



STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546



Office of the
Commissioner

An Equal Opportunity Employer

**Testimony of James P. Redeker
Commissioner, Connecticut Department of Transportation
U.S. Senate Committee on Commerce, Science and Transportation
Subcommittee on Surface Transportation and Merchant Marine Infrastructure, Safety,
and Security
June 19, 2013**

Good morning Senator Blumenthal, Ranking Member Blunt, and Members of the Subcommittee. I am Jim Redeker, Commissioner of the Connecticut Department of Transportation (CTDOT). I am also the current Chair of the Northeast Corridor Commission. I am honored to have the opportunity to discuss passenger and freight rail safety on the Northeast Corridor and in particular, on the rail lines within the State of Connecticut.

Connecticut's Rail Infrastructure and Investments

Connecticut's rail freight and passenger system is strategically located between New York City and Boston. There are numerous freight railroads, ranging from a large Class 1 railroad to shorter regional and local railroads. There are also three passenger rail operations; the New Haven Line (NHL) commuter service operates between New Haven, Connecticut and Grand Central Terminal in New York City with connecting branches to New Canaan, Danbury, and Waterbury; the Shore Line East (SLE) commuter service which operates between New Haven and New London; and Amtrak intercity passenger service provided along the Northeast Corridor (NEC) between Washington and Boston, and the inland route between New Haven and Springfield, Massachusetts.

The State of Connecticut has a unique role on the NEC, since the State owns 46 miles of the NEC infrastructure between New Haven and the New York border as well as three branch lines. In total, Connecticut owns 235 track miles on the NEC and the three branch lines.

As the owner, Connecticut has invested significant state and federal resources to upgrade the rail infrastructure, including track, catenary and bridges. Connecticut has funded the complete replacement of 405 New Haven Line electric passenger vehicles and the construction of related new maintenance facilities to support that fleet. As a result of the State's investment, progress toward a State of Good Repair has been strong. It is important to note that the Connecticut portion of the NEC is not part of the Amtrak capital program. As a result, almost all of the funding for the infrastructure is solely a state responsibility. In the last 10 years, Connecticut has invested over \$3.2 billion in the NHL, while Amtrak has invested \$64 million in track-related. Of the \$3.2 billion, two-thirds, or over \$2 billion has been funded by state bond funds,

while the remainder is Federal Transit Administration rail formula or discretionary funding.

Despite the progress, there is an estimated \$4.5 billion backlog in critical State of Good repair needs that have to be addressed in the near-term. Included in this backlog are catenary replacement, four major moveable bridges between Greenwich and New Haven as well as numerous fixed bridges on the line. The State has invested substantial dollars over the years to maintain these bridges in order to meet the demand for passenger and freight service on one of the most heavily traveled rail lines in the country. A critical priority is replacement of the cab signal automatic train control system; while this system is extremely effective, it must be upgraded. This occurs at the same time as the implementation of Positive Train Control (PTC). PTC requirements present both financial and implementation challenges. CTDOT continues to work collaboratively with MNR to advance this effort by the 2015 deadline. I should note that PTC is estimated to cost CTDOT \$130 million in addition to the cab signal upgrades, and that will impact our ability to maintain the pace of SOGR normalized replacement of assets as well as desired capacity improvements.

Northeast Corridor Infrastructure and Investments

Connecticut is not alone in addressing the backlog of SOGR investments. The NEC relies on over 1,000 bridges and tunnels, many of which were constructed over a century ago and are in desperate need of replacement or repair. Key segments of the NEC are operating at or near capacity, such as the Hudson River Tunnels between NY and NJ, which carry over 70,000 riders daily and have no space for additional trains during rush hour. Major components of the NEC's electrical and signaling systems date back to the 1910's, making service on the line highly susceptible to malfunctions and delay. Major investment in the Corridor is essential to reduce delays, achieve a state-of-good-repair, and build capacity for growth. In 2010, the NEC Infrastructure Master Plan (Master Plan) estimated that the Corridor required approximately \$2.6 billion in annual expenditures over twenty years (\$52 billion total) in order to achieve state-of-good-repair and build infrastructure capable of supporting passenger rail demand forecasts for 2030. Investment levels over the past several decades have been critical in supporting the NEC's enviable record of continuous safe operation but have barely covered the costs of normalized replacement of basic components. They fall far short of the levels needed to address repair backlogs and meet future needs. The NEC Commission is currently in the process of developing an updated capital investment plan for the NEC that will address the needs of freight, commuter and intercity services. A copy of a report entitled, "Critical Infrastructure Needs on the Northeast Corridor" is available on the NEC Commission website at www.nec-commission.com. The Commission is scheduled to complete the capital plan by the end of this year.

Safety of Connecticut Rail Operations

Turning to operations and maintenance of the NHL, CTDOT has an operating agreement with the Metropolitan Transportation Authority's Metro-North Railroad (MTA/MNR) to operate the NHL. This agreement assigns responsibility to MNR for maintenance of rail facilities including track, bridges, culverts, power and signals, and rolling stock. AMTRAK is responsible for maintaining the infrastructure they own and provides those services as part of the operating agreement CTDOT has for Shore Line East service.

Metro-North's track inspection programs are designed to comply with all relevant Federal guidelines and standards. All track is visually inspected twice each week. All bridges are inspected annually. Track inspectors are trained to identify deviations and defects. Critically, they have the authority and responsibility to take immediate action, if necessary, such as reducing train speeds or taking the section of track out of service entirely. In addition to defects that require immediate action, FRA guidelines and standards require track inspectors to make note of ANY deviations to the basic track structure. These other types of deviations are noted so that there can follow-up – either by programmed maintenance or in the next visual inspection. MNR also inspects the right-of-way with specialized equipment (track geometry car/Sperry Rail Car) twice a year – exceeding FRA requirements.

