

Wireless Broadband Uses Public Safety First Responders

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LTE Interoperability

- **Automatic Aid**
- **Mutual Aid**
- **Large-scale Incidents**
- **Regional Task Forces**
- **Joint Operations**
- **Examples**
 - **9/11/01**
 - **Hurricane Katrina**

LTE Priority Access

- **Competition for bandwidth**
 - **Commercial carriers struggling to meet demand**
- **Commercial Systems Overload During Major Events**
 - **I-35 Bridge Collapse in Minnesota**
 - **East Coast Earthquake**
- **Commercial Carriers Reluctant to Provide Priority Access Due to Liability**

LTE Ownership

- APCO Project 25 (P25) voice systems have not resulted in widespread interoperability
 - Standards have been slow to emerge & process has been dominated by equipment manufacturers
 - Governance and cost-sharing become significant barriers
- Wireless Broadband (Long Term Evolution – LTE)
 - Standards process is driven by commercial carriers
 - Offers economies by leveraging commercial products
 - “Unique” needs of Public Safety may not be addressed

Fire Department Applications for LTE

Current Needs:

Fire Apparatus Connection to Computer Aided Dispatch System- AVL used for the routing of fire apparatus, status changes, mapping information, and incident information

Mobile Hotspot on Fire Apparatus- Create a local Wi-Fi to allow multiple mobile devices to connect using a single data connection. Reduces the cost of maintaining several connections per fire apparatus.

Fire Department Applications for LTE

Current Needs:

Mobile software and map updates- Connect to mobile computers to update software and maps

Send and Receive Documents- Improve the availability of pre-incident plans, accountability reports, incident action plans, patient treatment reports, and incident records to improve incident intelligence and mitigation.



Fire Department Applications for LTE

Future Uses:

Transmit Incident Video to Command Post- Deploy mobile video devices to send visual updates to the Incident Commander for ongoing strategic planning and action in real time.

Fire Fighter Safety and Wellness monitoring- connect to a wellness database to document firefighter wellness data and incident activity's to improve firefighter safety and exposure tracking.



Fire Department Applications for LTE

Future Uses:

Electronic Incident Command Tracking- Connect to the Record Management system and maintain worksheet

Mobile Accountability Systems for Hazardous Incidents- Conduct real time monitoring of firefighters vitals, location and air consumption to improve firefighter safety. System would allow on scene resources to quickly locate and remove an injured firefighter from a hazardous atmosphere.

