
MTA Metro-North Railroad's
100-Day Action Plan



Overview

Joseph J. Giulietti assumed responsibility as President of MTA Metro-North Railroad on Monday, February 10 2014. Three weeks later, on March 3, Mr. Giulietti established a 100-Day Action Plan for the railroad. Although the action plan elements were established relatively quickly, they were identified with input from a number of different sources – both direct stakeholders and interested parties. These sources included:

- The Governors of New York and Connecticut
- Members of the MTA Board of Directors
- Elected and public officials in both New York and Connecticut
- National and Regional officials of the Federal Railroad Administration (FRA)
- Members of the National Transportation Safety Board (NTSB)
- Members of the MTA's Blue Ribbon Panel of safety experts (BRP)
- Senior Staff at MTA and Metro-North Railroad
- Active and retired employees
- Labor leaders
- Customers

These conversations were informative and, in some cases, very sobering. Overall, many of the issues identified by these constituencies could be categorized within four main areas of focus.

- Promoting a Culture of Safety – To create a culture in which safety is embedded in all decisions, actions and initiatives.
- Adopting Concrete Safety Enhancements – To develop and implement programs that guarantee safe operations and safe work practices.
- Restoring Reliable Service – To provide customers with train service that is not only safe but reliable and of a high quality.
- Improving Communications – To ensure that customers are kept fully informed as to the railroad's goals, operations and policies so that they can make informed choices when riding our service. To ensure that employees are fully informed as to the railroad's goals, operations and policies so that they can provide the best customer service possible.

As a result, these categories of improvement became the overarching goals of the 100-Day Plan. In turn, each initiative supported one or more of these four areas. In all, 32 Initiatives were established and Metro-North committed to beginning or completing all of these items within 100 days.

Metro-North can report that of the 32 initiatives identified in the action plan, 21 have been completed. Another 7 are underway. The railroad considers two to be ongoing efforts so that Metro-North will continue to challenge itself to do better; these two initiatives are "improving communication with

customers, elected officials and other stakeholders and implementing a “back to basics” plan to improve train reliability and quality. Lastly, two of the three external reviews identified in the 100-Day Action Plan – those being done by the NTSB and the MTA’S Blue Ribbon Panel -- have not yet been completed and their recommendations could not be included for implementation in this plan

Much has been accomplished during these 100 days; yet much still needs to be done. Each of these achievements is important individually, but they are also critical stepping stones on a path of continual improvement. Continued focus on safety, reliability and communication, funding and implementing investments in infrastructure, and a strategic vision for the future are essential; these are the elements required to rebuild Metro-North into an excellent railroad once more – for its customers, its employees and the region it serves.

A detailed description of the work done under each initiative follows. Each original initiative in the 100-Day Action plan is in **bold**. A checklist of the initiatives and their status is also included at the end of this report.

Improving Safety

There is no single area that has and will continue to receive as much energy and attention as improving safety. Advances are being made both in the railroad’s overall safety culture and in actual concrete safety enhancements.

A key step in this process was establishing a significant shift in the functional responsibilities of the Office of System Safety. In addition to enhancing the staff and skills within this department, the OSS will be actively supported by a more effective collaboration with all other departments on the railroad – in both the operating and non-operating disciplines. This deeper collaboration between the Safety organization and all aspects of Metro-North not only will enable more effective and systematic oversight of safety across Metro-North, but it will foster greater ownership of the overall Priority One Program by employees at all levels of the organization.

While it will take time to implement these changes and build greater safety involvement and ownership across the railroad, this plan is critical to putting Metro-North on the path to be an industry-leading safety-oriented agency.

Communication is also essential to the success of this effort. Metro-North has mounted an intensive communications effort to its employees to reinforce that nothing is more important than working safely and operating the railroad to the safest standards. Safety messages that emphasize safety statistics and safe work practices – in both static and video formats – have been posted to all employee monitors (screens on display in high-traffic areas at each employee facility). These messages are replicated in other formats to reach the largest number of employees possible. For example, daily messages are delivered via company computers every day when employees log in. Printed material is available to employees who work in the field and are away from computer terminals for most of their work week.

There are many other efforts Metro-North has either begun or completed. These efforts were detailed last

month in the railroad's response to the FRA's "Operation Deep Dive," an intense 60-day review of the railroad's safety-related processes and procedures, its compliance with safety regulations and requirements, and its overall safety culture.

In addition, although investigations by the National Transportation Safety Board continue, specific interim recommendations have been issued by the NTSB. In particular, the NTSB has recommended the installation of speed signs on the right-of-way, as well as inward/outward facing video/audio units on railcars to provide after incident analyses. Metro-North has acted on all these interim recommendations and anticipates incorporating further NTSB recommendations when that body issues its final report.

Further, in September 2013, MTA enlisted the help of track and safety experts in the transportation industry to assist in reviewing its rail operations. The report of this Blue Ribbon Panel is expected shortly, and their recommendations will be incorporated at Metro-North as well.

Lastly, Metro-North is retaining a consultant to guide and assist with establishing and maintaining a strong safety culture across the organization. Bringing in an outside perspective and expertise will help ensure that the railroad acquires the tools to remain consistent and uncompromising in communicating and pursuing safety as the number one priority.

