Expanding Internet Access

Bank Financing for Rural Broadband Initiatives
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Look Inside …
The Office of the Comptroller of the Currency (OCC) published this newsletter to highlight the important role that national banks and federal savings associations (collectively, banks) can play in helping rural communities gain access to reliable, high-speed internet access through broadband networks.

Community Reinvestment Act Consideration for Rural Broadband Development Initiatives
Banks financing certain broadband development initiatives can receive Community Reinvestment Act (CRA) consideration for promoting economic development in certain rural communities and helping to revitalize distressed and low- and moderate-income communities across the nation.

Closing the Digital Divide: How Banks Can Help Rural Communities With Broadband
The National Telecommunications and Information Administration, part of the U.S. Department of Commerce, provides an overview of broadband technologies and explains how banks financing broadband initiatives can help reduce the digital divide in rural communities in need of reliable, high-speed internet access.

Cooperative Connection: Banks Back RS Fiber to Bring Broadband to Rural Minnesota
First National Bank of Fairfax, Minn., and other local banks are helping to finance a cooperative formed by 10 cities and 17 townships determined to provide quality, high-speed internet access in southwestern Minnesota. The case study serves as a working model for rural communities interested in establishing public-private cooperatives to deliver quality internet.

Falcon National Bank: Financing Wireless First, Then Broadband in Rural Minnesota
A community bank’s decision to finance Palmer Wireless began a successful partnership that turned into a decade-long relationship, benefiting the bank, Palmer Wireless, and the communities the bank serves by expanding an existing broadband network.

U.S. Bank: NMTC Helps Expand Internet Access in Appalachian County in Ohio
U.S. Bank used the national bank public welfare investment authority and helped to finance a new market tax credit project that expanded an existing broadband network for rural residents in Appalachian communities in northeastern Ohio.

United Bank, Alabama: Wiring Branches, Several Business Customers With Broadband
United Bank invested in a fiber-optic network solution to communicate more effectively between its rural branches using video conferencing and other online communication channels. This investment also benefited several local businesses that needed high-quality internet service.

Wiring Alaska: Two National Banks Help Connect Remote Native Communities
First National Bank Alaska and U.S. Bank made loans backed by federal loan guarantees to benefit Alaska’s Native communities by financing the expansion of fiber-optic networks in geographically remote areas that for too long had poor or no internet access.
The Office of the Comptroller of the Currency (OCC) recognizes that America’s digital divide—the gap between those with quality internet access and those without it—is greatest in our rural communities. To reduce this divide, the OCC encourages the national banks and federal savings associations (collectively, banks) it supervises to finance broadband infrastructure initiatives in rural communities struggling without reliable internet access.

This issue of the OCC’s Community Developments Investments discusses the important role banks play in helping rural communities gain access to reliable internet service through broadband networks. In addition, this issue profiles bank-financed broadband projects that are benefiting rural communities and for which these banks may receive consideration under the Community Reinvestment Act (CRA).

Broadband infrastructure includes a combination of wired and wireless services that connect households, businesses, and anchor institutions to the internet. Most frequently, wired connections are made using fiber optics, coaxial cable, and traditional copper telephone lines (or a combination thereof). Fiber-optic cable can be buried underground and undersea, hung on power and telephone lines, and connected to wireless towers. Internet access over a fiber-optic network is widely considered to be faster, more reliable, and better able to carry more data, and therefore more effective in helping reduce the digital divide than internet over cable, phone lines, and wireless networks. These latter services carry far less data and deliver that data more slowly; additionally, they are unreliable in wind storms, electrical outages, and natural disasters.

Broadband’s benefits include economic growth, improved educational opportunities, access to better health care information, greater employment prospects, improved public safety, and enhanced global competitiveness for American businesses. Conversely, communities with insufficient broadband capacity are disadvantaged by reduced manufacturing, employment, population, and educational opportunities.

Banks financing rural broadband development initiatives in underserved and low- and moderate-
income (LMI) areas deliver benefits in three ways.

First, banks may help their own viability and bottom lines by ensuring that the banks’ rural customers can use the many internet-based banking services increasingly offered, such as online banking, loan applications, cash management, investing, and other financial management activities. These services are taken for granted in many urban communities, but are often unavailable or unreliable in rural areas without broadband access. The services are increasingly important in rural communities without traditional bank branches and where farmers and agriculture-related and small, local businesses need reliable internet access to manage production, order supplies, and sell commodities, livestock, and other goods in global markets.

Second, banks financing rural broadband development initiatives help to deliver educational and economic empowerment to communities. High-speed internet access allows schools to use high-tech education programs in classrooms and deliver distance learning for school-age, post-high-school, and adult students. Reliable internet allows for access to applications increasingly critical for job hunting, workforce development, telemedicine, recreation, tourism, and myriad other economic and social online applications. Finally, banks can finance rural broadband development initiatives and support their CRA programs. Some banks have financed these projects using their public welfare investment (PWI) authority to make investments that benefit LMI communities, including distressed, underserved, rural, or tribal areas. Since July 25, 2016, under revised interagency CRA guidance, banks have recognized the need for financing rural communications infrastructure that revitalizes or stabilizes distressed or underserved nonmetropolitan middle-income geographies or LMI rural areas. In recent years, OCC-supervised banks have recognized the need for financing broadband development initiatives in rural areas and have used their PWI authority in innovative ways to finance broadband projects that primarily benefit the public welfare of underserved rural and LMI areas in Alaska, Minnesota, Ohio, and other states. Some of these projects are profiled in this issue of Community Developments Investments.

Bank Methods for Financing Rural Broadband Development Initiatives

High-speed broadband is typically delivered over fiber-optic networks installed underground, undersea, or above ground to connect directly to homes, businesses, and public facilities. These networks are capable of transmitting data at speeds consistent with modern communications needs.

More than 30 percent of rural communities do not use high-speed broadband internet access, according to a U.S. Department of Commerce report. Thirty-nine percent of rural Americans (23 million people) and 41 percent of Americans living on tribal lands lack access to the Federal Communication Commission’s recommended broadband speeds.

To fulfill the need for rural broadband development initiatives, banks have partnered with local municipalities, community development financial institutions, and venture capitalists. Banks are leveraging local, state, and federal loan guarantee programs. Banks also are collaborating with other community and business leaders to form broadband cooperatives and partnerships, helping to craft strategic municipal planning, and providing advice to entrepreneurs financing new or expanded broadband networks.

