In	candescent	-		scent				
Roadway <u>0</u> Pedestrian	□ 3 Quad □ 4 Quad	Resistanc		Not Over	Traffic L	.ane_0_	🗆 LE	D	∟ Ba	ick Lig	hts Included	∐ Side Include	e Lights ed	4	
3.F. Installation Dat	e of Current			3.G. Wayside	Horn					3.H. F	lighway Traffi	c Signals C	Controlling	g	3.I. Bells
Active Warning Dev	· · ·	/) Not Requi	rea		talled or	n <i>(MM/Y</i>	YYY)	_/		Cross	ing s 🗖 No				(count) 1
3.J. Non-Train Active Warning     3.K. Other Flashing Lights or Warning Devices															
Flagging/Flagman  Manually Operated Signals  Watchman  Floodlighting  None Count  O Specify type															
4.A. Does nearby H <sup>a</sup> Intersection have	wy 4.B. Hwy Intercon	Traffic Sig	nal 4	4.C. Hwy Traff	ic Signal	Preemp	tion	5. Highway T		e-Sigr	nals	•	ay Monit <i>II that ap</i>		g Devices
Traffic Signals?		nterconnec	cted						NO			🗌 Yes -	Photo/Vi	deo	Recording
🗆 Yes 🛛 No		raffic Signa /arning Sig		Simultaned Advance	ous			Storage Dista Stop Line Dis				□ Yes – □ None		res	ence Detection
			,113		art IV:	Physi		acteristic							
1. Traffic Lanes Cros	ssing Railroad	One-w	ay Traffic			adway/P		1		Dow	n a Street?	4. Is Cro	ossing Illu	min	ated? (Street
Number of Lanes	2	<ul><li>Two-w</li><li>Divide</li></ul>	d Traffic		Paved? או		□ No		🗆 Yes		No	0	ithin appr rail) 🖬 Y		50 feet from
5. Crossing Surface													Length *		
□ 1 Timber □ □ 8 Unconsolidate							Concrete	and Rubber		Rubbe					
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	st Crossing A	ngle			8. Is Co	ommercia	l Pov	wer Available? *
🗆 Yes 🔳 No	If Yes, Approxin	nate Distar	nce <i>(feet)</i>				□ 0° – 29	9° □ 30°	– 59°	X	60° - 90°		🖿 Yes		□ No
				Par	t V: Pı	ublic H	lighway	Informat	ion						
1. Highway System			2. Fu	unctional Class			d at Crossin 1) Urban	g		Cross em?	sing on State H	lighway	4. ⊦ 30		way Speed Limit MPH
🗌 (01) Inters	tate Highway Sy	rstem		1) Interstate			(5) Major	Collector			🖬 No				ed 🗆 Statutory
	Nat Hwy Syster			2) Other Freev 3) Other Princ	'	•	,	Collector	5. Li	near	Referencing Sy	/stem (LRS	S Route IL	)) *	
🔟 (03) Federa	al AID, Not NHS ederal Aid			4) Minor Arte	-		(7) Local	Collector	6. LF	RS Mi	lepost *				
7. Annual Average Year 2009 AA	Daily Traffic <i>(A)</i> DT 000560	,	3. Estima 00	ted Percent T	rucks %	9. Reg		d by School B Average Nu		er Day	0	10.	-	ncy S ] No	Services Route
Submi	ission Infor	mation	- This ir	nformation	is used	d for ac	lministra	tive purpo	ses and	d is n	ot availabl	e on the	public	wel	bsite.
Submitted by				Organiza							Phone			ate	
Public reporting but															
sources, gathering a agency may not cor	-					-									
displays a currently	valid OMB cont	rol numbe	er. The va	alid OMB cont	rol num	ber for i	nformation	collection is	2130-00	)17. S	end comment	s regardir	ng this bu	rder	estimate or any
other aspect of this Washington, DC 20		uding for re	educing t	nis burden to:	Inform	ation Co	niection Of	licer, Federal	Railroad	a Adm	inistration, 12	UU New Je	ersey Ave	. SE	IVIS-25



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



OMB No. 2130-0017

Form. For private hig pedestrian station gr Parts I and II, and the I, and the Submissio updated data fields. I	ghway-rail rade crossi e Submissic n Informa Note: For p	grade cross ings), compli- on Informati- tion section private cross	sings, complet ete the Heade on section. Fo . For changes ings only, Part	e the Head er, Parts I ar r grade-sepa to existing	er, Parts I and II, and the arated highw data, compl	nd II, a e Subm /ay-rail ete the	nd the Su ission Inf or pathwa e Header,	ubmission Informatio ormation section. Fo ay crossings (includir Part I Items 1-3, an	on section. For or Private pathy ng pedestrian st nd the Submissi	public pathway vay grade crossi ation crossings), on Information	nplete the entire inventory grade crossings (including ings, complete the Header, , complete the Header, Part section, in addition to the denotes an optional field.
A. Revision Date (MM/DD/YYYY)		Reporting	• •		son for Upd	•	· -	_ ,			D. DOT Crossing
09 / 15 / 2010		] Railroad	Trans	Data	0	] New rossing		Closed	No Train Traffic	Quiet Zone Update	Inventory Number
	1	State	🗆 Othe	r 🗆 Re-		] Date		Change in Primary	□ Admin.		054122E
			F	Part I: Lo		hange ( <b>d Cla</b>		Operating RR tion Informatio	Correction		
1. Primary Operating					2. Stat	te			3. County		
Boston & Maine Co		i [BM]	E Stroot	/Road Nam	e & Block N		PSHIRE		ROCKINGH 6. Highway T		
In ■ Near PORTS			MAPL	EWOOD A	V		_	k Number)	LS-368	ype a no.	
7. Do Other Railroad	s Operate	a Separate			1		Do Other	Railroads Operate O	ver Your Track	at Crossing?	Yes 🛛 No
If Yes, Specify RR						ľ	f Yes, Spe	cify RR			
9. Railroad Division of	or Region		10. Railroad	Subdivision	or District	- I	11. Bra	nch or Line Name		<b>12. RR Milepo</b>	ost 09.90
	ON & MAI		□ None	VS 3 MAP			□ None			(prefix)   (nn	/ / / / /
13. Line Segment		14. Nea Station	arest RR Timet *	able	15. Paren	nt RR (i	f applicat	ole)	16. Crossi	ng Owner (if app	plicable)
230     PORTSMOUTH     N/A     N/A       17. Crossing Type     18. Crossing Purpose     19. Crossing Position     20. Public Access     21. Type of Train     22. Average Passenger											
17. Crossing Type	18. Cross	• •	At Grad	•	20. Put (if Prive			<b>21. Type of Train</b>	🗆 Transi	it	22. Average Passenger Train Count Per Day
Public	🗆 Pathw	vay, Ped.	C RR Und		🗆 Yes		5,	Intercity Passen		d Use Transit	Less Than One Per Day
□ Private □ Station, Ped. □ RR Over □ No □ Commuter ☑ Tourist/Other ☑ Number Per Day 8 23. Type of Land Use											
Open Space	🗆 Farm	-	sidential	Comme		Indus		Institutional	🗆 Recreati	onal 🗌 R	RR Yard
24. Is there an Adjac	ent Crossii	ng with a Se	parate Numb	er?	25.	Quiet	Zone (FF	RA provided)			
	Yes, Provic	de Crossing N				-			go Excused	Date Establis	
26. HSR Corridor ID		27. Lati	tude in decim	U			0	le in decimal degree		29. L	at/Long Source
	_□ N/A	(WGS84	4 std: nn.nnn	<sub>nnnn)</sub> 43.0	782295	(W		-nnn.nnnnnnn) -70	.7622117	🕱 Ac	tual 🗌 Estimated
30.A. Railroad Use	4							itate Use *			
30.B. Railroad Use	*						31.B. S	itate Use *			
30.C. Railroad Use	*						31.C. S	tate Use *			
30.D. Railroad Use	*						31.D. S	itate Use *			
32.A. Narrative (Rai	ilroad Use)	* VERIFIE	D				32.B. N	Narrative (State Use)	* VERIFIED		
33. Emergency Notif	ication Tel	ephone No.	(posted)	34. Railro	oad Contact	(Telep	hone No.)	)	35. State Co	ntact (Telephon	e No.)
									603-271-24	68	
				1	Part II: Ra	ailroa	d Infor	mation	l		
1. Estimated Number	,	1								1	
1.A. Total Day Thru Trains       1.B. Total Night Thru Trains       1.C. Total Switching Trains       1.D. Total Transit Trains       1.E. Check if Less Than         (6 AM to 6 PM)       0       0       0       0       How many trains per week?											
0     0     0     How many trains per week?       2. Year of Train Count Data (YYYY)     3. Speed of Train at Crossing     How many trains per week?											
	3.A. Maximum Timetable Speed (mph)       15         3.B. Typical Speed Range Over Crossing (mph)       From       5       15										
4. Type and Count of	Tracks		3	.в. турісаі S	peeu kange	over Cl	ussing (n	<i>ipiij</i> riolli <u>o</u>			
	Siding		'ard	Transit	: <u></u>	Ind	ustry				
5. Train Detection (M		• •	Dotoction			□ 0	thor $\Box$	Nono			
<ul><li>Constant Warr</li><li>6. Is Track Signaled?</li></ul>	0			AFO D P	PTC 🗷 DC 7.A. Event R			None		7.B. Remote	e Health Monitoring
🗆 Yes 🖬 No					🗆 Yes					🗆 Yes	
FORM FRA F 61	.80.71 (1	Rev. 3/15	5)		ON	/B ap	proval	expires 3/31/2	018		Page 1 OF 2

<b>A. Revision Date</b> (A 09/15/2010	/M/DD/YYYY)				P	AGE 2			<b>D.</b> 054	Crossing Inve	ntory Nun	nber (7 ch	ar.)
		Part	III: Highway o	or Path	าพลง	Traffic O	Control De	evice					
1. Are there	2. Types of Pa	ssive Traffic C	ontrol Devices asso	ociated v	with the	Crossing							
Signs or Signals? I Yes □ No	2.A. Crossbuck Assemblies (cc 2		STOP Signs (R1-1) nt)	2.C. Y (coun		gns <i>(R1-2)</i>	2.D. Advar				8		<i>count)</i>
2.E. Low Ground Cl (W10-5)			ent Markings			2.G. Chai Devices/	nnelization			2.H. EXEMP ( <i>R15-3</i> )		_	Sign (I-13)
□ Yes <i>(count</i> ☑ No	)	Stop Line		amic Env Ie	elope	□ All Ap □ One A		Med Med		□ Yes □ No		□ Yes ■ No	
2.J. Other MUTCD S	Signs	□ Yes [	No No				te Crossing	2.L.	LED Er	nhanced Signs	(List types	)	
Specify Type Specify Type Specify Type						Signs (if µ							
3. Types of Train A	ctivated Warnin	g Devices at t											
3.A. Gate Arms (count) Roadway 0	3.B. Gate Conf	□ Full (Barri Resistance	Structures er) Over Traff	<i>(count)</i> ic Lane	2		candescent	<i>(cou</i> □ Ir	int of r ncande	Mounted Flas masts)_0 escent ghts Included	 LED Side	Lights	3.E. Total Count of Flashing Light Pairs 9
Pedestrian	🗆 4 Quad	🗆 Median G	ates Not Over	I rattic La	ane <u> </u>	LE	D				Include	ea	
3.F. Installation Dat Active Warning Dev //	vices: (MM/YYYY	′) Not Required	3.G. Wayside H		(MM/Y	YYY)	_/		Cross	Highway Traffi ing s ⊠No	c Signals C	Controlling	3.1. Bells (count) 2
3.J. Non-Train Activ □ Flagging/Flagma	•	perated Signa	ls 🗆 Watchman 🛛	🛛 Floodli	ghting	🗆 None			Other nt_0	Flashing Light S	s or Warni pecify type		S
4.A. Does nearby H Intersection have Traffic Signals? □ Yes ■ No	Interconr Not In For Tr	Traffic Signal nection terconnected affic Signals arning Signs	4.C. Hwy Traffi	U	Preemp		5. Highway T Storage Dista Stop Line Dis	No ance *		nals	(Check a Yes -	<i>II that app</i> Photo/Vid Vehicle P	oring Devices ly) leo Recording resence Detection
				art IV·	Physi	I	acteristic						
1. Traffic Lanes Cros	-	<ul> <li>One-way T</li> <li>Two-way</li> <li>Divided Tr</li> </ul>	raffic 2 Traffic F	. Is Road Paved?	dway/P		3. Does T		_	n a Street? No	lights wi	•	ninated? (Street ox. 50 feet from s
5. Crossing Surface	2 Asphalt 🛛	3 Asphalt an	d Timber 🛛 🛛 4 C							dth * er □ 7 Me		Length *	
6. Intersecting Roa	dway within 500	) feet?				7. Smalle	st Crossing A	ngle			8. Is Co	mmercial	Power Available? *
🗆 Yes  🖬 No	If Yes, Approxim	ate Distance	, ,			□ 0° – 29			X	60° - 90°		🖬 Yes	□ No
			Part	t V: Pu	blic H	lighway	Informat	ion					
🗌 (02) Other	tate Highway Sy Nat Hwy Systen al AID, Not NHS rederal Aid		<ul> <li>2. Functional Class</li> <li>1) Interstate</li> <li>(2) Other Freev</li> <li>(3) Other Princ</li> <li>(4) Minor Arter</li> </ul>	(0) Rura vays and ipal Arter	al 🛛 ( LExpress rial 🗌	1) Urban 1 (5) Major sways	Collector	Sys  5. L	stem? Yes Linear	sing on State H No Referencing S lepost *		30 ☑ P	ghway Speed Limit MPH osted
7. Annual Average		<i>NDT)</i> 8. E 05	stimated Percent Ti			gularly Use	d by School B Average Nu		er Day	, 0	10. □ Y	•	cy Services Route No
		mation - T	his information	is used	for ac						e on the	public v	vebsite.
Submitted by			Organiza	tion						Phone		Da	ite
Public reporting bu sources, gathering a agency may not cor displays a currently other aspect of this Washington, DC 20	and maintaining nduct or sponsor valid OMB cont collection, inclu	the data need ; and a perso rol number.	led and completing n is not required to, he valid OMB cont	and revi nor shal rol numb	iewing t II a pers per for in	he collecti on be subj nformation	on of informa ect to a pena collection is	ation. A Ity for f 2130-0	Accordi ailure 017. S	ing to the Pap to comply wit Send comment	erwork Re h, a collect ts regardin	duction A tion of info ng this bur	ct of 1995, a federal ormation unless it den estimate or any



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



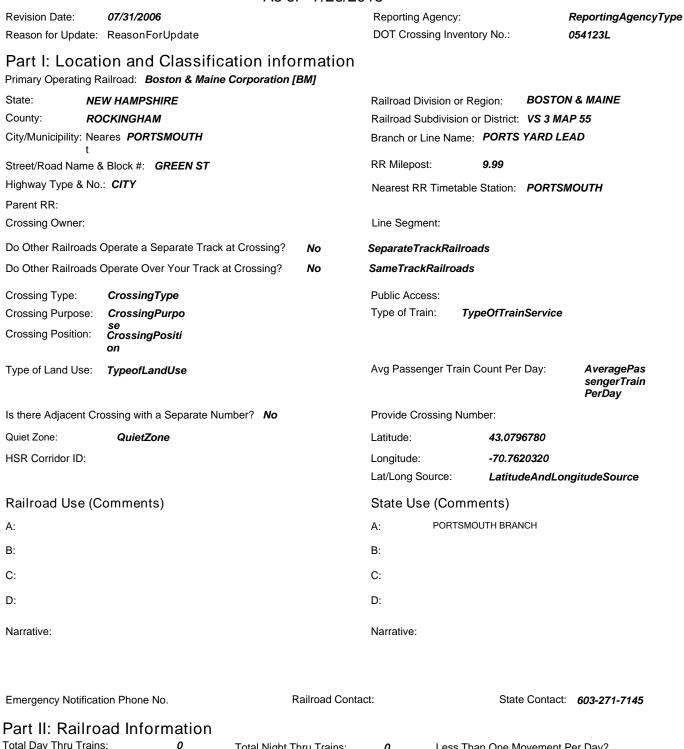
OMB No. 2130-0017

Form. For private hi pedestrian station g Parts I and II, and the	ghway-rail rade crossi e Submissio n Informa	grade cross ings), comple on Information tion section.	sings, complet ete the Heade on section. For . For changes	e the Head r, Parts I a r grade-sep to existing I Item 20 a	der, Part nd II, an arated h data, co nd Part I	s I and II Id the Sul Iighway-r omplete III Item 2.	I, and the S bmission In ail or pathw the Header .K. are requi	ubmission Infor formation sectio ray crossings (inc , Part I Items 1- red unless other	matio on. Foi cluding 3, and	n section. For Private pathv g pedestrian st d the Submissi	public path vay grade o ation crossi on Informa	hway gr crossing ings), co ation se	lete the entire inventory rade crossings (including s, complete the Header, omplete the Header, Part action, in addition to the enotes an optional field.
A. Revision Date		B. Reporting	• •			•	(Select only	,					D. DOT Crossing
( <i>MM/DD/YYYY</i> ) _07_/31_/2006		Railroad	Trans	Data	ange in	Crossi		Closed		No Train Traffic	□ Quie Zone U		Inventory Number
		State	🗆 Other	r □ Re	-Open	🗆 Dat		Change in Prin	nary	Admin.			054123L
				Part I· I o	ocation		2 1	Dperating RR tion Inform	atio	Correction			
1. Primary Operating	z Railroad		ſ			. State			atio	3. County			
Boston & Maine C		n [BM]					MPSHIRE		_	ROCKING			
4. City / Municipality In □ Near PORTS	<b>/</b> MOUTH		GREE	/Road Nan N ST /Road Nam		ck Numb		ck Number)	-	6. Highway T	ype & No.		
7. Do Other Railroad If Yes, Specify RR	s Operate	a Separate 1			/			Railroads Opera	ate Ov	ver Your Track	at Crossing	<b>;?</b> 🗆 Y	es 🛛 No
9. Railroad Division	or Region	,	10. Railroad	Subdivisio	n or Dist	rict	11. Bra	nch or Line Nan	ne	,	12. RR M	lilepost   0009.	
	ON & MAI		□ None	VS 3 MA			□ Non		YARD		(prefix)		, , ,
13. Line Segment *		Station	rest RR Timet * SMOUTH	able	15. P		t (if applical)	ble)		16. Crossi	ng Owner (	if applic	cable)
17. Crossing Type		sing Purpose		ng Positior	י 1 20	. Public A		21. Type of Tr	ain	- <b>I</b>			2. Average Passenger
Public	Highw	vay vay, Ped.	🗷 At Grad		()	<i>Private C</i> Yes	Crossing)	Freight Intercity Pa	isseng	er 🗌 Share	it d Use Trans		rain Count Per Day
□ Private □ Station, Ped. □ RR Over □ No □ Commuter ☑ Tourist/Other ☑ Number Per Day 8													
<b>23. Type of Land Use</b> Open Space	e □ Farm	🗆 Res	sidential	🗷 Comme	ercial	🗆 Inc	dustrial	□ Institution	al	🗆 Recreati	onal		Yard
24. Is there an Adjac	-							RA provided)					
🗆 Yes 🗷 No 🛛 If	Ves Provid	de Crossing N	lumber			🖪 No	🗆 24 Hr	Partial	Chicad	o Excused	Date Es	tabliche	ad
26. HSR Corridor ID	103, 110010		tude in decim	al degrees		· · · · · ·		de in decimal de		o Excused			Long Source
	□ N/A	(MGS8/	4 std: nn.nnnı	43.	0796780	0	/W/GS8/ std	: -nnn.nnnnnn	, <b>-</b> 70.	7620320		🗆 Actu	al 🗆 Estimated
30.A. Railroad Use	*	(11030-	fota. milinin					State Lise *		MOUTH BRAI			
30.B. Railroad Use								State Use *					
30.C. Railroad Use	*							State Use *					
30.D. Railroad Use	*							State Use *		*			
32.A. Narrative (Ra	uroad Use)	, *					32.B.	Narrative (State	Use)	Ŧ			
33. Emergency Notif	ication Tel	lephone No.	(posted)	34. Railı	road Con	ntact (Tel	lephone No.	)		35. State Co	ntact (Tele	phone I	No.)
										603-271-71	45		
					Part II	I: Railr	oad Info	rmation					
1. Estimated Number											1		
1.A. Total Day Thru Trains       1.B. Total Night Thru Trains       1.C. Total Switching Trains       1.D. Total Transit Trains       1.E. Check if Less Than         (6 AM to 6 PM)       0       0       One Movement Per Day       D         0       0       0       How many trains per week?													
2. Year of Train Count Data (YYYY)       3. Speed of Train at Crossing													
	3.A. Maximum Timetable Speed (mph)       25         3.B. Typical Speed Range Over Crossing (mph)       From       15       25												
4. Type and Count of	Tracks			.b. Typical 3		inge Over				_ 10			
	Siding		'ard	Transi	it	I	ndustry						
5. Train Detection (N		• •		□afo □	ртс 🖙	DC 🗆	Other 🗆	None					
6. Is Track Signaled?	6. Is Track Signaled?       7.A. Event Recorder       7.B. Remote Health Monitoring												
🗆 Yes 🔳 No					□ Ye	es 🗆 N					□ Y	/es 🗆	
FORM FRA F 61	.80.71 (I	Rev. 3/15	5)			OMB	approval	expires 3/3	1/20	)18			Page 1 OF 2

A. Revision Date ( <i>MM/DD/YYYY</i> ) PAGE 2 D. Crossing Inventory Number (7 char.) 07/31/2006														
		Part	III: Highway o	or Path	way	Traffic (	Control De	evice						
1. Are there	2. Types of Pa	ssive Traffic C	ontrol Devices asso	ociated w	ith the	Crossing								
Signs or Signals? I Yes □ No	2.A. Crossbuck Assemblies (co 2		STOP Signs (R1-1) nt)	2.C. YI (count		ns <i>(R1-2)</i>	2.D. Advar			0 1		W1	<i>count)</i> □ None 0-11 0-12	
2.E. Low Ground Clo (W10-5)			ent Markings			2.G. Char Devices/	nnelization			2.H. EXEMP ( <i>R15-3</i> )				
□ Yes <i>(count</i> ☑ No	)	□ Stop Line □ RR Xing S		amic Enve Ie	elope	□ All Ap □ One A		Mee Nor		□ Yes □ No		🗆 Yes 🖿 No		
2.J. Other MUTCD S	Signs	□ Yes [				te Crossing	2.L.	LED Er	nhanced Signs	(List types	)			
Specify Type Specify Type Specify Type						Signs (if )								
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)														
3.A. Gate Arms <i>(count)</i> Roadway <u>0</u> Pedestrian	3.B. Gate Conf 2 Quad 3 Quad 4 Quad	iguration Full (Barrie Resistance Median G	Structures er) Over Traff	ic <i>(count)</i> ic Lane	0	□ Back Lights Included □ Side				hing Lights  □ LED □ Side Include	Lights (	3.E. Total Count of Flashing Light Pairs D		
3.F. Installation Date of Current       3.G. Wayside Horn       3.H. Highway Traffic Signals Controlling       3.I. Bells         Active Warning Devices: (MM/YYYY)       □ Yes       Installed on (MM/YYYY)       □ Crossing       (count)          □ Not Required       □ Not       □ Not       □ Not       □ Not											, ,			
3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         □ Flagging/Flagman □Manually Operated Signals □ Watchman □ Floodlighting □ None       3.K. Other Flashing Lights or Warning Devices												5		
4.A. Does nearby H Intersection have Traffic Signals? □ Yes ■ No	raffic Signals? □ Not Interconnected □ For Traffic Signals □ Simultaneous						□ Yes □ Storage Dista	Yes - Photo/Video Recording				ly) eo Recording		
			Advance	ort IV/+ I	Dhyci		racteristic							
1. Traffic Lanes Cros	-	🗆 Two-way	raffic 2 Traffic P	. Is Road aved?	lway/Pa	athway	3. Does T	rack Ru	_	n a Street?	lights wi	thin appro	hinated? (Street x. 50 feet from	
5. Crossing Surface		Divided Tr				□ No M/YYYY)		2 Yes		No dth *		r <i>ail) 🖪</i> Ye: Length *	s 🗆 No	
□ 1 Timber I □ 8 Unconsolidate	2 Asphalt 🛛	3 Asphalt an	d Timber 🛛 🛛 4 C											
6. Intersecting Roa	dway within 500	) feet?				7. Smalle	st Crossing A	ngle			8. Is Co	mmercial	Power Available? *	
🖬 Yes 🗌 No	If Yes, Approxim	nate Distance				□ 0° - 2			X	60° - 90°		🖬 Yes	□ No	
			Part	: V: Pul	blic H	lighway	Informat	ion						
🗌 (02) Other	tate Highway Sy Nat Hwy Systen al AID, Not NHS		<ul> <li>2. Functional Class</li> <li>(1) Interstate</li> <li>(2) Other Freev</li> <li>(3) Other Princi</li> </ul>	(0) Rural vays and	I 🖬 (: Express	1) Urban (5) Majoi sways	· Collector	Sy:  5.	stem? Yes Linear	sing on State H No Referencing Sy			ghway Speed Limit MPH osted	
🔳 (08) Non-F			(4) Minor Arter			(7) Local			LRS Mi	lepost *				
7. Annual Average Daily Traffic (AADT)       8. Estimated Percent Trucks       9         Year       1987       AADT       001250       01       9							d by School B Average Nu		per Day	, _0	10. □ Y	•	cy Services Route No	
Submi	ission Inform	mation - T	nis information	is used	for aa	lministra	tive purpo	ses ai	nd is r	not availabl	e on the	public w	vebsite.	
Submitted by			Organiza	tion						Phone		Da	te	
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection of 1907. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.														



#### U.S. DOT - CROSSING INVENTORY INFORMATION As of 7/26/2015



Total Day Thru Trains:	0	Total N	ght Thru Trains:	<b>0</b> L	Less Than One Movement Per Day?						
Total Switching Trains:	0	Total T	ansit Trains:		Total Trains Per week:						
Year Of Train Count Data:											
Maximum Timetable Speed	1: <b>25</b>	Typical S	Speed Range Over	Crossing: From	15	to	25	mph			
Type and Count of Tracks:	Main: <b>1</b>	Siding:	Yard:	Transit:	Industr	y:					
Train Detection: TrainD	etection										



A-10

**U.S. DOT - CROSSING INVENTORY INFORMATION** 

(continued)

Revision Date: 07/31/2006

No

Yes

DOT Crossing Inventory No: 054123L

#### Part III: Highway or Pathway Traffic Control Device Information

Signs or Signals?

Types of Passive Traffic Control Devices associated with the Crossing

Crossbucks Assemblies: 2	Stop Signs (R1-1): 2	Yield Signs (R1-2):	
Low Ground Clearance Sign (W10-5):	No	Advanced Warning Signs	No
Pavement Markings:	PavementMarkings	W10-1:	W10-4:
Channelization Devices/Medians:	ChannelizationDevices	W10-2:	W10-11:
EXEMPT Sign (R15-3):		W10-3:	W10-12:
ENS Sign Displayed (I-13):	No		
Other MUTCD Signs (Type):		Count:	
Other MUTCD Signs (Type):		Count:	
Other MUTCD Signs (Type):		Count:	
Private Crossing Signs (if private):		LED Enhanced Signs:	

Types of Train Activated Warning Devices at the Grade Crossing

Linear Referencing System (LRS Route ID):

Annual Average Daily Traffic (AADT): Year

1987

Gates Arms:	Gate Configuration: Gate	eConfigurati	onTypes		
	Cantilevered (or Bridged) F Over Traffic Lane:	ashing Light 0	Structures		andescent:
Pedestrian:	Not Over Traffic Lane	e: <b>O</b>		LEI	D:
Mast Mounted Flashing lights: 0 Incande	scent: LED:	Back Light	ts Included:	: Sic	le Lights Included:
Total Count of Flashing Light Pairs: 0	Wayside	Horn:		Installed on:	
Highway Traffic Signals Controlling Crossing:	No Installation D	ate of Currer	nt Active Wa	arning Devices	ActiveWarningDevicesInstallation
Non-Train Active Warning: NonTrainActiveWa	arnings		Bells:	0	
Other Flashing Lights or Warning Devices: (co	unt) <b>0</b>		Туре:		
Does Nearby Hwy Intersection have Traffic Sig	gnals: <b>No</b>		Hwy Traffi	ic Signal Interc	connection: HwyTrafficSignalInt erconnection
Highway Traffic Signal Preemption:	HighwayTrafficSig emption	nalPre	Highway 1	Traffic Pre-Sigr	nals:
			Storage D	)istance:	Stop Line Distance:
Highway Monitoring Devices: HwyMonitoria	ngDevice				
Part IV: Physical Characterist	ics				
Traffic Lanes Crossing Railroad: Number of La Is Roadway/Pathway Paved? <b>Yes</b> Doe:	nes: <b>2 TrafficLaneT</b> s Track Run Down a Street	•••		Is Cross	sing Illuminated? Yes
Crossing Surface: CrossingSurface Other (specify):					
Installation Date: CrossingSurfa Width:	Length:				
Intersecting Roadway within 500 feet? Yes		lf Yes, App	proximate D	Distance (Feet)	: <b>-75</b>
Smallest Crossing Angle: SmallestCrossing.	Angle	Is Comme	rcial Power	Available?	Yes
Part V: Public Highway Inform	nation				
Highway System: <i>HighwaySystem</i> F	unctional Classification of F	Road at Cross	sing: <b>Fun</b> d	ctional Func	tionalClassificationOfRoad
Is Crossing on State Highway System? No		H	lighway Sp	eed Limit:	HighwaySp

AADT: 001250

LRS Milepost:

Estimated Percent Trucks:

01



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private his pedestrian station gr Parts I and II, and the	ghway-ra ade cros Submis n Inform	ail grade cros ssings), comp sion Informat nation sectior	sings, complet lete the Heade ion section. For I. For changes	e the Head r, Parts I an grade-sep to existing	ler, Parts I nd II, and arated hig data, com	I and II, a the Subm hway-rail nplete the	ind the S nission Inf or pathw e Header,	ubmission Informatic ormation section. Fo ay crossings (includin Part I Items 1-3, an	on section. For or Private pathv og pedestrian st id the Submissi	public pathway vay grade crossi ation crossings), on Information	nplete the entire inventory grade crossings (including ings, complete the Header, , complete the Header, Part section, in addition to the denotes an optional field.
A. Revision Date (MM/DD/YYYY)		B. Reporting	Agency		<b>ason for U</b> ange in	pdate (Se	,	one) ] Closed	🗆 No Train	🗆 Quiet	D. DOT Crossing Inventory Number
07 / 31 / 2006				Data	0					Zone Update	
		🗷 State	🗆 Other	Re	-Open	Date Change (		☐ Change in Primary ○perating RR	Admin. Correction		054125A
			F	art I: Lo	cation			tion Informatio			
1. Primary Operating Boston & Maine Co						<b>tate</b> W HAMF	PSHIRE		3. County ROCKINGH	IAM	
4. City / Municipality	/		5. Street MARK	/Road Nam	ne & Block	Number	1		6. Highway T	ype & No.	
□ Near PORTS			(Street/	Road Name	,			k Number)	CITY		
7. Do Other Railroad If Yes, Specify RR	s Operat	te a Separate	Track at Cross	ng? 🗆 Yes	s 🕱 No		<b>Do Other</b> f Yes, Spe	Railroads Operate O cify RR	ver Your Track	at Crossing?	Yes 🖪 No
9. Railroad Division o	or Regio	n	10. Railroad	Subdivisio	n or Distrio	ct	11. Bra	nch or Line Name		<b>12. RR Milepo</b>	ost 00.03
	ON & M/		□ None	VS 3 MAF			□ Non			(prefix)   (nn	, , , , ,
13. Line Segment *		Station	-	able		rent RR (ij	ј арриса	ne)		ng Owner (if app	blicable)
17. Crossing Type	18. Cro	ossing Purpos	SMOUTH	ng Position	□ N/A	Public Acc	ess	21. Type of Train	□ N/A		22. Average Passenger
🗷 Highway 🖾 At Grade (if A							ssing)	<ul> <li>Freight</li> <li>Intercity Passeng</li> </ul>	🗆 Transi	t d Use Transit	Train Count Per Day
Image: Break way and the second se								Less Than One Per Day Mumber Per Day			
<b>23. Type of Land Use</b> Open Space	23. Type of Land Use										
24. Is there an Adjac		-						RA provided)			
🗆 Yes 🗷 No 🛛 If	Yes. Pro	vide Crossing	Number		(	🔺 No 🗆	] 24 Hr	Partial Chica	go Excused	Date Establis	shed
26. HSR Corridor ID			itude in decim	al degrees				le in decimal degrees	•	29. L	at/Long Source
	_□ N/A	(WGS8	4 std: nn.nnni	nnn) 43.0	0817990	(W	GS84 std:	-nnn.nnnnnnn) -70.	.7624970	□ Ac	tual 🗌 Estimated
30.A. Railroad Use	*							tate lise *	GTON BRANC	СН	
30.B. Railroad Use	*						31.B. S	itate Use *			
30.C. Railroad Use	*						31.C. S	tate Use *			
30.D. Railroad Use	*						31.D. 9	itate Use *			
32.A. Narrative (Rai	ilroad Us	se) *					32.B. 1	Narrative (State Use)	*		
33. Emergency Notif	ication T	elephone No	(posted)	34. Railr	oad Conta	act (Telep	hone No.,	)	35. State Co	ntact (Telephon	e No.)
									603-271-71	45	
					Part II:	Railroa	d Info	mation			
1. Estimated Number 1.A. Total Day Thru T			ients Total Night Thr	u Traine	1.C. Total	Switching	g Trains	1.D. Total Transit	Trains	1.E. Check if L	ess Than
(6 AM to 6 PM) 0	Tanis		1 to 6 AM)		0	JWITCHIN	g iranis	1.0. 10(a) Hansit	Trains	One Moveme	
2. Year of Train Coun	t Data (Y	(YYY)		Speed of T A. Maximu		•	(mnh) 1	5		, ,	•
	Taril							nph) From 5			
4. Type and Count of Main 1	Tracks	,	Yard	Transi	+	Inde	ustry				
5. Train Detection (M	0		ialu		ι	mai	ustry				
<ul><li>Constant Warr</li><li>6. Is Track Signaled?</li></ul>	<u> </u>	e 🗌 Motio	n Detection		PTC 🗷 [ 7.A. Event			None		7.8 Remote	e Health Monitoring
□ Yes 🖬 No											□ No
FORM FRA F 6180.71 (Rev. 3/15)     OMB approval expires 3/31/2018     Page 1 OF 2											

<b>A. Revision Date</b> ( <i>N</i> 07/31/2006	/M/DD/YYYY)			P	PAGE 2 D. Crossing Inventory Number (7 char.) 054125A										
		Р	art III:	Highway	or Pat	hway	Traffic (	Control De	evice l						
1. Are there	2. Types of Pa	ssive Traf	ffic Conti	rol Devices as	sociated	with the	Crossing								
Signs or Signals?	2.A. Crossbuc	<	2.B. STO	P Signs <i>(R1-1)</i>	2.C.	YIELD Sig	ns <i>(R1-2)</i>	2.D. Advar	nce War	ning S	igns (Check all	that appl	y; include	cour	nt) 🗌 None
🖬 Yes 🗌 No	Assemblies (co 4		(count) )		(cou	nt)		₩ W10-1			□ W10-3 □ W10-4				1 2
2.E. Low Ground Cle	earance Sign	2.F. Pav	vement N	Лarkings				nnelization			2.H. EXEMP	Г Sign		ENS Sign (1-13)	
(W10-5) □ Yes (count	1		1				Devices/				(R15-3) □ Yes		Displaye	ed	
☐ res (count ▲ No	/	Stop	ing Symb		namic En one	ivelope	🗆 All Ap		Medi None				🗆 res		
2.J. Other MUTCD S	Signs		es 🗷 No					te Crossing	-		nhanced Signs	(List types	;)		
Spacify Type		Cour	<b>*</b>				Signs (if	orivate)							
Specify Type Specify Type		Cour	nt nt				🗆 Yes								
Specify Type		Cour	nt												
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)															
3.A. Gate Arms	3.B. Gate Con	figuration					<i>ged)</i> Flashii	ng Light			Mounted Flash	ning Lights	5		Total Count of
(count)	🗆 2 Quad	🗆 Full <i>(E</i>	Carrier)		es <i>(count</i> offic Lane			candescent		-	<i>nasts)</i> _4 escent	 □ LED		Flas	hing Light Pairs
Roadway 0	-	Resistan	,	Over m			_ □	candescent			sterne ghts Included	□ Side	1.1.1.1.1	6	
Pedestrian		🗆 Media	an Gates	Not Ove	r Traffic l	ane 0	🗆 LE	D		-	-	Include		0	
3.F. Installation Date of Current 3.G. Wayside Horn 3.H. Highway Traffic Signals Controlling 3.I. Bells											3.I. Bells				
Active Warning Devices: (MM/YYYY) (count)															
$ \begin{array}{c} \square \ Ves \\ \square \ Mot \ Required \\ \square \ No \\ \end{array} $ Installed on $(MM/YYYY) \_ \_ /\_\_\_ \\ \square \ Ves \\ \blacksquare \ No \\ \end{array} $ No $ \begin{array}{c} \square \ Ves \\ \blacksquare \ No \\ \end{array} $										2					
3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         □ Flagging/Flagman □Manually Operated Signals □ Watchman □ Floodlighting □ None       3.K. Other Flashing Lights or Warning Devices															
4.A. Does nearby Hwy 4.B. Hwy Traffic Signal 4.C. Hwy Traffic Signal Preemption 5. Highway Traffic Pre-Signals 6. Highway Monitoring Devices												Devices			
Intersection have	Intercon		-		0	•		□ Yes □	No	0			ll that app		
Traffic Signals?		terconne affic Signa		□ Simultane				Chave an Dist					Photo/Vio		Recording nce Detection
🗷 Yes 🗆 No		arning Sig		□ Advance	eous			Storage Dista Stop Line Dis				□ Tes =		1636	lice Detection
			<u> </u>	I	Part IV	: Physi	cal Cha	racteristic	s						
1. Traffic Lanes Cros					2. Is Roa	adway/P	athway	3. Does T	rack Rur	n Dow	n a Street?		0		ted? (Street
Number of Lanes		□ Two-\ □ Divide			Paved?	Yes	□ No		] Yes		No		ithin appro rail) 🖬 Ye		0 feet from □ No
5. Crossing Surface												neuresti	,		
□ 1 Timber I □ 8 Unconsolidate	2 Asphalt 🛛	3 Aspha	lt and Tir	mber 🗌 4	Concrete						er 🗌 7 Mei	tal	0		
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	st Crossing A	ngle			8. Is Co	mmercial	Pow	er Available? *
🗷 Yes 🗆 No	If Yes, Approxin	nate Dista	nce (feet	-200			□ 0° – 2	9° ⊠ 30°	– 59°		60° - 90°		🖬 Yes		🗆 No
					rt V: P	ublic H	lighway	Informat	ion						
1. Highway System			2. F	unctional Cla	ssificatio	n of Road	at Crossir	g	3. 19	s Cros	sing on State H	lighway	4. H	ighw	ay Speed Limit
					. ,		1) Urban	<b>.</b>		tem?					MPH
. ,	tate Highway Sy Nat Hwy Syster			<ul><li>(1) Interstate</li><li>(2) Other Free</li></ul>			] (5) Majo sways	Collector			Referencing Sy	istom /I PS			d 🗆 Statutory
	al AID, Not NHS			(3) Other Prir		•		Collector				Stem (LN3	S NOULE ID	'	
🗆 (08) Non-F				(4) Minor Art			(7) Local			.RS Mi	lepost *				
4007 000075						9. Reg		d by School B Average Nu		er Day	,_0	_ 10. □ Y	•	cy Se No	ervices Route
Submi	ssion Infor	mation	- This i	informatio	n is used	d for ac	Iministra	tive purpo	ses an	d is r	not availabl	e on the	public v	veb	site.
Submitted by															
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25															
Washington, DC 20	590.														



