

Executive Summary

The historic \$45 billion Rebuild Illinois investment strategy included \$420 million to expand access to high-speed broadband internet across the state. The resulting program, known as *Connect Illinois*, is the largest state broadband grant program ever, providing the magnitude of funding needed for state-driven universal broadband access.

Created through Public Act 100-833, the Broadband Advisory Council (BAC) is charged with removing barriers and fostering collaboration to expand broadband access, adoption, and utilization. In particular, the BAC serves to guide the creation, implementation, and effectiveness of the increasingly comprehensive *Connect Illinois* program — which balances the need for improved broadband access through infrastructure investment with complementary programming promoting broadband adoption and utilization, all through the lens of digital equity and inclusion.

In announcing the BAC, Governor J.B. Pritzker identified three main outcomes that would center the council's work: telehealth; education; and economic development. These priorities have gained significance in light of the COVID-19 pandemic and constitute three primary utilization categories that depend upon high-quality broadband access.

- **Telehealth.** Expand access to telehealth across the state of Illinois, which will provide additional healthcare options to communities in rural and urban Illinois alike, ranging from primary care to expanded treatment opportunities in areas such as mental health and opioid addiction.
- **Education**. Increase broadband access both for in-classroom learning and remote learning at home throughout Illinois to ensure students have the tools they need to succeed.
- **Economic Development.** Expand economic development and opportunity in urban and rural communities throughout Illinois. This investment will support the growth of Illinois' agriculture economy and information technology sector and will help to modernize transportation and support the development of entrepreneurs and small business owners.

Among its powers and duties, the BAC – in collaboration with the Illinois Office of Broadband and its strategic partners – strives to contribute as follows:

- Explore all ways to expand broadband availability to end-user customers, including in areas of income, business, education, health and aging in place;
- Explore ways to encourage state and municipal expansion of new broadband services;
- Explore, cooperate and assist with increased educational, career, workforce preparation including expansion of electronic and distance educational services;
- Identify service barriers to residents and small businesses;
- Research ways to eliminate adoption barriers;
- Monitor other states broadband progress; and
- Receive input from all Illinois broadband stakeholders and advise the Pritzker Administration on remedying service to underserved areas

Members of the Broadband Advisory Council

To inform and advise the Connect Illinois program, the Governor-appointed Illinois Broadband Advisory Council convened in August 2019. The 25-member council includes representation from various internet service providers, state agency officials and legislators, and certain broadband-related stakeholders. The full membership list is available in Appendix A of this report.

The following individuals serve as officers of the Broadband Advisory Council:

- Chair, Matt Schmit | Illinois Office of Broadband, Department of Commerce and Economic Opportunity
- Vice Chair, Lori Sorenson | Illinois Department of Innovation and Technology; and
- Secretary/Treasurer, Katie Stonewater | Illinois Department of Commerce and Economic Opportunity.

Meetings of the Broadband Advisory Council

By statute, the Broadband Advisory Council is required to meet once quarterly. The Broadband Advisory Council convened five times in 2020, with four regular meetings and one special meeting:

• Regular Meeting: February 18, 2020

• Regular Meeting: May 19, 2020

• Regular Meeting: September 15, 2020

• Special Meeting: November 18, 2020

• Regular Meeting: December 16, 2020

February 18th Meeting: Chair Budzinski and Deputy Director for Broadband Matt Schmit provided updates on the Office of Broadband, the Broadband Strategic Plan, and Notice of Funding Opportunities. The Connect Illinois Broadband Strategic Plan was published in February. Deputy Director Schmit provided an overview of the Strategic Plan and the vision and values of the competitive matching grant program. The first Notice of Funding Opportunity for Connect Illinois state broadband grants was published, with \$50 million made available in the first round. The Connect Illinois website was launched. Chair Budzinski announced her resignation as Chair of the Broadband Advisory Council after the February meeting and her departure from the Governor's Office.

May 19th Meeting: Representatives from the Illinois State Board of Education, Jennifer Kirmes and Erich Grauke, provided updates on remote learning and the Illinois Communities Grant Program. The grant program was designed to provide funding in response to the COVID-19 pandemic and strengthen the infrastructure for remote learning. Chair Schmit gave an overview of the first round of the Connect Illinois grant program – 39 applicants were received with 37 applicants meeting program eligibility. Gigi Sohn, Senior Fellow with the Benton Institute for Broadband & Society, provided an overview on broadband-eligible CARES Act funding.

September 15th Meeting: Erich Grauke, Illinois State Board of Education, provided an update on remote learning initiatives – Illinois Priority Learning Standards, Illinois Learning Technology Center, Wi-Fi hotspot map, Digital Equity Formula Grant, and Digital Professional Learning Grant. Chair Schmit provided an update regarding recent Office of Broadband activities – Connect Illinois grant program Round 1, Illinois Connected Communities, Broadband Mapping, Digital Equity, and the Broadband Affordability Study. Professor Colin Rhinesmith, Simmons University, led a discussion on various approaches to and study findings of broadband affordability research undertaken across

the country. Input regarding the Illinois study was invited and collected, including a request for a region-by-region breakdown of certain study cost estimates.

November 18th Meeting: Chair Schmit provided an update of the Office of Broadband activities — Connect Illinois grant program awarded 28 projects and Round 2 was announced in October with \$50 million available for grants; Digital Equity Package announced to build digital literacy, drive regional collaboration for broadband access, adoption, and utilization, and mentor communities for planning; the Illinois COVID-19 Response Fund provided the nonprofit, PCs for People, with a \$1.45 million grant to build computer refurbishing and redistribution network throughout 41 counties in southern Illinois. The network would include warehouse and retail space in the Metro East region and provide access to refurbished computers for qualified Illinois households. Researchers working on the Broadband Affordability Study, led by Professor Colin Rhinesmith, Simmons University, provided an update on the study commissioned by the Illinois General Assembly.

December 16th Meeting: Chair Schmit provided an update on the Office of Broadband activities and the status of Connect Illinois Round 2, Digital Equity Package grant programs, and Office of Broadband mapping efforts. The Broadband Affordability Study findings were presented by the researchers and discussed among the council.

Work of the Broadband Advisory Council

Broadband Working Groups

The working groups were established in 2019 to discuss key issues and identify various opportunities and barriers related to broadband infrastructure and utilization. The working groups include: access; economic development; education; infrastructure and technology; and telehealth. Findings from the working groups have been incorporated into the Broadband Strategic Plan. With their initial work informing the Broadband Strategic Plan and related programming complete, the working groups may reconvene during the latter half of 2021.

Broadband Strategic Plan

The Connect Illinois Broadband Strategic Plan was released in February 2020 to guide investment and gauge progress of the \$420 million investment made by Governor J.B. Pritzker to expand access to high-speed broadband internet across the state. Connect Illinois seeks to achieve what no other state or federal approach has accomplished: ubiquitous broadband access. In order to help Illinoisans both access and use broadband, Connect Illinois will promote digital literacy, adoption, and inclusion while leveraging fully scalable broadband infrastructure to drive economic development and increase quality of life.

The Connect Illinois broadband strategy is anchored by distinct, yet interdependent goals - ensuring short-term basic access for Illinois homes, businesses, and community anchor institutions throughout the state of at least 25/3 Mbps by 2024; providing longer-term high-speed access to the same communities at 100/20 Mbps service by 2028; demonstrating broadband leadership as a top three national broadband access leader by 2028; and supporting economic development from advanced manufacturing to precision agriculture relative to other states and to countries around the globe.

