BROADBAND ADVISORY COUNCIL
MEETING AGENDA

- Call to Order
- Introductory Remarks from the Chair
- Approval of Minutes
- Connected Learning | Dr. Erica Thieman + Erich Grauke, Illinois State Board of Education
- Legislative Session Updates + Discussion | Drew Garner, Common Sense Media
- Office of Broadband Updates
  - Connect Illinois Broadband Grant Program
  - Digital Equity Programming + Collaboration | Bill Coleman, Benton Institute for Broadband & Society
    - Illinois Connected Communities
    - Accelerate Illinois
    - Broadband READY
- Illinois Digital Inclusion Profile | Dr. Roberto Gallardo, Purdue University
- Internet Equity Initiative | Dr. Nick Feamster + Dr. Nicole Marwell, University of Chicago
- BAC Terms + Working Groups
- Public Comment
- Adjourn
Connected Learning

Dr. Erica Thieman & Erich Grauke
Illinois State Board of Education
District Technology Survey

- HB2170/PA 101-0654
- Requires annual reporting of tech capacity and policies
- As of Feb 8:
  - 87% of districts and regional offices reporting
  - 60% are 1:1
  - More comprehensive data analysis in May once reporting period has closed
Continuing Support for Districts

- Digital Equity Grants
  - Funds for technology for neediest districts
    - FY21: $79.7 Million
    - FY22: $52.5 Million
    - FY23: Determined by Statewide Tech Survey

- E-Rate State Matching Grant
  - Funds available to assist districts with school connectivity upgrades in conjunction with federal E-Rate program

- FCC Emergency Connectivity Fund
  - $195 Million obligated to Illinois so far

- ESSER, ESSER II, and American Rescue Plan (ARP)
**INFRASTRUCTURE ACT* CREATES ~$65B IN BROADBAND FUNDING**

<table>
<thead>
<tr>
<th>Title I - Broadband Equity, Access &amp; Deployment Program</th>
<th>Title II - Tribal Connectivity Technical Amendments</th>
<th>Title III – Digital Equity Act</th>
<th>Title IV - Enabling Middle Mile Broadband Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEAD</td>
<td>TRIBAL</td>
<td>DIGITAL EQUITY</td>
<td>MIDDLE MILE</td>
</tr>
<tr>
<td><strong>$42.45B</strong></td>
<td><strong>$2.00B</strong></td>
<td><strong>$2.75B</strong></td>
<td><strong>$1.00B</strong></td>
</tr>
</tbody>
</table>

- **Title II** - Tribal Connectivity Technical Amendments furthers current Tribal Broadband Connectivity Program by investing an additional $2B to fund broadband adoption and infrastructure projects.
- **Title III** – Digital Equity Act establishes three programs, established for planning & implementation of programs that promote digital equity, support digital inclusion activities, and build capacity related to the adoption of broadband.
- **Title IV** - Enabling Middle Mile Broadband Infrastructure provides funding to extend middle mile capacity to reduce cost of serving unserved and underserved areas and enhance network resilience.

NTIA will administer ~$48B of this new funding:

- **BEAD** $42.45B
- **DIGITAL EQUITY** $2.75B
- **TRIBAL** $2.00B
- **MIDDLE MILE** $1.00B

FCC to administer ~$14B:

- **BEAD** $14.2B
  For Affordable Connectivity Program, which will replace the EBB program

USDA to administer $2B:

- **BEAD** $2.0B
  Via the Rural Utilities Service

Private Activity Bonds $600M:

- **BEAD** $600M
  Authorizes State/local gov’ts to use private activity bonds for rural broadband

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* *Infrastructure Investment and Jobs Act, Division F, Pub. L. 117-58 (Nov. 15, 2021)  
  Note: funding amounts inclusive of all administrative set-asides*
Legislative Session Updates

Drew Garner
Common Sense Media
Broadband Equity Access and Deployment (BEAD) & SB 3683
A Common Sense Perspective

1. **BEAD tiers:** 1) Unserved, 2) Underserved, 3) Anchors
   SB 3683 also makes no allowance for device programs, connecting MDUs, and other BEAD uses.

2. **BEAD says:** "States may not exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, private or public utilities, public utility districts, or local governments"
   SB 3683 also prohibits organizations that have advised the State on broadband issues.

3. **BEAD requires:** A low-cost service option, speed and performance standards, a public awareness campaign, and service to each interested customer.
   SB 3683 also prohibits open access requirements.

4. **BEAD funds can supplement other broadband grants.**
   SB 3683 prohibits improvement/expansion of existing projects.