#### U.S. DOT - CROSSING INVENTORY INFORMATION As of 7/26/2015



Revision Date:	07/31/2006 ReasonForUpdate			Reporting Ager	-		ReportingAgencyType <mark>054125A</mark>
	on and Classific						
State: NEW	HAMPSHIRE			Railroad Divisio	n or Region:	BOSTON	& MAINE
County: ROC	KINGHAM			Railroad Subdiv	ision or Dist	rict: VS 3 MA	P 55
City/Municipility: Near	es PORTSMOUTH			Branch or Line	Name: POR	TS YARD LE	AD
t Street/Road Name & I	Block #: MARKET ST			RR Milepost:	0.03		
Highway Type & No.:	CITY			Nearest RR Tin	netable Statio	on: PORTSM	OUTH
Parent RR:							
Crossing Owner:				Line Segment:			
Do Other Railroads O	perate a Separate Track	at Crossing?	No	SeparateTrackF	Railroads		
Do Other Railroads O	perate Over Your Track a	t Crossing?	No	SameTrackRail	roads		
Crossing Type:	CrossingType			Public Access:			
	CrossingPurpo			Type of Train:	TypeOfT	rainService	
Crossing Position: (	se CrossingPositi on						
Type of Land Use:	TypeofLandUse			Avg Passenger	Train Count	Per Day:	AveragePas sengerTrain PerDay
Is there Adjacent Cros	ssing with a Separate Nu	mber? No		Provide Crossin	ng Number:		
Quiet Zone:	QuietZone			Latitude:	43.	0817990	
HSR Corridor ID:				Longitude:	-70	.7624970	
				Lat/Long Source	e: Lat	itudeAndLon	gitudeSource
Railroad Use (Co	mments)			State Use (C	Comments	;)	
A:				A: NE	WINGTON BR	ANCH	
В:				B:			
C:				C:			
D:				D:			
Narrative:				Narrative:			
Emergency Notificatio	n Phone No.	Ra	ilroad Conta	ct:	S	State Contact:	603-271-7145
Part II: Railroa Total Day Thru Trains:		Total Night Thr	u Trains:	0 Le	ess Than On	e Movement P	'er Day?
Total Switching Trains		Total Transit T				Total Trains Pe	
Year Of Train Count D	ata:						
Maximum Timetable S	peed: 15	Typical Speed F	Range Over (	Crossing: From	5 to	15 mph	

 Type and Count of Tracks: Main:
 1
 Siding:
 Yard:
 Transit:
 Industry:

Train Detection: TrainDetection

**U.S. DOT - CROSSING INVENTORY INFORMATION** 

(continued)

Revision Date: 07/31/2006

No

DOT Crossing Inventory No: 054125A

#### Part III: Highway or Pathway Traffic Control Device Information

#### Signs or Signals? Yes

Types of Passive Traffic Control Devices associated with the Crossing

Crossbucks Assemblies: 4	Stop Signs (R1-1): 0	Yield Signs (R1-2):	
Low Ground Clearance Sign (W10-5):	No	Advanced Warning Signs:	No
Pavement Markings:	PavementMarkings	W10-1:	W10-4:
Channelization Devices/Medians:	ChannelizationDevices	W10-2:	W10-11:
EXEMPT Sign (R15-3):		W10-3:	W10-12:
ENS Sign Displayed (I-13):	No		
Other MUTCD Signs (Type):		Count:	
Other MUTCD Signs (Type):		Count:	
Other MUTCD Signs (Type):		Count:	
Private Crossing Signs (if private):		LED Enhanced Signs:	

Types of Train Activated Warning Devices at the Grade Crossing

Gates Arms: Gate G	Configuration: Gate	Configuratio	onTypes	
-	evered (or Bridged) Fa Over Traffic Lane:	ashing Light 0	Structures:	Incandescent:
Pedestrian:	Not Over Traffic Lane	: 0		LED:
Mast Mounted Flashing lights: 4 Incandescent:	LED:	Back Light	s Included:	Side Lights Included:
Total Count of Flashing Light Pairs: 6	Wayside H	Horn:	Installed o	n:
Highway Traffic Signals Controlling Crossing: No	Installation Da	ate of Curren	t Active Warning Dev	vices: ActiveWarningDevicesInstallation
Non-Train Active Warning: NonTrainActiveWarning	S		Bells: 2	
Other Flashing Lights or Warning Devices: (count)	0		Туре:	
Does Nearby Hwy Intersection have Traffic Signals:	Yes		Hwy Traffic Signal Ir	nterconnection: HwyTrafficSignalInt erconnection
Highway Traffic Signal Preemption:	HighwayTrafficSign emption	alPre	Highway Traffic Pre-	Signals:
			Storage Distance:	Stop Line Distance:
Highway Monitoring Devices: HwyMonitoringDev	nce			
Part IV: Physical Characteristics				
Traffic Lanes Crossing Railroad: Number of Lanes:	4 TrafficLaneTy	/pe		
Is Roadway/Pathway Paved? Yes Does Trac	k Run Down a Street?	? No	ls C	crossing Illuminated? Yes
Crossing Surface: CrossingSurface Other (specify):				
Installation Date: CrossingSurfa Width:	Length:			
Intersecting Roadway within 500 feet? Yes		If Yes, App	roximate Distance (F	eet): -200
Smallest Crossing Angle: SmallestCrossingAngle		Is Commer	cial Power Available	? Yes
Part V: Public Highway Informati	on			
Highway System: Highway System Functio	nal Classification of R	oad at Cross	sing: Functional F	unctionalClassificationOfRoad

Is Crossing on State Highway System? No			Highway Speed	Limit:	HighwaySp	
Linear Referencing System (LRS Route ID):			LRS Milepost:			
Annual Average Daily Traffic (AADT): Year	1987	AADT: 000375		Estimated Perc	ent Trucks:	05



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION

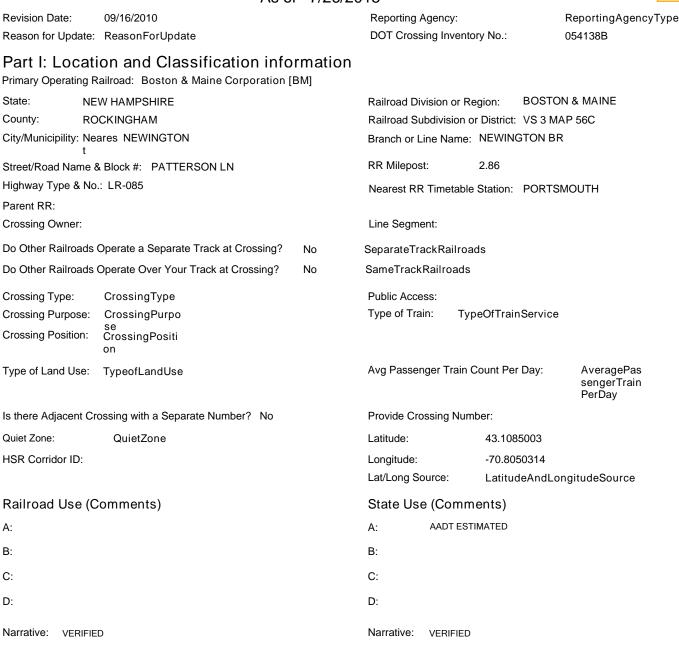


Form. For private high pedestrian station grad Parts I and II, and the Su	way-rail gi le crossing ubmission Informatio	rade cross (s), comple Information (n section.	ings, complete ete the Header on section. For For changes t	the Heade , Parts I and grade-separ o existing c	r, Parts I and d II, and the rated highwa lata, comple	nd II, ar Submi ay-rail c ete the	nd the S ission Inforpathw Header,	ubmission Informat formation section. I vay crossings (includ , Part I Items 1-3, a	ion section. For For Private pathy ing pedestrian st and the Submiss	public pathwa way grade cros ation crossing ion Informatio	ay grade crossings (including ssings, complete the Header s), complete the Header, Part on section, in addition to the	
A. Revision Date (MM/DD/YYYY)		Reporting A Railroad	Agency		son for Upda	a <b>te</b> (Sele New		<i>one)</i> □ Closed	🗆 No Train	□ Ouist	D. DOT Crossing	
09 / 16 / 2010	_			Data	Cr	ossing			Traffic	Zone Upda	Quiet Inventory Number   ne Update 054138B   054138B     No.     ssing?   Yes   Ssing?   Yes     (mnn.nnn)   (suffix)   ner (if applicable)     22. Average Passenger   Train Count Per Day   Immer (if applicable)     Immer (if applicable)     22. Average Passenger   Train Count Per Day   Immer Per Day   Immer Per Day     Immer Per Day	
	L¥ S	State	Other	🗆 Re-C		Date nange O		Change in Primar Operating RR	✓ □ Admin. Correction		054138B	
			P	art I: Loc	ation an	d Clas	ssifica	tion Informati	on			
1. Primary Operating R Boston & Maine Corp		BM]			2. State NEW		SHIRE		3. County ROCKING	HAM		
4. City / Municipality				Road Name RSON LN	e & Block Nu	ımber	1		6. Highway T	ype & No.		
□ Near NEWINGT			, ,	Road Name)				ck Number)	LR-085			
7. Do Other Railroads Operate a Separate Track at Crossing?       Yes       Yes       8. Do Other Railroads Operate Over Your Track at Crossing?       Yes       Yes         If Yes, Specify RR       If												
9. Railroad Division or I	Region		10. Railroad S	Subdivision	or District		11. Bra	anch or Line Name		<b>12. RR Mile</b>		
Image: None       BOSTON & MAINE       Image: None       VS 3 MAP 56C       Image: None       New INGTON BR       (prefix)       (nnnr         13. Line Segment       14. Nearest RR Timetable       15. Parent RR (if applicable)       16. Crossing Owner (if applicable)       16. Crossing Owner (if applicable)												
*		Station	smouth	bie		<b>LKK</b> (1)	иррпси	ue)		ng Owner (ij d	ιρριιταδιεγ	
17. Crossing Type 1	18. Crossin			g Position	20. Pub	lic Acce	ess	21. Type of Train	LI N/A		22. Average Passenger	
Image: Second state     Image: Second s							sing)	<ul> <li>Freight</li> <li>Intercity Passe</li> </ul>	□ Trans	it d Use Transit		
Private	Ped.	□ RR Over						Touri:				
<b>23. Type of Land Use</b> Open Space	] Farm	🕱 Res	idential	Commer	cial 🗆	] Indust	trial	Institutional	🗆 Recreati	onal 🗌	] RR Yard	
24. Is there an Adjacen	t Crossing	with a Sep	oarate Number	?	25.	Quiet Z	Zone (Fi	RA provided)				
🗆 Yes 🗷 No 🛛 If Ye	s, Provide	Crossing N	lumber			No 🗆	24 Hr	Partial Chi	ago Excused	Date Estab	olished	
26. HSR Corridor ID		27. Latit	ude in decima	l degrees		28.	Longitud	de in decimal degre	es	29.	Lat/Long Source	
	□ N/A	(WGS84	std: nn.nnnn	<sub>nnn)</sub> 43.10	085003	(WC	GS84 std	: -nnn.nnnnnnn) <sup>-7</sup>	0.8050314	X	Actual 🗌 Estimated	
30.A. Railroad Use *							31.A. 9	State Use * AADT	ESTIMATED			
30.B. Railroad Use *							31.B. 9	State Use *				
30.C. Railroad Use *							31.C. 9	State Use *				
30.D. Railroad Use *							31.D. 9	State Use *				
32.A. Narrative (Railro	oad Use) *	VERIFIE	D				32.B. I	Narrative (State Use	VERIFIED			
33. Emergency Notifica	tion Telep	hone No.	(posted)	34. Railro	ad Contact	(Teleph	none No.	)	35. State Co	ntact (Telepho	one No.)	
									603-271-24	68		
	-			P	art II: Ra	ilroa	d Info	rmation				
1. Estimated Number of 1.A. Total Day Thru Tra	-		ents otal Night Thru	Trains	1.C. Total Sw	vitching	Trains	1.D. Total Trans	it Trains	1.E. Check i	f Less Than	
(6 AM to 6 PM) 0			to 6 AM)		0						'	
2. Year of Train Count D	2. Year of Train Count Data (YYYY)       3. Speed of Train at Crossing											
					n Timetable S leed Range (			5 nph) From <u>5</u>	<sub>to</sub> 15			
4. Type and Count of Tr	acks			., p.cu op			61/	,,				
	ling		ard	_ Transit		Indu	istry					
5. Train Detection (Main	_		Detection	AFO 🗆 PI	гс 🗆 рс	🗆 Ot	ther 🛙	None				
6. Is Track Signaled?	<u> </u>				.A. Event Re	corder					•	
□ Yes I No FORM FRA F 6180	0 71 (Re	w 3/15	)		□ Yes □ OM		nroval	expires 3/31/	2018	⊔ Yes	□ No Page 1 OF 2	

<b>A. Revision Date</b> ( <i>N</i> 09/16/2010	/M/DD/YYYY)				PAGE 2 D. Crossing Inventory Number (7 char.) 054138B											
		Р	art III	: Highway	or Pat	:hway	Traffic (	Control D	evice	Info	rmation					
1. Are there	2. Types of Pa	ssive Traf	fic Cont	rol Devices ass	ociated	with the	Crossing									
Signs or Signals?	2.A. Crossbuck Assemblies (co		2.B. STC (count)	)P Signs <i>(R1-1)</i>	2.C. (cou		gns <i>(R1-2)</i>	2.D. Advar			igns (Check al.	l that appl			<i>int)</i> □ None	
🖬 Yes 🗌 No	1	0						□ W10-2			🗆 W10-4	l		□ W10-12		
2.E. Low Ground Clo (W10-5)	earance Sign	2.F. Pav	ement	Markings				nnelization Medians			2.H. EXEMP ( <i>R15-3</i> )	T Sign	Displayed			
□ Yes <i>(count</i> ☑ No	)	□ Stop □ RR Xi			amic En าe	ivelope			Mec Mec Non		□ Yes □ No		🗆 Yes 🗷 No			
2.J. Other MUTCD S	Signs	🗆 Ye	s 🗷 N	0				ate Crossing	2.L.	LED Ei	nhanced Signs	(List types	5)			
Specify Type Specify Type		Coun	t t				Signs (if	-								
Specify Type			t													
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)           3.A. Gate Arms         3.B. Gate Configuration         3.C. Cantilevered (or Bridged) Flashing Light         3.D. Mast Mounted Flashing Lights         3.E. Total Count of													Total Count of			
(count)	3.B. Gate Con	riguration			3.C. Cantilevered (or Bridged) Flashing Light Structures (count)						<i>nasts</i> ) 0	ning Lights	5		shing Light Pairs	
. ,	🗆 2 Quad	🗆 Full <i>(B</i>	arrier)	Over Traf	•		🗆 Ir	candescent			escent	LED			0 0 0 0	
Roadway <u>0</u>	□ 3 Quad	Resistant				0			□в	ack Lig	ghts Included		e Lights	0		
Pedestrian	🗆 4 Quad	🗆 Media	in Gates	Not Over	I raffic l	Lane <u> </u>	🗆 LI	-D				Include	ed			
3.F. Installation Date of Current       3.G. Wayside Horn       3.H. Highway Traffic Signals Controlling       3.I. Bells																
Active Warning Devices: (MM/YYYY) Crossing (count)											(count)					
											0					
3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         □ Flagging/Flagman       Manually Operated Signals       Watchman       Floodlighting       None         Count       0       Specify type																
4.A. Does nearby H	, ,	Traffic Sig	nal	4.C. Hwy Traff	ic Signa	l Preemp	otion	5. Highway T		re-Sig	nals	•			g Devices	
Intersection have Traffic Signals?	Intercon	nection Iterconne	stod					□ Yes □	No				II that ap		Recording	
Traffic Signais:		affic Signa		□ Simultaned	ous			Storage Dista	ance *						ence Detection	
🗆 Yes 🛛 🗶 No	🗌 For W	arning Sig	ns	□ Advance				Stop Line Dis		k		🗆 None	2			
				P	art IV	: Physi	ical Cha	racteristic	s							
1. Traffic Lanes Cros	-	🗆 Two-v	vay Traf	fic	Paved?	adway/P					n a Street?	lights wi	ithin appr	ox. s	ated? (Street 50 feet from	
Number of Lanes		Divide					$\square$ No M/YYYY)		🗆 Yes		No dth *	nearest	<i>rail)</i> [] Y			
□ 1 Timber ■ □ 8 Unconsolidate	2 Asphalt 🛛	3 Asphal	t and Ti	mber 🗌 4 (							er 🗆 7 Me		Length			
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	est Crossing A	ngle			8. Is Co	ommercia	l Pov	wer Available? *	
🗆 Yes 🔳 No	If Yes, Approxin	nate Distai	nce <i>(fee</i>	t)			□ 0° – 2	9° 🗆 30°	– 59°		60° - 90°		🖬 Yes		🗆 No	
				Par	t V: P	ublic H	lighway	<sup>,</sup> Informat	ion							
1. Highway System			2.	Functional Class			d at Crossii 1) Urban	ng		ls Cros stem?	sing on State I	Highway	4. <del> </del> 20	•	way Speed Limit MPH	
	tate Highway Sy			(1) Interstate				r Collector			🕱 No				ed 🛛 Statutory	
	Nat Hwy Syster al AID, Not NHS	n (NHS)		(2) Other Free (3) Other Princ		•	•	r Collector	5. l	Linear	Referencing S	ystem (LR:	S Route IL	) *		
🔟 (03) Federa				(4) Minor Arte			(7) Local		6. l	LRS Mi	ilepost *					
7. Annual Average Daily Traffic (AADT)     8. Estimated Percent Trucks       Year     2009     AADT     000560     00     %						9. Reg		d by School B Average Nu		er Day	, 0	10.	-	ncy S ] No	Services Route	
Submi	ssion Infor	mation	- This	information	is use	d for ac	dministra	itive purpo	ses an	nd is i	not availabl	e on the	public	wel	bsite.	
Submitted by																
Public reporting but																
sources, gathering a	-				-	-										
agency may not cor displays a currently		-					-		-							
other aspect of this	collection, inclu											-	-			
Washington, DC 20	590.															



#### **U.S. DOT - CROSSING INVENTORY INFORMATION** As of 7/26/2015



Emergency Notification Phone No.			Railroad Contac	ct:		Sta	ate Conta	ct:	603-271-2468
Part II: Railroad Inform	ation								
Total Day Thru Trains:	0	Total Night	Thru Trains:	0	Less Tha	n One	Moveme	nt P	er Day?
Total Switching Trains: 0		Total Trans	it Trains:			Тс	otal Train	s Pe	er week:
Year Of Train Count Data:									
Maximum Timetable Speed: 15		Typical Spee	ed Range Over (	Crossing: From	5	to	15 n	nph	
Type and Count of Tracks: Main:	1 Si	ding:	Yard:	Transit:	Indust	ry:			
Train Detection: TrainDetection									

A:

B:

C:

D:





**U.S. DOT - CROSSING INVENTORY INFORMATION** 

(continued)

Revision Date: 09/16/2010

No

DOT Crossing Inventory No: 054138B

#### Part III: Highway or Pathway Traffic Control Device Information

#### Signs or Signals? Yes

Types of Passive Traffic Control Devices associated with the Crossing

Crossbucks Assemblies: 1	Stop Signs (R1-1): 0	Yield Signs (R1-2):	
Low Ground Clearance Sign (W10-5):	No	Advanced Warning Signs:	No
Pavement Markings:	PavementMarkings	W10-1:	W10-4:
Channelization Devices/Medians:	ChannelizationDevices	W10-2:	W10-11:
EXEMPT Sign (R15-3):		W10-3:	W10-12:
ENS Sign Displayed (I-13):	No		
Other MUTCD Signs (Type):		Count:	
Other MUTCD Signs (Type):		Count:	
Other MUTCD Signs (Type):		Count:	
Private Crossing Signs (if private):		LED Enhanced Signs:	

Types of Train Activated Warning Devices at the Grade Crossing

Gates Arms: Gate	Configuration: Gate	Configuration <sup>-</sup>	Types	
•	evered (or Bridged) Fa	0 0	ructures:	Incandescent:
Pedestrian:	Over Traffic Lane:	0		LED:
	Not Over Traffic Lane:	0		LED.
Mast Mounted Flashing lights: 0 Incandescent	LED:	Back Lights I	ncluded:	Side Lights Included:
Total Count of Flashing Light Pairs: 0	Wayside H	lorn:	Installed or	ז:
Highway Traffic Signals Controlling Crossing: No	Installation Da	ate of Current A	Active Warning Dev	ices: ActiveWarningDevicesInstallation
Non-Train Active Warning: NonTrainActiveWarning	IS	B	ells: 0	
Other Flashing Lights or Warning Devices: (count)	0	T	ype:	
Does Nearby Hwy Intersection have Traffic Signals:	No	H	wy Traffic Signal In	terconnection: HwyTrafficSignalInt erconnection
Highway Traffic Signal Preemption:	HighwayTrafficSign emption	alPre H	ighway Traffic Pre-	Signals:
		St	torage Distance:	Stop Line Distance:
Highway Monitoring Devices: HwyMonitoringDev	vice			
Part IV: Physical Characteristics				
Traffic Lanes Crossing Railroad: Number of Lanes:	2 TrafficLaneTy	pe		
Is Roadway/Pathway Paved? Yes Does Trac	k Run Down a Street?	No	ls C	rossing Illuminated? No
Crossing Surface: CrossingSurface Other (specify):				
Installation Date: CrossingSurfa Width:	Length:			
Intersecting Roadway within 500 feet? No		If Yes. Approx	ximate Distance (F	eet):
Smallest Crossing Angle: SmallestCrossingAngle			al Power Available?	,
Part V: Public Highway Informati	ion			
Highway System: HighwaySystem Function	nal Classification of R	oad at Crossing	g: Functional Fi	unctionalClassificationOfRoad



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Instructions for the i Form. For private hig pedestrian station gr Parts I and II, and the I, and the Submissio updated data fields. I	ghway-rail ade crossin Submission n Informati	grade crossings), comple ngs), comple n Informationion section.	ings, complete ete the Header, on section. For For changes to	the Header Parts I and grade-separ existing d	r, Parts I a d II, and th ated high ata, comp	and II, a ne Subm way-rail plete the	nd the S iission In or pathw Header	ubmission Informati formation section. Fr ay crossings (includio , Part I Items 1-3, au	on section. For or Private pathv ng pedestrian st nd the Submissi	public pathway vay grade crossin ation crossings), on Information	grade cross ngs, comple complete th section, in a	ings (including te the Header, e Header, Part
A. Revision Date (MM/DD/YYYY)		Reporting A	• •		on for Up	<b>date</b> (Se □ New		one) □ Closed		□ Ouiot	D. DOT	Crossing ry Number
09 / 15 / 2010		State	Transit	I Char Data □ Re-C		Crossing		□ Closed	No Train Traffic Admin.	Quiet Zone Update		-
			D	art I. Loc		Change (		Operating RR tion Informatio	Correction			
1. Primary Operating	Railroad		FO		2. Sta	ate			3. County			
Boston & Maine Co	·	[BM]	E Street/	Road Name			PSHIRE					
4. City / Municipality In □ Near PORTSI			BARBE	RRY LN		umber	_   * (Bloo	ck Number)	6. Highway Tr	ype & NO.		
7. Do Other Railroad If Yes, Specify RR	s Operate a	a Separate T	rack at Crossin	g? □Yes	No No		<b>Do Other</b> f Yes, Spe	Railroads Operate C ecify RR	Over Your Track	at Crossing? 🗆	Yes 🗷 No	
9. Railroad Division o	or Region		10. Railroad S	ubdivision (	or District		11. Bra	inch or Line Name		<b>12. RR Milepo</b>	<b>st</b> 8.90	
	DN & MAIN			/S 28 MAP			□ Non	-		(prefix)   (nni	, ,	(suffix)
13. Line Segment *		Station	rest RR Timeta * SMOUTH	ble	15. Pare	nt RR (/	f applicai	de)		ng Owner (if app	olicable)	
17. Crossing Type		ing Purpose		-	20. Pu	ublic Acc		21. Type of Train			22. Average	-
🗷 Public	🗷 Highwa 🗌 Pathwa	,	🗷 At Grade		(If Priv	vate Cros S	ssing)	Freight Intercity Passen	☐ Transi ger ☐ Share	t d Use Transit	Train Count	r <b>Per Day</b> n One Per Day
<ul><li>Private</li><li>23. Type of Land Use</li></ul>	□ Station	n, Ped.	🗆 RR Over		🗆 No			Commuter	Touris	t/Other	🗆 Number	Per Day 0
Open Space	🗆 Farm			Commerc		🗆 Indus		Institutional	🗆 Recreati	onal 🗌 R	R Yard	
24. Is there an Adjac	ent Crossin	g with a Sep	oarate Number	?	25	5. Quiet	Zone (F	RA provided)				
	Yes, Provide	e Crossing N			X			Partial Chica	•	Date Establis		
26. HSR Corridor ID		27. Latit	tude in decima	0		28.	Longitue	de in decimal degree	S	29. La	at/Long Sour	ce
	N/A	(WGS84	std: nn.nnnn	<sub>nnn)</sub> 43.06	56996	(W		////////////////////////////////////	0.7791763	🖬 Ac	tual 🗌 E	stimated
30.A. Railroad Use	* *								ESTIMATED			
30.B. Railroad Use								State Use *				
30.C. Railroad Use							31.C. 9	State Use *				
30.D. Railroad Use	*						31.D. 1	State Use *				
32.A. Narrative (Rai		VERIFIE					32.B. I	Narrative (State Use)	* VERIFIED			
33. Emergency Notifi	ication Tele	ephone No.	(posted)	34. Railroa	ad Contac	t (Telep	hone No.	)		ntact (Telephone	e No.)	
									603-271-24	68 		
1. Estimated Number	of Daily 7	oin Merer	anto	Р	art II: R	lailroa	d Info	rmation				
1. Estimated Number 1.A. Total Day Thru T (6 AM to 6 PM)	,	1.B. T (6 PM	otal Night Thru to 6 AM)		L.C. Total S	Switching	g Trains	1.D. Total Transi	t Trains	1.E. Check if L One Moveme	nt Per Day	
0 2. Year of Train Coun	t Data (YYY	<u>0</u>	3.9	Speed of Tra	4 ain at Cros	sing				How many tra	iins per weel	?
		,	3.A	Maximum	Timetabl	e Speed		0 nph) From <u>5</u>	to <u>10</u>			
4. Type and Count of	Tracks							· · · <u></u>				
Main 1 5. Train Detection (M	Siding		ard	_ Transit _		Ind	ustry					
5. Train Detection (M			Detection	AFO 🗆 PT	C 🗷 DO	: □ o	ther	None				
6. Is Track Signaled? □ Yes ☑ No				7.	A. Event I		r			7.B. Remote		itoring
FORM FRA F 61	80.71 (R	lev. 3/15	)				proval	expires 3/31/2	018			age 1 OF 2

<b>A. Revision Date</b> (A 09/15/2010	/M/DD/YYYY)					Р	AGE 2			<b>D</b> .	Crossing Inve	ntory Nur	<b>mber</b> (7 ci	har.,	)
		Р	Part III	: Highway	or Pat	hway	Traffic (	Control D	evice						
1. Are there	2. Types of Pa	ssive Tra	ffic Cont	rol Devices ass	ociated	with the	Crossing								
Signs or Signals? ☑ Yes □ No	2.A. Crossbuck Assemblies (co	ount)	2.B. STC (count) 2	DP Signs <i>(R1-1)</i>	2.C. (cou		gns <i>(R1-2)</i>	🛾 W10-1			igns (Check all UW10-3	·	_ 🗆 W	10-2	
2.E. Low Ground Cl	2 Parance Sign	<u> </u>		Markings			2 G Cha	DW10-2			2.H. EXEMP		W 2.I. ENS		
(W10-5)	carance sign	2.1. Fav	vennenn	ividi kiligs				Medians			(R15-3)	i Sigii	Display		1 (1-13)
□ Yes (count	)	□ Stop			amic En	velope		proaches	□ Med		□ Yes		□ Yes		
No			ing Sym		ne				Non		□ No	<i></i>	🛛 No		
2.J. Other MUTCD S	bigns	∐ Ye	es 🗷 N	0			2.K. Priva Signs (if	ate Crossing	2.L.	LED Er	nhanced Signs	(List types	5)		
Specify Type		Cour	nt				516115 (1)	silvate)							
Specify Type Specify Type		Cour	nt nt				🗆 Yes	🗆 No							
3. Types of Train A					Isnocifi	, count o	f each dev	ice for all the	t annly	)					
3.A. Gate Arms	3.B. Gate Cont	-					ged) Flashi				Mounted Flasl	hing Lights	s	3.6	. Total Count of
(count)		0		Structure		)		0 0 1			nasts)_0		-		shing Light Pairs
Deadway 0	2 Quad	🗆 Full (E	,	Over Traf	fic Lane	0	🗆 Ir	candescent			escent				
Roadway       0       Image: State and the state an															
3.F. Installation Dat Active Warning Dev				3.G. Wayside	Horn					3.H. H Cross	Highway Traffi	c Signals C	Controlling	g	3.I. Bells (count)
Active warning Dev		) Not Requ	ired		talled o	n <i>(MM/Y</i>	YYY)	_/			s 🗷 No				0
2   Non Train Activ		•		🗆 No					24	Othor	Elaching Light	c or Marp		00	0
3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         Flagging/Flagman       Manually Operated Signals       Watchman       Floodlighting       None         4.A. Does nearby Hwy       4.B. Hwy Traffic Signal       4.C. Hwy Traffic Signal Preemption       5. Highway Traffic Pre-Signals       6. Highway Monitoring Devices															
4.A. Does nearby H		Traffic Sig	gnal	4.C. Hwy Traff	ic Signa	l Preemp	otion	5. Highway 1		re-Sigi	nals	•	•		g Devices
Intersection have Traffic Signals?	Interconr	nection	octed					□ Yes □	No				Ill that ap		Recording
indine signals.		affic Sign		Simultanee	ous			Storage Dist	ance *						ence Detection
🗆 Yes 🛛 No	🗌 For W	arning Sig	gns	□ Advance				Stop Line Dis	stance *	۰ 		🗆 None	9		
				Р	art IV	: Physi	ical Cha	racteristic	cs						
1. Traffic Lanes Cros		One-w     Two-v     Divide	way Traf	fic	Paved?	adway/P					n a Street?	lights wi	ithin appr	ox.	ated? (Street 50 feet from
Number of Lanes				-			$\square$ No M/YYYY)		🗆 Yes		No dth *	nearest	<i>rail)</i> [] Y		
□ 1 Timber II □ 8 Unconsolidate	2 Asphalt 🛛	3 Aspha	lt and Ti	mber 🗌 4 (							er 🗌 7 Me		Length		
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	est Crossing A	ngle			8. Is Co	ommercia	l Pov	wer Available? *
🗆 Yes 🔳 No	If Yes, Approxin	nate Dista	nce (fee	t)			□ 0° – 2	9° 🖬 30°	– 59°		60° - 90°		🖬 Yes		🗆 No
				Par	t V: P	ublic H	lighway	<sup>,</sup> Informat	ion						
1. Highway System			2.	Functional Clas			d at Crossir 1) Urban	ng		s Cros tem?	sing on State H	Highway	4. ⊦ 30		way Speed Limit MPH
	tate Highway Sy			(1) Interstate			🛛 (5) Majo	r Collector		Yes	🖬 No		E F	Post	ed 🛛 Statutory
	Nat Hwy Systen al AID, Not NHS	n (NHS)		(2) Other Free (3) Other Princ	,		sways ] (6) Mino	r Colloctor	5. L	Linear	Referencing S	ystem (LR	S Route IL	)*	
🔟 (03) Peder				(4) Minor Arte			(7) Local		6. L	LRS Mi	lepost *				
7. Annual Average		ADT)		nated Percent T			gularly Use	d by School B Average Nu		er Day	, 0	10.	-	ncy S ] No	ervices Route
Submi	ssion Inform	nation	- This	information	is use	d for ac	dministra	itive purpo	ses an	nd is r	not availabl	e on the	public	wel	bsite.
Submitted by				Organiza	ation						Phone		D	ate	
Public reporting bu															
sources, gathering a agency may not cor	nduct or sponso	r, and a pe	erson is	not required to	, nor sh	all a pers	on be subj	ect to a pena	lty for f	ailure	to comply wit	h, a collec	tion of inf	form	ation unless it
displays a currently												-	-		
other aspect of this Washington, DC 20		iung for f	euucing	this burden to	. morm		mection Of	ncer, rederal	rdiir0a	ια Αθή	mustration, 12	TOO INEW J	ersey Ave	:. 3E,	, IVIJ-ZJ



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private his pedestrian station gr Parts I and II, and the	ghway-ra rade cros Submiss n Inform	il grade cross sings), complesion Information ation section.	sings, completed ete the Heade on section. Fo . For changes	te the Head er, Parts I a r grade-sep to existing	der, Pa and II, a barated g data,	arts I and and the I highwa complet	d II, ar Submi y-rail c te the	nd the Su ission Inf or pathwa Header,	ubm form ray cr , Par	ission Information nation section. For rossings (includir t I Items 1-3, ar	on section. For or Private path og pedestrian st od the Submiss	public p way grad ation cro ion Infor	e crossing ssings), c mation se	plete the entire inventor grade crossings (includir gs, complete the Heade complete the Header, Pa ection, in addition to the lenotes an optional field
A. Revision Date		B. Reporting	0,				•	ect only o						D. DOT Crossing
( <i>MM/DD/YYYY</i> ) 07_/25_/2006		🗆 Railroad	🗆 Trans	Data	nange i		New ossing	L	Clo	osea	No Train Traffic	- •	ulet Update	Inventory Number
		🗷 State	🗆 Othe	r 🗆 Re	e-Open		Date			ange in Primary	🗆 Admin.			054411F
				Part I · I c	ncatio		ange O I Clas		<u> </u>	ating RR <b>n Informatic</b>	Correction			
1. Primary Operating					-	2. State		SSILLEU			3. County			
Boston & Maine Co	•	on [BM]						SHIRE			ROCKING			
4. City / Municipality I In □ Near PORTS			BORT	t <b>/Road Nan</b> HWICK A /Road Nam	VE	lock Nur	mber		ck Nu	umber)	6. Highway T PRIVATE	ype & No	0.	
7. Do Other Railroad If Yes, Specify RR	s Operat	e a Separate	Track at Cross	i <b>ng?</b> □ Ye	es 🗆 N	No		<b>O Other</b> Yes, Spe		roads Operate O RR	ver Your Track	at Cross	ing? 🗆 \	res □ No
9. Railroad Division o	or Region	/	10. Railroad	, Subdivisio	n or Di	istrict		11. Bra	nch	or Line Name		12. RR	Mileposi	, t
DOOT	ON & MA			VS 28 M/	AD 2			<b>—</b> • •		PORTSMOU			0008	.11
□ None BOSTC 13. Line Segment			None None Rest RR Time			. Parent	RR (if	D None	-	FORTSMOU	16. Crossi		r)   (nnnı er (if appli	, , , ,, ,
*		Station PORT	* SMOUTH			N/A					□ N/A	-		
17. Crossing Type	17. Crossing Type       18. Crossing Purpose       19. Crossing Position       20. Public Access       21. Type of Train       22. Average Passenger													
Image: Public       Image: Pathway, Ped.       Image														
Image: Private       □ Station, Ped.       □ RR Over       Image: No       □ Commuter       □ Tourist/Other       □ Number Per Day 0														
<b>23. Type of Land Use</b> Open Space	e 🗷 Farm		sidential		ercial		Indust	trial	Г	] Institutional	Recreat	ional	🗆 RR	Vard
24. Is there an Adjac					creidi			Zone (FR						
🗆 Yes 🗷 No 🛛 If	Yes Prov	vide Crossing N	Number			🔺 N	• □	24 Hr	ПР	Partial 🗌 Chica	go Excused	Date	Establish	ed
26. HSR Corridor ID			tude in decim	al degrees			1			decimal degree	0	Dute	1	/Long Source
	□ N/A	(WGS84	4 std: nn.nnn	nnnn) 43.	06840	10	(WG	GS84 std:	: -ni	nn.nnnnnnn) <sup>-70</sup>	.7751010		🗆 Actu	ual 🛛 Estimated
30.A. Railroad Use	*			,				31.A. S		eUse *	MOUTH BRA	NCH		
30.B. Railroad Use	*							31.B. S	State	e Use *				
30.C. Railroad Use	*							31.C. S	State	e Use *				
30.D. Railroad Use	*							31.D. S	State	e Use *				
32.A. Narrative (Rai	ilroad Use	e) *						32.B. N	Narra	ative (State Use)	*			
33. Emergency Notif	ication T	elephone No.	(posted)	34. Railı	road Co	ontact (	'Teleph	none No.)	)		35. State Co	ntact (Te	elephone	No.)
											603-271-71	45		
					Part	II: Rai	ilroad	d Infor	rma	ation				
1. Estimated Number	-			The first	4.6.7			<b>T</b> '		1 D. T. I. J. T	<b>T</b>	45.0		
1.A. Total Day Thru T (6 AM to 6 PM) 0	(6 AM to 6 PM) (6 PM to 6 AM) One Movement Per Day													
2. Year of Train Coun	t Data <i>(Y</i>	YYY)		. Speed of 1			0	, ,, ,				1		
				.A. Maximu .B. Typical S						From 0	to			
4. Type and Count of	Tracks		•	·		-			-					
	Siding		'ard	Trans	it		Indu	ustry						
5. Train Detection ( <i>N</i> )			Detection	□afo □	PTC	🗆 DC	🗆 Ot	ther 🗖	No	ne				
6. Is Track Signaled?	_				7.A. E	vent Rec	corder			-				Health Monitoring
	00 71	(Day 2/45	:)			Yes		provel	<u></u>	niros 2/21/2	019		Yes 🗌	
FORM FRA F 61	.ou./1	(nev. 3/15	<b>)</b>				D app	hinat	ex	pires 3/31/2	010			Page 1 OF

<b>A. Revision Date</b> ( <i>N</i> 07/25/2006	/M/DD/YYYY)					P	AGE 2			<b>D</b> . 054	Crossing Inve	ntory Nun	nber (7 ch	ar.)
		Pa	art III: H	ighway o	r Path	าพลง	Traffic C	Control D	evice l					
1. Are there	2. Types of Pa	ssive Traff	ic Control	Devices asso	ciated v	with the	Crossing			_				
Signs or Signals? □ Yes I No	2.A. Crossbuck Assemblies (co 0		count)	igns <i>(R1-1)</i>	2.C. Y (count		ns <i>(R1-2)</i>	2.D. Advar			igns <i>(Check all</i> □ W10-3 □ W10-4			10-11
2.E. Low Ground Clo (W10-5)	earance Sign	2.F. Pave	ement Mar	kings			2.G. Char Devices/I	nnelization			2.H. EXEMPT (R15-3)			Sign (I-13)
☐ Yes (count ☑ No	)	Stop I RR Xir	ines g Symbols		mic Env e	elope	All App One A	proaches	Media     None		□ Yes □ No		□ Yes ■ No	-
2.J. Other MUTCD S	Signs		S 🛛 No					te Crossing	2.L. L	ED En	hanced Signs	(List types	;)	
Specify Type Specify Type Specify Type		Count					Signs <i>(if µ</i>	-						
3. Types of Train A	ctivated Warnin	g Devices	at the Gra	de Crossing (	specify	count o	f each devi	ice for all tha						
3.A. Gate Arms (count) Roadway <u>0</u> Pedestrian	3.B. Gate Cont 2 Quad 3 Quad 4 Quad	figuration Full (Ba Resistanc Median	e	3.C. Cantile Structures Over Traffi Not Over T	<i>(count)</i> ic Lane	0	🗆 In	candescent	<i>(coun</i> □ Inc	n <i>t of n</i> cande	Mounted Flash nasts)_0 scent hts Included	ning Lights  □ LED □ Side Include	Lights	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current       3.G. Wayside Horn       3.H. Highway Traffic Signals Controlling       3.I. Bells         Active Warning Devices: (MM/YYYY)       Installed on (MM/YYYY)       Image: Crossing       (count)         Image: Crossing       Installed on (MM/YYYY)       Image: Crossing       (count)         Image: Crossing       Image: Crossing       Image: Crossing       (count)         Image: Crossing       Image: Crossing       Image: Crossing       (count)         Image: Crossing       Image: Crossing       Image: Crossing       Image: Crossing         Image: Crossing       Image: Crossing       Image: Crossing       Image: Crossing       Image: Crossing         Image: Crossing       Image: Crossi														
3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         C Flagging/Flagman Manually Operated Signals       Watchman       Floodlighting       None         3.K. Other Flashing Lights or Warning Devices       Count       0       Specify type														
4.A. Does nearby Hwy       4.B. Hwy Traffic Signal       4.C. Hwy Traffic Signal Preemption       5. Highway Traffic Pre-Signals       6.         Intersection have       Interconnection       Interconnected       9       9       0       0         Traffic Signals?       Not Interconnected       9       Simultaneous       5. Highway Traffic Pre-Signals       6.         For Traffic Signals?       10       Not Interconnected       10       10       10										(Check a	<i>II that app</i> Photo/Vic Vehicle P	oring Devices hly) leo Recording resence Detection		
				Ра	rt IV:	Physi	cal Chai	racteristic	cs					
1. Traffic Lanes Cros		□ Two-w □ Divideo	ay Traffic d Traffic	Р	. Is Road aved? □ Ye	es [	_ No		🗆 Yes	X	n a Street? No	lights wi	thin appro	ninated? (Street ox. 50 feet from es
<ol> <li>Crossing Surface</li> <li>☐ 1 Timber</li> <li>☐ 8 Unconsolidate</li> </ol>	2 Asphalt 🛛	3 Asphalt	and Timb	er 🗌 4 Co							dth * er □ 7 Met		Length *	
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	st Crossing A	ingle			8. Is Co	mmercial	Power Available? *
🗆 Yes 🗆 No	If Yes, Approxin	nate Distan	ce (feet) _				□ 0° – 29				60° - 90°		🗆 Yes	□ No
								Informat	-					
1. Highway System       2. Functional Classification of Road at Crossing       3. Is Crossing on State Highway       4. Highway Speed Limit         (0) Nural       (1) Urban       System?       MPH         (0) Oly Other Nat Hwy System       (1) Interstate       (5) Major Collector       Yes       No         (0) System (NHS)       (2) Other Freeways and Expressways       5. Linear Referencing System ( <i>LRS Route ID</i> ) *       5. Linear Referencing System ( <i>LRS Route ID</i> ) *         (0) (0) Non-Federal Aid       (4) Minor Arterial       (7) Local       6. LRS Milepost *														
7. Annual Average Year <u>1970</u> AA		ADT) 8	. Estimate	d Percent Tr	ucks %	9.Reg		d by School B Average Nເ		er Day	0	_ 10. □ Y	-	cy Services Route No
Submi	ssion Infor	nation ·	- This inf	ormation i	's used	for ac	lministra	tive purpo	ses and	d is n	ot availabl	e on the	public v	vebsite.
Submitted by				_ Organizat							Phone			ate
Public reporting bur sources, gathering a agency may not cor displays a currently other aspect of this Washington, DC 20	and maintaining nduct or sponsor valid OMB cont collection, inclu	the data n r, and a per rol numbe	eeded and rson is not r. The vali	l completing required to, d OMB contr	and revi nor shal ol numb	iewing t II a pers per for in	he collections on be subjection be subjected by the subject of the	on of informa ect to a pena collection is	ation. Ac Ity for fai 2130-00	ccordi ilure 17. S	ng to the Pape to comply with end comment	erwork Re n, a collect s regardin	duction A tion of info ng this bur	ct of 1995, a federal ormation unless it den estimate or any