Within Metro-North's 100-Day Action Plan, Metro-North has identified initiatives in two key areas: Promoting a Culture of Safety and Adopting Concrete Safety Enhancements. The railroad has made good progress in both areas.

Promoting a Culture of Safety

- **Recreate/reorganize the Safety Department**
 - **Create a Data Analysis Unit**
 - **Create an Incident Investigation Unit**
- **Develop a Corporate Safety Policy**
- **Review and overhaul Metro-North's System Safety Program Plan**
 - **Develop & Implement a communication & training program on the SSPP by the end of 2014**
- **Conduct Safety Stand Downs every quarter**
- **Review and improve programs to train and test employees on their application and knowledge of working safely**
- **Set up a Confidential Close Call Reporting System**
 - **Reach agreement on an Implementing Memorandum of Understanding with at least one labor organization.**

Accomplishments

Building an effective Safety organization will provide the firm foundation for the improvements Metro-North is seeking to make both programmatically and culturally. It will allow the railroad to address deficiencies, and to identify negative trends and potential hazards in the future. It will also allow the railroad to set a positive tone and continually reinforce that safety is the first priority.

To achieve these goals, and in keeping with the direction set forth by MTA Chairman and CEO Tom Prendergast, **the Safety Department has been reorganized**. First, the Safety and Security functions at Metro-North, which had reported to one person, have been separated to ensure dedicated attention to each of these important activities. Both of these department heads continue to report to the President.

In addition, the Safety Department organizational structure has been reviewed and benchmarked against the best practices of other transit agencies, including the NYCT Office of System Safety and other MTA Agencies.

To ensure a more proactive and programmatic approach to safety throughout the railroad, more resources will be devoted to creating a comprehensive Office of System Safety (OSS) that will focus on overall policy and program development, corporate risk reduction programs, and trend analysis and reporting. These elements, in concert with the work done at the local and district team level to foster and share safe work practices, will provide the nucleus for the creation of departmental Safety Action Plans and the refreshed Metro-North System Safety Program Plan.

Revised functional areas of responsibility have been established within the new organization. In addition to the **Safety Support/Data Analysis and Incident Investigation Units** identified in the 100-Day Action Plan, the office will also organize to focus on Risk Reduction (including Hazard Management), Field Operations, and Fire Safety & Emergency Management. In all, 21 new positions have been identified, bringing department staffing to 46 positions in 2014 – the largest staff dedicated to this department since the railroad's inception. A description of each unit follows.

Risk Reduction: To ensure alignment with anticipated federal regulations, this unit will have the responsibility for Hazard Identification, Hazard Assessment and Mitigation, and associated policies. Industrial Hygiene, HAZCOM, and a Chemical Assessment Team (CAST) will fall under this division. This group will also be responsible for the development and maintenance of the SSPP, as well as implementation and oversight of the Confidential Close Call Reporting Program (C3RS).

Field Operations: This unit will have two sections. The Field Officers will be responsible for evaluating system-wide compliance with safety regulations, policies and procedures, operating rules, and training programs. They will evaluate the implementation of all Departmental Safety Action Plans, and will be responsible for coordination and development of corrective action plans for the Priority One Steering Committee and the Senior Safety Committee. This group will also support the Safety Working Group meetings (Safety Committees) by providing technical guidance and support to the District and Local Teams. Joint labor/management teams will be created to perform targeted audits of personnel working on the

right-of-way, in order to evaluate compliance with roadway worker protection and other critical safety rules and procedures.

Safety Support and Data Analysis: This unit will be responsible for critical trend analysis and the development and dissemination of corporate reports to the MTA and other organizations. The data reports and trends identified by this unit will also be used to develop the work plans for the Field Operations unit and all Departmental Safety Action Plans. Specifically, required regulatory reporting for all accidents and incidents (including rail accidents) will be the responsibility of this group. All necessary documentation will be maintained in accordance with regulatory requirements and appropriate filing will be completed in a timely manner to ensure compliance as well as the capturing of industry trends for further analysis. All administrative functions in support of the OSS will be handled by this group as well.

Investigations: The Investigations unit was created to ensure that serious incidents are appropriately investigated. This includes development of thorough investigative reports to ensure impartiality and appropriate root cause analysis, as well as effective development and tracking of recommendations and corrective action plans. This group will be responsible for the investigation of all mainline and yard collisions and derailments. Any near-miss incidents involving potential employee contact with a train, customer fatalities that meet established criteria, employee fatalities, and serious employee industrial accidents will be investigated by this unit. Regulatory notifications required by any of these incidents will be made by the Investigations team, which will also coordinate with outside agencies as required. The individual departments will continue to investigate non-serious customer and employee industrial accidents, as well as suicides, in accordance with Metro-North's newly created Incident Investigation Procedure.

Fire Life Safety and Emergency Management: This unit oversees Metro-North's fire safety and prevention program, including the inspection and acceptance testing of sprinkler, standpipe, suppression, and fire alarm systems. This group also conducts investigations of significant fires. Under the purview of the Fire Marshal, safety code compliance analysis is performed for all projects, including review of plans and specifications for the design, construction, and renovation of facilities, structures, rolling stock, and equipment to ensure compliance with policies, regulatory standards, rules, and regulations. As required by federal regulation, this unit develops and facilitates emergency exercises and is responsible for developing the Passenger Train Emergency Response training curriculum, as well as delivery of training, for the 266 emergency service agencies in the territory. All coordination and development of Metro-North's emergency preparedness and contingency plans, as well as joint planning efforts with local and regional emergency management agencies, will be the responsibility of this unit.