This issue of Community Developments Investments discusses how banks are financing rural broadband development initiatives using a variety of methods, including the following:

- Permanent financing through the U.S. Small Business

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1 Under 12 USC 24(Eleventh) and its implementing regulation, 12 CFR 24, a national bank can make a PWI investment that primarily benefits LMI individuals or areas, or other areas targeted for redevelopment by a government entity, or an investment that would receive consideration under 12 CFR 25.23 as a “qualified investment” for purposes of the CRA. See 12 CFR 24.3. See also 12 USC 1464(c)(3)(A), 12 CFR 5.59, 12 CFR 160.30, and 12 CFR 160.36 (federal savings associations).

2 “Community Reinvestment Act; Interagency Questions and Answers Regarding Community Reinvestment; Guidance” (Q&A) __12(g)(4)(iii)–4, 81 Fed. Reg. 48,506, 48,528 (July 25, 2016).

3 The Federal Communications Commission defines home broadband as 25 Mbps download and 3 Mbps upload speed.

4 Only 69 percent of rural households use broadband internet service, or 6 percent less than in urban households, according to the “The State of the Urban/Rural Digital Divide,” National Telecommunications and Information Administration, U.S. Department of Commerce (August 10, 2016). Data from 1998 through 2015 showed that rural broadband use was 6 to 9 percentage points lower than in urban areas in those years.
Administration 7(a) Loan Program.
- Construction financing, working capital, and other short-term loans.
- New market tax credits financing.
- PWI-qualified equity purchase of stock or cooperative shares.\(^5\)
- Subordinated debt from community development financial institutions.
- Municipal bond investments.

This issue of *Community Developments Investments* also discusses federal government support for broadband development initiatives in distressed, underserved, and LMI rural areas, and how banks may use their PWI authority to finance these projects and receive CRA consideration for these activities.

**OCC Support for Bank Financing for Rural Broadband Development Initiatives**

This issue of *Community Developments Investments* reflects the OCC’s continuing commitment to informing and supporting banks interested in financing broadband development initiatives in rural LMI areas, designated disaster areas, or distressed or underserved nonmetropolitan middle-income geographies.

To this end, the OCC participates with the U.S. Department of the Treasury as a member agency in the Broadband Interagency Working Group, which works to ensure the effective deployment of federal assets for rural broadband development initiatives. Another member agency of this working group is the National Telecommunications and Information Administration (NTIA). The NTIA has contributed an article to this issue on the federal government’s efforts and is helping federal agencies identify the resources communities may use to expand broadband access.

The OCC’s Community Affairs staff members produced a video in early 2018 highlighting the RS Fiber project and how banks have financed rural broadband development initiatives. To learn more, watch “Bank Financing for Rural Broadband Initiatives,” available on the OCC’s Rural Broadband Financing and Development resources page at www.occ.gov/rural. These resources can also be found by searching with the keywords “rural broadband” on www.occ.gov.

After reviewing these resources, this issue of *Community Developments Investments*, and our video, we believe you will better understand the important role banks can play in financing broadband development initiatives in rural communities.

We hope that banks will share the OCC’s commitment to ensuring that rural, LMI, and other underserved communities benefit from quality internet access.

Community Reinvestment Act Consideration for Rural Broadband Development Initiatives

Michael Carrier, Community Development Expert, OCC

In 1977, the Community Reinvestment Act (CRA) was enacted to encourage national banks and federal savings associations (collectively, banks) to help meet the credit needs of the communities in which they are chartered, including low- and moderate-income neighborhoods, consistent with safe and sound operations of the bank.

The CRA requires the appropriate federal financial supervisory agency—the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, or the Board of Governors of the Federal Reserve System (collectively, the agencies)—to assess a bank’s record of meeting the credit needs of its entire community, including low- and moderate-income (LMI) neighborhoods, consistent with safe and sound operation of the bank, and to assign a CRA rating.

Among the factors on which banks are evaluated for CRA performance are their provision of community development loans, investments, or related services, depending on their size and business model.

On July 25, 2016, the agencies revised the “Interagency Questions and Answers Regarding Community Reinvestment” (Q&A),1 which recognized the need for broadband development in the nation’s underserved nonmetropolitan middle-income geographies. The CRA regulations2 define “community development” to include activities that revitalize or stabilize underserved nonmetropolitan middle-income geographies designated based on population size, density, and dispersion if the activities help to meet essential community needs, including needs of LMI individuals.

One example in the Q&A of the type of project that qualifies as meeting essential community needs, including the needs of LMI individuals, is “a new or rehabilitated communications infrastructure, such as broadband internet service, that serves the community, including LMI residents.”3

The Q&A cautions, however, that a bank providing financing for a project that connects services to a middle- or upper-income housing development while bypassing an LMI development that also needs the services generally would not qualify for revitalization or stabilization consideration in geographies designated as underserved.4

For more information, contact Michael Carrier at michael.carrier@occ.treasury.gov.
Closing the Digital Divide: How Banks Can Help Rural Communities With Broadband

Andy Spurgeon, Chief of Operations, Office of Telecommunications and Information Applications, National Telecommunications and Information Administration

Broadband is an enabling technology that drives many socioeconomic benefits for American citizens and their communities. The benefits of broadband include economic growth, improved educational opportunities, access to better health care information, greater employment prospects, improved public safety, and enhanced global competitiveness for American businesses. Conversely, communities with insufficient broadband capacity are disadvantaged by reduced manufacturing, employment, population, and educational opportunities.

Unfortunately, despite enormous private and public investments in broadband development initiatives and infrastructure in recent years, there is still a gap between segments of American society—the so-called digital divide—which separates communities and demographics that have access to and use of broadband technologies from those that have limited access and adoption.

The National Telecommunications and Information Administration (NTIA), part of the U.S. Department of Commerce, is a valuable resource for American communities intent on closing the digital divide by deploying broadband infrastructure and promoting digital inclusion. The NTIA provides this support through its BroadbandUSA program and publishes findings on broadband adoption in America through its Digital Nation reports.

