

**by CostQuest Associates
EFRsource and e-Copernicus**

LinkAmerica Alliance

- I. Introduction/LinkAmerica Alliance – **3 minutes**
- II. Our State Broadband Mapping and Assessment Approach – **7 minutes**
- III. Mapping – **10 minutes**
- IV. Approaches for Broadband Stimulus Funds – **5 minutes**
- V. Questions – **35 minutes**

LinkAmerica Alliance



CostQuest is a highly experienced broadband mapping firm recognized worldwide as a leader in geospatial, economic and network modeling.



EFRsource, Inc. is a technology and research firm specializing in bridging the insights of strategic visioning with the action of strategic planning for telecoms, energy, telehealth sectors.



e-Copernicus helps clients interface with public safety services, coalitions, strategic partners and federal funding sources and maintains a particular focus on advancing broadband and wireless communications service deployment, particularly in rural and underserved areas.

LinkAmerica Alliance

Local Solution

LinkAmerica provides independent analysis that supports a Local solution based on the needs and concerns of Local citizens, businesses, and service providers. We provide a holistic supply and demand side framework for decision making that is fact based, research focused and consensus driven.

Experienced

The LinkAmerica Alliance draws together the foremost experts on broadband policy, mapping, network development, strategic planning, financing and marketing.

Independent

Link Alabama provides a robust analysis that supports a Local solution for an Local issue. The team is agnostic and independent. The LinkAmerica Alliance works to serve the State and its citizens.

Consensus Driven

The LinkAmerica Alliance provides a team of experts with a successful process to gain consensus across a diverse set of geographic, cultural and political constituencies. We take what we learn, share it to all stakeholders and use shared knowledge as a means to derive consensus and action.

Value

LinkAmerica provides a value priced, effective and complete solution from leading industry experts using tested methods processes and tools.

