The Partnership for a Connected Illinois Wednesday Webinar

Webinar 2

May 18, 2011

Developing State-wide Baseline Data for Research

PCI Webinar Series:

Developing State-wide Baseline Data for Research

Introductory Remarks…

Drew Clark
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Presenter…

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Panelist…

Brian Webster
Telecom Project Coordinator, Partnership for a Connected Illinois

Questions…

Ruben Clark
GIS Analyst, Partnership for a Connected Illinois

Webinar Topics

- What is the State-wide Baseline Study?
- Why do we need to complete a State-wide Baseline?
- Sampling
  - Households
  - Businesses
- Comprehensive
  - Community Anchor Institutions
- Results
  - Reports
  - Maps
- Questions

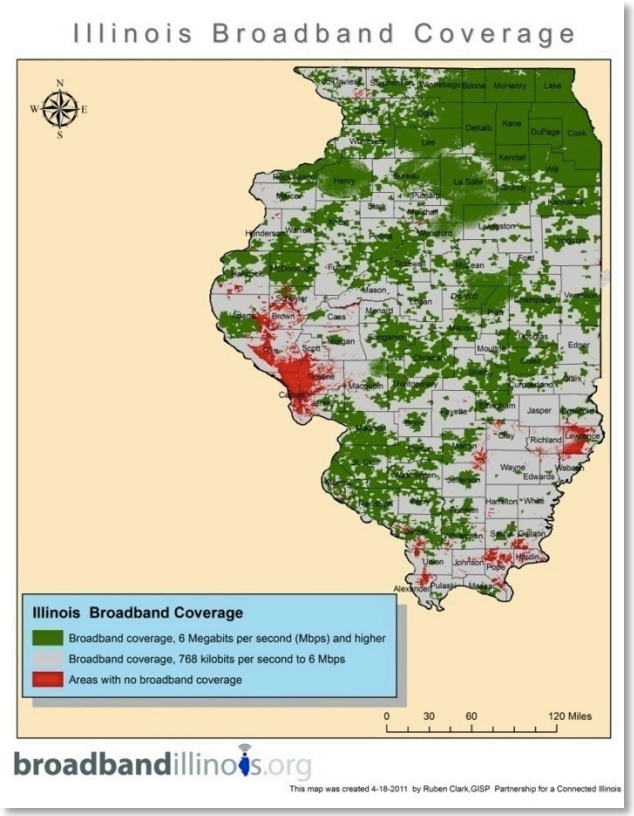
What is the State-wide Baseline Study?

- The proposed study targets the development of a baseline in the current trends for broadband supply and demand
- Targeted outcomes – Developing data driven solutions and evidence for creating policies to address current barriers to broadband adoption and access

- Sectors
  - Households
  - Businesses
  - Community Anchor Institutions (CAIs)

What is the State-wide Baseline Study? – Supply

- Goal is to inventory and map broadband access across the State of Illinois
- Data Sources – National Broadband Map and BroadbandStat
  - Outcomes are to target and identify regions, communities, and populations most at risk for no/low access
  - Quantify the Broadband Availability Gap using Census 2010 Data
    - Age, Income, Educational Attainment, Rural



What is the State-wide Baseline Study? – Demand

- Goal is to coordinate the development of a statewide survey to identify current adoption trends, applications, and barriers associated with broadband use for households, businesses and community anchor institutions

What is the State-wide Baseline Study? – Demand

- Surveys:
  - Broadband Use or Applications
    - How broadband is being used
    - How broadband is not being used
  - Broadband Adoption Gaps
    - Technical literacy
    - Cost
    - Access
    - No interest

What is the State-wide Baseline Study? – Demand

- Data will be referenced and organized around critical geographic scales for analysis (i.e., state, county, eTeam regions, economic/workforce development zones, legislative districts and school districts)

What is the State-wide Baseline Study? – Demand

- Types of Data:
  - Households
    - Percentage of households having broadband access
    - Percentage of households having speeds meeting NTIA goals
    - Barriers to adoption for populations with access