Defining Broadband and Community Challenges

Broadband infrastructure includes a combination of wired and wireless services that connect households, businesses, and anchor institutions to the internet. Most frequently, wired connections are made using fiber optics, coaxial cable, and traditional copper telephone lines (or a combination thereof).

Microwave links remain the most common form of long-haul wireless connectivity, while a mix of microwave, 4th Generation Long Term Evolution (4G-LTE) wireless, satellite, and unlicensed radio communications are used to make wireless connections to end users. The capacity of each of these technologies to carry data varies tremendously, from 100 gigabytes per second on the high end in certain fiber-optic networks to roughly 2 megabytes per second (Mbps) on the low end for high-traffic LTE networks, and even...
lower transmission rates among older coaxial and copper systems. Together, these technologies permit high-speed internet access for homes, businesses, and mobile users.

Digital inclusion refers to the adoption of broadband technologies and its meaningful use for social and economic benefits. This definition is intended to bring together broadband access, information technologies, and digital literacy in ways that promote success for communities and individuals trying to navigate and participate in the digital economy.

In 2016 alone, according to U.S. Telecom, U.S. broadband providers invested more than $76 billion in capital expenditures on network infrastructure. There is much progress to be made, however, among American communities seeking to expand broadband access and close the digital divide. After assessing nearly 100 local broadband programs that BroadbandUSA has supported through the end of fiscal year 2016, agency data show that more than 90 percent of communities are still struggling with the essential efforts needed to plan a broadband program. Further, greater than 65 percent are struggling with options to finance or fund their planned programs. More than 90 percent are facing challenges that prevent them from implementing their desired programs. These statistics include a variety of business and funding models (publicly led, privately led, and public-private partnerships), urban/suburban/rural geographies, and socioeconomic situations.

The problem is particularly acute among rural communities. Research by the Federal Communications Commission (FCC)—which defines home broadband as 25 Mbps download and 3 Mbps upstream—indicates that 10 percent of all Americans (34 million people) do not have access to these services at home.\(^2\) Worse still, 39 percent of rural Americans (23 million people) lack access to the FCC’s recommended broadband speeds, while 41 percent of Americans living on tribal lands lack access to these services. Meanwhile, household access to broadband is not the only issue. Research suggests that approximately 6.5 million American children do not have the bandwidth sufficient for digital learning because 2,049 schools still lack access to fiber broadband connections that meets the FCC’s minimum requirements.\(^3\) Similarly, 34 percent of non-metropolitan health care facilities lack sufficient broadband connectivity to upload electronic medical records and exchange health information. Only one-third of library users find the internet speeds adequate for their needs.\(^4\) Forty-two percent of public libraries lack broadband connections because they have speeds less than 10 Mbps. Seventy-five percent of rural libraries have lower download speeds than their urban counterparts. Yet, public libraries fill a critical connectivity gap and average more than 4.5 million wireless sessions annually.\(^5\)

The digital divide also varies by family income with even higher disparities among low-income rural residents. Data from the 2015 NTIA internet use survey shows that the biggest gap in internet use is among rural and urban Americans with incomes between $25,000 and $49,999.\(^6\) Black, Native American, and Hispanic households reported lower internet subscription rates compared with national averages, indicating that specific actions are needed to improve adoption among those populations. These 2015 NTIA data illustrate that among non-adopters, 25 percent attribute cost of service as the primary reason for not subscribing and 54 percent say that they do not need or are not interested in the service.

Public Sector Broadband Development Initiatives

Addressing issues described above requires cooperation between the public and private sectors. Through the Broadband Interagency Working Group (BIWG)—led by an Executive Leadership Team from the White House, NTIA, and the U.S. Department of Agriculture—BroadbandUSA works with other federal agencies, including the U.S. Department of the Treasury (Treasury), to: (1) improve coordination across broadband programs, (2) reduce regulatory barriers to broadband deployment, (3) promote awareness of the importance of federal support for broadband investment and

\(^3\) FCC, “2018 Broadband Deployment Report” (February 2, 2018).
\(^5\) Ibid.
\(^6\) NTIA, “Computer and Internet Use Supplement” (July 2015).
digital inclusion programs, and (4) collect and share information with communities about federal resources that are available to them for broadband deployment and digital inclusion efforts. The efforts of the BIWG complement BroadbandUSA’s work to help communities across the country expand their broadband capacity and utilization.

Acknowledging the vital role that broadband technologies play in workforce and community development, the federal agencies responsible for banking regulations and interpretation of the Community Reinvestment Act (CRA)—the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation, and the Board of Governors of the Federal Reserve System—issued revised guidelines in July 2016 specifying that certain activities (e.g., financing for the construction, expansion, improvement, maintenance, or operation of essential infrastructure) receive CRA consideration if they “revitalize or stabilize” an underserved nonmetropolitan middle-income area, such as projects relating to broadband internet service that serve the community, including low- and moderate-income residents. In a similar show of support for broadband investments, the Community Development Financial Institutions Fund updated the New Markets Tax Credit (NMTC) Program’s Frequently Asked Questions (FAQ) to include the financing of broadband infrastructure among eligible activities, provided the financing meets certain Internal Revenue Service regulations.

Both the CRA and the NMTC program have created a number of interesting financial incentives for banks to engage in local broadband programs and address the digital divide. Banks frequently have deep ties to their communities, and there are several ways that they can support the planning, funding, and implementation of local broadband programs.

Public-Private Partnership Opportunities

Planning for broadband infrastructure and digital inclusion programs requires up-front work to assess local needs, garner stakeholder support, and develop studies and plans for implementation. Local, regional, and national banks can participate in these efforts to organize and convene stakeholders or provide logistical or financial support for needs assessments and project planning. In addition, expert staff knowledgeable in financial planning and analysis may be able to support local project teams by offering their expertise and input to project budgets, financial forecasts, and investment options.

Banks should consider the ways they can support the financing and funding of broadband deployment programs. The NMTC program offers banks the opportunity to leverage tax credits that are reinvested in communities that meet specific guidelines. In addition, banks that understand the mid- to long-term economics of infrastructure investments can provide loans for the capital investment required to deploy broadband networks as well as the working capital required to operate a broadband network and connect new customers following implementation. Banks should also consider the opportunities to partner with the public sector and public financing through programs that offer loan guarantees or in concert with public funding vehicles like grants or local bond measures.