LinkAmerica Alliance

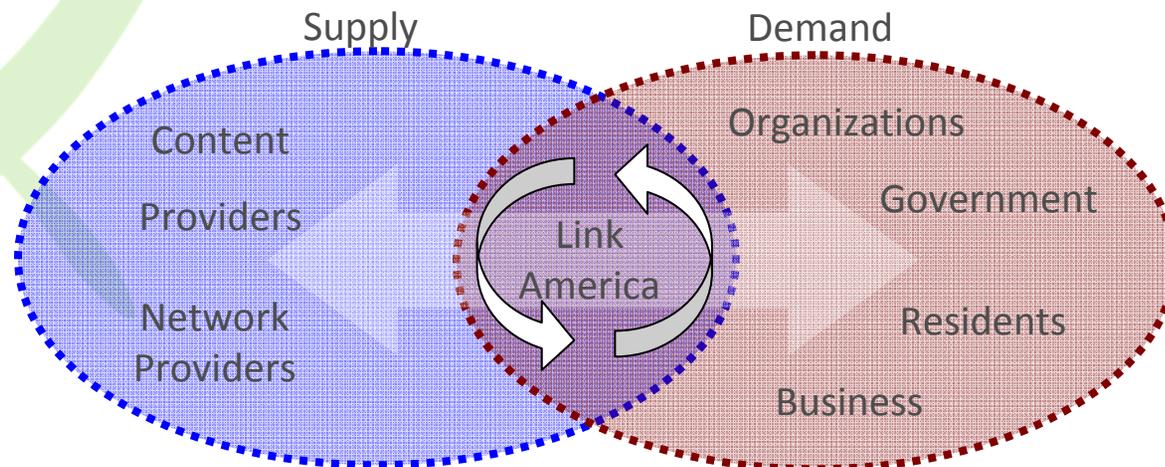
Supply and Demand – Linking Both Sides

Supply Side

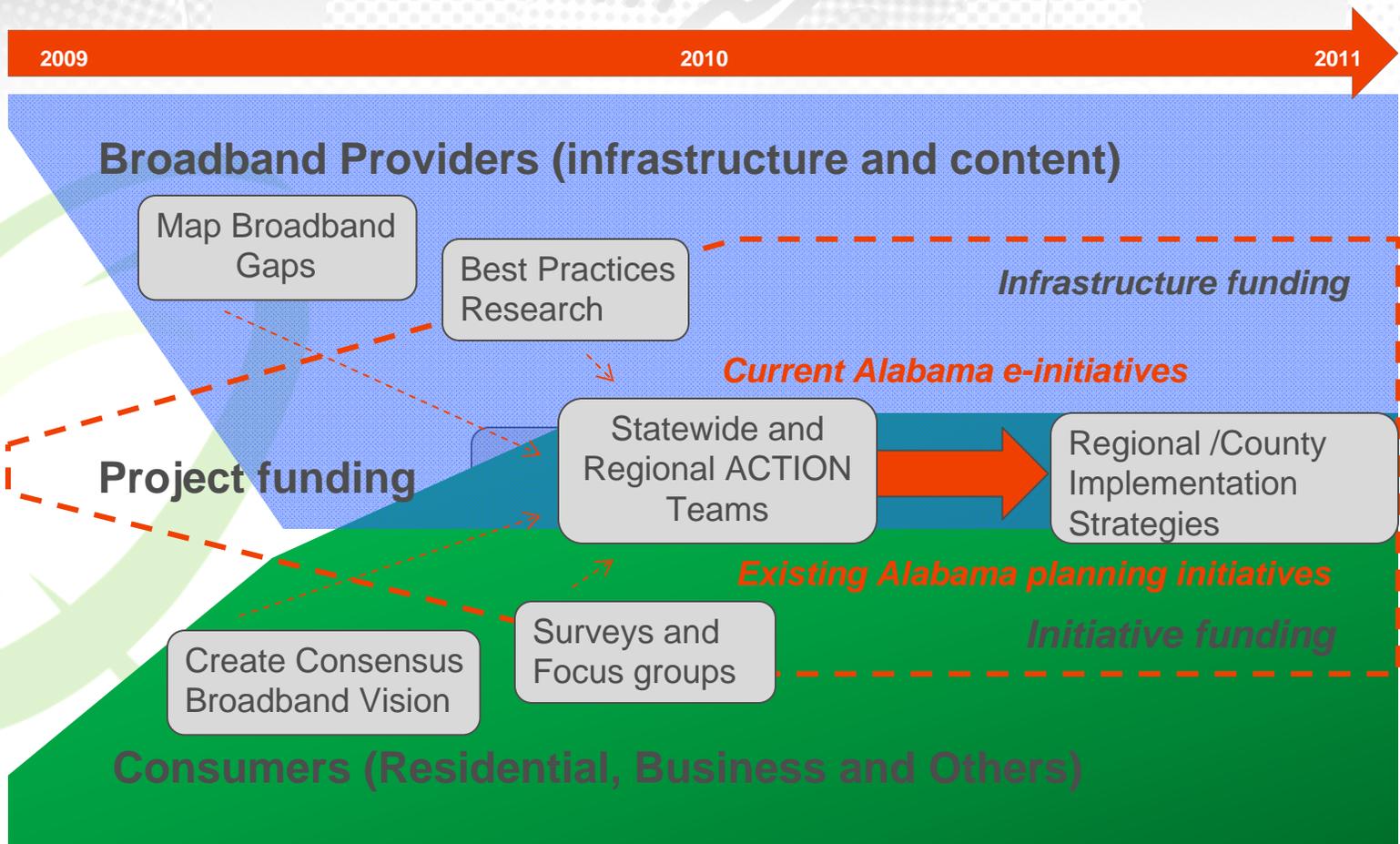
The supply-side can be thought of as consisting of two major components: the network connection and content. We will work to identify barriers to deployment of networks and vital content.

