

STATEMENT BY  
MTA NEW YORK CITY TRANSIT  
BEFORE THE COUNCIL OF THE CITY OF NEW YORK'S  
COMMITTEE ON TRANSPORTATION  
JANUARY 29, 2009

Good morning, Chairman Liu and members of the City Council. I am Robert Walsh, General Superintendent with MTA New York City Transit's Department of Buses (DOB) and project manager for Automatic Vehicle Location (AVL) Programs. I'm accompanied by DOB's Sassan Davoodi, who is the co-project-manager for AVL Programs. As the Transportation Committee has requested, we're here this morning to address the topic: "When will the MTA (NYCT) be able to track the location of its buses and provide 'real' arrival times to its riders?" To present this matter in context, we will first share background information with you on our experience over the past several years in attempting to develop an AVL system for buses, and we'll then discuss the status of our current efforts.

In its effort to develop an AVL system for buses, NYC Transit's purpose has been twofold: 1) to establish a service management tool for DOB to use in tracking bus locations and monitoring schedule and route adherence, and 2) to provide bus riders with onboard next stop announcements as well as access to real-time estimates of bus arrival times via electronic signs at bus stop shelters and the internet. NYCT launched its first AVL pilot project in October 1996. That contract was awarded to Orbital Sciences Corporation (OSC). The scope of this pilot project was limited to equipping the buses assigned to one depot in Manhattan with an AVL system. Thus, this contract did not include customer information signs at bus stop shelters.

At approximately the same time, NYCT awarded a separate contract to another vendor, Transportation Management Solutions (TMS), to provide a Customer Information System consisting of electronic customer information signs at bus stop shelters. This project was to interface with the AVL project and use the real time bus location data that system provides as the means for projecting bus arrival times at the bus stop shelters. Thus, the customer information system contract was designed to essentially piggyback the AVL contract.

The AVL pilot contract experienced numerous problems. Due to the difficulty in achieving a reliable and working system, the parties terminated the contract by mutual agreement in March of 2001. Because of its dependency on the AVL project, the Customer Information System contract with TMS was cancelled as well.

In August 2005, NYCT awarded the Service Management and Customer Information System (SMCIS) contract to Continental Inc. (formerly Siemens

VDO). Based on our experience with the first pilot project, NYCT's qualification criteria for potential vendors were strengthened significantly, requiring applicants to have a proven commercial off-the-shelf system successfully implemented at other transit agencies and to provide a field demonstration phase of the actual product before an award of the contract.

SMCIS was to provide both the AVL and the Customer Information System features in a phased implementation. The base contract was for implementation of the system in one depot, and upon successful implementation, NYCT's intention was to expand the project system wide. Equipment and software were installed at the 126<sup>th</sup> Street depot in Manhattan, in the Bus Command Center, in the radio sites and in selected bus stop shelters.

After completing the equipment installation in all buses assigned to the depot, the contractor was unable to achieve a satisfactory level of performance and reliability. Repeated attempts by the contractor to address the software and hardware problems were unsuccessful. In December 2007, NYCT met with executives from Continental, the company that had taken over Siemens VDO. Continental reconfirmed its commitment to resolving the outstanding issues and meeting the contract requirements. However, after an additional eight months, the vendor was, in our view, unable to meet its commitments in delivering a reliable system in a single depot. This matter is now in the hands of our Legal Department.

While there are other bus systems throughout the country which already have AVL systems in place, NYCT has the distinction of having, by far, the most challenging operating and environmental conditions under which to develop and sustain a reliable system. NYCT's stringent contract requirements were developed in an effort to ensure that a system can work reliably in such a demanding environment.

As we have visited and spoken with other transit agencies which have or are implementing AVL systems, we've learned that while there are some that consider their AVL systems to be generally acceptable, many have had or continue to experience problems with their systems, or a component of their system, that appear to be similar to those we've experienced. During the implementation of the base AVL contract (which required that the vendor implement the system to our satisfaction at one depot before the award of a roll-out contract), NYCT learned that at least two other transit agencies, Atlanta (MARTA) and Hampton Roads, Virginia, have experienced significant software problems similar to those of NYCT. In some cases, transit properties do not collect accurate data regarding system reliability or availability, while others have much less stringent acceptance criteria. In some other instances, the transit agencies have already paid a large percentage of the cost of the contract and therefore have no ability to hold the vendor accountable.

Despite the difficulties and disappointments NYC Transit has experienced in pursuing AVL projects, the agency remains committed to developing a reliable system that can be used both as an aid to manage bus service and as a means to provide real-time information to bus riders. Improvements in GPS technology have substantially resolved some of the initial challenges we faced in our efforts to develop an application that functions reliably in an environment such as Manhattan, with its tall structures creating urban canyons in which GPS signals can become partially blocked. We also face additional challenges posed by closely scheduled bus service and extreme traffic congestion during peak periods. At this juncture, we are aggressively investigating and evaluating options that we believe may have the potential to meet the needs of our bus system.

On behalf of NYC Transit, thank you for providing a forum to discuss the status of our efforts to develop an Automatic Vehicle Location system for buses and for your ongoing interest in the public transit system. Mr. Davoodi and I are now happy to answer any specific questions that you may have.