The following are examples of such investments in broadband projects:

• Ohio’s Next Generation Health Care: Using a $15 million NMTC investment, Next Generation constructed a fiber-optic network connecting rural Ohio health care facilities with the larger national interconnected broadband network. When the network is completed, Next Generation Health Care is expected to offer telemedicine services to more than 7 million residents in northeastern Ohio.

• Chattanooga Gigabyte Network (Chattanooga, Tenn): The Electric Power Board of Chattanooga (EPB) issued $229 million in revenue bonds in 2008. Of this amount, $162 million was used to build a fiber-optic network, which is owned by the EPB’s Electric Division and used for the Smart Grid system and broadband services. In November 2009, the bond funds were augmented with a $111 million federal grant from the U.S. Department of Energy to expedite the construction and implementation of the Smart Grid system. An additional $39 million of the bond issue was used for electric equipment such as transformers associated with the smart grid. About $26 million was used to cover the first three years of interest payments, and the remainder to cover the financing charges. The 25-year bond carried an average 4.5 percent interest rate. Since launching in 2009, EPB Fiber Optics now serves 61,000 homes and more than 5,000 businesses.
• NoaNet (Tacoma, Wash.): Several Washington public utilities districts in Washington state formed the Northwest Open Access Network in 2010 to enable broadband connectivity to their rural underserved counties. The original bond of $27 million was used for startup expenses. Members paid all principal and interest for the first 10 years, with final payment due by December 2016. All long-term bonds were paid off on time and revenues are positive. Combined with two federal grants from the NTIA’s Broadband Technology Opportunities Program, which totaled $138.8 million, the network supports 61 last-mile providers7 that serve more than 260,000 customers, many of whom have never before had access to advanced telecommunication services.

Broadband infrastructure programs are organized and led in a number of different ways. In some cases, telecommunications providers—either existing local providers or new market entrants—lead efforts to expand broadband access. Local and regional governments (e.g., city or county) may take the initiative to lead infrastructure or digital inclusion programs based on public feedback or input from political constituencies. In other cases, particular groups representing public education or health care, nonprofit groups, or local activists may start a more grassroots campaign to build support for a local broadband program.

This variation offers banks many different opportunities to engage. In a privately led venture, a bank can serve as a lender or engage more deeply as a strategic partner based on the bank’s ties to the community. Public-private partnerships offer banks the opportunity to work with local governments, community groups, and nonprofit organizations in a wide range of roles such as advisor or funder or even as employee-volunteers, depending on the needs of a specific program and the depth of the relationship that the bank is seeking.

Taking Action

If a bank is looking for opportunities to invest in a local or regional broadband project, BroadbandUSA recommends the following five steps:

1. Make contact with local government or other groups that may be involved in local and regional broadband planning. These groups generally have a public presence in the form of websites as well as public meetings or forums. The groups may include local or regional economic development experts, nonprofit groups, or other stakeholders who may already be conducting needs assessments or feasibility studies. Discuss their situation and the types of partners they are seeking for a project.

2. Research available data about a community’s level of connectivity to assess the need for expanded access, new providers, or additional services.

3. Sources may include the National Broadband Map and service provider data collected by the FCC.

4. Evaluate your institution’s investment options, risk profile, and desired investment and partnership models.

5. Work with the local or regional broadband planning team to consider how your institution’s support and partnership might increase the likelihood of another public investment, such as a state or federal grant.

6. Consider contacting BroadbandUSA to determine if there is a local project that NTIA is aware of that may benefit from a bank partner.

Investment in broadband infrastructure and digital inclusion efforts are critical to efforts to keep America’s communities competitive in an increasingly connected world. Both the public and private sector have a role to play. In the last two years, BroadbandUSA has provided advice to more than 150 communities eager to improve their broadband connectivity and close the digital divide. Our team is available to support banks that are interested in participating in these programs.

For more information on the NTIA’s BroadbandUSA program, visit [www.ntia.doc.gov](http://www.ntia.doc.gov) or email press@ntia.doc.gov.

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7 Last-mile providers build the leg in a telecommunications network delivering services to retail customers in homes.
Cooperative Connection: Banks Back RS Fiber to Bring Broadband to Rural Minnesota

Timothy Herwig, District Community Affairs Officer, OCC

The RS Fiber Cooperative (RS Fiber) is bringing low-cost and high-speed fiber-optic broadband to an area of southwestern Minnesota that includes 10 cities and 17 townships in Renville, Sibley, and portions of Nicollet and McLeod counties. Serving more than 6,000 households, businesses and farms, schools, public and private institutions, and hospitals with Fiber-to-the-Home (FTTH) connectivity, the cooperative serves an area of over 700 square miles at a development cost of $53 million.

RS Fiber’s success was made possible by a multilayered approach to financing involving banks; federal, state, and local governments; a community development financial institution; a private foundation; private equity investors; and member revenues. Playing a key role in the effort was First National Bank of Fairfax. The bank’s $50,000 investment helped finance initial engineering and predevelopment work. The bank’s capital was the catalyst for securing construction financing from other lenders. The bank made the investment using the public welfare investment (PWI) authority.¹

“A high-speed, affordable, accessible, and reliable gigabit internet network, such as that provided by RS Fiber Cooperative, is not only essential for economic development, it is also essential for education, health care, and attracting and retaining people who want to live in the area,” said Phil Keithahn, owner, chief executive officer, and president of ProGrowth Bank, which has branches in Gaylord, Mankato, and Nicollet, Minn., and the chief financial advisor to the RS Fiber Cooperative. “Internet access will increasingly become a ‘differentiator’ for economic and housing development.”

Running a business without quality internet access was difficult, said Dale Jackson, President of JTI, a Winthrop-based company providing electrical systems inspection, maintenance, and safety services to businesses.

“With our old system … it was very, very frustrating,” Mr. Jackson said. “Access to fiber-optic broadband has speeded up our processes immensely. We are able to work so much quicker than we were before. …The ability for us to download files very, very quickly has given us a competitive edge by improving our customer service. It has been fantastic.”

The goal for RS Fiber was clear.

“We will build a fiber-optic network to every home who wants it to (ensure) they’re connected to the internet at the speed of light,” said Mark Erickson, the former Winthrop city manager who helped lead the formation of RS Fiber.