Demand Side

Understanding where potential or likely demand exists is critical, even prior to any attempts to create demand. Once identified, there are several possibilities for increasing demand which should be considered within the context of local preferences and needs.



connectingALABAMA



Mapping

- What
 - ...define **Broadband**
- Where
 - ...underserved and **Unserved areas**
- Why
 - ...understand **Barriers**
- How
 - ...to effect **deployment**

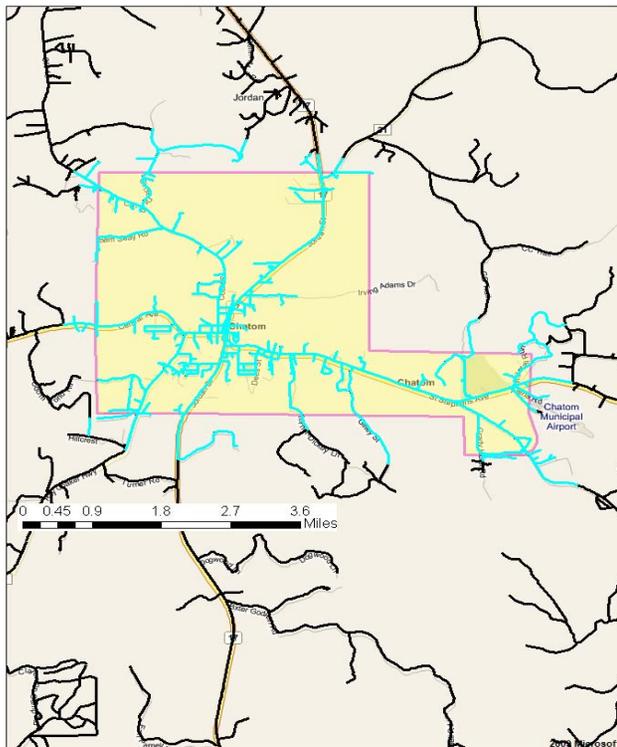
Mapping

- Key Attributes to define
 - Accuracy
 - Components
 - Display capabilities
 - Updates
 - Scale
 - Projection
 - ...more

NDA Process

NDA Process Keys

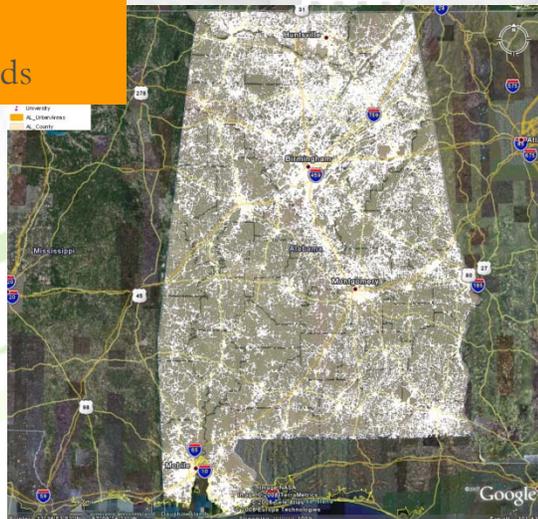
- Data Classification Scheme
- Derivatives and usage