5. **BEAD has no limits or prioritization based on project size.**
   SB 3683 also complicates the use of matching funds.
CONNECT ILLINOIS GRANTS
ROUND 3 NOFO

Program Summary
• Grant to support broadband infrastructure that meets or exceeds state goals

Grant Amount
• Up to $10M; $350M available statewide
• Nonstate match not required

Three Categories
• Broadband Access
• Broadband Innovation
• Urban Broadband

Application Deadline
• Rolling basis for grant review + awards
Governor Pritzker is committed to establishing Illinois as a leader when it comes to technology and innovation. Access to broadband is a critical component of staying ahead of the curve and will improve the lives of families, entrepreneurs, farmers and other Illinoisans who rely on high-speed broadband for everything from healthcare to education.

Governor Pritzker launched a statewide initiative in August 2019, Connect Illinois, to expand broadband access across the entire state. Connect Illinois includes a capital investment from Rebuild Illinois, the creation of a Broadband Advisory Council and Broadband Office, and a new program that will provide all Illinois public K-12 students access to high-speed broadband at no charge. The initiative also includes a $400 million broadband grant program and a $20 million capital program for the Illinois
Century Network, a high-speed broadband network serving K-12 and higher education institutions, among others.

**Illinois Broadband Grant Program**

Rebuild Illinois, the Illinois infrastructure program, includes $400 million to the Department of Commerce and Economic Opportunity for a statewide broadband deployment grant program. This appropriation will begin to expand access to reliable, high-speed internet service statewide. According to the USDA, fully utilizing digital technologies within the agriculture industry could create approximately $47 to $65 billion annually in additional gross benefit for the U.S. economy.

**Illinois Century Network**

Rebuild Illinois includes $20 million for the Illinois Century Network (ICN), to repair and expand the broadband network for schools, refresh aged components of the network and expand the existing network, with a focus on the K-12 portion.

The ICN is a high-speed broadband network serving K-12 and higher education institutions, public libraries and museums, state and local governments, and broadband service providers. This appropriation will also allow the ICN to provide internet and intranet connectivity for thousands of sites statewide, ensuring high availability for cloud-based content, disaster recovery services, and data, video, and audio communications. The network owns or leases approximately 2,100 miles of fiber optic cables throughout the state and interconnects with multiple regional public and private networks throughout Illinois.
Infrastructure
• Connect Illinois Broadband Grant Program
• Illinois Century Network | Middle Mile Broadband

Digital Equity + Engagement Programming
• Illinois Connected Communities
• Accelerate Illinois Broadband Infrastructure Planning Program
• Broadband READY (Regional Engagement for Adoption + Digital Equity)
• Computer Equity Network
• Digital Navigators (tbd)
Collaboration + Programming

Bill Coleman
Benton Institute for Broadband & Society
CONNECT ILLINOIS
‘ACCELERATE ILLINOIS’ PROGRAM

• Accelerate Illinois Broadband Infrastructure Planning Program
  • Local Broadband Planning + Capacity Building

• Program Summary
  • Designed to help local governments determine how to use federal/state funding
  • Two 14-week cohorts, Feb – May 2022 and May – Aug 2022
  • Collaboration with Benton Institute, Heartland Forward, University of Illinois Extension

• Approach
  • No funding | ‘Notice of Collaboration Opportunity’
  • 30+ hrs of expert consultation and facilitation
  • Vision statement
  • Community survey
  • Provider interviews
  • Broadband map analysis
  • Community plan
CONNECT ILLINOIS DIGITAL EQUITY
ILLINOIS CONNECTED COMMUNITIES

• Local Broadband Planning + Capacity Building
• Program Summary
  • Broadband Steering Committee
  • Digital Divide Elimination Plans | access, adoption + utilization
  • 50 hrs of consultant/facilitator time; best practice curriculum
• Grant Amount
  • Up to $15,000 per community
• Application Deadline
  • Rd 3 NOFO tbd
ILLINOIS CONNECTED COMMUNITIES

• Partnership among the Illinois Office of Broadband, the Benton Institute for Broadband & Society, and local philanthropy. Designed to engage a first-year cohort of communities through best practice curriculum and expert consultation.

