THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, NY 10007

MAYOR BLOOMBERG ANNOUNCES NEW, REAL-TIME TRAFFIC MANAGEMENT SYSTEM TO REDUCE CONGESTION IN MIDTOWN MANHATTAN

Cameras, Microwave Motion Sensors and E-ZPass Readers Provide Real-Time Information Used in Wireless Adjustments to Traffic Signals

Wireless System Made Possible Through the Investment in the City's High-Speed, Mobile Data Network – NYCWiN

Mayor Michael R. Bloomberg, Deputy Mayor for Operations Stephen Goldsmith, Department of Transportation Commissioner Janette Sadik-Khan, Administrator of the Federal Highway Administration Victor Mendez and Department of Information Technology and Telecommunications Commissioner Carole Post today unveiled a new, technology-based traffic management system that allows City traffic engineers to monitor and respond to Midtown Manhattan traffic conditions in real time, improving traffic flow on the city's most congested streets. The system, called Midtown in Motion, includes 100 microwave sensors, 32 traffic video cameras and E-ZPass readers at 23 intersections to measure traffic volumes, congestion and record vehicle travel times in the approximately 110-square block area bound by Second to Sixth Avenues and 42nd to 57th streets. The combined data is transmitted wirelessly to the City's Traffic Management Center in Long Island City, allowing engineers to quickly identify congestion choke points as they occur and remotely adjust Midtown traffic signal patterns to clear traffic jams. Department of Transportation engineers are using recently upgraded traffic signal control systems to adjust the traffic lights. The real-time traffic flow information will be made available to motorists and to app developers for use on PDAs and smart phones. The wireless system is made possible through the use of the New York City Wireless Network (NYCWiN) – a wireless network developed and managed by the Department of Information Technology and Telecommunications. Using technology to reduce greenhouse gas emissions and air pollution caused by traffic congestion is one of the priorities of the City's *PlaNYC* sustainability agenda. The Mayor made the announcement at the City's Traffic Management Center in Long Island City, Queens.

"Since the beginning of our Administration, we've been committed to finding ways to employ technology to give decision makers throughout government the information they need when they need it," said Mayor Bloomberg. "We are now using the most sophisticated system of its kind in the nation to improve traffic flow on the City's most congested streets – Midtown Manhattan. The technology will allow traffic engineers to immediately identify congestion choke

(more)

points as they occur and remotely alter traffic signal patterns to begin to clear up Midtown jams at the touch of a button."

"Midtown in Motion is a great example of how the creative deployment of technology can have a tangible impact on the everyday lives of New Yorkers," said Deputy Mayor Goldsmith. "Enabling City traffic engineers to react to traffic conditions in real-time will greatly improve the quality of life in Midtown and lay the groundwork for continued traffic management innovation."

"Midtown is the heart of the region's economy, and also its congestion," said Commissioner Sadik-Khan. "Midtown in Motion brings dynamic controls for a dynamic city to help keep its transportation network and economy moving."

"The New York City Wireless Network enables City agencies to modernize their field operations and use state-of-the-art technology to innovate service delivery," said Commissioner Post. "In this case, the NYCWiN will transmit real-time traffic condition information to the City's traffic experts, allowing them to use cutting-edge technology for improved transit planning."

Earlier generations of traffic signals only could be reliably set to adjust to preset signal patterns based on the time of day, leaving limited ability to respond to crashes, construction, special events like the UN General Assembly and times when congestion saturates the network, causing backups that block cross streets and crosswalks. Midtown in Motion allows Department of Transportation engineers to conduct real-time analysis and change signal patterns at the touch of a button, helping to alleviate congestion before it worsens.

