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# NG 9-1-1 and FirstNet Closing the gaps

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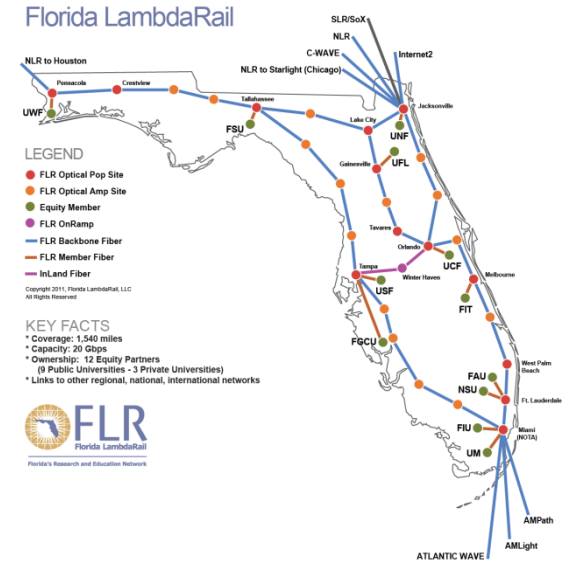
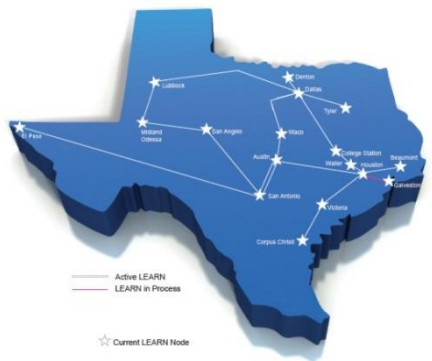
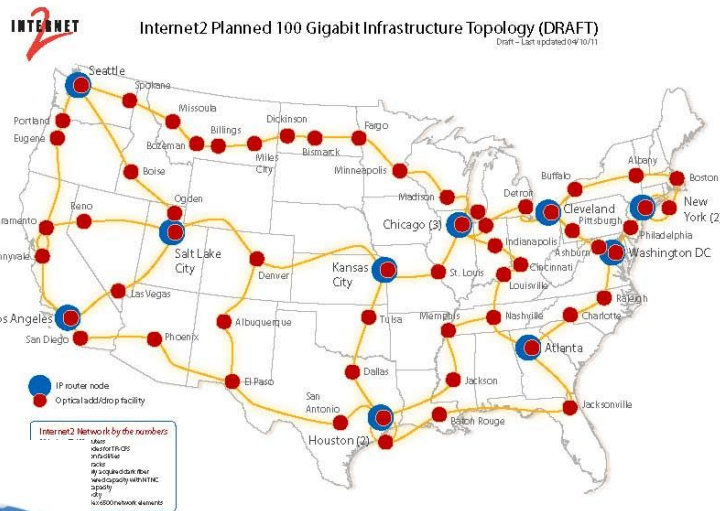
Texas A&M University

Internet2 Technology Evaluation Center  
(ITEC)

# Firstnet and NG 9-1-1 Backbones

- Firstnet OPEX
  - Backhaul
  - Towers
  - Maintenance
  - Co-Location
- Bandwidth required for Texas – 945 Gbps (4500 sites@210 Mbps ea.)
- NG 9-1-1 OPEX
  - Backhaul
  - Maintenance
- Bandwidth required for U.S. – 342 Gbps (5700 PSAPs with avg. call takers each – 60 Mbps per NENA recommendation)

# Fiber Resources – US UCAN – RONS – State - University – City – County – ISDs



# NG 9-1-1 and LTE Interoperability

- Opportunities
  - Voice interoperability – VoLTE
  - Internet Network QoS
  - The role of Software Defined Networks
  - Applications testing
  - Federated Authentication
  - Multicast Video

# Internet2 – Building the Applications Testing Sandbox

