2019
Illinois Public Safety Communications
Planning to use the
Public Safety Broadband Network

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What is FirstNet

- Dedicated nationwide LTE Broadband network for public safety – Focus on cellular-type voice, data, & video

- No requirement for you to use FirstNet

- LTE is **NOT** a replacement for LMR walkie-talkies

What is FirstNet

- Follows 3GPP LTE Standards
- Priority and Preemption
- How would we use it?

Fleet Management

Remote View of Aerial Imagery

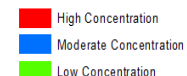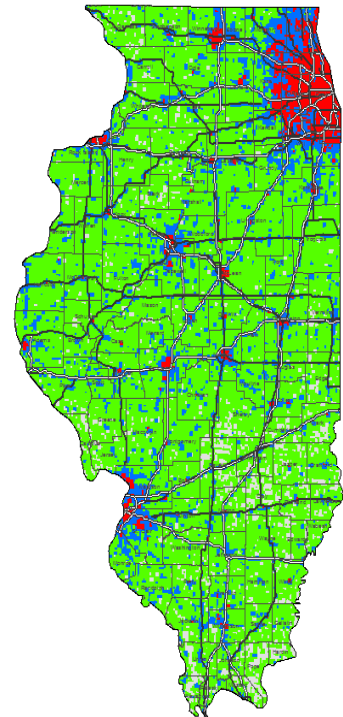# Mobile/Portable Traffic Monitoring

Cost

- Pricing appears competitive.
- Contract and Plans
- State Contracts for Agencies
- Subscriber-Paid
- No Throttling
  - But, Caps and Plan Changes

Coverage

- Carriers measure coverage differently on their maps.
- Public Safety is used to Guaranteed Coverage Maps.
- "In-Building Coverage"
- Key: You Can Test before you commit
  - Run a "Speed Test" application

High Concentration
Moderate Concentration
Low Concentration

Bandwidth

- New Technology – 5G on the way
- Fringe coverage area – minimum speeds
- Areas throughout IL will have better throughput
  - Generally, the closer to a tower, the faster the speeds.
- Key: You Can Test before you commit

Deployable Assets

- Deployables
  - Deployable systems are used to increase capacity and coverage
  - FirstNet / AT&T will have deployable assets available for use
  - Illinois has a number of Deployables with Satellite backhaul under our control

QPP

- **Q**uality of Service, **P**riority, and **P**re-emption
- Primary Users
  – Police, Fire, EMS, EMA, 911
- Extended Primary Users
  – Transportation, Public Works, Public Health, etc.
- Network Busy or Overloaded?
  – Priority gets you the next available opening
  – Pre-Emption bumps the low-priority users

Local Control

- Local Control
  - We believes the key to Control is Minimal User intervention
- "Uplift"
- LTE Networks "Self-Optimize"
  - Improper intervention by one agency can negatively affect neighboring agencies
- NIMS & ICS Communications Unit
  - Expertise in technology at the Incident

PTT

- LTE PTT is not considered Mission-Critical, i.e., it is not Public Safety grade
  - Still to be proven in a true Public Safety role
- PTT on day one may be for some users
  - Non-Frontline, Commanders, non-life-safety, etc.
- LMR is Here to Stay
  - Plan to stay on LMR for a decade (or longer!)
  - Look for Hybrid Networks and Radios

Applications Management

- <u>FirstNet Application Store</u>
- FirstNet will provide a place for applications developers to concentrate on the Public Safety market
- Application Developers to be vetted
- Applications to be tested for security flaws, bandwidth inefficiencies, etc.

Subscriber Paid

- It is possible for Personally-Owned Devices to be used on the FirstNet network.

- Non Public Safety users will NOT be able to acquire FirstNet service.

- Users may lose some control over their Personally-Owned Devices when on FirstNet

- Security is a huge concern

Decisions

- Decision
  - Do what's best for your Agency
    - Cost
    - Coverage
    - Demo Devices
    - Features

For More Information:

- www.firstnet.gov
  - Nationwide Information

For AGENCY Information:

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