

Infrastructure
Report Series:
**Broadband –
A Roadmap to
Connectivity**

TABLE OF CONTENTS

- 1** History of Laws That Impact Cities
- 4** Local Technology Planning Teams
(Importance of Long-Term Planning)
- 6** Requirements outlined in Section 350.81,
Florida Statutes
- 8** Where to Find Funding (State/Federal)
- 8** Broadband Funding Programs
- 9** Broadband Opportunity Program
- 10** Capital Projects Fund
- 13** Broadband Equity, Access, and
Deployment (BEAD) Program
- 14** Funding from the Digital Equity Act
- 16** Best Practices/Success Stories
- 22** What's Coming Next – Future Funding
 - 23** Resources
 - 23** Contact Information
- 24** References

INTRODUCTION

Municipal officials and staff are tasked with understanding a variety of complex issues that impact their unique communities. This report provides the history of broadband and knowledge of current and future programs to move your communities forward. This includes strategies for deploying broadband infrastructure, securing funding and collaborating with stakeholders to bring reliable internet services to underserved areas. By understanding the history and the current funding landscape, local governments can effectively harness the benefits of broadband, drive economic development, improve public services and enhance the overall quality of life for their residents.

ABOUT THE FLORIDA LEAGUE OF CITIES

Founded in 1922, the Florida League of Cities is the united voice for Florida's municipal governments. Its goals are to promote local self-government and serve the needs of Florida's cities, which are formed and governed by their citizens. The League believes in "Local Voices Making Local Choices," which focuses on the impact citizens and city leaders have in improving Florida's communities.

History of Laws That Impact Cities

1995

In 1995, the Florida Legislature authorized governmental entities, including municipalities, to sell two-way telecommunications services to the public.

Before
2005

Before 2005, a handful of cities were providing communications services within their jurisdictions. The services ranged from providing communication services to themselves (i.e., to another municipal utility) to providing services for residents and businesses.

2005

In 2005, the Florida Legislature passed Section 350.81, Florida Statutes, imposing additional requirements on local governments, including municipalities, that enter the communications services market. These requirements go above any statutory requirements for private providers in Florida. Before entering the communications service market, local governments must conduct a public analysis of the risks to ensure that municipalities enter the market without a competitive advantage over the private providers who provide the same service in the community. (See p. 6 for more information on Section 350.81.)

July
2020

In July 2020, the **Department of Economic Opportunity's** (DEO's) Office of Broadband was established to increase the availability and effectiveness of broadband internet throughout the state. Amending Section 288.9961, Florida Statutes, and creating Sections 288.9962 and 288.9963, Florida Statutes, allows DEO to access federal grant dollars and assist rural communities with expanding broadband services while also providing directives for mapping and the Broadband Opportunity Program (DEO).

The Office of Broadband works 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.

Legislative Session
2021

Through these partnerships, the Office of Broadband encourages investment in grant funding opportunities for broadband programs that focus on the expansion of broadband.

During Florida's 2021 Legislative Session, House Bill 1239 passed and provided an allocation of \$1.5 million to develop geographic information system (GIS) maps of Florida's broadband internet service.

February
2021

In February 2021, DEO partnered with the **Florida Regional Councils Association** to host 10 virtual workshops where participants discussed broadband internet accessibility. Industry sector and community leaders in each region were invited to participate. These industry sectors included local government, education, healthcare, private business, community organizations, agriculture, tourism, parks and recreation, economic development and internet service providers (ISPs).

September
2021

In September 2021, DEO launched the Local Technology Planning Team initiative using the Broadband Planning Toolkit developed by the Office of Broadband. Local Technology Planning Teams are tasked with working in their communities to:

- ▶ Better understand their current broadband availability
- ▶ Locate unserved and underserved businesses and residents
- ▶ Identify assets relevant to broadband deployment
- ▶ Build partnerships with broadband service providers
- ▶ Identify opportunities to leverage assets
- ▶ Reduce barriers to the deployment of broadband Internet services in the community.

December
2021

In December 2021, DEO published Florida's Broadband Availability Map to identify where broadband-capable networks exist, where service is available to end users, gaps in rural areas and download and upload speeds. DEO continues to collect data from Floridians on their availability and accessibility of broadband internet to be added to the map through its Broadband Internet Speed Test.

June
2022

In June 2022, DEO published the Faster Florida Broadband Map, which identifies census blocks as unserved, underserved, served and no fixed internet service as defined in Section 288.9961, Florida Statutes. The map also identifies Florida geographic boundaries, community anchor institutions, grant funding opportunities and information on the speed tests taken through the Broadband Availability Map.

June
2022

In June 2022, DEO submitted the Florida Strategic Plan for Broadband to the Governor, the Speaker of the House and the President of the Senate. The Florida Strategic Plan for Broadband lays out the vision of the Office of Broadband, the roles of local and state participants and the strategies to undertake as Florida works toward a fully connected citizenry, both economically and socially.

