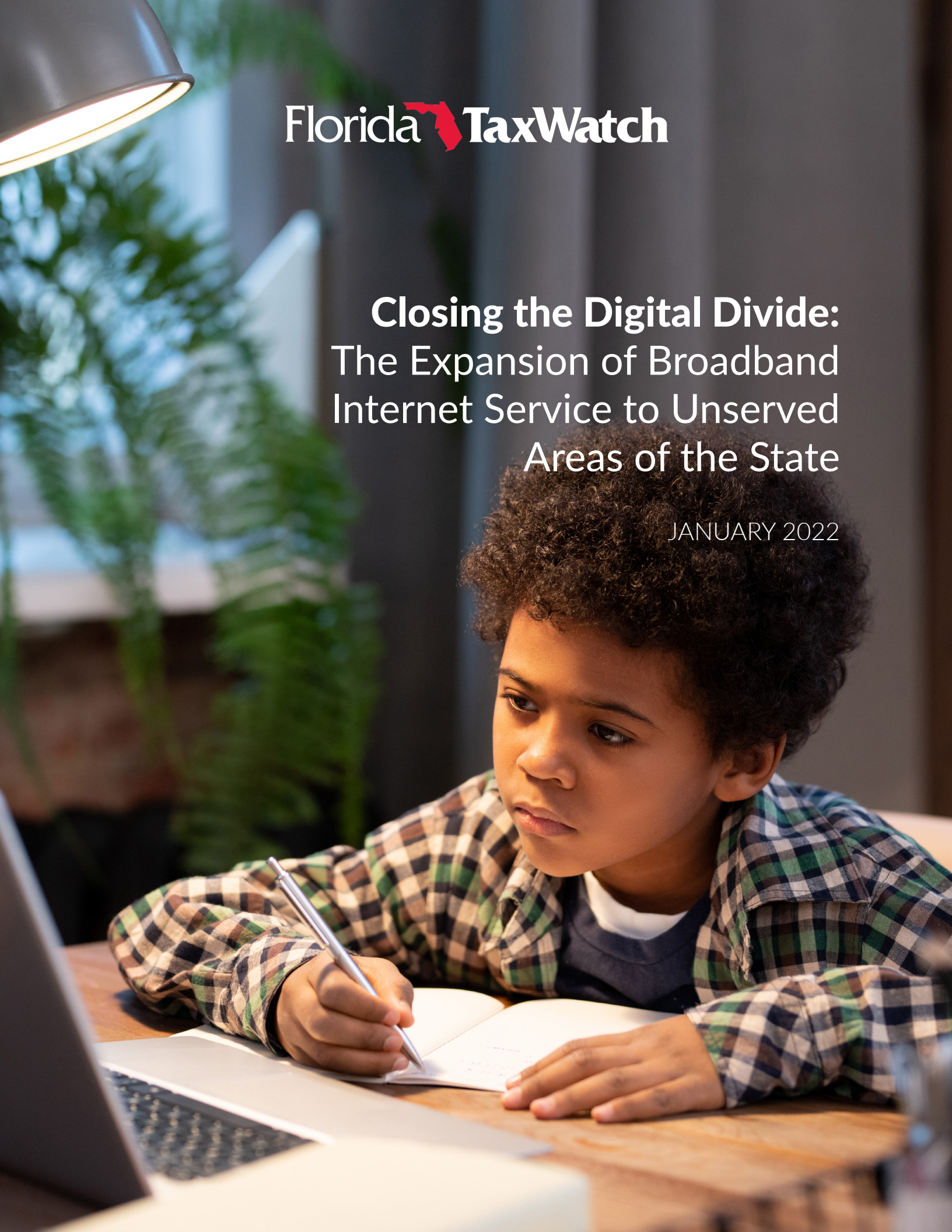


Closing the Digital Divide: The Expansion of Broadband Internet Service to Unserved Areas of the State

JANUARY 2022





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Senator George S. LeMieux
Chairman of the Board of Trustees

Dominic M. Calabro
President & Chief Executive Officer

Dear Fellow Taxpayer,

The COVID-19 pandemic has demonstrated the importance of access to reliable and affordable high-quality broadband Internet service to our daily lives. The Internet makes available an almost limitless amount of information, provides a social platform for communicating and sharing information, and provides a platform for education and conducting business.

The value of distance learning was on full display during the COVID-19 pandemic as the virus caused schools to be shuttered for extended periods. Business owners use the Internet to advertise and market products and services. Online payment and money transfer platforms are safer and more secure, allowing businesses to transact business virtually. Shoppers can buy things online and have them shipped to their homes without having to visit a store. The Internet has changed the way businesses advertise position vacancies and the way applicants search for jobs. The Internet improves access to telehealth and makes it possible to consult with physicians and other medical personnel online. Government agencies now have websites that provide access to services and information and permit residents to perform online transactions, such as renewing driver licenses and paying property taxes.

It is difficult to imagine life without the Internet. Yet, for almost one-half million Floridians, Internet service, and the benefits associated with its use, are not available in their area. Communities that currently lack access to the affordable, reliable, high-quality broadband Internet that is necessary for full participation in education, health care, employment, social services and government programs, and civic life are at a marked disadvantage without that access.

Florida TaxWatch undertakes this independent research project to assess the extent to which Floridians have access to Internet service and to outline a strategy to ensure that unserved areas of the state have access to fast, reliable, and affordable broadband Internet service. We look forward to discussing our findings and recommendations with policymakers during the 2022 legislative session and beyond.

Sincerely,

A handwritten signature in black ink that reads "Dominic M. Calabro".

Dominic M. Calabro
President & Chief Executive Officer

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EXECUTIVE SUMMARY

The importance of the Internet in our daily lives cannot be overstated. The Internet makes available an almost limitless amount of information, provides a social platform for communicating and sharing information, and provides a platform for education and conducting business. The Internet makes more things in our daily lives possible and easier. Having been exposed to the Internet it is difficult to imagine life without it. Yet, for many Floridians, Internet service, and the benefits associated with its use, are not available in their area.

According to BroadbandNow, Florida has the fifth-best broadband access ranking among the 50 states. Broadband Internet service requires a minimum of 25 Megabits per second (Mbps) download and three Mbps upload speeds. Statewide, 96.2 percent of Floridians have access to broadband speeds of 100 Mbps, 96.8 percent have access to wired broadband connection with speeds of 25 Mbps or greater, and 27.6 percent have access to one gigabit of broadband. More than 460,000 Floridians do not have a wired connection capable of these speeds.

The economic impacts associated with the delayed expansion of high-speed broadband Internet service to unserved areas are substantial. In Florida, the expansion of high-speed broadband Internet service into unserved areas is estimated to generate between \$2.25 billion and \$16.83 billion in economic gains, calculated as additional “willingness to pay.” Further, every month that the expansion of high-speed broadband Internet service into unserved areas is delayed costs Floridians between \$13.6 million and \$99.51 billion in economic and social costs.

