The challenge
Mobile information technology has become an essential weapon for patrol officers working the streets and keeping citizens safe. Timely access to information from the 911 Center, along with State and Federal databases saves lives of both the citizens of Akron and the officers that serve them. Rapid access to sensitive information needs to be readily available to the patrol officers at a moment’s notice. Investigations come to a close rapidly when officers can tap into national crime databases. Aside from the access to information the utilization of the mobile office allows officers the ability to file paperwork electronically in the field, increasing overall efficiency and patrol hours. The Akron Police Department (PD) recognized the benefits of deploying the mobile office early on and equipped its officers with the technology in 2005. Five years later the aged, three-piece units fell out of warranty, break fix issues increased and cruisers were delayed in the garage waiting for equipment to be fixed or replaced. Akron PD identified two primary requirements for a successful technology refresh to be met: an ergonomic, economy of space for an ever shrinking cockpit, and a fiscally sensitive solution to meet its constrained budget.

The solution
This was designed to be placed at the center of the vehicle and close to the dash, consisting of a MIL-STD-810G convertible notebook featuring top of the line Intel technology, mounted in tablet form, with a backlit, removable keyboard, swingaway mount, armrest (with optional printer), cupholders and 12-volt plug.

"Some (mobile computing) units are big and bulky, and cars are getting smaller and smaller. We were having trouble getting a solution where the passenger seat wouldn’t have laptops or wiring dropped in,“ 
- Sergeant Rick Schmahl.
Case Study  City of Akron Police Department

The benefit

- More comfortable data input via adjustable monitor/keyboard
- Mount design improves officer safety and use of passenger seat.

The solution

Akron PD set about testing many different brand names of mobile computers and designed an evaluation for the project that would "leave no stone unturned." The evaluation included extensive testing in both the office and the field, measuring the equipment's compatibility with existing software, resilience in harsh, cold weather environments and officer feedback.

Mike Carillon, Programmer/Analyst needed to ensure any solution chosen would be compatible with the proprietary Records Management Solution (RMS) utilized by Akron’s police force. He began with a set of specifications each product would need to meet, and then he diligently tested each machine in his office.

The evaluation criteria also included testing the effects of extreme swings in temperature upon the units they were testing. Their current solution had difficulties booting in the sub-freezing winter weather of central Ohio, causing long delays getting the officers on patrol.

“Our cars are not assigned to an officer, alter roll call an officer gets into an available vehicle,” Sgt. Schmahl continued. “Patrol shifts can have an eight hour gap, so it’s possible cars could be idle for a day in sub-zero temp. The old machines couldn’t handle it. Sometimes we’d have to have a blow dryer on it to get it warmed up to turn on.”

The demo machines being evaluated would need to withstand a two-day test in a freezer. Brite’s Fujitsu Solution, having met Mike Carillon’s specifications and software compatibility test, withstood this test and displayed no delay, or performance degradation. Once the office testing was completed, the units were rotated in the field, and a detailed account from officers utilizing the equipment was collected.

The benefit

The Brite Fujitsu Mobile Computer Solution is ergonomically designed with an emphasis on ease of use, officer comfort and maintains the use of the passenger seat. The Fujitsu Solution was designed to be placed at the center of the vehicle and close to the dash, consisting of a MIL-STD-810G convertible notebook featuring top of the line Intel technology, mounted in tablet form, with a backlit, removable keyboard, swing-away mount and armrest (with optional printer). The swing-away mount features a latch mechanism to lock the tablet in place with the ability to swing the mount open for access to the dash controls. The monitor and keyboard can be adjusted independently of one another to provide more comfortable data input.

Furthermore, the keyboard can be removed from the mount for more comfortable use. The mount design improves officer safety with an unobstructed view out of the windshield and full use of the passenger seat.

"It has been pretty pleasant, the one-piece (tablet design) looks like a monitor. It has been great! It made it a natural transition from the old equipment to the new equipment without needing the CPU in the trunk." - Officer Nathan Keith

“(The officers) don’t realize it is a tablet.” Carillon said. “(And) now we have horsepower in the car with the ability to multi-task between the RMS and CAD systems. We can send out photos in the future, and possibly implement mapping which we could never do with the old kit”

The solution answered all of Akron’s needs on price, value, ruggedness, ergonomics, the ability to allow an officer to sit comfortably in the passenger seat and most of all, positive officer feedback.

Akron PD is also evaluating the Fujitsu Q550 Tablet for field deployment to their Investigators and Detectives. They demanded a tablet device that will stand up to the rigors of a mobile workforce, and the security and compliance needed for their critical applications. The lightweight Q550 not only meets their criteria for security and compliance, the tablet also features a Windows 7 operating system, integrated WWAN and hot swappable battery.

Conclusion

Today the Fujitsu Solution is a vital part of the Akron PD’s tool kit enabling them to carry their their mission to serve the community of Akron in a collaborative effort to enhance the quality of life through crime prevention, enforcement of laws and promotion of safety.

About Fujitsu & Brite

Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Over 170,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. For more information, please see http://www.fujitsu.com. Brite has been delivering, deploying and supporting in-vehicle first responder solutions. This experience, coupled with countless conversations with public safety customers, led Brite to work with a leading mounting manufacturer to develop the Brite Fujitsu Solution. For more information, please see http://www.britecomputers.com.