• The initial cohort includes four school districts, two community-based organizations, two local governments, two county-level organizations, and two economic development groups:

ROUND 1
- Brown County School District 1
- City of Harvey
- Housing Authority of Champaign County
- Leadership Council Southwestern Illinois
- Mattoon School District 2
- McKinley Park Development Council
- Mercer County Better Together
- Neighborhood Network Alliance
- Palatine School District 15
- Park Forest-Chicago Heights School District 163
- Region 1 Planning Council
- Village of Flanagan

ROUND 2
- City of Carrollton
- City of Waukegan
- Community Builders (Chicago)
- Fairmont City
- Greater Peoria Economic Development Council (Tazewell County)
- Internet Freedom for McHenry County
- North Chicago CUSD 187
- The Center: Resources for Teaching and Learning/Latinx Digital Leaders Now (DLN)
CONNECT ILLINOIS DIGITAL EQUITY
BROADBAND READY PROGRAM

• Regional Engagement for Adoption + Digital Equity (READY)
• Program Summary
  • Drive broadband collaboration for engagement, evaluation, planning, and progress at regional level
  • Align local and regional efforts toward shared goals in broadband access, adoption, and utilization
  • Promote immediate community technology expansion
  • Integrate programming + identify best practices, key digital indicators
• Grant Amount
  • Up to $50,000 per region
• Project Timeline
  • 1st Cohort: 2021
  • 2nd Cohort: 2022
Collaboration + Programming

Dr. Roberto Gallardo
Purdue University
## 2020 Educational Attainment: Percent Population 25 or Older

<table>
<thead>
<tr>
<th>Region</th>
<th>Less than high school</th>
<th>High school</th>
<th>Some college</th>
<th>Bachelor's or higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>11.5</td>
<td>26.7</td>
<td>28.9</td>
<td>32.9</td>
</tr>
<tr>
<td>Illinois</td>
<td>10.3</td>
<td>25.6</td>
<td>28.6</td>
<td>35.5</td>
</tr>
<tr>
<td>Central</td>
<td>8.7</td>
<td>34.5</td>
<td>31.6</td>
<td>25.2</td>
</tr>
<tr>
<td>North Central</td>
<td>7.0</td>
<td>30.3</td>
<td>31.9</td>
<td>30.9</td>
</tr>
<tr>
<td>Northeast</td>
<td>11.0</td>
<td>22.6</td>
<td>26.2</td>
<td>40.2</td>
</tr>
<tr>
<td>Northwest</td>
<td>9.8</td>
<td>34.0</td>
<td>35.1</td>
<td>21.2</td>
</tr>
<tr>
<td>Southwest</td>
<td>8.1</td>
<td>29.5</td>
<td>35.3</td>
<td>27.1</td>
</tr>
<tr>
<td>West Central</td>
<td>9.0</td>
<td>35.2</td>
<td>33.1</td>
<td>22.7</td>
</tr>
</tbody>
</table>

Source: U.S. American Community Survey 2016-2020
The map shows census tracts divided into low, moderate, and high based on the percent of households with children. A darker color indicates a higher percent of households with children. Figure below shows the percent of households with children for the country, state, and region.

### Percent Households with Children

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent Households with Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>30.7</td>
</tr>
<tr>
<td>Illinois</td>
<td>30.1</td>
</tr>
<tr>
<td>Central</td>
<td>26.6</td>
</tr>
<tr>
<td>North Central</td>
<td>28.2</td>
</tr>
<tr>
<td>Northeast</td>
<td>31.0</td>
</tr>
<tr>
<td>Northwest</td>
<td>27.9</td>
</tr>
<tr>
<td>Southwest</td>
<td>29.6</td>
</tr>
<tr>
<td>West Central</td>
<td>25.4</td>
</tr>
</tbody>
</table>

Source: U.S. American Community Survey 2016-2020
2020 Individual Poverty

The map shows census tracts divided into low, moderate, and high based on the individual poverty rate. A darker color indicates a higher individual poverty rate. Figure below shows the poverty rate for the country, state, and region.

Source: U.S. American Community Survey 2016-2020
2020 Individuals with any Disability

The map shows census tracts divided into low, moderate, and high based on the percent of individuals with any disability. A darker color indicates a higher share of individuals with disabilities. Figure below shows the percent of individuals with disabilities for the country, state, and region.

Source: U.S. American Community Survey 2016-2020
The map shows census tracts divided into low, moderate, and high based on the percent of limited English households. A darker color indicates a higher share of limited English households. Figure below shows the percent of households with limited English for the country, state, and region.

**Percent Households with Limited English**

- **U.S.**: 4.3
- **Illinois**: 4.3
- **Central**: 0.5
- **North Central**: 0.8
- **Northeast**: 5.9
- **Northwest**: 1.5
- **Southwest**: 0.5
- **West Central**: 0.6

Source: U.S. American Community Survey 2016-2020
The map shows census tracts divided into low, moderate, and high based on the percent of children with a computer but no internet. A darker color indicates a higher share. Figure below shows the percent for the country, state, and region.