A new **Corporate Safety Policy** clearly identifying the authority of the Safety Department has been developed, distributed and incorporated into Metro-North's corporate policies and procedures.

A new **System Safety Program Plan (SSPP)** has been developed. It has been shared with the FRA and has been reviewed and approved by the New York State Public Transportation Safety Board (PTSB). To make this document the core of Metro-North's safety program will require continuous evaluation and enhancement, especially when new federal regulations, which are being developed now, are finalized.

Nonetheless, Metro-North will train to this current plan by the end of the year.

Corporate **Safety Stand-Downs** are a means to provide consistent messaging to employees and allow them to provide feedback. This feedback is tracked and supervision is able to act on the issues raised. Themes and trends are tracked and appropriate actions taken. During 2014, Metro-North has held three Corporate Safety Stand-Downs; additionally, a number of smaller, department-focused meetings have been held at work locations throughout the railroad.

Testing and training employees on safety critical rules is not only a vital part of ensuring that employees know and can apply these rules correctly; it is also federally regulated. In an enormous undertaking, Metro-North partnered with the FRA to conduct a complete review and rewrite of the required Operational Test and Evaluation Program. In addition, the railroad developed a new training program for supervisory employees who conduct these tests. The new program combines complete compliance with regulatory requirements while ensuring that it is a useful tool for employees and supervisors to ensure knowledge and competency.

Beyond meeting this critical goal, Metro-North has also made further strides in improving and establishing other training programs that are critical to ensuring safe operations and strengthening our safety culture:

- Metro-North has benchmarked both the Roadway Worker Safety and Blue Signal training programs against other passenger railroads, and will have initial improvements to these programs ready for rollout in the next few weeks. Further improvements in these areas are already underway or planned, such as establishment of a "Supervising for Blue Signal" program.
- A plan has been established for reviewing and evaluating all operations training programs, with a focus on safety. This will be an ongoing effort, working toward a regular review cycle for all programs.
- The role of the Training & Development Department has been enhanced, to ensure effective coordination and oversight of training programs across Metro-North.
- Metro-North has developed and begun rolling out a new "Supervising for Safety" course in safety leadership -- another important step toward improving safety culture. This full-day program provides supervisors at all levels and within all departments of the organization with tools and strategies to manage for a strong safety culture, including modeling and encouraging effective peer-to-peer safety communications, holding interactive job safety briefings, and more.

Metro-North continues to work with its labor organizations and the FRA to **implement the FRA's Confidential Close Call Reporting System**. This is a voluntary, non-punitive approach for employees to report certain incidents and close calls, anonymously to a third party. This data is then analyzed by a peer review team so that corrective actions are developed. Terms have been agreed to among the railroad, one labor organization, and the FRA for the first Implementing Memorandum of Understanding; signatures on the IMOU, as well as submittal and approval of regulatory waivers with the FRA are pending.

Adopting Concrete Safety Enhancements

- **Implement the findings and recommendations from external reviews**
- **Work with the NTSB to comply with recommendations to install inward/outward facing cameras in train cabs**
- **Complete implementation of the Enhanced Employee Protection System**
- **Complete Maintenance of Way Department reorganization**
- **Develop a corrective action plan to implement recommendations from the final TTCI report**
- **Implement the requirements of FRA's Emergency Order 29, including**
 - **Signal System modifications at 5 critical curves and 5 movable bridges**
 - **Installation of "alerter" devices on the M-3 and coach fleets by the end of the year**
- **Begin to institute procedures to identify and mitigate operational risks**
- **Ensure independent third-party review of plans for crucial maintenance projects to minimize risk to Metro-North's ability to service its customers**

Accomplishments

There are three significant external reviews of Metro-North being conducted by outside experts. Of these, the **FRA's Operation Deep Dive** has been finalized and recommendations provided to the railroad. The reforms touch virtually every aspect of Metro-North's operations. Among the key overarching actions, Metro-North is engaging in comprehensive outreach to ensure that all employees understand that safety is the foundation of the railroad, and its undisputed first priority. More than 60 experts comprising 14 teams from the FRA conducted the 60-day comprehensive safety assessment. The review analyzed Metro-North's safety-related processes and procedures, its compliance with safety regulations and requirements, and its overall safety culture. The report recommended or directed Metro-North to take more than 27 specific actions within eight categories: track safety, railroad operating rules, qualification and certification for engineers and conductors, workplace safety, train control systems, blue signal protection for employees, Operations Control Center, and track worker fatigue. Out of the 27 actions detailed in the report, Metro-North has completed 14, is progressing on five, and for eight has developed a training strategy, already underway.

The Metropolitan Transportation Authority created a **Blue Ribbon Panel** of distinguished railroad and transportation experts to examine maintenance and inspection programs at Metro-North, Long Island Rail Road and the New York City Transit subway system. It's evaluating each agency's focus on promoting an effective safety culture. The final report is expected shortly and Metro-North will implement any recommendations not already addressed.