Expanding broadband Internet services to those predominantly rural parts of the state that currently lack affordable and reliable broadband access creates several economic obstacles that must be overcome. Rural areas of the state tend to be unserved or underserved because the large geographic areas, coupled with lower population densities, increase the cost to construct the infrastructure needed to provide broadband Internet service. There is little or no competition among service providers in these areas, which increases the cost to subscribers that do have access.

The most cost-effective and practical way to do this is to connect to the existing network of utility poles. The collocation of communications infrastructure on existing electric utility poles (“pole attachments”) reduces the number of poles required to provide services. Additional benefits include the ability to share the high costs of infrastructure; minimizing the visual impact of two separate pole networks; and minimizing roadway hazards. Florida, like most other states, has adopted rules that attempt to balance the desire to maximize value to the users of electric utility and communications services with concerns that are unique to electric utility poles (e.g., safety and reliability).

Municipal utilities and rural electric cooperatives are exempt from the provisions of the federal Pole Attachment Act, which requires the Federal Communications Commission to establish the rates, terms, and conditions for pole attachments for the cable industry. This exemption allows municipal and cooperative electric utilities to exercise considerable “market power” over pole attachment rates and terms as part of the “make ready” process that occurs on the front end of pole attachment. These non-recurring costs are in addition to the recurring pole rental costs.

This raises the possibility of municipal utilities and rural electric cooperatives charging higher pole attachment rates than their investor-owned counterparts. This is commonly referred to as a “hold up problem.” A 2019 study of pole rates nationwide found that the rates charged by unregulated municipally and cooperatively owned

utilities in Florida exceed those charged by regulated investor-owned utilities (IOUs) by 200-250 percent, respectively. The 2021 Florida Legislature passed legislation authorizing the Florida Public Service Commission (PSC) to regulate and enforce rates, charges, terms, and conditions for pole attachments owned by a public utility or a communications services provider.

The infusion of federal COVID-19 relief funding has left Florida flush with cash that can be used to expand broadband Internet service to unserved areas of the state. The state of Florida was allocated approximately \$366 million from federal American Rescue Plan to invest in capital assets to meet critical community needs, such as reliable, affordable broadband infrastructure and other digital connectivity technology projects. Of Florida's estimated \$19.1 billion share of the federal Infrastructure Investment and Jobs Act, at least \$100 million will be allocated to help provide broadband coverage across the state.

With the 2022 legislative session now underway, Florida is well-suited to pursue the expansion of broadband service to unserved areas of the state. The legislature has established the Office of Broadband within the Department of Economic Opportunity (DEO) and established a program (albeit unfunded) to provide grants to local and state government agencies, community organizations, and private businesses to increase the availability and effectiveness of broadband Internet throughout the state, specifically in small and rural communities.

In addition, municipal electric utilities are required (through July 2024) to offer broadband Internet service providers a discounted/promotional rate of \$1 per wireline (pole) attachment per year for any new pole attachment necessary to make broadband service available to an unserved or underserved consumer within the utility's service territory.

The COVID-19 pandemic has demonstrated the importance of access to reliable and affordable high-quality broadband Internet service to our daily lives. Communities that currently lack access to the affordable, reliable, high-quality broadband Internet that is necessary for full participation in education, health care, employment, social services and government programs, and civic life are at a marked disadvantage without that access. To help ensure that all Florida communities have access to reliable and affordable high-quality broadband Internet service Florida TaxWatch recommends the following:

1. Priority for the expansion of broadband Internet service should be placed on unserved, as opposed to underserved, areas of the state. Once every unserved community has access to broadband Internet service, then the focus can shift to improving service in underserved areas of the state.
2. The legislature should place the \$366 million from the Capital Projects Fund into the Broadband Opportunity Grant Program, to be administered by the DEO.
3. The legislature should place the minimum \$100 million from the Infrastructure Investment and Jobs Act into a program to guide the replacement of utility poles to accommodate a broadband provider's attachment if replacement is necessary to meet applicable safety and engineering requirements.
4. The legislature should appropriate \$320,168 as requested by DEO in its FY 2022-23 Legislative Budget Request for: (1) one full-time equivalent (FTE) position and associated expenses to administer the Broadband Opportunity Grant Program and to work with local and state government agencies, community organizations and private businesses to increase the availability and effectiveness of broadband Internet throughout the state, specifically in small and rural communities; and (2) funds for contracted services to procure a vendor to update and expand the existing geographic information system (GIS) maps of broadband Internet service availability throughout the state.

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5. The DEO and FRCA should ramp up efforts to engage and involve those counties that did not participate in the regional workshops.
 6. The DEO should ramp up efforts to make available to the LTPTs additional expertise (e.g., Florida Association of Counties, Florida League of Cities, Florida Electric Cooperatives, existing Internet service providers, etc.) to assist in identifying appropriate strategies and technologies needed to increase the availability and accessibility of broadband Internet in each region of the state.
 7. The public and private providers that came together at the October 27, 2021, meeting coordinated by Senator Ausley and Representative Clemons should continue to work together to ensure the provision of reliable and affordable high-quality broadband Internet service to every unserved area of the state.
 8. The DEO should work diligently to ensure that the deadlines for the submission of the strategic plan required by CS/HB 969 (2020), for the federal grant plan, and all reporting requirements are met.
 9. The legislature should adopt a fair and equitable utility pole policy that ensures a reasonable cost allocation of pole costs and that limits a pole owner's ability to hold up the deployment of broadband Internet service in unserved areas of the state.

INTRODUCTION

What started in the 1960s as a way for government researchers to share information, the Internet has evolved into a globally connected network of computers capable of transmitting infinite amounts of information in a limitless space. This was made possible by the establishment of a standard communications protocol (Transfer Control Protocol/Internet Protocol) that allowed different kinds of computers on different networks to “talk” to each other.¹

The importance of the Internet in our daily lives cannot be overstated. The Internet makes available an almost limitless amount of information, provides a social platform for communicating and sharing information, and provides a platform for education and conducting business. The Internet permits people on one continent to connect to and communicate with people on another continent in real time.

The Internet makes more things in our daily lives possible and easier. The online presence of local newspapers and national media outlets and magazines lets people get their news faster from the Internet than from traditional print and video media. Entertainment platforms permit free downloads of music, games, and movies through any number of streaming sites. The Internet plays a vital role in ensuring that people remain in contact with friends and family members. The Internet now improves access to telehealth and makes it possible to consult with physicians and other medical personnel online. Travelers can browse destinations and accommodations and book trips and make payments online. Government agencies now have websites that provide access to services and information and permit residents to perform online transactions, such as renewing driver licenses and pay property taxes.

The Internet has become a powerful and essential learning tool. For students, the Internet serves as an important research tool and source of information on just about any subject. Students are able to access learning materials from any number of online libraries. Aside from the wealth of available information, the Internet has made education and its distance learning programs accessible to students all over the world. The value of distance learning was on full display during the COVID-19 pandemic as the virus caused schools to be shuttered for extended periods. Through platforms like YouTube, one can “upskill” oneself, achieve mastery in new subjects, and become proficient in new tasks.

