



Arbitrage and Partnerships

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Arbitrage

- **Definition**

- Take advantage of price difference
- Striking a combination of matching deals
- Risk-free common use
- Mitigate Risk
- Maximize deals

- **What happens in PS today**

- Share communications sites
- Leverage grants across jurisdictions
- Use existing networks – versus building new

Partnerships Needed



Potential Partnership Strategies For FirstNet

- **Carrier partners high level from FirstNet**
 - **Share Public Safety Spectrum with carriers – sharing enables:**
 - Use of existing carrier sites and network infrastructure by FirstNet
 - Instant network in place for public safety use
 - **FirstNet becomes the retailer – carriers are the wholesaler**
- **From a State and Local Perspective to FirstNet**
 - **Provide FirstNet access to existing municipal owned fiber networks**
 - **Allow co-location of FirstNet and carrier partner systems onto PS sites**
 - Leverage com sites with fiber connectivity and that fit within carrier model
 - Champion work being done in applications and Next Gen 911
- **States**
 - **Act as a facilitator for FirstNet partnerships from both a private/public and public/public perspective**

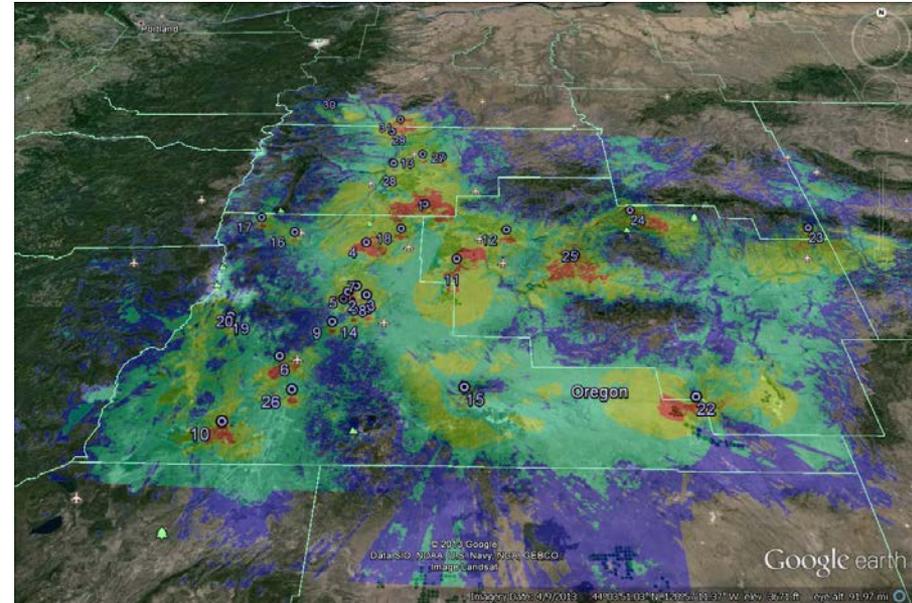
Strategies for FirstNet Partnerships

- **Leverage Existing Partnerships or opportunities**

- Find what works well today
- Open up to private sector development
 - Asset sharing
 - Maintenance agreements
- Focus on groups that work together
- Work P3 efforts early

- **Define Regional Strategies**

- Fiber Consortium in X County
- Niche carrier network in region Y
- New technology in Z region
 - Example technology use in school systems