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Instructions for the i Form. For private hi pedestrian station ge Parts I and II, and the I, and the Submissio updated data fields.	ghway-i rade cro Submi on Infori	rail grade cro ossings), com ssion Informa mation sectio	ossings plete t ation se on. For	, complete the Header, ection. For g	the Heade Parts I and grade-separ existing c	er, P d II, rate data	arts I and and the S d highway , complet	l II, a Subm y-rail e the	nd the S ission Inf or pathw Header,	iubmi forma vay cr , Part	ission Informatic ation section. Fo ossings (includin t I Items 1-3, an	on section. For or Private pathv og pedestrian st od the Submissi	public pathwa vay grade cros ation crossings on Information	y grade cr sings, com ), complete n section, i	ossings (including plete the Header, e the Header, Part
A. Revision Date		B. Reportin	g Ageı	ncy	C. Reas	son	for Updat	<b>e</b> (Se	lect only	one)				D. D0	OT Crossing
(MM/DD/YYYY)		🗆 Railroad		🗆 Transit		nge		New		Clo	osed	🗆 No Train	🗆 Quiet		ntory Number
09 / 16 / 2010		🗷 State		🗆 Other	Data □ Re-C	Ope	n 🗆 🛙	ssing Date			ange in Primary	Traffic	Zone Upda	te 0544 <sup>-</sup>	15H
				Da	art I. Loc	ati		inge (		<u> </u>	ating RR Informatio	Correction			
1. Primary Operating	z Railro	ad		FO		au	2. State		SSIIICa		i iniornatio	3. County			
Boston & Maine C							NEW H		SHIRE			ROCKING	IAM		
4. City / Municipality	y			5. Street/F	Road Name MOUTH A		Block Nun	nber				6. Highway T	ype & No.		
In □ Near GREEN	LAND				oad Name)				_   * (Bloc	ck Nu	umber)	N-050			
7. Do Other Railroad		ate a Separat	e Trac	1 1	,		No	8. [			oads Operate O		at Crossing?	Yes 🕱	No
If Yes, Specify RR									f Yes, Spe						
9. Railroad Division	or Regio	on	10	. Railroad S	ubdivision	or [	District		11. Bra	anch	or Line Name		<b>12. RR Miler</b>	ost 006.57	
□ None BOSTC	ON & M	IAINE		None V	/S 28 MAF				🗆 Non	-	PORTSMOUT	TH BR	(prefix)   (n	nnn.nnn)	(suffix)
13. Line Segment				RR Timetal	ole	1	5. Parent	RR (ij	f applical	ble)		16. Crossi	n <b>g Owner</b> (if a <sub>l</sub>	oplicable)	
*		Static GRF		* AND											
GREENLAND       □ N/A       □ N/A         17. Crossing Type       18. Crossing Purpose       19. Crossing Position       20. Public Access       21. Type of Train       22. Average Passenger         Image: State S															
I Highway I At Grade ( <i>if Private Crossing</i> ) □ Freight □ Transit Train Count Per Day															
🗷 Public	🗆 Pat	thway, Ped.		🗆 RR Unde	r		□ Yes				Intercity Passen	ger 🗌 Share	d Use Transit		han One Per Day
Private		ition, Ped.		🗆 RR Over			🗆 No				Commuter	🗆 Touris	t/Other	🗆 Numb	er Per Day 0
23. Type of Land Use										_	l to attraction at			DD Va al	
<ul> <li>Open Space</li> <li>24. Is there an Adjace</li> </ul>	Farr		esider		Commer	ciai		Indus	<b>Zone</b> (Fl		Institutional	C Recreati	onai 🗆	RR Yard	
24. IS there all Aujac		ssing with a s	epara		•		23. 0	luiet	20110 (77	NA pi	ovideu)				
🗆 Yes 🔳 No 🛛 If	Yes, Pro	ovide Crossing	g Num	ber			🖪 No	b □	24 Hr	🗆 Pa	artial 🗌 Chica	go Excused	Date Estab	lished	
26. HSR Corridor ID		27. La	ntitude	e in decimal	degrees			28.	Longitud	de in	decimal degrees	5	29.	Lat/Long S	ource
					43.04	443	165	<i></i>			70	.8237312			
30.A. Railroad Use	N/A *	A (WGS	84 std	: nn.nnnnn	nn) <sup>.e.e</sup>			(W	GS84 std. <b>31.A.</b> 9		in.nnnnnnn)		X A	ctual 🗌	] Estimated
SU.A. Rainoau Use									51.A	Jiale	AADT E	STIMATED			
30.B. Railroad Use	*								31.B. 9	State	Use *				
30.C. Railroad Use	*								31.C. S	State	Use *				
30.D. Railroad Use	*								31.D. 9	State	Use *				
32.A. Narrative (Ra	ilroad U	<sup>'se)*</sup> VERIF	IED						32.B. I	Narra	ntive (State Use)	* VERIFIED			
33. Emergency Notif	ication	Telephone N	<b>o.</b> (pos	sted)	34. Railro	ad (	Contact (7	Telepi	hone No.	)		35. State Co	ntact (Telepho	ne No.)	
				-								603-271-24	68		
					P	Par	t II: Rai	Iroa	d Info	rma	ition				
1. Estimated Number					<del>-</del> ·   .		<b>T</b> . 10		<u> </u>						
1.A. Total Day Thru (6 AM to 6 PM)	Irains		lotal M to 6	Night Thru	Trains	1.C.	Total Swit	tching	g I rains	1	L.D. Total Transit	Trains	1.E. Check if One Movem		y 🗆
0		0	101 10 0	Alvij		4							How many t		
2. Year of Train Coun	it Data (	YYYY)			peed of Tra	ain a	at Crossing	g					i non many e		
					. Maximum							4 5			
4. Type and Count of	Tracks			3.B	. Typical Sp	eed	I Range Ov	ver Cr	ossing (n	nph)	From <u>&gt;</u>	to			
Main 1	Siding		Yard		Transit			Indi	ustry						
5. Train Detection (N	0 -	ck only)							1						
Constant War	ning Tin		on Det	ection	AFO 🗆 PT			□ 0		] Nor	ne				
6. Is Track Signaled?					7.		Event Rec		. –				7.B. Remo		Ionitoring
🗆 Yes 🖬 No						L	Yes 🗆	NO					⊔ Yes	🗆 No	

<b>A. Revision Date</b> (A 09/16/2010	/M/DD/YYYY)					P	AGE 2			<b>D</b> .	Crossing Inve	ntory Nun	nber (7 ch	ar.)	
			Part II	: Highway o	r Path	nway	Traffic (	Control D	evice						
1. Are there	2. Types of Pa	ssive Tr	affic Con	trol Devices asso	ciated v	with the	Crossing								
Signs or Signals?	2.A. Crossbuck	(	2.B. ST(	OP Signs (R1-1)	2.C. Y	IELD Sig	gns <i>(R1-2)</i>					l that apply	y; include	count	t) 🗌 None
🛾 Yes 🗌 No	Assemblies (co 3	ount)	(count) 0		(coun	t)		₩ W10-1			□ W10-3 □ W10-4				
2.E. Low Ground Cl (W10-5)	earance Sign	2.F. Pa	avement	Markings			2.G. Cha Devices/	nnelization			2.H. EXEMP ( <i>R15-3</i> )	T Sign	2.I. ENS Displaye	• •	( -13)
□ Yes (count	)		p Lines		imic Env	elope		proaches	🗆 Me	dian	□ Yes		□ Yes		
🗷 No			Xing Sym	ibols 🗌 Non	e		🗆 One A		🗶 No	ne	🗆 No		🗷 No		
2.J. Other MUTCD S	Signs		Yes 🗆 N	lo				te Crossing	2.L	. LED Er	nhanced Signs	(List types	)		
Specify Type		Coι	unt <u>2</u>				Signs (if )	orivate)							
Specify Type Specify Type		ΟΟΙ ΟΟΙ	unt 0 unt				□ Yes	□ No							
3. Types of Train A					specify	count o	f each dev	ice for all tha	t appl	v)					
3.A. Gate Arms	3.B. Gate Conf	-		3.C. Cantil			-	-			Mounted Flas	hing Lights	;	3.E. <sup>-</sup>	Total Count of
(count)	_	_		Structures	. ,		_			-	nasts) 2			Flash	ning Light Pairs
Roadway 0	□ 2 Quad □ 3 Quad		(Barrier)	Over Traff	ic Lane	_1	🗆 In	candescent		Incande					
Pedestrian		Resista	lince dian Gate	s Not Over 1	Traffic La	ane_0_	D LE	D		васк це	ghts Included	□ Side Include	0	7	
3.F. Installation Dat	e of Current			3.G. Wayside H	orn					3 H I	Highway Traffi	c Signals C	ontrolling		3.I. Bells
Active Warning Dev		)		•						Cross	ē ,		oncioning		(count)
/		Not Req	luired	□ Yes Inst □ No	alled on	(MM/Y	YYY)	_/		🗆 Ye	s 🗷 No			1	,
	3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         G Flagging/Flagman       Manually Operated Signals       Watchman       Floodlighting       None         4.A. Does nearby Hwy       4.B. Hwy Traffic Signal       4.C. Hwy Traffic Signal       Preemption       5. Highway Traffic Pre-Signals       6. Highway Monitoring Devices														
4.A. Does nearby H	wy 4.B. Hwy	Traffic S	Signal	4.C. Hwy Traffi	c Signal	Preemp	tion	5. Highway 1	raffic	Pre-Sigi				oring	Devices
Intersection have	Interconr		-	-	-	-		□ Yes □	No	-			ll that app		
Traffic Signals?	🗆 Not In							c	÷				Photo/Vio		-
🗆 Yes 🔳 No	🗌 For Tr 🗌 For W	•		□ Simultaneo	us			Storage Dista Stop Line Dis				$\square$ res $=$ $\square$ None		resen	ce Detection
			0		rt IV:	Physi	cal Cha	racteristic							
1. Traffic Lanes Cros	ssing Railroad	🗆 One-	way Traf				athway	-		un Dow	n a Street?	4. Is Cro	ssing Illur	ninate	ed? (Street
Number of Lanes	-		-way Tra ded Traff		aved?	es	□ No		□ Yes	X	No	-	thin appro rail) 🗆 Ye		) feet from I No
5. Crossing Surface				llowed) Installa	ation Da	ite * <i>(M</i>	M/YYYY) _	/		Wi	dth *		,		
<ul> <li>1 Timber</li> <li>8 Unconsolidate</li> </ul>					oncrete	□ 5	Concrete	and Rubber	□ 6	Rubbe	er 🗌 7 Me	tal			
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	st Crossing A	ngle			8. Is Co	mmercial	Powe	er Available? *
🗆 Yes 🔳 No	If Yes, Approxim	nate Dist	tance (fee	et)			□ 0° – 2	9° □ 30°	– 59°	X	60° - 90°		🖿 Yes		□ No
			-	Part	V: Pu	ıblic H	lighway	Informat	ion						
1. Highway System			2.	Functional Classi				lg			sing on State H	Highway		ighwa	ay Speed Limit
(01) Inters	tata Highway Sy	ctom		(1) Interstate	(0) Rura	,	1) Urban ] (5) Majo	Collector		vstem?	🗆 No		30	octod	MPH □ Statutory
	tate Highway Sy Nat Hwy Systen			(1) Interstate (2) Other Freew	vays and			Collector			Referencing S	vstem (LRS			
	al AID, Not NHS			(3) Other Princi				Collector			ilepost *			,	
<ul><li>(08) Non-F</li><li>7. Annual Average</li></ul>		DT)		(4) Minor Arteri nated Percent Tr			t (7) Local gularly Use	d by School B			icpost	10.	Emergen	cv Ser	rvices Route
	DT 000560		03		%	X Yes		Average Nu		per Day	, <u>5</u>	_	-	No	
Submi	ssion Inform	natio	<b>n</b> - This	information i	is used	for ac	lministra	tive purpo	ses a	nd is r	not availabl	e on the	public v	vebs	site.
Submitted by				Organizat							Phone			ate _	
Public reporting bu															
sources, gathering a agency may not cor						•					•				
displays a currently															
other aspect of this		ding for	reducing	g this burden to:	Informa	ation Co	llection Of	ficer, Federal	Railro	ad Adn	ninistration, 12	200 New Je	ersey Ave	SE, N	/IS-25
Washington, DC 20	590.														



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private hi pedestrian station gi Parts I and II, and the	ghway-i rade cro e Submis n Inforr	rail grade cross ossings), comple ssion Information mation section.	ings, complete ete the Header on section. For For changes t	the Header , Parts I and grade-separ o existing d	r, Parts I and II, and the ated highwa ata, comple	d II, a Subm ay-rail ete the	nd the S iission Inf or pathw Header,	ubmission Informatio formation section. Fo ay crossings (includir . Part I Items 1-3, an	on section. For or Private pathy ng pedestrian st nd the Submissi	public pathway vay grade crossi ation crossings), on Information	nplete the entire inventory grade crossings (including ings, complete the Header, , complete the Header, Part section, in addition to the denotes an optional field.		
A. Revision Date (MM/DD/YYYY)		<b>B. Reporting</b> Railroad	Agency		on for Upda	<b>ite</b> (Se New	,	one) □ Closed	🗆 No Train	🗆 Quiet	D. DOT Crossing Inventory Number		
09 / 16 / 2010		State	Other	Data	Cr	ossing Date		□ Closed □ Change in Primary	Traffic $\Box$ Admin.	Zone Update			
						ange		Operating RR	Correction				
1. Primary Operating	Deilre		P	art I: Loca	-		ssifica	tion Informatio					
Boston & Maine Co				······	2. State NEW		PSHIRE		3. County ROCKINGH	IAM			
4. City / Municipality				Road Name	& Block Nu	mber	_1		6. Highway T	ype & No.			
Near GREEN <b>7. Do Other Railroad</b>		to a Saparata 7		Road Name)		0		ck Number) Railroads Operate O	ST-033	at Crossing?			
If Yes, Specify RR	s Opera	,	,	igr⊡res			f Yes, Spe		,	,	, ,		
9. Railroad Division or Region       10. Railroad Subdivision or District       11. Branch or Line Name       12. RR Milepost            □ None       BOSTON & MAINE          □ None       VS 28 MAP 5           □ None       PORTSMOUTH BR           10. ref(x)   (nonn nnn)   (suff(x))													
	DN & M			VS 28 MAP			□ Non			(prefix)   (nn	/ // // //		
13. Line Segment *		Station	rest RR Timeta *	ble	15. Parent	<b>t RR</b> ( <u>i</u>	f applical	ble)		ng Owner (if app	olicable)		
GREENLAND     N/A       17. Crossing Type     18. Crossing Purpose     19. Crossing Position     20. Public Access     21. Type of Train       22. Average Passenger     21. Type of Train     22. Average Passenger													
•	🗷 Hig	hway	🗷 At Grad	e	(if Priva	te Cros	ssing)	□ Freight	🗆 Transi	-	Train Count Per Day		
Public Private		hway, Ped. tion, Ped.	RR Unde     RR Over		Yes No			Intercity Passen Commuter	ger 🗌 Share 🗌 Touris	d Use Transit t/Other	<ul> <li>Less Than One Per Day</li> <li>Number Per Day 0</li> </ul>		
23. Type of Land Use										d other			
Open Space	🗆 Farr			Commerc		Indus		Institutional	🗆 Recreati	onal 🗌 R	R Yard		
24. Is there an Adjac	ent Cro	ssing with a Se	parate Numbe	·?	25.	Quiet	Zone (F	RA provided)					
🗆 Yes 🔳 No 🛛 If	Yes, Pro	vide Crossing N	lumber		<b>X</b> N	lo 🗆	] 24 Hr	🗆 Partial 🛛 Chica	go Excused	Date Establi	shed		
26. HSR Corridor ID		27. Lati	tude in decima	l degrees		28.	Longitud	de in decimal degree	S	29. L	at/Long Source		
		(WGS84	std: nn.nnnn	nnn) 43.04	78689	(W	GS84 std	: -nnn.nnnnnnn) <sup>-70</sup>	.8167136	🗷 Ac	tual 🗌 Estimated		
30.A. Railroad Use	*							State Use *					
30.B. Railroad Use	*						31.B. 9	State Use *					
30.C. Railroad Use	*						31.C. 9	State Use *					
30.D. Railroad Use	*						31.D. 9	State Use *					
32.A. Narrative (Ra		Ý VERIFIE						Narrative (State Use)	VERIFIED				
33. Emergency Notif	ication	Telephone No.	(posted)	34. Railroa	ad Contact	(Telep	hone No.	)	<b>35. State Co</b> 603-271-24	ntact (Telephon 68	e No.)		
				D	art II: Ra	ilroa	d Info	rmation					
1. Estimated Number	r of Dail				ai t ii. Na	11108				_			
1.A. Total Day Thru Trains       1.B. Total Night Thru Trains       1.C. Total Switching Trains       1.D. Total Transit Trains       1.E. Check if Less Than         (6 AM to 6 PM)       0       4       One Movement Per Day       D         0       4       How many trains per week?													
2. Year of Train Coun	t Data (	YYYY)		 Speed of Tra A. Maximum	ain at Crossi	•	(mnh) 1	5					
								<i>nph)</i> From <u>5</u>					
4. Type and Count of	Tracks												
	Siding		ard	_ Transit _		Ind	ustry						
5. Train Detection (N		• •	Detection [	AFO 🗆 PT	C 🗷 DC		ther 🗆	None					
6. Is Track Signaled?	<u> </u>				A. Event Re						e Health Monitoring		
🗌 Yes 🖬 No	00.74	/= /: =			□ Yes □	□ No				🗆 Yes	□ No		

<b>A. Revision Date</b> (A 09/16/2010	ЛМ/DD/YYYY)					P	AGE 2			<b>D.</b> 054	Crossing Inve	ntory Nun	<b>nber</b> (7 ch	nar.)	
		P	art III:	Highway o	or Pat	hway	Traffic O	Control D	evice l		-				
1. Are there	2. Types of Pa	ssive Traf	fic Contro	l Devices asso	ciated	with the	Crossing			_				_	
Signs or Signals? ■ Yes □ No	2.A. Crossbuck Assemblies (co 4		(count)	Signs <i>(R1-1)</i>	2.C. \ (cour	-	gns <i>(R1-2)</i>	2.D. Advar			igns <i>(Check ali</i> U W10-3 W10-4			10-11	, L
2.E. Low Ground Cl (W10-5)	earance Sign	2.F. Pav	ement M	arkings			2.G. Chai Devices/	nelization			2.H. EXEMP (R15-3)		2.I. ENS Displaye	Sign	
☐ Yes (count ☑ No	)	Stop     RR Xi	Lines ng Symbo		amic Env	velope		proaches	🗆 Medi 🗷 None		□ Yes □ No		□ Yes		
2.J. Other MUTCD S	Signs		s 🗷 No		-			te Crossing			nhanced Signs	(List types			
Specify Type Specify Type Specify Type		Coun	t t t				Signs (if µ								
3. Types of Train A		-		-			-								
3.A. Gate Arms ( <i>count</i> ) Roadway <u>0</u> Pedestrian	3.B. Gate Cont 2 Quad 3 Quad 4 Quad	figuration Full (B Resistanc Media	<i>arrier)</i> ce	3.C. Cantil Structures Over Traff Not Over T	( <i>count)</i> ic Lane	2		candescent	(coun □ Inc	nt of r cande	Mounted Flasi nasts)_2 escent shts Included	hing Lights  □ LED □ Side Include	e Lights		Total Count of hing Light Pairs
							□ [	D							
3.F. Installation Date of Current       3.G. Wayside Horn       3.H. Highway Traffic Signals Controlling       3.I. Bells         Active Warning Devices: (MM/YYYY)       Installed on (MM/YYYY)       Crossing       (count)         Image: Constraint Active Warning       Not Required       Installed on (MM/YYYY)       Image: Crossing       2         3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices       3.K. Other Flashing Lights or Warning Devices															
3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         G Flagging/Flagman       Manually Operated Signals       Watchman       Floodlighting       None         4.A. Does nearby Hwy       4.B. Hwy Traffic Signal       4.C. Hwy Traffic Signal Preemption       5. Highway Traffic Pre-Signals       6. Highway Monitoring Devices															
4.A. Does nearby H Intersection have Traffic Signals? □ Yes I No	Interconr Not Ir For Tr	Traffic Sig nection nterconnec affic Signa darning Sig	cted Ils [	.C. Hwy Traffi Simultaneo Advance	0	Preemp		5. Highway T Yes Storage Distant Stop Line Distant Stop Line Distant	No ance *		nals	(Check a	<i>II that app</i> Photo/Vic Vehicle P	o <i>ly)</i> deo R	
				Ра	art IV:	Physi	cal Cha	acteristic	cs						
1. Traffic Lanes Cros	6	□ Two-v □ Divide	vay Traffic d Traffic	: Р	'aved? ☑ Y		□ No		🗆 Yes	X	n a Street? No	lights wi		ox. 50	ed? (Street D feet from
<ol> <li>Crossing Surface</li> <li>☐ 1 Timber ▲</li> <li>☐ 8 Unconsolidate</li> </ol>	2 Asphalt 🗌	3 Asphal	t and Tim	ber 🗌 4 C							dth * er □ 7 Me	tal	Length *		
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	st Crossing A	ngle			8. Is Co	mmercial	Pow	er Available? *
🗆 Yes 🔳 No	If Yes, Approxin	nate Distar	nce <i>(feet)</i>				□ 0° - 29				60° - 90°		🖬 Yes	[	□ No
							· ·	Informat	tion						
1. Highway System       2. Functional Classification of Road at Crossing       3. Is Crossing on State Highway       4. Highway Speed Limit         □ (01) Interstate Highway System       □ (1) Interstate       □ (5) Major Collector       System?       50       MPH         □ (02) Other Nat Hwy System (NHS)       □ (1) Interstate       □ (5) Major Collector       Image: Collector															
7. Annual Average Year 2009 AA	Daily Traffic (AA DT 025225	,	3. Estimat 01	ed Percent Tr	ucks %	9. Reg Xes		d by School B Average Nເ		er Day	3	10. Y	-	cy Se No	ervices Route
Submi	ission Infor	mation	- This in	formation	is usea	l for ac	lministra	tive purpo	ses and	d is r	not availabl	e on the	public v	veb:	site.
Submitted by				Organiza							Phone			ate _	
Public reporting bu sources, gathering a agency may not cor displays a currently other aspect of this Washington, DC 20	and maintaining nduct or sponsor valid OMB cont collection, inclu	the data r r, and a pe rol numbe	needed ar erson is no er. The va	nd completing nt required to, lid OMB contr	and rev nor sha ol numl	viewing t all a pers ber for in	the collection on be subj Information	on of informa ect to a pena collection is	ation. Ac Ity for fa 2130-00	ccordi ailure )17. S	ing to the Pape to comply with Send comment	erwork Re h, a collect ts regardin	duction A tion of info ng this bur	ct of orma den e	1995, a federal ition unless it estimate or any



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private hi pedestrian station gr Parts I and II, and the	ghway-r ade cro Submis n Inforn	rail grade cros ssings), compl ssion Information nation section	sings, complete ete the Heade on section. For . For changes	e the Head r, Parts I ar grade-sepa to existing	er, Parts nd II, and arated hi data, co	and II, and II	and the So nission Inf or pathw e Header,	ubmission Informatio formation section. Fo ay crossings (includir Part I Items 1-3, ar	on section. For or Private pathy ng pedestrian st nd the Submissi	public pathwa vay grade cros ation crossings on Informatio	omplete the entire inventory ay grade crossings (including ssings, complete the Header, s), complete the Header, Part n section, in addition to the * denotes an optional field.		
A. Revision Date (MM/DD/YYYY)		B. Reporting	• .			Update (Se	,	,			D. DOT Crossing		
07 / 31 / 2006		🗆 Railroad	🗆 Trans	Data	ange in	New Crossing		Closed	No Train Traffic	Quiet Zone Upda	Inventory Number		
		🗷 State	🗆 Other	🗆 Re-	-Open	🗆 Date		Change in Primary	$\Box$ Admin.		054417W		
			D		cation	Change	<u> </u>	Operating RR tion Informatio	Correction				
1. Primary Operating	z Railroa	d			-	State	155111Cd		3. County				
Boston & Maine Co						EW HAM	PSHIRE		ROCKING	IAM			
4. City / Municipality IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			TIDE	<b>/Road Nam</b> /ILL RD Road Name		k Number	_1	k Number)	6. Highway T TOWN	ype & No.			
7. Do Other Railroad		te a Separate			,			Railroads Operate O		at Crossing?	Yes 🗷 No		
				/						,	,,		
9. Railroad Division o	•		10. Railroad			rict	11. Bra	nch or Line Name		<b>12. RR Mile</b>	post 005.32		
□ None BOSTC 13. Line Segment	ON & M.		None None	VS 28 MA		arent RR (	I Non			(prefix)   (n ng Owner (if a			
*		Station		able	□ N/		η αρριιται	ne)			ρριταδιεγ		
17. Crossing Type       18. Crossing Purpose       19. Crossing Position       20. Public Access       21. Type of Train       22. Average Passenger													
Image: Mighway       Image: Mighway <thimage: mighway<="" th="">       Image: Mighway       Image:</thimage:>													
□ Private □ Station, Ped. □ RR Over □ No □ Commuter □ Tourist/Other □ Number Per Day 0													
23. Type of Land Use Open Space	e	n 🗆 Re	sidential	□ Comme	ercial	🗆 Indu	strial	Institutional	🗆 Recreati	onal 🗆	RR Yard		
24. Is there an Adjac		-						RA provided)					
🗆 Yes 🗷 No 🛛 If	Voc Bro	vide Crossing	Numbor			🖪 No 🗆	7.24 ⊔r	Partial Chica	igo Excused	Date Estab	lished		
26. HSR Corridor ID	165, FIU		itude in decima	al degrees				le in decimal degree	0		Lat/Long Source		
		(14/058	4 std: nn.nnnr	43.0	)410730		ICC01 atd	-70 -nnn.nnnnnn)	.8407290		Actual 🛛 Estimated		
30.A. Railroad Use	_□ N/A *	(1038	4 510. 111.11111			(00		state lise *	MOUTH BRAI				
30.B. Railroad Use	*						31.B. S	itate Use *					
30.C. Railroad Use	*						31.C. S	itate Use *					
30.D. Railroad Use	*						31.D. 9	State Use *					
32.A. Narrative (Ra	ilroad Us	se) *					32.B. M	Narrative (State Use)	*				
33. Emergency Notif	ication 1	Telephone No	(posted)	34. Railro	oad Cont	<b>tact</b> (Telep	hone No.)	)	35. State Co	ntact (Telepho	one No.)		
									603-271-71	45			
					Part II:	: Railroa	nd Infor	rmation					
1. Estimated Number				Tester	1 C T .:	al Curitati	- Trains	1.0. Tabel Tabel	Troine				
1.A. Total Day Thru (6 AM to 6 PM) 0	1.A. Total Day Thru Trains       1.B. Total Night Thru Trains       1.C. Total Switching Trains       1.D. Total Transit Trains       1.E. Check if Less Than         (6 AM to 6 PM)       (6 PM to 6 AM)       0       4       Development Per Day       Development Per Day												
2. Year of Train Coun	t Data ()			Speed of T	rain at C	•							
				A. Maximur				5 nph) From <u>5</u>	to_15				
4. Type and Count of	Tracks		I 3.		peca nai		100011g (11	<i>ipiij</i> 110iii <u>-</u>					
	Siding		′ard	Transit	t	Ind	ustry						
5. Train Detection (N Constant War		,,	Detection	∃AFO □ F	ртс 🗖	DC 🗆 C	)ther 🗆	None					
6. Is Track Signaled?	<u> </u>				7.A. Ever	nt Recorde					te Health Monitoring		
🗆 Yes 🖬 No	oc -	10 - 1				es 🗌 No				🗆 Yes	□ No		
FORM FRA F 61	80.71	(Rev. 3/15	5)			OMB ap	proval	expires 3/31/2	018		Page 1 OF 2		

<b>A. Revision Date</b> ( <i>N</i> 07/31/2006	/M/DD/YYYY)				P	AGE 2			<b>D</b> .	Crossing Inve	ntory Nun	nber (7 ch	ar.)
		Par	t III: Highway	or Path	าพลง ่	Traffic O	Control De	evice	Info	rmation			
1. Are there	2. Types of Pa	ssive Traffic	Control Devices ass	ociated v	with the	Crossing							
Signs or Signals? ☑ Yes □ No	2.A. Crossbuck Assemblies (co 2		. STOP Signs (R1-1) unt)	2.C. Y (coun	0	ins <i>(R1-2)</i>	2.D. Advar					_ 🗆 W1	<i>count)</i> □ None 0-11 0-12
2.E. Low Ground Clo (W10-5)			ent Markings			2.G. Char Devices/	nnelization			2.H. EXEMP ( <i>R15-3</i> )		_	Sign (I-13)
□ Yes <i>(count</i> ☑ No	)	□ Stop Lin □ RR Xing		amic Env าe	elope	□ All Ap □ One A		Mea		□ Yes □ No		🗆 Yes 🗷 No	
2.J. Other MUTCD S	Signs	□ Yes				2.K. Priva	te Crossing	2.L.	LED Er	nhanced Signs	(List types	;)	
Specify Type Specify Type Specify Type						Signs (if )	-						
3. Types of Train A	ctivated Warnin	g Devices at											
3.A. Gate Arms ( <i>count</i> ) Roadway <u>0</u> Pedestrian	3.B. Gate Cont 2 Quad 3 Quad 4 Quad	iguration Full (Barr Resistance Median (	ier) Structure	s <i>(count)</i> fic Lane	0		candescent	(cou □ II	<i>unt of r</i> ncande	Mounted Flash nasts) <u>0</u> escent shts Included	ning Lights  □ LED □ Side Include	Lights	3.E. Total Count of Flashing Light Pairs
	_												
3.F. Installation Dat Active Warning Dev //	vices: (MM/YYY)	′) Not Required	3.G. Wayside		(MM/Y	YYY)	_/		Cross	Highway Traffi ing s I∎ No	c Signals C	ontrolling	3.I. Bells <i>(count)</i> O
	3.J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         □ Flagging/Flagman □Manually Operated Signals □ Watchman □ Floodlighting □ None       3.K. Other Flashing Lights or Warning Devices												
□ Flagging/Flagman       □ Manually Operated Signals       □ Watchman       □ Floodlighting       □ None       Count       0       Specify type													
				art I\/·	Dhyci		racteristic		·				
1. Traffic Lanes Cros		<ul> <li>One-way</li> <li>Two-way</li> </ul>	Traffic	2. Is Road Paved?	-				ın Dow	n a Street?		•	ninated? (Street x. 50 feet from
Number of Lanes		Divided T		□ Y		No No		🗆 Yes		No		<i>rail)</i> 🗆 Ye	
<ul> <li>5. Crossing Surface</li> <li>1 Timber II</li> <li>8 Unconsolidate</li> </ul>	2 Asphalt 🛛	3 Asphalt a	nd Timber 🛛 🛛 4 🕻							dth * er		Length * _	
6. Intersecting Roa	dway within 500	) feet?				7. Smalle	st Crossing A	ngle			8. Is Co	mmercial	Power Available? *
🗆 Yes  🖬 No	If Yes, Approxin	nate Distance	(feet)			□ 0° - 2	9° 🗆 30°	– 59°	X	60° - 90°		🗆 Yes	🖬 No
			Par	t V: Pu	iblic H	lighway	Informat	ion					
🗌 (02) Other	tate Highway Sy Nat Hwy Systen al AID, Not NHS		2. Functional Class           2. Functional Class           1 (1) Interstate           (2) Other Free           (3) Other Prince	(0) Rura ways and	al 🗆 ( Express	1) Urban ] (5) Majoi sways	Collector	Sy: 5.	stem? Yes Linear	sing on State H           Image: No           Referencing System			ghway Speed Limit MPH osted
🔳 (08) Non-F			(4) Minor Arte			(7) Local			LRS Mi	lepost *			
7. Annual Average Year <u>1987</u> AA	Daily Traffic (AA DT _000025	$\frac{ADT}{2}$ 8. 1	Estimated Percent T	rucks %	9. Reg		d by School B Average Nu		per Day	, _0	10.	•	cy Services Route No
Submi	ssion Infor	nation - 7	his information	is used	for ad	lministra	tive purpo	ses ar	nd is r	not availabl	e on the	public v	vebsite.
Submitted by			Organiza							Phone		Da	
Public reporting bur sources, gathering a agency may not cor displays a currently other aspect of this Washington, DC 20	and maintaining nduct or sponsor valid OMB cont collection, inclu	the data nee r, and a perso rol number.	ded and completing on is not required to The valid OMB cont	g and revi , nor shal rol numb	iewing t II a pers per for ir	he collecti on be subj nformation	on of informa ect to a pena collection is	ation. A Ity for f 2130-0	Accord failure 0017. S	ing to the Pape to comply with Send comment	erwork Reen, a collect s regardin	duction Ac tion of info ng this bure	t of 1995, a federal ormation unless it den estimate or any



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private hi pedestrian station gr Parts I and II, and the	ghway-ra rade cros e Submiss n Inform	il grade cross sings), compl ion Informati ation section	sings, comple ete the Head on section. Fo . For changes	te the Heade er, Parts I an or grade-sepa to existing o	er, Parts d II, and rated hi data, co	I and I the Su ghway-r mplete	I, and the S Ibmission Inf rail or pathw the Header,	ubmissic ormatio ay cross Part 1 1	on Information on section. Fo ings (includin tems 1-3, an	on section. For or Private pathy og pedestrian st od the Submissi	public path vay grade cr ation crossir on Informat	way gr ossing ngs), co tion se	lete the entire inventory rade crossings (including gs, complete the Header, pmplete the Header, Part ction, in addition to the enotes an optional field.
A. Revision Date		B. Reporting	• .				(Select only	,		<b>—</b> • • •			D. DOT Crossing
( <i>MM/DD/YYYY</i> ) 09 / 16 / 2010		🗆 Railroad	🗆 Tran	sit 🛛 🗷 Cha Data	nge in	Ne     Cross		Closed	1	No Train Traffic	Quiet Zone Up		Inventory Number
		🗷 State	🗆 Othe		Open	🗆 Da	0	] Chang	e in Primary	☐ Admin.	Zone op	uute	054418D
						,		Operatin	-	Correction		_	
	<u> </u>			Part I: Loo			Classifica	tion Ir	nformatio				
1. Primary Operating Boston & Maine Co						State EW HA	MPSHIRE			3. County ROCKINGH	IAM		
4. City / Municipality	/			t <b>/Road Name</b> IDE RD	e & Bloc	k Numb	ber			6. Highway T	ype & No.		
In ■ Near GREEN	LAND			/Road Name)	)		I  * (Bloc	k Numb	er)	LR-052			
7. Do Other Railroad	s Operat	e a Separate	Track at Cross	ing? □ Yes	🕱 No		8. Do Other If Yes, Spe		ds Operate O	ver Your Track	at Crossing?	P 🗆 Y	es 🗷 No
		J						- /					·······
9. Railroad Division	or Region	l	10. Railroad	l Subdivision	or Distr	rict	11. Bra	nch or L	ine Name		12. RR Mi	lepost 0004.	
□ None BOSTO	ON & MA	INE	□ None	VS 28 MA	P 7		🗆 Non	e P	ORTSMOU	ТН		(nnnn	I
13. Line Segment			rest RR Time	table	15. Pa	arent RF	R (if applical	ole)		16. Crossi	ng Owner (ij	f applio	cable)
*		Station GREE	* NLAND		□ N/	A				□ N/A			
17. Crossing Type	18. Cro	ssing Purpose	e 19. Cross	ing Position	<u> </u>	Public /	Access	21. Ty	pe of Train			2	2. Average Passenger
	High 🛛 🖾		🗷 At Gra				Crossing)	🗆 Fre		Transi			rain Count Per Day
Image: Break way, Ped.         □ RR Under         □ Yes         □ Intercity P           □ Private         □ Station, Ped.         □ RR Over         □ No         □ Commute										ger 🗆 Share	d Use Transi st/Other		Less Than One Per Day Number Per Day 0
23. Type of Land Use		_		_		_				_		_	
<ul> <li>Open Space</li> <li>24. Is there an Adjac</li> </ul>	Farm		sidential	Commer	rcial		dustrial iet Zone (Fl		stitutional	🗆 Recreati	onal	🗆 RR `	Yard
	cht cross	ing with a se				23. Qu		in provi	ucuy				
	Yes, Prov	ide Crossing I				🖪 No	🗆 24 Hr			go Excused	Date Est		
26. HSR Corridor ID		27. Lati	tude in decin				•		cimal degrees		2	9. Lat/	Long Source
	_□ N/A	(WGS84	4 std: nn.nnn	nnnn) 43.04	475973		(WGS84 std.	-nnn.n	nnnnnn) <sup>-70</sup>	.8603474		Actu	al 🗌 Estimated
30.A. Railroad Use	*							State Us	<b>ه</b> *	STIMATED			
30.B. Railroad Use	*						31.B. 9	itate Us	e *				
30.C. Railroad Use	*						31.C. 9	itate Us	e *				
30.D. Railroad Use	*						31.D. 9	State Us	е *				
32.A. Narrative (Ra	ilroad Use	e) * VERIFIE	D				32.B. 1	Varrativ	<b>e</b> (State Use)	* VERIFIED			
33. Emergency Notif	ication Te	elephone No.	(posted)	34. Railro	ad Cont	tact (Te	lephone No.	)		35. State Co	ntact (Telep	hone I	No.)
		-								603-271-24	68		
				F	Part II	: Railr	oad Info	matic	_ on				
1. Estimated Number	r of Daily												
1.A. Total Day Thru T (6 AM to 6 PM)	Frains		<sup>-</sup> otal Night Th I <i>to 6 AM)</i>	ru Trains	1.C. Tot	al Switcl	hing Trains	1.D.	Total Transit	Trains	1.E. Check One Move		
0		0			4						How man	y train	s per week?
2. Year of Train Coun	t Data (Y	YYY)		<ol> <li>Speed of Tr</li> <li>A. Maximun</li> </ol>			ed (mnh) 1	5					
				B.B. Typical Sp					om <u>5</u>				
4. Type and Count of	Tracks												
	Siding		'ard	Transit			Industry		_				
5. Train Detection (N Constant War		.,	Detection	□AFO □ P	TC 🖬	DC 🗆	] Other 🗌	None					
6. Is Track Signaled?	0					nt Recor		NULLE			7.B. Ren	note H	ealth Monitoring
🗆 Yes 🗵 No					🗆 Ye	s 🗆 N	No					es 🗆	-
FORM FRA F 61	80.71	(Rev. 3/15	5)			OMB	approval	expire	es 3/31/2	018			Page 1 OF 2

<b>A. Revision Date</b> ( <i>N</i> 09/16/2010	ЛМ/DD/YYYY)					P	AGE 2			<b>D</b> . 054	Crossing Inve	ntory Nun	<b>nber</b> (7 cł	nar.)	
		Ра	art III: H	lighway o	r Patl	hway	Traffic C	Control D	evice l		-				
1. Are there	2. Types of Pa	ssive Traffi	ic Control	Devices asso	ciated v	with the	Crossing			_				_	
Signs or Signals? ☑ Yes □ No	2.A. Crossbuck Assemblies (co		count)	igns <i>(R1-1)</i>	2.C. Y (coun		gns <i>(R1-2)</i>	2.D. Advar			igns <i>(Check all</i> □ W10-3 □ W10-4			10-11	, L
2.E. Low Ground Clo (W10-5)	earance Sign	- I	ement Ma	rkings			2.G. Char Devices/I	nnelization		_	2.H. EXEMP ( <i>R15-3</i> )		2.I. ENS	Sign	
☐ Yes (count ☑ No	)	🗷 Stop L 🗆 RR Xir	ines. Ig Symbol	□Dyna s □Non		velope		proaches	Media None		□ Yes □ No		□ Yes ■ No		
2.J. Other MUTCD S	Signs		X No					te Crossing	2.L. LI	ED Er	hanced Signs	(List types	;)		
Specify Type Specify Type Specify Type		Count					Signs <i>(if µ</i>	-							
3. Types of Train A	ctivated Warnin	g Devices a	at the Gra	de Crossing (	specify	count o	f each devi	ice for all tha							
3.A. Gate Arms ( <i>count</i> ) Roadway <u>0</u> Pedestrian	3.B. Gate Conf	□ Full (Ba Resistance	e	3.C. Cantile Structures Over Traffi	<i>(count)</i> ic Lane	0	🗆 In	candescent	<i>(coun</i> □ Inc	<i>t of n</i> cande	Mounted Flash nasts)_0 scent thts Included	LED	e Lights		Total Count of hing Light Pairs
		Mediar		Not Over T		ane <u> </u>	🗆 LE	D				Include			
3.F. Installation Date of Current       3.G. Wayside Horn       3.H. Highway Traffic Signals Controlling       3.I. Bells         Active Warning Devices: (MM/YYYY)       Istalled on (MM/YYYY)       Crossing       (count)         J. Non-Train Active Warning       No       Not Required       3.K. Other Flashing Lights or Warning Devices         3.J. Non-Train Active Warning       Matchman       Elegating (Flagman       S.K. Other Flashing Lights or Warning Devices															
	J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         Count 0       Specify type														
				Ра	rt IV:	Physi	cal Chai	racteristic	cs						
1. Traffic Lanes Cros	2	<ul><li>Two-w</li><li>Divided</li></ul>	ay Traffic I Traffic	P	aved? X X	'es l	athway □ No		🗆 Yes	X	n a Street? No	lights wi	•	ox. 50	ed? (Street D feet from
<ol> <li>Crossing Surface</li> <li>☐ 1 Timber ▲</li> <li>☐ 8 Unconsolidate</li> </ol>	2 Asphalt 🛛	3 Asphalt	and Timb	er 🗌 4 Co							dth * er	tal	Length *		
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	st Crossing A	ingle			8. Is Co	mmercial	Pow	er Available? *
🗆 Yes 🖬 No	If Yes, Approxim	nate Distan	ce (feet) _				□ 0° – 29			X	60° - 90°		🖿 Yes	[	□ No
								Informat	ion						
🗌 (02) Other	tate Highway Sy Nat Hwy Systen al AID, Not NHS ederal Aid		□ (1) □ (2) □ (3)	Interstate Other Freew Other Princip Minor Arteri	(0) Rura vays and pal Arte	al 🗆 ( Express rial 🗌	1) Urban ] (5) Major	Collector	Syste Syste S. Lin	em? 'es near	sing on State F No Referencing Sy lepost *		<u>30</u> ⊠ P	osteo	ay Speed Limit MPH d
7. Annual Average Year 2009 AA	Daily Traffic (AA DT 000560	,	. Estimate )0	ed Percent Tr	ucks %	9.Reg I Yes	, ,	d by School B Average Nເ		r Day	, _4	_ 10. □ Y	•	cy Se No	ervices Route
Submi	ission Inforr	mation -	• This inf	formation i	s used	l for ac	lministra	tive purpo	ses and	d is n	not availabl	e on the	public v	veb:	site.
Submitted by				_ Organizat							Phone			ate _	
Public reporting burners, gathering a agency may not cor displays a currently other aspect of this Washington, DC 200	and maintaining nduct or sponsor valid OMB cont collection, inclu	the data n r, and a per rol number	eeded and son is not r. The vali	d completing required to, d OMB contr	and rev nor sha ol numb	riewing t III a pers per for in	he collections on be subjection be subjected by the subject of the	on of informa ect to a pena collection is	ation. Ac Ity for fai 2130-00	cordi ilure 17. S	ing to the Pape to comply with end comment	erwork Re h, a collect ts regardin	duction A tion of inf ng this bur	ct of orma den e	1995, a federal ition unless it estimate or any