“There’s a lot of fiber in the current telecommunications network throughout the United States and throughout the world, but very few of them serve rural areas, extending fiber to the home or to the business in a wholesale operation.”

Financing RS Fiber

“When we determined that phone providers and cable providers

¹ 12 USC 24(Eleventh), implemented by 12 CFR 24, provides the authority for national banks to make PWI. Under 12 CFR 24, which provides the standards and procedures that apply to these investments, national banks can make investments that primarily benefit low- and moderate income (LMI) individuals, LMI areas, areas targeted for redevelopment by a government entity, or investments that would otherwise receive consideration under the Community Reinvestment Act regulation as a “qualified investment,” the primary purpose of which is community development.
weren’t interested in working with us, the 10 communities formed a Joint Powers Agreement Board,” said Mr. Erickson. The first step was to fund RS Fiber through the newly created board, which issued a generally obligated tax abatement bond that raised $13.6 million in subordinated debt in two phases: $8.7 million allocated for phase one and $4.9 million for phase two of construction. Typically, general obligation pledges by local governments result in a property tax increase that covers debt service requirements. In RS Fiber’s case, the bond payments are covered by the cooperative’s member fees. With a tax increase not needed, organizers found it easier to win support from local residents and businesses. Another plus for locals is projected property value increases of as much as $2,500 per home in cities and $10,000 per farm, according to Mr. Erickson. Increased property tax revenue is expected to help with debt repayment.

The bond, publicly sourced subordinated and private construction debt, grants and equity investments, and member payments financed the first phase of construction. RS Fiber began construction in 2015 and completed construction in 2017 when direct fiber access became available to homes, businesses, and community institutions in the 10 cities. This phase also constructed 13 broadcast towers providing wireless access to farms, businesses, and rural residents living in the 17 townships. The second phase of fiber-to-the-farm construction is expected to be completed in 2021. Financing in addition to the bond has not been secured but is expected to come from similar sources. The bond proceeds were instrumental in attracting construction financing from three local banks, including First National Bank of Fairfax. The bank, along with ProGrowth Bank of Gaylord, Minn., and CornerStone State Bank of Le Sueur, Minn., initially committed to co-fund a $3.75 million construction line of credit. They later increased the line of credit by $2.75 million, giving the project up to $6.5 million of construction credit. In addition, First National Bank of Fairfax bought preferred stock in RS Fiber under its PWI authority.

In addition to the bond and bank construction financing, loans and grants were also sourced from Rural Electric Economic Development (REED), a CDFI affiliated with the Renville-Sibley Cooperative Power Association. REED provided $1.5 million in debt financing, in addition to administering a $300,000 USDA Rural Economic Development Grant and $1.6 million USDA Rural Economic Development Loan. The $3.4 million in financing provided by REED was an essential part of the complex funding structure behind RS Fiber.

When asked to finance RS Fiber, First National Bank of Fairfax’s officers debated their options and the risks of financing a start-up business. In the end, they recognized the business development and customer service benefits high-speed internet provides. They stepped up and asked, “What can we do to help?” said Robert Dickson, the bank’s chief executive officer and cashier. “We can bring our customers and community broadband,” Mr. Dickson said. “We can bring them something that will

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2 In the first phase, 10 communities provided an $8.7 million bond; in the second phase, townships will provide a $4.9 million bond. Construction of phase two is scheduled for 2021.
be equal to what anybody has who lives in Washington, D.C., or in Minneapolis.”

**Community Involvement a Critical Success Factor**

“Our cooperative was created out of nothing,” Mr. Erickson explained in “RS Fiber: Fertile Field for New Rural Internet Cooperative.”

The story of the RS Fiber Cooperative is about rural residents organizing to secure the future prosperity of their region and a place in the global economy.

Volunteers led more than 100 local meetings, sent more than 14,000 mailings, placed newspaper advertisements, and organized a door-to-door campaign to educate their neighbors and local businesses. Volunteers remained enthusiastic despite setbacks that could have derailed the project, believing the goal of quality internet access would ultimately pay off.

Other rural communities that need quality internet access can learn from RS Fiber’s example.

“What I’m most proud of is the fact that 10 city councils from very small rural communities see the importance of the project right off the bat,” Mr. Erickson said.

“Seventeen very rural, conservative, skeptical, and cautious township boards also ‘got it’ and voted to put their constituents’ tax dollars on the line to make it happen.”

*For more information, contact Timothy Herwig at timothy.herwig@occ.treas.gov, and watch the OCC’s video, “Bank Financing for Rural Broadband Initiatives” at www.occ.gov/rural.*

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3 Institute for Local Self-Reliance and Next Century Cities, April 18, 2016.
Falcon National Bank: Financing Wireless First, Then Broadband in Rural Minnesota

Janet Fix, Community Affairs Analyst, and Timothy Herwig, District Community Affairs Officer, OCC

When Falcon National Bank was asked in 2009 to lend to a small, locally owned wireless phone company, the community bank in Foley, Minn., had been in business just six years and had not previously loaned to a startup telecommunications company.

Unbeknownst to either party at the time, that first $50,000 loan request would lead to a long and beneficial banking partnership with Palmer Wireless, a new Clear Lake, Minn.-based telecommunications company. Falcon Bank’s experience with the borrower—and federal small business loan guarantees—gave the bank the confidence to help finance the development of a broadband network that would bring high-speed, reliable internet to the bank, residents, schools, and businesses in the underserved, rural area located in central Minnesota 50 minutes north of Minneapolis.

Over the years, Falcon Bank made seven loans to Palmer Wireless totaling $1.2 million. The U.S. Small Business Administration (SBA) guaranteed each loan through its 7(a) Program1 for a total of $806,000.2 In May 2018, this mutually beneficial partnership paid off unexpectedly when Palmer Wireless was sold to a larger telecommunications company.

Before the sale, Falcon Bank financed a number of innovative initiatives undertaken by Palmer Wireless that first improved wireless capabilities. In 2015, the bank’s loans financed the company’s shift into fiber optics and the installation of a broadband network benefitting the rural communities in Benton and Stearns counties, including Duelm, Palmer, Becker, and Big Lake.