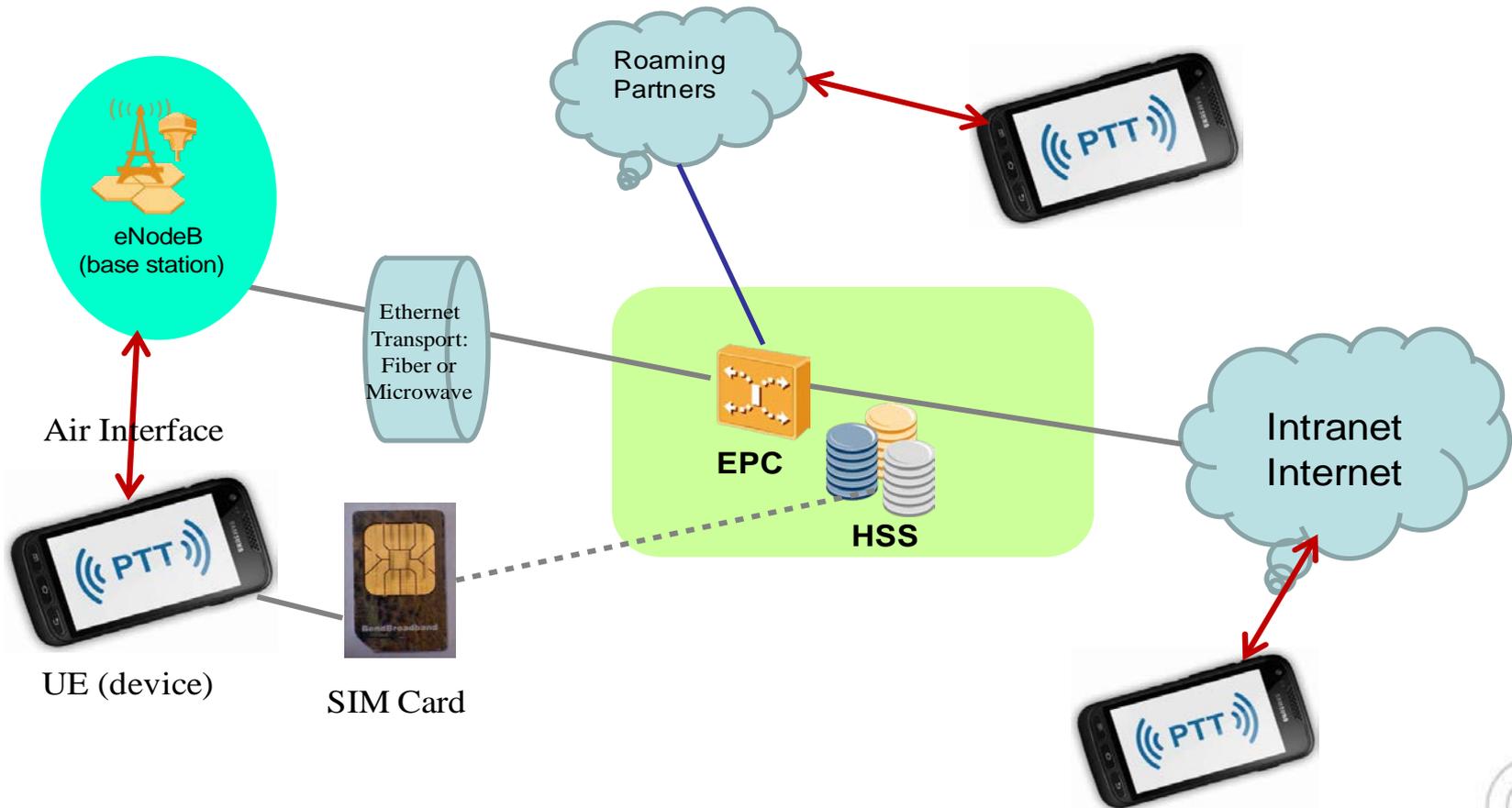
Hypothetical Public/Private Partnership

- **Existing LTE Network supporting public safety today**
 - Combination of privately owned fiber and publicly owned microwave for backhaul
 - Network provides public safety coverage at least equal to or better than commercial coverage, both outdoors and inside buildings
 - Multi-agency network with coverage sufficient to replace legacy trunked radio equipment with expanded coverage to areas that do not have service today
- **NOC access located in local market area**
- **EPC hosted at Bell Labs in Chicago and then transition to FirstNet Core**
- **End user support will be provided by agency IT/Radio staff with support from local vendor**
- **Local vendor to staff maintenance personnel, equipment and spares, and will dispatch tower climbers as required**
- **User equipment spared and maintained at the agency level**