The Connect Illinois broadband strategy defines basic broadband as speeds of at least 25/3 Mbps and considers a home, business, or community unserved if it lacks access to basic broadband. An underserved home, business or community anchor institution lacks access to broadband of at least 100/20 Mbps. All Connect Illinois Broadband Grant Program projects must be scalable to service of at least 100/100 Mbps. The Broadband Strategic Plan is included as Appendix B.

Broadband Affordability Study

In May 2020, the Illinois General Assembly directed the Broadband Advisory Council to conduct a study on broadband affordability by January 1, 2021. SB 2135 required the study to include analysis of universal access in areas of poverty and areas where broadband infrastructure is insufficient for high-speed access.

Applying a methodology used by Common Sense Media, the study researched technology and internet adoption rates among four categories of Illinois households using 2019 American Community Survey data. The study then estimated costs for network deployment for free and affordable broadband to connect those households, breaking out costs for short-term non-infrastructure and long-term infrastructure solutions. The study focused its analysis on adoption across Illinois' 10 economic development regions examining socio-economic factors such as income and race/ethnicity. The full text of SB 2135 is included as Appendix C.

Office of Broadband

Created in September 2019, the Office of Broadband is housed within the Illinois Department of Commerce and Economic Opportunity, the state's largest grant-making authority. As a primary charge, the office is responsible for administering the Connect Illinois broadband infrastructure grant program. In addition, the Office develops and administers related programming – such as in the areas of community planning and capacity building and digital literacy, adoption, and inclusion.

The Office has expanded its technical capabilities by growing its team and developing strategic partnerships that have broadened the Office's reach and activities. Matt Schmit has served as Deputy Director of Broadband since September 2019. The Office includes a grants manager for the Connect Illinois grants program, Senior Policy Advisor, Illini Science Policy fellow, and regular contribution from technical consultants. To add value to its programming, leverage external resources, and enhance its capacity, the Office forged strategic partnerships with the Evanston-based Benton Institute for Broadband & Society, the Illinois Innovation Network, University of Illinois Extension Services, the National Digital Inclusion Alliance, and the nonprofit, PCs for People.

Programming

The Office of Broadband launched multiple programs in 2020 to move further toward the state's goals of achieving ubiquitous broadband access and adoption.

Connect Illinois

The *Connect Illinois Grant Program* focuses on expanding broadband connectivity through matching grants for broadband infrastructure projects in unserved and underserved areas. This program can transform the state's investment into a potential total public-private investment of \$1 billion or more in state and non-state public/private sources. The first \$50 million of the Connect Illinois grant program was awarded in June, matched by \$65 million in

nonstate funds. Twenty-eight projects among 18 grantees will connect or improve connections for 26,000 Illinois businesses, homes and farms. Applications for Round Two opened in October, with \$50 million available through four distinct categories - broadband access, broadband equity, broadband innovations, and urban broadband. Round Two will operate similarly to Round One. The state will relax the nonstate match requirement for areas with difficult project economics, historic low adoption rates, high unemployment and/or poverty. A summary of Round One winners is included as Appendix D; a map is included in Appendix E.

Digital Equity Package

In order to help Illinoisans both access and use broadband, Connect Illinois launched the Digital Equity Package in 2020 to offer related programming to add value to the state's infrastructure investment. The Digital Equity Package enlists state, local, nonprofit and philanthropic support to address gaps in digital access, adoption, and affordability for high-speed internet access. The comprehensive approach is designed to help communities identify and address existing broadband equity gaps, as well as to leverage new and existing sources of funding for long-term broadband equity. The package consists of:

- Illinois Connected Communities a partnership of the Office of Broadband, the Benton Institute, and local philanthropy, the Illinois Connected Communities program engages a cohort of communities to drive community planning for broadband access, adoption, and use implementation through best practice curriculum and expert consultation. By the end of the program, each community, using state grant funding combined with a philanthropic match, will have completed a community-driven, broadband strategic plan, including community events. The program launched in the summer of 2020 with twelve communities currently engaged. A second round, which closes January 25, 2021, is currently accepting applications. A map of the Round One Illinois Connected Communities cohort is included as Appendix E.
- Digital Navigator Collaboration to support community digital equity needs, the Office of Broadband will partner with the National Digital Inclusion Alliance (NDIA) and PCs for People to establish digital navigator capacity within communities around the state. Navigators will work to address the digital inclusion process including home connectivity, devices, and digital skills. Digital navigators will assess residents' needs and connect them to resources that match their households' lifestyles. These navigators can be volunteers or cross-trained staff who already work in social service agencies, libraries, healthcare, and more. They will offer remote and socially distant in-person guidance. A cohort of qualified applicants will be provided with expert training as well as the opportunity to work directly with project partners on resource establishment and digital equity mapping.
- Broadband READY Program a collaborative effort between the Illinois Office of Broadband and the Illinois Innovation Network, Broadband Regional Engagement for Adoption + Digital Equity (READY) grants will direct \$250,000 to qualified regional entities statewide to explore opportunities for equitable advances in broadband access, adoption, and utilization. Grant awards up to \$50,000 will identify current digital inequities as well as next steps in creating a digital inclusion ecosystem through regional collaboration among community and economic development organizations, education, local leaders and other related stakeholders. The program will provide scalable solutions for broadband utilization across all ten Illinois economic development regions including pressing current needs such as telehealth and remote learning.



Connect Illinois Computer Equity Network

A first of its kind initiative to expand digital access for low-income households, the *Connect Illinois Computer Equity Network* launched in December to deploy refurbished computers, digital literacy programming and workforce development through a statewide network of public and private partners, including the Illinois COVID-19 Response Fund. Operated by PCs for People, a national nonprofit organization focused on getting low-cost computers and affordable broadband internet into the homes of low-income individuals, this program will put computers and other mobile devices into the hands of Illinois residents through its hubs in the Metro East and Cook County. Events are planned for each county in the state for the coming year.

Communication

In an effort to be a useful resource to individual consumers, local communities, various state agencies and broadband providers alike, the Office of Broadband has expanded its outreach efforts to keep the public informed and engaged in statewide broadband activities.

Newsletter

The Illinois Broadband Connections newsletter is a collaborative effort between the Illinois Office of Broadband and the Benton Institute to bring subscribers Illinois-specific broadband news. Launched in 2020, the bi-weekly newsletter provides information on activities of the Illinois Office of Broadband, as well as news of federal actions and local initiatives. The newsletter reaches approximately 1,000 subscribers – and counting.

Webinars

The Office of Broadband webinar series provides timely briefings on activities of the Office of Broadband, technical assistance webinars for interested grant applicants of the Connect Illinois grant programs, and a series of expert conversations exploring important topics with national, state, and local leaders. These webinars are a collaboration among the Office of Broadband, the Benton Institute, and the University of Illinois Extension Services. The University of Illinois houses and operates the webinars. Links are provided via the Connect Illinois website. Local and state leadership with national experts to get the most out of their fields.

The Development Broadband Leadership Series provided four webinars — *Broadband: Now More than Ever, Community Broadband Deployment, Broadband 101, Digital Inclusion* — to provide expert perspective from broadband leaders across the county.