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private hig pedestrian station gr Parts I and II, and the	ghway-ra ade cross Submiss n Informa	il grade cross sings), comple ion Informatio ation section.	ings, complete the the Heade on section. For For changes	e the Heade r, Parts I an grade-sepa to existing o	er, Parts I and d II, and the rated highwa data, comple	nd II, an Submis ay-rail o ete the	nd the Su ssion Inf or pathwa Header,	ubmission Informatio ormation section. Fo ay crossings (includir Part I Items 1-3, ar	on section. For or Private pathv og pedestrian st od the Submissi	public pathway vay grade cross ation crossings) on Information	mplete the entire inventory y grade crossings (including sings, complete the Header, ), complete the Header, Part a section, in addition to the * denotes an optional field.
A. Revision Date		B. Reporting /	• •		son for Upda	•		,			D. DOT Crossing
( <i>MM/DD/YYYY</i> ) _09_/20_/2010_		<ul> <li>Railroad</li> <li>State</li> </ul>	Transi	Data	Cr	New ossing   Date		Closed Change in Primary	<ul> <li>No Train</li> <li>Traffic</li> <li>Admin.</li> </ul>	Quiet Zone Updat	Inventory Number te 054421L
		_				nange O		perating RR	Correction	_	
1. Primary Operating	Railroad	1	P	art I: Loo	2. State		ssificat	tion Informatio	3. County		
Boston & Maine Co	orporatio				NEW	HAMP	SHIRE		ROCKING		
4. City / Municipality In □ Near GREEN			GREA	<b>/Road Name</b> T BAY RD Road Name)	e & Block Nu 	umber		k Number)	6. Highway Ty N-052	ype & No.	
7. Do Other Railroad If Yes, Specify RR	s Operate	e a Separate T		1				Railroads Operate O	ver Your Track	at Crossing?	Yes X No
9. Railroad Division c	•		10. Railroad				11. Bra	nch or Line Name	,	, <b>12. RR Milep</b>	ost 03.60
□ None BOSTC 13. Line Segment	DN & MA		None	VS 28 MA	P 7 15. Parent	+ DD /if				(prefix)   (ni ng Owner (if ap	
*		Station	NLAND				uppricu	<i>ie)</i>			
17. Crossing Type	18. Cros	ssing Purpose		ng Position	20. Pub (if Priva			21. Type of Train			22. Average Passenger
Public Private	At Grad RR Und RR Ove	<ul> <li>Freight</li> <li>Intercity Passen</li> <li>Commuter</li> </ul>	☐ Transi ger ☐ Share ☐ Touris	d Use Transit	Train Count Per Day  Less Than One Per Day Number Per Day 0						
<b>23. Type of Land Use</b> Open Space	🗆 Farm	Rec.	idential	Commer	rcial [	] Indust	rial	Institutional	Recreati		RR Yard
24. Is there an Adjace	-							RA provided)			
🗆 Yes 🗷 No 🛛 If	Yes. Prov	ide Crossing N	umber			No 🗆	24 Hr	🗆 Partial 🛛 Chica	go Excused	Date Establ	ished
26. HSR Corridor ID			ude in decima	al degrees				e in decimal degree	0	29.1	Lat/Long Source
30.A. Railroad Use	_□ N/A*	(WGS84	std: nn.nnn	nnn) 43.05	516685	(WG		-/////////////////////////////////////	.8675396	X A	ctual 🗌 Estimated
30.B. Railroad Use	*							AADT E	STIMATED		
30.C. Railroad Use	*						31.C. S	tate Use *			
30.D. Railroad Use	*						31.D. S	tate Use *			
32.A. Narrative (Rai	lroad Use	e) * VERIFIE	D				32.B. N	larrative (State Use)	* VERIFIED		
33. Emergency Notifi	cation Te	elephone No.	(posted)	34. Railro	ad Contact	(Teleph	one No.)		35. State Cor	ntact (Telephor	ne No.)
									603-271-24	68	
				F	Part II: Ra	ilroad	d Infor	mation			
1. Estimated Number 1.A. Total Day Thru T			ents otal Night Thr	u Trains	1.C. Total Sw	vitching	Trains	1.D. Total Transit	Trains	1.E. Check if	Less Than
(6 AM to 6 PM) 0			to 6 AM)		4	_				One Movem	
2. Year of Train Coun	t Data (Y)	YYY)	3.	A. Maximun	ain at Crossi n Timetable S	Speed (I		5 pph) From <u>5</u>	to15		
4. Type and Count of	Tracks		3.	o. Typical Sp							
	Siding		ard	Transit		Indu	stry				
5. Train Detection (M			Detection	∃AFO □ P	TC 🗷 DC	🗆 Ot	her 🗆	None			
6. Is Track Signaled? □ Yes ☑ No	·				.A. Event Re						e Health Monitoring
FORM FRA F 61	80.71	(Rev. 3/15	)				oroval	expires 3/31/2	018	☐ Yes	Page 1 OF 2

<b>A. Revision Date</b> ( <i>N</i> 09/20/2010	/M/DD/YYYY)					Р	AGE 2			<b>D</b> .	Crossing Inve	ntory Nur	<b>nber</b> (7 cl	har.)	
		F	Part III	: Highway	or Pat	hway	Traffic (	Control D	evice l	Info	rmation				
1. Are there	2. Types of Pa	ssive Tra	ffic Cont	rol Devices as	sociated	with the	Crossing								
Signs or Signals?	2.A. Crossbuck	(	2.B. STC	P Signs (R1-1)	2.C.	YIELD Sig	gns <i>(R1-2)</i>				igns (Check al			сои	nt) 🗌 None
🕱 Yes 🗌 No	Assemblies (co 2	,	(count) 2		(cou	nt)		☑ W10-1 □ W10-2		_	□ W10-3 □ W10-4		_ □w		1 2
2.E. Low Ground Cle	earance Sign	2.F. Pa	vement	Markings				nnelization			2.H. EXEMP	T Sign	2.I. ENS	•	n (l-13)
(W10-5) □ Yes (count	)	🗆 Stop	lines		namic En	velone	Devices/	Medians proaches	🗆 Medi	ian	(R15-3) □ Yes		Displaye	ed	
No	/		(ing Sym			velope	One A		None		□ No		No No		
2.J. Other MUTCD S	Signs	X Y	es 🗆 N	0				ate Crossing	2.L. L	.ED Er	hanced Signs	(List types	5)		
Specify Type		Cou	nt <u>1</u>				Signs (if )	orivate)							
Specify Type		Cou	nt _0				□ Yes	🗆 No							
Specify Type		Cou	int												
3. Types of Train A		-					-				Mounted Flasl	aing Light		2 6	. Total Count of
3.A. Gate Arms (count)	3.B. Gate Cont	iguration	1	Structure			<i>ged)</i> Flashir	ng Light			nasts) 0	ning Lights	5		shing Light Pairs
. ,	🗆 2 Quad	🗆 Full (	Barrier)	Over Tra	•		🗆 In	candescent	•	-	escent	 LED			00000
Roadway <u>0</u>	□ 3 Quad	Resistar				0			🗆 Ba	ack Lig	hts Included	🗆 Side	0	0	
Pedestrian	🗆 4 Quad		an Gates	Not Ove	r i rattic L	ane <u> </u>	D LE	:D				Include	ed		
3.F. Installation Dat				3.G. Wayside	Horn						lighway Traffi	c Signals C	Controlling	g	3.I. Bells
Active Warning Devices: (MM/YYYY) Not Required Ves Installed on (MM/YYYY) Crossing (count) No 0 0															
	B.J. Non-Train Active Warning     No     O       3.J. Non-Train Active Warning     3.K. Other Flashing Lights or Warning Devices														
	Flagging/Flagman       Manually Operated Signals       Watchman       Floodlighting       None       Count       O       Specify type														
4.A. Does nearby H			gnal	4.C. Hwy Traf	fic Signal	l Preemp	tion	• •		e-Sigr	nals	•			g Devices
Intersection have Traffic Signals?	Interconr		octod					□ Yes □	No			•	Il that app Photo (Viu		Recording
	□ For Tr			□ Simultane	ous			Storage Dist	ance *						ence Detection
🗆 Yes 🛛 No	🗌 For W	'arning Si	gns	□ Advance				Stop Line Dis	stance *			🗆 None	9		
				P	art IV	: Physi	cal Cha	racteristic	cs						
1. Traffic Lanes Cros					2. Is Roa	adway/P	athway	3. Does T	rack Run	n Dow	n a Street?				ited? (Street
Number of Lanes	-	□ Two- □ Divid	•		Paved?	Yes	□ No		🗆 Yes	X	No	-	ithin appr rail) 🗆 Ye		50 feet from I No
5. Crossing Surface				lowed) Insta	llation D	ate * (M	M/YYYY) _	/		Wi	dth *		,		
<ul> <li>□ 1 Timber</li> <li>■ 8 Unconsolidate</li> </ul>	•					e 🗆 5	Concrete	and Rubber	□ 6 F	Rubbe	er 🗌 7 Me	tal			
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	est Crossing A	ngle			8. Is Co	ommercial	l Pov	ver Available? *
🗆 Yes 🔳 No	If Yes, Approxin	nate Dista	ance <i>(fee</i>	t)			□ 0° – 2	9° 🗆 30°	° – 59°	X	60° - 90°		🖬 Yes		🗆 No
				Pa	rt V: Pi	ublic H	lighway	Informat	tion						
1. Highway System			2.	Functional Clas				ng	3. Is	Cros	sing on State H	Highway			vay Speed Limit
□ (01) laters	hata I liahuuau Cu				] <b>(0)</b> Rui		1) Urban	Callestar		tem?			30		MPH
	tate Highway Sy Nat Hwy Systen			<ul><li>(1) Interstate</li><li>(2) Other Free</li></ul>	wavs an		] (5) Majoi swavs	Collector			No Referencing System	ustem (I R			ed 🗌 Statutory
🗌 (03) Federa	al AID, Not NHS	. ,		(3) Other Prin			] (6) Minoi	Collector				ystern (Ene		~/	
🛛 (08) Non-F				(4) Minor Arte			(7) Local			RS MI	lepost *		_		
7. Annual Average Year 2009 AA	Daily Traffic (AA DT000560	ADT)	8. Estim 01	ated Percent	rucкs _ %	9. Reg	, ,	d by School B Average Nເ		er Day	, _4	10.	-	l No	ervices Route
Submi	ission Infori	nation	- This	informatior	is used	d for ac	lministra	itive purpo	oses and	d is r	not availabl	e on the	public	wel	osite.
Submitted by				Organiz							Phone			ate	
Public reporting but															
sources, gathering a agency may not cor															
displays a currently	valid OMB cont	rol numb	er. The	valid OMB con	trol num	ber for i	nformation	collection is	2130-00	)17. S	Send comment	s regardir	ng this bu	rden	estimate or any
other aspect of this		iding for	reducing	this burden to	: Inform	nation Co	llection Of	ficer, Federal	l Railroad	d Adm	ninistration, 12	200 New Je	ersey Ave	. SE,	MS-25
Washington, DC 20	590.														

A-35

#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private hi pedestrian station g Parts I and II, and the	ghway-rai rade cross e Submissi on Informa	il grade cross sings), comple ion Information ation section.	ings, complet ete the Heade on section. Fo For changes	e the Head er, Parts I a r grade-sep to existing	der, Parts nd II, and arated hig data, co	I and II, a I the Subm ghway-rail mplete the	and the S nission Inf or pathw e Header,	ubmission Informati formation section. F ray crossings (includi , Part I Items 1-3, a	on section. For or Private pathy ng pedestrian st nd the Submissi	public pathway vay grade cross ation crossings) on Information	nplete the entire inventory y grade crossings (including ings, complete the Header, , complete the Header, Part section, in addition to the * denotes an optional field.		
A. Revision Date		B. Reporting	• .			Jpdate (Se		,			D. DOT Crossing		
( <i>MM/DD/YYYY</i> ) _09_/20_/2010		🗆 Railroad	Trans	Data	ange in	New Crossing		Closed	No Train Traffic	Quiet Zone Updat	e Inventory Number		
		🗷 State	🗆 Othe	r 🗆 Re	-Open	□ Date		Change in Primary			054423A		
				Part I. Lo	cation	Change		Dperating RR tion Information	Correction				
1. Primary Operating	g Railroad					State	15511100		3. County				
Boston & Maine C		n [BM]				EW HAM	_		ROCKING				
4. City / Municipality In □ Near GREEN	-		BAYR	t <b>/Road Nan</b> IDGE RD /Road Nam		k Number	_	ck Number)	6. Highway T	ype & No.			
7. Do Other Railroad If Yes, Specify RR	ls Operate	e a Separate	,		/			Railroads Operate (	Over Your Track	at Crossing?	Yes 🛛 No		
9. Railroad Division	or Region		10. Railroad	Subdivisio	n or Distr	ict	11. Bra	nch or Line Name	,,	12. RR Milep	ost 02.95		
	<u> </u>		□ None	VS 28 M/			□ Non			(prefix)   (nr	, , ,		
13. Line Segment *		Station	NLAND	table	15. Pa	arent RR (/	if applicat	ble)	16. Crossi	ng Owner (if ap	plicable)		
17. Crossing Type		ssing Purpose		ing Positior		Public Acc		21. Type of Train			22. Average Passenger		
🗷 Public	High Path	way way, Ped.	🗷 At Grad		(if F □ \	Private Cro. Yes	ssing)	Freight Intercity Passer	□ Transi nger □ Share	it d Use Transit	Train Count Per Day Less Than One Per Day		
Private	🗆 Statio	on, Ped.	🗆 RR Ove	er		No		Commuter	□ Touris	st/Other	$\Box$ Number Per Day 0		
<b>23. Type of Land Use</b>	3. Type of Land Use ] Open Space												
24. Is there an Adjac	ent Cross	ing with a Se	parate Numb	er?		25. Quiet	Zone (Fi	RA provided)					
🗆 Yes 🔳 No 🛛 If	Yes. Prov	ide Crossing N	lumber			🖪 No 🗆	<b>∂</b> 24 Hr	Partial Chica	ago Excused	Date Establi	shed		
26. HSR Corridor ID	100) 1101		tude in decim	al degrees				de in decimal degree	<u> </u>		at/Long Source		
	□ N/A	(WGS84	1 std: nn.nnn	<sub>nnnn)</sub> 43.0	0559991	(14)	/GS84 std	: -nnn.nnnnnnn) -7(	).8779901		ctual 🛛 Estimated		
30.A. Railroad Use	*	11.000						State I Ise *	ESTIMATED				
30.B. Railroad Use	*						31.B. 9	State Use *					
30.C. Railroad Use	*						31.C. 9	State Use *					
30.D. Railroad Use	*							State Use *					
32.A. Narrative (Ra	ilroad Use	<sup>e)*</sup> VERIFIE	D				32.B. I	Narrative (State Use)	VERIFIED				
33. Emergency Notif	ication Te	elephone No.	(posted)	34. Railı	road Cont	act (Telep	hone No.	)	35. State Co	ntact (Telephor	ne No.)		
									603-271-24	68			
					Part II:	Railroa	ad Info	rmation					
1. Estimated Numbe					1.0 -	10	- <b>-</b> ·						
1.A. Total Day Thru <sup>-</sup> (6 AM to 6 PM) 2	Trains		otal Night Thi to 6 AM)	ru Trains	1.C. Tota 0	al Switchin	g Trains	1.D. Total Transi	t Trains	1.E. Check if One Moveme			
2. Year of Train Coun	t Data (Y)	(YY)		. Speed of 1		•				now many a			
				.A. Maximu				0 nph) From 10	to10				
4. Type and Count of	Tracks			.b. rypical (	Speed nat		. 00011B (11	<i>inging</i> 110111 <u>···</u>	10				
	Siding		ard	Transi	it	Ind	lustry						
5. Train Detection (N		• •	Detection	afo	ртс 🗆	DC 🗆 C	Other 🛙	None					
6. Is Track Signaled?	ē				7.A. Ever	nt Recorde					e Health Monitoring		
	00 74	(Day 2/45	1					avairas 2/24/2	010	🗆 Yes			
FORM FRA F 61	.80.71 (	(Kev. 3/15	)			омв ар	proval	expires 3/31/2	2018		Page 1 OF 2		

<b>A. Revision Date</b> ( <i>N</i> 09/20/2010	/M/DD/YYYY)					P	AGE 2			<b>D. Crossing Inve</b> )54423A	entory Nun	<b>nber</b> (7 ch	ar.)
		P	art III: I	lighway	or Pat	hway	Traffic (	Control D	evice In	ormation			
1. Are there	2. Types of Pa	ssive Traf	fic Contro	l Devices ass	ociated	with the	Crossing						
Signs or Signals? I Yes □ No	2.A. Crossbuck Assemblies (cc 2		(count)	Signs <i>(R1-1)</i>	2.C. V (cour		gns <i>(R1-2)</i>	□ W10-1			3	_ 🗆 W1	0-11
2.E. Low Ground Clo (W10-5)			vement Ma	arkings				W10-2 nnelization Medians		2.H. EXEMP ( <i>R15-3</i> )		2.I. ENS Displaye	Sign (I-13)
□ Yes <i>(count</i>	)	Stop	Lines ing Symbo		iamic Env	velope		proaches	<ul> <li>Median</li> <li>None</li> </ul>	· ·			u
2.J. Other MUTCD S	Signs		es 🗷 No					ate Crossing		Enhanced Signs	(List types	-	
Specify Type Specify Type Specify Type		Coun	t t t				Signs (if )	,					
3. Types of Train A	ctivated Warnin	g Devices	at the Gr	ade Crossing	(specify	count o	f each dev	ice for all tha	t apply)				
3.A. Gate Arms (count) Roadway <u>0</u> Pedestrian		figuration Full (B Resistance Media	<i>Barrier)</i> ce	3.C. Cant Structure Over Trai	s <i>(count)</i> fic Lane	0		candescent	<i>(count d</i> □ Incar	st Mounted Flas f masts) <u>0</u> descent Lights Included	hing Lights  □ LED □ Side Include	e Lights	3.E. Total Count of Flashing Light Pairs D
3.F. Installation Dat Active Warning Dev //	vices: (MM/YYYY	′) Not Requi	ired 🗆	.G. Wayside ] Yes Ins ] No		ו <i>(MM/Y</i>	YYY)	_/	Cr	I. Highway Traffi ossing Yes III No	c Signals C	Controlling	3.I. Bells <i>(count)</i> O
□ Flagging/Flagman       Manually Operated Signals       Watchman       Floodlighting       None       Count       0       Specify type													
				Р	art IV:	Physi	cal Cha	racteristic	cs				
<ol> <li>Traffic Lanes Cross</li> <li>Number of Lanes</li> <li>Crossing Surface</li> </ol>	2 (on Main Track,	Two-v Divide multiple	way Traffic ed Traffic types allor	wed) Insta		/es   ate * (M	No <i>M/YYYY)</i> _	/	□ Yes	wn a Street? Mo Width *	lights wi nearest	ithin appro rail) 🗆 Ye	ninated? (Street x. 50 feet from s I No
<ul> <li>□ 1 Timber</li> <li>■ 8 Unconsolidate</li> </ul>						5	Concrete	and Rubber	□ 6 Rul	ber 🗌 7 Me	tal -		
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	est Crossing A	ngle		8. Is Co	mmercial	Power Available? *
🗌 Yes 🕱 No	If Yes, Approxim	nate Distar	nce (feet)	-			□ 0° – 2			ĭ 60° - 90°		🖬 Yes	□ No
								Informat	1				
🗌 (02) Other	tate Highway Sy Nat Hwy Systen al AID, Not NHS ederal Aid		□ (1 □ (2 □ (3	nctional Clas Interstate ) Other Free ) Other Prind ) Minor Arte	(0) Rur ways and cipal Arte	al 🗆 ( Expres erial 🗌	1) Urban ] (5) Majo	r Collector	Systen	ossing on State   P No ar Referencing S Milepost *		30 ☑ ₽0	ghway Speed Limit MPH osted Statutory
7. Annual Average Year 2009 AA	Daily Traffic <i>(AA</i> DT _000560		8. Estimat 00	ed Percent T	rucks _ %	9. Reg		d by School Β Average Νι		ay <u>8</u>	10. □ Y	-	cy Services Route No
Submi	ssion Inform	nation	- This in	formation	is used	l for ac	lministra	itive purpo	ses and i	s not availabi	le on the	public w	vebsite.
Submitted by				Organiz	ation					Phone		Da	te
Public reporting but sources, gathering a agency may not cor	and maintaining nduct or sponsor valid OMB cont collection, inclu	the data r r, and a pe rol numbe	needed an erson is no er. The va	is estimated d completing t required to lid OMB cont	to averag g and rev g, nor sha rol numl	viewing t all a pers ber for i	the collecti on be subj nformatior	on of informa ect to a pena collection is	ation. Acco Ity for failu 2130-0017	rding to the Pap re to comply wit . Send commen	erwork Re h, a collect ts regardin	duction Ac tion of info ng this burg	t of 1995, a federal ormation unless it den estimate or any



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private hi pedestrian station gr Parts I and II, and the I, and the Submissio	ghway-i rade cro Submi n Infori	rail grade cros ossings), comp ssion Informat mation section	sings, lete the ion sec n. For c	complete t ne Header, f ction. For gr changes to	he Header Parts I and ade-separa existing da	, Parts I and II, and the ated highwa ata, complet	d II, a Subm y-rail te the	ind the S hission Inf or pathw e Header,	ubmission Information formation section. For ay crossings (includin	on section. For or Private pathw og pedestrian sta od the Submissio	public pathway vay grade crossi ation crossings), on Information	nplete the entire inventory grade crossings (including ings, complete the Header, complete the Header, Part section, in addition to the denotes an optional field.	
A. Revision Date (MM/DD/YYYY)		B. Reporting		<b>cy</b> □ Transit	C. Reaso	on for Updat	<b>te</b> (Se New	· · .	one) □ Closed	🗆 No Train	🗆 Quiet	D. DOT Crossing Inventory Number	
09 / 20 / 2010					Data	Cro	ossing			Traffic	Zone Update	2	
		🗷 State		🗆 Other	Re-O		Date ange (		<ul> <li>Change in Primary</li> <li>Operating RR</li> </ul>	Admin. Correction		054424G	
				Pai	rt I: Loca	ation and	l Cla	ssifica	tion Informatio	'n			
1. Primary Operating Boston & Maine Co						2. State		PSHIRE		3. County ROCKINGH	AM		
4. City / Municipality			Ę	5. Street/Ro DEARBC		& Block Nur	nber	_1		6. Highway Ty	/pe & No.		
□ Near GREEN				(Street/Ro	,				ck Number)	LR-060			
7. Do Other Railroad If Yes, Specify RR	s Opera	ite a Separate	Track a	at Crossing	? □ Yes	🗷 No		<b>Do Other</b> f Yes, Spe	Railroads Operate O ecify RR	ver Your Track	at Crossing?	Yes 🖾 No	
9. Railroad Division of	or Regio	on	10. F	Railroad Su	bdivision o	or District		11. Bra	nch or Line Name		12. RR Milepo	ost )2.81	
□ None BOSTC	DN & M				S 28 MAP			□ Non	-		(prefix)   (nni	, , ,	
13. Line Segment *		Statio		RR Timetabl	le	15. Parent	<b>RR</b> (!	f applical	ble)		ng Owner (if app	olicable)	
17. Crossing Type	18. Cr	ossing Purpos		9. Crossing	Position	□ N/A 20. Publi	ic Acc	ess	21. Type of Train	□ N/A		22. Average Passenger	
Image: state of the state													
Image: Public       Pathway, Ped.       RR Under       Yes       Intercity Passenger       Shared Use Transit       Less Than One Per Day         Private       Station, Ped.       RR Over       No       Commuter       Tourist/Other       Number Per Day													
	23. Type of Land Use												
Open Space	🗆 Farr			-	Commerc				Institutional	🗆 Recreatio	onal 🗌 R	R Yard	
24. Is there an Adjac	ent Cro	ssing with a S	eparate	e Number?		25. 0	Quiet	Zone (F	RA provided)				
🗆 Yes 🗷 No 🛛 If	Yes, Pro	ovide Crossing	Numbe	er		🖄 N	0 [	] 24 Hr	Partial     Chica	go Excused	Date Establis	shed	
26. HSR Corridor ID		27. Lat	itude i	in decimal c	degrees		28.	. Longitu	de in decimal degrees	5	29. La	at/Long Source	
		(WGSE	34 std:	nn.nnnnn	43.05	62629	(W	GS84 std	: -nnn.nnnnnnn) <sup>-70</sup>	.8826018	🗷 Ac	tual 🛛 Estimated	
30.A. Railroad Use	*	1 1			/				State Use *	STIMATED			
30.B. Railroad Use	*							31.B. 9	State Use *				
30.C. Railroad Use	*							31.C. 9	State Use *				
30.D. Railroad Use	*							31.D. 9	State Use *				
32.A. Narrative (Ra	ilroad U	<sup>se)*</sup> VERIFI	ED					32.B. I	Narrative (State Use)	* VERIFIED			
33. Emergency Notif	ication	Telephone No	. (poste	ed)	34. Railroa	d Contact (	Telep	hone No.	)	35. State Cor	ntact (Telephon	e No.)	
				_						603-271-24	58 		
					Pa	art II: Rai	ilroa	d Info	rmation				
1. Estimated Number 1.A. Total Day Thru		1		Night Thru T	rains 1	.C. Total Swi	tchin	a Trainc	1.D. Total Transit	Trains	1.E. Check if L	oss Than	
(6 AM to 6 PM)	1101115		A to 6 A	0	4			g iranis			One Moveme		
2. Year of Train Coun	t Data (	YYYY)		3.A.	Maximum	in at Crossin Timetable S	peed			. 15			
4. Type and Count of	Tracks			3.B.	турісаї Spe	ееи кange O	ver Ci	iossing (n	nph) From <u>5</u>	to15			
Main 1	Siding		Yard		Transit		Ind	ustry					
5. Train Detection (N	lain Tra	ck only)											
<ul><li>Constant War</li><li>6. Is Track Signaled?</li></ul>	<u> </u>	ne 🗌 Motio	n Dete	ection 🗆 A	FO D PT	C 🗷 DC A. Event Rec			None		7 P. Pomoto	e Health Monitoring	
□ Yes I No					1.4	A. Event Rec □ Yes □		I				□ No	
	00 74	10 0/1	- \				_		: 0/04/0	04.0			

<b>A. Revision Date</b> (A 09/20/2010	/M/DD/YYYY)					P	AGE 2			<b>D</b> . 05	Crossing Inve	ntory Nun	nber (7 cl	har.)	
		Par	t III: Hi	ighway o	r Path	าพลง ่	Traffic (	Control D	evice	Info	rmation				
1. Are there	2. Types of Pa	ssive Traffic	Control I	Devices asso	ciated v	with the	Crossing								
Signs or Signals? I Yes □ No	2.A. Crossbuck Assemblies (cc 2		. STOP Si unt)	gns <i>(R1-1)</i>	2.C. Y (coun		ns <i>(R1-2)</i>	🗷 W10-1			□ W10-3		W	10-1	nt) 🗆 None 1
2.E. Low Ground Cl (W10-5)		2.F. Pavem	ient Mar	kings				W10-2 nnelization Medians			□ W10-4 2.H. EXEMP ( <i>R15-3</i> )		2.I. ENS Displaye	Sign	
□ Yes <i>(count</i> ☑ No	)	Stop Lin			imic Env e	elope		proaches pproach	Me Mor		□ Yes □ No		🗆 Yes 🗷 No		
2.J. Other MUTCD S	Signs	□ Yes	X No					ate Crossing	2.L.	LED Er	hanced Signs	(List types	;)		
Specify Type Specify Type Specify Type							Signs (if )	-							
3. Types of Train A	ctivated Warnin	g Devices at	the Grac	le Crossing (	specify	count o	f each dev	ice for all the							
3.A. Gate Arms ( <i>count</i> ) Roadway <u>0</u> Pedestrian	3.B. Gate Conf 2 Quad 3 Quad 4 Quad	figuration Full (Barr Resistance Median (		3.C. Cantile Structures Over Traffi Not Over T	<i>(count)</i> ic Lane	0	🗆 Ir	icandescent	(cou □ 1	<i>unt of r</i> ncande	Mounted Flash nasts)_0 escent ghts Included	hing Lights  □ LED □ Side Include	e Lights		. Total Count of shing Light Pairs
3.F. Installation Date of Current       3.G. Wayside Horn       3.H. Highway Traffic Signals Controlling       3.I. Bells         Active Warning Devices: (MM/YYYY)       Installed on (MM/YYYY)       Crossing       (count)         J. Non-Train Active Warning       Not Required       Installed on (MM/YYYY)       0         3.J. Non-Train Active Warning       S.K. Other Flashing Lights or Warning Devices:															
	Image: Second														
					rt IV:	Physi	cal Cha	racteristi							
1. Traffic Lanes Cros	-	<ul> <li>One-way</li> <li>Two-way</li> <li>Divided 1</li> </ul>	' Traffic	2	. Is Road aved?	dway/Pa		3. Does T			n a Street? No	lights wi	•	ox. 5	ted? (Street 0 feet from I No
<ul> <li>5. Crossing Surface</li> <li>1 Timber </li> <li>8 Unconsolidate</li> </ul>	2 Asphalt 🛛	3 Asphalt a	nd Timbe	er 🗆 4 Co							dth * er □ 7 Me	tal	Length *		
6. Intersecting Roa	dway within 500	) feet?					7. Smalle	est Crossing A	ngle			8. Is Co	mmercial	Pow	ver Available? *
🗆 Yes 🔳 No	If Yes, Approxim	nate Distance	e (feet)				□ 0° – 2	9° 🗆 30'	° – 59°	X	60° - 90°		🕱 Yes		🗆 No
				Part	V: Pu	iblic H	lighway	Information	tion						
□ (02) Other □ (03) Feder ☑ (08) Non-F		n (NHS)	□ (1) □ (2) □ (3)	tional Classi Interstate Other Freew Other Princi Minor Arteri	(0) Rura vays and pal Arter	al 🗌 ( Express rial 🗌	1) Urban ] (5) Majo sways	ng r Collector r Collector	Sy □ 5.	stem? Yes Linear	sing on State H Solution Referencing Solution Iepost *		<u>30</u> ⊠ P	oste	vay Speed Limit MPH d □ Statutory
7. Annual Average Year 2009 AA	Daily Traffic (AA DT _000560	ADT) 8. 00		d Percent Tr	ucks %	9. Reg □ Yes		d by School E Average Nu		per Day	, 0	_ 10. □ Y	-	lcy Se No	ervices Route
Submi	ssion Inform	mation - 7	This info	ormation i	is used	for ac	Iministra	itive purpo	ses ai	nd is r	not availabl	e on the	public	web	site.
Submitted by				Organizat	tion						Phone		D	ate _	
Public reporting bu sources, gathering a agency may not cor displays a currently other aspect of this Washington, DC 20	and maintaining nduct or sponsor valid OMB cont collection, inclu	the data nee r, and a perso rol number.	eded and on is not The valic	completing required to, I OMB contr	and revi nor shal ol numb	iewing t II a pers per for ir	he collecti on be subj nformatior	on of inform ect to a pena collection is	ation. Ilty for 2130-0	Accord failure 0017. S	ing to the Pape to comply with Send comment	erwork Re h, a collect ts regardin	duction A tion of inf ng this bui	ct of orma rden	1995, a federal ation unless it estimate or any

A-39

#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private his pedestrian station gr Parts I and II, and the	ghway-r ade cro Submis n Inforr	rail grade cro ossings), comp osion Informa nation sectio	ssings, comp plete the Hea tion section. n. For chang	lete the H der, Parts For grade-s es to exist	eader, I and I separat ing dat	Parts I and I, and the ted highwa	d II, ar Submi y-rail o te the	nd the S ission Inf or pathw Header,	iubn forn /ay c , Pa	nission Information nation section. For crossings (includir rt I Items 1-3, ar	on section. For or Private pating pedestrian and the Submis	or public nway grad station cr sion Info	pathway g de crossin ossings), c rmation s	plete the entire invent grade crossings (includ gs, complete the Hea complete the Header, I ection, in addition to lenotes an optional fie	ding der, Part the
A. Revision Date (MM/DD/YYYY)		B. Reporting				n for Updat	•			) losed				D. DOT Crossing	
07 / 25 / 2006			🗆 Tra		Chang ata		New ossing	L		loseu	No Trai Traffic		Quiet e Update	Inventory Number	
		🗷 State	🗆 Ot	ner 🗌	Re-Op		Date ange C			hange in Primary rating RR	□ Admin. Correctior			054425N	
				Part I:	Loca		<u> </u>		· ·	n Informatio					
1. Primary Operating Boston & Maine Co						2. State NEW H					3. County ROCKING	НАМ			
4. City / Municipality				et/Road N POT RD	Name 8	Block Nur	nber				6. Highway	Type & N	lo.		
Near GREEN     GREEN     Other Railroad		to a Conarate		et/Road Na	/	No	0			lumber) Iroads Operate C	PRIVATE	k at Crac			
If Yes, Specify RR	s Opera	,	,	, ssing: ∟				Yes, Spe			, ,	k at crus	, ,	, ,	
9. Railroad Division of	•		10. Railro	ad Subdivi				11. Bra	anch	or Line Name			R Milepos	2.12	
□ None BOSTC	<u> </u>		None     arest RR Tim	VS 28		) 15. Parent	BR /if	Non	-	PORTSMOU		1 1	x)   (nnni er (if appl	, , , , ,	
*		Statio		letable				uppncu	uic)		_ □ N/A				
17. Crossing Type		ossing Purpo		ssing Posit	tion	20. Publi				1. Type of Train				22. Average Passenge	r
Image: Public       Image: Pathway, Ped.       Image: RR Under       Image: Pathway, Ped.       Image: RR Under       Image: Pathway, Ped.         Image: Private       Image: Station Ped       Image: RR Under       Image: Pathway, Ped.       Image: Pa										] Freight ] Intercity Passen	☐ Trar ger □ Shai	ed Use T		<b>Frain Count Per Day</b> □ Less Than One Per [	Day
Image: Station, Ped.       Image: RR Over       Image: No       Image: Commuter       Image: Tourist/Other       Image: Number Per Day_0         23. Type of Land Use       Image: Tourist/Other       Image: No       Image: Tourist/Other       Image: Number Per Day_0															
Open Space	🗆 Farn		esidential	□ Com	nmercia		Indust			Institutional	🗆 Recrea	tional	🗆 RR	Yard	
24. Is there an Adjac	ent Cros	ssing with a S	eparate Nun	iber?		25. 0	Quiet Z	Zone (Fi	RA p	provided)					
	Yes, Pro	vide Crossing				<b>1</b> No		24 Hr			ago Excused	Dat	e Establish		
26. HSR Corridor ID		27. La	titude in dec	imal degre	es		28.	Longitue	de ir	n decimal degree	s		29. Lat	/Long Source	
	_□ N/A	(WGS	34 std: nn.ni	nnnnn)			(WC			nnn.nnnnnnn)			🗆 Actu	ual 🗌 Estimated	
30.A. Railroad Use	*										SMOUTH BR	ANCH			
30.B. Railroad Use	*							31.B. S	Stat	e Use *					
30.C. Railroad Use	*							31.C. S	State	e Use *					
30.D. Railroad Use	*							31.D. 9	Stat	e Use *					
32.A. Narrative (Rai	ilroad U	se) *						32.B. I	Narr	r <b>ative</b> (State Use)	*				
33. Emergency Notif	ication	Telephone No	. (posted)	34. R	ailroad	Contact (	Teleph	hone No.	)		35. State C	ontact (7	Felephone	No.)	
											603-271-7	145			
					Ра	rt II: Rai	Iroa	d Info	rm	ation					
1. Estimated Number 1.A. Total Day Thru 1			nents Total Night 1	hru Trains	10	C. Total Swi	tching	Trains		1.D. Total Transi	Trains	1 E (	Check if Le	ss Than	
(6 AM to 6 PM) 0	iruns		M to 6 AM)		0	2. 10101 5 101	tering	5 1101115		1.0. 10101 110131		One	Movemen		
2. Year of Train Coun	t Data (	YYYY)				n at Crossin	0	(mah) O	)					·	
						imetable S ed Range O				From 0	to				
4. Type and Count of	Tracks														
Main 0 5. Train Detection (M	Siding	ck only)	Yard	Tra	insit		Indu	ustry							
Constant Warr	ning Tim		on Detection	□afo [					No	one					
6. Is Track Signaled? □ Yes I No						. Event Rec □ Yes □			_				Remote I	Health Monitoring ☐ No	_
FORM FRA F 61	80.71	(Rev. 3/1	5)		'			proval	ex	pires 3/31/2	018		05 L	Page 1 OF	F 2

<b>A. Revision Date</b> (A 07/25/2006	ЛМ/DD/YYYY)					P	AGE 2			<b>D.</b>	Crossing Inve 4425N	ntory Nun	nber (7 ch	nar.)	
		Pa	art III: H	lighway o	r Path	าพลง	Traffic (	Control D	evice						
1. Are there	2. Types of Pa	ssive Traff	fic Control	Devices asso	ciated w	vith the	Crossing								
Signs or Signals? I Yes □ No	2.A. Crossbuck Assemblies (co	ount) (	count)	igns <i>(R1-1)</i>	2.C. Y		ins <i>(R1-2)</i>	🕱 W10-1						10-11	
2.E. Low Ground Cl (W10-5)	earance Sign	2 2.F. Pave	ement Ma	rkings				W10-2 nnelization Medians			□ W10-4 2.H. EXEMP <sup>-</sup> ( <i>R15-3</i> )		W 2.I. ENS Displaye	Sign (	
☐ Yes <i>(count</i> ☑ No	)	Stop RR Xii	Lines ng Symbol:	,	imic Env	elope	🗆 All Ap	proaches pproach	Med Mone		□ Yes □ No		Yes	u	
2.J. Other MUTCD S	Signs	□ Yes	s 🗷 No					ate Crossing	2.L.	LED Er	nhanced Signs	(List types	)		
Specify Type Specify Type Specify Type		Count	t t t				Signs (if )								
3. Types of Train A	ctivated Warnin	g Devices	at the Gra	de Crossing (	specify o	count o	f each dev	ice for all tha	at apply)	)					
3.A. Gate Arms <i>(count)</i> Roadway <u>0</u> Pedestrian	3.B. Gate Conf 2 Quad 3 Quad 4 Quad	figuration Full (Ba Resistanc Media	e	3.C. Cantile Structures Over Traffi Not Over T	<i>(count)</i> ic Lane	0	🗆 Ir	candescent	<i>(cou</i> □ In	<i>nt of r</i> ncande	Mounted Flash nasts)_0 escent ghts Included	ning Lights  D LED Side Include	Lights		Fotal Count of ing Light Pairs
3.F. Installation Dat Active Warning Dev //	vices: (MM/YYY)	ク Not Requi	red 🗆	G. Wayside H Yes Insta No		(MM/Y	YYY)	_/	_	Cross	Highway Traffio ing s ⊠No	c Signals C	Controlling		B.I. Bells count)
	J. Non-Train Active Warning       3.K. Other Flashing Lights or Warning Devices         Gragging/Flagman														
□ Flagging/Flagman       □ Manually Operated Signals       □ Watchman       □ Floodlighting       □ None       Count       0       Specify type         4.A. Does nearby Hwy       4.B. Hwy Traffic Signal       4.C. Hwy Traffic Signal Preemption       5. Highway Traffic Pre-Signals       6. Highway Monitoring Devices         Interconnection       □ Not Interconnected       □ Yes       No       □ Yes - Photo/Video Recording         □ Yes       □ No       □ For Traffic Signals       □ Simultaneous       Storage Distance *       □ Yes - Vehicle Presence Detection         □ Yes       □ No       □ For Warning Signs       □ Advance       Stop Line Distance *       □ None															
				Ра	rt IV:	Physi	cal Cha	racteristi							
<ol> <li>Traffic Lanes Cross</li> <li>Number of Lanes</li> <li>Crossing Surface</li> <li>1 Transport</li> </ol>	1 : (on Main Track,	Two-w Divide , multiple t	vay Traffic d Traffic types allow	P ved) Installa	aved? X Ye ation Dat	es [ te * (M		/	🗆 Yes	Wi	n a Street?	lights wi nearest	0	ox. 50 es	ed? (Street feet from I No
□ 1 Timber □ □ 8 Unconsolidate					oncrete	5	Concrete	and Rubber		RUDDE	er 🗆 7 Mei				
6. Intersecting Roa	·			75				est Crossing A	0	_		8. Is Co			er Available? *
Yes 🗆 No	If Yes, Approxim	nate Distar	nce (feet) _		V/. D	blic H	$0^{\circ} - 2$			X	60° - 90°		🛾 Yes		] No
4 11-1 5								Informat				1° a la	• •	• • •	Care http://
🗌 (02) Other	tate Highway Sy Nat Hwy Systen al AID, Not NHS rederal Aid		□ (1) □ (2) □ (3)	ctional Classi Interstate Other Freew Other Princi Minor Arteri	(0) Rura vays and pal Arter	al 🗆 ( Express rial 🗆	1) Urban ] (5) Majo sways	r Collector	Sys D 5. L	tem? Yes inear	sing on State F <ul> <li>No</li> <li>Referencing Sylepost *</li> </ul>		P	osted	y Speed Limit MPH
7. Annual Average Year AA	, ,	A <i>DT)</i> 8	8. Estimate	ed Percent Tr	ucks %	9.Reg		d by School E Average Nu		er Day	, 0	10.	-	cy Ser No	vices Route
Submi	ission Inforr	mation	- This inf	ormation i	is used	for ac	Iministra	itive purpo	oses an	nd is r	not availabl	e on the	public v	vebs	ite.
Submitted by				Organizat	tion						Phone		Di	ate	
Public reporting bu sources, gathering a agency may not cor displays a currently other aspect of this Washington, DC 20	and maintaining nduct or sponsor valid OMB cont collection, inclu	the data r r, and a pe rol numbe	needed and rson is not r. The vali	s estimated to d completing required to, d OMB contr	o averag and revi nor shal ol numb	iewing t II a pers per for in	he collecti on be subj nformatior	on of informa ect to a pena collection is	ation. A alty for fa 2130-0	Accordi ailure 017. S	ne for reviewin ing to the Pape to comply with Send comment	erwork Re n, a collect s regardin	ons, sear duction A tion of inf ng this bur	ching e ct of 1 ormat den e	1995, a federal ion unless it stimate or any