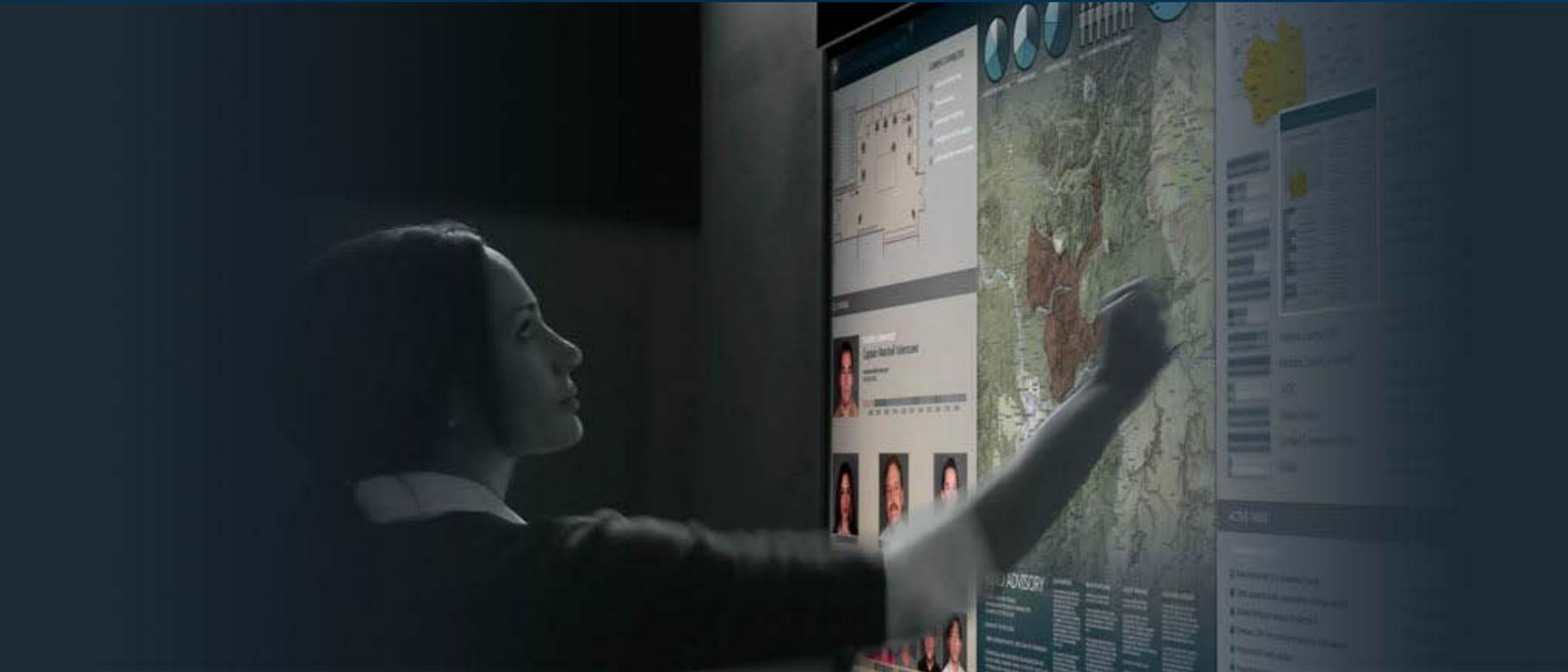
Stakeholder Involvement

- **All Police, Fire , EMS, Search and Rescue, Emergency Management, 911 Service, and Sheriff's departments within a local region**
- **US Forest Service in the region to include National Forests. USFS will likely want to add some additional forests.**
- **Tribal entities, especially those with telecom operational experience**
- **Include corrections and public works groups**
- **Public Utilities can be added as secondary users in the future**