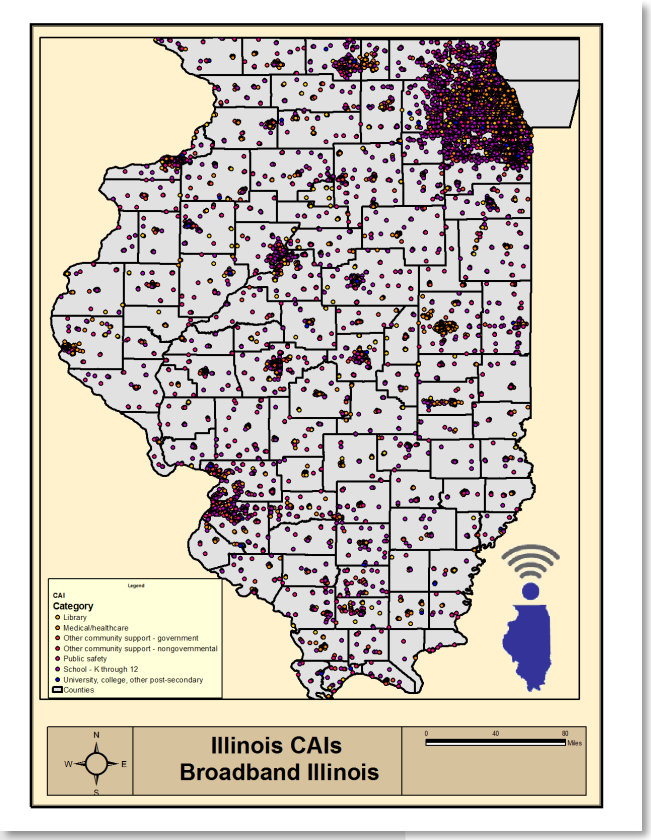
What is the State-wide Baseline Study? – Demand

- Types of Data:
  - Businesses
    - Industry and geographic trends for broadband adoption and access
    - Cluster analysis
    - Industry and regional analysis for assessing the Illinois business community for speed and transmission types
    - What percentage of Illinois businesses are equipped to compete in the digital economy?

What is the State-wide Baseline Study? – Demand

- Types of Data:
  - Community Anchor Institutions
    - CAI Sector Comparison
    - Regional Assessments
    - Speeds by Regions

Community Anchor Institutions



- CAI Sector Performance and Adoption Trends
- Speed Performance
- Spatial Analysis – Cluster Analysis
- Critical for evaluation and assessment of the economic and social impacts of broadband investments

Sampling Issues – Demand/ Adoption Survey

Goals

- Goal is to structure the State-wide Baseline Study around accepted industry and research standards
  - Households – Sample
  - Businesses – Sample
  - CAIs – Population

CAI Graph

Category	Total Number of CAIs in March 2011
School - K through 12	5,604
Library	1,444
Medical/healthcare	15,267
Public safety	2,339
University, college, other	266
Other community support - gov	1,449
Other community support - non-gov	230
Totals	26,599

Sampling Issues – Demand/ Adoption Survey

Households

- Random sampling methodology using both landline and cell phones
  - E-mail
- Response rate – 15% to 20%
- Sample size
- Results structured and linked to geographic locations for spatial analysis

Businesses

- Random or stratified sampling methodology using both landline and cell phones
  - Stratified Sampling
    - Healthcare, Manufacturing, and Transportation
  - E-mail
- Response rate – 15% to 20%
- Sample size

