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Press Release

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LIRR

IMMEDIATE

LIRR Has Best Mechanical Performance Record in its History

Reliability Centered Maintenance Strategy Continues to Pay Off As Railroad Improves for 16th Consecutive Year

MTA Long Island Rail Road today announced that in 2015 its rail cars achieved their best mechanical reliability since record-keeping began in 1981. The achievement marked the railroad's 16th consecutive year of improvement for rail car reliability.

Last year, LIRR rail cars traveled an average of 208,383 miles between breaking down and causing a delay. That's enough to circle the earth more than eight times! The number bests last year's by more than 2,000 miles, and it was 18% above railroad's goal of 176,000 miles.

"There are many factors that can cause a train delay, from track conditions to problems at grade crossings to congestion from other trains," said LIRR President Patrick Nowakowski. "I am pleased to report that the LIRR is doing a better job than ever before in neutralizing the category of potential train delays that we have the most control over: problems with the trains themselves. Our all-time high performance in terms of rail car mechanical reliability is a testament to the hard work that our employees perform every day to keep our rail cars inspected and maintained in top condition, even as the fleet ages."

Today's mean distance between failures has risen from 50,000 in 2005, and from 150,000 in 2010. The LIRR credits the improvements to its successful adherence to its Reliability Centered Maintenance strategy, known inside the railroad as RCM. The strategy, which was put into place in 2009, has led to dramatic improvements in train car reliability in recent years.

Under this maintenance approach, all rail cars are slated for specific types of inspections and maintenance based on the intervals of time that have elapsed since each car's last maintenance procedures. The strategy uses manufacturer data and real-world observations to govern schedules for replacement of rail car components, ensuring that all components are replaced before they are likely to fail. "We're constantly monitoring failures and conducting trend analyses on components and subcomponents and adjusting replacement intervals," said Craig Daly, LIRR's Acting Chief Mechanical Officer. "Our replacement intervals are continuously evolving in a dynamic way in response to our updated observations."

Reliability Centered Maintenance is made a reality by the LIRR's force of 2,100 employees in its Maintenance of Equipment Department, who maintain the railroad's fleet of 1,185 passenger rail cars and locomotives while always bearing in mind customer safety, and their own safety. In addition to daily safety inspections, tests, and cleaning that take place at 15 yards throughout the railroad, the heaviest maintenance work is undertaken at two shops, Hillside Facility in Hollis, Queens, where the focus is on the railroad's electric fleet, and Sheridan Shop in Richmond Hill, Queens, which focuses attention on diesel trains.

Specific maintenance tasks are performed for each car based on regular time intervals that can be as short as 92 days. Employees might replace air brakes, couplers, wheel assemblies, which are known as "trucks," doors, heating/ventilation/air conditioning equipment, third rail electrical pickup equipment, communications equipment, and the many more components that must work together for a train car to operate.

But the interval that counts most is not measured in days, but in hours. "Our goal each day is to make sure that the railroad has the number of cars available for service to meet that day's train schedule requirements," Daly said. "Just in terms of the electric fleet alone, we need 862 cars in service for each morning rush hour, and 866 for each evening rush hour. I'm glad to say that we met or exceeded that requirement each calendar day in 2015."

Car interiors go through regular daily cleaning, and undergo "extraordinary" cleaning regiments every 60 to 90 days, depending on the car type.

Three types of rail car equipment all set new records for mean distance between failures in 2015. The M7 self-propelled electric coaches traveled an average of 488,470 miles between failures; the C3 diesel-hauled bi-level coaches traveled 120,652 miles, and the diesel-electric locomotives traveled 25,139 miles.

These improvements to the LIRR's fleet reliability come at a time when ridership on the railroad is reaching highs not seen in nearly 70 years. The LIRR carried 87.6 million customers in 2015, the highest amount since 1949.