STEM Advisory Council's Broadband Committee
ICN 2.0 Presentation

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2013 STEM BROADBAND PROPOSAL

November 2013

Presentation Overview

- **Introduction**
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- **Resourcefulness / Resources**
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  - **Summary of ICN 2.0**
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Introduction:
Iowa Communications Network

- **Administers Iowa's state-of-the-art statewide fiber optic telecommunications network.**
  - Provides secure data network for a critical information infrastructure.
  - Provides Network services for Public Safety, Government, Education and Healthcare.
  - **3400 miles** of owned network assets and **5200 miles** of network secured by an exchange of value with the private sector.
  - Connections in all **99** counties in Iowa.

Introduction:
Public/Private Partnerships

- The ICN was designed to create a **fabric of public/private partnerships** and provide opportunities for local providers of last mile services.
- From the beginning, the ICN has **surrounded itself** with valuable partners in the Private Sector, who by virtue of State Procurement processes, are contracted to provide value from the Private Sector to the Public Sector.
- What if there was a way to **strengthen those partnerships** by allowing the Private Sector access, by way of fair and equitable procurement, to routes and potential bandwidth of the ICN.

Introduction:
Network Infrastructure Upgrade

- **Successful $25 million infrastructure upgrade**.
  - Backbone of **40Gb-100Gb** with an extended reach of backbone capacity of 10 gbps to all 99 counties.
  - Provides at least 1 gbps of dedicated, symmetrical, Ethernet connectivity to selected users. All AEA's served by 10GB.
  - Ability to turn-up additional capacity (where needed) at any time without interfering with the connectivity of existing users.
  - Future advancements - **400Gb** at the core.

Something to Offer

- Distribution end is the HEAVY LIFT of this equation.
- We should be hearing from each of us <u>what we CAN do or Offer</u>.
- Bring all of our respective resources to bear.
- That's the mindset that can solve this.
- **So we are offering ICN 2.0 as one definition of how Public Private Partnership could assist in the Broadband solution.**

Resourcefulness / Resources

- Money doesn't solve it – BTOP proved that.
- Statement ***"We have enough Middle Mile in the State"***
- *Looking to* ***Compliment****, not* ***compete.***

- **June 2013 – Des Moines Register:**
  - "We would like to see the ICN increase as a Public-Private Partnership, in which the network remains public owned, but is **leased** and **operated** by the private sector."

