









Lumbee Group Hometown Heroes Technology Solutions

Public Safety Program









Mobility in Patrol Vehicles

Why Mobility? The Historical Perspective

The foundational concept of mobility was introduced several decades ago with the development and use of Computer Aided Dispatch (CAD) and Mobile Data Terminals (MDT) that supply officers with CAD data.

Capabilities once available only in traditional offices, the combination of geographic information systems (GIS), global positioning systems (GPS), records management systems (RMS), mobile wireless report entry (MRE), and automatic vehicle location (AVL) with CAD and MDT software has increased the ability of departments to control and monitor their patrol functions. Since implementation, computerization and technology have expanded exponentially. Few agencies benefit more from mobility than law enforcement.

Creating a Mobile Office on Wheels

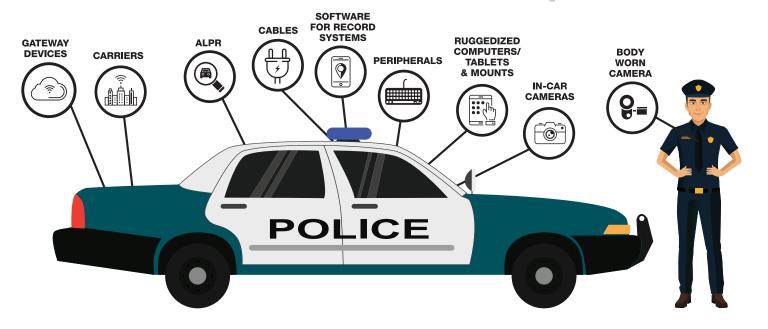
Foundational components for solving mobility needs:

Benefits

- Paperless records system
- Enhanced response times
- Enhanced officer and public safety
- Enhanced efficiency and lower costs
- More police presence on the streets

Common Mobility Requests from Police Chiefs and Sheriffs

- Enhance response times and add police presence on the streets.
- Enhance officer safety in the field.
- Paperless records system.















Surveillance Cameras and Video Management Systems

- 3VR
- Dataworks
- Hikvision
- Veracity

- Barracuda
- EverFocus
- Milestone
- Video Bank

- Bosch
- GeoVision
- Panasonic
- Video Insight

- D-Link
- Hanwha Techwin
 - n Toshiba

Emergency Operations Centers/Control-Ready Rooms Equipment That Powers, Connects, Secures, and Protects

- Allied Telesis
- Christie Digital
- Intel
- Sony

- AMX
- Gridless Power
- NEC
- StarTech

- Black Box
- LG

- Planar
- Tripplite

- Black BoC2G
- LIND Flectronics
- Sharp
- Viewsonic

Drones

- AFF
- DJI

Yuneec

Peripherals

• APC

- EPSON
- Intel

- Avepoint
- Ergotech
- Plantronics

Bretford

• Ergotron

The public safety team provide the support and services you need to be successful

- **Assessment/design:** offers solution providers a range of pre-sales consultation including assessments, device selection, migration strategies, connection with OEMs, financial alternatives, and deployment/logistics solutions.
- **Solution development:** provides access to ongoing technical support for OEMs and resellers by developing the needed technology solutions for their end users.
- **Most current strategies:** The Lumbee public safety solution provides the most current strategies in the delivery of technologies that allow local and state leaders to capitalize upon the knowledge of their constituents in ensuring safety daily.
- **Specialized expertise:** Lumbee has a mature public safety practice comprised of former public safety practitioners. Each member brings unique experiences that define real solutions and assist in accurately assessing public safety needs.

Mobility: Patrol Vehicles Solutions

























Mobility in Patrol Vehicles (Description)



First Pillar of Public Safety Vertical: Mobility in Patrol Vehicles

- Ruggedized Computer/Tablet
- In-Car Camera
- Body Worn Camera
- Gateway for Connectivity
- Cellular Carrier
- LPR Milestone XProtect

Proposed Demonstration of Solution:

- All Described solutions in DT Research Rugged Computers Patrol Vehicles
- Microsoft Patrol Vehicle?
- DT Research Ruggedized, In-car, and BWC
- DT Research ruggedized in POD
- Cradle Point and Verizon for gateway and carrier











Mobility in Patrol Vehicles (Vendor Tables)

Vendor Tables to Support Mobility in Patrol Vehicles

- In-car DT Research Rugged Computers Solutions
- BWC –DT Research, Axon (Fire/EMS)
- Ruggedized Computers/Tablets Xplore, Fujitsu, DT Research
- Mounts Havis, Gamber-Johnson, RAM, etc.
- LPR Milestone XProtect
- Gateway Cradlepoint, Cal Amp, Net Motion
- Carrier Verizon, T-Mobile, AT&T
- Keyboards- TG3, IKEY
- Accessories C2G, Startech