#### **DEPARTMENT OF TRANSPORTATION**

FEDERAL RAILROAD ADMINISTRATION



Form. For private hi pedestrian station g Parts I and II, and the	ghway-rail rade crossir Submissio n Informat	grade cross ngs), comple n Informatio ion section.	ings, complet ete the Heade on section. For For changes	e the Head r, Parts I ar grade-sepa to existing I Item 20 ar	er, Parts nd II, and arated hig data, con nd Part II	I and II, I the Subr ghway-rai mplete th I Item 2.K	and the S mission In il or pathw ne Header . are requi	ubmission Informat formation section. F ray crossings (includi , Part I Items 1-3, a red unless otherwise	ion section. For for Private pathwing pedestrian st nd the Submissi	public pathway vay grade crossi ation crossings), on Information	nplete the entire inventory grade crossings (including ings, complete the Header, , complete the Header, Part section, in addition to the denotes an optional field.	
A. Revision Date		Reporting	• •			• •	elect only	,			D. DOT Crossing	
( <i>MM/DD/YYYY</i> ) _07_/25_/2006		Railroad	🗆 Trans	Data	ange in	New     Crossin		Closed	No Train Traffic	Quiet Zone Update	Inventory Number	
	X	State	□ Other	· □ Re-	Open	🗆 Date		Change in Primary			844837H	
				Part I. Lo	cation	Change	,	Dperating RR tion Information	Correction			
1. Primary Operating	z Railroad		ſ		-	State	assilica		3. County			
Boston & Maine C		[BM]					IPSHIRE		ROCKING			
4. City / Municipality In □ Near PORTS	и MOUTH		PORT	/Road Nam AUTHORI Road Name	TY	k Numbe		ck Number)	6. Highway T	ype & No.		
7. Do Other Railroad If Yes, Specify RR	s Operate a	a Separate 1	, ,		,	8.		Railroads Operate	Over Your Track	at Crossing?	Yes 🗆 No	
9. Railroad Division	or Region		10. Railroad	, Subdivisior	n or Distr	ict	11. Bra	inch or Line Name		12. RR Milepo	,, ost 00.07	
	ON & MAIN	NE	□ None	VS 3			🗆 Non	-	BRANCH	(prefix)   (nn	nn.nnn)   (suffix)	
13. Line Segment *		Station	rest RR Timet * SMOUTH	able	15. Pa		(if applical	ble)	<b>16. Crossi</b> □ N/A	ng Owner (if app	olicable)	
17. Crossing Type	18. Cross	ing Purpose	19. Crossi	ng Position	- <u>-</u>	Public Ac	cess	21. Type of Train			22. Average Passenger	
Public	Highwa Pathwa	,	At Grad		(if F ☑ \	Private Cro	ossing)	<ul> <li>Freight</li> <li>Intercity Passer</li> </ul>	□ Transi	it d Use Transit	Train Count Per Day	
Image: Private       Image: Station, Ped.       Image: RR Over       Image: No       Image: Commuter       Image: Tourist/Other       Image: Number Per Day 8											· ·	
23. Type of Land Use	3. Type of Land Use											
24. Is there an Adjac	-							RA provided)				
🗆 Yes 🗷 No 🛛 If	Voc Drouid		lumbor			🖪 No 🛛	□ 24 Ur			Data Establi	shad	
26. HSR Corridor ID	Yes, Provid	e Crossing N 27. Lati	tude in decim	al degrees				Partial Chic de in decimal degree	ago Excused es	Date Establis 29. La	at/Long Source	
		(14/659)	std: nn.nnnı	43.0	310750	4		-7° : -nnn.nnnnnn)	1.0391850		-	
30.A. Railroad Use	_□ N/A *	(WGS84	sta: nn.nnn	innn)		(V		State Use *		CH	tual 🗌 Estimated	
30.B. Railroad Use	*						31.B. 9	State Use *				
30.C. Railroad Use	*						31.C. 9	State Use *				
30.D. Railroad Use	*							State Use *				
32.A. Narrative (Ra	ilroad Use)	*					32.B.	Narrative (State Use	)*			
33. Emergency Notif	ication Tele	ephone No.	(posted)	34. Railr	oad Cont	act (Tele	phone No.	)	35. State Co	ntact (Telephon	e No.)	
									603-271-71	45		
					Part II:	: Railro	ad Info	rmation				
1. Estimated Number								1				
1.A. Total Day Thru <sup>-</sup> (6 AM to 6 PM) 0	Frains		otal Night Thr to 6 AM)	u Trains	1.C. Tota 0	al Switchii	ng Trains	1.D. Total Trans	it Trains	1.E. Check if L One Moveme		
2. Year of Train Coun	t Data (YYY		3	Speed of T		rossing				HOW many us		
				A. Maximu				nph) From 0	to_0			
4. Type and Count of	Tracks		3.	в. турісаї S	peeu kar	ige over (	crossing (r	<u>πρη ετοπισ</u>	IU _ <b>_</b>			
	Siding		ard	Transit	t	In	dustry					
5. Train Detection (N			Detection [	⊐afo □ f	отс 🗆	DC 🗆	Other 🛽	None				
6. Is Track Signaled?	0				7.A. Ever	nt Recorde	er			7.B. Remote	e Health Monitoring	
🗆 Yes 🔳 No						s 🗆 No				🗆 Yes		
FORM FRA F 61	.80.71 (R	Rev. 3/15	)			OMB a	pproval	expires 3/31/2	2018		Page 1 OF 2	

<b>A. Revision Date</b> ( <i>N</i> 07/25/2006		PAGE 2 D. Cros 844837							ossing Inventory Number (7 char.) 37H						
Part III: Highway or Pathway Traffic Control Device Information															
1. Are there     2. Types of Passive Traffic Control Devices associated with the Crossing															
Signs or Signals? □ Yes I No	2.A. Crossbuck2.B. STOP SignameAssemblies (count)(count)00			gns (R1-1) 2.C. YIELD Sig (count)			ns <i>(R1-2)</i>	□ W10-1 □ W				.0-3 □ W10-11			
2.E. Low Ground Clearance Sign 2.F. Pavement Mark (W10-5)				arkings			2.G. Char Devices/I		2.H. EXEMPT ( <i>R15-3</i> )						
□ Yes (count) □ S			Stop Lines □Dynamic E RR Xing Symbols I None				All App One A	Media None		□ Yes □ No	☐ Yes I≇ No				
2.J. Other MUTCD S					te Crossing	•		Enhanced Signs (List types		;)					
Specify Type Specify Type Specify Type		🖬 Yes 🗆 No													
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)															
3.A. Gate Arms (count) Roadway <u>0</u> Pedestrian	3.B. Gate Cont 2 Quad 3 Quad 4 Quad	3.C. Cantile Structures Over Traffi Not Over T	<i>(count)</i> ic Lane	0	🗆 In	(coun □ Inc	3.D. Mast Mounted Flash (count of masts)_0 □ Incandescent □ Back Lights Included					.E. Total Count of lashing Light Pairs			
3.F. Installation Dat Active Warning Dev /	G. Wayside Horn Yes Installed on ( <i>MM/YYYY</i> )/						3.H. Highway Traffic Signals Controlling     3.I. Bells       Crossing     (count)       -     □ Yes     ☑ No								
3.J. Non-Train Activ □ Flagging/Flagma	] Floodlig	odlighting 🗆 None				3.K. Other Flashing Lights or Warning Devices     Count <u>0</u> Specify type				es					
4.A. Does nearby H Intersection have Traffic Signals?	. Hwy Traffic Signal Preemption 5. Highway Yes Simultaneous Storage Dist Advance Stop Line Di				No (C			6. Highw <i>(Check a</i> □ Yes -	Highway Monitoring Devices <i>heck all that apply)</i> Yes - Photo/Video Recording Yes – Vehicle Presence Detection						
		arning Sigr			rt IV:	Physi		racteristic							
1. Traffic Lanes Cros	2. P.	Paved?				. Does Track Run Down a Street?			4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) □ Yes □ No						
5. Crossing Surface (on Main Track, multiple types allowed)       Installation Date * (MM/YYYY)/ Width * Length *         1 Timber       2 Asphalt       3 Asphalt and Timber       4 Concrete       5 Concrete and Rubber       6 Rubber       7 Metal         8 Unconsolidated       9 Composite       10 Other (specify)															
6. Intersecting Roa	7. Smallest Crossing A					ngle			8. Is Co	mmercial	Power A	vailable? *			
□ Yes □ No	If Yes, Approxin	nate Distan								60° - 90°	🗆 Yes	☐ Yes   □ No			
Part V: Public Highway Information															
1. Highway System (01) Interst (02) Other (03) Feders (08) Non-F	2) Other Freeways and Expressway 3) Other Principal Arterial 🛛 (6)				) Urban (5) Major Collector			<ul> <li>3. Is Crossing on State Highway System?</li> <li>Yes No</li> <li>5. Linear Referencing System (LR</li> <li>6. LRS Milepost *</li> </ul>			4. Highway Speed Limit MPH Posted Statutory S Route ID) *				
7. Annual Average Year <u>1970</u> AA	ed Percent Trucks 9. Regularly Used by School □ Yes					Buses? umber per Day _0				10. Emergency Services Route □ Yes □ No					
Submission Information - This information is used for administrative purposes and is not available on the public website.															
Submitted by											Phone				
sources, gathering a agency may not cor displays a currently other aspect of this	Submitted by Organization Phone Date Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.														5, a federal unless it nate or any







# USING DATA PRODUCED BY WBAPS

(Web Accident Prediction System)

1200 New Jersey Avenue, SE Third Floor West Washington, DC 20590

WBAPS generates reports listing public highway-rail intersections for a State, County, City or railroad ranked by predicted collisions per year. These reports include brief lists of the Inventory record and the collisions over the last 10 years along with a list of contacts for further information. These data were produced by the Federal Railroad Administration's Web Accident Prediction System (WBAPS).

WBAPS is a computer model which provides the user an analytical tool, which combined with other site-specific information, can assist in determining where scarce highway-rail grade crossing resources can best be directed. This computer model does not rank crossings in terms of most to least dangerous. Use of WBAPS data in this manner is incorrect and misleading.

WBAPS provides the same reports as PCAPS, which is FRA's PC Accident Prediction System. PCAPS was originally developed as a tool to alert law enforcement and local officials of the important need to improve safety at public highway-rail intersections within their jurisdictions. It has since become an indispensable information resource which is helping the FRA, States, railroads, Operation Lifesaver and others, to raise the awareness of the potential dangers at public highway-rail intersections. The PCAPS/WBAPS output enables State and local highway and law enforcement agencies identify public highway-rail crossing locations which may require additional or specialized attention. It is also a tool which can be used by state highway authorities and railroads to nominate particular crossings which may require physical safety improvements or enhancements.

The WBAPS accident prediction formula is based upon two independent factors (variables) which includes (1) basic data about a crossing's physical and operating characteristics and (2) five years of accident history data at the crossing. These data are obtained from the FRA's inventory and accident/incident files which are subject to keypunch and submission errors. Although every attempt is made to find and correct errors, there is still a possibility that some errors still exist. Erroneous, inaccurate and non-current data will alter WBAPS accident prediction values. While approximately 100,000 inventory file changes and updates are voluntarily provided annually by States and railroads and processed by FRA into the National Inventory File, data records for specific crossings may not be completely current. Only the intended users (States and railroads) are really knowledgeable as to how current the inventory data is for a particular State, railroad, or location.

It is important to understand the type of information produced by WBAPS and the limitations on the application of the output data. WBAPS does not state that specific crossings are the most dangerous. Rather, the WBAPS data provides an indication that conditions are such that one crossing may possibly be more hazardous than another based on the specific data that is in the program. It is only one of many tools which can be used to assist individual States, railroads and local highway authorities in determining where and how to initially focus attention for improving safety at public highway-rail intersections. WBAPS is designed to nominate crossings for further evaluation based only upon the physical and operating characteristics of specific crossings as voluntarily reported and updated by States and railroads and five years of accident history data.

PCAPS and WBAPS software are not designed to single out specific crossings without considering the many other factors which may influence accident rates or probabilities. State highway planners may or may not use PCAPS/WBAPS accident prediction model. Some States utilize their own formula or model which may include other geographic and site-specific factors. At best, PCAPS and WBAPS software and data nominates crossings for further on-the-ground review by knowledgeable highway traffic engineers and specialists. The output information is not the end or final product and the WBAPS data should not be used for non-intended purposes.

It should also be noted that there are certain characteristics or factors which are not, nor can be, included in the WBAPS database. These include sight-distance, highway congestion, bus or hazardous material traffic, local topography, and passenger exposure (train or vehicle), etc. Be aware that PCAPS/WBAPS is only one model and that other accident prediction models which may be used by States may yield different, by just as valid, results for ranking crossings for safety improvements.

Finally, it should be noted that this database is not the sole indicator of the condition of a specific public highway-rail intersection. The WBAPS output must be considered as a supplement to the information needed to undertake specific actions aimed at enhancing highway-rail crossing safety at locations across the U.S. The authority and jurisdiction to appropriate resources towards the safety improvement or elimination of specific crossings lies with the individual States.



### ABBREVIATION KEY for use with WBAPS Reports



1200 New Jersey Avenue, SE Third Floor West Washington, DC 20590

The lists produced are only for public at-grade highway-rail intersections for the entity listed at the top of the page. The parameters shown are those used in the collision prediction calculation.

RANK:	Crossings are listed in order and ranked with the highest collision prediction value first.
PRED COLLS:	The accident prediction value is the probability that a collision between a train and a highway vehicle will occur at the crossing in a year.
CROSSING:	The unique sight specific identifying DOT/AAR Crossing Inventory Number.
RR:	The alphabetic abbreviation for the railroad name.
CITY:	The city in (or near) which the crossing is located.
ROAD:	The name of the road, street, or highway (if provided) where the crossing is located.
NUM OF COLLISIONS:	The number of accidents reported to FRA in each of the years indicated. Note: Most recent year is partial year (data is not for the complete calendar year) unless Accidents per Year is 'AS OF DECEMBER 31'.
DATE CHG:	The date of the latest change of the warning device category at the crossing which impacts the collision prediction calculation, e.g., a change from crossbucks to flashing lights, or flashing lights to gates. The accident prediction calculation utilizes three different formulas, on each for (1) passive devices, (2) flashing lights only, and (3) flashing lights with gates. When a date is shown, the collision history prior to the indicated year-month is not included in calculating the accident prediction value.
WD:	The type of warning device shown on the current Inventory record for the crossing where: FQ=Four Quad Gates; GT = All Other Gates; FL = Flashing lights; HS = Wigwags, Highway Signals, Bells, or Other Activated; SP = Special Protection (e.g., a flagman); SS = Stop Signs; XB = Crossbucks; OS = Other Signs or Signals; NO = No Signs or Signals.
TOT TRNS:	Number of total trains per day.
TOT TRKS:	Total number of railroad tracks between the warning devices at the crossing.
TTBL SPD:	The maximum timetable (allowable) speed for trains through the crossing.
HWY PVD:	Is the highway paved on both sides of the crossing?
HWY LNS:	The number of highway traffic lanes crossing the tracks at the crossing.
AADT:	The Average Annual Daily Traffic count for highway vehicles using the crossing.



### PUBLIC HIGHWAY-RAIL CROSSINGS RANKED BY PREDICTED ACCIDENTS PER YEAR AS OF 12/31/2014\*

\*Num of Collisions: Most recent year is partial year (data is not for the complete calendar year) unless Accidents per Year is 'AS OF DECEMBER 31'.

		OF DECH																		
RANK	PRED COLLS.	CROSSING	RR	STAT	E COUNTY	CITY	ROAD	NUM 14*		COLI 12	LISIOI 11	NS 10	DATE CHG	W D		TOT TRK	TTBL SPD	HWY PVD		AADT
1	0.029224	054416P	BM	NH	ROCKINGHAM	GREENLAND	GREENLAND RD	0	0	0	0	0		FL	4	1	15	YES	6	25,225
2	0.020606	053090X	ВМ	NH	ROCKINGHAM	EXETER	MAIN ST	0	0	0	0	0		FQ	12	2	40	YES	2	12,480
3	0.019845	053104D	BM	NH	ROCKINGHAM	NEWMARKET	NH COLLEGE HWY	0	0	0	0	0		GT	8	1	40	YES	2	15,928
4	0.019187	053089D	BM	NH	ROCKINGHAM	EXETER	FRONT ST	0	0	0	0	0		FQ	12	1	79	YES	2	9,200
5	0.017026	053075V	BM	NH	ROCKINGHAM	PLAISTOW	MAIN ST	0	0	0	0	0		FQ	10	1	40	YES	2	6,700
6	0.013989	053078R	BM	NH	ROCKINGHAM	NEWTON	WEST MAIN ST	0	0	0	0	0		GT	8	1	40	YES	2	3,783
7	0.011423	053084U	BM	NH	ROCKINGHAM	EAST KINGST	DEPOT RD	0	0	0	0	0		GT	10	1	40	YES	2	1,370
8	0.010398	053077J	BM	NH	ROCKINGHAM	NEWTON	CRANE CROSSING	<b>G</b> 0	0	0	0	0		GT	8	1	40	YES	2	1,195
9	0.010341	053099J	BM	NH	ROCKINGHAM	NEWFIELDS	SWAMSCOTT RD	0	0	0	0	0		GT	10	2	40	YES	2	560
10	0.010240	054423A	BM	NH	ROCKINGHAM	GREENLAND	BAYRIDGE RD	0	0	0	0	0		SS	2	1	10	YES	2	560
11	0.009088	054421L	BM	NH	ROCKINGHAM	GREENLAND	GREAT BAY RD	0	0	0	0	0		SS	4	1	15	YES	2	560
12	0.009088	054424G	BM	NH	ROCKINGHAM	GREENLAND	DEARBORN RD	0	0	0	0	0		SS	4	1	15	YES	2	560
13	0.009088	054418D	BM	NH	ROCKINGHAM	GREENLAND	BAYSIDE RD	0	0	0	0	0		SS	4	1	15	YES	2	560
14	0.009025	053093T	BM	NH	ROCKINGHAM	EXETER	SALEM ST	0	0	0	0	0		GT	10	1	40	YES	2	560
15	0.008774	054410Y	BM	NH	ROCKINGHAM	PORTSMOUTH	BARBERRY LN	0	0	0	0	0		SS	4	1	10	YES	1	560
16	0.008502	053088W	BM	NH	ROCKINGHAM	EXETER	POWDER MILL RI	0	0	0	0	0		GT	8	1	40	YES	2	560
17	0.008502	053106S	BM	NH	ROCKINGHAM	NEWMARKET	ELM ST	0	0	0	0	0		FQ	8	1	40	YES	2	560
18	0.006196	053082F	BM	NH	ROCKINGHAM	KINGSTON	NEW BOSTON RD	0	0	0	0	0		GT	10	1	40	YES	2	140
19	0.006006	053081Y	BM	NH	ROCKINGHAM	NEWTON	HEATH ST	0	0	0	0	0		GT	10	1	40	YES	2	125
20	0.005109	054415H	BM	NH	ROCKINGHAM	GREENLAND	PORTSMOUTH AV	/ 0	0	0	0	0		FL	4	1	15	YES	2	560
21	0.001711	054417W	BM	NH	ROCKINGHAM	GREENLAND	TIDE MILL RD	0	0	0	0	0		XB	4	1	15	NO	1	25
22	0.000341	054123L	ВМ	NH	ROCKINGHAM	PORTSMOUTH	GREEN ST	0	0	0	0	0		SS	0	1	25	YES	2	1,250
23	0.000316	054126G	BM	NH	ROCKINGHAM	PORTSMOUTH	MICHAEL SUCCI	0	0	0	0	0		XB	0	1	15	YES	2	375
24	0.000316	054117H	BM	NH	ROCKINGHAM	PORTSMOUTH	WBBX RD	0	0	0	0	0		SS	0	1	15	YES	1	560
25	0.000316	054138B	BM	NH	ROCKINGHAM	NEWINGTON	PATTERSON LN	0	0	0	0	0		XB	0	1	15	YES	2	560
26	0.000316	054129C	BM	NH	ROCKINGHAM	PORTSMOUTH	GOSLING RD	0	0	0	0	0		XB	0	1	15	YES	2	3,750
27	0.000316	054114M	BM	NH	ROCKINGHAM	PORTSMOUTH	BANFIELD RD	0	0	0	0	0		SS	0	1	15	YES	2	560
28	0.000174	054125A	BM	NH	ROCKINGHAM	PORTSMOUTH	MARKET ST	0	0	0	0	0		FL	0	1	15	YES	4	375
29	0.000121	054122E	BM	NH	ROCKINGHAM	PORTSMOUTH	MAPLEWOOD AV	0	0	0	0	0		FL	0	1	15	YES	2	10,950
30	0.000121	054118P	BM	NH	ROCKINGHAM	PORTSMOUTH	BARBERRY LN	0	0	0	0	0		FL	0	1	15	YES	2	560
31	0.000121	054113F	BM	NH	ROCKINGHAM	PORTSMOUTH	OCEAN RD	0	0	0	0	0		FL	0	1	15	YES	2	5,276
	0.245826									0		0								

TTL: 0.245826



### TEN YEAR COLLISION HISTORY AT PUBLIC AT-GRADE CROSSINGS ON THE ACCIDENT PREDICTION LIST

Crossing	Date/Time	Railroad	City/hwy	Highway User/ User Speed	Type Track/ Train Speed		Circumstances/ View of Track Obstructed	Warning Devices/ Operating?		# Killed / # Injured
053104D							•	•		
	12/06/05	ATK N	IEWMARKET	AUTO	MAIN	35 F	TRN STRUCK HWY USR	GATES		0
	10:9AM	R	RT 108 ; EXETER	R ST 000MPH	040MPH	CLEAR	NOT OBSTRUCTED	YES	YES	0
Total Accid	dents: 1									
054125A			~~~~							
	06/03/08	GRS P	ORTSMOUTH	TRK/TRL	MAIN	80 F	TRN STRUCK HWY USR	STOP SIGNS	NO	0
	12:40PM	D	RIVEWAY	007MPH	010MPH	CLEAR	NOT OBSTRUCTED		NO	0
Total Accid	dents: 1									

Total accidents this report: 2

DEPARTMENT OF TRANSPORTATION

#### HIGHWAY-RAII GRADF CROSSING ACCIDENT/INCIDENT REPORT



FEDERAL RAILROAD ADMINISTRA		KA)									1110.213	0-0300
Name Of								Alpha	betic Co	ode RR Accide	ent/Incider	nt No.
1. Reporting Railroad		В	oston & M	Iaine Co	prporation [BM]			1a. BI	М	1b. 83005	56	
2. Other Railroad Involved in Train	Accident/I	ncident						2a.		2b.		
3. Railroad Responsible for Track N	laintenan	ce Bo	oston & M	laine Co	rporation [BM]			3a. B	М	3b. 83005	56	
4. U.S. DOT-AAR Grade Crossing	ID No.	054	118P	5. Da	e of Accident/Incide	nt 03	3/22/83	6. Time	of Acci	dent/Incident 1	0:25 AN	М
7. Nearest Railroad Station PORTSMOUTH			8. D	Division		9	9. County ROCI	' KINGHAM		10. State Abbr.		Code NH
11. City (if in a city) <b>PORTS</b>	AOUTH		12. H	lighway N	ame or No. BAR	BERI	RY AVE	C		Public	Priv	vate
Highway	User Invo	olved						ipment Involve	ed			
13. Type C. Truck-trailer F. Bus		J. Other Mo	tor Vehicle	Code	17. Equipment 1. Train (units pu		4. Car(s	s) (moving)			ecify)	Code
A. Auto D. Pick-up truck G. Sch				1.	<ol> <li>Train (units pu</li> <li>Train (units pu</li> </ol>					. Train pulling- R . Train pushing- I		
	torcycle	M. Other (	1 1	A	3. Train (standin	ng)	7. Light	loco(s) (stand	0,	. Train standing-		1
'	irection	(geograph	,	Code	18. Position of Car	Unit ir	n Train		1			
(est. mph at impact) 0 1. N 16. Position 1. Stalled on crossing		outh 3. East		1 Code	19. Circumstance	1 Poil	Loguinmo	nt atruck high				Code
2. Stopped on Crossing		•	ossing	2				ent struck high	•		1	1
20a. Was the highway user and/or	rail equipn	nent involved	ł	Code	20b. Was there a h				<u> </u>		I	Code
in the impact transporting haz			N 1 - 141	4	1 Highwoy	v Lloor	2 Poi	il Equipment	3. Both	4. Neither		
1. Highway User 2. Rail Eq 20c. State the name and quantity o	•				I. Highway	y User	2. Rai		3. DUI	1 4. Neither		
200. State the name and quantity of	i ille liaza	iuous materi	ai ieleaseu	, ii aliy								
21. Temperature 22.	/isibility (	(single entry)		Code	23. Weather (sing	gle ent	try)					Code
(specify if minus) 48 °F 1	Dawn 2.	Day 3. Dus	sk 4. Dark	2	1. Clear 2. Clo	- oudy 3	3. Rain 4.	. Fog 5. Sleet	6. Sno	ow		2
24. Type of Equipment			A. Spec. Mo	oW Equip	25. Track Type Us	sed by	Rail		Code	26. Track Num	ber or Na	me
		in 7. Yard/S	•		Equipment Inv				eeue			
(single entry) 2. Passenger train 5 3. Commuter train 6	•	•	. ,	Code	1. Main 2. Ya	ord 3	. Siding	4. Industry	1	SINGLE M	AIN	
27. FRA Track 28. Number of		29. Number			eed (Recorded if ava		-	31. Time Tal				Code
Class Locomot		Cars		. Recorde		allable				Clion		Coue
1 Units	1	5	Ε.	. Estimate	ed 5	mph	Е	1. North 2	. South	3. East 4. Wes	st	4
	Wig wag				lagged by crew		•	aled Crossing		34. Whistle Ban		Code
Crossing 2. Cantilever FLS 5. Warning 3. Standard FLS 6.		•	<ol> <li>Stop sign:</li> <li>Watchmai</li> </ol>		ther (specify)		Warr	ning		1. Yes 2. No		
Code(s) 03 06	07					_	20 sec v	warn min (1)	:	3. Unknown		
35. Location of Warning			ode 36. 0	Crossing	Warning Interconnec	cted	Code	37. Crossi	ng Illumi	inated by Street		Code
1. Both Sides				with High	way Signals			Lights	or Spec	ial Lights		
<ol> <li>Side of Vehicle Approach</li> <li>Opposite Side of Vehicle Approach</li> </ol>	rooch	1		1. Yes	2. No 3. Unknown		2	1. Yes	2. No	3. Unknown		2
38. Driver's 39. Driver's Code		r Drove Behi	nd or in Fro	ont of Trai	n Code 41.	. Drive	r					Code
Age Gender		Struck or was						nd or thru the g	jate 4.	Stopped on cros		Couo
1. Male		1. Yes 2. N	o 3. Unkn	own	2			d then proceed	ded 5.	Other (specify	)	4
2. Female 42. Driver Passed Standing	Code	43. View of	Track Obs	cured by	(primary obstru		d not stop	)				Code
Highway Vehicle			anent Struc		3. Passing Train	n 5. Ve	getation	7. Othe	er (spe	ecify)		Coue
1. Yes 2. No 3. Unknown	2	2. Stand	ding railroad	d equipm	ent 4. Topography	6. Hig	ghway Ve	hicles 8. Not	Obstruc	ted		8
			44. Driver	r was		Coc	de	45. Was Dri	ver in th	e Vehicle?		Code
Casualties to:	Killed	Injured	1. Kill	led 2. In	ured 3. Uninjured	3		1. Yes	2. No			1
			47. Highw	vay Vehic	le Property Damage	;		48. Total Nu	mber of	f Highway-Rail C	rossing U	Jsers
46. Highway-Rail Crossing Users	0	0	(est. d	dollar dan	nage)	\$3	300	(include	driver)		1	
49. Railroad Employees	0	0	50. Total	Number	of People on Train					nent Accident /	(	Code
52. Passengers on Train	0	0	(inclue	de passe	ngers and crew)			Incident 1. Yes	•	Being Filed		2
53a. Special Study Block	I	I I			53b. Special Study	y Block	<b>‹</b>	1				
54. Narrative Description												-
55. Typed Name and Title		56. Signatur	е							57. Date		
FORM FRA F 6180.57	* NOTE	THAT ALL	CASUALTI	ES MUS	BE REPORTED O	N FOR	RM FRA F	- 6180.55A				







# DEPARTMENT OF TRANSPORTATION

#### HIGHWAY-RAII GRADE CROSSING ACCIDENT/INCIDENT REPORT



		KA)							JIVIB Approval No. 2	2130-0500
Name Of								Alphabetic Code	RR Accident/Inc	ident No.
1. Reporting Railroad			oston & M	aine Co	prporation [BN	[]		1a. BM	1b. B86019	
2. Other Railroad Involved in Train								2a.	2b.	
3. Railroad Responsible for Track	Maintenan	ce Bo	oston & M		rporation [BN			3a. BM	3b. B86019	
4. U.S. DOT-AAR Grade Crossing	ID No.	054	122E	5. Dat	e of Accident/In	cident	01/17/86	6. Time of Accider	nt/Incident 07:10	PM
7. Nearest Railroad Station PORTSMOUTH			8. Di	ivision			9. County ROCK	INGHAM	10. State Abbr. 33	Code 8 NH
11. City (if in a city) PORTS	MOUTH		12. H	ighway N	lame or No. M	IAPLE	WOOD A	VE	Public	Private
Highway	User Invo	olved	•				Rail Equi	pment Involved		
13. Type C. Truck-trailer F. Bu A. Auto D. Pick-up truck G. Sc	hool Bus	K. Pedestri		Code	17. Equipment 1. Train (uni 2. Train (uni	ts pulling	g) 5. Car(s)	loco(s) (moving) B. Tr	rain pulling- RCL	Code
14. Vehicle Speed 15. D	torcycle irection lorth 2. So	M. Other ( (geograp) outh 3. East	hical)	Code	3. Train (sta 18. Position of	- 0/	<u>v</u>	loco(s) (standing) C. Ti 1	rain standing- RCL	-
16. Position 1. Stalled on crossing	g 3. Mo	oving over cr		Code	19. Circumstan			nt struck highway user		Code
2. Stopped on Cross 20a. Was the highway user and/or	<u> </u>		d	Code	20b. Was there			nt struck by highway user ials release by	ſ	2 Code
in the impact transporting haz			u .		200. 1100 11010	o a naza				
1. Highway User 2. Rail Ed			4. Neither	4	1. Higł	nway Us	er 2. Rail	Equipment 3. Both	4. Neither	
20c. State the name and quantity of	of the haza	rdous mater	ial released,	if any						
21. Temperature 22.	Visibility	(single entry	)	Code	23. Weather	(single e	entry)			Code
(specify if minus) 38 °F 1.	Dawn 2.	Day 3. Du	sk 4. Dark	3	1. Clear 2.	Cloudy	3. Rain 4.	Fog 5. Sleet 6. Snow		1
24. Type of Equipment Consist 1. Freight train (single entry) 2. Passenger train s		in 7. Yard/S	-	W Equip Code	25. Track Typ Equipmer		,	Code 26	6. Track Number or	Name
3. Commuter train 6	•	0	Main./inspect. car 1 1. Main 2. Yard 3. Siding 4. Industry 1 MAIN							
27. FRA Track 28. Number		29. Number Cars								Code
Class Locomo 1 Units	ive			Recorde Estimate		3 mp	h E	1. North 2. South 3.	East 4. West	1
Crossing 2. Cantilever FLS 5		fic signals 8	B. Stop signs	s 11. O			33. Signal Warn	-	. Whistle Ban 1. Yes	Code
Warning         3. Standard FLS         6           Code(s)         03         06			9. Watchmar	n 12.N	one		20 sec w	varn min (1);	2. No 3. Unknown	
35. Location of Warning	07		ode 36. C	rossing V	Warning Interco	nnected		37. Crossing Illuminat		Code
<ol> <li>Both Sides</li> <li>Side of Vehicle Approach</li> </ol>				with High	way Signals			Lights or Special I	_ights	1.
3. Opposite Side of Vehicle Ap	proach	1	1	I.Yes 2	2. No 3. Unkno	wn	2	1. Yes 2. No 3	. Unknown	2
38. Driver's 39. Driver's Code			ind or in From			41. Driv				Code
Age Gender 1. Male			s Struck by S lo 3. Unkno		rain 2	2. 5	Stopped and	d or thru the gate 4. Sto I then proceeded 5. Oth		3
2. Female 42. Driver Passed Standing	Code	43. View of	f Track Obso	cured by	(primary of		<u>Did not stop</u> n)			Code
Highway Vehicle	1	1. Perm	nanent Struc	ture	3. Passing T	rain 5. V	Vegetation	7. Other (specify		1
1. Yes 2. No 3. Unknown	2	2. Stan			ent 4. Topograp			nicles 8. Not Obstructed		8
Casualties to:	Killed	Injured	44. Driver 1 Kill		ured 3. Uninjur		ode	45. Was Driver in the V 1. Yes 2. No	'ehicle?	Code
					•		3			a Users
46. Highway-Rail Crossing Users	0	0	(est. doilaí damage) \$2,500 (include differ) 2							
49. Railroad Employees	0	0			of People on Tra			51. Is a Rail Equipmen Incident Report Bei		Code
52. Passengers on Train	0	0	(Includ	le passer	ngers and crew)			1. Yes 2. No		2
53a. Special Study Block					53b. Special S	tudy Blo	ock			
54. Narrative Description										
55. Typed Name and Title		56. Signatu	re						57. Date	

#### DEPARTMENT OF TRANSPORTATION FEDERAL RAIL ROAD ADMINISTRATION (FRA)

#### HIGHWAY-RAII GRADE CROSSING ACCIDENT/INCIDENT REPORT



		(A)							ONB Approval No.	2130-0300
Name Of								Alphabetic Coc	de RR Accident/Ind	cident No.
1. Reporting Railroad			oston & N	faine Co	rporation [BN	M]		1a. BM	1b. B85036	
2. Other Railroad Involved in Trair								2a.	2b.	
3. Railroad Responsible for Track	Maintenan	ce Bo	oston & M	Iaine Co	rporation [BN	/]		3a. BM	3b. B85036	
4. U.S. DOT-AAR Grade Crossing	ID No.	054	122E		e of Accident/In	cident	02/12/85	6. Time of Accid	lent/Incident 09:28	AM
7. Nearest Railroad Station PORTSMOUTH			8. 0	Division			9. County ROCK	INGHAM	10. State Abbr. 3	Code 3 NH
11. City (if in a city) PORTS	MOUTH		12. H	lighway N	lame or No. M	IAPLE	WOOD A	VENUE	✓ Public	Private
Highwa	y User Invo	lved	•				Rail Equi	pment Involved		
13. Type C. Truck-trailer F. Bu A. Auto D. Pick-up truck G. So	hool Bus		an	Code A		ts pullin ts pushi	g) 5. Car(s) ng) 6. Light I	(standing) A. loco(s) (moving) B.	Other (specify) Train pulling- RCL Train pushing- RCL	Code 6
	otorcycle Direction	M. Other ( (geograp)	,	Code	3. Train (sta 18. Position of		v	oco(s) (standing) C.	Train standing- RCL	, i
		outh 3. East	,	4	10.1 0311011 01			1		
16. Position 1. Stalled on crossin 2. Stopped on Cross	0	oving over cr	ossing	Code	19. Circumstan			nt struck highway user nt struck by highway us		Code
20a. Was the highway user and/or		••	d	Code	20b. Was there				501	
in the impact transporting ha								-		
1. Highway User 2. Rail E				4	1. Higi	hway Us	ser 2. Rail	Equipment 3. Both	4. Neither	
20c. State the name and quantity	of the haza	rdous mater	al released	l, if any						
	Visibility (	single entry	)	Code	23. Weather	(single	entry)			Code
(specify if minus) 34 °F 1.	Dawn 2.	Day 3. Du	sk 4. Dark	2	1. Clear 2.	Cloudy	3. Rain 4.	Fog 5. Sleet 6. Sno	w	2
24. Type of Equipment Consist 1. Freight train	4. Work tra	in 7. Yard/S	A. Spec. Mo Switching	oW Equip	25. Track Typ Equipmer			Code	26. Track Number of	Name
(single entry) 2. Passenger train 3. Commuter train	•	•	. ,	Code			3. Siding	4. Industry 1	MAIN	
27. FRA Track 28. Number		29. Number						31. Time Table Direc	tion	Code
Class Locomo 1 Units	tive 1	Cars							1	
	4. Wig wags	s 7			agged by crew			1	34. Whistle Ban	Code
Crossing 2. Cantilever FLS		•					Warn	ing	1. Yes	
Warning 3. Standard FLS			9. Watchma	n 12. N	one		20 000 1	varn min (1);	2. No 3. Unknown	
Code(s)020635. Location of Warning	07		ode 36.0	Crossing	Narning Interco	nnected		37. Crossing Illumir		Code
1. Both Sides		U		0	way Signals	meeteu	COUE	Lights or Specia	,	Code
<ol> <li>Side of Vehicle Approach</li> <li>Opposite Side of Vehicle Approach</li> </ol>	proach	1		1. Yes 2	. No 3. Unkno	wn	2	1. Yes 2. No	3. Unknown	2
38. Driver's 39. Driver's Code		r Drove Behi	ind or in Fro	ont of Trai	n Code	41. Dri	ver			Code
Age Gender		Struck or wa						d or thru the gate 4. S	Stopped on crossing	0040
1. Male		1. Yes 2. N	lo 3. Unkn	iown	2			then proceeded 5.0	Other (specify)	2
42. Driver Passed Standing	Code	43 View of	f Track Obs	cured by	(primary of		Did not stop			Code
Highway Vehicle			nanent Struc		3. Passing T	rain 5.	Vegetation	7. Other (spec		l
1. Yes 2. No 3. Unknown	2	2. Stan	ding railroad	d equipme	ent 4. Topograp	hy 6.	Highway Vel	nicles 8. Not Obstruct	ed	8
Casualties to:	Killed	Injured	44. Drive				Code	45. Was Driver in the	e Vehicle?	Code
		injurou	1. Kil	led 2. Inj	ured 3. Uninjur	red	3	1. Yes 2. No		1
46. Highway-Rail Crossing Users	0	0	•	vay Vehic dollar dam	le Property Dam lage)	Ŭ 1	\$400	48. Total Number of (include driver)	Highway-Rail Crossin	ng Users I
49. Railroad Employees	0	0	50. Total	Number o	of People on Tra		<del>•</del> 100	51. Is a Rail Equipme	ent Accident /	Code
52. Passengers on Train	0	0	(inclue	de passer	ngers and crew)			Incident Report E 1. Yes 2. No	Seing Filed	2
53a. Special Study Block	•				53b. Special S	tudy Blo	ock			
54. Narrative Description										
55. Typed Name and Title		56. Signatu	re						57. Date	

#### DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION (FRA)

#### HIGHWAY-RAII GRADE CROSSING ACCIDENT/INCIDENT REPORT



Name Of								Alphat	petic Co	ode RR Accident/Inc	ident No.
1. Reporting Railroad			ston & Ma	aine Co	prporation [BM]			1a. BN	M	1b. 820237	
2. Other Railroad Involved in Trai								2a.		2b.	
3. Railroad Responsible for Track	Maintenan	ce Bo	ston & Ma		rporation [BM]			3a. Bi	М	3b. 820237	
4. U.S. DOT-AAR Grade Crossin	g ID No.	054	122E	5. Dat	e of Accident/Incide	nt 1	0/03/82	6. Time	of Acci	dent/Incident 10:05	PM
7. Nearest Railroad Station PORTSMOUTH			8. Div	vision			9. County ROCH	KINGHAM		10. State Abbr. 33	Code
11. City (if in a city) PORT	SMOUTH		12. Hi	ghway N	lame or No. MAP	LEV	VOOD A	VE.		✓ Public	Private
Highw	ay User Invo	olved					Rail Equ	ipment Involve	d		
13. Type C. Truck-trailer F. B	us	J. Other Mo	tor Vehicle	Code	17. Equipment 1. Train (units pr	(م مالان	4. Car(s	) (moving)		. Other (specify)	Code
A. Auto D. Pick-up truck G. S					2. Train (units pi					Train pulling- RCL	1 2
	lotorcycle	M. Other (s		A	3. Train (standir	0/		loco(s) (stand	ling) C	. Train standing- RCL	3
· ·	Direction	(geograph	,	Code	18. Position of Car	Unit i	in Train		1		
(est. mph at impact) 15 1. 16. Position 1. Stalled on crossi		outh 3. East		2 Code	19. Circumstance	1 Ra	ail equipme	ent struck high			Code
2. Stopped on Cros	0	0	Jooning	3				nt struck by high	•		2
20a. Was the highway user and/o				Code	20b. Was there a h	nazaro	dous mate	rials release by	/		Code
in the impact transporting hat 1. Highway User 2. Rail I			. Neither	4	1. Highwa	v Use	er 2. Rai	l Equipment	3. Both	4. Neither	
20c. State the name and quantity				if any	<u></u>	,					
				<i>.</i>							
	. Visibility	(single entry)		Code	23. Weather (sin	gle er	ntry)				Code
(specify if minus) 60 °F	. Dawn 2.	Day 3. Dus	k 4. Dark	4	1. Clear 2. Clo	oudy	3. Rain 4.	Fog 5. Sleet	6. Sno	ow	1
24. Type of Equipment			. Spec. Mol	N Equip	25. Track Type Us	sed by	y Rail		Code	26. Track Number or	Name
Consist 1. Freight train (single entry) 2. Passenger train		in 7. Yard/Sv	0	0	Equipment Inv	volved	d			EASTBOUND N	ίδιν
(single entry) 2. Passenger train 3. Commuter train	0	•	. ,	Code	1. Main 2. Y	ard	3. Siding	4. Industry	1	LINE	
27. FRA Track 28. Number	r of	29. Number	of 30. Cor	nsist Sp	eed (Recorded if av	ailable	e) Code	31. Time Tat	l ole Dire	ction	Code
Class Locom		Cars	R. I	Recorde	d		, 				1
1 Units	2	2		Estimate		mph			. South	3. East 4. West	3
32. Type of 1. Gates Crossing 2. Cantilever FLS	4. Wig wag				lagged by crew ther (specify)		l .	aled Crossing		34. Whistle Ban	Code
Warning 3. Standard FLS		•	. Watchman				Warı	ning		1. Yes 2. No	
Code(s) 03 06							20 sec v	varn min (1)	;	3. Unknown	
35. Location of Warning			de 36. Ci	rossing	Warning Interconned	cted	Code	37. Crossir	ng Illumi	inated by Street	Code
1. Both Sides		1	w	vith High	way Signals		I.	Lights	or Spec	ial Lights	
<ol> <li>Side of Vehicle Approach</li> <li>Opposite Side of Vehicle A</li> </ol>	pproach	1	1	. Yes 2	2. No 3. Unknown		2	1. Yes	2. No	3. Unknown	2
38. Driver's 39. Driver's Code		r Drove Behir	nd or in Fron	t of Trai	n Code 41.	Drive	er				Code
Age Gender		Struck or was						nd or thru the g	ate 4.	Stopped on crossing	0000
1. Male		1. Yes 2. No	3. Unkno	wn	2			d then proceed	led 5.	Other (specify)	3
42. Driver Passed Standing	Code	13 View of	Track Obsci	ured by	(primary obstru		id not stop				Code
Highway Vehicle			anent Struct		3. Passing Train	n 5. Ve	egetation	7. Othe	er (spe	ecify)	L
1. Yes 2. No 3. Unknown	2	2. Stand	ing railroad	equipm	ent 4. Topography	6. H	ighway Ve	hicles 8. Not	Obstruc	ted	8
			44. Driver	was		Co	ode	45. Was Driv	ver in th	e Vehicle?	Code
Casualties to:	Killed	Injured	1. Kille	ed 2. Inj	ured 3. Uninjured	3		1. Yes	2. No		1
			47. Highwa	ay Vehic	le Property Damage	-		48. Total Nu	mber of	f Highway-Rail Crossin	
46. Highway-Rail Crossing Users	0	0	(est. do	llar dan	nage)	\$	150	(include	driver)	1	
49. Railroad Employees	0	0	50. Total N	lumber o	of People on Train					nent Accident /	Code
52. Passengers on Train	0	0	(include	e passe	ngers and crew)			1. Yes		Being Filed	2
53a. Special Study Block	-				53b. Special Study	v Bloc					
54. Narrative Description							-				
	<u> </u>										
55. Typed Name and Title		56. Signatur	e							57. Date	
FORM FRA F 6180.57				S MUS	FBE REPORTED O			6180 554			