The Internet has become a powerful tool for business and commerce. The Internet has been instrumental in bringing about a global economy by eliminating physical barriers and through its connectivity and international business relationships. Business owners use the Internet to advertise and market products and services. Online payment and money transfer platforms are safer and more secure, allowing businesses to transact business virtually. Shoppers can buy things online and have them shipped to their homes without having to visit a store. Through the Internet, businesses advertise job openings and applicants use the Internet to search for jobs. The Internet permitted millions of workers to work remotely during the COVID-19 pandemic. Through the Internet of Things,² factories and manufacturing facilities are operating with minimal human-to-human or human-to-computer interaction. The Internet has changed the way businesses advertise position vacancies and the way applicants search for jobs.

1 Online Learning Library, “A Brief History of the Internet,” retrieved from https://usg.edu/galileo/skills/unit07/Internet07_02.phtml#:~:text=The%20Internet%20started%20in%20the%201960s%20as%20a,computer%20tapes%20sent%20through%20the%20conventional%20postal%20system,September%2016,2021.

2 The Internet of Things (IoT) is a system of interrelated computing devices, mechanical, and digital machines that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

Having been exposed to the Internet it is difficult to imagine life without it. Yet, for many Floridians, Internet service, and the benefits associated with its use, are not available in their area. Florida TaxWatch undertakes this independent research project to assess the extent to which Floridians have access to Internet service and to outline a strategy to ensure that unserved areas of the state have access to fast, reliable, and affordable broadband Internet service.

FLORIDA'S DIGITAL DIVIDE

According to BroadbandNow, Florida has the fifth-best broadband access ranking among the 50 states. The Federal Communications Commission defines “broadband” as the transmission of wide bandwidth data over a high-speed Internet connection. Broadband Internet service requires a minimum of 25 Megabits per second (Mbps) download and three Mbps upload speeds.³ Broadband provides high-speed Internet using the following technologies:

- Fiber optic --- carries a large amount of data using pulses of light through strands of fiber at the fastest Internet speeds;
- Wireless (Wi-Fi) --- connects homes and businesses to the Internet using radio signals instead of cabling;
- Digital Subscriber Line (DSL) --- transmits data over traditional telephone lines;
- Cable --- delivers high-speed Internet over the coaxial cables that deliver television signals; and
- Satellite --- provides Internet connectivity through communications satellites.

Statewide, 96.2 percent of Floridians have access to broadband speeds of 100 megabits per second (Mbps), 96.8 percent have access to wired broadband connection with speeds of 25 Mbps or greater, and 27.6 percent have access to one gigabit of broadband. More than 460,000 Floridians do not have a wired connection capable of these speeds.⁴ County coverage (access) ranges from one percent in Dixie County to 100 percent coverage in Pinellas County, with broadband coverage greater than 95 percent in about one-half (33) of Florida’s counties. Six Florida counties have broadband coverage of less than 50 percent (see Table 1).

Table 1. Broadband Coverage in Florida (2021)

Coverage	Counties
Less than 50%	Dixie, Gilchrist, Holmes, Jefferson, Levy, Washington
50.1% to 75%	Bradford, DeSoto, Jackson, Lafayette, Liberty, Madison, Taylor
75.1% to 95%	Alachua, Baker, Calhoun, Charlotte, Columbia, Franklin, Gadsden, Glades, Gulf, Hamilton, Hardee, Hendry, Highlands, Okeechobee, Putnam, Santa Rosa, Suwannee, Union, Wakulla, Walton
95.1% to 99%	Bay, Citrus, Clay, Collier, Duval, Escambia, Flagler, Hernando, Indian River, Lake, Lee, Leon, Marion, Martin, Miami-Dade, Monroe, Nassau, Okaloosa, Palm Beach, Polk, St. Johns, St. Lucie, Sarasota, Sumter, Volusia
Greater than 99%	Brevard, Broward, Hillsborough, Manatee, Orange, Osceola, Pasco, Pinellas, Seminole

Source: BroadbandNow.com

³ Verizon, “Broadband,” retrieved from <https://www.verizon.com/info/definitions/broadband/>, December 27, 2021.

⁴ BroadbandNow, “The State of Broadband in Florida 2021,” June 7, 2021, retrieved from <https://broadbandnow.com/Florida>, September 17, 2021.

With 220 Internet providers providing service in Florida, approximately one million people have access to only one wired provider and more than 250,000 do not have access to a wired provider at their home.⁵ In terms of affordability, almost 60 percent of Floridians have access to a monthly plan that costs \$60 per month or less. This places Florida slightly ahead of the curve nationally.⁶

All of the counties identified in Table 1 as having 75 percent or less broadband coverage are located within one of Florida’s three designated Rural Areas of Opportunity (RAOs). An RAO is a rural community, or a region composed of rural communities, designated by the Governor, that has been adversely affected by an extraordinary economic event, severe or chronic distress, or natural disaster that presents a unique economic development opportunity of regional impact.⁷ RAOs are eligible for assistance and other support through the Rural Economic Development Initiative, administered by DEO.

ECONOMIC IMPACTS

The economic impacts associated with the delayed expansion of high-speed broadband Internet service to unserved areas are substantial. A 2021 study by Connect the Future estimates that expanding broadband Internet service to the 14 to 42 million Americans who lack access would create anywhere from \$83 billion to \$314 billion in new economic gains, calculated as additional “willingness to pay” (WTP).⁸ Every month that the expansion of high-speed broadband Internet service into unserved areas is delayed costs Americans between \$491 million and \$1.86 billion in economic and social benefits.⁹

In Florida, the expansion of high-speed broadband Internet service into unserved areas is estimated to generate between \$2.25 billion and \$16.83 billion in economic gains.¹⁰ Every month that the expansion of high-speed broadband Internet service into unserved areas is delayed costs Floridians between \$13.6 million and \$99.51 million in economic and social costs.¹¹ Table 2 shows the estimated economic gains should all currently estimated unserved Florida populations gain access to high-speed broadband Internet service, using three Internet speed scenarios. The estimates included in Table 2 represent a range of possibilities for those estimated populations within Rural Digital Opportunity Fund (RDOF) locations; those within the FCC’s unserved areas; and those estimated by BroadbandNow.

Table 2. Estimated Gains if Unserved Populations Have Access to Broadband Internet

Internet Speed	All Assigned RDOF Locations Gain Access	All FCC Unserved Populations Gain Access	All BroadbandNow Unserved Populations Gain Access
150/25 Mbps at <10 Ms	\$2.25 billion	\$4.82 billion	\$14.24 billion
300/100 Mbps at <10 Ms	\$2.49 billion	\$5.34 billion	\$15.77 billion
1000/100 Mbps at <10 Ms	\$2.66 billion	\$5.69 billion	\$16.83 billion

Source: Pole Attachment Policies and Broadband Expansion in the State of Florida (2021) Note: Table entries equal net present value of annualized gains over 25 years at a 5 percent discount rate.