The Illinois Connected Communities series hosted four public webinars held quarterly. These webinars provide expert resources and explored access, adoption, and utilization for local communities undergoing community planning and capacity building for broadband.

Over ten technical assistance and grant preparation webinars were held to overview the grant programs offered by the Connect Illinois program, review eligibility and program requirements, and answer questions from interested applicants.

APPENDIX A - Broadband Advisory Council Members

BAC Member Organization

Matt Schmit Illinois Department of Commerce and Economic Opportunity

Deno Perdiou AT&T
Melia Carter Verizon
Chris Nelson Comcast

Rick Holzmacher Illinois Rural Broadband Association

Zak Horn Metro Communications

Steven Hill Satellite Broadcasting and Communications Association

Karen Boswell Frontier

Josh Shallenberger CEO of Shelby Electric Coop

Mike Chamberlain Illinois Municipal League/Mayor of Belvidere

Anne Slaughter Illinois Library Association

Deb Alfredson Illinois Association of Housing Authorities

Jeff Newell Illinois Community College Board
David Antonacci Illinois Board of Higher Education

Bill Bodine Illinois Farm Bureau

Ryan Gruenenfelder AARP

Lori Sorenson Department of Innovation and Technology

Paula Basta Department of Aging
Susan Satter Illinois Attorney General

Jim Zolnierek Illinois Commerce Commission

Theresa Eagleson Illinois Department of Healthcare and Family Services

Sen. Bill Cunningham-D Illinois Senate
Sen. Jil Tracy-R Illinois Senate

Rep. John Connor-D Illinois House of Representatives
Rep. Keith Wheeler-R Illinois House of Representatives

APPENDIX B — Broadband Strategic Plan

Executive Summary

As part of his historic \$45 billion Rebuild Illinois investment strategy, Governor J.B. Pritzker included \$420 million to expand access to high-speed broadband internet across the state. A critical commitment to closing gaps and expanding opportunity, the Connect Illinois program is central to the Governor's Five-Year Economic Plan to revitalize and grow the Illinois economy with an emphasis on equitable growth.

As the largest state broadband competitive matching grant program ever, Connect Illinois seeks to achieve what no other state or federal approach has accomplished: ubiquitous broadband access. In order to help Illinoisans both access and use broadband, Connect Illinois will promote digital literacy, adoption, and inclusion while leveraging fully scalable broadband infrastructure to drive economic development and increase quality of life.

The Connect Illinois broadband strategy is anchored by distinct, yet interdependent goals providing short-term *basic access*, ensuring longer-term *high-speed access*, and demonstrating *broadband leadership* and *economic development* relative to other states and countries.

Basic broadband access. The short-term universal access goal provides that Illinois homes, businesses, and community anchor institutions around the state can access broadband at basic service levels:

By 2024, Illinois homes, businesses, and community anchor institutions throughout the state will have access to basic service of at least 25/3 Mbps.

High-speed broadband access. The longer-term universal access goal ensures that Illinois homes, businesses, and community anchor institutions have access to at least one provider with high-speed service levels necessary for advanced applications, heavy bandwidth use, or future need:

By 2028, Illinois homes, businesses, and community anchor institutions throughout the state will have access to at least one provider offering 100/20 Mbps service.

Broadband leadership. Just as bandwidth needs change, so does the definition of "broadband." Connect Illinois seeks to lead relative to its peers on the broadband of today – and tomorrow:

By 2028, Illinois will place in the top three nationally, and top 12 globally, for broadband access.

Economic development. Illinois is not investing in high-speed internet for its own sake. Broadband can support innovation in areas from advanced manufacturing to precision agriculture:

Illinois will be a leader in broadband applications for agriculture, economic development, education, and telehealth while leveraging broadband infrastructure investments to support equitable growth.

At its core, the push toward broadband ubiquity is one of broadband equity – targeting resources to close gaps and expand opportunity for unserved and underserved communities throughout Illinois.

Understandably, private investment has doubled down on relatively profitable service territories – growing the broadband access gap as a result. Connect Illinois will address this market failure and recalibrate the business case for new deployment, aligning public and private investment to connect communities and individual consumers with fully scalable service.

Connect Illinois Vision

The Connect Illinois broadband investment represents an integral and strategic component of the comprehensive 2019 Rebuild Illinois infrastructure program and the Governor's Five-Year Economic Plan. With \$400 million appropriated for competitive broadband grants, Connect Illinois is the largest state broadband matching grant program ever, providing the magnitude of funding needed for state-driven broadband ubiquity and innovation— and lasting broadband equity.

In addition to \$400 million in competitive grants, the Connect Illinois program includes \$20 million for upgrades to the 100 GB Illinois Century Network, the state's existing 2,000-mile open access institutional fiber network, which serves over 3,400 K-12, higher education, and library locations across the state. Importantly, this funding will provide a secure K-12 Broadband Network available at no cost to all Illinois K-12 public schools.

Connect Illinois seeks to achieve what no other state or federal approach to date has accomplished: ubiquitous broadband access — to homes, businesses, and community anchor institutions. At the same time, Connect Illinois will promote digital literacy, adoption, and inclusion while leveraging investment in new broadband infrastructure to spur advances in such areas as economic development, education, precision agriculture, and telehealth.

Universal access. Poor broadband represents an infrastructure gap with serious socioeconomic consequences. Despite significant investment from the private sector and federal government, large swaths of Illinois lack access to basic broadband service — defined by the Federal Communications Commission (FCC) as service of at least 25 Mbps download and 3 Mbps upload (25/3 Mbps). At the same time, pockets of urban areas, developments just outside city lines, and entire rural communities alike fall below this threshold, posing a challenge to equitable investment that must be surmounted if opportunity is to be widespread.

Digital literacy, adoption, and inclusion. If broadband infrastructure and service represent one side of the connectivity coin, the flip side is broadband utilization — including digital literacy, adoption, and inclusion. While the relatively simple and well-documented barriers to the former often include population sparsity, geography, and lack of economic return on investment, barriers to utilization are more complex. Adoption and literacy rates are of particular concern in black and brown communities and rural regions across the state. For a state, local community, or individual family to compete in the 21st century digital economy, these barriers must be overcome. Thus, Connect Illinois will leverage complementary efforts to ensure that Illinoisans have both the requisite broadband service and necessary broadband skills.

Support economic development goals. Strategic broadband deployment will maximize connections — to homes, businesses, and community anchor institutions alike — while promoting opportunities in broadband-driven applications, such as those in economic development, education, precision agriculture, and telehealth. Connect Illinois will enable and showcase cutting- edge broadband innovations across various sectors of the state's economy, including those highlighted in the Governor's Five-Year Economic Plan: agriculture; energy; health care; information technology; manufacturing; and transportation. These broadband infrastructure investments will support Governor Pritzker's strategy to revitalize the Illinois economy and catalyze equitable growth.

Building on Past Investment

Connect Illinois follows previous state-led investment and collaboration that made meaningful progress toward broadband expansion. Projects commissioned through the American Recovery and Reinvestment Act of 2009 (ARRA) and during the administration of former Governor Pat Quinn offer strong examples of sound investment that balanced short-term need and longer-term vision while promoting innovative approaches to collaboration, funding, and deployment.