Falcon National Bank financed the following projects:

- From 2009 to 2014, Falcon Bank financed the development of the wireless connections that Palmer Wireless made between existing cell towers and rural residences and businesses. In 2014, the bank financed “rolling study halls” for the Becker School District. In all, 20 school buses were wired with 20 mobile 3G/Wi-Fi modems so that students could do their homework between home and school. Falcon Bank also financed the school district’s connection to a 170-foot cellular tower that Palmer Wireless built on a campus in Becker, Minn. The tower does double duty by providing schools with wireless access while lighting the soccer field.
- From 2014 through 2017, Falcon Bank financed an additional expansion of fiber-optic service

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1 The SBA’s 7(a) Loan Program is authorized by section 7(a) of the Small Business Act and is governed by the regulations outlined in 13 CFR 103, 105, 120, and 121. For more information about the 7(a) Program, see the related Community Developments Fact Sheet.

2 Falcon National Bank reported that the SBA guarantees totaled $806,000 or 71 percent of the total financed.
by Palmer Wireless. The project expanded the high-speed internet network to rural communities and customers along the way. Falcon Bank’s financing provided the state of Minnesota’s Border-to-Border Broadband program with the local commitment needed for nearly $400,000 in grants. This financed the buildout of high-speed, fiber-optic cable that linked directly to underserved, rural homes, schools, and businesses from existing cell towers along a 60-mile stretch of Highway 10, a corridor running from St. Cloud, through Becker, to Big Lake, Minn.

Looking back, Falcon Bank could have just as easily have rejected Palmer Wireless’ first $50,000 loan request.

Large national banks with branches in St. Cloud, Minn., had previously declined to lend to Palmer Wireless. They looked at us like we were crazy,” said Laura Kangas, who, with her husband, Albert, founded Palmer Wireless. “When we started our business, nobody understood what we were trying to do.”

Falcon Bank, however, took the time to understand the company’s business plan and evaluate the owners’ commitment to the needs of the rural community. The couple had long lived in Palmer Township, and Albert had decades of experience in the cellular phone business with a national company and as chief operating officer at a rural technology carrier. Most importantly, the bank recognized that Palmer Wireless would be able to address a key community economic development need.

“As a community bank, we really focus on trying to help the communities that are surrounding us,” said Jessica Bitz, Falcon Bank’s market president, who worked closely with Palmer Wireless from 2009 through 2018 in making seven loans.

“One of the big struggles in rural areas is broadband access,” Ms. Bitz said. “So, we looked at these loan requests from a different perspective and thought, ‘How can we make this work?’ ”

The first step was to minimize Falcon Bank’s risk by securing SBA 7(a) loan guarantees. In addition, on the first loan, Falcon Bank took out a lien on the equipment owned by Palmer Wireless and a second mortgage on the couple’s home. The SBA 7(a) guarantee is designed to help creditworthy small businesses obtain financing when they cannot otherwise obtain credit at reasonable terms. The guarantee helps banks lend to small businesses that have sufficient cash flow to repay loans but may not have the necessary collateral or credit history typically required by the banks’ lending policies. SBA 7(a) guaranteed loans can be used to purchase machinery, fixtures, and supplies; make improvements to land and buildings; finance receivables and augment working capital; acquire and start businesses; and refinance certain existing debt.

Falcon Bank and Palmer Wireless agreed: Without the SBA guarantees, the partnership would not have gotten off the ground. “It was a little riskier project, so we definitely wanted to have that SBA 7(a) guarantee behind us,” Ms. Bitz said. “The biggest struggle for banks is getting your arms around projects without collateral.”

Given its success in financing Palmer Wireless, Falcon Bank encourages other community banks to carefully evaluate loan requests from local telecommunications companies in the hope that they, too, can bring quality, high-speed internet access to their rural communities.

“Understand the needs of your communities … and take full use of the federal and state programs available to you,” Ms. Bitz said. “Thanks to the SBA 7(a) loans and Minnesota’s Broadband Initiative, our project with Palmer Wireless succeeded.”

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U.S. Bank invested approximately $3.2 million under its public welfare investment authority to help expand and modernize an existing broadband network for 2,000 residents and businesses in rural Appalachian communities in northeastern Ohio.

U.S. Bank’s investment supported GreatWave Communications, a 120-year-old telephone company, transition into a 21st-century provider of phone, internet, cable, and fiber-optic networks in rural communities. “The company reinvented itself as a broadband internet provider,” according to Christian Siebeneck, chief executive officer of GreatWave Communications and GreatWave Broadband Services, LLC.

The GreatWave project was financed, in part, with New Markets Tax Credits (NMTC), which are designed to provide safe, stable financing to businesses in low-income areas across the country. U.S. Bank’s investment in the GreatWave project went to rural LMI communities in the cities of Ashtabula (population 18,000) and Geneva (population 6,000). These cities are located in Ashtabula County, Ohio, which hugs Lake Erie and is 194 miles northeast of Columbus. Tourists know Ashtabula County as home to 17 covered bridges, including the longest and the shortest in the nation.

Ashtabula County is designated as severely distressed by the Appalachian Regional Commission. Like many distressed rural areas, Ashtabula County has a high concentration of LMI residents and has struggled to retain and attract the residents and businesses—and high-speed broadband investment—needed to fuel the kind of economic prosperity enjoyed in Ohio’s metropolitan areas. The city of Conneaut (population 12,708), also in Ashtabula County, for example, has struggled with an aging telecommunications infrastructure that made many essential services unreliable, such as dispatch of emergency medical, fire, and police services.

The county’s distressed designation and demographics made the $9.5 million cost of the GreatWave project eligible for NMTC financing. Two local community development financial institutions (CDFI), the Ohio Community Development Finance Fund and the Development Fund of the Western Reserve, provided $5 million and $4.5 million, respectively, in NMTC allocation. U.S. Bancorp Community Development Corporation, a wholly owned subsidiary of U.S. Bank, made the approximately $3.2 million NMTC investment on behalf of the bank.

GreatWave used the NMTC funding to upgrade its fiber-optic network to build out into new service areas, Ohio’s covered bridges, like this one in Ashtabula County, attract tourists to an area where rural businesses and residents do not have reliable internet access.
known in the industry as the “last mile,”¹ to provide phone and internet services to an additional 50 businesses and 600 residential customers per year.