Sampling Issues – Demand/ Adoption Survey

CAIs

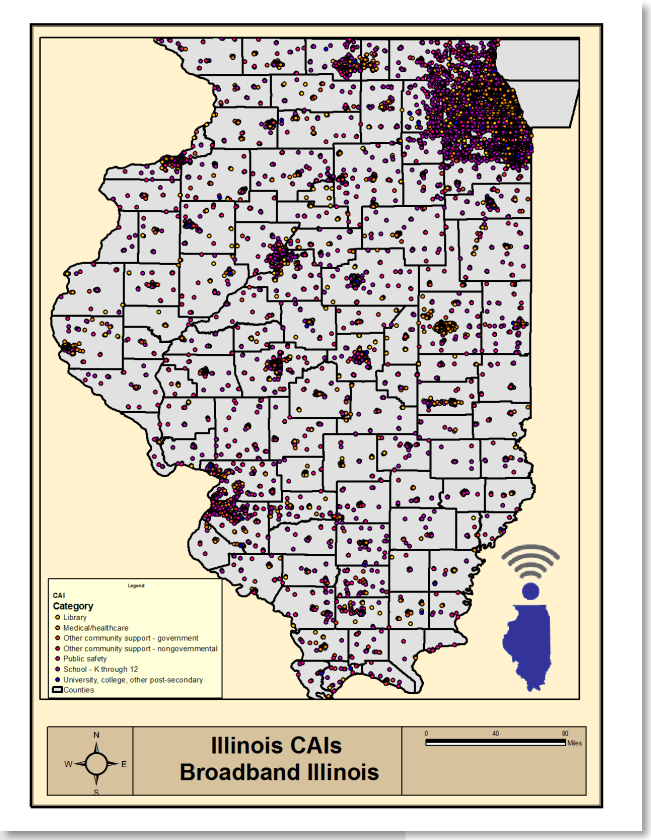
- Our goals are to capture, survey, and map the **total population of CAIs** across the State of Illinois
  - Healthcare
  - Schools
  - Government
  - Others
- Results structured and linked to geographic locations for spatial analysis

Frequency Count of CAIs

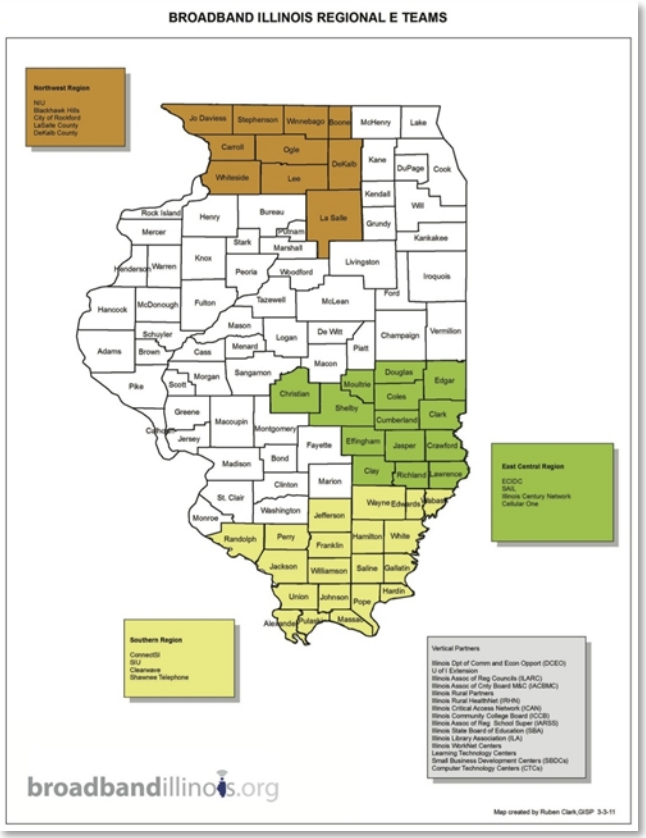
- Schools – K-12 = 5,651
- Library – 1505
- Healthcare – 15,352
- Public Safety – 2,359
- University/College – 307
- Other community support government – 1450
- Other community support non-government - 234