The ARRA era. In 2010, Illinois projects leveraged approximately \$200 million in federal funding, most notably from the Department of Commerce National Telecommunications and Information Administration. The focus of these projects included broadband infrastructure; data and development; public computing centers; and sustainable adoption.

The projects included investment in regional middle-mile, institutional, and open-access networks that led to new connections for numerous community anchor institutions — schools, libraries, and other public buildings — and from multiple broadband providers offering last-mile service to homes and businesses. Collaboration over shared middle-mile infrastructure allowed broadband providers to compete on service and further extend new last-mile connections; investment in institutional networks provided schools, libraries, and other public buildings with great value: gigabit-capable service and the promise of long-term cost stability.

Separate projects in Northern Illinois and Chicago focused on broadband adoption, including direct access through expanded public computing center capacity and programs equipping participants with devices for permanent, at-home use. Another statewide project focused on state capacity building, technical assistance, and data collection and mapping.

Quinn Administration. The Illinois Broadband Opportunities Partnership (IBOP) was created to catalyze the state's ARRA participation, position its applicants competitively for ARRA broadband funding, and track progress over time, among other activities. Approximately \$70 million in state resources served as matching funds to leverage over \$200 million in federal ARRA grants.

In addition, the Quinn Administration targeted state funding toward three separate initiatives, adding another roughly \$5 million in state investment through the Broadband Innovation Fund; the Digital Divide Grant Program; and the Illinois Gigabit Community Challenge.

Other Federal Funding. To close broadband access gaps, primarily in rural areas, Illinois internet service providers have leveraged significant funding through various FCC programs and through other grant and loan programs from the United States Department of Agriculture (USDA). Although these funds have expanded internet access, they have not always produced investment in competitive speeds or scalable broadband that ensures the level of service and bandwidth necessary for many applications already in demand today.

The Connect Illinois vision and magnitude of funding offer a potential opportunity to leverage existing federal funding streams for investment in scalable broadband that will help Illinois meet its broadband goals, utilize public funding efficiently and effectively, and position Illinois homes, businesses, and community anchor institutions to thrive in the 21st century digital economy.

Broadband Advisory Council

To inform and advise the Connect Illinois program, the Governor-appointed Illinois Broadband Advisory Council convened in August 2019. The 25-member council includes representation from various internet service providers, state agency officials and legislators, and certain broadband- related stakeholders (Appendix A). Five working groups formed to discuss key issues and to identify various opportunities and barriers related to broadband infrastructure and utilization. The working groups included: access; economic development; education; infrastructure and technology; and telehealth.

Access. The working group on access explored barriers and opportunities for improved collaboration between broadband providers and private landowners and public facilities. Through careful communication and coordination, Connect Illinois deployments will seek to leverage shared stakeholder interests to improve access to public facilities and private assets, such as agricultural land, railroad crossings, and utility poles, wherever possible.

Economic development. The working group on economic development examined how to leverage the convergence of improved bandwidth, innovative applications, and useful metrics to promote and measure the impact of new broadband investment and related opportunities. It found that broadband is increasingly necessary for to attract businesses and grow the economy of today — and tomorrow. For instance, broadband was found to reduce transaction costs and improve access to online resources, boosting sales and reducing input costs. In addition, multiple studies suggest that rural broadband is positively associated with GDP growth; median household incomes; farm revenues; and non-farm rural business growth — with faster broadband having greater impact.

Residential broadband is also an important business-attraction tool, providing quality of life for workers and local customers — and the capacity for telework, flex schedules, or home-based business start-ups that could grow to produce new jobs or boost the property tax base.

The Governor's Five-Year Economic Plan highlights six primary sectors for driving growth: agriculture; energy; healthcare; information technology; manufacturing and transportation. This plan committed the Pritzker Administration to investing to grow these sectors while prioritizing fair and equitable

growth, supporting small businesses, and strengthening the Illinois workforce. High-quality broadband infrastructure, along with increased adoption and digital rates, is foundational to this strategy. With regard to the rural economy, companies with high transaction costs or high labor intensity – such as financial services, wholesale trade, health, or tourism – stand to benefit the most from better broadband.

Education. The working group on education considered the barriers and opportunities at the intersection of broadband and education. While the federal e-rate program and state investment in the Illinois Century Network have produced clear successes, continued progress is needed to ensure that all students have access to the level of broadband they need – both inside the classroom and out – for such uses as interactive and multimedia curriculum, flip schedules, and distance learning.

Infrastructure and technology. The working group on infrastructure and technology focused on identifying elements of a successful broadband grant program, such as the need for mapping, matching funds, clear funding criteria, and a balanced challenge process to ensure accurate mapping and fair grant administration.

Telehealth. The working group on telehealth identified barriers and opportunities related to expanded health care service and technology enabled by broadband connectivity, including the need for clear regulation of and reimbursement for telehealth services, related equipment for telehealth services and facilities, and the bandwidth necessary for real-time interaction between patient and heath care professional.

Goals and Definitions

To guide investment and gauge progress, the Connect Illinois broadband strategy is anchored by distinct, yet interdependent goals ensuring short-term *basic access*, providing longer-term *high-speed access*, and demonstrating *broadband leadership* and *economic development* relative to other states and to countries around the globe.

Short-term goal: basic access. The short-term universal access goal provides that Illinois homes, businesses, and community anchor institutions around the state can access broadband at basic service levels:

By 2024, Illinois homes, businesses, and community anchor institutions throughout the state will have access to basic service of at least 25/3 Mbps.

Longer-term goal: High-speed broadband access. The longer-term universal access goal ensures that Illinois homes, businesses, and community anchor institutions have access to at least one provider with high-speed service levels necessary for advanced applications, heavy bandwidth use, or future need:

By 2028, Illinois homes, businesses, and community anchor institutions throughout the state will have access to at least one provider offering 100/20 Mbps service.

Legacy goal: broadband leadership. Just as bandwidth needs change, so does the definition of "broadband." Connect Illinois seeks to lead relative to its peers on the broadband of today — and tomorrow:

By 2028, Illinois will place in the top three nationally, and top 12 globally, for broadband access.

Policy goal: economic development. Access to high-speed internet can catalyze innovations that benefit areas such as education, telehealth, advanced manufacturing, and precision agriculture:

Illinois will be a leader in broadband applications for agriculture, economic development, education, and telehealth while leveraging broadband infrastructure investments to support equitable growth.

Definition: basic broadband. Just as bandwidth needs change, so should the definition of what constitutes basic broadband. Connect Illinois will index its definition of broadband to track the FCC standard, currently 25/3 Mbps. However, broadband isn't just about speed; even basic broadband should match sufficient speed with adequate capacity, affordable pricing, appropriate reliability, and acceptable latency.

Definition: unserved areas. If a home, business, or community anchor institution lacks access to basic broadband, it is unserved. Connect Illinois considers those areas falling below this threshold, currently set at 25/3 Mbps, to be unserved areas.

Definition: underserved areas. Recognizing that bandwidth needs are rapidly changing, Connect Illinois considers any home, business, or community anchor institution without access to broadband of at least 100/20 Mbps as underserved. Areas falling below this threshold are underserved areas.

