

Wilmington PD Boosts Efficiency, Reduces Long Term Costs with L-3 Mobile Vision In-Car Systems

Wireless Digital Solution Solves Data Transfer, Management and Compatibility Issues

When Wilmington Police Department was founded in 1847, it was housed in the basement of City Hall, and it was manned by a single officer. By 2008, the police department had moved to a new, state-of-the art facility. Its personnel had grown to 253 sworn officers and 57 civilian employees – with 4 motorcycles, 271 car units and 2 helicopters. It was and is the epitome of the modern police department.

Yet Wilmington PD had a problem. Their in-vehicle video recording equipment was aging and breaking often. In addition, the vendor who sold them many of the aging systems had gone out of business – making parts harder to find and service more expensive. Adding to the situation, the department's data transfer and management systems were slow and inefficient.

They needed a video recording solution that would solve near-term, break-fix problems, and prevent future, unplanned maintenance costs – while improving management and efficiency.

Background

In the past, Wilmington PD had purchased units on an ad hoc basis – replacing old systems with the lowest cost option available. As a result, their video environment was a mixture of systems from different technology generations and different vendors that often created incompatibilities. In addition, all data transfer was manual. It was costing the department hundreds of hours in support services annually. “Each fleet category – motorcycle, car and helicopter – had its own camera systems,” said Captain Donny Williams, in charge of Fleet Management and Support Services. “Supporting all that equipment was not an efficient use of budget or personnel.”

It was 2008, and budgets everywhere were tighter than in the years leading up to that point. The department decided to take a more structured approach to technology purchase and implementation – with the goal of streamlining video systems and infrastructure.

A team of 15 field officers and support services staff evaluated wireless systems based on price, features and performance. The process began with 15 vendors. From that group, three were selected to set up live demo systems for a 30-day field trial. Each vendor installed a complete wireless video recording system including in-car video recording equipment, wireless hotspots, servers and data management software.

“The vendors had two days to set up their systems,” said Williams. “But L-3 had their systems up and transferring data within two hours.”

All three vendors were comparably priced. However, in performance and feature set availability, L-3 ranked significantly higher than the others. In fact, L-3 Mobile Vision was the only vendor whose solid state video recording systems worked in all vehicle categories – including helicopters.

Solution

In 2008, L-3 Mobile Vision began installing digital video recording systems into the Wilmington fleet.

The FLASHBACK™ DVR solution was installed in 24 cars and 2 motorcycles. The DVR is all-wireless with digital video recorder, solid-state flash memory card, VoiceLink Plus™ wireless microphone, and Nite-Watch™ camera. In order to reduce costs, one additional system would be shared by the two fleet helicopters.

“We needed to trim costs wherever possible, so the decision was made to share the DVR between our two helicopters,” said Officer Letson, nightshift pilot. “What’s great is it takes less than 60 seconds to pull the system out and drop it into the other helicopter.” Plus because the system is solid state (with no moving parts), it can be handled easily without breakage.

Data transfer became more efficient in two steps. First, a total of 10 wireless hotspots were set up in two locations – nine at police headquarters and one more at the precinct station (*nine miles away*). Next, L-3 Digital Evidence Pro™ video management software was installed. The video management software automates data upload at both wireless locations, then it securely transfers that data to a third location (Wilmington’s data center) more than a half-mile away.

To address potential data bottlenecks when as many as 25-30 cars and motorcycles arrive at once during shift change, L-3 implemented its proprietary Dynamic Load Balancing capability within its Digital Evidence Pro software solution. The solution streamlines data uploads at high volumes – ensuring fast, secure data transfer for all vehicles. Plus, because L-3 FLASHBACK DVR systems work across all mobile unit categories, additional video systems can be added without increasing infrastructure costs.

Results

For Wilmington PD, the impact of L-3 Mobile Vision systems is just beginning to be seen. The 27 installed units are just a fraction of the overall fleet of 165. Yet, according to Captain Williams, the impact is already impressive.

“We’re seeing immediate positive impact on personnel,” reports Williams. In the past, officers had to remove the entire hard drive in order to archive their video recording. Now, for those units with L-3 systems, officers simply drive within range of a wireless hotspot. They don’t even need to get out of their unit.

Still, Support Services is where the most visible impact has been felt. “When it came to copying and archiving, the old systems burned minute for minute,” said Capt. Williams. “So if you had to burn a 60 minute video, it took 60 minutes of support staff’s time.” If each of the 27 L-3-supported units copied just one, hour-long video per week, the time savings for Support Services staff would be significant.

Officer Letson adds: “The system time stamps so you can mark a specific spot on the video. It even records locations and speeds. It really works well. Archiving, copying, and even labeling are just a **push of a button.**”

“If you’re in a position where you’re trying to accomplish multiple tasks with a complex fleet, L-3 is the right answer,” said Capt Williams. “Compatibility between systems enables us to **capitalize** on existing server space. The management software enables us to add camera systems **on our schedule** – without adding infrastructure.”

Footnote: Wilmington plans to outfit the balance of its 165-car fleet over the next three years.

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