Source: U.S. American Community Survey 2016-2020
The map shows census tracts divided into low, moderate, and high based on the percent of those ages 65 or older without a computer. A darker color indicates a higher share. Figure below shows the percent for the country, state, and region.

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent Seniors with No Computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>15.7</td>
</tr>
<tr>
<td>Illinois</td>
<td>17.7</td>
</tr>
<tr>
<td>Central</td>
<td>20.2</td>
</tr>
<tr>
<td>North Central</td>
<td>18.9</td>
</tr>
<tr>
<td>Northeast</td>
<td>16.0</td>
</tr>
<tr>
<td>Northwest</td>
<td>19.7</td>
</tr>
<tr>
<td>Southwest</td>
<td>19.5</td>
</tr>
<tr>
<td>West Central</td>
<td>25.7</td>
</tr>
</tbody>
</table>

Source: U.S. American Community Survey 2016-2020
The map shows census tracts divided into low, moderate, and high based on their IIR. The IIR is calculated by dividing the share of homes making less than $35,000 without internet access by the share of homes making $75,000 or more without internet access. A higher IIR (darker color) denotes higher inequality. Figure below shows the IIR for the country, state, and region.

<table>
<thead>
<tr>
<th>Region</th>
<th>Internet Income Ratio (IIR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>6.8</td>
</tr>
<tr>
<td>Illinois</td>
<td>7.1</td>
</tr>
<tr>
<td>Central</td>
<td>5.2</td>
</tr>
<tr>
<td>North Central</td>
<td>7.0</td>
</tr>
<tr>
<td>Northeast</td>
<td>7.6</td>
</tr>
<tr>
<td>Northwest</td>
<td>5.6</td>
</tr>
<tr>
<td>Southwest</td>
<td>7.1</td>
</tr>
<tr>
<td>West Central</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Source: PCRD; U.S. American Community Survey 2016-2020
The map shows census tracts divided into low, moderate, and high based on digital distress (higher share of households with cellular data only or no internet as well as mobile only or no computing devices). A darker color indicates a higher digital distress.
The map shows census tracts divided into low, moderate, and high based on the digital divide index. Digital divide index ranges from 0 to 100 where a higher number implies a larger divide. A darker color indicates a higher digital distress.
The map shows counties divided into low, moderate, and high based on ventures (websites per 100 residents). A darker color indicates a higher number of ventures.
The map shows counties divided into low, moderate, and high based on highly active ventures as of 2020. A darker color indicates a higher number of highly active ventures. Highly active ventures refer to websites that are better built, have more traffic, etc.
<table>
<thead>
<tr>
<th>Region</th>
<th>Work from Home</th>
<th>Non-Ag</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>7.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Illinois</td>
<td>7.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Central</td>
<td>5.5</td>
<td>5.0</td>
</tr>
<tr>
<td>North Central</td>
<td>5.4</td>
<td>5.0</td>
</tr>
<tr>
<td>Northeast</td>
<td>8.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Northwest</td>
<td>4.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Southwest</td>
<td>5.2</td>
<td>5.0</td>
</tr>
<tr>
<td>West Central</td>
<td>5.1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

*Note: includes 46 industries considered to be “fully” part of the digital economy; primarily hardware related though data processing is included; does not include warehousing or retail associated with e-commerce

Source: U.S. American Community Survey 2016-2020
2020 Remote Work Potential*

*Potential is in percentage points and is the difference between the share of remote work friendly occupations minus the share working from home (non-agriculture). A digitally inclusive community works towards leveraging this potential by reducing this number.

Source: U.S. American Community Survey 2016-2020; EMSI; National Bureau of Economic Research; PCRD
2020 Percent Digital Economy* Jobs

Source: EMSI; BEA; PCRD

*Note: includes 46 industries considered to be “fully” part of the digital economy; primarily hardware related though data processing is included; does not include warehousing or retail associated with e-commerce
2020 Share of Occupations by Digital Skills Level

Source: ESI; Brookings; PCRD
INTERNET EQUITY INITIATIVE

Dr. Nick Feamster + Dr. Nicole Marwell
University of Chicago
<table>
<thead>
<tr>
<th>Initial</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Access</td>
<td>Digital Equity + Inclusion</td>
</tr>
<tr>
<td>• Economic Development</td>
<td>Smart Cities</td>
</tr>
<tr>
<td>• Education</td>
<td>Rural Innovation</td>
</tr>
<tr>
<td>• Technology</td>
<td></td>
</tr>
<tr>
<td>• Telehealth</td>
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</tbody>
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QUESTIONS?

Matt Schmit  |  Chair
Illinois Broadband Advisory Council
broadband@Illinois.gov
ADJOURNMENT