



RTC: Westchester County, NY

License Plate Recognition on Moving Vehicles

Real Time Crime with MOBOTIX Cameras

Real Time Crime (RTC) was established by the Westchester County Police Department and its partners in 2017, aiming to unify collaboration across the county's 40+ police departments. RTC's arsenal includes a combination of surveillance, machine learning analytics, license plate recognition (LPR), and shared police databases. One of the largest LPR systems in the USA, RTC scans & archives approximately 40 million plates a month across 220 MOBOTIX cameras aimed at their highways. These plates can generate real-time alerts via a robust software platform, and the archived database is searchable by plate number, vehicle color, make, model, vehicle type, and other characteristics.

Mobile LPR

RTC wanted to expand this system beyond the fixed locations on main roads and into the smaller arteries of their community. To accomplish this, it was decided to pursue expansion into police vehicles. Mobile LPR would allow them to dynamically expand both their investigative reach and also their ability to quickly intensify real-time searches in different geographic locations based upon need.

They aimed to accomplish this for significantly less cost than the traditional, pre-built solutions without sacrificing performance. This task would require discreet, high resolution cameras that provided enough resolution & clarity to accurately capture license plates from a vehicle in motion at high speeds.

Multiple Lanes of View

The new MOBOTIX S74 was chosen due to its ability to provide the AI analytics with exceptionally clear images at high speeds. These host (2) 4K sensors and (1) IR illuminator, all housed inside a fabricated metal bracket on the vehicle. With the widest available field of view, they can capture an incredible 5 lanes of moving traffic with a single camera during the day. A specialized long pass filter lens allows them to capture plates at night as well. It processes the imaging on a small edge server, then transmitted to integrate into their main county-wide system.

By engineering the solution themselves, RTC has provided the department an exceptionally powerful tool that has been – traditionally – too expensive for widescale adoption. *“Traditional patrol vehicle systems would cost anywhere between \$17K – \$25K per car, but we’ve been able to reduce the cost to under \$5K with our system”* said Lt. Brian Hess, C.O. of the Real Time Crime Center.

Key Data

Sector
Public Safety

Customer
Various Police Departments in Westchester County

Timeframe
2020 - Present

Products
(35) S74 Flex Cameras with 4K Day & 4K with Long Pass Filter sensors



Powerful Results

In 2020 alone, RTC captured 243 million license plates and has contributed to over 200 arrests, 102 recovered stolen vehicles, and generates approximately 330,000 alerts a month for the department. RTC was able to coordinate with agencies on the following multi-agency investigations: burglaries, robberies, stolen vehicles and vehicle break-ins.

S74 deployments have been implemented into several different police departments within Westchester County, with plans to expand this footprint even further. Mobile LPR expands the agency's ability to monitor areas previously unreachable at an attainable cost, and allows agencies to better secure not only their community, but any of their networked communities as well. *"It's priceless. Without it, multiple cases would be left unsolved. It's a great tool for both proactive and reactive policing."* says Det. Justin Bottiglieri at the neighboring Hastings Police Department.