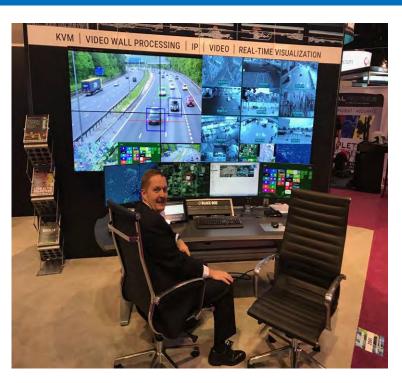






























Mobility in Field Operations (Description)



Second Pillar of Public Safety Vertical: Mobility in Field Operations

- Surveillance Cameras Public Safety Camera System serving as platform for connectivity with Physical Security Facility Cameras including Private Businesses and Schools
- Command/Control Rooms (Emergency Operations Centers)

Proposed Demonstration of Solution

- Control Room (EOC) Black Box or Christie Digital
- Surveillance Camera in VisualSolv area (Private Business)
- Surveillance Camera on Pole in PS area (Public Safety System)
- Surveillance Camera in Education area hallway
- External Solution Encore Networks
- In-car camera/BWC within DT Research Patrol Vehicles
- All cameras are fed into the Control Room
- Drone YUNEEC (Tethered)
- Alternative Vehicles SEGWAY













BLUEFORCE DEVELOPMENT CORP

Shared Situational Awareness and IoT/Sensor Fusion

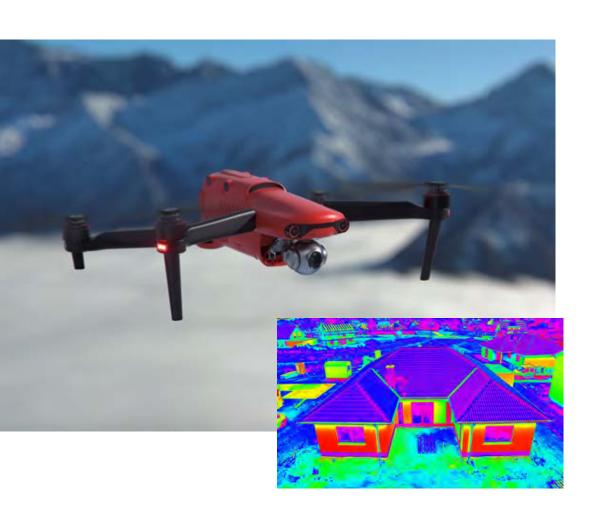
Affordable Intelligent Mobile Edge software that delivers shared and real-time actionable insights for municipalities, law enforcement, fire, emergency management, smart cities, and lone workers... to enable rapid, secure, intelligent connectivity between people, sensors, and systems... to dramatically impact the tempo of operations, increase effectiveness, and enhance life safety.

- Sustainable: Secure, supported, extensible, and interoperable
- Location, sensors, AI, and connectivity with enterprise 911/CAD, drones, smart city infrastructure
- Rapid swarming of personal, sensors, and cognitive services fused and made securely shareable to the palm of your hand.
- "Single pane of glass" dashboard that combines information from deployed personnel, body-mounted or unattended IoT sensors, live streaming video, and Al information services.
- Enduser configurable dashboards with alerts from personal body warn, unattended sensors, and AI driven awareness notifications.
- Integrated presence and multi-media comms, saving valuable radio air-time





Autel Drones



- 8K camera option (1/2 in. sensor)
- 6K camera option (1 inch sensor)
- Dual FLIR/8K option
- Flown at altitude of 70 feet had resolution of approx. ½ mm.
- Especially useful for locating suspects hiding at night.
- Up to 40 minutes of flight time.
- Can be paired with training from Sundance Media Group.



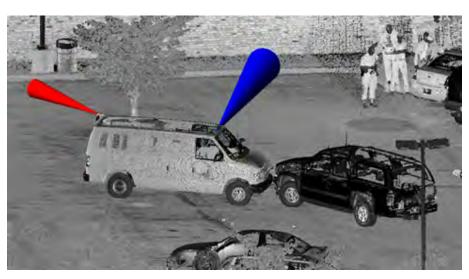
Wireless Guardian

- Identify and track subjects before they ever come into view of a camera.
- Match a subject's face to technology on his person.
- Prevent and intervene when known trespassers come onto property.
- Find more wanted people with less effort.
- Secure your physical facilities with the latest technology.





