

The Role of Broadband In Improving Public Safety Communications and Emergency Response

Larry Flourney

Associate Director

Academy for Advanced Telecommunications
and Learning Technology

Available Technology

- Technology is generally not the problem.
- Problems are introduced by
 - Lack of Economic Incentives
 - Congressional intent interpretations artificially restricting eligibility
 - FCC agency rules artificially restricting eligibility
 - Industry practices
 - Cherry picking
 - Delayed functionality rollout
- Technology availability for 700 Mhz/P25 is an issue

Technology



**Research/Testbed
Ambulance Prototype**



**Liberty County
Field Ambulance**



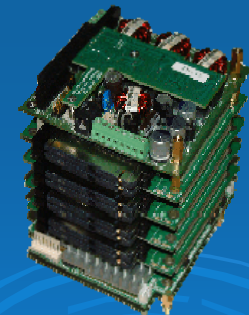
**U.S. Army HMMWV
Ambulance Prototype**



**Deployable
Telemedicine System**



**Physician Workstation
Prototype**



**Intelligent Communications
Manager**

Economic: Sustainability

- Federal dollars can initiate but not sustain
- Matching funds and operating funds must come from State, regional, and local sources
- Community networks provide local and regional shared funding opportunities
- Should the National Broadband Plan and others adopt sponsorship of community networks as a sustainability agent for healthcare networks
- Should they encourage and support the education of medical management that appropriate security/privacy tools exist

Congressional Intent

- FCC Interpretation of the 1996 Act
- Rural ambulance services which are not wholly owned subsidiaries of a hospital are not eligible for Universal Services funding.
- This significantly reduces the ability of these rural services to support “at the scene” and “in-route” advanced trauma and acute care.

Agency Rules

- Emergency Services are a named focus concept in the FCC Rural Healthcare Pilot Program yet the regional and local emergency services coordinators are not considered eligible entities under the program.
- We have to expand our definitions in many areas
- Our larger scale planning should focus around:
 - County government
 - Councils of Government (CoGs)

The INTERNET

is not the 21st Century panacea.

“The Internet”

- “The Internet” has been defined as the “default” backbone for the National Health Information Network. Yet, the Internet like the POTS phone system is “very” subject to local and regional “overload”. Witness 9/11 and the hurricanes of the Gulf Coast region.
- Local and regional “private” networks will be critical components of the answer in many areas.

NG9-1-1

➤ Need for:

- Continued research
- Local, Regional, National and International Interoperability
- Use of existing standards where they exist and their creation where needed
 - Access Network providers (location)
 - Service Providers
 - IP network providers
 - Security
 - NG9-1-1 Systems
 - First Responder Systems