Connect Illinois Program

With \$400 million available for broadband deployment grants targeting areas of greatest need, Connect Illinois is an equity-driven infrastructure program, first and foremost. Challenges tied to population sparsity, geography, or low take rate continue to stand as barriers to broadband ubiquity. In particular, Connect Illinois will seek to address disparities in broadband access and adoption in rural regions and black and brown communities across the state. Understandably, private investment has doubled down on relatively profitable service territories — growing the broadband access gap as a result. Connect Illinois funding will address this market failure and recalibrate the business case for new deployments, connecting communities and individual consumers with scalable service throughout the state.

The magnitude of the Connect Illinois investment is critical to its success: First, it signals — to the public, providers, and policymakers alike — the significance and scale of the broadband access challenge and the Connect Illinois vision. Second, it allows for phased deployment and planning — for both grant applicants and grant administrators. Third, it creates leverage to push private investment and federal funding toward scalable technology that meets the broadband needs of today — and tomorrow.

Broadband deployment grants. The Connect Illinois program will focus on expanding broadband connectivity by promoting the following project criteria:

- Competitive matching grants will be scored based upon merit and require a certain non- state match, transforming the Connect Illinois investment into a potential total public- private investment of \$1 billion or more in state and non-state sources, whether federal, local, or private funds.
- Applicant inclusive approach will inspire a wide array of proposals, including but not limited to those from providers, cooperatives, municipalities, tribal entities, nonprofits, and public-private partnerships.
- *Technology neutral* approach will enable a diverse set of providers and related technology to qualify for funding, including various wireline and wireless approaches.
- Fully scalable technology will allow for future upgrades and ensure long-term return on the historic Connect Illinois investment.
- Open access and shared use preference will acknowledge that collaboration over infrastructure promotes better service for consumers and expanded network coverage for providers, producing a triple win by stretching Connect Illinois to its last-mile limits.
- Community-driven approach will promote direct engagement among providers, local communities, and individual stakeholders to collaborate and build toward a shared community technology vision.
- Affordability focus will ensure that the Connect Illinois program takes a comprehensive approach to promoting broadband access through broadband equity, addressing one critical barrier to adoption: a consumer's cost to connect.
- Synergy with the Governor's Five-Year Economic Plan will provide a strategic frame for aligning Connect Illinois investment with broader economic goals and opportunities.
- *Emphasis on applications* will showcase cutting-edge broadband-driven innovations in areas such as agriculture, economic development, education, and telehealth.
- Leveraging broadband for innovation in economic development or quality of life requires more than a fast connection. This is particularly true when it comes to empowering communities to participate in anticipation of a broadband deployment or encouraging consumers to utilize broadband once it is available. Accordingly, Connect Illinois will augment its historic investment in broadband infrastructure with value-added work to prime the broadband pump through attention to capacity building and planning for communities and digital literacy, adoption, and inclusion for consumers.

Community planning and capacity building. The most compelling infrastructure grant applications will be community driven, with deep connections between the application and a community's technology vision, needs, and goals. Targeted engagement and programming will be necessary to promote community involvement throughout the grant process, eventual deployment, and ongoing broadband adoption and utilization. Without meaningful community involvement, applications may tend toward minimal impact, missing key opportunities for advances in such areas as community and economic development, education, or telehealth.

To jump-start community involvement and to maximize the impact of the Connect Illinois investment, effort will be taken to engage individual communities, inspire and support community broadband planning and goalsetting, and galvanize local resources and awareness.

This effort will seek to leverage state and non-state funding to design programming, tap experts in community broadband engagement, and lay the groundwork for meaningful, community-driven infrastructure deployment and lasting approaches to broadband utilization.

Digital literacy, adoption, and inclusion. For a state, local community, or individual family to compete in the 21st century digital economy, all barriers to broadband access must be overcome. At the same time Connect Illinois invests in broadband infrastructure, the program will leverage complementary efforts to ensure that all Illinoisans have both the requisite broadband service and necessary broadband knowhow.

More or better broadband deployment alone won't close the broadband access gap, but an historic infrastructure investment matched with meaningful civic engagement will position Illinois communities and consumers alike to compete in an increasingly digital global economy – and enjoy the advances in quality of life that come with connectivity of all kinds.

Office of Broadband

Created in September 2019, the Office of Broadband is housed within the Illinois Department of Commerce and Economic Opportunity. The office is responsible for administering the Connect Illinois broadband infrastructure grant program. In addition, the office will develop and administer related programming – such as in the areas of community planning and capacity building and digital literacy, adoption, and inclusion.

Beyond the administration of grants and programming, the office will work with one or more third- party vendors to develop state-specific mapping of broadband assets, including available technology and levels of service. Recognizing the limitation of current mapping offered by the FCC, this effort will leverage otherwise proprietary broadband provider data — and direct consumer feedback — to generate interactive mapping detailing various technology and levels of service available to communities and consumers throughout Illinois. Among other attributes, the mapping will enable analysis of various layers, such as by county, legislative district, or deployment year.

Finally, the office will serve as a one-stop shop for all things broadband. From infrastructure to utilization, public funding to private deployment, the office will strive to be a useful resource to individual consumers, local communities, various state agencies, and broadband providers alike. Just as broadband connects seemingly distinct aspects of our lives or otherwise siloed areas of government, the office of broadband seeks to make meaningful connections — including through thoughtful public-private partnership, innovative cross-sector collaboration, and increased efficiency within state agency and across all levels of government.

APPENDIX C – SB 2135 – Broadband Affordability Study

ARTICLE 10. BROADBAND ACCESS

Section 10-5. The Broadband Advisory Council Act is amended by adding Section 25 as follows:

(220 ILCS 80/25 new)

Sec. 25. Universal no-cost broadband Internet access.

- (a) In furtherance of the purposes of this Act to expand broadband service to unserved rural and urban areas of this State and to achieve universal broadband service and Internet access for the residents of this State, the Broadband Advisory Council shall study the goal of providing free access to all residents of this State to broadband service through the expansion of the state broadband competitive matching grant program. The Broadband Advisory Council shall also study the alternative goal of providing affordable access to all residents of this State to broadband service. The Office of Broadband within the Department of Commerce and Economic Opportunity shall support and assist the Council in the development of the study.
- (b) The study must include establishing access to broadband service in zip codes identified as having high levels of poverty and in the areas of the State without the infrastructure necessary to meet the requirements for high-speed access to the Internet. To the extent possible, the study shall consider the incorporation and expansion of the initiatives established in the Connect Illinois Broadband Strategic Plan. The Council's study shall identify existing and new streams of State, federal and private-public partnership revenue to underwrite the creation of necessary infrastructure and purchase unlimited broadband Internet access to be provided, without charge, to some or all residents of the State. The Council's study shall include a recommended schedule for implementation of free universal broadband to the extent determined to be feasible.
 - (c) The Council shall issue a report on its findings and recommendations for any necessary legislation to the General Assembly no later than January 1, 2021.

