

**TESTIMONY**  
**OF**  
**JOSEPH H. BOARDMAN**  
**PRESIDENT AND CHIEF EXECUTIVE OFFICER**  
**AMTRAK**  
**BEFORE THE**  
**SENATE COMMITTEE ON COMMERCE, SCIENCE, AND**  
**TRANSPORTATION'S**  
**SUBCOMMITTEE ON SURFACE TRANSPORTATION AND**  
**MERCHANT MARINE**  
**INFRASTRUCTURE SAFETY AND SECURITY**  
**HEARING ON:**  
**“POWER OUTAGE ON METRO-NORTH’S NEW HAVEN LINE:**  
**HOW TO PREVENT FUTURE FAILURES ALONG PASSENGER**  
**RAIL’S BUSIEST SECTOR”**

**MONDAY, OCTOBER 28, 2013**

**10:00 A.M.**

**BRIDGEPORT CITY HALL COUNCIL CHAMBERS**

Thank you very much for the opportunity to testify today.

Amtrak operates and maintains 401 miles<sup>1</sup> of the 457 mile Northeast Corridor (NEC), and we work closely with Metro-North, which operates and maintains the other 56 miles. The NEC serves a region that houses more than a sixth of the nation's population, and generates \$1 out of every \$5 of our gross domestic product on less than 2% of our country's land area. While our line is a transportation asset of national importance, it is aging and failure prone, and lacks redundant systems to keep it operating in the event of failure. While the incident we are here to discuss was not necessarily an infrastructure failure, the consequences of such a failure would be similar, particularly if they came at one of the many critical points, or "single points of failure," in the states of Connecticut, New York, or New Jersey. A single point of failure is a part of a system that, if it fails, will stop an entire system from working. In its current state, our system faces the threat of a major failure – with comparable impacts to this incident in terms of disruption – on a daily basis, for much of our infrastructure is aging and heavily trafficked, while capital investment has lagged.

Amtrak owns 122.5 miles of rail line in Connecticut and we have invested heavily in the state over the last two decades. In 2000, we finish the electrification of the 156 mile segment between New Haven and Boston with \$2.6 billion in Federal funds, and we also have invested nearly \$300 million to replace several bridges in recent years, such as the replacement of the movable portion of the Thames River Bridge in New London. Some of these projects were completed as part of the American Recovery and Reinvestment Act, which provided us with a

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<sup>1</sup> Includes 37 miles in Massachusetts that are owned by Massachusetts Bay Transit Authority but maintained and dispatched by Amtrak.

substantial infusion of funding in 2009, and we invested more than \$167 million in the state of Connecticut to improve every aspect of our railroad.

As you probably know, Amtrak also does a lot of business in the state of Connecticut, which is served by our Northeast Corridor and Springfield Line trains. We operate 46 daily trains, including *Acela*, *Northeast Regional*, *Vermont*, and *Springfield Shuttle* services. Last year, we carried more than 1.7 million people to or from stations in Connecticut, and we employ 680 residents with a total payroll of more than \$51 million. We spent another \$51 million on goods and services in the state in 2012, \$11 million of that right here in Bridgeport.

As you would expect, we work closely with the Connecticut Department of Transportation, who we are pleased to add as a new state partner under a Federal-state cost sharing methodology that went in effect in October for service on the line to Springfield, MA. We also work very closely with Metro-North Railroad, which is, on the basis of train mileage, our sixth largest host railroad – which might not seem impressive, until you stop to consider that Metro-North hosts Amtrak trains for only fifty-six miles, while some of our services run on host railroad tracks for trips of up to 2,400 miles. It's a busy line, carrying 48 of our trains and about 300 Metro-North trains on a typical weekday. We are vividly aware of the challenges Metro-North faces in maintaining an aging and heavily used railroad, because these are our challenges, too. For Metro-North, as for Amtrak, the reality is that we are stewards of an aging infrastructure system that requires increasing levels of investment just to maintain the existing level of service; faster or more frequent service requires even more. Consequently, when we get a service disruption caused by a point of failure on this infrastructure, it can be costly and prolonged. The recent Metro-North shutdown is a case in point. Because of it, we were unable