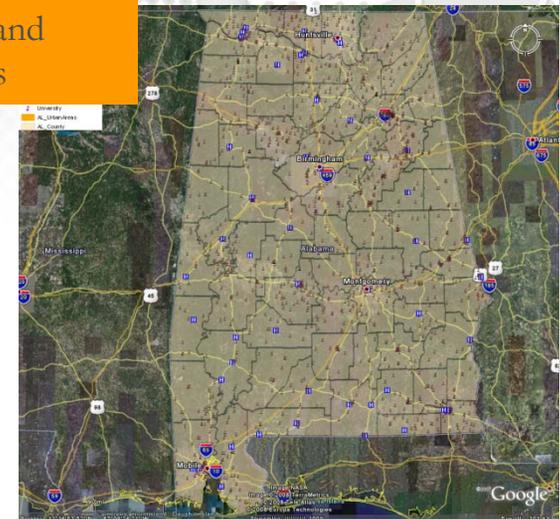
	Data Protection Class			
	Public Domain	Confidential, Proprietary	Public Domain But Infrastructure Sensitive	License Restricted
Received Input Data Type	Infrastructure	<p>No change in location for</p> <p>Visualization, used as provided for analysis and disclosure.</p> <p>data will not be viewable on the Dynamic site, and will only be shown on static maps at a county level or higher, unless the provider and State agree to more granular views or use of the data on the dynamic site.</p> <p>Actual record, provider and location not provided to State or shown on Maps, unless approved by provider.</p>	<p>Location used for analysis and development of derivatives. Derivative</p> <p>Derivative data will not be viewable on the Dynamic site, and will only be shown on static maps at a county level or higher, unless the State agrees to more granular views or use of the data on the dynamic site.</p> <p>Actual record, provider and location not provided or shown on public Maps, unless permitted by classifier.</p>	<p>Location used for analysis and development of derivatives</p> <p>Derivative data will not be viewable on the Dynamic site, and will only be shown on static maps at a county level or higher, unless the provider agrees to more granular views or use of the data on the dynamic site.</p> <p>Actual record, provider and location not shown on public maps or reports. However, data may be shown (but not given) to non-licensed parties.</p>
	Service Location	<p>Will likely be</p> <p>Visualized to be at a consistent scale with other information.</p>	<p>Will be modified to be at a consistent</p> <p>scale with other information to create a derivative. Derivative data of coverage will be masked so that accuracy is limited to no more than 1km. Release of granularity below this level will be provided only if the provider agrees.</p> <p>In other words, covered street segments may be used for visualization, analysis and disclosure. The actual record, provider and location not provided to State or shown on Maps, unless approved by provider.</p>	<p>Will be modified to be at a consistent</p> <p>scale with other information to create a derivative. Derivative data of coverage will be masked so that accuracy is limited to no more than 1km. Release of granularity below this level will be provided only if the State agrees.</p> <p>In other words, covered street segments may be used for visualization, analysis and disclosure, but actual record, provider and location not provided on public Maps.</p>