Sampling Issues – Demand/ Adoption Survey

Frequency Count of CAIs

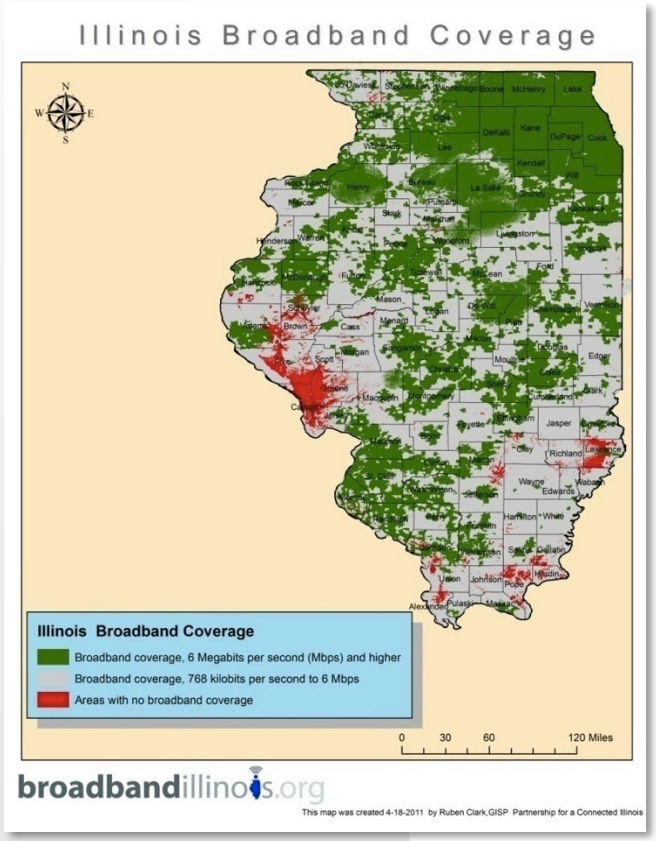


Regional eTeams



Results of State-wide Baseline Study

Supply



Supply - # Households

SBDD Speed Tiers	Un-served	Under-served	Served
768-1500 kbps			
1.5-3 Mbps			
3-6 Mbps			
6 Mbps			

Comparing Supply Patterns

Illinois

CAI Sector	Percent CAIs Sector with Broadband Access
Healthcare	75
Colleges and Universities	95
Public Safety	50
Library	75

Coles County

CAI Sector	Percent CAIs Sector with Broadband Access
Healthcare	40
Colleges and Universities	80
Public Safety	90
Library	39

Broadband Availability Gap Supply Summary

Households and Business

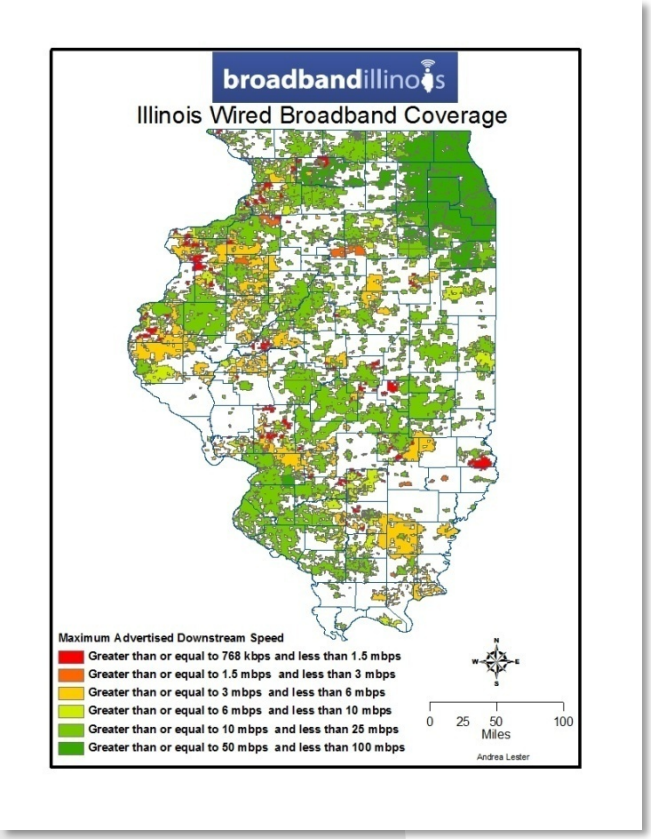
- Identify and measure how location is impacting broadband access across the State of Illinois for households and businesses
  - Households – age, educational attainment, ethnicity, income, and rural
  - Business
    - Sectors
    - Impacts on jobs and economic development