Metro-North continues to work with the **NTSB as it conducts its ongoing investigations**. Although a consolidated report is not expected until later this year, improvements are implemented as they are identified. For example, the NTSB issued an interim recommendation for the installation of speed signs identifying areas of speed reduction; this initiative is currently underway. In addition, recommendations were issued to **evaluate and install inward and outward facing audio and video recording devices in**

trains. In March, Metro-North asked for and received approval from its Board to issue a Request for Proposals from vendors to install these devices. Once proposals are received and evaluated and a vendor/design is selected, a prototype will be installed. This is a joint process with Metro-North's sister agency, the Long Island Rail Road.

Implementation of an industry-leading system to improve protection for employees working on tracks – the **Enhanced Employee Protection System (EEPS)** -- was completed at the end of February. This system puts the key to removing tracks from service and restoring tracks to service in the hands of the person who is working on those tracks. When a track is removed from service, the system issues a random, confidential, computer generated code to the roadway worker in charge. When it is time for the track to be returned to service, this code must be communicated by that same person to the rail traffic controller. The RTC must then correctly enter that code into the system before trains can enter the area.

Through all of the completed and ongoing reviews, it became apparent that there was a critical shortage of engineers and other supervisory/managerial employees in the Maintenance of Way department. This resulted in Metro-North ordering a complete review of the **Maintenance of Way organization**. Thirty-three new jobs were identified and established. Recruiting and hiring to fill these additional jobs has been fast-tracked. As hiring progresses, the organization will continue to be reviewed by Metro-North's newly-hired Vice President of Engineering to ensure sufficient staffing to meet the railroad's maintenance needs as well as any new initiatives that may arise.

In 2013, Metro-North contracted with **Transportation Technology Center, Inc. (TTCI)**, the internationally renowned research arm of the Association of American Railroads, to conduct a comprehensive review of its Maintenance of Way department structure, processes and practices. While the final report from TTCI is still pending, Metro-North has been working closely with TTCI's experts and anticipates receipt of the final report imminently. TTCI is breaking their recommendations into three classifications of varying urgency. "Recommended Immediate Actions" are recommendations that should be considered for addressing as soon as possible. "Short Term Considerations" are recommendations that may be beneficial to consider, but not necessarily in an urgent manner. "Other Beneficial Considerations" are recommendations that may be beneficial for efficiency. In advance of receipt of the final report, Metro-North has either begun implementation or fully implemented 13 of the 23 expected Recommended Immediate Actions, 9 of the 15 Short Term Considerations and 10 of the 27 Other Beneficial Considerations. Some examples of the Recommended Immediate Actions implemented thus far include:

- Periodically perform track inspections from each main line track in multi-track territories.
- Record which track is occupied for inspection in multi-track territories.
- Review policies related to the tools that track inspectors must carry.
- Ensure that rail defect testing is performed within the minimum time cycles required by the FRA, MW-4 and MNR practices.
- Implement the regular use of Gage Restraint Measuring (GRMS).

Another series of improvements to Metro-North operational safety was mandated in December 2013 when the FRA issued Emergency Order #29 (EO29). EO29 required Metro-North to create and comply with an FRA-approved action plan. Not only did Metro-North quickly provide this action plan, but is well on its way to completing all items identified for completion. Two key requirements/commitments under EO29 were included in the 100-Day Action Plan, specifically:

- **Signal modifications at critical locations to enable systems on-board the train to enforce speed limits automatically.** Modifications to five critical curves were completed by February 8, and signal modifications to five movable bridges were completed by May 1. All modifications enforce speed limits at those locations.
- **Installation of “alerter” devices on the M-3 and coach fleets by the end of the year.** A design has been completed and installation has begun on the M-3 cars. A robust testing program has been developed and is now underway to ensure these units are working as intended.

An interim process has been implemented to **mitigate operational risks associated before beginning projects** and to **ensure independent third-party review** for crucial maintenance projects to minimize risk to Metro-North’s ability to serve its customers. These processes have been used successfully on power upgrade projects at Cos Cob and Mount Vernon, as well as relocation of a massive air cooling system on the roof of Grand Central Terminal.

In the long term, these risk analyses will be performed through a **Hazard Assessment Program** described as part of the new Office of System Safety (OSS). The framework for this program is being developed to ensure a consistent approach to identifying potential hazards that can cause unsafe conditions so they can be prevented or mitigated appropriately. The program will be managed by the newly-established Risk Reduction Unit in the OSS.

Restoring Reliable Service

- **Conduct a detailed study of New Haven Line train performance to develop a dependable schedule by May 11**
- **Finalize the 2014 track maintenance program**
- **Implement a “back to basics” plan in the Operations Division**
- **Establish a technical working group to identify and implement a fix for the malfunctioning grade crossings on the Danbury Branch (with Connecticut DOT)**

Accomplishments

When Metro-North implemented speed limit enforcement actions in response to EO 29, there were concurrent impacts to the running times. The biggest impact occurred on the New Haven Line, which has more than twice as many locations affected by these changes than on the Hudson and Harlem Lines combined. In addition, Metro-North wanted to ensure that its schedules adequately accounted for infrastructure changes, ensured appropriate track outage windows for maintenance and major construction

projects, addressed as many customer requests as possible, and ensured compliance with Metro-North service guidelines.