Mapping Examples Broadband-Demographics

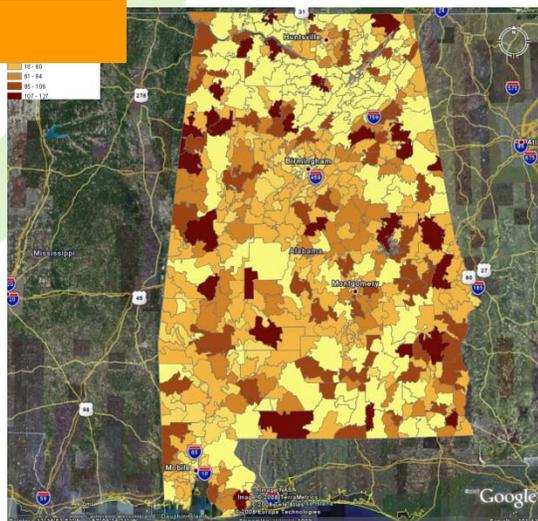
Census
Households



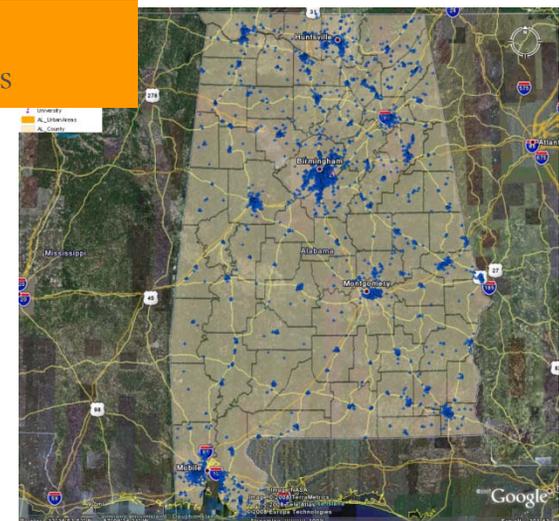
Schools and
Hospitals



Farms

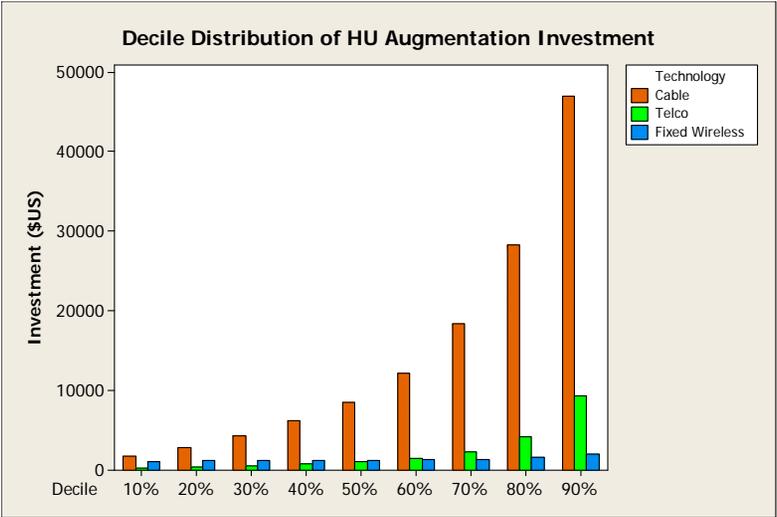
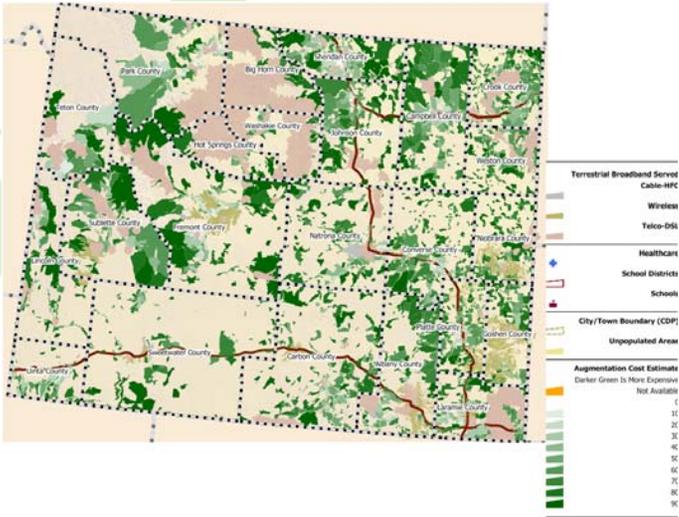
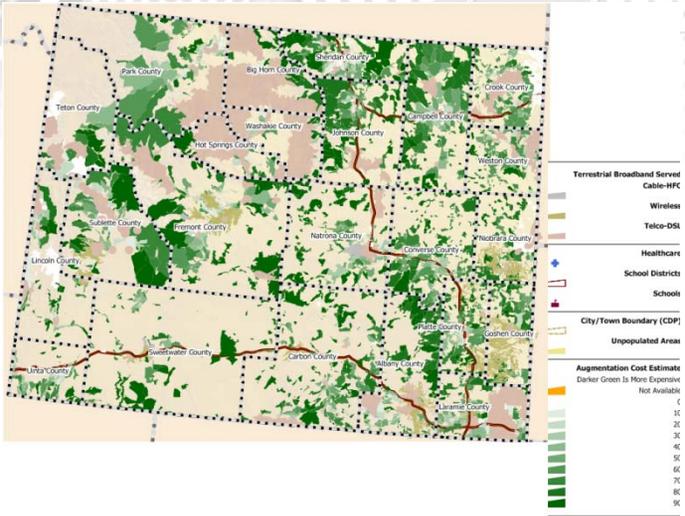
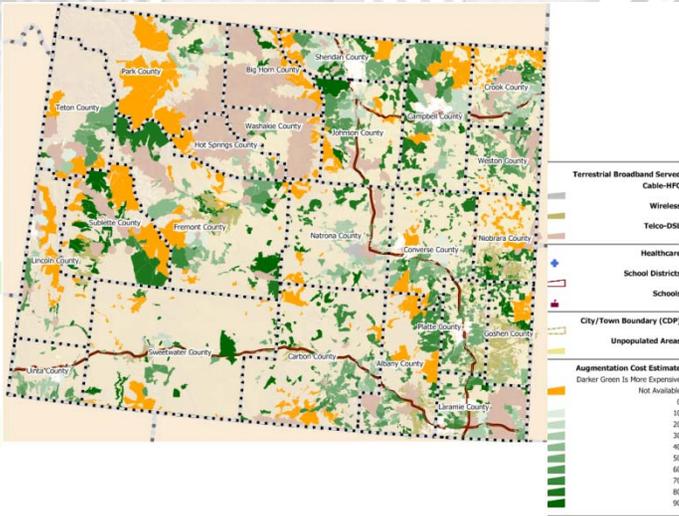