5 BroadbandNow, “The State of Broadband in Florida 2021,” June 7, 2021, retrieved from <https://broadbandnow.com/Florida>, September 17, 2021.

6 Ibid.

7 §288.0656, Florida Statutes.

8 Edward J. Lopez and Patricia D. Kravtin, “Advancing Pole Attachment Policies to Accelerate National Broadband Buildout,” Connect the Future, 2021.

9 Ibid.

10 Edward J. Lopez and Patricia D. Kravtin, “Pole Attachment Policies and Broadband Expansion in the State of Florida,” Connect the Future, 2021.

11 Ibid.

UTILITY POLE CONNECTIONS

Expanding broadband Internet services to those predominantly rural parts of the state that currently lack affordable and reliable broadband access creates several economic obstacles that must be overcome. Rural areas of the state tend to be unserved or underserved because the large geographic areas, coupled with lower population densities, increase the cost to construct the infrastructure needed to provide broadband Internet service. There is little or no competition among service providers in these areas, which increases the cost to subscribers that do have access.

Remote, hard-to-reach locations require broadband providers to connect to a larger number of utility poles. The most cost-effective and practical way to do this is to connect to the existing network of utility poles. The collocation of communications infrastructure on existing electric utility poles (“pole attachments”) reduces the number of poles required to provide services. Additional benefits include the ability to share the high costs of infrastructure; minimizing the visual impact of two separate pole networks; and minimizing roadway hazards.¹² Florida, like most other states, has adopted rules that attempt to balance the desire to maximize value to the users of electric utility and communications services with concerns that are unique to electric utility poles (e.g., safety and reliability).¹³

The federal Pole Attachment Act¹⁴ requires the Federal Communications Commission (FCC) to establish the rates, terms, and conditions for pole attachments for the cable industry. Provisions were subsequently added that make access to utility poles mandatory for telecommunications services providers (unless there is insufficient capacity or reasons of safety or capacity, or for engineering purposes).¹⁵ Municipal utilities and rural electric cooperatives are exempt from these provisions. This exemption allows municipal and cooperative electric utilities to exercise considerable “market power” over pole attachment rates and terms, including timetables, permitting fees, pre- and post-construction requirements, and pole replacement, as part of the “make ready” process that occurs on the front end of pole attachment. These non-recurring costs are in addition to the recurring pole rental costs.¹⁶

This raises the possibility of municipal utilities and rural electric cooperatives charging higher pole attachment rates than their investor-owned counterparts. This is commonly referred to as a “hold up problem.”¹⁷ A 2019 study of pole rates nationwide found that the rates charged by unregulated municipally and cooperatively owned utilities in Florida exceed those charged by regulated investor-owned utilities (IOUs) by 200-250 percent, respectively.¹⁸

12 The Professional Staff of the Committee on Appropriations, “CS/SB 1944, Bill Analysis and Fiscal Impact Statement,” Florida Senate, April 21, 2021.

13 The Professional Staff of the Committee on Appropriations, “CS/SB 1944, Bill Analysis and Fiscal Impact Statement,” Florida Senate, April 21, 2021.

14 Pub. L. No. 95-234, codified at 47 U.S.C. s. 224.

15 Pub. L. No. 104-104, codified at 47 U.S.C. s. 224(f).

16 Edward Lopez and Patricia D. Kratvin, “Utility Pole Policy: A Cost-Effective Prescription for Achieving Full Broadband Access in North Carolina,” North Carolina Cable Telecommunications Association, August 2021.

17 A hold up problem refers to the inefficient concentration of market power that is contrary to the public interest and results in market failure, absent the adoption of public policies that prevent the exercise of the hold up power at its source.

18 Michelle Connelly, “The Economic Impact of Section 224 Exemption of Municipal and Cooperative Poles,” July 12, 2019.

ECONOMIC IMPACTS

The economic impacts of delays in expanding high-speed broadband Internet service to unserved areas of the state are also substantial. These impacts are measured in terms of “deadweight loss” (DWL), which is a standard textbook measure of foregone economic gains resulting from a lack of access to goods and services (e.g., broadband Internet access). Pole owner “hold up” costs Americans between \$491 million and \$1.86 billion every month broadband Internet expansion is delayed.¹⁹

The 2021 study by Connect the Future estimates Florida’s DWL due to pole attachment hold up to be in the range of \$13.31 million to \$99.51 million per month.²⁰ The estimates included in Table 3 represent a range of DWL possibilities for those estimated populations within Rural Digital Opportunity Fund (RDOF) locations; those within the FCC’s unserved areas; and those estimated by BroadbandNow.

Table 3. Deadweight Loss Possibilities for Estimated Populations

Internet Speed	Foregone Claims of Delayed Expansion to Currently Unserved RDOF Locations	Foregone Gains of Delayed Expansion to Currently Unserved FCC Estimated Population	Foregone Gains of Delayed Expansion to Currently Unserved Broadband Now Estimated Population
150/25 Mbps at <10 Ms	\$13.31 million	\$28.51 million	\$84.18 million
300/100 Mbps at <10 Ms	\$14.74 million	\$31.58 million	\$93.25 million
1000/100 Mbps at <10 Ms	\$15.73 million	\$33.70 million	\$99.51 million

Source: Pole Attachment Policies and Broadband Expansion in the State of Florida (2021). Note: Table entries are monthly aggregate foregone economic gains.

States can assume responsibility for the regulation of pole attachments through a process called “reverse preemption,” which requires a state to assert jurisdiction through legislation and then certifying to the FCC that “in so regulating such rates, terms, and conditions, the state has the authority to consider and does consider the interests of the subscribers of the services offered via such attachments, as well as the interests of the consumers of the utility services.”²¹ The 2021 Florida Legislature passed legislation²² authorizing the Florida Public Service Commission (PSC) to regulate and enforce rates, charges, terms, and conditions for pole attachments owned by a public utility or a communications services provider.

19 Edward J. Lopez and Patricia D. Kravtin, “Advancing Pole Attachment Policies to Accelerate National Broadband Buildout,” Connect the Future, 2021.

20 Edward J. Lopez and Patricia D. Kravtin, “Pole Attachment Policies and Broadband Expansion in the State of Florida,” Connect the Future, 2021.

21 47 U.S.C. s. 224(c)(2).