# DEPARTMENT OF TRANSPORTATION

#### HIGHWAY-RAII GRADE CROSSING ACCIDENT/INCIDENT REPORT



FEDERAL RAILROAD ADMINISTR	ATION (FF	KA)							OIVIB Approval No.	2130-0300
Name Of								Alphabetic Coc	le RR Accident/Inc	cident No.
1. Reporting Railroad		В	oston & M	aine Co	prporation [BN	/]		1a. BM	1b. 780141	
2. Other Railroad Involved in Train	Accident/I	Incident						2a.	2b.	
3. Railroad Responsible for Track	Maintenan	ce B	oston & M		rporation [BN			<sup>3a.</sup> BM	3b. 780141	
4. U.S. DOT-AAR Grade Crossing	ID No.	054	122E		e of Accident/Inc	cident	1	6. Time of Accid	lent/Incident 11:55	
7. Nearest Railroad Station PORTSMOUTH			8. Di	ivision			9. County STRA	FFORD	10. State Abbr. 3:	Code 3 NH
11. City (if in a city) PORTS	MOUTH		12. H	lighway N	lame or No. M	APLE	WOOD A	VENUE	✓ Public	Private
Highwa	/ User Invo	olved	·				Rail Equi	pment Involved		
13. Type C. Truck-trailer F. Bu A. Auto D. Pick-up truck G. Sc B. Truck E. Van H. Mo				Code A	17. Equipment 1. Train (unit 2. Train (unit 3. Train (sta	ts pushi	g)    5. Car(s) ng)  6. Light I	(standing) A. loco(s) (moving) B.	Other (specify) Train pulling- RCL Train pushing- RCL Train standing- RCL	Code
14. Vehicle Speed 15. D	irection	(geograp outh 3. East	hical)	Code	18. Position of		-	1		
16. Position 1. Stalled on crossin 2. Stopped on Cross	-	oving over cr	rossing	Code	19. Circumstan			nt struck highway user ht struck by highway us		Code
20a. Was the highway user and/or	<u> </u>		d	Code	20b. Was there					Code
in the impact transporting has							0 D "			
1. Highway User 2. Rail E			4. Neither	4	1. Higr	nway Us	ser 2. Rail	Equipment 3. Both	4. Neither	
20c. State the name and quantity o	n the haza	irdous mater	lai released,	, ii any						
· ·	Visibility	(single entry	')	Code	23. Weather	(single (	entry)			Code
(specify if minus) 50 °F 1.	Dawn 2.	Day 3. Du	sk 4. Dark	2	1. Clear 2.	Cloudy	3. Rain 4.	Fog 5. Sleet 6. Sno	w	1
24. Type of Equipment Consist 1. Freight train (single entry) 2. Passenger train		in 7. Yard/S	•	W Equip Code	· 25. Track Typ Equipmen			Code	26. Track Number or	Name
3. Commuter train	•	0	. ,	7	1. Main	2. Yard	3. Siding	4. Industry 1	EASTBOUND N	MAIN
27. FRA Track 28. Number		29. Number							Code	
Class Locomo 1 Units	ive	Cars	s     R. Recorded       3     E. Estimated       3     mph       E     1. North 2. South 3. East						3	
Crossing 2. Cantilever FLS 5		fic signals	7. Crossbuck 8. Stop signs	ks 10. Fl s 11. O	agged by crew ther (specify)	•	33. Signal Warn	-	34. Whistle Ban 1. Yes	Code
Warning         3. Standard FLS         6           Code(s)         03         06			9. Watchmar	n 12.N	one			arn min (1);	2. No 3. Unknown	
35. Location of Warning		C		•	Warning Intercor	nnected		37. Crossing Illumir	nated by Street	Code
1. Both Sides 2. Side of Vehicle Approach		1			way Signals 2. No 3. Unkno	wp	2	Lights or Specia	0	2
3. Opposite Side of Vehicle Ap								1. 165 2. 110	3. UTKIOWI	Cada
38. Driver's 39. Driver's Code Age Gender 1. Male	and	Struck or wa	ind or in Fror is Struck by \$ Io 3. Unkno	Second T	rain		Drove aroun	d or thru the gate 4. S then proceeded 5. C		Code
2. Female					2		Did not stop		(	4
42. Driver Passed Standing	Code		f Track Obso		(primary ob			7.04		Code
Highway Vehicle 1. Yes 2. No 3. Unknown	2		nanent Struc ding railroad		3. Passing T ent 4. Topograp			7. Other (spec nicles 8. Not Obstructe		8
Casualties to:	Killed	Injured	44. Driver				Code	45. Was Driver in the	Vehicle?	Code
		injureu			ured 3. Uninjur		3	1. Yes 2. No		1
46. Highway-Rail Crossing Users	0	0	° °	ay Vehic ollar darr	le Property Dam nage)	Ŭ I	\$100	48. Total Number of (include driver)	0,	ng Users I
49. Railroad Employees	0	0			of People on Tra	in		51. Is a Rail Equipme Incident Report B		Code
52. Passengers on Train	0	0	(Includ	ie passer	ngers and crew)			1. Yes 2. No	ing i neu	2
53a. Special Study Block					53b. Special S	tudy Blo	ock			
54. Narrative Description										
55. Typed Name and Title		56. Signatu	re						57. Date	





#### DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION (FRA)

#### HIGHWAY-RAIL GRADE CROSSING ACCIDENT/INCIDENT REPORT



FEDERAL RAILROAD ADMINISTRA	TION (FR	A)							OMB	Approval No. 2	2130-0500
Name Of								Alphabetic Co	ode R	R Accident/Inci	ident No.
1. Reporting Railroad		Pam	Am Rail	lways/(	Guilford Syste		S]	<sup>1a.</sup> GRS	1	b. 217	
2. Other Railroad Involved in Train	Accident/Ir		-				~,	2a.		b.	
3. Railroad Responsible for Track M	/laintenanc	æ Pam	Am Rail	ways/(	Guilford Syste	m [GR!	S1	<sup>3a.</sup> GRS	3	b. 217	
4. U.S. DOT-AAR Grade Crossing I	D No.	05412		1	e of Accident/Inc			6. Time of Acci			РМ
7. Nearest Railroad Station			8. Div	vision			9. County		10	). State	Code
PORTSMOUTH			EAS	STERN	N		ROCK	INGHAM		Abbr. 33	
11. City (if in a city) PORTSN	10UTH		12. Hig	hway N	ame or No. D	RIVEW	/AY			Public 🖌	Private
Highway	User Invol	lved					Rail Equip	ment Involved			
13. TypeC. Truck-trailerF. BusA. AutoD. Pick-up truckG. Sch		J. Other Motor K. Pedestrian	Vehicle	Code	1. Train (unit	s pulling s pushin	4. Car(s) ) 5. Car(s) )g) 6. Light lo	(standing) A		(specify) oulling- RCL oushing- RCL	Code
	,	M. Other (spe			3. Train (star		<u>v</u>	oco(s) (standing) C	C. Train s	standing- RCL	2
	irection	) geographica) 4 outh 3. East	-	Code	18. Position of	Car Unit	in Train	1			
16. Position 1. Stalled on crossing		ving over cross		Code	19 Circumstan	ce 1 Ra	ail equipmen	it struck highway use	۰r		Code
2. Stopped on Crossin		•	ing	3				t struck by highway use			1
20a. Was the highway user and/or i				Code	20b. Was there	a hazar	dous materia	als release by			Code
in the impact transporting haz			laithar	4	1 High	nway Use	or 2 Poil	Equipment 3. Both	- 4 N/	either	4
1. Highway User 2. Rail Eq 20c. State the name and quantity of						Iway Use		Equipment 3. Boti	1 4. IN	einiei	
200. State the name and quantity of	ine nazar	uous materiari	eleaseu, li	rany							
21. Temperature 22. \	/isibility (	single entry)		Code	23. Weather	(single e	ntry)				Code
(specify if minus) 80 °F 1. [	Dawn 2.[	Day 3. Dusk	4. Dark	2	1. Clear 2.	Cloudy	3. Rain 4. F	Fog 5. Sleet 6. Sn	ow		1
24. Type of Equipment			Spec. MoW	V Equip	25. Track Type	e l lsed h	w Rail	Code	26 Tr	ack Number or	Name
,	. Work trai	n 7. Yard/Swit		40.6	Equipmen			Code			Name
(single entry) 2. Passenger train 5	•	•	. ,	Code						WINGTON	
3. Commuter train 6		•		1	1. Main 2			4. Industry 1		INLINE	
27. FRA Track 28. Number of		29. Number of Cars		isist Spe Recorde	eed (Recorded if	availabl	le) Code	31. Time Table Dire	ction		Code
Class Locomoti 2 Units	1	4		Estimate		n mpł	h E	1. North 2. South	3. East	4. West	4
	Wig wags	7. C			lagged by crew			ed Crossing		istle Ban	Code
Crossing 2. Cantilever FLS 5.	• •				ther (specify)		Warni	s.	1. \		
Warning 3. Standard FLS 6.	Audible	9. V	Vatchman	12. N	one		-		2. N		2
Code(s) 08							<u> </u>			Jnknown	
<ol> <li>Location of Warning</li> <li>Both Sides</li> </ol>		Code	-	•	Warning Intercor way Signals	inected	Code	37. Crossing Illum Lights or Spec			Code
2. Side of Vehicle Approach			VVI	urrign	way Signais			Lights of Spec	iai Liyin	.5	
3. Opposite Side of Vehicle App	roach	2	1.	Yes 2	2. No 3. Unknov	wn	2	1. Yes 2. No	3. Un	known	2
38. Driver's 39. Driver's Code	40. Driver	Drove Behind	or in Front	t of Train	n Code	41. Driv					Code
Age Gender		Struck or was S	-		Train			or thru the gate 4.		•	
63 1. Male 1 2. Female 1	1	I. Yes 2. No	3. Unknov	NN	1		Stopped and Did not stop	then proceeded 5.	Other	(specify)	3
42. Driver Passed Standing	Code	43. View of Tr	ack Obscu	ured by	(primary ob						Code
Highway Vehicle		1. Perman	ent Structu	ure	3. Passing T	rain 5. V	/egetation		ecify)		1
1. Yes 2. No 3. Unknown	2	2. Standing	g railroad e	equipme	ent 4. Topograpl	ny 6.H	lighway Veh	icles 8. Not Obstruc	ted		8
			4. Driver w	vas		Co	ode	45. Was Driver in th	ne Vehic	le?	Code
Casualties to:	Killed	Injured	1. Killed	d 2. Inj	ured 3. Uninjur	ed 3	3	1. Yes 2. No			1
			7. Highwa	y Vehic	le Property Dam		-	48. Total Number of	f Highwa	ay-Rail Crossin	g Users
46. Highway-Rail Crossing Users	0	0	(est. dol	llar darr	nage)		50	(include driver)	-	1	-
49. Railroad Employees	0	0 5	0. Total Ni	umber (	of People on Trai			51. Is a Rail Equipm	nent Acc	cident /	Code
52. Passengers on Train	0	0			ngers and crew)	2	,	Incident Report	Being F	iled	2
C C	0	0						1. Yes 2. No			
53a. Special Study Block					53b. Special S	tudy Bloc	ck				
54. Narrative Description TRAIN PH-1 WAS SHOVING BACK THE TRUCK DRIVERS FACILITY. EMERGENCY AND STRUCK THE	THE DRIV	VERS STATES									/ING
55. Typed Name and Title	ł	56. Signature								57. Date	

# DEPARTMENT OF TRANSPORTATION

#### HIGHWAY-RAII GRADF CROSSING ACCIDENT/INCIDENT REPORT



FEDERAL RAILROAD ADMINISTRA	TION (FF	RA)														
Name Of								Alphabetic C	ode	RR Accident/Inci	ident No.					
1. Reporting Railroad		S	pringfield	Termin	al Railway Co	mpany	(Vermon	t) 1a. ST		1b. S90025						
2. Other Railroad Involved in Train	Accident/I	Incident						2a.	:	2b.						
3. Railroad Responsible for Track N	laintenan	ce S	pringfield	Termin	al Railway Co	mpany	(Vermont	) 3a. ST	:	3b. S90025						
4. U.S. DOT-AAR Grade Crossing I	D No.	054	125A	5. Dat	e of Accident/Ind	cident (	02/14/90	6. Time of Acc	cident/In	cident 06:04	PM					
7. Nearest Railroad Station PORTSMOUTH			8. [	Division			9. County ROCK	INGHAM	1	0. State Abbr. 33	Code					
11. City (if in a city) PORTSM	лоитн		12. H	Highway N	lame or No. M	ARKE	T STREE	T EXT.	[	Public	Private					
Highway	User Invo	olved	I				Rail Equi	pment Involved								
13. Type C. Truck-trailer F. Bus A. Auto D. Pick-up truck G. Sch B. Truck E. Van H. Mot				Code A	1. Train (unit	ts pulling ts pushin	i) 5. Car(s) ig) 6. Light	) (standing) loco(s) (moving)	B. Train	(specify) pulling- RCL pushing- RCL standing- RCL	Code					
'	irection	(geograp	-	Code	18. Position of	Car Unit	in Train									
		outh 3. Eas		1	40.0			1			0					
16. Position 1. Stalled on crossing 2. Stopped on Crossin		oving over ci apped	rossing	Code	19. Circumstan			nt struck highway us nt struck by highway			Code					
20a. Was the highway user and/or in the impact transporting haz 1. Highway User 2. Rail Eq	rail equipr ardous ma	ment involve aterials?		Code	20b. Was there		dous mater	ials release by	th 4. N	leither	Code					
20c. State the name and quantity of	•						21110				<u> </u>					
	/isibility	(single entry	/)	Code	23. Weather	(single e	ntry)				Code					
(specify if minus) 24 °F 1. I	Dawn 2.	Day 3. Du	sk 4. Dark	4	1. Clear 2.	Cloudy	3. Rain 4.	Fog 5. Sleet 6. Sr	now		1					
(single entry) 2. Passenger train 5	. Single ca	in 7. Yard/S ar 8. Light l	9. Main./inspect. car 7 1. Main 2. Yard 3. Siding 4. Industry 2 MAIN LINE							Name						
27. FRA Track 28. Number of	of	29. Numbe								Code						
Class Locomoti 1 Units	ve 1	Cars		. Recorde	-	۲ mpl	hE	1. North 2. South	n 3. Eas	t 4. West	3					
		fic signals	7. Crossbuc	cks 10.F ns 11.C	lagged by crew ther (specify)	<b>I</b>		led Crossing	34. W	histle Ban Yes No	Code					
Code(s) 03							20 sec w	varn min (1);		Unknown						
35. Location of Warning 1. Both Sides		C	ode 36.	•	Warning Intercor way Signals	nnected	Code	37. Crossing Illur Lights or Spe			Code					
<ol> <li>Side of Vehicle Approach</li> <li>Opposite Side of Vehicle Approach</li> </ol>	oroach	1	1	1. Yes 2	2. No 3. Unkno	wn	2	1. Yes 2. No	o 3. Ui	nknown	2					
38. Driver's 39. Driver's Code		r Drove Beh				41. Driv	er				Code					
Age Gender 1. Male 2. Female		Struck or wa 1. Yes 2. N			Frain	2. S		d or thru the gate 4 I then proceeded 5		ed on crossing (specify)	3					
42. Driver Passed Standing	Code	43. View o	f Track Obs	scured by	(primary ob						Code					
Highway Vehicle 1. Yes 2. No 3. Unknown	2		nanent Stru ding railroa		3. Passing T ent 4. Topograp			7. Other (sp hicles 8. Not Obstru	oecify) cted		8					
			44. Drive	r was		Co	ode	45. Was Driver in t	he Vehi	cle?	Code					
Casualties to:	Killed	Injured	1. Ki	lled 2. Inj	ured 3. Uninjur	ed 3	3	1. Yes 2. No			1					
46. Highway-Rail Crossing Users	0	0	47. Highv	way Vehic	le Property Dam			48. Total Number	of Highw	vay-Rail Crossing						
	0	0	(est. o	dollar dan	nage)	\$	\$3,000	(include driver)		1						
49. Railroad Employees	0	0			of People on Traingers and crew)	in I		51. Is a Rail Equip Incident Report			Code					
52. Passengers on Train	0	0	(inclu					1. Yes 2. No			2					
53a. Special Study Block					53b. Special S	tudy Blo	ck									
54. Narrative Description																
55. Typed Name and Title	ame and Title 56. Signature 57. Date															





-3, Inc. Terminal: 190 Shattuck Way Newington, NH 03801-7868 Tel: (603) 431-5990 Fax: (603) 431-5652 E-mail: newington@sea-3.com

# **NEWINGTON MARINE TERMINAL**

# **RISK MANAGEMENT PROGRAM**

eSUBMIT June 25, 2014





### Section 1. Registration Information

Reason for Resubmission	5-year update (40 CFR 68.190(b)(1))
1.1 Source Identification	
1.1.a. Facility Name	Sea-3, Inc.
1.1.b. Parent Company #1 Name	Trammo, Inc.
1.1.c. Parent Company #2 Name	
1.2 EPA Facility Identifier	100000165368
1.3 Other EPA Systems Facility Identifier	NHD 986468197
1.4 Dun and Bradstreet Numbers (DUNS)	
1.4.a. Facility DUNS	037226180
1.4.b. Parent Company #1 DUNS	041909466
1.4.c. Parent Company #2 DUNS	
1.5 Facility Location	
1.5.a. Street - Line 1	190 Shattuck Way
1.5.b. Street - Line 2	
1.5.c. City	Newington
1.5.d. State	NH
1.5.e. Zip Code - Zip +4 Code	03801
1.5.f. County	ROCKINGHAM
1.5.g. Facility Latitude (in decimal degrees)	43.104722
1.5.h. Facility Longitude (in decimal degrees)	-070.802500
1.5.i. Method for determining Lat/Long	Interpolation - Photo
1.5.j. Description of location identified by Lat/Long	Loading Facility
1.5.k. Horizontal Accuracy Measure (meters)	25
1.5.I. Horizontal Reference Datum Code	North American Datum of 1983
1.5.m. Source Map Scale Number	24000
1.6 Owner or Operator	
1.6.a. Name	Sea-3, Inc.
1.6.b. Phone	(603) 431-5990
1.6.c. Street - Line 1	190 Shattuck Way
1.6.d. Street - Line 2	
1.6.e. City	Newington
1.6.f. State	NH
1.6.g. Zip Code - Zip +4 Code	03801
Foreign Country	
Foreign State/Province	
Foreign Zip/Postal Code	
1.7 Name, title and email address of person or position	on responsible for RMP (part 68) implementation
1.7.a. Name of person	Paul N. Bogan
1.7.b. Title of person or position	Vice President - Operations
1.7.c. Email address of person or position	paul.bogan@sea-3.com

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### Section 1. Registration Information

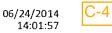
1.8 Emergency Contact	
1.8.a. Name	Paul N. Bogan
1.8.b. Title of person or position	Vice President - Operations
1.8.c. Phone	(603) 431-5990
1.8.d. 24-Hour Phone	(603) 431-5990
1.8.e. 24-Hour Phone Extension/PIN #	
1.8.f. Email address for emergency contact	paul.bogan@sea-3.com
.9 Other Points of Contact	
1.9.a. Facility or Parent Company E-mail Address	paul.bogan@sea-3.com
1.9.b. Facility Public Contact Phone Number	(603) 431-5990
1.9.c. Facility or Parent Company WWW Homepage Address	www.trammo.com
1.10 Local Emergency Planning Committee (LEPC)	Newington LEPC
L.11 Number of fulltime equivalent (FTEs) employees on site	16
1.12 Covered by	
1.12.a. OSHA PSM	Υ
1.12.b. EPCRA section 302	
1.12.c. CAA Title V Air Operating Permit Program	
1.12.d. Air Operating Permit ID #	
1.13 OSHA Star or Merit Ranking	
1.14 Last Safety Inspection (by an External Agency) Date	06/02/2010
1.15 Last Safety Inspection Performed by an External Agency	EPA
1.16 Will this RMP involve Predictive Filing?	
.18 RMP Preparer Information	
1.18.a. Name	Neal E. Frangesh
1.18.b. Phone	(781) 837-6300
1.18.c. Street - Line 1	399 North Street
1.18.d. Street - Line 2	
1.18.e. City	Duxbury
L.18.f. State	МА
1.18.g. Zip	02332
Foreign Country	
Foreign State/Province	
Foreign Zip Code	

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### Section 1. Registration Information

#### ction 1.17 Process Specific Information

### Process 1

Process ID #	1	1000055715		
Process Description	LPG Sto	LPG Storage/ Distribution		
1.17.a. Program Level		3		
1.17.b. NAICS Code(s)				
	42471 (Petroleum Bulk Stations and	Terminals)		
1.17.c. Chemical(s)				
	Chemical Name	CAS Number	Quantity	
	Propane	74-98-6	110000000	
	Ethyl mercaptan [Ethanethiol]	75-08-1	13000	

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### Section 4. Flammables: Worst Case

### Scenario 1

Process Name	LPG Storage/ Distribution
Chemical	Propane
4.1.a. Chemical Name	Propane
4.2 Model Used	EPA's RMP*Comp(TM)
4.3 Scenario	Vapor Cloud Explosion
4.4 Quantity Released (lbs)	82000000
4.5 Endpoint Used	1 PSI
4.6 Distance to endpoint (miles)	0.6
4.7 Estimated residential population within distance to endpoint (numbers)	200
4.8 Public receptors within distance to endpoint	
4.8.a. Schools	Υ
4.8.b. Residences	Υ
4.8.c. Hospitals	
4.8.d. Prison/Correctional Facilities	
4.8.e. Recreational Areas	Υ
4.8.f. Major commercial, office or industrial areas	Υ
4.8.g. Other	
4.9 Environmental receptors within distance to endpo	pint
4.9.a. National or State Parks, Forests or Monuments	
4.9.b. Officially Designated Wildlife Sanctuaries, Preserves or Refuges	
4.9.c. Federal Wilderness Area	
4.9.d. Other	
4.10 Passive mitigation considered	
4.10.a. Blast Walls	
4.10.b. Other	Impoundment (gas liquefied by refrigeration)
4.11 Graphic file	

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### Section 5. Flammables: Alternative Release

### Scenario 1

Process Name	LPG Storage/ Distribution
Chemical	Propane
5.1.a. Chemical Name	Propane
5.2 Model Used	EPA's RMP*Comp(TM)
5.3 Scenario	Vapor Cloud Fire
5.4 Quantity Released (lbs)	5500
5.5 Endpoint Used	Lower flammability limit
5.6 Distance to endpoint (miles)	0.1
5.7 Estimated residential population within distance to endpoint (numbers)	0
5.8 Public receptors within distance to endpoint	
5.8.a. Schools	
5.8.b. Residences	
5.8.c. Hospitals	
5.8.d. Prison/Correctional Facilities	
5.8.e. Recreational Areas	
5.8.f. Major commercial, office or industrial areas	Y
5.8.g. Other	
5.9 Environmental receptors within distance to endpoin	nt
5.9.a. National or State Parks, Forests or Monuments	
5.9.b. Officially Designated Wildlife Sanctuaries, Preserves or Refuges	
5.9.c. Federal Wilderness Area	
5.9.d. Other	
5.10 Passive mitigation considered	
5.10.a. Dikes	
5.10.b. Fire walls	
5.10.c. Blast walls	
5.10.d. Enclosures	
5.10.e. Other	
5.11 Active mitigation considered	
5.11.a. Sprinkler systems	
5.11.b. Deluge systems	
5.11.c. Water curtain	
5.11.d. Excess flow valve	
5.11.e. Other	Emergency Shutdown System
5.12 Graphic file	

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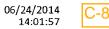
### Section 7. Prevention Program: Program Level 3

### Program 1

Prevention Program Description:	
7.1 NAICS Code for process	
7.1.a. Process Name	1000055715 (LPG Storage/ Distribution)
7.1.b. NAICS	42471 (Petroleum Bulk Stations and Terminals)
7.2 Chemicals	
Pro	ppane
Ethyl mercapt	an [Ethanethiol]
7.3 Date on which the safety information was last reviewed or revised	03/26/2009
7.4 Process Hazard Analysis (PHA)	
7.4.a. Date of last PHA or PHA update	04/14/2011
7.4.b. Technique used	
7.4.b.1. What if	Y
7.4.b.2. Checklist	
7.4.b.3. What if/Checklist Combined	
7.4.b.4. HAZOP	
7.4.b.5. Failure mode & effects analysis	
7.4.b.6. Fault tree analysis	
7.4.b.7. Other	
7.4.c. Expected or actual date of completion of all changes resulting from last PHA or PHA update	10/28/2011
7.4.d. Major hazards identified	
7.4.d.1. Toxic release	
7.4.d.2. Fire	Y
7.4.d.3. Explosion	γ
7.4.d.4. Runaway reaction	
7.4.d.5. Polymerization	
7.4.d.6. Overpressurization	
7.4.d.7. Corrosion	
7.4.d.8. Overfilling	
7.4.d.9. Contamination	
7.4.d.10. Equipment failure	
7.4.d.11. Loss of cooling, heating, electricity, instrument air	
7.4.d.12. Earthquake	
7.4.d.13. Floods	
7.4.d.14. Tornado	
7.4.d.15. Hurricanes	
7.4.d.16. Other	Results of identified hazards were fire, explosion, or personal injury.
7.4.e. Process controls in use	
7.4.e.1. Vents	γ
7.4.e.2. Relief valves	Y
7.4.e.3. Check valves	Ŷ
7.4.e.4. Scrubbers	

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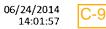


### Section 7. Prevention Program: Program Level 3

7.4.e.5. Flares	Υ
7.4.e.6. Manual shutoffs	Y
7.4.e.7. Automatic shutoffs	Y
7.4.e.8. Interlocks	Y
7.4.e.9. Alarms and procedures	¥
7.4.e.10. Keyed bypass	
7.4.e.11. Emergency air supply	Y
7.4.e.12. Emergency power	Υ
7.4.e.13. Backup pump	
7.4.e.14. Grounding equipment	Ŷ
7.4.e.15. Inhibitor additions	
7.4.e.16. Rupture disks	
7.4.e.17. Excess flow device	Υ
7.4.e.18. Quench system	
7.4.e.19. Purge system	
7.4.e.20. None	
7.4.e.21. Other	process alarms
7.4.f. Mitigation systems in use	
7.4.f.1, Sprinkler system	Ŷ
7.4.f.2. Dikes	Ŷ
7.4.f.3. Fire walls	Y
7.4.f.4. Blast walls	en e
7.4.f.5. Deluge system	Ŷ
7.4.f.6. Water curtain	Y
7.4.f.7. Enclosure	
7.4.f.8. Neutralization	
7.4.f.9. None	
7.4.f.10. Other	Remote control fire water monitors; Halon extinguishing
7.4.g. Monitoring/detection systems in use	
7.4.g.1. Process area detectors	Υ
7.4.g.2. Perimeter monitors	
7.4.g.3. None	
7.4.g.4. Other	CCTV
7.4.h. Changes since last PHA update	
7.4.h.1. Reduction in chemical inventory	
7.4.h.2. Increase in chemical inventory	
7.4.h.3. Change in process parameters	
7.4.h.4. Installation of process controls	Y
7.4.h.5. Installation of process detection systems	
7.4.h.6. Installation of perimeter monitoring	
systems	
ystems	
systems 7.4.h.7. Installation of mitigation systems	
systems 7.4.h.7. Installation of mitigation systems 7.4.h.8. None recommended	

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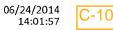


# Section 7. Prevention Program: Program Level 3

7.6 Training	
7.6.a. Date of most recent review or revision of training programs	11/14/2013
7.6.b. Type of training provided	
7.6.b.1. Classroom	Υ
7.6.b.2. On the job	Y
7.6.b.3. Other	Massachusetts Firefighting Academy
7.6.c. Type of competency testing used	
7.6.c.1. Written test	Y
7.6.c.2. Oral test	γ
7.6.c.3. Demonstration	Y
7.6.c.4. Observation	Y
7.6.c.5. Other	
7.7 Maintenance	
7.7.a. Date of most recent review or revision of maintenance procedures	05/19/2014
7.7.b. Date of most recent equipment inspection or test	06/17/2014
7.7.c. Equipment most recently inspected or tested (equipment list)	Pressure test of hot water boiler
7.8 Management of change	
7.8.a. Date of most recent changes that triggered management of change procedures	01/15/2013
7.8.b. Date of most recent review or revision of management of change procedures	01/15/2013
7.9 Date of most recent pre-startup review	10/08/2009
7.10 Compliance audits	
7.10.a. Date of most recent compliance audits	05/31/2013
7.10.b. Expected or actual date of completion of all changes resulting from the most recent compliance audits	12/31/2013
7.11 Incident investigation	
7.11.a. Date of most recent incident investigation	
7.11.b. Expected or actual date of completion of all changes resulting from the incident investigation	
7.12 Date of most recent review or revision of employee participation plans	03/09/2009
7.13 Date of most recent review or revision of hot work permit procedures	06/23/2008
7.14 Date of most recent review or revision of contractor safety procedures	06/23/2008
7.15 Date of most recent evaluation of contractor safety performance	06/23/2008

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### Section 9. Emergency Response

	and a bit of
9.1 Written emergency response (ER) plan	
9.1.a. Is your facility included in the written community emergency response plan?	Y
9.1.b. Does your facility have its own written emergency response plan?	
9.2 Does your facility's ER plan include specific actions to be taken in response to accidental releases of regulated substances?	
9.3 Does your facility's ER plan include procedures for informing the public and local agencies responding to accidental releases?	
9.4 Does your facility's ER plan include information on emergency health care?	
9.5 Date of most recent review or update of your facility's ER plan	
9.6 Date of most recent ER training for your facility's employees	
9.7 Local agency with which your facility's ER plan or r	esponse activities are coordinated
9.7.a. Name of agency	Newington Fire Department
9.7.b. Phone number	(603) 436-9441
9.8 Subject to	
9.8.a. OSHA Regulations at 29 CFR 1910.38	Ŷ
9.8.b. OSHA Regulations at 29 CFR 1910.120	Υ
9.8.c. Clean Water Act Regulations at 40 CFR 112	
9.8.d. RCRA Regulations at 40 CFR 264, 265, 279.52	
9.8.e. OPA-90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, 30 CFR 254	
9.8.f. State EPCRA Rules of Laws	Y
9.8.g. Other	

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Carrier V.

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#### Executive Summary

Risk Management Plan Executive Summary Sea-3, Inc. Wholesale Propane (LPG) Import and Distribution Terminal

1. Accidental Release Prevention and Response Policies

Constructed in 1974-75, the Sea-3 Newington LPG Terminal provides a vital energy service to homeowners, commercial businesses, and industry. The facility has an excellent safety record, and its employees are key players in achieving that safety record.

Sea-3 is committed to safe and reliable operation for the protection of its employees, the community, and the environment. Sea-3 is proud of its 40 year operating record, during which there has never been an incident that resulted in any off-site impacts to neighboring industries, residents or the community at large. This record has been achieved through consistent attention and total dedication by management and staff to safe operating practices and preventive maintenance. Sea-3 has constantly made new investments in the latest technology in operating and maintaining the facility. These practices form the backbone of Sea-3's dedication to keeping the facility and its community safe.

2. Description of the source and regulated substances handled.

The Sea-3 Terminal in Newington, NH imports and stores fully refrigerated liquid propane (also called liquefied petroleum gas or LPG) at -45A°F. The terminal processes this product by heating it to +40A°F for shipment to its customers by truck and rail. Ethyl mercaptan, an odorizing agent, is added to the LPG being distributed from the terminal. Both propane and ethyl mercaptan are regulated flammable substances. The terminal has no RMP listed toxic chemicals in threshold quantities.

3. Release Prevention Program

The terminal was designed and built in accordance with provisions of the following three recognized standards for LPG facilities:

\* NFPA 58, Standard for the Storage and Handling of Liquefied Petroleum Gases, (National Fire Protection Association).

\* API 2510, Design and Construction of Liquefied Petroleum Gas (LPG) Installations, (American Petroleum Institute).

\* API 620, Design and Construction of Large, Welded, Low-Pressure Storage Tanks, (American Petroleum Institute).

Operating areas of the plant are monitored by combustible vapor detectors to quickly detect any leaks. Ultraviolet flame detectors monitor the plant to detect fires. The plant is attended by at least two operators at all times. They log field operating data at two-hour intervals and monitor plant equipment using the following monitoring and control systems:

\* The main control panel, located in the central control room, displays pressures, temperatures, valve positions, and flow rates and provides for remote operation and manual or automatic shutdown of valves and equipment.

\* The emergency control panel, also located in the central control room, displays readings of combustible vapor detectors and fire detectors. It provides fire department notification and manual and automatic activation of water deluge and emergency shutdown systems.

\* A closed circuit television (CCTV) system, with displays located in the central control room, is used for surveillance and security of all portions of the terminal.

Written policies and procedures for safe operation are contained in the following Sea-3 manuals:

\* "Sea-3 Standard Operating Procedures Manual," covering normal startup, operation, and shutdown of plant systems and equipment.

\* "Sea-3 Safety Standards and Procedures Manual," covering safe handling of the product and other materials used in the plant. It covers safe work practices and permitting requirements for such activities as hot work, electrical work, confined space and vessel entry, excavation, and other hazardous activities. Plant

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Resubmission

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#### Executive Summary

security and visitor policies are covered.

\* "Sea-3 US Coast Guard Operating and Emergency Procedures Manual," covering operation of the marine transfer portion of the terminal as required by 33 CFR 127.

\* "Sea-3 Contingency Plan," covering responses by facility employees, the Newington Fire and Police Departments, and the US Coast Guard. Its purpose is to minimize the effects of an incident at the terminal and to provide protection for persons and property in the area. It includes plans for sounding an alarm, initial response, determination of need for additional assistance, flammable vapor control, firefighting, evacuation of personnel and nearby residents, mutual aid support and propane industry group response.

\* "Sea-3 Mooring Policy and Procedure Manual," covering the safe mooring of LPG carriers at the berth during cargo transfers.

\* "Sea-3 Facility Security Plan," covering security as required by the US Department of Homeland Security.

\* "Sea-3 Process Safety Management Manual," covering the elements of Process Safety Management, including employee participation, process safety information, process hazard analysis, operating procedures, training, contractor evaluation and training, truck driver (non-employee) evaluation and training, pre-startup safety reviews, equipment mechanical integrity, safe work permit system, management of change, incident investigation, and emergency preparedness.

4. Five Year Accident History

In the five-year reporting period, there have been no propane or mercaptan releases that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.

#### 5. Emergency Response Program

Emergency planning and preparedness are covered in the "Sea-3 Contingency Plan," which details responses by facility employees, the Newington Fire and Police Departments, and the US Coast Guard. These agencies were involved in the development of the plan, which is available to all cognizant officials in the pamphlet "Sea-3 Emergency Procedures." The sections involving facility employees were developed by Sea-3 management in conjunction with the operating staff and outside consultants. All new employees are given initial training in operating and emergency procedures. Employees receive refresher training on an ongoing basis. This training is documented in accordance with the training records requirements of OSHA's Process Safety Management program and EPA's Risk Management Program.

In addition to the Sea-3 Emergency Procedures noted above, emergency response is also covered in the "Sea-3 US Coast Guard Operating and Emergency Procedures Manual." The US Coast Guard also maintains its own written operating and emergency plan, "Liquefied Petroleum Gas (LPG) Contingency Plan," issued by the USCG Marine Safety Office in Portland, Maine.

6. Planned Changes to Improve Safety

The facility has been in operation since 1975. Safety reviews have been undertaken periodically since that time. Many recommendations arising from these reviews have been implemented through equipment and procedural changes.

The most recent review was a process hazard analysis (PHA) completed in April 2011. All issues identified during that review were dealt with by the end of that year. Sea-3 will update the PHA by April 2016 and will deal promptly with any recommended improvements that result from that review.

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399 North Street • Duxbury, Massachusetts 02332 • Phone (781) 838-6300 • Fax (781) 837-6344

Sea-3, Inc.

**Newington Marine Terminal** 

**Process Hazard Analysis** 

2011 Update and Revalidation

**Final Report** 

14 April 2011



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# D-3

# LGA ENGINEERING LLC

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	2011 Checklist Accidents, Incidents, and Near Misses, May 2006 to March 2011 2011 Risk Categorization of Hazards Considered 2011 PHA Team Members 2011 PHA Recommendations

### 1.0 Introduction

Sea-3, Inc. owns and operates a marine terminal on the Piscataqua River in Newington, NH for importing, storing and distributing Liquefied Petroleum Gas (LPG). The terminal has a storage capacity of 560,000 barrels (approximately 45,000 metric tons) of propane. The facility receives fully refrigerated LPG by ship and, very infrequently, ambient temperature LPG by rail. The product is shipped out in bulk by truck and rail.

The Newington terminal has been in operation since 1975. During this period, the safety record has been excellent. Reviews of operating safety have been conducted periodically since startup of the terminal. Many recommendations arising from these reviews have been incorporated through equipment and procedural changes.

A comprehensive review was conducted in 1994 and 1995 in accordance with the requirements of the Occupational Safety and Health Administration (OSHA) process safety management (PSM) rules at 29 CFR 1910.119. The results were reported in the *Initial Process Hazard Analysis, Final Report*, issued 6 October 1995. The Initial Process Hazard Analysis was updated and revalidated in 2001. The 2001 Process Hazard Analysis was updated and revalidated in 2006.

The regulations call for the initial PHA to be updated and revalidated at least every five years following its initial issue. This report represents the 2011 revalidation. All of the findings and recommendations of the 2006 update and revalidation team have either been instituted or addressed.

### 2.0 Summary

Sea-3 formed a team to update and revalidate the PHA for the Newington Marine Terminal. The team's deliberations are described below in *Section 3.0, Approach*. On March 17, 2011, the 2011 PHA update and revalidation team held an all day meeting in the conference room at the Sea-3 terminal in Newington

The 2011 PHA update and revalidation team included five delegates from Sea-3, two from management and three from the operating and maintenance staff. LGA Engineering provided one team member. The members of the 2011 PHA update and revalidation team were as follows:

- Paul Bogan, V.P., Operations
- John Mielke, Operations Manager
- Jay Griffin, Electrical Supervisor
- Tim McFaden, Operator
- Scott Sherman. Operator
- Neal Frangesh, LGA Engineering, Consulting Engineer

The experience and background of 2011 PHA update and revalidation team members is summarized in *Table 10.6, 2011 PHA Team Members*.



Using a rating system with three principal risk categories, the 2011 team found no hazards with the highest rating, two hazards of medium risk, and six hazards with a low risk rating. These hazards are tabulated in *Table 10.4, 2011 Risk Categorization of Hazards Considered*.

The 2011 PHA update and revalidation team concluded that the Sea-3 Newington Terminal continues to adhere to high standards of safe operation. Properly trained personnel who exercise a reasonable degree of caution in their daily work can expect to be exposed to very low levels of risk from process hazards.

### 3.0 Approach

The methodology used in conducting the update and revalidation of the 2006 PHA report was primarily a series of reviews described below in Section 4.0. The 2011 team discussed changes to the plant made since 2006; accidents, incidents, and near misses since 2006; and the current status of the recommendations made by the 2006 PHA team.

In considering the process hazard aspect of items in the reviews, the 2011 team used the same "What-if/Checklist" method used for the initial PHA in 1994 and 1995 and for the subsequent PHA updates and revalidations in 2001 and 2006. This technique is one of the methodologies listed in the OSHA Process Safety Management regulations (29 CFR 1910.119) and the EPA Chemical Accident Prevention regulations (40 CFR 68). The checklist is shown in *Table 10.2, 2011 Checklist.* 

During their meeting, the 2011 PHA team evaluated various hazards and assigned a relative risk rating to each in accordance with *Table 10.1, 2011 Risk Categorization Table*. The assigned categories reflect the team's collective judgment of the expected frequency and likely consequences of each hazard considered.

### 4.0 Reviews

# 4.1 Review of Changes and Additions Since 2006 PHA

During their meeting, the 2011 team considered the process hazard aspects of following changes and additions made to the terminal since the process hazard update and revalidation was conducted in 2006:

- Updated truck loading meters.
- Updated odorant system.
- Installation of new railcar unloading pumps.
- Addition of new boiler expansion tank.
- Addition of new hot water low flow switch.
- Addition of new drain and heating system at flare.
- Addition of new leak detection and ESD system at BA-01.



