



MTA Press Releases

[Select Language](#) ▼

Press Release

December 2, 2009

[Bridges & Tunnels](#)

IMMEDIATE

Weather Sensors Help MTA Bridges and Tunnels Keep Customers Safe

When Mother Nature kicks up her heels with high winds as she did recently over the Thanksgiving Holiday weekend, MTA Bridges and Tunnels uses a system of technologically-advanced weather sensors to help keep motorists safe.

The road and weather information systems used by the Authority at all seven MTA bridges includes above-ground atmospheric sensors that deliver highly-accurate weather information, including wind velocity, wind direction, humidity and precipitation, via wireless communication. Based on the data collected, actions are taken ranging from lowering speed limits, banning certain vehicles from crossing to sending out trucks to spread salt.

The small, rocket-like weather sensors attached to light poles often go unnoticed by motorists as they cross the spans, yet they are constantly recording data, including wind speed, velocity, direction and sustained wind times. They also measure rain and snow.

The system has been in place since the early 1990s but the latest upgrade, completed in 2008, includes cutting-edge technology which results in information virtually being received in real time, said Chief Maintenance Officer Patrick Parisi.

The information is sent to facility managers to be used as a guideline to determine whether restrictions are necessary. It is also used to dispatch maintenance crews to stand by in the event that emergencies develop as a result of extreme weather conditions.

Though traffic delays may occur when restrictions are put in place, "These procedures are designed and implemented to insure the safety of our customers," said Chief of Special Operations James Fortunato.

Phase I speed restrictions are implemented when winds reach between 40 mph to 49 mph in dry conditions, or 30 mph to 49 mph when roadways are wet or icy. Other factors, such as wind direction, are also considered in making this determination. Speed restrictions are then relayed to motorists via electronic signs and stationary flip-board signs.

Phase I restrictions were last enacted on Nov. 27 and Nov. 28th at the Throgs Neck, Verrazano-Narrows, Cross Bay Veterans Memorial and Bronx-Whitestone bridges when wind as high as 38 mph with gusts up to 47 mph were recorded.

Along with a reduction in speed, Phase II restrictions bar certain vehicles, including tractor trailers, motorcycles, step vans, motor homes and mini-buses, from crossing the bridges. These restrictions are not common.

Phase I restrictions were put in place 16 times between January and November this year, while Phase II restrictions were put in place only once. The last Phase II event occurred Feb. 12 at the Verrazano-Narrows Bridge when wind gusts of up to 59 mph were recorded.

MTA Bridges and Tunnels two tunnels — the Queens Midtown and Brooklyn-Battery Tunnel — have slightly different weather systems in place since they are not exposed to the same wind conditions as the bridges.



Close up look at weather sensor, which is used to record weather data at all seven MTA Bridges.



View of weather sensor inconspicuously attached to light pole at the Verrazano-Narrows Bridge.

MTA Bridges and Tunnels' facilities, which connect the five boroughs of New York City, include the Robert F. Kennedy, Throgs Neck, Bronx–Whitestone, Henry Hudson, Verrazano–Narrows, Cross Bay Veterans Memorial and Marine Parkway–Gil Hodges Bridges, and the Queens Midtown and Brooklyn–Battery Tunnels.