Depending on the traffic situation, traffic lights can be adjusted to provide a more even distribution of traffic entering Midtown so that already congested areas do not become oversaturated, or priority can be given to clearing isolated backups resulting from breakdowns, fender-benders or double-parked vehicles. On the avenues, engineers can switch more easily between a simultaneous signal pattern, where all the signals on the avenue turn green or red at the same time, and a traffic signal progression, which lets vehicles traveling at the speed limit encounter green lights as they drive along a corridor. The system lets engineers use the more effective pattern based on measured traffic conditions.

The Midtown in Motion program included the installation of turn lanes to 53 intersections, allowing vehicles to turn from cross town streets onto the avenues without blocking an entire lane of through-traffic, and added turn signals at 23 of these intersections to allow turning vehicles to do so more safely without conflicting with pedestrians. Planning and installation of Midtown in Motion components began last summer, and was in addition to ongoing technology upgrades to the city's traffic signal system. The total cost for installation of the system was $1.6 million, with $1 million in City funding and $600,000 in Federal funding provided by the Federal Highway Administration.

The program utilizes Advanced Solid State Traffic Controllers – a state-of-the-art piece of equipment installed at signalized intersections that controls the traffic signals at the intersection wirelessly. This generation of traffic controllers also is more weather-resistant and tamperproof, requires less maintenance. The wireless system is powered by New York City Wireless Network (NYCWiN), a high-speed, citywide infrastructure dedicated to public safety and public service applications developed and managed by the Department of Information Technology and

Telecommunications. NYCWiN provides agencies real-time access to high-speed voice, video, and data communications throughout the five boroughs, allowing users to access myriad agency systems and applications on laptops and handheld devices in the field. Half of the City's signalized intersections – 6,200 – have been computerized and integrated with the Traffic Management Center and the goal is complete integration of all signals by 2013.

Adaptive Traffic Signal Control
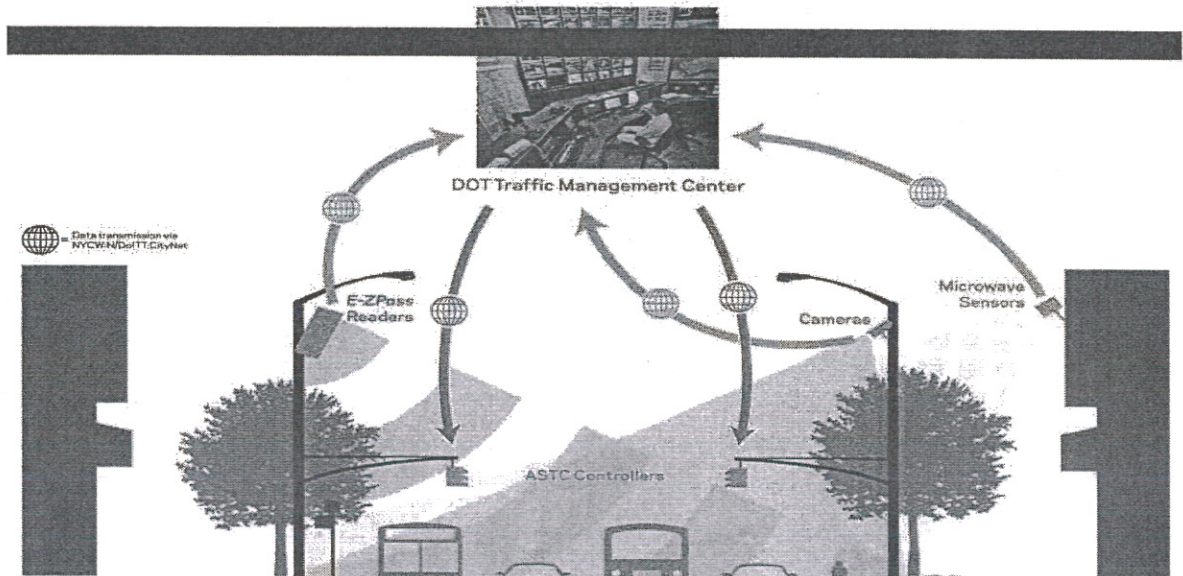
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