CAIs

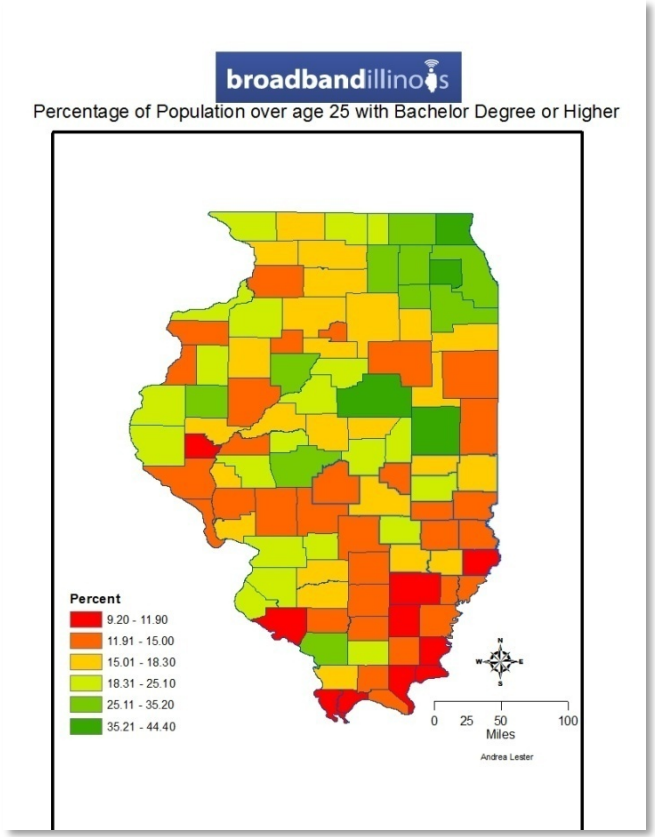
- Identify and measure how location is impacting broadband access across the State of Illinois for CAIs
  - Which CAI sectors and geographic regions have been identified in the Broadband Availability Gap?