With an eye toward identifying mitigations for these running time increases, Metro-North conducted a **detailed study of New Haven Line train performance and schedules** to determine how to improve reliability. This in-depth review revealed a number of actions that could be taken to improve reliability and offer customers a train schedule that would meet their needs, and that could be operated safely and reliably without reducing the overall number of trains.

As a result of this review, a schedule change on Metro-North's East of Hudson lines went into effect on Sunday, May 11, 2014.

Unfortunately, it has been difficult to evaluate the effectiveness of this new schedule. The day before it was put into effect, a fire at a major switching control point created operating constraints in the Cos Cob area. Further, three disruptions occurred as a result of failures with antiquated movable bridges – twice at the 118-year-old bridge at South Norwalk (the "Walk" Bridge) and once at the 109-year-old bridge between Milford and Stratford (the "Devon" Bridge). Lastly, a contractor working on the tracks improperly operated a crane and tore down catenary wire – the power source for New Haven Line trains – in the Greenwich area.

Nonetheless, Metro-North has been monitoring its service and has considered input from train crew observations, customer feedback, and actual customer counts to continue to improve schedules. As a result, minor changes to a handful of morning rush hour trains on the Harlem and New Haven Lines have been identified and are being implemented in phases. These minor changes are designed to reduce crowding and enhance connections.

As of June 2, cars were added to seven AM Peak New Haven Line trains and three PM Peak New Haven Line trains to reduce crowding. On Monday, June 9, the first Waterbury train will be extended from Bridgeport to Stamford, providing better intra-state service as well as a better connection to points west. The remaining refinements will take effect July 7.

With respect to continuing essential track work, on May 9, Metro-North **completed a comprehensive track reconstruction effort that began in July 2013 in the Bronx**, in a six-mile stretch between Melrose and Tremont on May 9. This resulted in safer and more reliable service for customers, as well as improved operating speeds. The project began out of an intensive focus on track safety, which led to rigorous inspections using the most advanced rail inspection technologies, including Ground Penetrating Radar (GPR) and Track Loading Vehicle (TLV) data. Completion of this work, allowed us to lift speed restrictions on these tracks prior to implementation of the new May 11 schedule.

The May 11 timetable also took into account any impacts resulting from the **2014 track maintenance program**. This program is planned to continue through the summer, and work will be performed largely during the mid-day off-peak, late night and weekend time periods. Key elements of the maintenance plan are:

On the Harlem Line, track and drainage improvements, as well as installation of new switches, will be done between Harlem-125th Street and Melrose.

On the Hudson Line, track and drainage improvements are scheduled between Riverdale and Tarrytown, necessitating the use of bridgeplates. (Customers were given instructions about boarding and exiting trains safely using bridgeplates.)

On the New Haven Line, track enhancements, including cyclical tie replacement and resurfacing of the track bed, are planned between Larchmont and Bridgeport; weekend switch replacement will occur between Harrison and Bridgeport; and there will be installation of new bridge timbers on Walk and Saga Bridges, as well as replacement of bridge timbers on the last of four tracks on the Harlem Lift Bridge.

Developing and implementing an effective track maintenance program is an essential element of the **Operations Division's "back to basics" program**. By concentrating on the basics of good railroading, which has, as its cornerstone, operating a dependable service in the safest manner possible, Metro-North intends to work toward achieving a "best in class" status. The railroading basics include:

- The safety of the operation is paramount
- Employees adhere to rules governing safe operation
- Each train is clean and well-maintained
- The right-of-way is well-maintained
- Each train leaves its originating terminal on time
- All employees are well-trained and knowledgeable about their duties and responsibilities – with respect to both operating the service and providing customer assistance
- Communicating to customers and with each other is essential

Although the program has been adopted, Metro-North considers its implementation to be ongoing.

Earlier this year, it was discovered that the newly installed signal system on the Danbury Branch – which had allowed for increased train service – instead resulted in an unintended negative consequence. The new technology train detection system that controls the closing of crossing gates would also cause the crossing gates to activate when no trains were approaching – bringing car and pedestrian traffic to a halt in these communities. To maintain safe train movements, Metro-North and Connecticut DOT quickly established a requirement for trains to completely stop before entering each affected crossing and then proceed at 15 mph. To account for this reduced speed, a temporary service plan was put into effect on the Danbury Branch, and Danbury Branch tickets were cross-honored on the Harlem Line.

A **Technical Working Group** was assembled to identify root causes and develop corrective actions for these Danbury Grade Crossing issues. The working group is comprised of representatives from Connecticut DOT, Metro-North, and a third-party consultant specializing in signal installations. Efforts were coordinated with the contractor for the signal project, Alstom, and their supplier of the Grade Crossing Predictor, Siemens, to help expedite a solution. The team has identified short-term modifications for each of the 11 grade crossings on the Branch. These modifications have already been applied to 9 grade crossings. Work on the

remaining 2 is expected to be completed in time for the July 7 schedule modification.

