

# The Meadowlands in Motion

## Adaptive signal system expands to reduce traffic

This month I am pleased to report that the New Jersey Meadowlands Commission (NJMC) and the New Jersey Department of Transportation (NJDOT) are working in cooperation on an agreement to expand the scope of the NJMC's innovative Meadowlands Adaptive Signal System for Traffic Reduction (MASSTR) project. The expansion will modernize an additional 15 traffic signals in Jersey City and Kearny with the MASSTR system's state-of-the-art technology. The expansion is expected to help keep commerce flowing smoothly by alleviating an anticipated increase in traffic congestion on local roads when the NJDOT begins the reconstruction of the Pulaski Skyway begins in 2014.

This effort is a great example of how the NJMC can share its staff expertise and resources with a sister state agency for the benefit of businesses and the general public. In addition, it supports the Commission's ongoing commitment to find new ways to further promote economic growth in the Meadowlands District, protect the environment and enhance the quality of life of the people who live, work and travel throughout the area.

A dozen intersections in Kearny are already upgraded under the existing MASSTR project, with another dozen in Jersey City

scheduled for upgrades by the end of this year. The 15 additional intersections to be updated as part of MASSTR's expansion for the NJDOT's Pulaski Skyway reconstruction project include the critical U.S. Truck Route 1&9, which runs through both Jersey City and Kearny, and N.J. Route 440 in Jersey City.

The original scope of the MASSTR project, which is currently underway, entails upgrading 128 traffic signals on local, county and state roads with modern technology that automatically changes signals based upon traffic flow in real-time to reduce vehicle delays, congestion and accompanying greenhouse gas emissions. With the expansion, MASSTR will include 143 traffic signals throughout the region. MASSTR's modern technology can boost the region's economic engine by helping vehicles travel more efficiently throughout the economically vital Meadowlands corridor, where more than 400,000 private, public and commercial vehicles pass through daily.

MASSTR covers a number of key Meadowlands region corridors in Bergen and Hudson counties, including U.S. Routes 46 and 1 & 9; N.J. Routes 7, 17 and 120; County Avenue; County Road; Meadowland Parkway; Newark Turnpike; Paterson Plank

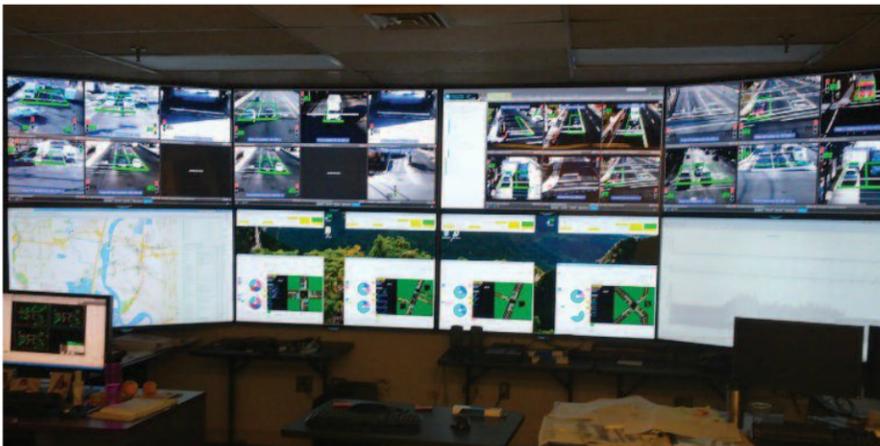


Road; Secaucus Road; Schuyler Avenue; Washington Avenue; and Westside Avenue. With the expected increase of vehicular traffic in the area when the Super Bowl comes to the Meadowlands in February, MASSTR is an especially timely project.

The traffic signals being modernized currently operate on antiquated timing systems that rely on outdated hardware and pre-timed signal plans that do not take real-time traffic flow into account. Under MASSTR, critical infrastructure will now be brought into the 21st century.

For motorists, MASSTR will minimize waiting in a long line of traffic at a red light with little to no vehicles on other approaches. It will also reduce the likelihood being stopped at a red signal immediately following a green signal change at the previous intersection. It can mean making it to that job interview or business meeting on time, keeping on schedule with deliveries or reaching shopping destinations faster.

NJMC transportation engineers have worked diligently over the past three years designing and implementing MASSTR's intricate system. Their efforts reflect the NJMC staff's technological ingenuity and commitment to making sustainable improvements to the roadway network within the Meadowlands.



MASSTR Traffic Management Center



### How MASSTR Works

MASSTR is an intelligent transportation system that uses a complex network of adaptive traffic signal controllers, wireless communications and vehicle detection devices that work in concert to continuously adjust signal timings in real-time based upon the changing flows of traffic.

The system's radios and antennas allow traffic signals to communicate with each other to synchronize their timings. This significantly reduces stopping times at each signal and creates a smooth flow of traffic along the corridors. Traffic conditions and signal operations can also be monitored in real-time by NJMC transportation engineers at the Commission's administration building.

MASSTR is the first adaptive traffic signal system of its kind in New Jersey and the largest adaptive signal system to be built at one time in the country. The majority of the project is being funded by a \$10 million federal grant awarded to the NJMC in 2010. The Meadowlands Transportation Planning District Fund is providing the remaining \$2.5 million.

I look forward to providing further updates on this exciting initiative that exemplifies the NJMC's hard work in supporting and furthering both the region's economy and its appeal as an ideal location for companies to start, move or expand their businesses. 📍

### Timetable

The MASSTR project is being constructed in five phases as follows:

**Phase 1** – Secaucus and North Bergen (Completed February 2013; 28 signals)

**Phase 2** – Secaucus, Lyndhurst, North Bergen, Kearny, North Arlington (Completed July 2013; 24 signals)

**Phase 3** – Carlstadt, Moonachie, East Rutherford, Rutherford, Teterboro, North Bergen and Jersey City (Completed July 2013; 22 signals); and Jersey City, Moonachie and North Bergen (Expected completion February 2014; 6 signals).

**Phase 4** – Ridgefield, North Bergen, Jersey City, Fairview (Expected completion March 2014; 29 signals).

**Phase 5** – US Route 46 in Little Ferry, Moonachie, Teterboro, North Bergen, South Hackensack and Ridgefield Park (Expected completion 2014; 19 signals).

**Pulaski Skyway Reconstruction Project** – Jersey City and Kearny (Expected completion March 2014; 15 signals).

To view a map of all intersections included in MASSTR and its expansion, visit [www.masstr.com](http://www.masstr.com).

Businesses interested in learning more about MASSTR are encouraged to contact David Liebgold, NJMC Chief of Transportation, at 201-777-2414 or [david.liebgold@njmeadowlands.gov](mailto:david.liebgold@njmeadowlands.gov).



By **Senator Marcia Karrow**, Executive Director of the NJ Meadowlands Commission. Senator Karrow has served as executive director of the NJ Meadowlands Commission since January 2011. Her proven ability to work with various stakeholders to support economic development and sustainability mirrors the NJMC's dual mandates of promoting economic growth and protecting the environment.

# MASSTR

## MASTERING THE FLOW OF COMMERCE IN THE MEADOWLANDS



*The MASSTR Control Room at the NJMC Headquarters allows staff to view traffic conditions at specific intersections*

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MASSTR covers a number of key Meadowlands region corridors in Bergen and Hudson counties. To view a map of all intersections included in MASSTR, visit [www.masstr.com](http://www.masstr.com). To learn more about the project call 201-777-2414.



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