Leica Geosystems Laser Scanning



Laser Scanning

- Capture entire crime scene/crash scene.
- Have a 3-D "Point Cloud" that preserves forever.
- · View from any perspective. Fly-through scene.
- Measure anything, through walls, height of suspects, speed of cars.
- Much faster than photographs. Save time.
- See detail that can't be seen with naked eye.





Silent Partner Technologies

- · Smart inventory of all items in stock.
- Updates can be automatic (multiple times per second).
- Missing equipment can be tracked to the last place it was on the truck.
- Medications and other date-sensitive items can be highlighted for use as they near their expiration.





iStorage







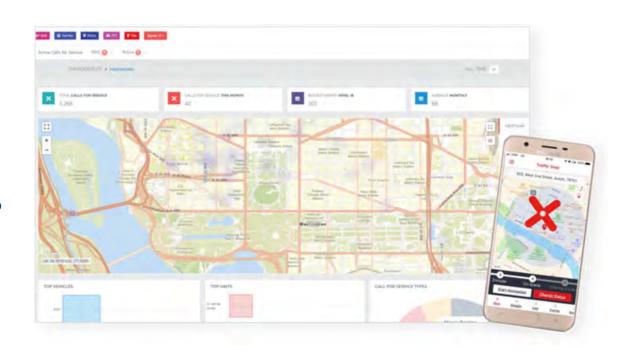
- Secure storage of sensitive information.
- Cannot be read or recognized by computer until the PIN code is physically pushed on the device.
- Immune to brute force attacks
- Cloud encryption/decryption devices make it easy to send encrypted sensitive information over regular email to known associates with the decryption key/device.



Rapid Deploy

Cloud-Based Dispatch and Mapping

- Zero downtime. No need for servers, patches, updates, maintenance. All handled in cloud.
- Live dispatch info. 911 callers can click a text message link to stream real-time location info and video evidence straight to dispatcher.
- Dispatcher can forward video stillshots to police en-route.
- Dispatcher can forward live/updated GPS coordinates.





eCitations and Paperless Records

- eCitations and paperless RMS provide a faster way of reporting activity to command staff and government.
- eCitations can't be lost. No searching through courthouse records for missing tickets during an audit.
- Paperless RMS can email victims a copy of their incident report. It can even allow victims to file a report online.
- Many state governments now have requirements to use eCitations.
- Paperless RMS can keep up with changes in NIBRS requirements in near real time.





Citizen Notification

In a world of information, now local governments can keep citizens informed... **in real time**.



- Citizens in a geographic area can be informed of emergency information on weather, flood, fire, etc.
- Citizens can be alerted when police action or pursuit is near their area.
- Citizens can be reminded of court dates for traffic tickets.
- Victims can be informed when suspects have finished their jail sentence and are about to be released.



Results





Reliable and dependable solutions that helps public safety to enrich the lives of citizens.

Mobility in Field Operations (Vendor Tables)



Vendor Tables to Support Control Room/Surveillance Cameras

- Public Safety/Surveillance Camera System Product line Panasonic, BOSCH, Hanwha Techwin, Barracuda, Toshiba, Hikvision, GeoVision, EverFocus, D-Link, Encore
- In-Car Cameras Panasonic,
- Video Management Systems Product Line- Milestone, 3VR, Dataworks, Video Insight, Veracity, IP Configure
- Control/Ready Room (EOC) Christie Digital, Black Box, Planar?
- Mounting for Control EOC/Dispatch Ergotron, Ergotech
- Cabling C2G, Startech
- Headsets Plantronics
- Drone YUNEEC













Management, Storage and Security of Data































Management, Storage and Security of Data



Third Pillar of Public Safety Vertical: Storage and Security of Data

- Storage Solutions (Local, hybrid, cloud)
- Security of Data (FBI CJIS Compliance)

Proposed Demonstration of Solution

- Generated data is defined as Body worn cameras, In-car cameras, Surveillance Cameras, Drones, and Paperless Records System (These solutions are being demonstrated already in previous two demos)
- Red Hat will be utilized for storage in close proximity to Control Room (Cloud – Microsoft Azure Government Cloud?)
- Milestone utilized for video management of data











Vendor Tables to Support Storage and Security of Generated Data

- Integrated Databases (Storage) Red Hat
- Local Server Storage HPE?
- Cloud Solution Microsoft Azure Government Cloud
- Video Management Milestone, VideoBank?
- Security? Quantum, Symantec, Watchguard
- Storage/Security of Hardware











Services Provided – Public Safety Vertical

Assessment/Design: Range of pre-sales consultation including:

- Assessments
- Device Selection
- Migration strategies
- Connection with OEMs
- Financial alternatives
- Deployment/Logistics solutions











^{*}Mature Public Safety Practice - Most current strategies in the delivery of technologies through former Public Safety practitioners