Improving Communications

- **Hold 6 informal meetings in outlying stations and in Grand Central Terminal**
- **Make the Contact Us button on the web site easier to find and use**
- **Improve availability of train information at stations with the use of LCD monitors**
- **Develop a project plan with Connecticut DOT to install similar LCD monitors at New Haven Line stations in Connecticut**
- **Provide additional information to customers and legislators on the status of Metro-North programs**
- **Implement a comprehensive service disruption operating plan for Grand Central Terminal to improve communication to customers**

Accomplishments

Making good on a pledge to increase openness and transparency, Metro-North held **six informal outreach meetings at Grand Central and outlying stations** in an effort to engage customers in a dialogue with senior management of the railroad and to listen to customer comments and suggestions.

The following sessions were held:

1. March 26, Grand Central Terminal's Main Concourse from 4 p.m. to 6 p.m.
2. April 3, White Plains Station entrance lobby from 5 p.m. to 7 p.m.
3. April 10, Stamford Station across from the Ticket Office from 5 p.m. to 7 p.m.
4. May 1, Grand Central Terminal, Main Concourse from 7 a.m. to 9 a.m.
5. May 6, Croton-Harmon Station, near the ticket office, north overpass from 5 p.m. to 7 p.m.
6. May 14, Harrison Station on the eastbound platform from 5 p.m. to 7 p.m.

Metro-North senior management also participated in an April 24 customer forum at the Westport Station that was sponsored by the Connecticut Commuter Rail Council. Furthermore, the Mayors of White Plains, Stamford, Croton-On-Hudson and Harrison attended these forums and provided input on behalf of their constituents regarding Metro-North service and initiatives.

Going forward, Metro-North commits to conducting customer forums on an ongoing basis to continue breaking down barriers between Metro-North and its customers.

To ensure that Metro-North advances its goals in safety and service, increasing efforts to engage employees is essential. Although not specifically listed as an initiative in the 100-Day Action Plan, Metro-North's

President visited five of the railroad's biggest work locations in Croton-Harmon, Highbridge, New Haven, Stamford and Grand Central Terminal. He talked to employees about the importance of safety, asked them for their input and listened to their concerns. The importance of this effort cannot be overstated and it will be an ongoing practice of the President and his senior team.

Making the "Contact Us" button on the Metro-North web site easier to find and use was completed immediately upon the development of this 100-Day Action Plan. The icon was improved and is now more prominently displayed on the web site, providing easy and direct access for customers to contact Metro-North with any comment or concern – whether by email, phone or mail. Metro-North is also making this button available to other stakeholders, to expand the opportunities for customers to communicate with the railroad.

For customers at stations, the availability of real time train information becomes an important part of Metro-North's service delivery. Currently, 13 stations have **LCD monitors providing real-time information**. These monitors have been well-received by customers, and Metro-North is committed to further expanding the rollout of real-time train status information at all 71 New York State stations.

For 2014, initial installation work is complete at 4 stations, and the railroad is on schedule to rollout real time information monitors in the third quarter at Rye, Scarsdale, Mount Vernon West and Crestwood. Six stations (Marble Hill, Ossining, Southeast, Hartsdale, Bronxville, and Mount Vernon East) will also see LCD monitors with train status in the fall. The remaining 3 stations (Harrison, Spuyten Duyvil, and Pelham) will have monitors installed by the end of 2014. The program will continue through 2020, with 5 to 10 stations to be completed each year until the installation project is concluded in 2020.

Furthermore, Metro-North has worked with Connecticut DOT to **develop a plan to expand real-time train information LCD monitors to Connecticut stations**. Connecticut DOT is developing an implementation plan that will prioritize each station. Improvements are already underway at the major stations of New Haven, Bridgeport and Stamford. New Haven should be fully operational this summer, and Bridgeport and Stamford will follow in 2015.

Metro-North has developed several new ways to **improve the lines of communication between the railroad, its customers and elected officials**. The railroad considers this initiative to be an ongoing effort, and is continuing to look for ways to improve and expand outreach.

Metro-North provides targeted information to customers through its web site, email alerts, social media, and notices distributed on trains regarding projects that affect service delivery. For example, information has recently been provided on track maintenance work, the May 11 schedule change, safety improvements, the New Haven Line Catenary project and the Greenwich switch control house fire.

To increase its digital presence, Metro-North created an on-line version of *Mileposts*, the railroad's monthly newsletter which provides customers with easy access to news and other information. Printed copies are still available at Grand Central Terminal and at select stations. Metro-North has also established the "Safety

Tweet of the Week” – tips sent to customers via Twitter on how to use the railroad safely.

Everything that is distributed to customers is also distributed to elected officials, to help keep them informed of Metro-North’s initiatives and projects. For Connecticut issues, Metro-North also communicates and coordinates information with Connecticut DOT government affairs staff including bi-weekly coordinating discussions. Lastly, the railroad commits to establishing annual briefings with its federal/state delegations in both New York and Connecticut to provide updates on Metro-North programs and initiatives.

Communication during service disruptions is critical especially at stations and in Grand Central Terminal. Both the Grand Central Terminal and the Customer Service and Stations departments have established a network of employees who can be dispatched at a moment’s notice to provide much-needed -- and appreciated -- customer assistance during disruptions.