Appendix D – Connect Illinois Round One Project Summaries

Adams Telsystems, Inc. – \$4,954,066 grant

Location: Adams and Brown Counties

Adams TelSystems, Inc. project will develop a FTTP Build-out for Adams & Brown Counties. This broadband access deployment will serve approximately 1,106 households, business, farms and anchor institutions in rural areas east of Quincy. The rural communities of Columbus, Payson, Richfield, Kingston, Burton, Liberty, Mound Station (Timewell) and Adams will all benefit from this broadband access build. Adams TelSystems, Inc. will vastly improve the unserved/underserved areas to 1 Gbps download and 1 Gbps upload. Adams TelSystems, Inc. is a Certified Gigabit Provider and has provided Internet access to the region since 1995. Adams TelSystems, Inc. knows and has witnessed the impact that broadband service can provide to schools and their students, agricultural operations including precision ag tools and telehealth care. The broadband access that Adams TelSystems, Inc. is providing will stimulate the local economy and help businesses compete on a larger scale and provide a better quality of life.

Allpoint NetworX – \$2,679,502 grant Location: Bond and Madison Counties

As a Broadband Access project, this middle mile and last mile deployment will serve a total of 926 premises, specifically 846 unserved households and 80 unserved businesses, farms, and community anchor institutions, located in Bond County and a portion of Madison County. In a funding partnership with the State of Illinois, Allpoint NetworX, Inc. will improve unserved areas to 1Gb per second download and 1Gb per second upload as demand warrants, with initial plans providing for 100 Megabits per second download and 100 Megabits per second upload, 250 Megabits per second download and 125 Megabits per second upload. Bond and Madison Counties both have a strong agricultural industry with farming being one of the main sources of income for residents. Access to high speed internet will allow farmers to improve both quality and efficiency and become more competitive. With better broadband, farmers will be able to use more advanced technologies to track and monitor crop prices, weather, livestock, crop and soil quality, and inventory. Additionally, better internet will provide farmers, and small businesses in general, with more opportunities to sell and market products. Furthermore, advanced broadband will allow residents to access real-time services such as E-learning, video streaming and telehealth, as well as engage in telework. Access to high-speed, reliable broadband is a key ingredient in a community's ability to grow and prosper. Allpoint NetworX, Inc. is committed to ensuring that customers have the necessary tools to succeed, especially during these uncertain times.

Cambridge Telecom Inc – \$817,053 grant Location: Henry County

The last mile Cambridge Telcom, Inc. FTTH Project, by Cambridge Telcom, Inc., will serve approximately 172 businesses, farms, and households in Henry and Rock Island counties located in northwestern Illinois. The Cambridge Telcom, Inc. FTTH Project will provide broadband data speeds at a variety of advertised data rates, with the capability of attaining speeds of 1 Gbps symmetrical or more to every location. Cambridge Telcom, Inc. believes that sustainable broadband adoption will transform these primarily unserved areas into highly productive rural communities, opening doors to advancements such as precision agriculture. Given the current demand for advanced technologies and high-speed broadband, FTTH will empower the area by providing the opportunity to be proficient users of broadband technology. Education, health care, energy efficiency, and public safety will improve with high-speed Internet access.

Century Enterprises, Inc. – \$3,123,122 grant Location: Fulton, Peoria, and Knox Counties

Century Enterprises, Inc. will build a FTTP Build-out for Fulton, Peoria and Knox Counties. This broadband access deployment will serve approximately 581 households, business, farms and anchor institutions. The rural communities of Rapatee, Laura, Dunlap, Kickapoo, Hanna City, Trivoli, Knoxville, Princeville, Williamsfield, Maquon, Bernadotte, and Ipava will benefit from the broadband Connect Illinois Broadband Grant/Century Enterprises, Inc. FTTP Build-out for Fulton, Peoria and Knox Counties. Century Enterprises, Inc.'s parent company, Mid Century Telephone Cooperative, has been providing cooperative members service for over 70 years by first providing phone services and now high-speed broadband services. Century Enterprises, Inc. knows and has witnessed the impact that broadband service can provide to schools and their students, especially during the COVID-19 pandemic, and the need for broadband connectivity to correspond with teachers and students. Agricultural operations using precision ag tools such as GPS guidance, control systems, sensors, drones and variable rate technologies give them a competitive edge to farmers that do not have high speed broadband services. Telehealth care has never been as important as it is today with the COVID-19 pandemic. Physicians can pre-screen patients before having them arrive at a clinic for an in-person visit. Also, telehealth is essential for the residents at nursing homes or assisted living homes that are on lock down. Those residents can video chat with their primary physician without having to expose themselves to the COVID-19 virus. The broadband access that Century Enterprises, Inc. project will stimulate the local economy and help businesses compete on a larger scale and provide a better quality of life to the residents in the area.

Comcast 2 – \$595,301 grant

Location: Sterling, Whiteside County

As a Broadband Access project, this last mile deployment will serve 179 unserved households in unincorporated Sterling, Whiteside County. In a funding partnership with the State of Illinois, Comcast of Illinois/ Indiana/ Ohio, LLC or its subsidiary, will improve unserved levels up to 1 gigabit per second down and 35 megabits up. The project area will have access to some of the fastest and most reliable broadband speeds available nationwide. Providing broadband service to this unserved area of Whiteside County will benefit the entire area. Having access to broadband will enable residents to bridge the local skills gap, expand their career pathway, and improve their overall quality of life. Residents will be better able to engage in on-line sales and marketing, banking, telemedicine; improve and increase educational opportunities for students; provide for the use of smart devices in the home; increasing efficiencies for lighting and heating; and encourage the use of technology by the older population.

Comcast 3 – \$595,301 grant Location: Vermillion County

As a Broadband Access project, this last mile deployment will serve 270 unserved households in the Leisure Time Estates subdivision located in Unincorporated Vermilion County in Catlin and Danville Townships. In a funding partnership with the State of Illinois, Comcast of Illinois/ Indiana/ Ohio, LLC or its subsidiary, will improve unserved levels up to 1 gigabit per second down and 35 megabits up. The project area will have access to some of the fastest and most reliable broadband speeds available nationwide. Providing broadband service to this unserved area of Vermilion County will benefit the entire area. Having access to broadband will enable residents to bridge the local skills gap, expand their career pathway, and improve their overall quality of life. Residents will be better able to engage in on-line sales and marketing, banking, telemedicine; improve and increase educational opportunities for students; provide for the use of smart devices in the home; increasing efficiencies for lighting and heating; and encourage the use of technology by the older population.

Cook County - \$1,876,581 grant

Location: Cook County | Chicago Southland

Through this Urban Broadband Middle Mile Project, Cook County seeks to expand the existing CSFN fiber footprint throughout the Chicago Southland area. This fiber implementation will extend the existing Chicago Southland Fiber Network regional high speed fiber-optic footprint through additional underserved communities with focus on fiber paths that will provide distribution and host last mile service platforms addressing those communities with the greatest need, municipalities with no fiber assets to support economic opportunities and stimulus, and key regional education campus facilities with limited connectivity to online and Internet resources.

Diverse Communications – \$426,000 grant Location: Rural Alpha and Lynn Center

The last mile Rural Alpha and Lynn Center Broadband Buildout and Upgrade project by Diverse Communications Inc. will serve approximately 81 businesses, farms, households, and anchor institutions in Henry County located in northwestern Illinois. The Rural Alpha and Lynn Center Broadband Buildout and Upgrade fiber-to-the-premises (FTTP) project will provide broadband data speeds at a variety of advertised data rates, with the capability of attaining speeds of 1 Gbps or more to every location. Diverse Communications Inc. believes that sustainable broadband adoption will transform these unserved and underserved areas into highly productive rural communities, opening doors to advancements such as precision agriculture. Given the current demand for advanced technologies and high-speed broadband, FTTP will empower the area by providing the opportunity to be proficient users of broadband technology. Education, health care, energy efficiency, and public safety will improve with high-speed Internet access.