Linking Supply Patterns to Market Demographics

Broadband Data



Demographic Data



Results of State-wide Baseline Study on Demand

Application

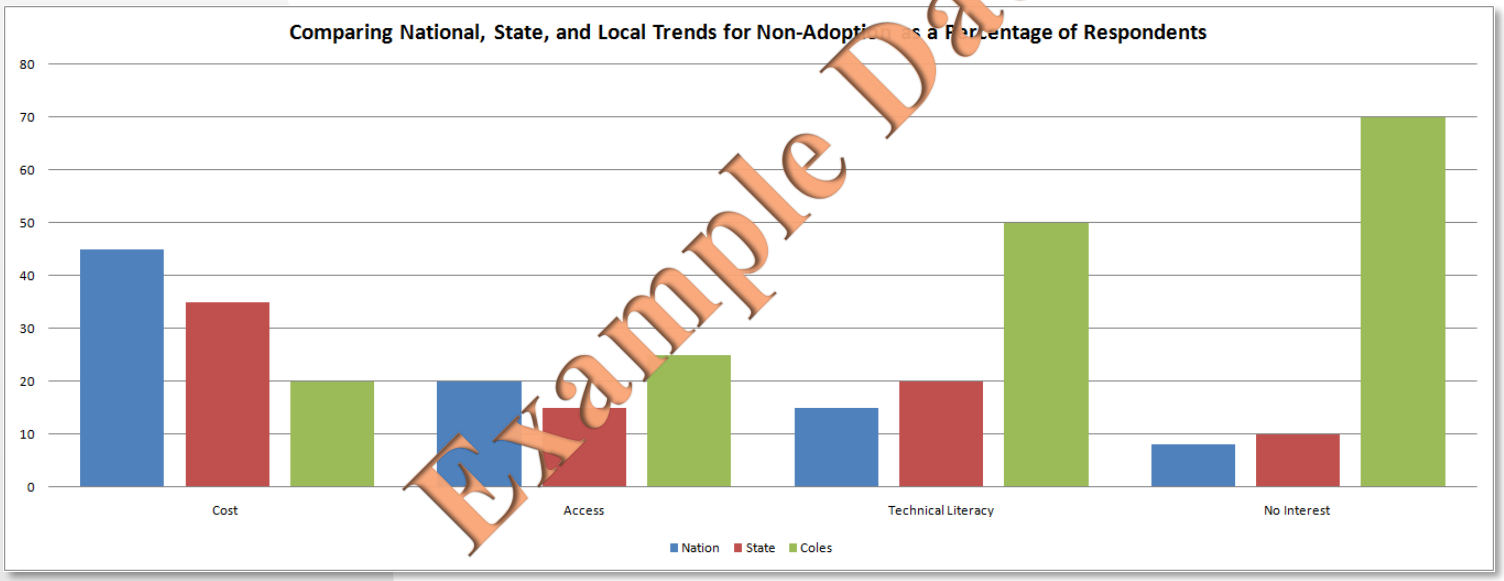
- How and where they are using it?
- Impacts on households, businesses, and CAIs
  - Assess cultural and economic impacts of broadband
- Assess and summarize sector strengths and potential opportunities to expand

Adoption

- Which households, businesses, CAIs, are using broadband?
- Why are households, businesses, and CAIs not using broadband?
- What barriers are limiting target groups in leveraging broadband technology?

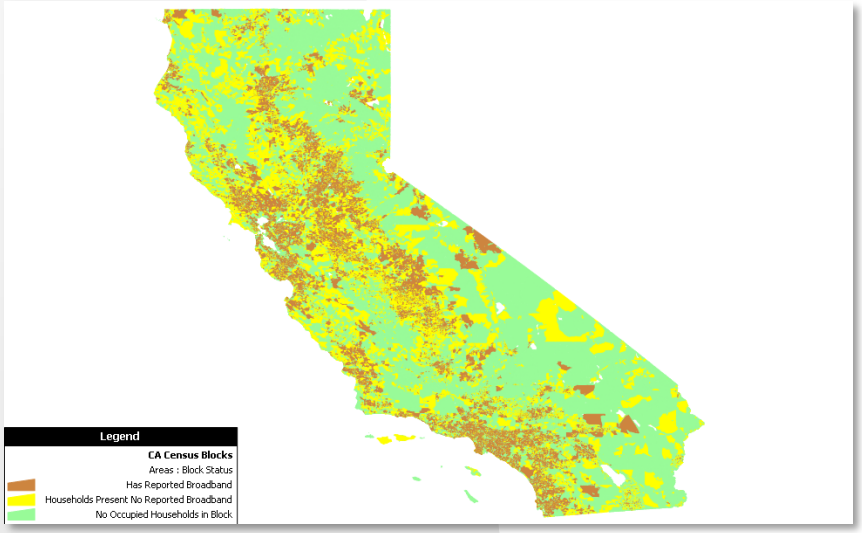
Results of State-wide Baseline Study on Demand

Benchmarking local demand – Proposed output for comparing a local county versus state or national data