22 Chapter 2021-91, Laws of Florida.

FEDERAL INITIATIVES

In 2020, the FCC established the Rural Digital Opportunity Fund (RDOF) to fund the expansion of broadband Internet service to rural America over the next decade. The first phase made available up to \$16 billion to target census blocks that are wholly unserved with fixed broadband speeds of at least 25 megabits per second (Mbps) downstream and three Mbps upstream (25/3 Mbps). Entities that bid to provide service in Florida will receive more than \$190 million over the next ten years. Using data collected in the first phase, the second phase will make available about \$4.4 billion in grants to target geographic areas where some locations lack access to 25/3 Mbps broadband.²³

The U.S. Department of Agriculture (USDA) offers loans and grants to expand broadband service to rural areas without access to sufficient broadband service through its “ReConnect” program. State and local governments, rural electric cooperatives, non-profits, and for-profit companies are eligible to receive broadband funds under this program.

The American Rescue Plan (ARP) has appropriated \$10 billion nationwide for a Capital Projects Fund to provide funding to states, territories, and Tribal governments to carry out critical capital projects that “directly enable work, education, and health monitoring, including remote options, in response to the public health emergency.”²⁴ A key priority of the Fund is to make funding available to eligible recipients to invest in capital assets to meet critical community needs, such as reliable, affordable broadband infrastructure and other digital connectivity technology projects. Eligible uses include:

- Broadband Infrastructure Projects --- construction and deployment of broadband infrastructure designed to deliver service that reliably meets or exceeds symmetrical speeds of 100Mbps so that communities have future-proof infrastructure to serve their long-term needs;
- Digital Connectivity Technology Projects --- purchase or installation of devices and equipment, such as laptops, tablets, desktop personal computers, and public Wi-Fi equipment, to facilitate broadband Internet access for communities where affordability is a barrier to broadband adoption and use; and
- Multi-Purpose Community Facility Projects --- construction or improvement of buildings designed to jointly and directly enable work, education, and health monitoring located in communities with critical need for the project.²⁵

BROADBAND INFRASTRUCTURE PROJECTS

For broadband infrastructure projects, the Treasury recommends that recipients focus on projects that will achieve “last-mile” connections;²⁶ prioritize investments in fiber-optic infrastructure where feasible, as such advanced technology better supports future needs; and prioritize projects that involve broadband networks owned, operated by or affiliated with local governments, non-profits, and co-operatives.²⁷ Recipients are also

23 The Professional Staff of the Florida House of Representatives, “CS/CS/HB 1239 Final Bill Analysis,” May 25, 2021.

24 U.S. Department of the Treasury, “Capital Projects Fund,” retrieved from <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/capital-projects-fund>, October 22, 2021.

25 U.S. Department of the Treasury, “Capital Projects Fund,” retrieved from <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/capital-projects-fund>, October 22, 2021.

26 Recipients considering funding middle-mile projects are encouraged to have commitments in place to support new and/or improved last-mile service.

27 These providers experience less pressure to generate profits and are more likely to commit to serving entire communities.

encouraged to consider a project's affordability,²⁸ to make sure broadband service is affordable and available for use by all Floridians. Service providers are required to participate in federal programs that provide low-income consumers with subsidies on broadband Internet access services, such as the Federal Communications Commission's Emergency Broadband Benefit program.

DIGITAL CONNECTIVITY TECHNOLOGY PROJECTS

For digital connectivity technology projects, the purchase of and/or installation of equipment and devices is permissible if affordability has been identified by the state as a barrier to broadband adoption and use. Permissible equipment and devices include laptops, tablets, and personal desktop computers, which are to be made available to members of the public through either a short- or long-term loan program, or by making them available for use in public facilities (e.g., public library). Equipment installed as part of public wi-fi infrastructure (e.g., access points, repeaters, routers) is also permissible.²⁹

GRANT PLANS

The state of Florida was allocated approximately \$366 million from the Capital Projects Fund.³⁰ To secure the funds, the state must undergo a three-step process. The first step is the submission of an application to the U.S. Treasury establishing the state's eligibility to receive the funds. Once the state's eligibility has been established, the state executes a "grant agreement" with the Treasury. The final step is the submission of a "grant plan" that outlines the proposed use of the funds. The deadline for submittal of the grant plan by the state is September 24, 2022, and all funded projects must reach "substantial completion"³¹ by December 31, 2026.

INFRASTRUCTURE FUNDS

In November 2021, the President signed the \$1.2 trillion Infrastructure Investment and Jobs Act, which will make available funding to repair water systems, roads and bridges; improve transportation options; establish a network of charging stations for electric vehicles; and help connect every American to reliable high-speed broadband Internet service. Of Florida's estimated \$19.1 billion share, at least \$100 million will be allocated to help provide broadband coverage across the state. An estimated 30 percent of Floridians will be eligible for the "Affordability Connectivity Benefit," which will help to make broadband Internet service more affordable for low-income families.³²

28 Recipients will be required to publish a description of their process used to for consider affordability in their project selection process and to report pricing data as part of program performance and monitoring.

29 U.S. Department of the Treasury, "Guidance for the Coronavirus Capital Projects Fund for States, Territories & Freely Associated States," September 2021.

30 U.S. Department of the Treasury, "Coronavirus Capital Projects Fund Allocations for States, District of Columbia, and Puerto Rico," retrieved from <https://home.treasury.gov/system/files/136/Allocations-States.pdf>, October 22, 2021.

31 Substantial completion is defined as the date for which the Project can fulfill the primary operations that it was designed to perform, delivering services to end-users. At substantial completion, service operations and management systems infrastructure must be operational.

32 The White House, "The Infrastructure Investment and Jobs Act Will Deliver for Florida," retrieved from [chrome-extension://efaidnbmnnnibpcajpcgl-clcfndmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.whitehouse.gov%2Fwp-content%2Fuploads%2F2021%2F08%2FFLORIDA_Infrastructure-Investment-and-Jobs-Act-State-Fact-Sheet.pdf&clen=146398&chunk=true](https://www.whitehouse.gov/wp-content/uploads/2021/10/20211008-FFLORIDA-Infrastructure-Investment-and-Jobs-Act-State-Fact-Sheet.pdf), December 7, 2021.

STATE OF FLORIDA INITIATIVES

The 2020 Florida Legislature passed legislation designating the Department of Economic Opportunity (DEO) as the lead state agency for coordinating the expansion of broadband Internet service throughout Florida.³³ An Office of Broadband (“Office”) was created within the DEO to develop, market, and promote broadband service in the state. The specific duties of the Office include (among other things):

- Create a strategic plan to increase the use of broadband Internet services in the state;
- Develop local technology planning teams (LTPTs) representing, among others, libraries, schools, colleges and universities, local health care providers, private businesses, community organizations, economic development organizations, local governments, tourism, parks and recreation, and agriculture;
- Encourage the use of broadband Internet services in rural, unserved, and underserved areas of the state through grant programs; and
- Monitor and participate in proceedings of the Federal Communications Commission (FCC) and other federal agencies related to the geographic availability and deployment of broadband Internet service in Florida.³⁴

The strategic plan required by CS/HB 969 must:

- Identify available federal funding sources for the expansion or improvement of broadband;
- Include a process to review and verify public input regarding transmission speeds and availability of broadband Internet service throughout the state;
- Be submitted to the Governor, the President of the Senate, and the Speaker of the House of Representatives by June 30, 2022; and
- Be updated biennially thereafter.