Geneseo Communications – \$5,000,000 grant

Location: Henry and Rock Counties

The last mile Geneseo Rural FTTH project by Geneseo Communications, Inc. will serve approximately 3,776 businesses, farms, households, and anchor institutions in Henry and Rock Island counties located in northwestern Illinois. The Geneseo Rural FTTH fiber-to-the-home (FTTH) project will provide broadband data speeds at a variety of advertised data rates, with the capability of attaining speeds of 1 Gbps symmetrical or more to every location. Geneseo Communications, Inc. believes that sustainable broadband adoption will transform these unserved areas into highly productive rural communities, opening doors to advancements such as precision agriculture. Given the current demand for advanced technologies and high-speed broadband, FTTH will empower the area by providing the opportunity to be proficient users of broadband technology. Education, health care, energy efficiency, and public safety will improve with high-speed Internet access.

Grafton Technologies, Inc. – \$1,483,007 grant Location: Jersey County

As a Broadband Access project, this middle mile and last mile deployment will serve a total of 584 Premises, specifically 460 unserved households and 124 unserved businesses, farms, and community anchor institutions, located in parts of Jersey County. In a funding partnership with the State of Illinois, Grafton Technologies Inc. will build its network to provide broadband speeds capable of 1Gb per second download and 1Gb per second upload in the unserved area, with initial plans also providing for the following speeds: 5/5Mb, 10/10Mb, 20/20Mb, 30/30Mb, 40/40Mb, 50/50Mb, 75/75Mb, 100/100Mb and 1Gb/1Gb. According to the Illinois Department of Commerce and Economic Opportunity, a part of Jersey County that is included in GTI's proposed service area, Fieldon, IL located in English Township, is considered an opportunity zone. Consequently, the area requires long-term investment and job creation given that it is a low-income area of the state. Reliable, high-speed broadband is crucial for attracting long term investment and creating jobs in this area. Furthermore, better broadband will benefit farmers in the proposed communities in Jersey County by allowing them to employ more precision agricultural tools and become more efficient and competitive. Ultimately, building a fiber-to-the-premises network that provides advanced, high-speed broadband

services to households, businesses and farms in the proposed portions of Jersey County improves access to critical school e-learning applications while also making agricultural operations more efficient and farming operations. The broadband network will improve access to rural health care resources and will stimulate a more robust local area economy. Given GTI has its own construction crew and equipment, GTI has the ability to construct and complete the project fully in-house. Therefore, GTI will be able to provide residents with access to broadband more quickly and efficiently.

Illinois Electric Cooperative – \$3,443,670 grant Location: Calhoun County

As a Broadband Access project, this last mile deployment will serve 746 unserved households and 95 unserved businesses, farms, and community anchor institutions in Hardin, Kampsville, Brussels, Winneberger, and Batchtown in Calhoun County. In a funding partnership with the State of Illinois, Illinois Electric Cooperative will improve unserved/underserved areas to 1 Gigabyte per second download and 1 Gigabyte per second upload. Building a fiber-to-the-premise network that provides advanced, high-speed broadband services to households, businesses and farms in the grant area improves access to critical school e-learning applications while also making agricultural operations more efficient and enhancing crop production through enabled precision agriculture tools. The broadband network will improve access to rural health care resources, and will stimulate a more robust local area economy. Reliable broadband will also allow Calhoun residents with the ability to telecommute to their jobs in the St. Louis metropolitan area.

Illinois Fiber Connect, LLC – \$4,874,174 grant Location: Effingham County

As a Broadband Access project, this middle mile and last mile deployment will serve 207 unserved households, businesses, farms, and community anchor institutions in Beecher City and 637 unserved households, businesses, farms, and community anchor institutions in the area south of Effingham. Both project areas are located in Effingham County. As a Broadband Access project, this middle mile and last mile deployment will serve a total of 844 premises, specifically 755 unserved households and 89 unserved businesses, farms, and community anchor institutions located in Effingham County. In a funding partnership with the State of Illinois, Illinois Fiber Connect, LLC will improve unserved areas to 1Gb per second download and 1Gb per second upload as demand warrants, with initial plans providing for up to 1 Gb upload and download speed packages. Building a fiberto-the-premises network that provides advanced, high-speed broadband services to households, businesses and farms in the grant area improves access to critical school e-learning applications while also providing residents the opportunity to work from home. The broadband network will improve access to rural health care resources and will stimulate a more robust local area economy. Effingham County has a strong agricultural industry. Access to high speed internet will allow farmers to improve both quality and efficiency and become more competitive. With better broadband, farmers will be able to use more advanced technologies to track and monitor crop prices, weather, livestock, crop and soil quality and inventory. Additionally, better internet will provide farmers, and small businesses in general, with more opportunities to sell and market product. Furthermore, advanced broadband will allow residents to access real-time services such as e-learning, video streaming and telehealth, as well as engage in telework. Access to high-speed, reliable broadband is a key ingredient in a community's ability to grow and prosper. Illinois Fiber Connect, LLC is committed to ensuring that customers have the necessary tools to succeed, especially during these uncertain times.

JoCarrol Energy Cooperative (Projects 2 and 3) – \$6,050,115 (two grants) Location: Carroll, Jo Daviess, Stephenson, Whiteside Counties

A last mile fiber project, JoCarrol 2 will serve 1122 unserved households and 150 unserved businesses, 213 unserved farms and 2 unserved community anchor institutions through rural areas of Jo Daviess County. In a funding partnership with the State of Illinois, JoCarroll Energy, Inc. (NFP) will improve unserved/underserved areas to 1 Gbps download and 1 Gbps upload. Building a fiber-to-the-premise network that provides world-class, high speed broadband services to households, businesses

and farms in the grant area improves access to critical school e-learning applications while also making agricultural operations more efficient and enhancing crop production through enabled precision agriculture tools. The broadband network will improve access to rural health care resources and will stimulate a more robust local area economy. JoCarrol 3 will serve approximately 424 unserved households and 87 underserved businesses, and 126 underserved farms throughout rural areas of Carroll, Jo Daviess, Stephenson and Whiteside Counties. In a funding partnership with the State of Illinois, Jo-Carroll Energy, Inc. (NFP) will improve unserved/underserved areas to 1 Gbps download and 1 Gbps upload.

Madison Communications – \$4,230,223 grant Location: Macoupin and Madison Counties

The last mile and middle mile Go Madison GigaSpeed 18 project by Madison Communications, Inc. will serve approximately 9,283 businesses, farms, households, and anchor institutions in Macoupin and Madison counties located in Southwest-Central Illinois. The Go Madison GigaSpeed 18 project will provide broadband data speeds at a variety of advertised data rates, with the capability of attaining speeds of 1 Gbps symmetrical or more to every location. Madison Communications, Inc. believes sustainable broadband adoption will transform these unserved areas into highly productive communities, opening doors to advancements such as precision agriculture. Given the current demand for advanced technologies and high-speed broadband, FTTP and DOCSIS 3.1 will empower the area by providing the opportunity to be proficient users of broadband technology. Education, health care, energy efficiency, and public safety will improve with high-speed Internet access.