to offer *Acela* service between Boston and New York City. The *Acela* trains are what we call “integral train sets,” with the electric locomotives permanently joined to the coaches, so we can’t swap out a diesel engine if the power system fails. That meant cancelling those trains, and since approximately 72% of all *Acela* riders on the North End of the NEC are travelling between the three Boston area stations and New York Penn, we lost about 18,300 *Acela* riders. Fortunately, we were able to run the *Regional* trains behind diesel power over Metro-North, so we actually picked up some 6,300 riders on the *Regionals* (a likely spillover effect from cancelled *Acelas*), which reduced our net ridership impact to 12,000. This ridership “bump” produced an offsetting gain of about a half a million dollars in *Regional* revenue, leaving us with a net financial impact of \$2 million. *Acela* service was completely halted for six days, and we were not able to resume a full slate of scheduled services for another six days. This disruption was of slightly longer duration than usual – but it is by no means unique. The blocking of all service on the line in the wake of the derailment and collision on Metro North in May cost us about \$4 million in revenue losses, and a freight derailment in New Haven, on Amtrak’s infrastructure, cost about \$700,000 in lost revenue in March.

The lost riders and revenues are the clearest manifestation of the problem of aging and decaying infrastructure. This process, which is continual, is gradually eroding the serviceability of the railroad as underfunding takes its toll. To get some idea of what the consequences of underfunding are, I asked our Chief Engineer to study the problem of decapitalization earlier this year, because the NEC has suffered from decades of unmitigated deferrals of investment needs and reductions in our planned capital investment programs. The result is a complicated process of compounding deterioration. When we defer maintenance on one part of the infrastructure, we

see that other effects that show up in areas of the infrastructure where we might not otherwise have had a problem. For example, where tunnel deterioration is an issue, we find that one of the effects can be greater corrosion of the rails, which correlates strongly to tunnel condition. When we find problems, we can either address them in large, comprehensive programs, or we can do spot repairs. Large programs cost more, of course, but the unit cost is significantly lower than the unit cost for spot repairs. Unfortunately, when we don't have enough money for the larger programs we need, we have no choice but to go with spot repairs. But spot repairs don't renew the infrastructure or prevent further decay – they simply fix the problems that affect day-to-day operations and safety. But as the infrastructure continues to deteriorate, you have to do more spot repairs, which in turn consume more resources. And we have an infrastructure that, while safe, is vulnerable to service disruptions at virtually any time and place – and the vulnerability is highest, as Super Storm Sandy demonstrated, at the points where congestion is greatest and redundancy is nonexistent. While I have spoken principally about the Amtrak-managed segments of the railroad, these cannot be disaggregated from the larger problem of disinvestment. Amtrak and Metro-North both suffer from the same basic challenge: since we took over this line in the 1970s, business and traffic have both grown, but investment has not kept pace. Consequently, we are running more and more service on a line that is now several decades older – but major components of that line should have been replaced years ago.

To address this need, Amtrak studied state of good repair investment needs for the Amtrak-owned segments of the NEC in 2011. At the time, our proposal envisioned the spending of about \$782 million per year in today's dollars, to bring the infrastructure into a state of good repair by 2026. Unfortunately, funding has not been available, and in FY 2012 and 2013, the

total funding level was about half of that need. It simply isn't enough to sustain an aging system that's coping with record levels of traffic.

There are several processes that are now in place that we hope will allow us to harness the support of the states with the Federal investment in the NEC. I am hopeful that the ongoing Section 212 process, mandated by the 2008 Passenger Rail Investment and Improvement Act, will allow us to continue the process of building a collaborative relationship with the states to better manage and fund the NEC. The Northeast Corridor Commission's excellent report on "Critical Infrastructure Needs on the Northeast Corridor," published earlier this year, outlines the need: the challenge ahead of us is balancing a growing demand for the services of all of the NEC's users with the needs of the infrastructure. It is old and aging, and the process of asset aging is irreversible: at some point, everything needs replacement, and replacement is feasible only if adequate funding is available – and for Amtrak, as for Metro-North, funding on the required scale will have to come from a strong coalition that involves the Federal government, States, users of the NEC, local government and the private sector where it makes sense. This disruption should serve as a wakeup call to what would happen if we had an issue at one of the NEC's many single points of failure. We must stop taking this vital infrastructure for granted and start investing in the future of the region and the nation. And we must not only address the current vulnerabilities, but also provide the capacity that is urgently needed – not just for the decades of growth we expect to see, but the ongoing growth that is stretching a fragile and vulnerable but nevertheless vital transportation system.