The DEO is also authorized to apply for and accept federal grant funds, such as the funds available through the American Rescue Plan.

In 2021, the legislature passed the “Florida Broadband Deployment Act of 2021” (“Act”).³⁵ The Act acknowledges that the sustainable adoption of broadband Internet service is critical to economic and business development and is essential for all residents of the state. In addition to authorizing the Florida Public Service Commission (PSC) to regulate pole attachments, the Act creates two new programs to support the expansion of broadband Internet service to consumers without access to service.³⁶

First, the Broadband Opportunity Grant Program (unfunded) is established within DEO to award grants to applicants wishing to install infrastructure to expand broadband Internet service to unserved areas of the state. The use of grant funds to install or deploy broadband Internet service in an area that already has at least one broadband Internet service provider is expressly prohibited.

³³ Chapter 2020-26, Laws of Florida.

³⁴ The Professional Staff of the Florida House of Representatives, “CS/HB 969 Final Bill Analysis,” June 11, 2020.

³⁵ Chapter 2021-24, Laws of Florida.

³⁶ Chapter 2021-24, Laws of Florida.

In evaluating and awarding grants, the Office is required to give priority to applications that:

- Offer broadband Internet service to important community institutions (e.g., libraries, educational institutions, public safety facilities, and health care facilities);
- Facilitate the use of telemedicine and electronic health records;
- Serve economically distressed areas of this state, as measured by indices of unemployment, poverty, or population loss that are significantly greater than the statewide average;
- Provide for scalability to transmission speeds of at least 100 megabits per second download and ten megabits per second upload;
- Include a component to actively promote the adoption of the newly available broadband Internet service in the community;
- Provide evidence of strong support for the project from citizens, government, businesses, and institutions in the community;
- Provide access to broadband Internet service to the greatest number of unserved households and businesses;
- Leverage greater amounts of funding for a project from private sources; or
- Demonstrate consistency with the strategic plan adopted by DEO.³⁷

Grants awarded, when combined with any state or local funds, may not fund more than 50 percent of the total cost of a project. No single project may be awarded a grant in excess of \$5 million.

Second, municipal electric utilities are required (through July 2024) to offer broadband Internet service providers a discounted/promotional rate of \$1 per wireline (pole) attachment per year for any new pole attachment necessary to make broadband service available to an unserved or underserved consumer within the utility's service territory. Pole attachments that are subject to this promotional rate must comply with the terms and conditions of any existing pole attachment agreements between the broadband provider and the utility. If no such agreement exists, then the parties have 90 days in which to enter into a pole attachment agreement.

If the attachment by the broadband provider requires the replacement of the municipal utility's pole, the municipal electric utility is authorized, as a condition to attachment, that the broadband provider reimburse all "reasonable and nondiscriminatory costs" that can be attributed solely to the new pole attachment (minus the salvage value of the removed pole). Municipal utilities can require the replacement of a utility pole to accommodate a broadband provider's attachment only if replacement is necessary to meet applicable safety and engineering requirements.

Perhaps the most critical part of Florida's effort to expand broadband Internet service to unserved and underserved areas is the coordination between DEO and the local technology planning teams (LTPTs). Each county administrator, county manager, or a selected designee is responsible for recommending members for DEO to vet and appoint to their LTPT, to ensure its membership represents local stakeholders in broadband expansion.

37 The Professional Staff of the Florida House of Representatives, "CS/CS/HB 1239 Final Bill Analysis," May 25, 2021.

The following industry sectors must be represented on each LTPT:

- Libraries;
- K-12 education;
- Health care providers;
- Private businesses;
- Tourism;
- Community organizations;
- Agriculture;
- Economic development organizations;
- Local governments;
- Parks and recreation; and
- Internet service providers.³⁸

Each LTPT will work with their respective communities to:

- Understand their current broadband availability;
- Locate unserved and underserved businesses and residents;
- Identify assets relevant to broadband deployment;
- Build partnerships with broadband service providers; and
- Identify opportunities to leverage assets and reduce barriers to the deployment of broadband Internet services in the community.³⁹

To facilitate this coordination, DEO has developed a broadband planning “toolkit” that includes the following nine steps:

- Step 1: Engage Stakeholders --- involves onboarding community leaders and representatives from the designated industry sectors;
- Step 2: Assemble the Team --- each designated team leader submits recommended industry sector representatives to DEO;
- Step 3: Identify Community Priorities --- involves developing an understanding of the broadband-related strengths and weaknesses in the county or region and establishing benchmarks for evaluating future progress;
- Step 4: Harness the Data --- involves surveying public opinion regarding community needs, broadband utilization, and expansion efforts;
- Step 5: Consider Digital Inclusion --- ensures that communities have access to robust and affordable broadband connections, Internet-enabled devices, and the skills to explore, create, and collaborate in a digital world;

³⁸ § 288.9961, Florida Statutes.

³⁹ Florida Department of Economic Opportunity, “Broadband Planning Toolkit: A Guide to Establishing Local Technology Planning Teams,” September 23, 2021.

-
- Step 6: Assess Resources and Infrastructure --- compares existing resources with needs to identify gaps in broadband infrastructure;
 - Step 7: Engage Local Internet Service Providers --- involves brainstorming to identify how each industry sector or area can best address challenges to increase the availability and accessibility of broadband throughout the state;
 - Step 8: Evaluate Solutions --- intended to refine options presented to the Local Technology Planning Team; and
 - Step 9: Develop and Execute Solutions --- identify and refine concepts to meet broadband planning goals with local service providers.

The Rural Infrastructure Fund, which is administered by DEO, offers grants to “facilitate the planning, preparing and financing of infrastructure projects in rural communities which will encourage job creation, capital investment and the strengthening and diversification of rural economies.”⁴⁰ Eligible projects include improvements to access and availability of broadband Internet service. A total of \$7.5 million in funding is available for FY 2021-2022. Grants may be awarded for up to 50 percent of the total infrastructure project cost.

The Community Development Block Grant/Coronavirus Small Cities and Entitlement Program (CDBG-CV), also administered by DEO, provides federal funds to “help local governments prepare for, prevent, or respond to the health and economic impacts of the pandemic.”⁴¹ The activities must be critical to their locality and primarily for the benefit of low- and moderate-income residents, and include broadband planning and infrastructure.

40 Florida Department of Economic Opportunity, “Rural Infrastructure Fund,” retrieved from <https://floridajobs.org/community-planning-and-development/rural-community-programs/rural-infrastructure-fund>, December 5, 2021.

41 Florida Department of Economic Opportunity, “Office of Broadband,” retrieved from <https://floridajobs.org/community-planning-and-development/broadband/office-of-broadband>, December 5, 2021.