The Finance Fund supports community organizations working to improve the quality of life for LMI individuals and communities. Western Reserve is a private nonprofit managed by the Development Finance Authority of Summit County. Western Reserve enables investments that target eligible low-income communities in northeastern Ohio.

The CDFIs providing the NMTCs were brought together, like pieces in a puzzle, by Advantage Capital Partners, a venture capital and small business finance firm providing growth capital to economic development efforts. Jeremy Degenhart, principal, Advantage Capital Development Corp., said that the firm raises private institutional capital from investors to finance businesses in areas underserved by traditional sources of risk capital.

GreatWave’s technological transformation came about slowly. In 1990, the company became one of the first to be 100 percent digital. In 1991, nine Ashtabula County high schools connected to the local branch of Kent State University on an interactive fiber-optic network, the first such network in Ohio that was made possible by a joint effort with three other telephone companies serving Ashtabula County. In 1999, GreatWave began construction on its most ambitious project, an $18 million hybrid fiber-coaxial system (a combination of fiber-optic cable and coaxial copper core lines) providing telephone, broadband, and video services to core area customers. In 2013 GreatWave expanded its fiber network to provide connectivity directly to homes and businesses.

Today, GreatWave is Ashtabula County’s primary telecommunications provider and serves 2,000 telephone customers, 1,650 cable television subscribers, and 3,200 broadband internet users. Continual expansion of the network and the company’s growth are moving forward together. “We are currently focused on serving business and residential customers in the cities of Kingsville, Ashtabula, and Geneva,” Mr. Siebeneck said.

Most importantly, GreatWave’s transformation is giving distressed Appalachian communities a better chance to compete in the digital economy, spur development, and prepare students for jobs and life in the 21st-century economy.

James E. Hockaday, city manager of Conneaut, told the Community Development Financial Institutions Fund that “there are few cities in Ohio or the country that can claim to have a completely wired fiber-optic network capable of gigabit dedicated service. It is a unique asset that this city is proud of and we hope to see GreatWave continue to grow and prosper around this new technology.”²

For more information, visit greatwavecom.com/ or contact Letty Ann Shapiro at lettyann.shapiro@occ.treas.gov.

¹ The last mile refers to the last leg in a telecommunications network that delivers services to retail customers in homes.
In 1992, when Robert Jones became President and Chief Executive of United Bank, his slide rule was nearby and, like other executives, he had no idea how his business would be transformed by the newly launched World Wide Web. Today, the slide rule is in a display case, and United Bank and three of its business customers enjoy high-speed internet thanks to a deal that extended an existing fiber-optic network into their low-income rural area.

The digital transformation of United Bank, operating since 1904 in Atmore, Ala. (population 10,194), began after too few customers used its new website and after one too many video conferences were interrupted between the bank’s 17 branches located in southwest Alabama and northwest Florida.

“It dawned on us that nobody uses our website because all they had was poor, unreliable internet access,” Mr. Jones recalled. “In our rural area, the reliability and availability of broadband—or even reasonably acceptable high-speed internet—simply did not exist.”

He wanted United Bank to have reliable, high-speed internet to deliver online banking services—bill pay, money transfers, and loan applications—to customers in Monroeville (population 6,000) and Frisco City (population 1,212).

No internet provider, however, had been willing to build a fiber-optic network for the economically depressed towns in Monroe County, Ala. The county—best known as home to Harper Lee, author of To Kill a Mockingbird, and journalist Truman Capote—had struggled economically for years. For many years, Monroe County struggled economically as residents moved elsewhere for jobs because businesses such as Vanity Fair Brands, a subsidiary of Fruit of the Loom, closed down, Mr. Jones said. The businesses that remained struggled to compete because of unreliable internet.

Fortunately, in 2016, Standard Furniture, Franklin Primary Health, and Smith Tractor were as fed up as United Bank with bad internet service. Their combined frustration provided enough business demand to convince a nearby telecommunications company to extend by five miles an existing fiber-optic network running along highways 84 and 43 from Evergreen, Ala., to Jackson, Ala.

Looking back, if these four businesses had not signed service contracts, Southern Light, now Uniti Fiber, likely could not have justified the $266,400 cost of building out its network to United Bank’s Frisco City branch, said Tiffany Ginn, account manager for Uniti Fiber, who worked for Southern Light on the United Bank deal.

The high-cost, capital-intensive reality of broadband means that sufficient customer demand in rural areas is required before a network such as this can be extended. “It’s not like we will build it and they will come,” Ms. Ginn said. “When customers come, we will build it.”
With United Bank on board, it was easier to recruit other businesses to defray the buildout cost, said Kevin Luker, another Uniti Fiber account manager. “That carried a lot of weight with Standard Furniture and Smith Tractor,” he said.

Smith Tractor is grateful for United Bank’s leadership. Ricky Smith, chief executive of Smith Tractor, said his 65-year-old business in Jay, Fla., a John Deere representative, suffered for years with unreliable wireless service. Because Smith sits on United Bank’s board of directors, he learned about the bank’s fiber-optic contract and wanted one too.

“We had really bad internet until Bob and United Bank pushed for broadband service,” Mr. Smith said. “It was embarrassing from a customer service perspective, to have our computers go down in the middle of a transaction because we had inadequate internet service.”

Today, Smith Tractor and United Bank enjoy reliable internet at a cost that, Mr. Smith and Mr. Jones said, is not more expensive than what they had paid for unreliable wireless internet service. They hope their success inspires banks and businesses in other rural communities to collaborate and negotiate for fiber-optic service.

“Our is a perfect example of how building an initial network in a city has ancillary benefits,” Mr. Jones said. “When fiber is brought closer to businesses, the cost declines for other nearby businesses wanting service.”

Now, Mr. Jones and Uniti Fiber hope that other rural businesses and internet companies will piggyback on Uniti Fiber’s expanded network to provide improved wireless and fiber-optic service area for rural residents as well as businesses.

“Inadequate internet is a pervasive problem in all small towns and rural areas,” Mr. Jones said. “No business can compete in this economy without quality broadband, and rural communities must get quality internet access or be left behind.”

“If you look at history, the early stage development of communication services followed trails, rivers, rail lines, and finally highways and interstates,” he added. “If you weren’t on those corridors, communities didn’t exist. Today, reliable broadband is the required channel for commerce in rural communities.”