Medical
Locations



Mapping Examples Cost to Deploy

Augmentation
Costs

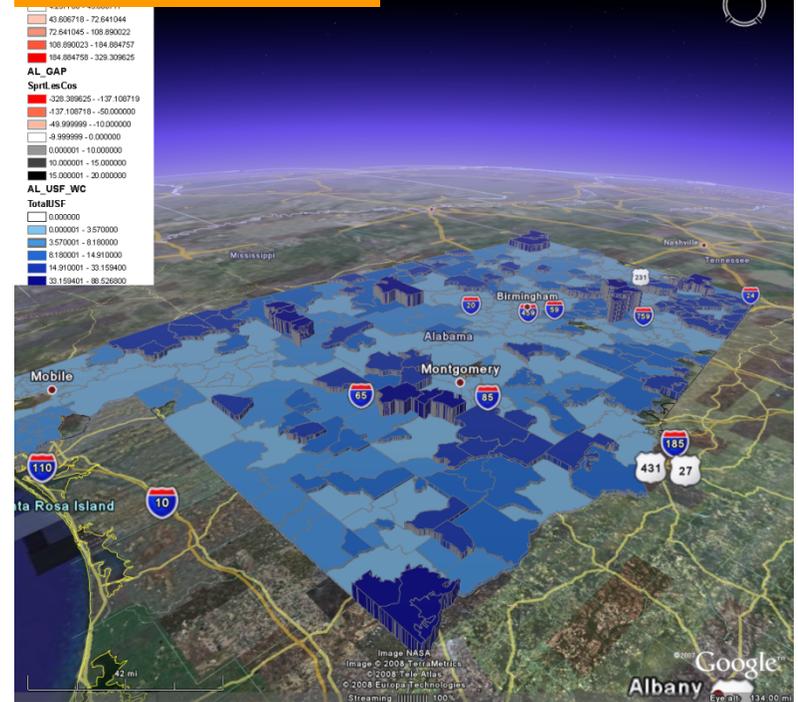


Mapping Examples Cost and USF

Estimated Cost of Telephone Service (voice and DSL)

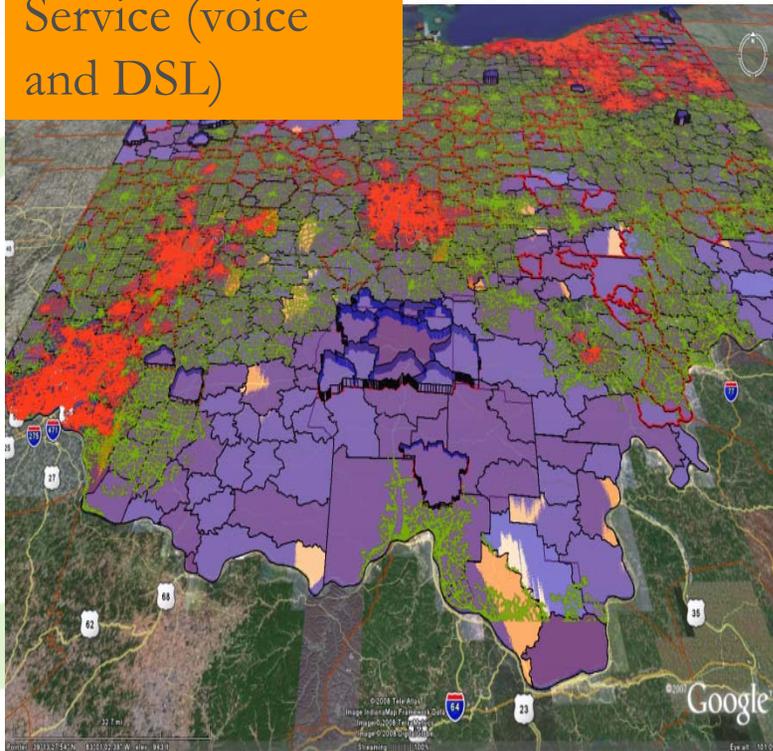


FCC Universal Service Funding areas



Mapping Examples Cost and USF

Estimated Cost
of Telephone
Service (voice
and DSL)