BROADBAND INTERNET FUNDING IN OTHER STATES

Table 4 provides a summary of what some other southern states are doing to fund the expansion of broadband Internet into unserved areas. As shown in Table 4, Florida has the largest population without access yet has allocated no funding to broadband Internet expansion into unserved areas.

Table 4. Comparing Southern States on Broadband Expansion

State	Broadband Program/Administrator	Total Funding	FCC Estimate of Population Without Broadband Access
Alabama	Alabama Broadband Accessibility Fund/ADECA	\$25 million (anticipated)	608,000
Florida	Florida Broadband Opportunity Program/DEO	TBD - Subject to Appropriation	804,000
Georgia	Georgia Broadband Program/GADCA	\$300 million	654,000
Kentucky	Kentucky Broadband Deployment Fund/KIA	\$300 million	257,000
Maryland	Maryland Expansion of Existing Broadband Networks Funding Program/MDDHCD	\$400 million	152,000
North Carolina	North Carolina GREAT Grant/NCDIT-BIO	\$967 million	472,000
South Carolina	South Carolina Broadband Infrastructure Program/SCORS	\$400 million (anticipated)	451,000
Tennessee	Tennessee Broadband Accessibility Grant Program/TNEDC	\$500 million	433,000
Virginia	Virginia Telecommunications Initiative/VADHCD	\$700 million	498,000

Source: FLORIDA Extending the Broadband Shine to Everyone in the Sunshine State (Charter Communications)

LOOKING AHEAD

Florida law makes an important distinction between geographic areas that are “unserved” and those that are “underserved.” The term “unserved” is defined as a geographic area where there is no broadband Internet service provider. “Underserved” refers to geographic areas where no broadband Internet service provider offers Internet connections with the capacity for transmitting at a constant speed of at least 100 megabits per second downstream and at least ten megabits per second upstream.

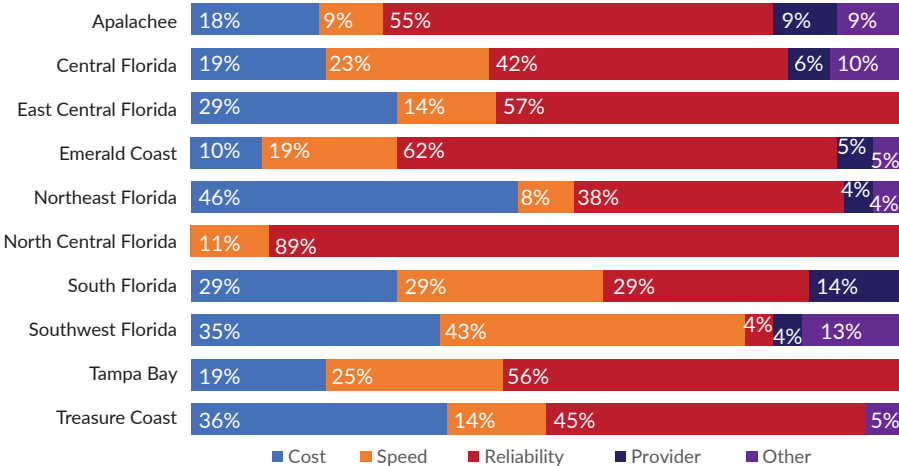
With the 2022 legislative session now underway, Florida is well-suited to pursue the expansion of broadband service to unserved areas of the state. The legislature has established the Office of Broadband within DEO and established a program (albeit unfunded) to provide grants to local and state government agencies, community organizations, and private businesses to increase the availability and effectiveness of broadband Internet throughout the state, specifically in small and rural communities. It is unclear whether any further legislation is needed to support the expansion of broadband Internet service to unserved areas of the state.

The legislature appropriated \$1.5 million in non-recurring general revenue funds during fiscal year 2021-22 to DEO to develop maps showing the availability of broadband Internet service availability throughout the state. These maps must identify where broadband-capable networks exist; where service is available to end users; gaps in rural areas; and download and upload transmission speeds. The maps must be complete by June 30, 2022.

Most, if not all, of the LTPTs have been established. The DEO’s Office of Broadband has partnered with the Florida Regional Councils Association (FRCA) to host and facilitate ten regional workshops with industry sector leaders and statewide partners. The information gathered from these workshops will be used to identify the needs of each region and to provide guidance for the Florida Strategic Plan for Broadband.

As shown in Figure 1 polling showed the most important factor to Florida communities regarding their broadband Internet accessibility is reliability, followed by cost, speed, technology, and provider. In rural areas, the most important factors were reliability, provider presence technology, and cost.

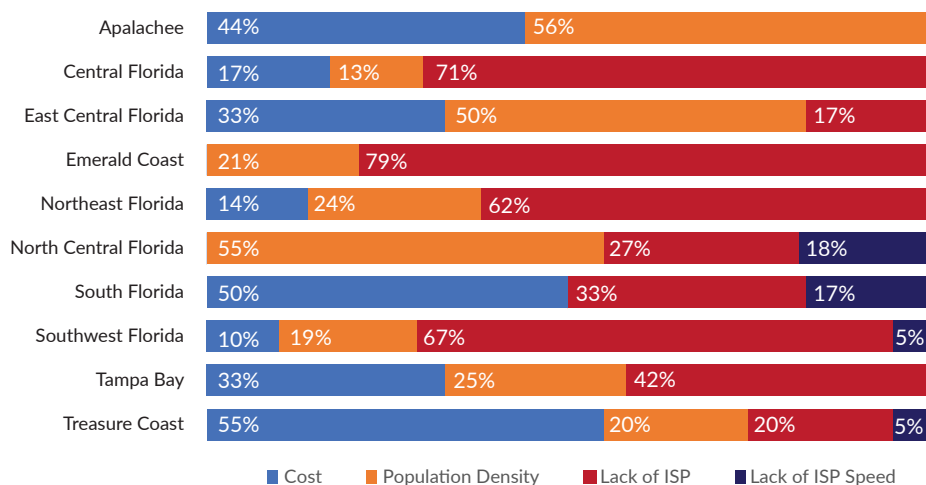
Fig. 1. The Most Important Factor to Florida Communities Regarding Broadband Internet Accessibility is Reliability, Followed by Cost, Speed, Technology, and Provider



Source: Florida Department of Economic Opportunity, “Workshop Summary,” March 2021.

When asked about the greatest challenge going forward, 47 percent of the workshop participants identified the lack of Internet service providers and limited options for service; 26 percent identified cost as the greatest challenge; 23 percent identified population density; and four percent identified Internet speed as the greatest challenge (See Figure 2).⁴²

Fig. 2. The Greatest Challenge Facing Florida Communities is the Lack of Service Providers, Followed by Cost, Population Density, and Speed



Source: Florida Department of Economic Opportunity, "Workshop Summary," March 2021.