Mediacom 2 – \$249,424 grant Location: Edgewood

As a Broadband Access project, this last-mile deployment will serve 234 unserved households, 11 businesses and three community anchor institutions in Edgewood. In a funding partnership with the State of Illinois, the Mediacom will construct broadband in unserved/underserved areas capable of supporting download and upload speeds of 1000 Megabits per second or greater to residential and business customers. Mediacom will help drive economic development in the project area by deploying a wide range of broadband offerings. The download and upload speeds of these offerings are a significant upgrade to the wireline offerings currently available in the project area. With faster speeds, businesses will be better able to connect to the global marketplace. With a reliable and fast connection from Mediacom, residents within the project area will be able to work from home, engage in e-commerce, study online, etc. To meet the high-capacity requirements of any large business customers in the project area, Mediacom will have the ability to extend fiber-optic cable rom the node site directly to the business customer's premise with upload/download speeds selected by the customer.

Mediacom 3 – \$210,831 grant

Location: Franklin

As a Broadband Access project, this last-mile deployment will serve 224 unserved households, 13 businesses and three community anchor institutions in Franklin. In a funding partnership with the State of Illinois, the Applicant will construct broadband in unserved/underserved areas capable of supporting download and upload speeds of 1000 Megabits per second or greater to residential and business customers. Mediacom will help drive economic development in the project area by deploying a wide range of broadband offerings. The download and upload speeds of these offerings are a significant upgrade to the wireline offerings currently available in the project area. With faster speeds, businesses will be better able to connect to the global marketplace. With a reliable and fast connection from Mediacom, residents within the project area will be able to work from home, engage in e-commerce, study online, etc. To meet the high-capacity requirements of any large business customers in the project area, Mediacom will have the ability to extend fiber-optic cable rom the node site directly to the business customer's premise with upload/download speeds selected by the customer.

On eida Telephone Exchange – \$576,900 grant Location: Rural Sparta-Henderson Township

This last mile Rural Sparta-Henderson Township Fiber Project will serve approximately 36 unserved households, 2 unserved businesses, and 3 unserved farms, which are located in Knox County in Northwest Illinois. Along with the unserved subscribers, the Rural Sparta-Henderson Township Fiber Project will also provide broadband services to 12 underserved households, 7 underserved business, and 9 underserved farms. In a funding partnership with the State of Illinois, Oneida Telephone Exchange will offer broadband services at 1 gigabit per second (Gbps) symmetrical (upstream and downstream) to locations that were previously unserved or underserved. The Rural Sparta-Henderson Township Fiber Project will promote rural economic development by providing access to broadband to 100 percent of the households and businesses within the grant funded area. This fiber-to-the-premises (FTTP) project will provide broadband data speeds at a variety of advertised data rates, with the capability of attaining speeds of 1 Gbps or more to every location. Oneida Telephone Exchange believes that sustainable broadband adoption will transform these unserved and underserved areas into highly productive rural communities. Given the current demand for advanced technologies and high-speed broadband, FTTP will empower the area by providing the opportunity to be proficient users of broadband technology. This use and development of broadband will provide various home-based business options, stimulate economic growth, and stimulate innovation and investment. Education, health care, energy efficiency, and public safety will improve with high-speed Internet access.

Shawnee LEC 1 – \$2,264,157 grant

Location: Johnson County

Shawnee will partner with the State of Illinois on its Buncombe/Vienna Fiber Project to build a 1 gigabit capable network to provide last mile fiber-to-the-premise (FTTP) services to the southern Illinois communities of Goreville, Elvira, Vienna, and Cache Townships in Johnson County. The funded service area includes the communities of Vienna, West Vienna, Buncombe, and Wartrace in southern Illinois. Shawnee will build to a future-proof fiber-to-the-premise network capable of 1 Gigabit synchronous transmission speed designed to serve approximately 557 unserved households, 111 unserved businesses, 230 underserved households and 54 underserved businesses in Johnson County. This future-proof fiber network design supports higher transmission speeds as broadband technologies advance, ensuring the communities in the project area have ample broadband access for years to come.

Shawnee LEC 2 – \$3,525,068 grant

Location: Williamson and Johnson Counties

Shawnee will partner with the State of Illinois on its Goreville/Lake of Egypt Fiber Project to build a 1 gigabit capable network to provide last mile fiber-to-the-premise (FTTP) services to the southern Illinois communities of Goreville, Tunnel Hill, and Southern Townships in Williamson and Johnson Counties. The funded service area includes the communities of Goreville, Eagle Point Bay, and Pulleys Mill located in southern Illinois. Shawnee will build to a future-proof fiber-to-the-premise network capable of 1 Gigabit synchronous transmission speed designed to serve approximately 881 unserved households, 104 unserved businesses, 642 underserved households and 8 underserved businesses in Williamson and Johnson Counties. This future-proof fiber network design supports higher transmission speeds as broadband technologies advance, ensuring the communities in the project area have ample broadband access for years to come.

Shawnee LEC 3 - \$1,183,982 grant

Location: Saline County

Shawnee will partner with the State of Illinois on its Mitchellsville / Rudement Fiber Project to build a 1 gigabit capable network to provide last mile fiber-to-the-premise (FTTP) services to the southern Illinois communities of Mitchellsville and Rudement in Saline County. Shawnee will build to a futureproof fiber-to-the-premise network capable of 1 Gigabit synchronous transmission speed designed to serve approximately 253 unserved households, 63 unserved businesses, 74 underserved

households and 5 underserved businesses in Saline County. This future-proof fiber network design supports higher transmission speeds as broadband technologies advance, ensuring the communities in the project area have ample broadband access for years to come.

Spectrum Mid-America (Projects 1 through 6) – \$214,822 grant Location: Areas in or near Bethalto, Freeburg, Granite City, Lebanon, North Woodlawn, O'Fallon

These projects will provide a fiber/coaxial hybrid network to 7 unserved households just north of Lebanon; unserved households just northeast of Bethalto; 55 unserved households just north of Freeburg; 26 unserved households just northwest of Granite City; 7 households just north of Lebanon; 34 unserved households in North Woodlawn; 48 unserved households just north of O'Fallon. Speeds up to 940 mbps download and 35 mbps upload will be offered to customers, exceeding the State's 2028 speed goals of 100/20Mbps. Charter would retain ownership of the broadband plant and maintain plant 24/7-365 days a year. All homes would have access to Charter's full suite of services including Internet, Phone and Cable Television.

Wabash Telephone – \$1,591,098 grant Location: Clay County

As a Broadband Access project, this middle mile and last mile deployment will serve 659 unserved households, businesses, farms, and community anchor institutions in parts of Clay County with 24 miles of fiber cable. In a funding partnership with the State of Illinois, the Wabash Telephone will improve unserved areas to 1 Gigabits per second download and 1 Gigabits per second upload. Building a fiber-to-the-premises network that provides advanced, high-speed broadband services to households, businesses and farms in the grant area improves access to critical school e-learning applications while also providing residents the opportunity to work from home. The broadband network will improve access to rural health care resources and will stimulate a more robust local area economy.

Appendix E – Map of Round One Connect Illinois and Connected Communities Cohort

ILLINOIS CONNECTED COMMUNITIES | 2020