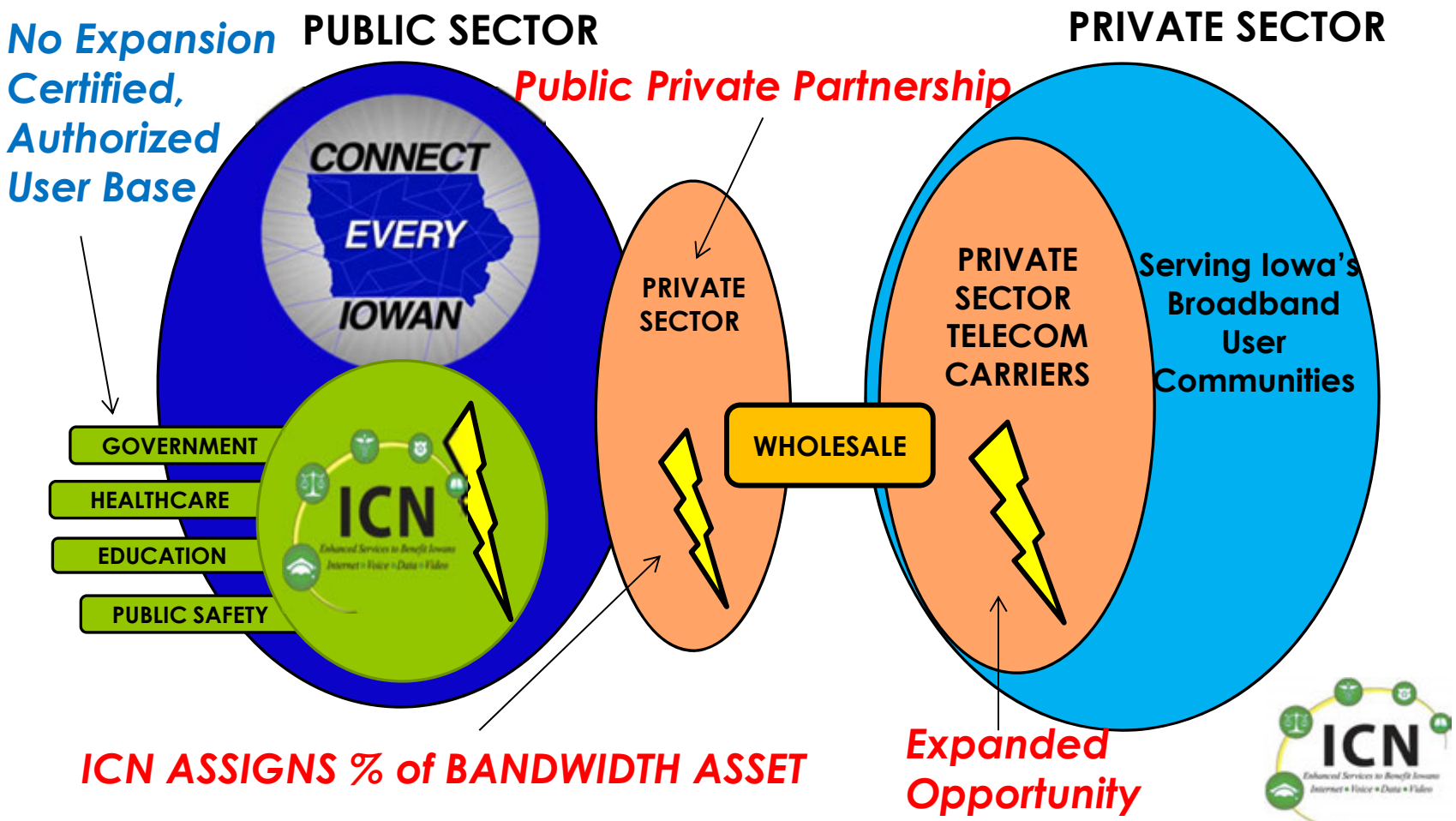
~ *ICN Exec Director David Lingren*

What is ICN 2.0

- **THREE SIMPLE IDEAS:**
  - The State will offer up a **significant %** of the ICN unused bandwidth potential as a wholesale asset for the Private Sector to access unreached or underserved areas.
  - The State will **Partner with the Private Sector** to:
    - Operate middle mile fiber routes and segments of bandwidth potential.
    - Make those available via wholesale agreement to Private Sector carriers.
  - By having wholesale availability to established ICN bandwidth potential, private sector carriers **have increased economic opportunity** to serve Iowans Broadband Internet access.

STEM Broadband – ICN 2.0

Overview



STEM Broadband – ICN 2.0

SUMMARY

1. ICN provides the **wholesale asset.**

2. **Private Sector provided** access to wholesale asset.

3. Private Sector carriers have **additional route and bandwidth opportunity** to develop broadband deployment.

Legislative Changes to Code Chapter 8D

In support of the Governor's Broadband initiative:

- Language required to enable **"WHOLESALE"** activities with a portion of the ICN bandwidth capacity.
- **Determine qualifications/specifications for the "WHOLESALE User"**
  - State Administrative processes will provide detail regarding use and access by "Wholesale Users", which may be similar to what ICN has historically done through managed services contracts with the Private Sector.
- **By adding this distinction, the Public Private Partnerships would be able to Wholesale ICN assets for their use or for their customer product deliverables.**

Closing Notes

- Today, an opportunity to **repurpose** the ICN is before Iowans.
- The network is positioned to **enable the private sector** to develop **new revenue opportunities**.
- **Foster economic and broadband development** throughout the State of Iowa.
- ICN's authorized and certified user base **remains unchanged**, but the Private Sector's user base may **increase by virtue of access**.
- This offer also empowers the STEM Broadband Committee with **actionable legislation.**
- Repurposing the ICN provides an opportunity to **strengthen the relationship** between government and the private sector.
- Establishing an '**open network provider**' would benefit the private sector, and ensure the **critical infrastructure is available to all Iowans**.

ICN 2.0