

2018 IPWMAN 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?



Snow Plow Management



Remote Access of Dash Camera Video

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NO SIGNAL L

RADAR OFF



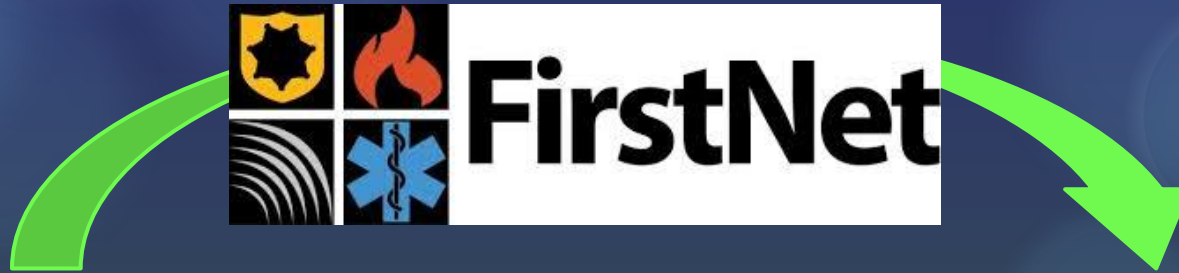
Remote View of Aerial Imagery



Mobile/Portable Traffic Monitoring



Video Interoperability



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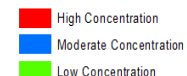
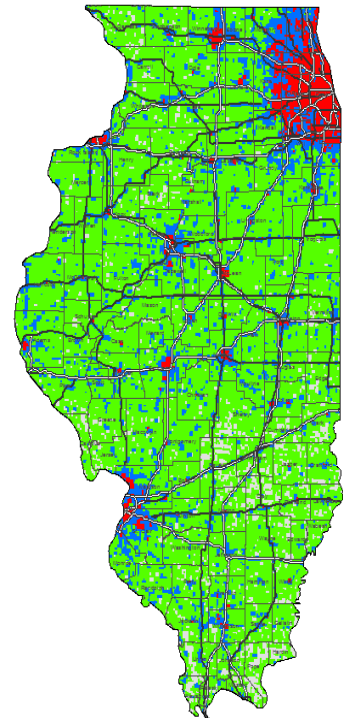


Cost

- Pricing appears competitive.
- Contract and Plans
- State Contracts in Progress
- 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



Bandwidth

- Minimum FirstNet coverage is 256 Kbps Up and 768 Kbps Down at the “Cell Edge”
- 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 wants a number of Deployables with Satellite backhaul under our control

QPP

- **Quality of Service, Priority, and Pre-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

