



## PROJECT

Monitoring noise from Queen's Midtown Tunnel construction

## APPLICATION

Remediation

## SCOPE

Deliver unique data-to-desk sound monitoring solution product for monitoring noise from two concurrent construction projects being performed on the Queen's Midtown Tunnel. As site work was considered to have a potential environmental impact on the surrounding area, perimeter monitoring for dust, noise and vibration was deployed.

## EQUIPMENT AND SERVICES

Spectro Technology's AutoSLM-SC

## SUPPLIER

Spectro Technology

## DATE

2017



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## PROJECT OVERVIEW:

- As a part of a 4-year, \$236.5 million rehabilitation of the Queens Midtown Tunnel of New York, the Metropolitan Transit Authority (MTA) has been working on two concurrent construction projects on the 76-year-old tunnel since Spring 2015.
- One of the projects is at Manhattan's exit plaza that repairs the area's deteriorated roadbed, some of which dates back to the 1930s.
- The other project, taking place overnight inside the tunnel itself, repairs damages caused by Superstorm Sandy in 2012. During that work, the tunnel for construction has to be closed between 10:30 p.m. and 5:30 a.m., Monday through Thursday and between 11 p.m. and 8 a.m. on Friday.

## UNIQUE CHALLENGES

- One of the issues caused by the night work has been noise from the construction activities as well as horn honking from drivers attempting to navigate the lanes closures.
- In order to monitor, and to limit the impact of noise to the surrounding residential area, the MTA has specified 2 automated Sound Level Meters (SLM) with ability to capture Sound Clips for the project.
- The sound clip option is required to identify the type and the source in addition to the magnitude of the noise.

## INSTRUMENTATION & MONITORING SCHEME

- Spectro Technology's AutoSLM-SC (SC stands for Sound Clip) was chosen and approved for the monitoring task due to its extensive and unique features to monitor, analyze, store and transmit sound level data as well as capture, store and transmit Sound Clips (in mp3 format).
- It provides a fully automated data to desk solution for environmental and construction noise monitoring.