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Wiring Alaska: Two National Banks Help Connect Remote, Native Communities

Letty Ann Shapiro, Community Development Expert, OCC

Residents and businesses in rural, remote Alaskan communities are enjoying long-awaited, reliable internet access, thanks in part to leadership and financing provided by two national banks. U.S. Bank and First National Bank Alaska serve as examples to other banks interested in helping to reduce the digital divide in the rural communities they serve.

U.S. Bank and First National Bank Alaska helped finance, with support from different federal programs, two separate broadband projects in communities that are home to Native Alaskans. In doing so, the banks have helped to change lives in Alaska, according to Jay Page, First National Bank’s vice president and corporate loan officer.

The impact delivered by the investments of these two banks highlights the need for bank financing of broadband development projects in America’s distressed and underserved nonmetropolitan middle-income geographies and low- and moderate-income rural areas.

U.S. Bank: Kotzebue Sound Communities

In 2013, U.S. Bank used its public welfare investment authority to help deliver reliable internet access over a broadband network for the first time to remote Inupiat villages in northwestern Alaska, within the Arctic Circle, that are reachable only by airplane, snowmobile, all-terrain vehicle, or dog sled.

The bank’s investment supported an approximately $10 million new markets tax credit (NMTC) allocation from the Clearinghouse Community Development Financial Institution, which included approximately $3.3 million in equity from U.S. Bancorp Community Development Corporation and an approximately $6.7 million leveraged loan from Alaska-based General Communication Inc. (GCI). The NMTC allocation provided a crucial source of financing for the project.

The business development team at U.S. Bank had this to say about the project: “This phase of the TERRA (Terrestrial for Every Region of Rural Alaska) project in northwestern Alaska was intended to meet the technology demands of schools and health clinics in these communities, so rural communities could better connect to a wide-range of resources and also address community concerns around social isolation and depression. In our conversations with key partners, it was clearly important to equip health care organizations with broadband access so they could effectively provide medical care, and take advantage of new technology such as access to electronic medical records and performing specialized consultations by video-conference.”

The native Inupiat communities of Noatak, Buckland, Noorvik, Selawik, and Igichuk Hills are the latest group of communities connected through the TERRA network, which already serves 44,131 people in 84 communities in northwestern Alaska.

Constructing a broadband internet network is costly in Alaska, where populations are low and geographically remote. In the TERRA network, each phase has had a financial gap between estimated infrastructure costs and expected return on investment due to limited population, challenging terrain, and the need to minimize subscription costs for low-income communities. The NMTC program provided the capital infusion that allowed a business like GCI Communications to meet its minimum return on investment.
requirements and to bring its services to the local communities. The network addressed challenges faced by native Alaskans living in geographic isolation, according to Lewis Schnaper, vice president, GCI Business, GCI Communication Corp. The TERRA network serves 99 schools, providing video conferencing that allows teachers and administrators to attend meetings remotely and to reach dozens of classrooms in different communities at the same time.

The TERRA network crosses 233 rivers, 87 lakes, and six mountain ranges in northwestern Alaska. The network runs in a 3,289-mile-long ring. If stretched end to end, the network would extend from Seattle to Miami. This phase of the network’s development marked an important milestone: It closes the network loop.

“In a telecom network, ringing a network is hugely important, because if there’s failure or a technical problem and no ring, any data beyond that failure can’t get through,” Mr. Schnaper said. “Once you have a ring, data can go in either direction.”

**First National Bank Alaska: Kodiak Island Communities**

First National Bank, Alaskan-owned and operated since 1922, is committed to serve the special needs of Native Alaskans with support from federal loan guarantee programs designed to benefit Native communities. Thanks to First National Bank’s support, Kodiak Island, once served only by bouncing signals off satellites, now has subsea fiber cable service that is relayed to surrounding villages.

Kodiak Island sits about 30 miles off the southern coast of Alaska and about 250 miles southwest of Anchorage. It is home to Alaska’s largest fishing port. Before First National Bank’s investment in Kodiak–Kenai Cable, anyone needing to see medical specialists had to travel to Anchorage. Phone calls made by doctors, residents, and businesses were often interrupted and delayed as communication signals bounced off satellites.

“The early satellite network had a 10-second delay; the delay was annoying but also could be crippling in an emergency situation,” said Carl Marrs, chief executive of Old Harbor Native Corporation (Old Harbor), owner of Kodiak–Kenai Cable. Marrs oversaw the construction of the subsea project from its start, in the early 2000s, to its end in 2006 when the last undersea cable was laid.

Old Harbor believed that the project would enhance economic opportunities, educational opportunities, and health services for all communities served by the network. The unconventional project involved building hundreds of miles of a submerged fiber-optic cable. Old Harbor reached out to First National Bank and investors, including two Native tribes and the owners of a private missile launching complex to help finance the project. The undersea cable reached Kodiak Island, not the remote villages further inland. To serve these communities, First National Bank helped to finance the construction of microwave towers for wireless broadcast, at a cost of $16 million.

To mitigate its risk, First National Bank obtained a federal loan guarantee from the U.S. Office of Indian Energy and Economic Development (IEED), part of the U.S. Department of the Interior. The bank is Alaska’s leading IEED lender. In 2000, First National Bank became the first bank to receive a Title VI loan guarantee, a program overseen by the Office of Native American Programs, part of the U.S. Department of Housing and Urban Development (HUD). HUD’s Indian Housing Block Grant Program helps finance affordable housing and infrastructure activities on Indian reservations and areas.

Now, residents can connect online with doctors 287 miles away in Anchorage without leaving home. Doctors in Anchorage and elsewhere can assist doctors in Kodiak with diagnoses, treatments, and emergency surgery when patients cannot be moved to mainland hospitals because of health, cost, weather, or other issues.

For more information, visit First National Bank Alaska at www.fnbalaska.com and U.S. Bancorp Community Development Corporation at www.usbank.com/commercial-business/tax-credit-financing/, or contact Letty Ann Shapiro at lettyann.shapiro@occ.treas.gov.
Community Affairs supports the OCC’s mission to ensure a vibrant banking system by helping national banks and federal savings associations to be leaders in providing safe and sound community development financing and making financial services accessible to underserved communities and consumers, while treating their customers fairly.

E-mail and telephone information for the OCC’s District Community Affairs Officers is available at www.occ.gov/cacontacts.