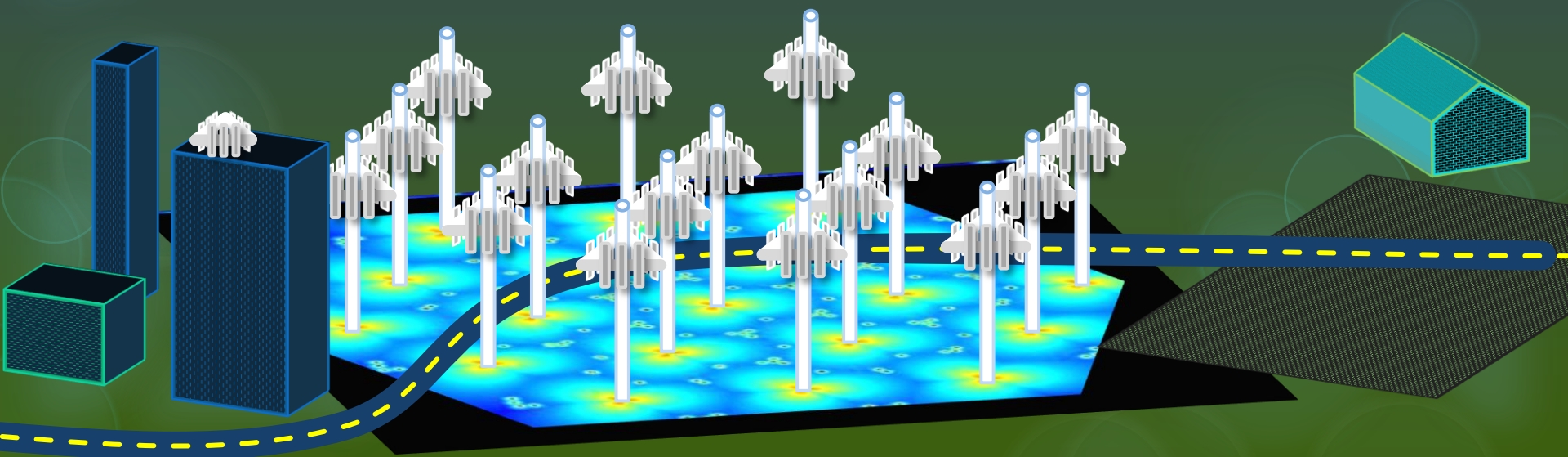
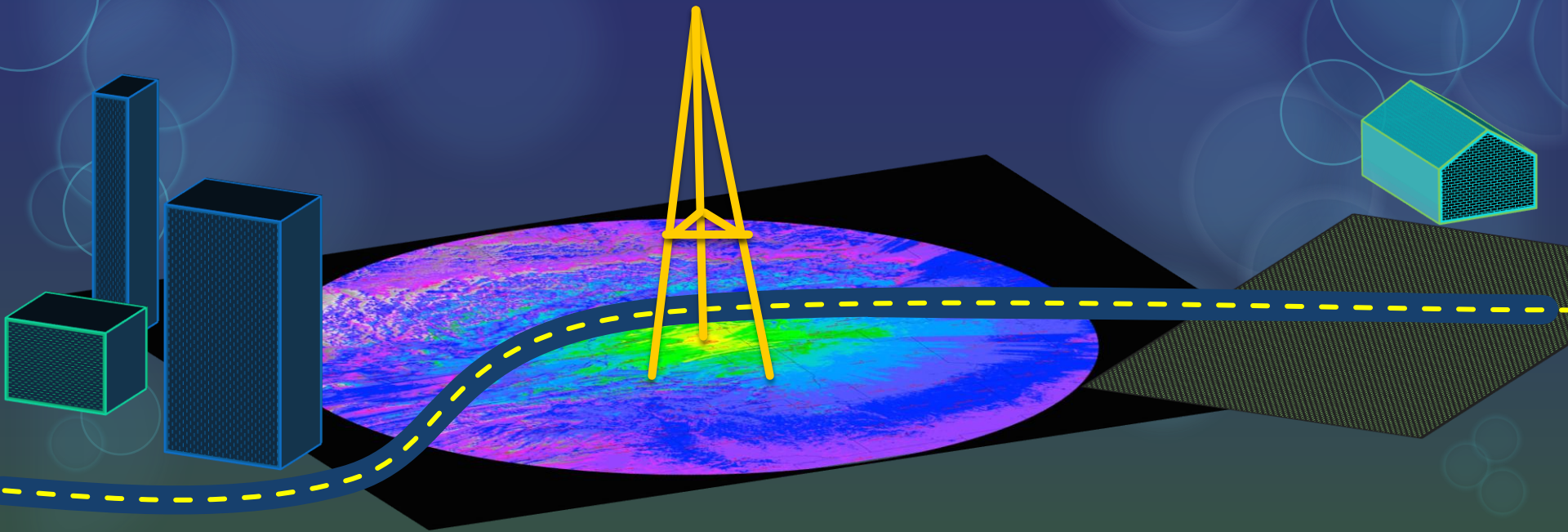
Local Control

- 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

LTE \neq LMR



Applications Management

- FirstNet Application Store
- 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 will be 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

Interoperability

- Similar to cellular networks today, phone calls and data can be sent between various carrier networks
- No Priority BETWEEN Networks
- Networks are “Manufacturer-Agnostic”
- Something to think about: Do we need to designate common apps that everyone should have on their device?

FirstNet

And

NG-911



FirstNet & NG-911

- Two Parallel Technology Projects

- FirstNet

- First Responders

- NG-911

- Our Citizens.



- How will new technology affect your:

- Field Operations
- Dispatch Centers

FirstNet & NG-911

- Text to 911



- Who, What, When?
- Who Decides?



Decisions

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

For More Information:

- www.firstnet.gov
 - Nationwide Information

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