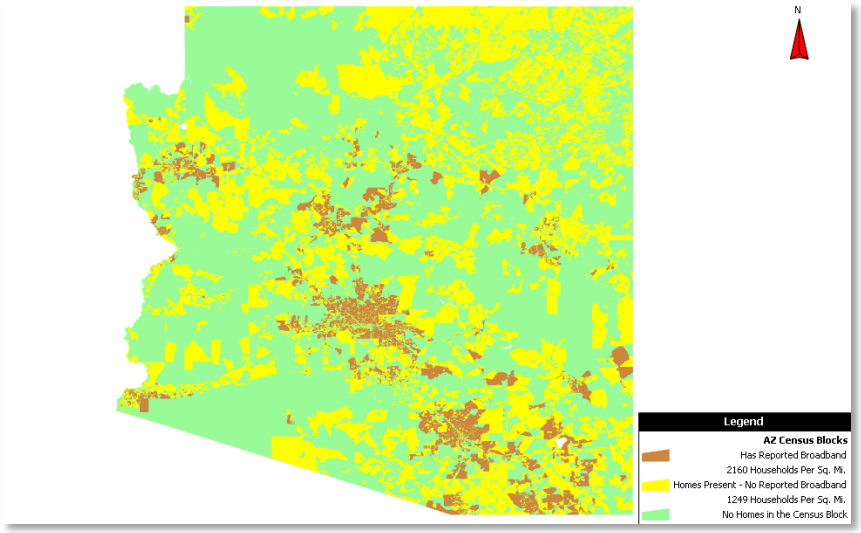


Results of State-wide Baseline Study (Demand)

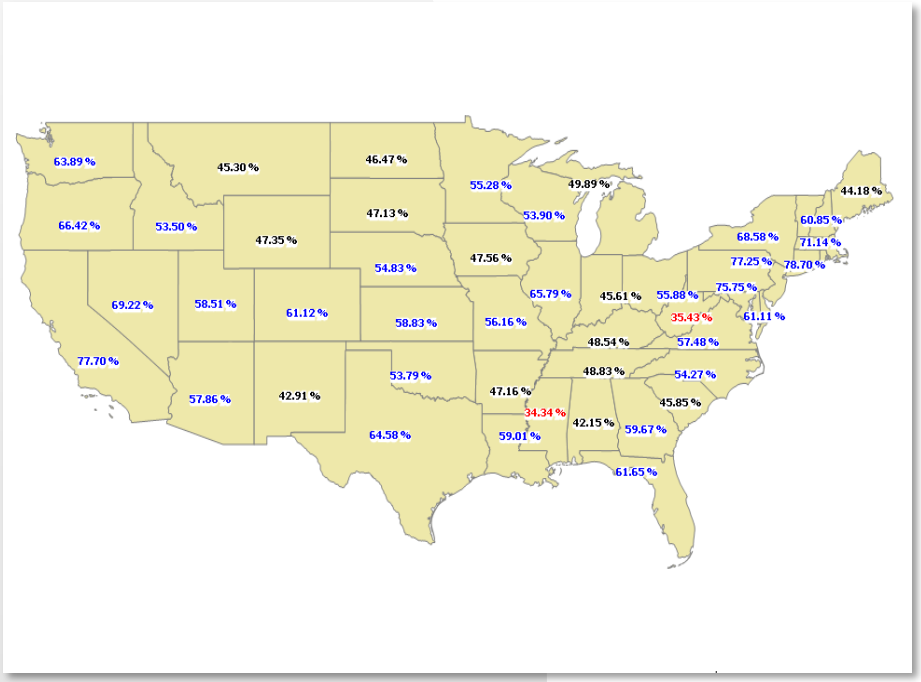
Market Penetration



Market Penetration



State-wide Baseline Study Summary



Goals of the Study

- Comparing supply and demand data in Illinois against national data
- Initiate discussions among broadband stakeholders across Illinois
- Developing a data-driven approach to broadband & economic development

Questions & Answers

- Drew Clark
- Mike Rudibaugh
- Brian Webster
- Ruben Clark

http://broadbandillinois.org

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