A summary of the team's discussions on and evaluation of each of these changes and additions are presented in the appropriate sections of this report.

## 4.2 Review of Accidents, Incidents, and Near Misses Since 2006 PHA Update

The 2011 PHA update and revalidation team reviewed the significant accidents, incidents, and near misses that occurred at Newington terminal since the 2006 PHA Update and Revalidation. The dates and descriptions of these five events are presented in *Table 10.3, Accidents, Incidents, and Near Misses, May 2006 to April 2011.* A summary of the team's discussion and assessment of each of these events is contained in the appropriate sections of this report.

### 4.3 Review Status of 2006 PHA Recommendations

The 2006 PHA team made six recommendations listed in *Table 10.7, 2011 Status of 2006 Recommendations*. The 2011 PHA update and revalidation team reviewed the current status of each of these recommendations.

### 5.0 Truck and Rail Operations

### 5.1 Installation of New Product Loading Metering System

In 2008, Sea-3 installed a new product loading metering system. The old positive displacement product loading meters at the truck loading rack were replaced with new turbine meters. The new meters at truck loading skids A and B can also be used for railcar loading. This project also included the installation of a new product loading computer system.

The Sea-3 P&IDs and the truck loading operating procedures in the Sea-3 SOPM have been revised and updated as required to reflect the installation of the new meters and the new product loading computer system. All operators received appropriate training in the operation of the new product loading metering system and the new product loading computer system. A management of change (MOC) form is on file for this project. The 2011 PHA team found no new hazards associated with this project.

# 5.2 Installation of New Odorization System

In 2008, Sea-3 also installed a new odorization system. The new system includes two new positive displacement odorant pumps and new odorant injection metering and control units at each truck loading rack. The new hardware at truck loading skids A and B can also be used for railcar loading. The new odorization system automatically keeps track of the amount of odorant injected into each transport or railcar load of propane and prints this information on the bills of lading.

The old positive displacement meters, installed when the terminal was built in 1975, required frequent maintenance. Spare parts for these obsolete meters, meter stacks, and mechanical ticket printers were becoming difficult to find. The new odorant



injection system is more reliable than the old system, requires less maintenance than the old system, and has substantially reduced the frequency of odorant leaks.

The Sea-3 P&IDs and the truck loading operating procedures in the Sea-3 SOPM have been have been revised and updated as required to reflect the installation of the new odorization system. All operators received appropriate training in the operation of the new system. A management of change (MOC) form is on file for this project. The 2011 PHA team found no new hazards associated with this project.

### 5.3 Installation of New Railcar Unloading Pumps

In 2008, Sea-3 installed two new positive displacement railcar unloading pumps near the existing railcar unloading compressors. Each of these pumps has a nominal capacity of 250 GPM. Both are driven by 30 HP motors.

The new railcar unloading pumps were installed to facilitate unloading railcars directly into transports at truck loading racks A and B. Prior to their installation, product received by railcar had to be unloaded into the Day Tank, BA-01, before being loaded onto transports. Product received by railcar may be odorized or unodorized. The new railcar unloading pumps can be used to unload odorized railcars directly into transports.

The Sea-3 P&IDs been have been revised as required to reflect the installation and the new railcar unloading pumps. The railcar unloading procedures and the truck loading procedures in the Sea-3 SOPM have been revised to reflect the installation of the new pumps. Training will be done and documented when railcars become available to train personnel. A management of change (MOC) form is on file for this project.

The 2011 PHA team reviewed the possible hazards associated with the installation of the new railcar unloading pumps. The team recognized the possibility of shaft seal leaks and recommended that appropriate revisions be made to the Sea-3 Electrical Area Classification drawing. The team assigned a hazard rating of C-LL to the possibility of railcar unloading pump shaft seal leaks.

The team also recognized that valve lineup required prior to using the railcar unloading pumps will be new to most of the operators and needs to be carefully documented. The team recommended that the operators be given appropriate training before the railcar unloading pumps are placed in operation. The team assigned a hazard rating of C-LL to the possibility of improper valve lineup when using the railcar unloading pumps.

### 5.4 Transport Wheel Chocks

The 2011 team reviewed the hazards associated with transport wheel chocks. Over the years, Sea-3 has tried several different types of chocks. Metal chocks sometimes created sparking hazards. Plastic chocks were too fragile. The 2006 team assigned a Risk Assessment of B-HL to these hazards and recommended that rubber chocks be purchased to eliminate the spark hazards and reduce the personnel hazards. This recommendation was implemented.

The use of rubber chocks has not eliminated all tripping hazards. Since the rubber chocks are very heavy, the drivers sometimes leave the chocks on the pavement rather than placing them on the truck loading islands thus creating tripping hazards. In 2008, a transport driver tripped over a wheel chock, fell, and was taken to the hospital.

The 2011 team recommended posting signs at the driver's window reminding the drivers not to leave the chocks on the pavement. The 2011 team also recommended considering the installation of hooks that could be used to hang up the chocks.

### 5.5 Lighting at the Transport Unloading Station

In Section 4.1.3 of their report, the 2006 team considered the question of adequate lighting at the truck unloading station but did not assign a risk assessment to this concern.

The 2011 team revisited the question of adequate lighting at the transport unloading station. After a brief discussion, the 2011 team decided that the lighting at the truck unloading station was adequate and did not assign a hazard rating to this concern.

### 6.0 Marine Operations

# 6.1 USCG Approved Floatation Suit

The 2006 PHA team noted that the USCG approved floatation (survival) suit was not being worn as required in the Sea-3 Safety Standards and Procedures Manual (SOPM), Chapter 8, Section 8.7, *Water Survival Work Vests and Coveralls*. The 2006 team assigned a Risk Assessment of C-LM to this hazard and recommended that the employee in charge of any operation taking place on the berth require all employees to adhere to the procedure in the SOPM.

The 2011 PHA team reviewed the text of Section 8.7 of the SOPM and recommended that the text of Section 8.7 be revised to clarify exactly when employees involved in operations on the berth are required to wear the flotation (survival) suits. The 2011 team did not change the Risk Assessment of C-LM.

# 6.2 Vessel Unloading Hoses Connect/Disconnect

The 2006 PHA team investigated the hazards and risks of connecting both the twelve (12) inch liquid and eight (8) inch vapor hoses to the vessel manifold. The double braided (wrapped) stainless steel corrugated wire hoses are heavy and difficult to handle. A crane is used to lift the hoses to the vessel main deck but the hoses still require a certain amount of "man handling" to make the connection. The team assigned a Risk Assessment rating of C-LM to this hazard. The 2006 team recommended that Sea-3 investigate other mechanical means, come-a-longs, straps, etc., to make this operation safer and to lower the risk to employees.

The 2011 PHA team reviewed the circumstances that resulted in a near miss in early 2011 while hooking up the unloading hoses. Due to an apparent operator error, the liquid valve at the dock, RP-002, and vapor valve at the berth, RB-021, were left open during the cooldown of the liquid unloading line. This resulted in a release of vapor when the operators loosened the blind flange on the end of the vapor hose. Since there were no injuries during this incident and this was the first time in 35 years that an incident like this occurred, the 2011 team assigned a Risk Assessment rating of C-LL to this hazard.

To prevent any similar incidents in the future, Sea-3 modified their vessel receipt checklist to include additional steps requiring the person in charge (PIC) of the unloading to verify that RP-002 and RB-021 are in the correct position: (1) Before the hoses are connected when ship arrives and, (2) Before the hoses are disconnected when the unloading is complete. The PIC is required to initial the vessel receipt checklist at each of these verifications.

# 7.0 Pressure Storage and Refrigerated Liquid Transfer Operations

# 7.1 Addition of New Hot Water Low Flow Switch

Propane Heaters EA-01 and EA-01A are used to heat refrigerated propane liquid from approximately -44°F to +40°F before it is sent to the Day Tank, BA-01. Under normal operating conditions, EA-01A is in service. EA-01 is the standby exchanger and is normally out of service. The heating medium is hot water from Boilers HWB-1 and HWB-2. The propane flows thru the tube side of these heat exchangers. The hot water flows thru the shell side.

A near miss occurred in 2009 when hot water circulation thru EA-01A was lost when the coupling on Hot Water Pump HWP-1 failed. This resulted in freezing of the water in the shell side of EA-01A before the heating system shut down. Fortunately, there was no damage to the heat exchanger and there was no release of propane vapor or hot water. EA-01A was subsequently taken out of service, inspected, and tested before being returned to service.

This incident had the potential for a propane release. The pressure of the propane in the tubes is substantially higher then the pressure of the hot water in the shell. If one or more of the tubes in the heat exchanger had been crushed, damaged, or broken by the ice, there is a possibility that liquid propane could have flowed into the shell side of the exchanger and vaporized. The resulting increase in the shell side pressure could have caused the shell side relief valve, SV-016A, ¾" X ¾", set at 55 PSIG, to lift and discharge propane to the atmosphere near the exchanger. If the propane vaporization rate exceeded the capacity of SV-016A, the pressure increase in the hot water system could have lifted one or more of the boiler relief valves, set at 60 and 66 PSIG, releasing hot water and propane vapor at grade behind the boiler room. The 2011 PHA team assigned a Risk Assessment Rating of B-MM to this potential hazard.



To prevent a future reoccurrence of this problem, Sea-3 installed a low hot water flow switch in the common hot water outlet line from EA-01A and EA-01. This new switch will shutdown the propane heating system on the loss of hot water flow to either propane heater.

# 7.2 Revised Procedure for Switching to Standby Product Heater

Another near miss occurred following the freeze up of EA-01A when the operators were taking EA-01A out of service and placing EA-01 into service. The spectacle blind downstream of the EA-01 hot water inlet valve, RV-165, and the spectacle blind upstream of the EA-01 water outlet valve, RV-166 were removed. The propane outlet valve to EA-01, RB-047, was still closed at this time. The operators then opened RV-165 and RV-166 to establish hot water flow through EA-01. As soon as these valves were opened the hot water circulating through EA-01 caused extremely rapid heating and thermal expansion of the liquid propane in the tube side of EA-01. The liquid thermal expansion rate of the liquid propane trapped in the tube side of the exchanger far exceeded the capacity of the tube side thermal relief valve, SV-043. The resulting severe overpressure caused propane liquid to spray out of the gasket on the tube side of the

To prevent a future reoccurrence of this problem, Sea-3 made following changes:

- In the future, the propane outlet valves on both propane heaters, RB-047 and RB-047A, will be car sealed open (CSO). This will eliminate the possibility of trapping liquid propane in the tube side of the exchangers.
- The spectacle blinds at RV-165 and RV-166 were removed and both of these valves will be left open and the standby heater, EA-01, will remain warm while out of service.
- Sea-3 will develop a new written procedure for switching to standby product heater. All operating and maintenance personnel will be given the required training in the use of this new procedure.

# 7.3 Installation of New Boiler Expansion Tank

In 2008, Sea-3 installed a new boiler expansion tank, BA-025A. The additional expansion volume provided by this tank will permit the boilers to be operated at slightly higher pressures thus increasing the NPSH available to Hot Water Circulation Pump HWP-1. This was an operational improvement. The 2011 PHA team agreed that the addition of BA-025A did not create any new hazards.



# 7.4 Installation of New Gas Detection and ESD System at BA-01

In 2010, Sea-3 installed a new gas detection and ESD system at the Day Tank, BA-01, to comply with the 2008 Edition of NFPA 58. This second and independent system was installed to provide additional protection against liquid propane leaks at or near BA-01. The 2011 PHA team agreed that the addition of BA-025A did not change any of the hazard ratings for BA-01 and the Product Loading Pumps.

# 8.0 Maintenance Operations and Plant Systems

# 8.1 Firewater Pump House and Valve Pit

The 2006 PHA team noted that the firewater pump house and the valve pit present confined space hazards. Warning signs reading *"Danger, Confined Space, Authorized Personnel Only"* are posted at the entrances to these spaces. An employee can slip and/or fall while going into or climbing out of these pits. He could also be trapped if a fire broke out or other incident occurred. The Newington Fire Department would be called to handle any confined space rescue operations. The 2006 team did not change the assigned Risk Assessment of C-LM.

Current Sea-3 procedures require that two (2) men to be present, one (1) in the pit and one (1) outside the pit, when any work is being done in these pits and that the Control Room be notified when work is taking place in these pits.

Sea-3 maintenance procedures require weekly preventive maintenance in the firewater pump house. The entrance to the pump house is thru a relatively small hatch in the roof and a vertical ladder built into the north wall of the pump house. In March of 2011, one of Sea-3's maintenance personnel was injured when he fell off of the ladder, hit his head, and was taken to the hospital. Subsequent to this accident Sea-3 coated the ladder rungs with non-slip material.

# 8.2 Safe Use of Ladders

In 2008, a Sea-3 operator fell off of an extension ladder in the compressor room while painting a sprinkler line near the ceiling. The operator was not seriously injured. This was not a lost time accident.

The 2011 PHA team assigned a Risk Assessment rating of C-LL to the hazards associated with the use of ladders and recommended that Sea-3 check the OSHA regulations and schedule appropriate ladder safety training for operating and maintenance personnel.

# 8.3 Installation of New Drain and Heating System at Flare

During a routine valve check in the winter of 2010-2011, Sea-3 maintenance personnel discovered that the flare valve, RP-197, was frozen shut due to ice accumulation on the downstream side of the valve. To free the valve, heat was applied to outside of the



pipe upstream and downstream of the valve. After the ice inside of the pipe had melted, RP-197 was opened to blow the water out of the pipe. This was the first time in 35 years that an incident like this occurred,

To prevent future similar incidents, Sea-3 installed an electrical heating system and insulation on the pipe and a drain valve downstream of RP-197. The 2011 PHA team assigned a Risk Assessment rating of C-LL to the possibility RP-197 being frozen shut due to ice accumulation inside the pipe.

# 9.0 Conclusions and Recommendations

The 2011 PHA update and revalidation team categorized eight situations considered to be process hazards. They are listed in *Table 10.4, 2011 Risk Categorization of Hazards Considered*.

The 2011 team made six recommendations for consideration by Sea-3's management. These recommendations are listed in *Table 10.6, 2011 PHA Recommendations*.

The 2011 PHA team concluded that the Sea-3 Newington Marine Terminal continues to adhere to high standards of safe operation, and that it can be expected to continue to do so. Properly trained personnel who exercise a reasonable degree of caution in their daily work can expect to be exposed to very low levels of risk from process hazards.

# 2011 RISK CATEGORIZATION TABLE

	CONSEQUENCES		
FREQUENCY 贝	LOW: minor injury	<b>MEDIUM</b> : serious injury; hospitalization	HIGH: fatality, disability, multiple injuries
LOW:	Category	Category	Category
once in 100 years	<b>C</b>	<b>C</b>	B
<b>MEDIUM</b> :	Category	Category	Category
once in 10 years	<b>C</b>	<b>B</b>	A
HIGH:	Category	Category	Category
once per year	B	A	A

# **RISK = FREQUENCY X CONSEQUENCES**

Hazards in category A occur more frequently and result in more serious consequences than hazards in categories B and C. Category C hazards include minor incidents expected to occur less frequently than those in category B. The three categories can also be interpreted as follows:

• Category A:

Includes risks meeting OSHA's "catastrophic consequences in the workplace" test [see 29 CFR 1910.119 (e)(3)(ii)].

• Category B:

Includes risks which the owner/employer should try to find reasonable means for reducing the risk by mitigating the consequences, reducing the probable frequency, or both.

• Category C:

Includes risks which can be controlled by normal good workplace practices.

# 2011 CHECKLIST

# **1.** Hazards of the process

- Fire hazards
- Hazards of cold liquid leaks or spills
- Falling, tripping, collision, or mechanical hazards
- Electric shock hazards
- Toxic chemical hazards
- Asphyxiation hazards
- **2. Previous incidents** ("The identification of any previous incident which had a likely potential for catastrophic consequences in the workplace.")
  - Fires
  - Leaks and spills
  - Personal injuries
  - Close calls
- **3.** System Controls ("Engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases. *e.g.*, process monitoring, control instrumentation with alarms, and detector hardware ...")
  - Process controls
  - Combustible vapor and fire detectors
  - Alarms, warnings, and communication
  - Procedures, standards, and response plans
- 4. Consequences of failure of engineering and administrative controls
  - Process controls
  - Combustible vapor and fire detectors
  - Alarms, warnings, and communication
  - Procedures, standards, and response plans



2011 PHA Update and Revalidation

# LGA ENGINEERING LLC

- 5. Facility Siting
  - Spill flow paths and impoundment design
  - Effect of equipment layout on potential for incident escalation
  - Ignition source distances
  - Access and escape routes
  - Piping and equipment vulnerability to vehicles, tank cars, or vessels
  - Fire mains, hydrants, and fixed protection systems

# 6 Human Factors

- Errors of commission or omission by employees
- Errors of commission or omission by contractors
- Errors of commission or omission by third parties (drivers; rail personnel; ship crew; pilots; tug crews; regulatory officials; neighboring facility staff)
- Communication within plant and with third parties
- **7** Safety and Health Effects (A qualitative evaluation of a range of the possible safety and health effects of failure of controls on employees in the workplace.
  - Frequency (likelihood) of incident
  - Severity (consequences) of incident

# ACCIDENTS, INCIDENTS, AND NEAR MISSES

# MAY 2006 TO MARCH 2011

Section	Description	Date
5.4	Accident. Transport driver tripped over a wheel chock, fell, and was taken to the hospital.	2008
6.2	Near miss. Due to an apparent operator error, the liquid valve at the dock, RP-002, and vapor valve at the berth, RB-021, were left open during the cooldown of the liquid unloading line. This resulted in a release of vapor. No personnel injuries.	
7.2	Near miss. Hot water circulating through EA-01 caused rapid thermal expansion of the liquid propane trapped in the tube side of EA-01. The resulting severe overpressure caused propane liquid to spray out of the gasket on the tube side of the tube sheet. No personal injuries.	2009
7.1	Near miss. Hot water circulation thru EA-01A was lost when the coupling on Hot Water Pump HWP-1 failed. This resulted in freezing of the water in the shell side of EA-01A.	2009
8.1	Accident. Maintenance technician injured when he fell off of the ladder in the firewater pump house, hit his head, and was taken to the hospital.	2011
8.2	Accident. Operator fell off of an extension ladder in the compressor room while painting a sprinkler line near the ceiling. No seriously injury. Not a lost time accident.	2008

### Note:

1. Numbers in the Section column refer to the section of the 2011 PHA report in which the accident, incident, or near miss is discussed.

# 2011 RISK CATEGORIZATION OF HAZARDS CONSIDERED

Report Section	Hazard Considered	Risk Category
5.3	Railcar unloading pump shaft seal leaks.	C-LL
5.3	Improper valve lineup when using the railcar unloading pumps for transport loading.	C-LL
6.1	Failure to wear the flotation (survival) suits when involved in operations on the berth.	C-LM
6.2	Vapor releases when connecting or disconnecting ship unloading hoses.	C-LL
7.1	Loss of hot water flow through Propane Heater EA-01A or Propane Heater EA-01.	B-MM
7.2	Incorrect valve positioning when switching between Propane Heater EA-01A and Propane Heater EA-01.	B-MM
8.2	Falls from ladders due to failure to observe proper ladder safety procedures.	C-LL
8.3	Flare valve RP-197 freezing shut due to ice accumulation inside the pipe.	C-LL

## Note:

1. Numbers in the Report Section column refer to the section of the 2011 PHA report in which the hazard was considered.

# 2011 PHA TEAM MEMBERS

# Paul Bogan, V. P., Operations

Mr. Bogan supervised operation of shipboard liquefied oxygen and nitrogen plants in the U. S. Navy. He holds an Associate degree in mechanical engineering from Wentworth Institute and has studied at Northeastern University. He served as supervisor on board the LNG (liquefied natural gas) barge *Massachusetts* and worked in LNG operations at the Distrigas of Massachusetts, Everett LNG import terminal. He served as the terminal manager of the Sea-3 Newington terminal since it began operations in 1975 until he assumed responsibility for all of Sea-3's operations in 1997. Mr. Bogan has served on the National Fire Protection Association's Technical Committee on Liquefied Petroleum Gases since 1988. That group sets safety standards for LPG storage and handling in the United States, which are frequently adopted by other nations for safety standards. Mr. Bogan is also an instructor at the Massachusetts Firefighting Academy.

### John Mielke, Operations Manager

As a qualified engineering department nuclear submariner, Mr. Mielke supervised nuclear propulsion power plants in the nuclear navy. He has over 30 years experience in all phases of maintenance. He worked in operations and maintenance functions at the Distrigas of Massachusetts, Everett LNG import terminal. He served as maintenance supervisor of the Sea-3 Newington terminal since it began operation in 1975, until he assumed the operations manger position in 1997.

# Jay Griffin, Electrical Supervisor

Mr. Griffin has served as the electrical supervisor of the Sea-3 Newington Terminal maintenance department since he was hired in 1997. Prior to that he worked as a licensed Master Electrician at Regan Electrical Corp, Portsmouth, NH for 16 years and still maintains his license. He has over 24 years experience in electrical maintenance.

# Tim McFaden, Operator

Mr. McFaden attended Worcester State College where he pursued a business degree. He worked in the hazardous waste industry where some of his duties included job site supervision and assessing site risk. He has held a CDL-A license for twenty-three (23) years. He has worked in the propane industry for fifteen (15) years the last eleven (11) of which have been with Sea-3 as a plant operator.



## Scott Sherman, Operator

Mr. Sherman served 4 years in the US Air force. He went to Aircraft Refueling Systems School at Chanute AFB, Illinois and was later stationed at Pease AFB with the 509<sup>th</sup> Bombardment Wing, servicing KC-135's and FB-111's. After honorable Air Force service he was employed by Metro North Commuter Railroad in the Structures Dept. in New York for 2 years before moving back to the Seacoast of NH. He was employed by Sprague Energy in the Operations Dept. for 6 years. After Sprague, he was hired by Sea-3 in 2000 and has worked for Sea-3 for 11 years.

# Neal Frangesh, LGA Engineering, Consulting Engineer

Mr. Frangesh is a consulting engineer (B.S., M.S., Penn State) whose experience includes engineering for Exxon, the Distrigas Everett and Staten Island LNG import terminals, construction and startup of the LNG barge Massachusetts, and consulting experience at many liquefied gas facilities. He served as Sea-3's field engineer during the construction and startup of the Newington terminal and has been involved in most of the upgrade projects at the plant.

# **TABLE 10.6**

# 2011 PHA RECOMMENDATIONS

Section	2011 Recommendation	Current Status
5.3	Revise the Electrical Area Classification drawing as required to recognize the possibility of railcar unloading pump shaft seal leaks.	Completed
5.3	Provide appropriate training to operators before the new railcar unloading pumps are placed in operation.	Pending
5.4	Post signs at the driver's window reminding the drivers not to leave transport wheel chocks on the pavement.	Pending
5.4	Consider the installation of hooks that could be used to hang up the transport wheel chocks.	Pending
6.1	6.1 Revise Section 8.7 of the SOPM to clarify exactly when employees involved in operations on the berth are required to wear the flotation (survival) suits.	
8.2	Check OSHA ladder safety regulations and schedule appropriate ladder safety training for operating and maintenance personnel.	Pending

### Note:

1. Numbers in the Section column refer to the section of the 2011 PHA report in which the recommendation was made.



# 2011 PHA UPDATE AND REVALIDATION

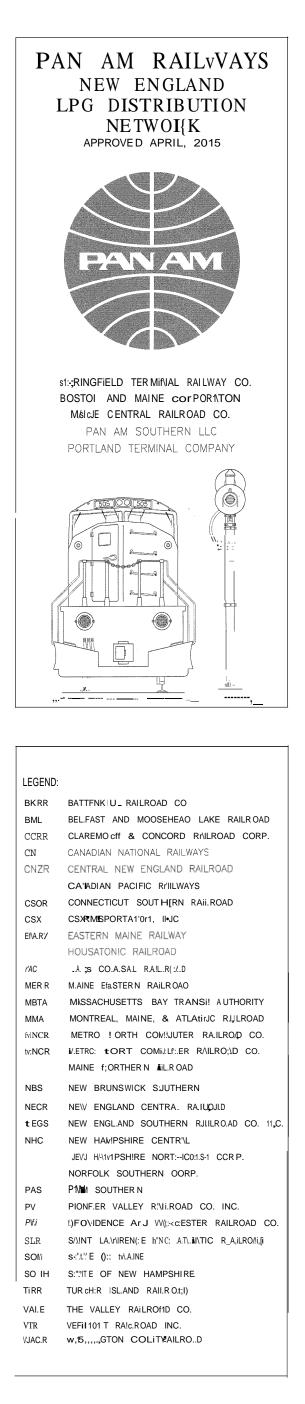
# **TABLE 10.7**

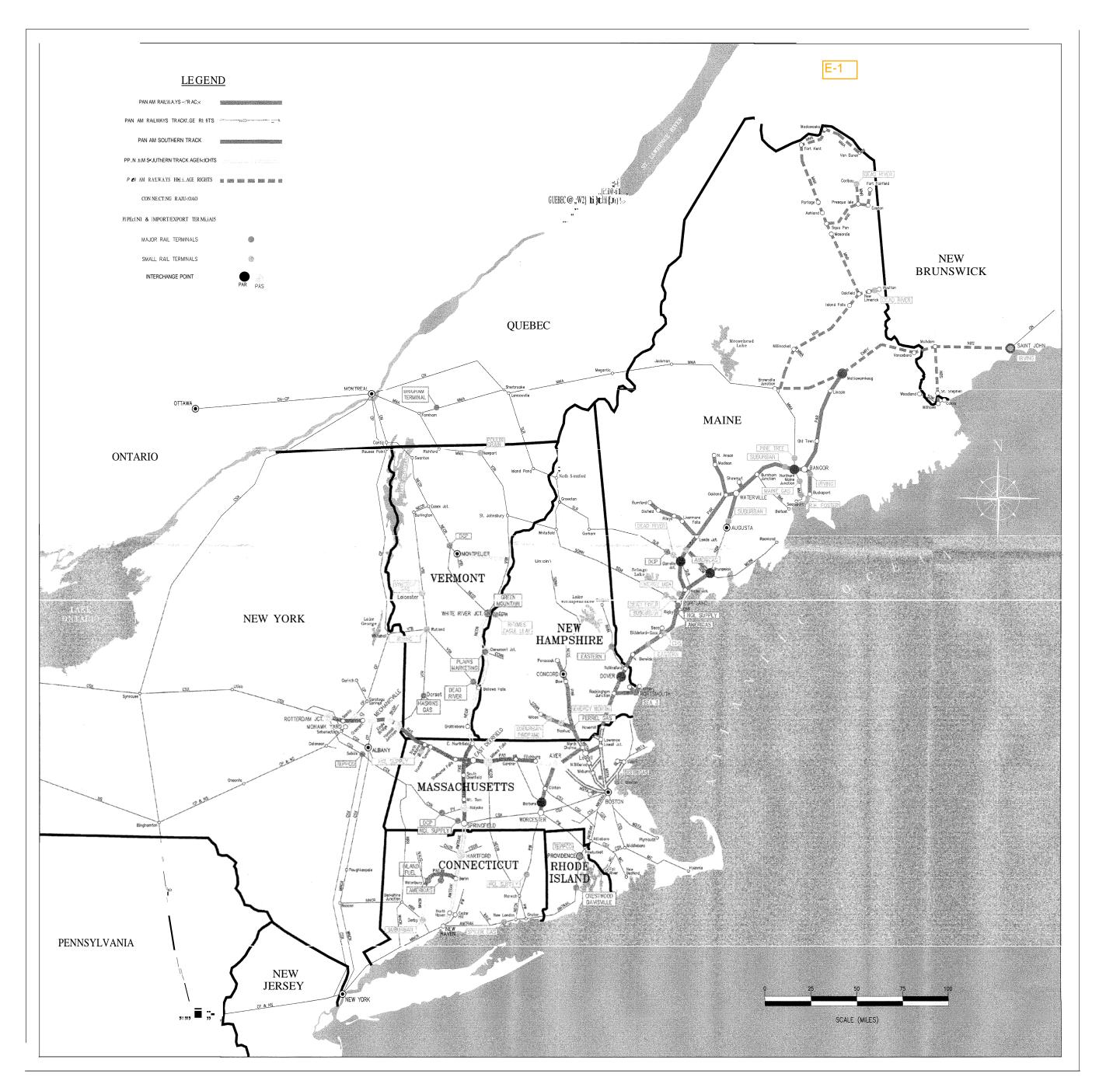
# 2011 STATUS OF 2006 RECOMMENDATIONS

Section	2006 Recommendation	2011 Status
4.1.1	Install a set of stairs at the end of the pump platform for better access.	Completed.
4.1.2	4.1.2 Purchase rubberized chocks to eliminate spark hazard and reduce personnel hazards.	
4.1.3	Consider improved lighting in the truck loading area.	Reconsidered by 2011 PHA team.
<ul> <li>5.1 The employee in charge of any operation on the dock berth will require all employees to adhere to Sea-3 policy regarding wearing of USCG water survival suits.</li> <li>5.2 Investigate means to reduce risk to employees while connecting and disconnecting ship liquid and vapor hoses at the berth.</li> </ul>		Completed.
		Completed.
13.0	Implement procedure to require two (2) men to be present, one (1) in the pit and one outside when work is being done in the fire water pump house or the valve pit.	Completed.

### Notes:

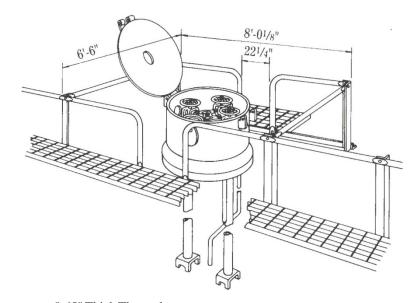
- 1. Numbers in the Section column refer to the section of the 2006 PHA report in which the recommendation was made.
- 2. Comments in the 2011 Status column reflect the 2011 status of the 2006 recommendations as of March 2011.





# 33,500 GALLON CAPACITY - NON-INSULATED - THERMAL PROTECTED

DOT-112J340W For Liquefied Petroleum Gas & Anhydrous Ammonia Service



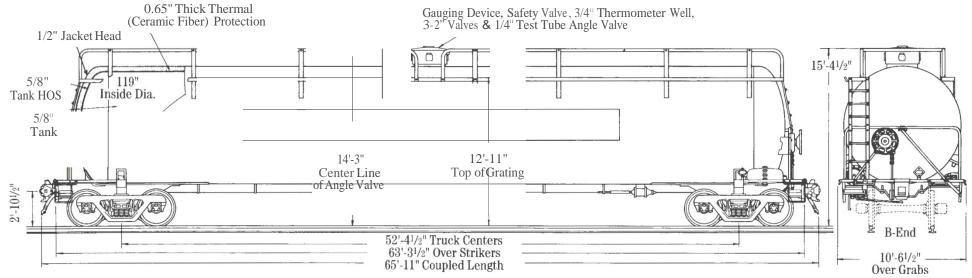
#### **CAPACITY & WEIGHTS**

Nominal Capacity @ 58.28% Filling Density - 33,500 gals. Estimated Light Weight -99,500 lbs.

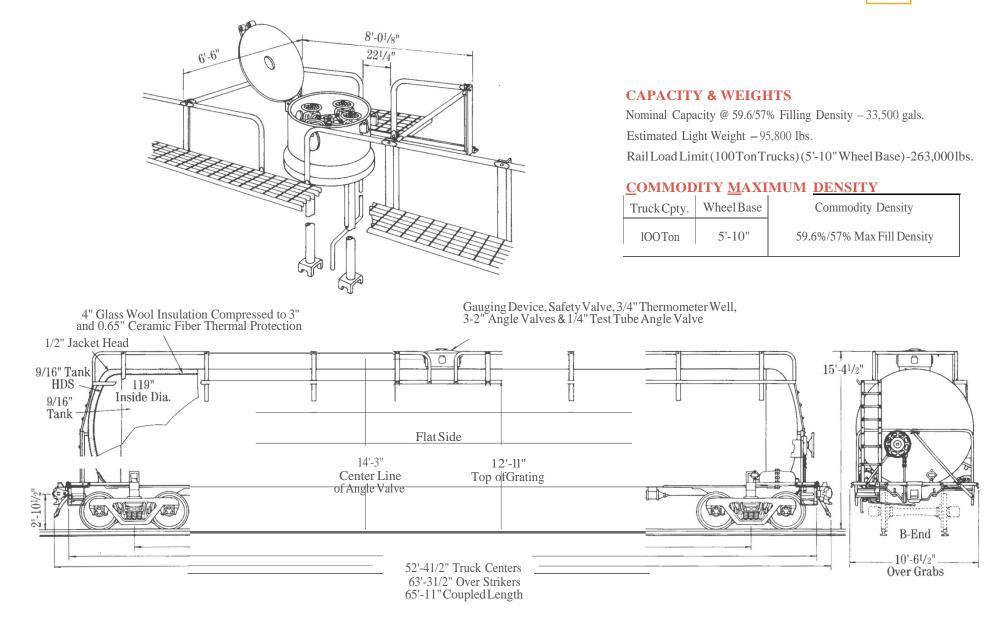
Rail Load Limit (100Ton Trucks) (5'-10" Wheel Base) - 263,000 lbs.

#### **COMMODITY MAXIMUM DENSITY**

Truck Cpty.	Wheel Base	Commodity Density
lOOTon	5'-10"	58.28% Max FillDensity



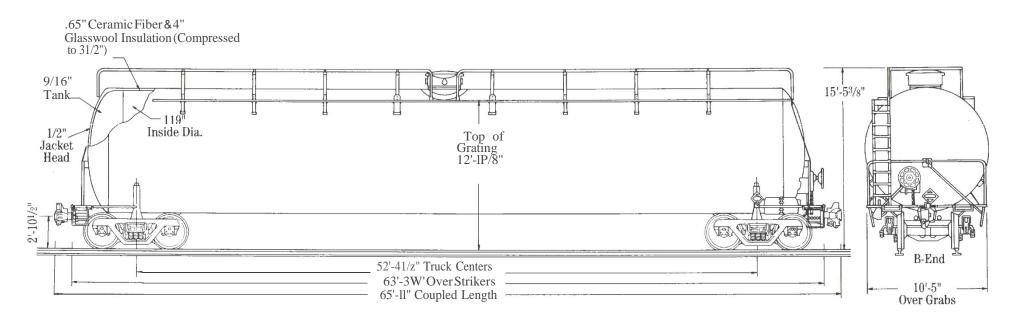


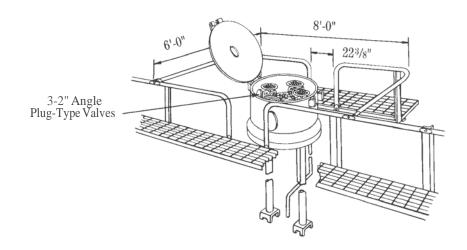


33,687 GALLON CAPACITY - INSULATED

DOT-105J300W

For Liquefied Petroleum Gas, Anhydrous Ammonia, Propane & Butane Service



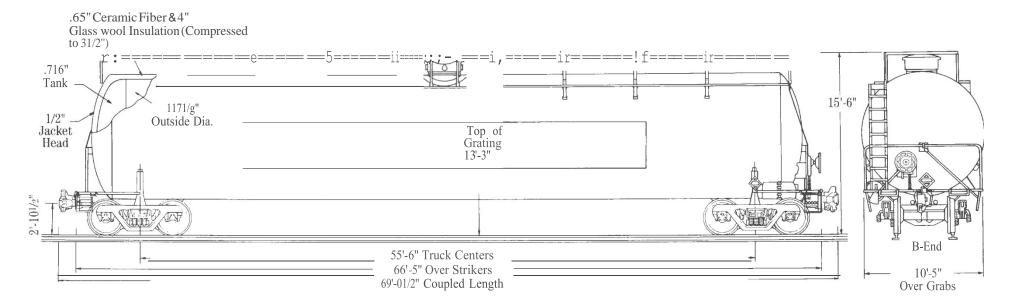


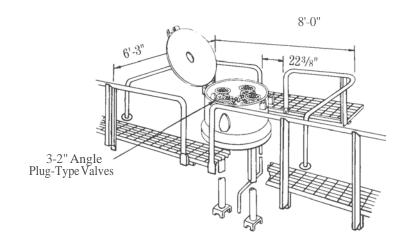
#### **CAPACITY & WEIGHTS**

Net Capacity – 33,687 gals. Estimated Light Weight –95,800 lbs. Rail Load Limit (100 Ton Trucks) – 263,000 lbs.

#### **COMMODITY MAXIMUM DENSITY**

Truck Cpty.	Wheel Base	Commodity Density
100 Ton	5'-10"	59.6% Max Fill Density





#### **CAPACITY & WEIGHTS**

Net Capacity – 33,565 gals. Estimated Light Weight -109,800 lbs. Rail Load Limit (100 Ton Trucks) – 263,000 lbs.

#### **COMMODITY MAXIMUM DENSITY**

Truck Cpty.	Wheel Base	Commodity Density
100 Ton	5'-10"	54.8% Max Fill Density

**F-4** 

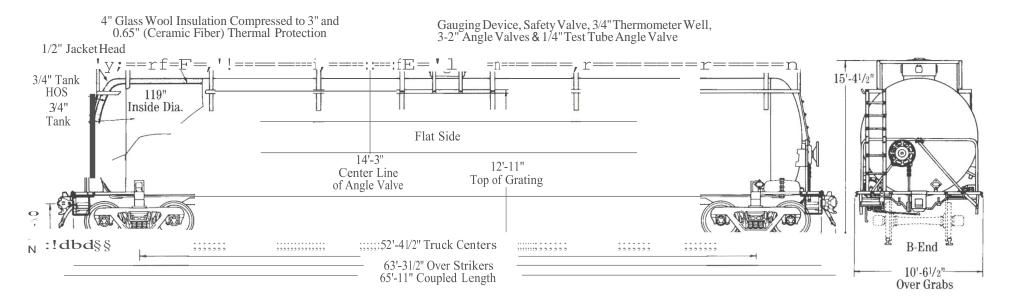
DOT-105J400W For Liquefied Petroleum Gas & Propylene Service 33,565 GALLON CAPACITY - INSULATED

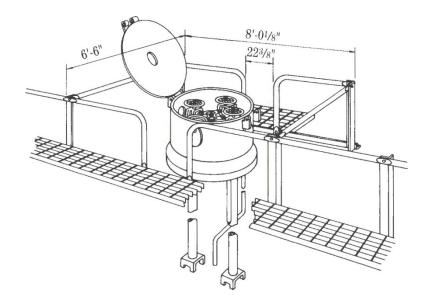
### 33,687 GALLON CAPACITY - INSULATED

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DOT-105J400W

For Liquefied Petroleum Gas & Propylene Service





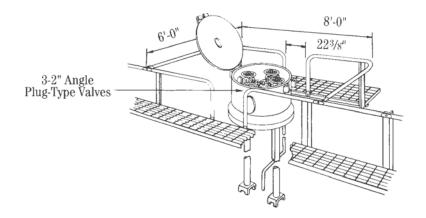
#### **COMMODITY MAXIMUM DENSITY**

Truck Cpty.	Wheel Base	Commodity Density
100 Ton	5'-10"	54.81% Max Fill Density

#### **CAPACITY & WEIGHTS**

Nominal Capacity @ 14% Filling Density – 33,500 gals. Estimated Light Weight – 111,100 lbs.

Rail Load Limit (100 Ton Trucks) (5'-10" Wheel Base) – 263,000 lbs.



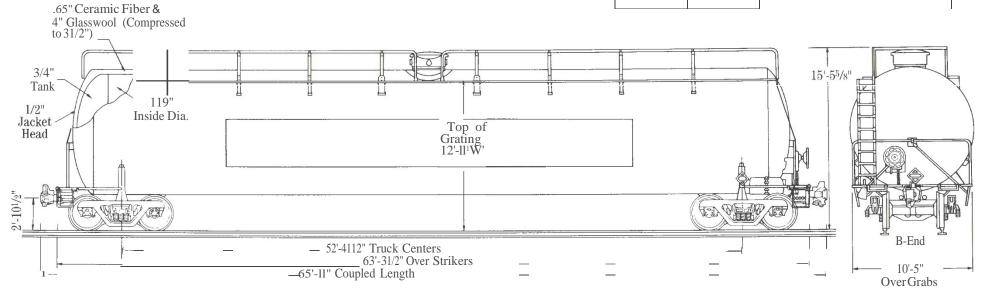
#### **CAPACITY & WEIGHTS**

Net Capacity @ 2% Outage – 33,687 gals. Estimated Light Weight – 111,100 lbs. Rail Load Limit (100 Ton Trucks) – 263,000 lbs.

#### **COMMODITY MAXIMUM DENSITY**

Truck Cpty.	Wheel Base	Commodity Density
100 Ton	5'-10"	54.143% Max Density

**F-6** 



DOT-105J400W For Liquified Petroleum Gas, Propylene & Anhydrous Ammonia

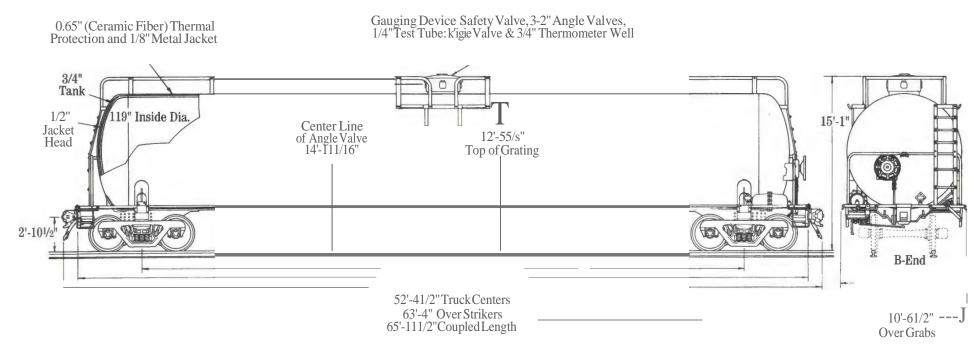
Service

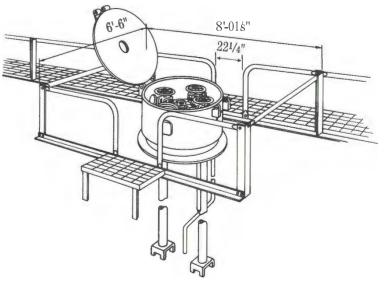
-33,500 GALLON CAPACITY - NON-INSULATED -

# THERMAL PROTECTED

DOT-112J400W

For Propylene, Liquefied Petroleum Gas & Anhydrous Ammonia Service





#### **CAPACITY & WEIGHTS**

Nominal Capacity @ 54.12% Filling Density- 33,500 gals. Estimated Light Weight - 112,000 lbs.