Customer feedback confirms the high value placed on face-to-face, personal customer assistance during disruptions. As a result, Metro-North is expanding its efforts in that area, establishing a comprehensive Station Terminal Auxiliary Responders (STAR) program. This program is designed to augment staff at Grand Central Terminal and outlying stations on all lines and branches. STARs are employee volunteers who will be deployed during service disruptions to provide additional customer assistance and information at impacted locations. STARs will be given gear so that customers can readily identify them, making them highly visible and accessible to customers.

Next Steps – Beyond the First 100 Days

Metro-North has made important strides in the past 100 days, including concrete accomplishments in safety and safety culture, service reliability, and communications. But as noted throughout this report, these steps are only the beginning. As important as these accomplishments are in themselves, they are also critical stepping stones, laying the foundation for continual improvement.

In the future, Metro-North will continue to build on these efforts, making even further progress in the following areas:

Safety

- In addition to pursuing concrete improvements in safety procedures and practices, the railroad’s safety culture must continue to be strengthened. Safety must be the undisputed highest priority for each and every individual, at every moment. This includes continuing to strengthen both the Safety and Training organizations and programs, relentlessly communicating the importance of safety, and leveraging all these initiatives with a safety culture consultant to ensure effective leadership in this area throughout Metro-North.
- To further reinforce that safety is Metro-North’s first priority, the railroad’s president will visit each major work location during every tour of duty, at least once before the end of the year. Metro-North’s commitment to safety will be demonstrated from the top down, and communication about

this important initiative will be encouraged from the bottom up.

- Another key source of guidance will be the recommendations received in upcoming reports from the National Transportation Safety Board and the MTA's Blue Ribbon Panel. Any new recommendations and initiatives will be incorporated into the ongoing work plans.

Infrastructure

- Metro-North must maintain its infrastructure and rolling stock to the highest standard, for both safety and reliability.
- This requires not only ensuring that Metro-North has established the appropriate inspection, maintenance, and replacement plans, but also that the railroad has the necessary resources to carry them out effectively.
- The ramifications of infrastructure deterioration are significant, and examples of the consequences are not difficult to find. Within the last two weeks, there have been three failures of two movable bridges on the New Haven Line in Connecticut. These failures resulted in extended service disruptions to both the New Haven Line and Amtrak's Northeast Corridor. Both of these bridges are over a century old and require major investment if they are to remain operational. A similar condition exists in New York at the Harlem River Lift Bridge.
- As a result, it is critical to ensure ongoing funding – not only for Metro-North's operating budget, but also for its Capital needs in both New York and Connecticut. In New York, MTA is preparing its next 5-year capital program, with the intention of submitting its plan to the legislature on October 1. Strong, stable funding of a multi-year Capital Program is absolutely necessary to enable Metro-North to maintain and improve its assets. Additionally, Connecticut's Governor and Congressional delegation have pledged support to try to secure federal funding for their state's investment needs.

Strategic Vision

- Two themes dovetail in all of the efforts outlined in this report: Safety as Metro-North's top priority, and culture change as the key step to achieving and maintaining this goal. True culture change is a long-term endeavor, and requires consistency of vision and message. Therefore, to bring together all of these efforts into a united framework, the railroad will establish a renewed multi-year strategic vision and business plan, outlining the strategies that will enable continuous improvement in safety, reliability, customer service, and communications.

Metro-North is fully committed to pressing forward on all of these fronts, while maintaining a relentless focus on safety for customers, employees, and neighbors. The railroad has only begun the work to return Metro-North to "best-in-class" status. Thus, while the 100 Days covered by this plan have concluded, the work, and the commitment, will continue far beyond.

100-Day Action Plan Checklist

Promoting a Culture of Safety	Status of Action Item			
	Action Item	Completed	In-Progress	Ongoing
Recreate the Safety Department so that its sole focus is developing, implementing and enforcing safety policy and initiatives. This reorganization will be completed by June 1 and will include further development of the following new units:				
A Data Analysis Unit to support decision making. Negative trends can be identified and improved and positive trends can be expanded.				
An Incident Investigation Unit to lead investigations into the root causes of accidents/incidents and monitor corrective actions/status of recommendations. This group will work closely with subject matter experts from the Operations Division.				
Develop a new Corporate Safety Policy clearly articulating the importance of Safety and identifying the roles of each department in reestablishing Safety as Priority One.				
Review and completely overhaul MNR's System Safety Program Plan (SSPP) by June 1.				
Develop and implement a communication and training program for all employees on the SSPP by the end of the year.				
Conduct "Safety Stand Downs" every quarter. These conversations about safety encompass employees at all levels of the organization at every work location, during every tour of duty.				
Review and improve programs to train and test employees on their application and knowledge of operating safely.				
Continue to work with the FRA and Metro-North's labor organizations to set up a Confidential Close Call Reporting System, a measure that allows employees to anonymously report safety concerns without fear of reprisal.				
Metro-North is the first railroad to agree to implement this program throughout its operation and anticipates successfully negotiating the required Implementing Memorandum of Understanding (IMOU) with the FRA and at least one labor organization by June 1.				