Likely elements of a First Office Application



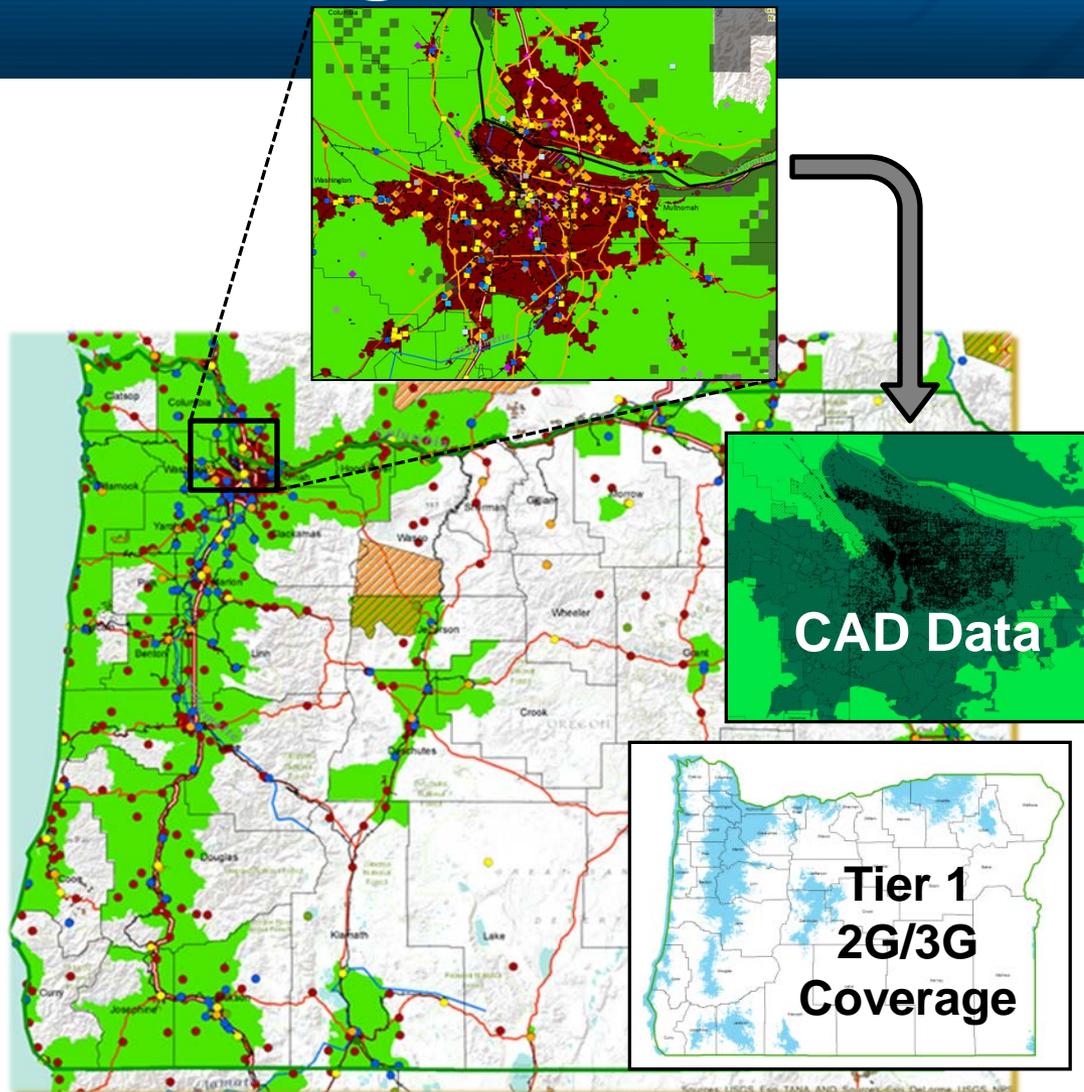
Vision of the Future



DHS Command, Control and Interoperability Division Basic/Futures Research program has developed a compelling video to illustrate broadband's potential within emergency management.

