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Press Release

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LIRR

IMMEDIATE

LIRR's Industry-Leading Leaf-Fighting Technology Cleans Six Times More Track Resulting in Fewer Delays and Cost Savings Through 2021

LIRR Saw 246 Fewer Delays After Adding Second Laser Train and Increasing its Speed

[See Video of the Laser Train in Action](#)

MTA Long Island Rail Road President Phil Eng today announced that the use of its industry-leading laser train has reduced delays caused by fallen leaves on the tracks and kept equipment in service, resulting in fewer delays for customers. The technology is also creating cost-saving measures that will help the LIRR going forward at a time when the Authority is asking the federal government for \$12 billion in much-needed funding.

In October, the LIRR added another laser train and increased the speed to 25 mph, up from 15 mph. Adding an additional laser car and increasing their speed allowed for the cleaning of six times more track than in 2019.

"Our investment in the laser train technology is already paying off for our customers who have encountered fewer delays and are seeing more train cars in service, allowing them to practice social distancing during the COVID-19 pandemic," **Eng said.** "The LIRR is committed to using innovative technology to create the safest and most efficient ride as possible."

Like other railroads that operate in seasonal environments, the LIRR experiences leaf fall induced low adhesion. This condition is created by a slick substance, called pectin, left by crushed leaves on rails that gets even more slippery with light rain. When a train attempts to speed up or slow down, the pectin can cause the wheels to slip or slide along the rails. In severe cases the train will automatically make an emergency stop, because the on-board computer system perceives "slip-sliding" as the train not slowing down when it should. This slip-sliding and emergency braking also creates flat spots on the train's wheels, forcing the LIRR to take much-needed equipment out of service for repairs.

The reduction in flat spots on the train's wheels improved performance during leaf season. There were 246, or 66% fewer low adhesion delays in Oct. 2020 through Nov. 2020 compared to the same time last year, and 473, or 79% fewer compared to the same period in 2018. The reduced wheel damage also allowed crews to remove 60 fewer cars from service compared to 2019. The number of cars taken out of service due to flat wheels decreased by 60, or 27% percent.

Immediate cost savings were seen in wheel truing, where labor costs decreased by 38.4%, or \$102,000 in Oct. 2020 through Nov. 2020 alone compared to the same period in 2019. Less wheel truing will result in longer wheel life, which means the LIRR will see continued savings through 2021 and beyond. For each year of extended life, LIRR anticipates saving \$500,000 in shop labor and materials costs.