Adopting Concrete Safety Enhancements		Status of Action Item		
Action Item		Completed	In-Progress	Ongoing
Implement the findings and recommendations from external reviews:				
	FRA Deep Dive			
	MTA Blue Ribbon Panel	Awaiting report		
	NTSB Investigations	Awaiting report		
Work with the NTSB to comply with recently issued recommendations to install inward and outward facing cameras in train cabs, to more closely monitor both train speeds and engineers.				
Complete implementation of the Enhanced Employee Protection System (EEPS). This industry-leading system developed in-house significantly increases the safety of workers on the tracks. It involves issuing a random, confidential, computer-generated code to a worker on the tracks. When it is time for the tracks to be returned to service, this code must be communicated by the track worker to the train dispatcher and correctly entered into a computer system before trains can enter the area. This program will be completed by May 1.				
Complete Maintenance of Way Department Reorganization; hire and train sufficient personnel at all levels to ensure proper management oversight as well as sufficient staffing to perform the work.				
Develop a corrective action plan to implement recommendations that are identified in the final report from TTCI. The action plan shall indicate all required actions, schedule to implement and personnel responsible for implementation. Plan to be developed within 4 - 6 weeks of receipt of Final Report.				
Complete implementation of the requirements of the FRA's Emergency Order 29, issued on December 8, 2013. These requirements include:				
	Completion of signal system modifications at critical locations to enable systems on-board the train to enforce speed limits automatically. Five critical curves are located in Spuyten Duyvil, Yonkers, White Plains, Bridgeport, and Port Chester. Signal system modifications for these curves were all completed by February 8, one month ahead of schedule. Signal modifications have also been identified for the five moveable bridges on the New Haven Line located in Cos Cob, South Norwalk, Westport, Bridgeport and Milford in Connecticut. "Peck" Bridge in Bridgeport is completed. The remaining four modifications will be completed by May 1, four months ahead of schedule.			

<p>Installation of "alerter" devices on the M-3 and coach fleets by the 4th Quarter. Alerters are designed to ensure that engineers remain responsive. These two older fleets are equipped with a feature requiring an engineer to apply constant pressure to a hand- or foot-activated switch. By the end of this year, all older equipment without alerters will be either retrofitted to include them, or replaced with new equipment that includes alerters.</p>			
<p>Begin to institute procedures to identify and mitigate operational risks associated before beginning projects. This effort will include contracting with a consultant to assist in developing a decision-making framework.</p>			
<p>Ensure independent third-party review of plans for crucial maintenance projects so as to minimize risk to Metro-North's ability to serve its customers.</p>			

Restoring Reliable Services	Status of Action Item		
Action Item	Completed	In-Progress	Ongoing
<p>Conduct a detailed study of New Haven Line train performance and running times to develop a dependable schedule. This study will take into account the impact of condition of the infrastructure and the impact of additional measures to improve safety. It will also look at train performance at key intermediate stations and adjust train schedules as needed to improve mid-line reliability. Adjustments will also be made to the Harlem and Hudson Line schedules for proper sequencing at key junctions and at Grand Central Terminal. Phase one of the review will be completed in time for the May 11 schedule change. Additional studies and modeling will be completed in time for subsequent schedule changes.</p>			
<p>Finalize the 2014 track maintenance program, including a plan to complete ongoing track work in the Bronx by March 31.</p>			
<p>Implement a "back to basics" plan to improve train reliability and the quality of train service delivery. Every aspect of our operation from how we maintain infrastructure and railcars to how we operate each train will be reviewed and will have targets for improvement.</p>			
<p>In conjunction with ConnDOT, establish a technical working group to identify and implement a fix for malfunctioning grade crossings on the Danbury Branch.</p>			
<p>The working group has begun its review and, once corrective actions are identified, they will be implemented as soon as possible.</p>			

Improving Communications	Status of Action Item		
	Action Item	Completed	In-Progress
Create additional opportunities for two-way dialogue between MNR and its customers. Hold a minimum of 6 informal meetings in outlying stations and in Grand Central Terminal during the 100-day period.			
We have already made the "Contact Us" buttons on the Metro-North web site easier to find and use.			
Improve availability of real time train information at stations. LCD monitors will be installed that will utilize the in-house developed Train Time System to display the next nine trains to arrive at that station, what stops the train will make, train status (whether it's on time or late and if it's late, how late) and what track it will be on. In 2014, nine stations will be added to this program (Marble Hill, Ossining, Southeast, Hartsdale, Bronxville, Mount Vernon East, Harrison, Spuyten Duyvil, Pelham) and four existing stations will see monitors (Rye, Mount Vernon West, Scarsdale, and Crestwood). Currently, this program provides for Metro-North to continue to install monitors at New York State stations through 2020.			
Develop a project plan with ConnDOT by June to install similar LCD monitors at New Haven Line stations in Connecticut.			
Provide additional information to customers and legislators on the status of Metro-North programs through any and all means (both printed and electronic), especially those programs that affect service delivery.			
Implement a comprehensive service disruption operations plan in Grand Central Terminal to improve communication to our customers during service disruptions. This plan includes re-establishing the Management Emergency Response Team - Metro-North employees who are available and clearly identified so that customers can get ready answers to questions. Program will be implemented by April 1.			