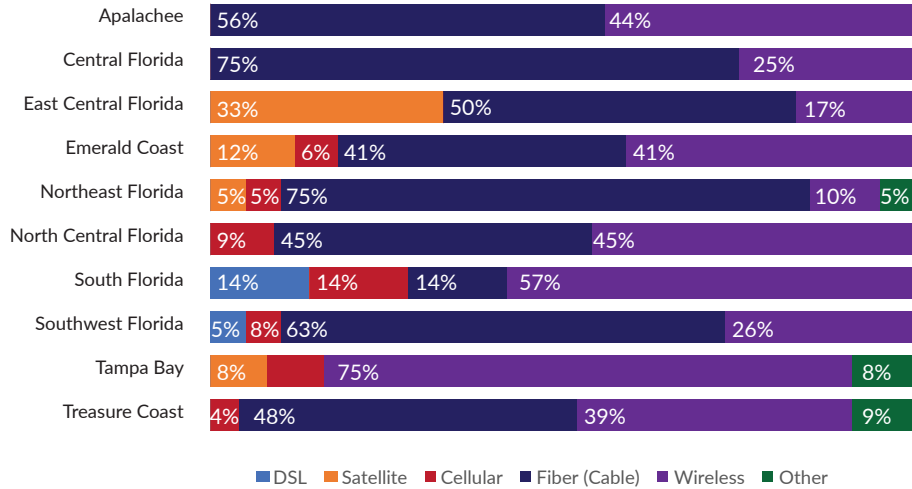
Workshop participants were asked to identify the Internet technology that would best increase accessibility in their communities. Fiber (cable) was the option selected most frequently, followed by wireless, satellite, cellular Internet, DSL, and other technologies (See Figure 3). Fiber was selected, according to many participants, because it was the term with which they were most familiar. Three out of every four participants surveyed indicated that they were not aware of any existing local broadband Internet feasibility studies or plans for their communities. This suggests that there is not enough information about the current status of broadband Internet in many regions, or about the strategies and technologies needed to increase the availability and accessibility of broadband Internet, upon which to make informed decisions going forward.

In terms of average industry sector participation in the workshops, no local health care provider (government), parks and recreation, or agriculture representatives attended. It is also important to note that, of the thirteen counties with 75 percent or less broadband Internet service (see Table 1), only six participated in the workshops.⁴³

⁴² Florida Department of Economic Opportunity, "Workshop Summary," March 2021.

⁴³ Bradford, Gilchrist, Holmes, Jackson, Madison, and Washington.

Fig. 3. Fiber (Cable) is the Internet Technology Most Communities Choose to Increase Accessibility, Followed by Wireless, Satellite, Cellular, and DSL



Source: Florida Department of Economic Opportunity, "Workshop Summary," March 2021.

The DEO has included in its legislative budget request \$320,168 for one full-time equivalent (FTE) position and associated expenses to administer the Broadband Opportunity Grant Program and to work with local and state government agencies, community organizations and private businesses to increase the availability and effectiveness of broadband Internet throughout the state, specifically in small and rural communities. Included in this request is \$200,000 in contracted services to procure a vendor to update and expand the existing geographic information system (GIS) maps of broadband Internet service availability throughout the state.

A November 29, 2021, meeting hosted by Senator Lorraine Ausley and Representative Chuck Clemons and facilitated by Florida TaxWatch brought together the major stakeholders to identify common areas of agreement as well as issues to be resolved before the state can go forward with broadband Internet expansion. One area where there was widespread agreement was the availability of funds --- the infusion of federal COVID-19 relief funding has left Florida flush with cash that can be used to expand broadband Internet service to unserved areas of the state. There was also general agreement on the need to fund the Broadband Grant Program and to provide sufficient staff and other resources to the DEO so it can accomplish its statutory requirements.

CONCLUSIONS AND RECOMMENDATIONS

The COVID-19 pandemic has demonstrated the importance of access to reliable and affordable high-quality broadband Internet service to our daily lives. Communities that currently lack access to the affordable, reliable, high-quality broadband Internet that is necessary for full participation in education, health care, employment, social services and government programs, and civic life are at a marked disadvantage without that access.

*“The days of just calling it a luxury good are over.
It’s an essential service for everyone, everywhere.”*

JESSICA ROSENWORCEL, CHAIR
U.S. FEDERAL COMMUNICATIONS COMMISSION⁴⁴

To help ensure that all Florida communities have access to reliable and affordable high-quality broadband Internet service Florida TaxWatch recommends the following:

1. Priority for the expansion of broadband Internet service should be placed on unserved, as opposed to underserved, areas of the state. Once every unserved community has access to broadband Internet service, then the focus can shift to improving service in underserved areas of the state.
2. The legislature should place the \$366 million from the Capital Projects Fund into the Broadband Opportunity Grant Program, to be administered by the DEO.
3. The legislature should place the minimum \$100 million from the Infrastructure Investment and Jobs Act into a program to guide the replacement of utility poles to accommodate a broadband provider’s attachment if replacement is necessary to meet applicable safety and engineering requirements.
4. The legislature should appropriate \$320,168 as requested by DEO in its FY 2022-23 Legislative Budget Request for: (1) one full-time equivalent (FTE) position and associated expenses to administer the Broadband Opportunity Grant Program and to work with local and state government agencies, community organizations and private businesses to increase the availability and effectiveness of broadband Internet throughout the state, specifically in small and rural communities; and (2) funds for contracted services to procure a vendor to update and expand the existing geographic information system (GIS) maps of broadband Internet service availability throughout the state.
5. The DEO and FRCA should ramp up efforts to engage and involve those counties that did not participate in the regional workshops.
6. The DEO should ramp up efforts to make available to the LTPTs additional expertise (e.g., Florida Association of Counties, Florida League of Cities, Florida Electric Cooperatives, existing Internet service providers, etc.) to assist in identifying appropriate strategies and technologies needed to increase the availability and accessibility of broadband Internet in each region of the state.
7. The public and private providers that came together at the October 27, 2021, meeting coordinated by Senator Ausley and Representative Clemons should continue to work together to ensure the provision of reliable and affordable high-quality broadband Internet service to every unserved area of the state.

⁴⁴ Politico Tech Summit, “Cracking the Digital Divide,” retrieved from <https://www.facebook.com/politico/videos/379638897151476>, September 15, 2021.

8. The DEO should work diligently to ensure that the deadlines for the submission of the strategic plan required by CS/HB 969 (2020), for the federal grant plan, and all reporting requirements are met.
9. The legislature should adopt a fair and equitable utility pole policy that ensures a reasonable cost allocation of pole costs and that limits a pole owner's ability to hold up the deployment of broadband Internet service in unserved areas of the state.

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As an independent, nonpartisan, nonprofit taxpayer research institute and government watchdog, it is the mission of Florida TaxWatch to provide the citizens of Florida and public officials with high quality, independent research and analysis of issues related to state and local government taxation, expenditures, policies, and programs. Florida TaxWatch works to improve the productivity and accountability of Florida government. Its research recommends productivity enhancements and explains the statewide impact of fiscal and economic policies and practices on citizens and businesses.

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