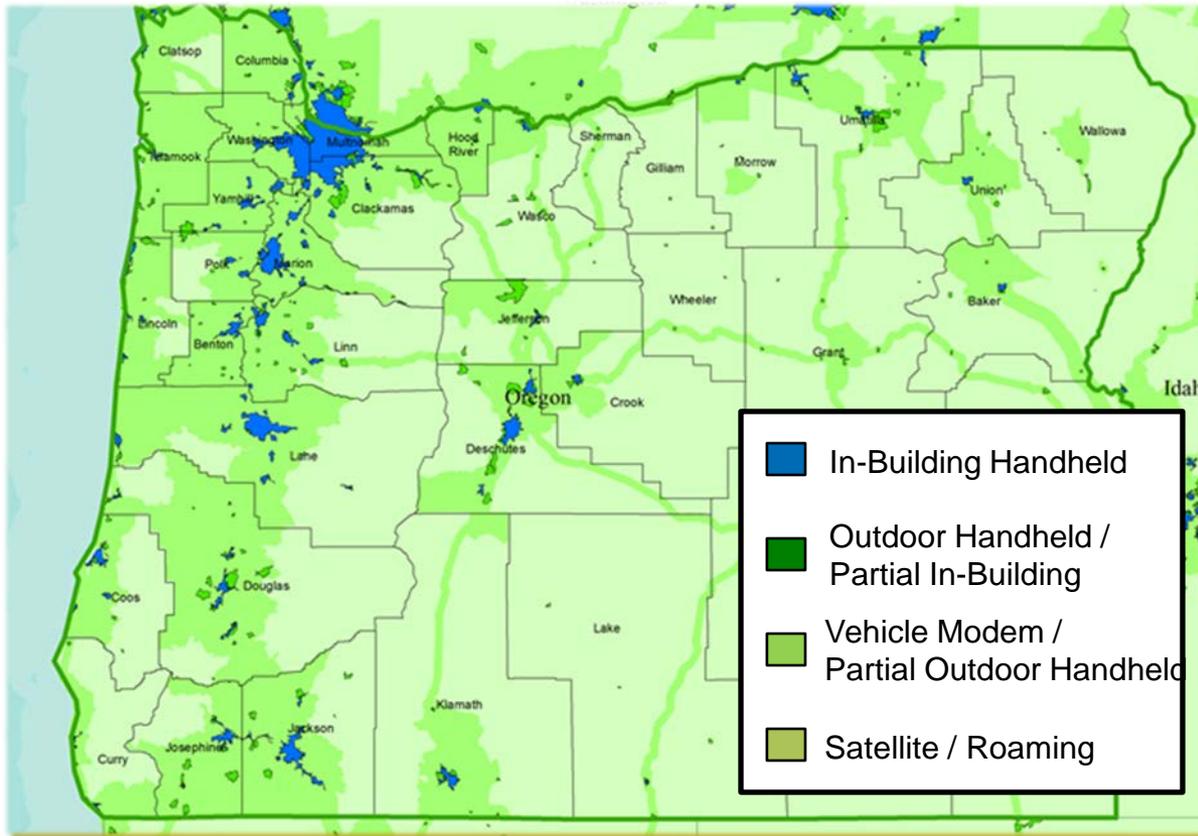
[Precision Information Environment \(PIE\)](#)

Foundation Building For Planning



- The State of Oregon requested DHS OEC to collaborate with FirstNet to develop a process to help define coverage objectives
- OEC combined standard data sets with Oregon unique data (such as CAD) and commercial coverage

Notional Coverage Baseline for a state Analysis



Baseline is validated by overlaying Oregon info for

- Agencies
- Facilities
- Infrastructure

e.g., Law Enforcement, Fire Dept., EMS, Federal, Military, Court Houses, Prisons, Airports, Emerg. Ops Centers, Energy, Pipelines, Mfrg, Schools, Hospitals, Public Venues

Thank You

www.firstnetinoregon.org

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