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2009 ANNUAL EVALUATION REPORT
HIGHWAY SAFETY IMPROVEMENT PROGRAM
Railway – Highway Crossing Report
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New York State Highway-Rail Grade Crossing Program
I. Program Priorities in New York

Since the federal crossing safety program’s inception in 1975, New York State has been a national leader in grade crossing safety. Our program’s primary emphasis has been on installation of full sets of active warning systems, including flashers and gates, at all appropriate public crossings in the State. As a result of this effort, New York has among the lowest crossing accident rates in the nation, even as traffic volumes on both the rail and highway system have shown significant increases.

For the past nine years, New York has placed its warning device upgrade effort on public grade crossings located on passenger and freight mainlines. An additional priority of New York’s crossing program has been reduction of the overall number of crossings in the State.

The above objectives have been borne out in the State’s crossing data: in 1975 there were over 4,000 public crossings; today there are only 2,736. Of those, over three-quarters or 2,146 are equipped with active warning devices, while 533 have passive devices only.

The occurrence of grade crossing accidents in New York continues to be relatively low: 39 from May 2008 – April 2009. Moreover, data indicate that 25 (or 64 percent) of those accidents were caused by illegal driver or pedestrian action; only one incident could be attributed to crossing characteristics which might be mitigated via capital improvements.

Consequently, we have encouraged our Regional offices to rely on broader bases than accidents alone in prioritizing new crossing project proposals and to plan pro-actively by taking broader measures to improve crossing safety and equipment reliability. New program guidelines were developed over the past three years, and these are discussed in greater detail in Part IV below.

II. Data Collection Initiatives

Since 2001, a comprehensive statewide effort has been underway to update the Federal Grade Crossing Inventory as well as to create a GIS database with photos of every crossing. The inventory continues to be about 90% complete and provides a valuable tool for data analysis and risk assessment.

The Department’s main inventory focus currently is to integrate our state data collection system with that of the FRA’s GX32 system.

A Statewide review of all passive public crossings continues to identify additional locations where an upgrade to active warning devices may be justified.
Meanwhile, remaining passive public crossing sites are being assessed for full compliance with signs and pavement markings per national MUTCD standard.

III. Reporting Year Accomplishments

During the current reporting period (July 1, 2008 – June 30, 2009), under the Section 130-funded grade crossing safety improvement program, the following was accomplished:

- 16 new full flasher and gate installations were placed into service;
- 23 full installation and/or partial upgrade projects were initiated. All projects are on freight lines.
- 25 crossing locations on the LIRR where highway traffic signal/grade crossing warning device interconnections are to be installed or improved. Construction (railroad portion) has been completed at 8 locations. For these 8 locations, the Municipal portion of the work is in design. Construction at 1 location is in progress. The remaining 16 locations are in design;
- 205 other crossings are in various stages of design, contracting, and construction improvements.

In addition, the following crossing improvement initiatives outside the Section 130 program have also taken place in New York:

- As part of the New York State Highway Improvement Program, projects were completed or are underway in which the scope of railroad work includes improvements to the warning devices at crossings and surface renewal.

- Under the same highway program, grade separation projects are being progressed that will allow for the elimination of two very hazardous grade crossings in the near future (Short Clove Rd., Haverstraw and Tissall Rd., Saugerties). In addition, the South Port Rensselaer Connector project is now under preliminary design, which will eliminate two problematic private crossings on a high speed Amtrak passenger line.

- Municipal highway improvement projects have improved warning devices and surfaces of at least 4 crossings.

- Railroad initiatives resulted in the improvement of at least 35 warning device systems, and at least 67 surface renewals.

IV. Future Direction
Our program efforts continue to be focused on six specific areas:

1. Highway-Rail Grade Crossing Interconnection with Highway Traffic Signals:

NYSDOT is seeking to have all applicable rail crossings in the State interconnected with nearby highway traffic signals and fully addressed on a prioritized basis. Attaining this goal will result in major improvements in safety, mobility and reliability and environmental conditions through the reduction of traffic delay, congestion and air quality issues. Priority will be given to crossings located on Amtrak and commuter rail line corridors.

2. Improve Pedestrian Crossing Safety:

Enhancing safety at grade crossings with high pedestrian volumes continues to be of particular concern along intercity and commuter line corridors.

NYSDOT is seeking to reduce a recent trend in pedestrian accidents at highway rail crossings, particularly on commuter rail lines. Priority will be given to crossings in close proximity to commuter rail passenger stations.

3. Mitigating Profile Deficient Crossings:

Profile deficient crossings occur where the difference in elevation of the crossing surface is significantly higher or lower than that of the approaching highway on either or both sides of the crossing. A condition is created whereby vehicles with low ground clearance (low-boy trucks, automobile carriers, motor coaches, moving vans, etc.) can be subject to scraping, bottoming out or getting stuck on the crossing surface - placing both the vehicle and train occupants at grave risk in the event of an oncoming train, including risk of possible train derailment.

NYSDOT’s priority is to identify and address profile-deficient crossings located on truck routes and Amtrak/commuter rail corridors, followed by those on main line freight corridors.

4. Update Existing Active Warning Devices/Signals at Grade Crossings:

Over 78 percent of public crossings in New York are equipped with active warning devices. At some locations, the active warning device equipment is outdated and would significantly benefit from an upgrade to state-of-the-art active warning device equipment and/or circuitry. Funding responsibility for this initiative may be shared with railroads if the crossing is already equipped with active devices.

5. Passive Public Crossing Update:
Passive crossings are those equipped with signage only, and no active warning devices. As noted above, 533 or 19 percent of public crossings in New York are passive. In the majority of these passive crossing situations, rail and/or vehicular usage is sufficiently low that installation of active warning devices is deemed not justified.

NYSDOT’s goal is to insure installation of uniform, MUTCD-compliant signage (and pavement markings where applicable) at public crossings not warranting active warning device upgrades.

6. Crossing Closure/Elimination:

Ultimately, the safest option regarding highway-rail grade crossing intersections is to eliminate or close them altogether - thereby eliminating all possibility of vehicle/train contact. Such an objective can be obtained via crossing consolidation, closure and/or grade separation.

To reduce the total number of highway-rail crossings throughout the State, NYSDOT has proposed a goal that each of its 10 Regions with highway-rail crossings closes at least one public at-grade crossing on main rail corridors every four years. Priority would be given to closure of crossings on passenger/commuter rail lines and freight main lines.

There were four at-grade crossings that were ordered to be closed from 7/31/2008 - 6/30/2009: Jay Street in Canton, Delord St. in Plattsburgh, West Pearl Street in Westfield, and Youman’s Road in New Scotland. One crossing closure (to vehicular access) was also completed in this time frame, Bayside Avenue in Oyster Bay.

V. Rail – Highway Crossing Project Metric Data

Please find attached Rail – Highway Crossing Project Metric data for New York for the 2009 reporting year.

In addition to the Section 130-funded crossing projects listed on these spreadsheets, locations where grade crossing accidents occurred during the reporting period are being addressed by current initiatives that include: long term crossing elimination projects (grade separation via Highway improvement program), closure (via regulatory action), warning device installation and/or pedestrian channelization.