Rail Load Limit (100 Ton Trucks) (5'-10" Wheel Base) -263,000 lbs.

### COMMODITY MAXIMUM DENSITY

Truck Cpty.	Wheel Base	Commodity Density
100 Ton	5'-10"	54.64% Max Fill Density

U.S Department of Transportation Research and Special Programs Administration

# **Hazardous Materials Incident Report**

Form Approval OMB No. 3137-0039

G-1

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2137-0039. The filling out of this information is mandatory and will take 96 minutes to complete.

#### INSTRUCTIONS

Submit this report to the Information Systems Manager, U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Materials Safety, DHM-63, Washington, D.C. 20590-0001. If space provided for any item is inadequate, use a separate sheet of paper, identifying the entry number being completed. Copies of this form and instructions can be obtained from the Office of Hazardous Materials Website at http://hazmat.dot.gov. If you have any questions, you can contact the Hazardous Materials Information Center at 1-800-HMR-4922 (1-800-467-4922) or online at http://hazmat.dot.gov.

#### **PART I - REPORT TYPE**

1. Incident Id: I-20080802	89	
2. This is to report: Haz	ardous Material Incident	
PART II - GENERAL INCIDI	ENT INFORMATION	
3. Date of Incident: 07/21/2008		4. Time of Incident (use 24-hour time): 09:28
5. Enter National Response Cent (if applicat		6. If you submitted a report to another Federal DOT agency, enter the agency and report number:
7. Location of Incident: City: County: State: Zip Code: (if known): Street Address/Mile Marker/Yard N	DEERFIELD FRANKLIN MA 01342 ame/Airport/Body of Water/Rit	ver Mile:
EAST DEERFIELD YARD, TR	ACK #15	
8. Mode of Transportation: FRA-F 9. Transportation Phase: IN TRAF 10. Carrier/Reporter: Name: Street: City: State: Zip Code:		
Federal DOT Id Number: 347917	Hazmat	Registration Number: 060908006004Q
11. Shipper/Offeror: Name: Street: City: State: Zip Code: Waybill/Shipping Paper: 13943	AMERIGAS PROPANE, L.P. 11450 COMPAQ CTR W HOUSTON TX 77070-1445 Hazmat	Registration Number:
12. Origin (if different from shipp City: State: Zip Code: 13. Destination: City: State: Zip Code:	er address) SOUTHINGTON CT 06489 Sarnia ZZ N7T749	

<ul> <li>14. Proper Shipping Name of Hazardous Material: PETROLEU</li> <li>15. Technical/Trade Name: LIQUEFIED PETROLEUM GASES</li> <li>16. Hazardous Class/Division: 2.1 FLAMMABLE GAS</li> </ul>	M GASES, LIQUEFIED OR LIQUEFIED PETROLEUM GAS
17. Identification Number: UN1075 (E.g. UN2764, NA 2020) 18. Packing Group: (if applicable) N/A	
19. Quantity Released: (Include Measurement Units) .007	7812 Liquid - Gallon
20. Was the material shipped as a hazardous waste? N If yes, provide the EPA Manifest Number:	10
21. Is this a Toxic by Inhalation (TIH) material? NO If yes, provide the Hazard Zone:	
22. Was the material shipped under an Exemption, Approval, or If yes, provide the Exemption, Approval, or CA number:	or Competent Authority Certificate? NO
23. Was this an undeclared hazardous materials shipment?	NO
PART III - PACKAGING INFORMATION	
24. Check Packaging Type (check only one - if more than one, type: Tank Car	list type of packaging, copy Part III, and complete for each
25. See instructions and enter the appropriate failure codes for from the list that corresponds to the particular packaging type describe the incident.	
5	OX 033763, DOT112J340W
(Examples: 1A1/Y1.4/150/92/USA/RB/93/RL, UN31H1/Y0493/USA/M9339/108 26b. For Non-bulk, IBC, or non-specification packaging, if ider	00/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)
instructions and complete the following:	
Single Package or Outer Packaging:	Single Package or Inner Packaging (if any):
Packaging Type: Material of Construction: Head Type (Drums only): <b>27. Describe the package capacity and the quantity:</b>	Packaging Type: Material of Construction:
	Single Reckeys on James Reckeying (# early)
Single Package or Outer Packaging:	Single Package or Inner Packaging (if any):
Package Capacity: 34009 LGA Amount in Package: 0 Number in Shipment: 1 Number Failed: 1	Package Capacity: Amount in Package: Number in Shipment: Number Failed:
28. Provide packaging construction and test information, as a	ppropriate:
	ture Date: 03/02/1979 t Date: null <sup>.</sup> Cylinder)

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Shell Thickness: .603 (if Tank Car, CTMV, Portable Tank) Head Thickness: .603 (if Tank Car, CTMV) Service Pressure: (if Cylinder) If valve or device failed: NO Type: VAPOR VALVE Model: Manufacturer: 29. If the packaging is for Radioactive Materials, complete the following: Packaging Category: Packaging Certification: Certification Number: Nuclide(s) Present: Transport Index: Activity: Critical Safety Index: **PART IV - CONSEQUENCES** 30. Result of Incident (check all that apply): - Spillage: NO - Fire: NO - Explosion: NO - Material Entered Waterway/Storm Sewer: NO - Vapor (Gas) Dispersion: YES - Environmental Damage: NO - No Release: NO 31. Emergency Response: The following entities responded to the incident: (Check all that apply) Fire/EMS Report #: YES Police Report #: NO In-house cleanup: NO Other Cleanup: NO NO 32. Damages Was the total damage cost more than \$500? If yes, enter the following information: (If no, go to question 33.) Material Loss: \$0 Carrier Damage: \$0 Property Damage: \$0 Response Cost: \$0 Remediation/Cleanup Cost: \$0 (See damage definitions in the instructions) 33a. Did the hazardous material cause or contribute to a human fatality? NO If yes, enter the number of fatalities resulting from the hazardous material: Employees: 0 Responders: 0 General Public: 0 33b. Were there human fatalities that did not result from the hazardous material? NO If yes, how many? 0 34. Did the hazardous material cause or contribute to personal Injury? NO If yes, enter the number of injuries resulting from the hazardous material: Hospitalized (Admitted Only): Employees: 0 Responders: 0 General Public: Λ Non-Hospitalized: (e.g.: On site first aid or Emergency Room observation and release) Employees: 0 Responders: 0 General Public: 0







Total number of general public evacuat Total number of employees evacuat		
Total evacuat		
Duration of the evacuati	on: 0	
36. Was a major transportation artery or facility closed?		NO
If yes, how many? 0		
7. Was the material involved in a crash	or derailment?	NO
If yes, provide the following information	:	
Estimated speed (mph): 0		
Weather conditions:		
Vehicle overturned? N	0	
Vehicle left roadway/track? N	0	

39. Where did the incident occur (if unknown, check the appropriate box for the location where the incident was discovered)?

40. What phase(s) had the shipment already undergone prior to the incident? (Check all that apply)

- Shipment had not been transported

- Initial transport by highway to cargo facility

- Transported by air (first flight)

- Transfer at sort center/cargo facility

- Transport by air (subsequent flights)

#### PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE

- Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

#### Describe:

While doing a routine inspection in the East Deerfield Yard, an FRA Inspector fbund that tank car (AMOX 033763)was leaking vapors from the vapor valve and notified Pan Am Railways. Pam Am railways responded by cordoningoff the tank car to prevent possible ignition, contacted the Deerfield Fire Department and a technician from AmeriGas. The fire department as well as the Ameri Gas technician responded to the incident. The technician was able totighten the valve and stopped the leak.

#### PART VII - RECOMMENDATIONS/ACTIONS TAKEN TO PREVENT RECURRENCE

- Where you are able to do so, suggest or describe changes (such as additional training, use of better packaging, or improved operating procedures) to help prevent recurrence. Provide recommendations for improvement to hazardous materials transportation beyond the control of your individual company. Continue on additional sheets if necessary.

#### Describe:

SHIPPER SHOULD PROVIDE PROPER TRAINING AND REVIEW PROCEDURES TO ENSURE THAT ALL VALVES AND PLUGS ARE PROPERLY TIGHTEN TO AVOID LEAKING DURING TRANSPORTATION.



U.S Department of Transportation Research and Special Programs Administration

# Hazardous Materials Incident Report

Form Approval OMB No. 3137-0039

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According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2137-0039. The filling out of this information is mandatory and will take 96 minutes to complete.

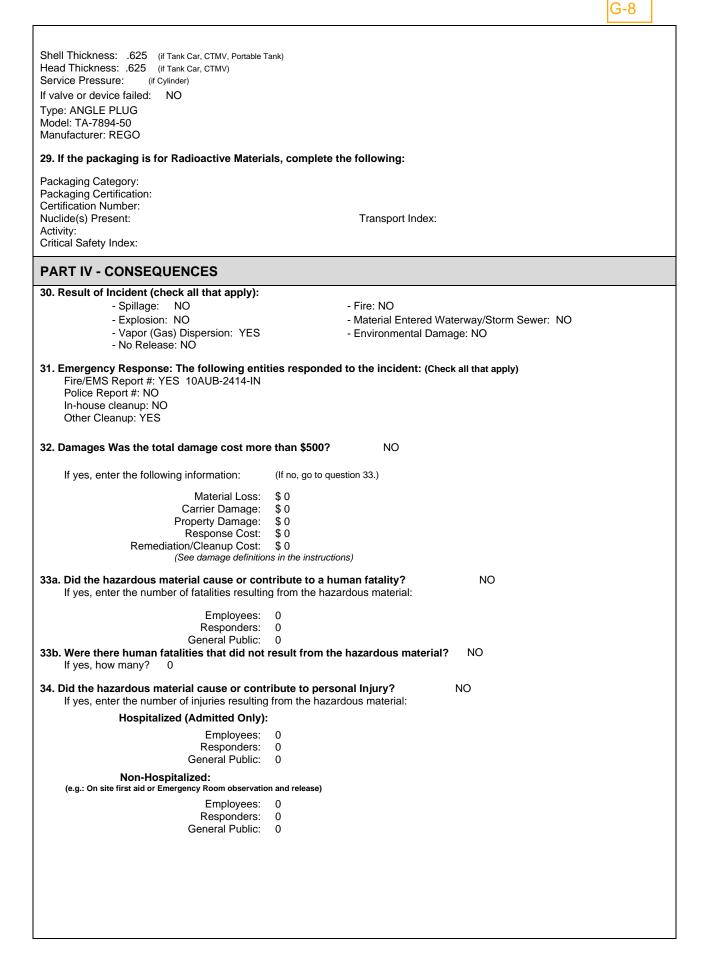
#### **INSTRUCTIONS**

Submit this report to the Information Systems Manager, U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Materials Safety, DHM-63, Washington, D.C. 20590-0001. If space provided for any item is inadequate, use a separate sheet of paper, identifying the entry number being completed. Copies of this form and instructions can be obtained from the Office of Hazardous Materials Website at http://hazmat.dot.gov. If you have any questions, you can contact the Hazardous Materials Information Center at 1-800-HMR-4922 (1-800-467-4922) or online at http://hazmat.dot.gov.

1. Incident Id: I-2010120	004	
2. This is to report: Ha	zardous Material Incident	
PART II - GENERAL INCID	ENT INFORMATION	
3. Date of Incident: 10/19/2010		4. Time of Incident (use 24-hour time): 19:30
5. Enter National Response Cent (if applica 95747	ole):	6. If you submitted a report to another Federal DOT agency, enter the agency and report number:
7. Location of Incident: City: County: State: Zip Code: (if known): Street Address/Mile Marker/Yard N	AUBURN ANDROSCOGGIN ME 04210 Iame/Airport/Body of Water/Ri	ver Mile:
DANVILLE YARD		
8. Mode of Transportation: FRA- 9. Transportation Phase: IN TRA 10. Carrier/Reporter: Name: Street: City: State: Zip Code:		
Federal DOT Id Number: 347917		Registration Number: 052510600008S
11. Shipper/Offeror:		
Name: Street: City: State: Zip Code:	AB T2P 0C1	Т
Waybill/Shipping Paper: 722922	Hazmat	Registration Number:
12. Origin (if different from shipp City: State: Zip Code: 13. Destination: City: State: Zip Code:	er address) SOUTH CALGARY ZZ T2P0C1 ROCHESTER NH 03866	

14. Proper Shipping Name of Hazardous Material: 1100 FEIED				
14. Proper Shipping Name of Hazardous Material: LIQUEFIED PETROLEUM GAS				
15. Technical/Trade Name: HD 5 PROPANE 16. Hazardous Class/Division: 2.1 FLAMMABLE GAS				
17. Identification Number: UN1075 (E.g. UN2764, NA 2020)				
18. Packing Group: (if applicable) N/A				
<b>19. Quantity Released:</b> (Include Measurement Units) .000	0008 Liquid - Gallon			
20. Was the material shipped as a hazardous waste? If yes, provide the EPA Manifest Number:	10			
21. Is this a Toxic by Inhalation (TIH) material? NO If yes, provide the Hazard Zone:				
22. Was the material shipped under an Exemption, Approval, If yes, provide the Exemption, Approval, or CA number:	or Competent Authority Certificate? NO			
23. Was this an undeclared hazardous materials shipment?	NO			
PART III - PACKAGING INFORMATION				
24. Check Packaging Type (check only one - if more than one	list type of packaging, copy Part III, and complete for each			
type: Tank Car				
25. See instructions and enter the appropriate failure codes for from the list that corresponds to the particular packaging type describe the incident.	ound at the end of the instructions. Be sure to enter the codes a checked above. Enter the number of codes as appropriate to			
Enter the most important failure point in line 1. If there are more th	an two failure points, provide in this format in part VI.			
What Failed: 127	- Inlet (Loading) Valve - Leaked			
Causes of Failure: 515				
26a. Provide the packaging identification markings, if availabl Identification Markings: DO	<b>e.</b> T112J340W			
5	00/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)			
26b. For Non-bulk, IBC, or non-specification packaging, if iden instructions and complete the following:	ntification markings are incomplete or unavailable, see			
Single Package or Outer Packaging:	Single Package or Inner Packaging (if any):			
Packaging Type:				
	Packaging Type:			
Material of Construction: Head Type (Drums only):	Packaging Type: Material of Construction:			
Head Type (Drums only):				
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity:			
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0         Amount in Package: LGA 294582.09858	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity: Amount in Package:			
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity:			
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0         Amount in Package: LGA 294582.09858         Number in Shipment: 1	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity: Amount in Package: Number in Shipment: Number Failed:			
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0         Amount in Package: LGA 294582.09858         Number in Shipment: 1         Number Failed: 1         28. Provide packaging construction and test information, as a         Manufacturer: KENITIC SARINA FRAC PLANT	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity: Amount in Package: Number in Shipment: Number Failed: ppropriate: ture Date: 09/01/1979 t Date: 07/05/2010			
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0         Amount in Package: LGA 294582.09858         Number in Shipment: 1         Number Failed: 1         28. Provide packaging construction and test information, as a         Manufacturer: KENITIC SARINA FRAC PLANT         Manufacturer: KENITIC SARINA FRAC PLANT         Manufacturer: NEOX 34357         Last Tes         Material of Construction:         12JAARTC128GRB (if Tank Car, CTMV,	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity: Amount in Package: Number in Shipment: Number Failed: ppropriate: ture Date: 09/01/1979 t Date: 07/05/2010			
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0         Amount in Package: LGA 294582.09858         Number in Shipment: 1         Number Failed: 1         28. Provide packaging construction and test information, as a         Manufacturer: KENITIC SARINA FRAC PLANT         Manufacturer: KENITIC SARINA FRAC PLANT         Manufacturer: NEOX 34357         Last Tes         Material of Construction:         12JAARTC128GRB (if Tank Car, CTMV,	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity: Amount in Package: Number in Shipment: Number Failed: ppropriate: ture Date: 09/01/1979 t Date: 07/05/2010			
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0         Amount in Package: LGA 294582.09858         Number in Shipment: 1         Number Failed: 1         28. Provide packaging construction and test information, as a         Manufacturer: KENITIC SARINA FRAC PLANT         Manufacturer: KENITIC SARINA FRAC PLANT         Manufacturer: NEOX 34357         Last Tes         Material of Construction:         12JAARTC128GRB (if Tank Car, CTMV,	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity: Amount in Package: Number in Shipment: Number Failed: ppropriate: ture Date: 09/01/1979 t Date: 07/05/2010			
Head Type (Drums only):         27. Describe the package capacity and the quantity:         Single Package or Outer Packaging:         Package Capacity: 0         Amount in Package: LGA 294582.09858         Number in Shipment: 1         Number Failed: 1         28. Provide packaging construction and test information, as a         Manufacturer: KENITIC SARINA FRAC PLANT         Manufacturer: KENITIC SARINA FRAC PLANT         Manufacturer: NEOX 34357         Last Tes         Material of Construction:         12JAARTC128GRB (if Tank Car, CTMV,	Material of Construction: Single Package or Inner Packaging (if any): Package Capacity: Amount in Package: Number in Shipment: Number Failed: ppropriate: ture Date: 09/01/1979 t Date: 07/05/2010			

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35. Did the hazardous material cause or contribute to an evacuation?         If yes, provide the following information:         Total number of general public evacuated:       0         Total number of employees evacuated:       0         Total number of employees evacuated:       0         Total evacuated:       0         Duration of the evacuation:       0         36. Was a major transportation artery or facility closed?       NO         If yes, how many?       0         37. Was the material involved in a crash or derailment?       NO         If yes, provide the following information:       Estimated speed (mph):       0         Weather conditions:       Vehicle overturned?       NO         Vehicle left roadway/track?       NO         PART V - AIR INCIDENT INFORMATION (please refer to S 175.31 to report a discrepancy for air shipments)	
Total number of general public evacuated:       0         Total number of employees evacuated:       0         Total evacuated:       0         Duration of the evacuation:       0         36. Was a major transportation artery or facility closed?       NO         If yes, how many?       0         37. Was the material involved in a crash or derailment?       NO         If yes, provide the following information:       Estimated speed (mph):       0         Weather conditions:       Vehicle overturned?       NO         Vehicle left roadway/track?       NO	
Total number of general public evacuated:       0         Total number of employees evacuated:       0         Total evacuated:       0         Duration of the evacuation:       0         36. Was a major transportation artery or facility closed?       NO         If yes, how many?       0         37. Was the material involved in a crash or derailment?       NO         If yes, provide the following information:       Estimated speed (mph):       0         Weather conditions:       Vehicle overturned?       NO         Vehicle left roadway/track?       NO	
Total number of employees evacuated:       0         Total evacuated:       0         Duration of the evacuation:       0         36. Was a major transportation artery or facility closed?       NO         If yes, how many?       0         37. Was the material involved in a crash or derailment?       NO         If yes, provide the following information:       Estimated speed (mph):       0         Weather conditions:       Vehicle overturned?       NO         Vehicle left roadway/track?       NO	
Total evacuated:       0         Duration of the evacuation:       0         36. Was a major transportation artery or facility closed?       NO         If yes, how many?       0         37. Was the material involved in a crash or derailment?       NO         If yes, provide the following information:       Estimated speed (mph):       0         Weather conditions:       Vehicle overturned?       NO         Vehicle left roadway/track?       NO	
Duration of the evacuation:       0         36. Was a major transportation artery or facility closed?       NO         If yes, how many?       0         37. Was the material involved in a crash or derailment?       NO         If yes, provide the following information:       NO         Estimated speed (mph):       0         Weather conditions:       Vehicle overturned?         Vehicle left roadway/track?       NO	
36. Was a major transportation artery or facility closed?       NO         If yes, how many?       0         37. Was the material involved in a crash or derailment?       NO         If yes, provide the following information:       NO         Estimated speed (mph):       0         Weather conditions:       Vehicle overturned?         Vehicle left roadway/track?       NO	
If yes, how many? 0 <b>37. Was the material involved in a crash or derailment?</b> NO If yes, provide the following information: Estimated speed (mph): 0 Weather conditions: Vehicle overturned? NO Vehicle left roadway/track? NO	
If yes, how many? 0 <b>37. Was the material involved in a crash or derailment?</b> NO If yes, provide the following information: Estimated speed (mph): 0 Weather conditions: Vehicle overturned? NO Vehicle left roadway/track? NO	
37. Was the material involved in a crash or derailment?       NO         If yes, provide the following information:       Estimated speed (mph):       0         Weather conditions:       Vehicle overturned?       NO         Vehicle left roadway/track?       NO	
If yes, provide the following information: Estimated speed (mph): 0 Weather conditions: Vehicle overturned? NO Vehicle left roadway/track? NO	NO
Estimated speed (mph): 0 Weather conditions: Vehicle overturned? NO Vehicle left roadway/track? NO	
Weather conditions:       Vehicle overturned?       NO         Vehicle left roadway/track?       NO	
Vehicle overturned? NO Vehicle left roadway/track? NO	
Vehicle left roadway/track? NO	
PART V - AIR INCIDENT INFORMATION (please refer to S 175.31 to report a discrepancy for air shipments)	
ART V ART INOIDENT INTORNIA HON (please relet to 3 173.51 to report a discrepancy for all simplifients)	
38. Was the shipment on a passenger aircraft?	
If yes, was it tendered as cargo, or as passenger baggage?	
39. Where did the incident occur (if unknown, check the appropriate box for the location where the incident was	
discovered)?	

40. What phase(s) had the shipment already undergone prior to the incident? (Check all that apply)

- Shipment had not been transported

- Initial transport by highway to cargo facility

- Transported by air (first flight)

- Transfer at sort center/cargo facility

- Transport by air (subsequent flights)

#### PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE

- Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

#### Describe:

In the process of walking an inspecting of the train the Conductor noticed a odor of gas and heard a hissing sound. The Conductor notified Pan Am Railways Operations and Local Emergency Responders were notified and arrived at the location. When the local hazmat team inspected the tank car they that a valve was not seated and were leaking vapor gas. The hazmat team tighten the valve and the leak was contained.

#### PART VII - RECOMMENDATIONS/ACTIONS TAKEN TO PREVENT RECURRENCE

- Where you are able to do so, suggest or describe changes (such as additional training, use of better packaging, or improved operating procedures) to help prevent recurrence. Provide recommendations for improvement to hazardous materials transportation beyond the control of your individual company. Continue on additional sheets if necessary.

#### Describe:

We contacted the shipper to report the findings. We suggested that a second employee check the valves for proper securing before shipping the tank car. Also to take a reading with a monitor for leaks. We also suggested that valves be tested periodically.

Pan Am Railways has offered Railroad Safety classes, Tank Car Classes & Exercises, Dispatcher Classes, Table Talk Exercises & Full Scale Railroad emergency Exercise throughout it's rail lines, partnering with the Federal Railroad Administration, Operation Life Saver, GATX, The Propane Institute, DuPont and many others to see that the communities we run through have a full understanding of how Pan Am Railways relies on safety and how important the relationships are with the communities we run through.

Since 2013 we have worked and trained with over 2000 emergency responders such as Fire Departments, Police Departments, Dispatchers, Town Hall Meetings, children of all ages, Federal Railroad Administration, Transportation Security Administration, Environmental Protection Agency and many others.

#### <u>2013</u>

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03/2013- Westford, MA FD

05/2013- Belgrade ,ME FD

06/2013- Saco, Bidderford & Wells, ME FD

10/2013- CT Fire Academy

10/2013- NHDES, Dover NH, Rollinsford NH, Portsmouth NH, North Berwick ME FD.

#### <u>2014</u>

02/2014- Deerfield, South Deerfield, MA FD

03/2014- NH Homeland Security

03/2014- North Hampton, MA FD & Dispatchers

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04/2014- Holyoke, MA FD

05/2014- Springfield, MA FD

- 05/2014- Lincoln ME, Mass Water Resources
- 06/2014- Greenfield MA FD
- 06/2014- Deerfield MA Town Meeting
- 06/2014- Manchester NH FD
- 06/2014- Carmel ME FD Controlled Burn
- 07/2014- Old Town ME FD
- 07/2014- Chicopee MA FD
- 07/2014- Turners Falls MA FD
- 07/2014- Tuners Falls MA, 3 bus companies were trained in Railroad Safety
- 07/2014- NMJ ME & surrounding towns FD
- 07/2014- Westford MA FD
- 07/2014- North Adams MA FD & surrounding towns
- 09/2014- Nashoba Valley MA Dispatcher Training
- 09/2014- East Hampton MA FD & Mass Conn. Supervisor Dispatcher Training
- 10/2014- Wells ME FD/PD & surrounding towns

H-3

12/2014- West Springfield MA FD

12/2014- Greenfield MA Dispatchers

## <u>2015</u>

01/2015- Greenfield MA FD

02/2015- NH Homeland Security

02/2015- Gill, Northfield, Shelburne, Bernardston MA FD

03/2015- New Gloucester ME FD

03/2015- Franklin County MA Dispatchers

03/2015- North Hampton MA FD/EMS

03/2015- ME, NH, MA, CT, VT, NY State Emergency Response Committees (SERC)

04/2015- Hadley, South Hadley, Whately MA FD/PD

04/2015- Plaistow, Newton, East Kingston, Exeter, Newfield's, Newmarket, Durham, Lee, UNH, Dover, Rollinsford, Portsmouth NH PD, North Berwick, Wells, Kennebunk ME PD

04/2015- Chicopee, Holyoke, Greenfield, North Hampton, Bernadston, Hatfield, Whately MA PD

04 &05/2015- Mass Homeland Security Western Mass Anti-Terrorism Exercise

05/2015- Falmouth, South Portland ME PD, Cumberland County Sheriffs ME

05/2015- Maine EMG Training

Washington/Becket/Barnes FD, Watertown FD, Wayland FD, Webster FD, Wellfleet FD, Wendell FD, West Barstable FD, West Brookfield FD, West Brookfield FD, West Stockbridge FD, Western Mass CISM Team, Westfield FD, Westfield PD, Westfield Public Safety, Westford FD, Westminster FD, Westminster PD, Weston FD, Westover AFB FD, Westwood FD, Westwood PD, Whately FD, Whately PD, Wilbraham FD, Williamsburg FD, Williamstown FD, Williamstown PD, Wilmington FD, Worcester County Reserve Deputy Sheriff, Worcester FD.

06/2015- Lincoln ME FD

07/2015- Old Town ME FD

07/2015- Portland ME FD

08/2015- GATX Tank Training, South Portland Maine & East Deerfield MA along with surrounding towns HAZMAT teams, DEP TSA, FRA, EPA

08/2015- Brunswick ME PD

## Over the past four years the following EMS Departments have also been trained:

104<sup>th</sup> Fighter Wing FD, Acton FD, Acton PD, Acton Public Safety, Acushnet FD & EMS, Adams FD, Agawam FD, Amherst FD, Amtrak PD, Andover FD, Andover PD, Army National Guard/179<sup>th</sup> FF DET, Ashburnham FD, Ayer FD, Barnes Air National Guard, Barnstable FD, Becket Ambulance Department, Becket FD, Becket PD, Bedford FD, Belchertown FD, Bellingham FD, Belmont FD, Bernardston FD, Billerica FD, Bolton PD, Bondsville FD, Bourne FD, Boxborough FD, Boxford FD, Braintree FD, Bristol County Tech Rescue, Brockton FD, Burlington FD, Byfield FD, Cambridge FD, Carver FD/Plymouth Cty CISM Team, Centerville-Osterville-Marstons Mills, Carlton FD, Chelmsford FD, Chicopee FD, Clinton FD, Concord FD, County Ambulance, Inc, Dalton FD, Deerfield FD, Deerfield PD, Dept. of Defense Fire and Emergency Services, DHS/TSA, Dracut FD, East Brookfield FD, Easthampton FD, Fitchburg FD, Framingham FD, Franklin FD, Gardner FD, Georgetown PD, Gill FD, Gill PD, Gloucester FD, Grafton FD. Great Barrington FD. Greenfield FD. Groton FD. Halifax FD, Harvard FD, Hatfield FD, Haverhill FD, Hinsdale FD, Holden FD, Holyoke FD, Huntington FD. Hvannis FD. Lancaster FD, Lanesborough FD, Lawrence FD, Lee Ambulance, Lenox FD, Leominster FD, Leominster PD, Leyden FD, Lincoln FD, Littleton FD, Longmeadow FD, Lunenburg FD, Manchester FD, Mashpee Fire & Rescue Dept, Mass. Dept. of Environmental Protection, Maynard FD, MBTA Transit PD, Medfield FD, Melrose FD, Middleboro FD, Middlefield FD, Monson FD, Montague FD, Montague PD Nashoba Valley Regional Emergency Comm Ctr, Natick FD, Needham FD, New Bedford FD, New Salem FD, Newton FD, Northampton FD, Noble Hospital, North Andover FD, Northampton PD, Northfield FD, Northfield PD, Oakham FD, Onset FD, Orange FD, Oxford FD, Palmer FD, Pan Am Railways, Peabody FD, Peru FD, Pittsfield FD, Princeton FD, Princeton FD/NH Fire Academy, Reading FD, Rehoboth FD, Richmond FD, Rockport FD. Sandwich FD. Shelburne Control/MA State Police, Shirley FD, Shirley PD, Shutesbury FD, So. Grafton FD, Somers FD, Somerville FD, South Deerfield FD, South Hadley FD, South Hadley District 1, Southampton FD, Southborough FD, Southwick FD, Springfield FD, Sudbury FD, Sunderland FD, Sutton FD, Swansea FD, Templeton FD, Three Rivers FD, Town of Williamstown, Townsend FD & EMS, Trinity EMS, Turners Falls Fire Department, Tyngsboro FD, UMASS Amherst, United States Postal Service, Upton FD, Wales FD, Waltham FD, Wareham FD, Warren FD,





# **Education:**

University of Maine, Orono, ME Bachelor of Science, Civil Engineering, 1973

Maine DOT Local Project Administration Certification Course, 2010

NH DOT Local Project Agency (LPA) Certification Course, 2012

# **Registrations:**

Professional Engineer: Maine #3736 New Hampshire #05122 Vermont #4040

# Memberships:

American Society of Civil Engineers

Maine Institute of Transportation Engineers

Maine Better Transportation Association, Board of Directors and Past President

# Training:

Traffic Signals Design and Operation Workshop, Electric Light Company, 2010, 2011, 2012, 2013, 2014 and 2015 BlueTOAD and Dynaflow Workshop, TrafficCast, 2010

Adaptive Traffic Signal Design Workshop, Naztec, 2011

# Stephen S. Sawyer, Jr., P.E.

Vice President, Transportation Services

Mr. Sawyer has over 40 years of broad-based experience in the transportation field, including route location/planning studies, preparation of contract documents (PS&E), and on-site construction administration. He possesses creative management capabilities and is skilled at making persuasive public presentations that build consensus on difficult issues. He has led many large complex technical teams that have succesfully left their mark on the northern New England landscape. Currently, projects include the replacement of the Sarah Mildred Long Bridge, between Kittery and Portsmouth, and the replacement of the I-91 bridges over the West River in Bratleboro, VT.

### **Selected Project Experience - Transportation Engineering:**

- Replacement of Sarah Mildred Long Bridge Kittery, ME & Portsmouth, NH
- Thornton Heights Complete Street South Portland, ME
- William Clarke Drive Improvements Westbrook, ME
- Maine Street Traffic Improvements Brunswick, ME
- Main Street Multi-use Path South Portland, ME
- Rochester Street Reconstruction Berwick, ME
- I-91 Brattleboro Bridge Project Brattleboro, VT
- Downtown Transportation Improvement Plan South Berwick, ME
- City-Wide ATMS Dover, NH
- Broadway Traffic Signal Upgrades South Portland, ME
- Maine Mall Traffic Signal Operations South Portland, ME
- Upper Route 1 Safety and Environmental Improvements Kittery, ME
- Route 1 Traffic Signal Improvements Kennebunk, ME
- Exit 3, I-295 Improvement Study and Design South Portland, ME
- Portland Intermodal Transportation Center Portland, ME
- Routes 1/3 Traffic Signal Operations Ellsworth, ME
- Bicycle/Pedestrian Improvement Study Kittery, ME

In 2008, Steve was instrumental in the development of a specific traffic signal systems operational practice within the firm which is quite unique to our industry. Current clients include South Portland, ME; Ellsworth, ME; Dover, NH; and Kennebunk, ME. As part of these assignments, Sebago engineers are providing daily monitoring and management of these systems via remote access to ensure their optimum efficiency.

Under Steve's leadership the firm has broadened its transportation geographic presence beyond Maine's borders. In 2014, NHDOT selected Sebago for a multi-year on call statewide contract for traffic engineering. In 2015 VTrans selected Sebago for a multi-year on call statewide roadway and traffic engineering contract.



# **Education:**

State University of New York, College at Delhi, Delhi, NY Associate Degree in Civil Technology, 1963

# Training:

Participant in Maine Operation Lifesaver (OL) since 1982. Certified as Presenter Trainer since 1995.

Courses at the Institute for Railway Engineering on Bridge Inspection

# **Memberships:**

American Railway Engineering and Maintenance-of-Way Association since 1972. Life member since 2002.

National Association of Railroad Safety Consultants and Investigators.

# Robert Davids

**Railroad Track Design and Inspections** 

**M**r. Davids has 48 years of experience in the railroad industry. He joined Sebago, Technics in 2011 as a track design advisor and inspector. Prior to joining Sebago, Mr. Davids had various short term projects for the Maine Department of Transportation (MaineDOT) including providing training for MaineDOT employees, contractors and railroad operators of MaineDOT owned lines. Also designed and installed a system of permanent monuments and measured offsets to curved track on a MaineDOT owned rail line with a problem of lateral track instability and recently installed continuous welded rail. He also worked with the MaineDOT as the railroad inspector for the rehabilitation of a major lift span railroad bridge over the Kennebec River and reconstruction of track approaches. During this same time period, he also worked with the Vermont Agency of Transportation preparing standards specifications for railroad track and bridge projects in Vermont.

From July 1978 to June 2003, Mr. Davids was a Railroad Safety Inspector – Track for the U.S. Department of Transportation – Federal Railroad Administration-Office of Safety Region 1. His responsibilities included: obtaining railroad compliance with Federal Track Safety Standards, Bridge Safety Policy, and Railroad Worker Safety regulations in four New England states; investigated railroad accidents and complaints; participated in several railroad assessment projects from Alabama to West Virginia to Pennsylvania to Massachusetts (railroads involved included CSX, Conrail and Long Island Railroad); assigned as Assistant Manager of Safety Assurance and Compliance Program (SACP) on the Bangor and Aroostook System; and conducted intensive oversight of the track and bridge rehabilitation project prior to the start up of Amtrak service between Boston and Portland.

Mr. Davids worked for the Delaware and Hudson Railroad Engineering Department as a General Roadmaster during the period of October 1963 to July 1978. His positions included: Rodman, Instrumentman, Assistance Engineer, Assistant Track Supervisor, Track Supervisor, and Roadmaster. His responsibilities included: design, surveying drafting, construction inspection for a new line change, managing and supervising track maintenance and rehabilitation. He supervised up to 200 railroad maintenance employees, and the construction of 18 tracks in a new pulp and paper mill while supervising track maintenance of a subdivision. He also developed annual work plans and budgets for the Railroad.

Most recently Mr. Davids worked on the design and specification development of the Railroad portion of the new Sarah Mildred Long Bridge between Kittery and Portsmouth.



# **Education:**

Fisher College, Boston Community College of the Air Force, Gunter AFB, Alabama 90 Semester Hours Major: Business

# Training:

Advanced Tank Car Technician Course - 2007

Tank Car Technician Course - 2006

Chicago Police Academy - Terrorism Awareness Course -  $2004\,$ 

New Hampshire Police Training Academy - 1975

# Affiliations:

Aircraft Owners and Pilot Association Private Pilot

# Awards:

Security clearance Top Secret (1983-2000) Awards received AF Meritorious Service Medal, AF Commendation Medal, AF Achievement Medal, ARF Meritorious Service Medal w/4D, National Defense Service Medal w/1D, Kuwait Liberation Medal, Southwest Asia Service Medal w/2D, Armed Forces Service Medal, Combat Readiness Medal w/5 D, AFGC Medal, Armed Forces Reserve Medal w/HG+M, Presidential Unit Citation, AF Outstanding Unit Award w/1D, AF Longevity Service Award w/3D, AF Small Arms Expert Ribbon, AF Training Ribbon.

- Federal Railroad Administration Customer Service Award – 2002
- Federal Railroad Administration- Hazardous Materials Team Award - 2004
- Federal Railroad Administration Hazardous Materials Award - 2006, 2009
- Federal Railroad Administration Special Achievement Award - 2006, 2007, 2008, 2009
- Federal Railroad Administration Special Pay Adjustment Award - 2009
- U.S. DOT Emergency Support Function 1 (ESF-1) -Team Award - 2010
- Federal Railroad Administration Special Achievement Award - 2010
- Federal Railroad Administration Special Pay Adjustment Award - 2011
- Federal Railroad Administration Administrators Award -2012
- U.S. Secretary of Transportation Award 2012

# Frederick D. Fraini, Jr. Special Railroad Consultant

Mr. Fraini, Jr. joined Sebago Technics in 2015 as a Special Railroad Consultant. His previous work experience includes:

# USDOT - Federal Railroad Administration (retired) Cambridge

7/2003 - 4/2013 Grade Level: GS-13 Hours per week: 40

# Supervisory Railroad Safety Specialist - HM, 2121

- Supervises the hazardous materials inspectors assigned to the region. Conducts performance appraisals, approves leaves, schedules, and, conducts training.
- Responsible for the technical guidance of all hazardous material activities within the region. (MA/CT/ME/NH/VT/RI/NY/NJ)
- Assists the Regional Administrator in planning and managing programs.
- Advises the Regional Administrator on unique problem areas, operating practices, chemicals, research and development, and safety and health needs.
- Provides technical guidance on the hazardous material activities within the region.
- Evaluates the allocation of inspection resources within the region, commensurable with the risks of the materials transported and shipped.
- Evaluates and critiques the reports submitted by each hazardous materials inspector for legal sufficiency.
- Evaluates and critiques hazardous materials inspectors field reports concerning railroad accidents, incidents and derailments to determine if the causal factors are appropriately identified.
- Works with the hazardous materials inspector to provide technical guidance and uniform understanding of the laws, orders, rules, and regulations concerning the transportation of hazardous materials by railroad.
- Leads and coordinates special assessments, assignments, inspections and investigations.
- Provides technical knowledge of the various chemicals and their reactivity with other chemicals under various environmental conditions.
- Provides guidance to Federal agencies, State agencies, local
- governments, railroads, chemical and container manufacturers, labor organizations and employees of these entities.
- Conducts conferences and seminars for Federal agencies, State
- agencies, local governments, railroads, chemical and container
- manufacturers, labor organizations, and employees of these entities.
- When directed by the Regional Administrator, represents FRA in claims collection meetings and in court cases.



#### **USDOT - Federal Railroad Administration**

Cambridge 7/2001 - 7/2003 Grade Level: GS-12 Hours per week: 40

#### Assistant Crossing & Trespasser Regional Manager, 2101

· Assists in the promotion of all Department of Transportation (DOT) and FRA crossing and trespasser prevention programs with state, local, and rail law enforcement agencies.

· Assists in the development of new initiatives within the Region, testing and analyzing the program viability and worth.

· Assists in maintaining contact with DOT operating administrations, the National Transportation Safety Board and state and local officials.

· Represents the FRA and the Region while participating in initiatives, studies, and surveys regarding highway-rail crossing and trespasser programs with local communities, states and the railroad industry.

#### **Boston & Maine Railroad Police Department**

North Billerica 1/1991 - 7/2001 Hours per week: 60

#### **Captain of Police**

49 CFR 207 US DOT Railroad Police Officer

- · Community Policing Unit Commander
- · Aviation Unit Commander
- · Special Investigations Unit Commander

· Wrote and secured \$225,000.00 US Department of Justice Community Policing Grant - 1st Rail Police agency in the nation to secure grant for trespass and grade crossing enforcement.

· Pan American Airlines Security Responsibilities

#### United States Air Force Reserve Command

Westover Air Reserve Base 1/1983 - 3/2000 Hours per week: 8

#### 439th Airlift Control Flight (ALCF) Superintendent (retired)

Responsible to the commander for the direction and control of all airfield activities including flight following, mission monitoring, security, NBC response alerting/detection, aircraft load planning, hazardous materials shipments, airfield conditions &lighting, pilot services, weather, Notams, parking and services while deployed to forward operating bases with no USAF support.

#### **Boston & Maine Railroad Police Department**

North Billerica 1/1989 - 1/1991 Hours per week: 60

# Frederick D. Fraini, Jr.

**Special Railroad Consultant** 

#### **Chief of Police**

Responsible to the Chairman of Board for the direction and control of a six state jurisdictional railroad police department consisting of 21 sworn police officers and an operating budget of \$1.02M. Credited with a 180-degree turnaround of department policies, direction and procedures. Resigned position because of military service activation and deployment to Saudi Arabia during the 1991 Persian Gulf War.

#### **Boston & Maine Railroad Police Department**

North Billerica 1/1987 - 1/1989 Hours per week: 60 **Captain of Police** 

· Special Investigations Unit Commander

Responsible for major crime investigations, surveillance assignments and operations, which included air surveillance operations.

· Credited with the most effective railroad burglary task force felony arrest squad in the Boston area.

· Introduced air surveillance in the prevention, detection, and,

apprehension of those engaged in criminal activity on the railroad which resulted in significant reductions in crime statistical reporting.

#### **Penn Central Railroad**

Boston 12/1975 - 1/1987 Hours per week: 40 **Patrolman** 

1975 - 1987 Penn Central / Conrail / P&W / B&M - Performed duties including K-9 officer, sergeant, department liaison officer, and lieutenant at various rail system locations throughout New England and New York.

#### **Manchester Police Department**

Manchester 1/1975 - 11/1975 Hours per week: 40

#### Patrolman

Performed duties as a police patrolman which included arrests, investigations, report writing, patrol, court prosecution, traffic enforcement, and other duties as assigned.

#### **United States Air Force**

8/1969 - 9/1975 Hours per week: 60 **Security Police** 

Active Military Police K-9 duties responsible for nuclear weapons system and base protection.