



30%
PRODUCTIVITY

CALL HANDLING
30%

NYCT Requires High Performance Software for Transit Operations

New York City Transit provides the largest Demand Response and Paratransit Service in the world performing on average 35,000 on-demand trips per week with ADEPT scheduling and dispatching solutions.

High volume service demands and unpredictable conditions meant manual interventions were often required to coordinate services which ended up being more time consuming and caused inefficiencies in operations.

Approximately 2,000 vehicles were equipped with AVL/MDC's that provide ADEPT software real-time updates. ADEPT calculates schedules and trip solutions in high volumes and updates driver manifests in real-time to meet the performance demands of NYCT.

Challenge and Solution

Operational performance is crucial to providing the essential services of paratransit while also managing costs and keeping in compliance. With the high volume demand for service it became increasingly important to make operations as productive and efficient as possible. Challenges usually begin with scheduling the day prior to service and continue to increase in complexity through the day of service.

First, schedules are filled prior to day of service which grows in complexity overtime as more trips are added. ADEPT is able to re-optimize the schedule as events change and as the trip sets increase based on route data, promise time windows, capacity, service areas and more. In addition ADEPT enables custom strategies that NYCT can choose which optimize the software based on their unique operational requirements. Each day new schedules are built and each day ADEPT

calculates the best possible solutions with its advanced algorithms to help increase productivity across all operations and provide detailed information to end users that streamline their workflows.

"With ADEPT our productivity saw a dramatic 30% increase while call handling time decreased by the same amount. In addition service denials dropped from 4.8% to 0%." —New York City Transit

A second challenge is dispatching on day of service which can lead to many changes to the original plan requiring a manual intervention from dispatchers. Trip cancellations, no shows, traffic and more can cause a significant strain on operations. With ADEPT dispatchers can respond accurately with real-time status updates backed by a decision support system that helps dispatchers more easily monitor and control productivity.

Results

NYCT has been able to maintain a "zero denial" in serving the critical need of Paratransit since 2003 with no eligible trip request denied, performing more trips per day than anyone else. With its emphasis on customer service, NYCT is taking full advantage ADEPT solutions to meet their high-volume demands with real-time calculations that enable fast accurate answers to questions like – "where's my ride".

In the end routes and schedules are optimized to save time and resources that help NYCT provide better transit service.