Federal track safety standards also identify requirements for the qualifications of inspectors. All of MN track inspectors are qualified foremen, possessing a higher level of experience and knowledge so that they can accurately detect deviations from track standards.

I would also note that MNR is in compliance with all provisions of the Rail Safety Improvement Act of 2008 that have had program implementation dates established. There are elements of RSIA – such as PTC – that are still in process, but we are in compliance with the interim deadlines required under the Act.

Employee Safety

With regard to employee safety, Metro-North has worked to completely transform the safety culture throughout MNR over the past two decades. As a result, there has been a drastic reduction of FRA reportable employee injuries from 1,000 per year in the early 1990s to the current, sustained annual average of below 200 per year since 2008 (a reduction of 500%). MNR was the last recipient of the MTA Chairman's Safety Award (2011) for its stellar safety record amongst the MTA family.

In 2011, the American Public Transit Association (APTA) conducted an audit of the MNR System Safety Program Plan (SSPP) which resulted in the following commendation, "APTA commends the management staff at MNR for its commitment and openness to further improve its system safety and security programs. MNR has clearly demonstrated that the safety and security of its customers and employees are its first priority. This open commitment to improving safety and security provides an excellent foundation for a proactive safety and security culture that is ultimately supported by all employees. APTA supports this proactive management approach to continuous improvement in the areas of safety and security performance." Moving forward, MNR will continue to focus on customer and employee safety as the railroad's top priority.

Recent Derailment and Employee Fatality

Despite an excellent safety record and maintenance efforts, MNR experienced two safety events this May. At approximately 6pm on May 17th, an eastbound NHL passenger train derailed and was struck by a westbound train between Bridgeport and Fairfield, Connecticut. About 250 passengers were on each train at the time of the incident. 73 passengers and 3 MNR personnel

were transported to area hospitals with injuries. The NTSB arrived at the scene within hours of the incident.

Service on the NHL was suspended between South Norwalk and New Haven and Amtrak NEC service was suspended between Boston and New York. The derailment destroyed track, signal and catenary systems on two tracks. The remaining two tracks are out of service due to a CTDOT project to replace 100 year old catenary and fixed bridges in the area of the derailment. As a result, the 4 track capacity of the NEC was reduced to 2 tracks, and both of those were fouled by the derailment. Amazingly, 2000 feet of the 2 track infrastructure was completely rebuilt, tested and restored to service four days later and full service was restored the following day.

I would like to pause to make an important point. CTDOT's current level of state and rail formula funding has been programmed over the next decade to address the backlog of replacement or major rehabilitation of the NHL infrastructure. That includes 20 moveable and fixed bridges, 80 miles of catenary replacement, a new signal system, and PTC. Without additional funding, CTDOT anticipates that additional 2 track outages will be required on sections of the NEC for the next decade, eliminating critical capacity and redundancy through Connecticut.

On May 28, 2013, a Metro-North track foreman was struck and killed by a Metro-North passenger train traveling at 70 mph in West Haven, Conn. The foreman had requested the section of track be taken out of service for maintenance. Two Metro-North rail traffic controllers, one of whom was a student controller, placed the section out of service. But the student controller reopened the track a little more than an hour later without the approval of the qualified controller or the foreman.

Prior to this incident, on May 4, 2013, another Metro-North rail traffic controller mistakenly placed out-of-service track back in service. Two days later, Metro-North instituted additional operations control procedures, but these procedures did not prevent the May 28 fatal incident.

NTSB Preliminary Reports and Recommendations

A preliminary report by the NTSB issued on June 4th noted that Metro-North inspectors found a track defect two days before the May 17 derailment. However, NTSB further indicated that the Federal standards and guidelines currently in place did not require immediate action for any of those track defects noted.

On June 17, the National Transportation Safety Board issued an urgent safety recommendation to Metro-North Railroad to provide redundant protection for track maintenance crews who depend on train dispatchers to provide signal protection. The NTSB is urgently recommending that Metro-North require redundant signal protection, such as shunting, in these circumstances. A shunt is a device that crews can attach to the rails in a work zone that alerts the controller and gives approaching trains a stop signal.

Metro-North received NTSB's recommendation and will implement safety improvements as

quickly as possible. Metro-North acted immediately after the fatal accident to activate a new procedure to prevent a Rail Traffic Controller from removing a block on a track without the explicit approval of the Chief Rail Traffic Controller. Previously a block could be removed by an RTC with the verbal permission of the roadway worker on the scene of the track work. In addition, the railroad already has begun working on a technological solution beyond the current system of verbal confirmations. It will require mechanical input from the roadway worker to implement and relinquish all blocks.

Current Actions by Metro-North/MTA

While the NTSB investigation is ongoing, in consultation with CTDOT, Metro-North has already taken action to review its existing programs and processes in advance of formal NTSB recommendations. These actions include:

- Retaining Transportation Technology Center Inc. TTCI is the internationally-renowned research affiliate of the American Association of Railroads which will assess our track maintenance and inspection programs, and to identify ways we can improve our efforts to maintain our right-of-way.
- Inspecting and conducting an inventory of all similar joints— it is important to note that no joint bar defects were found.
- Increasing inspections of our right-of-way using specialized equipment on loan from other railroads.
- Exploring solutions to better protect railroad employees working in the right-of-way.
- Building in additional safeguards to our procedures in the railroad's operations control center regarding returning tracks to revenue service.

CTDOT and Metro-North will continue to support the NTSB's investigation and will also implement any recommendations.

Closing

I appreciate the opportunity to appear before you today to discuss rail safety and I am prepared to address any questions you have.