



# Long Island Rail Road (LIRR) Expansion Project

## PROJECT

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## APPLICATION

Roadside

## SCOPE

A New York-based consulting services firm used integrated weather, noise, and particulate matter monitoring to protect communities and ensure regulatory compliance during the redevelopment of the nation's busiest commuter rail line.

## EQUIPMENT AND SERVICES

25 x AQS 1

## CLIENT

Vibranalysis

## SUPPLIER

Specto Technology

## DATE

2019

## PROJECT COST

\$2.6 billion

The LIRR Expansion Project is part of a comprehensive, interconnected plan, spearheaded by Governor Andrew Cuomo, to improve transit and transportation throughout the New York region. The project is estimated to cost \$2.6 billion, exponentially strengthening the local economy and creating a more robust Main Line for the 500,000 weekly passengers using the busiest commuter rail line in the nation. Notable improvements include an additional third track, new parking facilities and passenger rail stations, and elimination of seven street-level crossings. Critically, the construction of this third track was to take place through highly concentrated residential communities in Nassau County, NY.

Vibranalysis and their client anticipated that the work could have significant impacts on the downwind community. The potential for large quantities of dust and other airborne contaminants to be generated during construction activities has made community air monitoring an essential part of achieving regulatory compliance. In New York State, this includes compliance with the New York State Department of Environmental Conservation (NYSDEC) DER-10 – Technical Guidance for Site Investigation and Remediation and associated Community Air Monitoring Plan (CAMP).

## PROJECT CHALLENGES & OUTCOME

Following an investigation of several air quality monitoring options, Vibranalysis selected the Aeroqual AQS 1 from Specto Technology, one of Aeroqual's trusted channel partners. This all-in-one PM10 and VOC monitor not only met the requirements outlined in DER-10 and the resulting CAMP plan but exceeded those requirements in a convenient package. The team was able to remotely monitor each site during construction activities, compiling the necessary information from the Aeroqual Cloud server on an on-demand basis. Aeroqual and Specto Technology worked with Vibranalysis to integrate the AQS 1 air monitors with Class 1 sound level meters, weather stations, digital cameras, and a telemetry Cloud data solution. Collectively, the team installed these instruments on portable, battery- and solar-powered trailers for easy maneuverability.