FCC Universal
Service
Funding areas

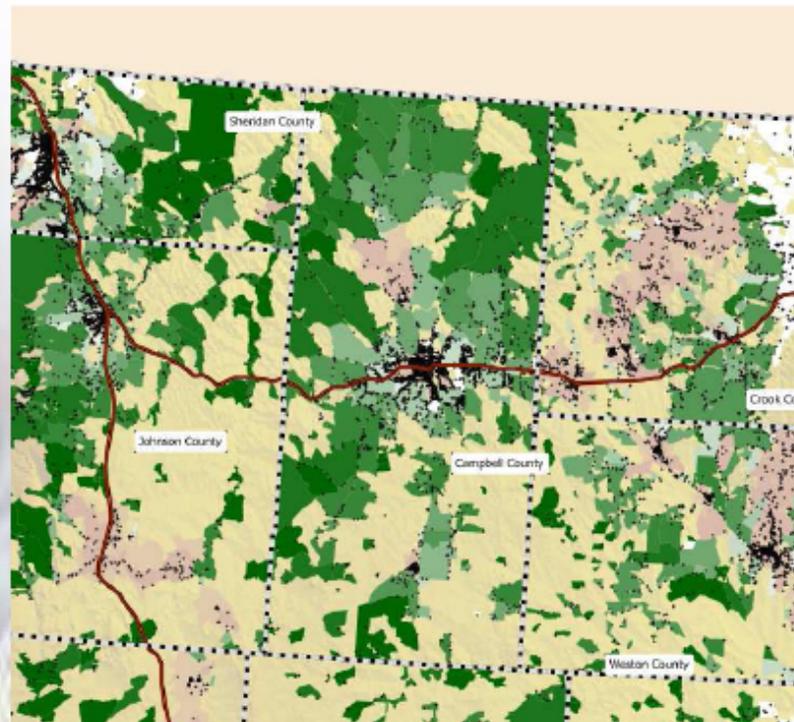


...and how do these mapping layers come together

The Wyoming Broadband Awareness and Wellness Report

Campbell County Telco Augmentation Investment

Campbell County Broadband Served Areas
And Relative Telco Augmentation Investment for Unserved
Housing Units



Mapping

- Issues to consider
 - Definitions
 - Technology agnostic
 - Accuracy of maps
 - Granularity of maps
 - Attributes of the data
 - Layers to include
 - Protections for the data
 - Verification
 - ...

LinkAmerica Alliance

Potential Stimulus Fund Management Approaches

The Broadband GPA

NTIA Broadband

Mapping

- State managed option
 - **State programs, National standards**
 - NTIA sets quality, scale, content, and approach standards
 - States facilitate mapping and assessment programs
 - National map built off of standard mapping and assessment outputs

Benefits

Mitigates risk

Competition

Closest to the carriers

Captures existing efforts

Links to States prioritizing funds

Possibly more exhaustive (states are more likely to include all providers)

Need to provide the minimum national attributes (it then assembles like a puzzle)

Layers, Accuracy, Data assurance

Provides standards for companies who operate in multiple states

Trust and verify

NTIA Broadband

The Broadband Infrastructure GPA

NTIA Broadband Grant Prioritization and Assessment (Broadband GPA)
A Possible Approach for Managing Broadband Stimulus Funds



For More Information

Contact

Jim Stegeman

513-941-9009

jstegeman@costquest.com

Mike Wilson

425-449-3353

mwilson@costquest.com

Bill Gillis

509-

bill@efrsource.com

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