August
2022

In August 2022, DEO hosted three regional workshops (Bartow, Milton and Moore Haven) to receive community input on rulemaking for the \$400 million Broadband Opportunity Program.

September
2022

In September 2022, DEO posted the final application and scoring and evaluation criteria for the Broadband Opportunity Program to the website. DEO also published the Notice of Proposed Rule in the Florida Administrative Weekly.

October
2022

In October 2022, the Office of Broadband filed the final rule package to the Joint Administration Procedures Committee and updated the Office website with information on the Broadband Opportunity Program, including program guidelines, frequently asked questions and information on the technical assistance walk-through webinars.

November
2022

In November 2022, the final rule for the Broadband Opportunity Program became effective.

November
2022

In November 2022, the Office of Broadband received \$247.8 million from the U.S. Treasury for the Capital Projects Fund Broadband Infrastructure Program. The Office was also awarded \$2.4 million for its Digital Equity Planning Grant, as well as \$5 million for the Broadband Equity, Access and Deployment (BEAD) five-year action plan.

May
2023

In May 2023, the Florida Legislature passed HB 5, which overhauls Florida's economic development programs and renames the Department of Economic Opportunity as the Department of Commerce.

For more information, visit bit.ly/3OTqmIM and view program broadband time.

October 2011 through June 2023:



Now known as:

FLORIDACOMMERCE

Local Technology Planning Teams (Importance of Long-Term Planning)

The **State of Florida** recognizes the need for the expansion of broadband infrastructure to bridge the digital divide in communities. Now, more than ever, it is crucial for Florida's municipalities to develop effective and comprehensive strategic broadband initiatives at the local level that take advantage of federal, state and other grant opportunities. The most critical component of this comprehensive effort is coordination between Florida's Local Technology Planning Teams (LTPTs) and the Department of Commerce Office of Broadband.

Section 288.9961(4)(b), Florida Statutes, directs the Office of Broadband to build and facilitate local technology planning teams representing cross-sections of the community, which may include, but aren't limited to, representatives from the following organizations and industries:

- ▶ Local governments
- ▶ K-12 education
- ▶ Colleges and universities
- ▶ Local healthcare providers
- ▶ Private businesses
- ▶ Community organizations
- ▶ Economic development organizations
- ▶ Parks and recreation
- ▶ Libraries
- ▶ Tourism
- ▶ Agriculture.

LTPTs: Benefit of Participation

Most federal funding available to municipalities is distributed to the Florida Department of Commerce, which serves as the program administrator. **The Office of Broadband strongly encourages municipalities to partner on a regional level with their LTPT to make their needs known and highly prioritized to receive grant funding.** By joining your county's LTPT, you will immediately immerse your city in the Florida Office of Broadband's planning process.

🗨️ Miami-Dade County's Local Technology Planning Team is going strong with over 190 members. We are working together to build a cohesive community that does not just expand infrastructure and connectivity but is building programs to reach residents where they are. Our monthly sessions will focus on a featured community organization, new updates on grant and collaboration opportunities, and then we open up for dialogue. We are working toward building collective that will change the lives of those most in need, one person at a time. This will take perseverance, but together we are making this goal very real. 🗨️

– Ana Peralta Chammass, Miami-Dade County, Director of County Innovation

LTPTs: Main Function

The Office has published a toolkit to guide your municipality through all the steps needed to successfully expand broadband. The toolkit uses functional resources to identify current broadband needs, inventory assets, assess strengths and weaknesses, establish goals and create and implement policies that will help Florida's counties and regions achieve a technological vision of the future by doing the following:

- ▶ Work with rural communities to help communities understand their current broadband availability
- ▶ Locate unserved and underserved businesses and residents
- ▶ Identify assets relevant to broadband deployment
- ▶ Build partnerships with broadband service providers
- ▶ Identify opportunities to leverage assets and reduce barriers to the deployment of broadband services in the community
- ▶ Be proactive in fiscally constrained counties in identifying funding opportunities and providing assistance with applying for federal grants for broadband service (Florida Department of Economic Opportunity).

🗨️ Orange County has followed the Florida Broadband Strategic Plan and has had over 40 organizations and four municipalities participate in our LTPT. This has been very helpful in mapping the unserved and underserved areas, identifying digital equity needs and targeting specific projects for grants. Recently, we presented the CPF-1C Multipurpose Grant to the Eatonville Mayor and Town Council to help them reach consensus on [broadband funding] priorities. The best part of the LTPT is all the sharing and learning that is happening between groups that might not normally get to communicate on this topic to one another and the growing cross-sector collaboration that is emerging. 🗨️


– Peter Murray, Executive Director, Dense Networks and Orange County LTPT member

Requirements Outlined in Section 350.81, Florida Statutes

These requirements include:

- ▶ **Public hearings:** The statute requires at least two public hearings, no less than 30 days apart.
- ▶ **Notice of public hearings:** Publish with 30 days' notice in the predominant newspaper of general circulation in the area considered for service.
- ▶ **Provide notice to the State:** Municipalities must electronically provide notice to the **Florida Department of Revenue** and the **Florida Public Service Commission** at least 40 days before the first public hearing. The Department must post the notice online and send notice to all dealers of communications services registered with the Department within 10 days of receipt.
- ▶ **Written business plan:** At one or more of the public hearings, the city must make available to the public a written business plan for the proposed communications service.
- ▶ **Findings and vote:** After the city makes specific findings on the above factors, the Commission may authorize providing a communications service by a majority recorded vote AND by resolution, ordinance or other formal means.
- ▶ **Limitation on use of funds:** A governmental entity that provides a communications service can't use any funds or assets from an electric, gas, water, wastewater or telecommunications utility that it owns or operates to subsidize providing a communications service.
- ▶ **Bonds:** If the city issues revenue bonds to finance a communications service and the revenue bonds mature 15 years or later, the city must conduct a bond referendum as specified in Chapter 100, Florida Statutes.
- ▶ **No subsidization:** The city may not price any communications service below the cost of providing the service by subsidizing the communications service with money from rates paid by subscribers of a non-communications services utility or from any other revenues.
- ▶ **Enterprise fund:** The city shall establish an enterprise fund to separately and accurately account for its operation of communications services.

Continued on p. 7

- 
- ▶ **No eminent domain:** The city can't use the powers of eminent domain in providing communications services.
 - ▶ **Annual review:** The city must annually review its enterprise at a formal public meeting to consider the progress toward its business plan goals. At the public meeting, the governmental entity must review the related revenues, operating expenses and payment of interest on debt.
 - ▶ **Four-year review:** If after four years, revenues do not exceed operating expenses and payment of principal and interest, the city must hold a public hearing to determine which of the statutorily set steps it will follow.

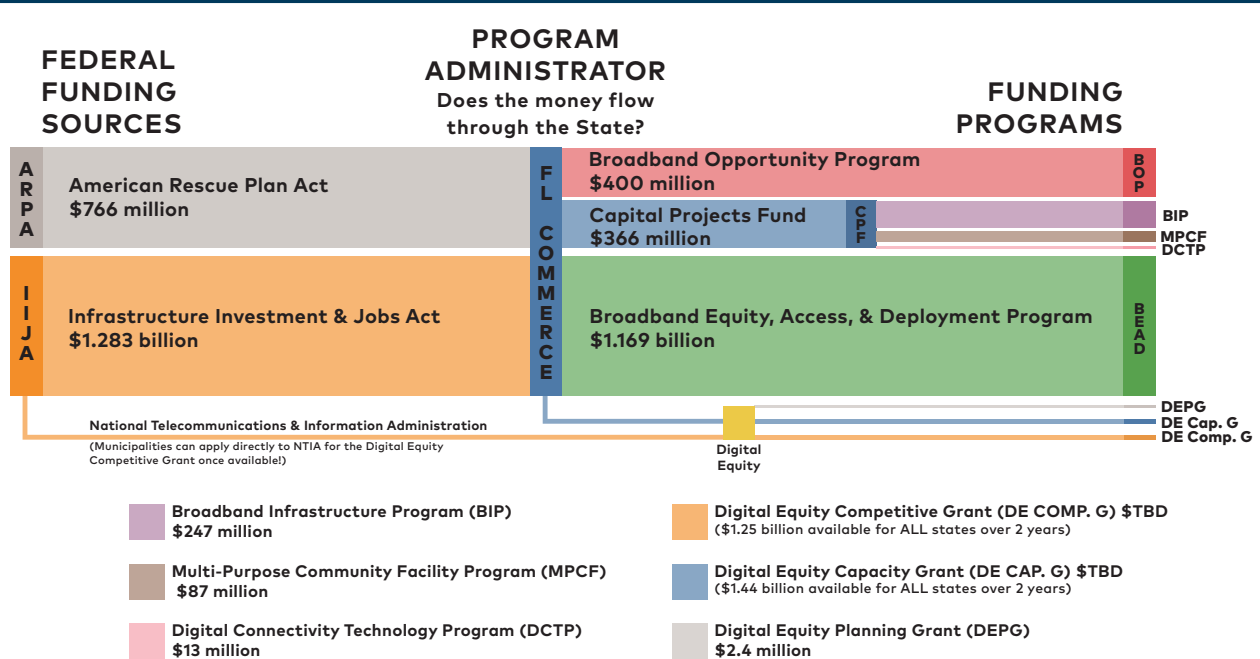
Also, cities may be required to pay ad valorem taxes on their communications service facilities. Article VII Section 3(a) of the Florida Constitution states that "all property owned by a municipality and used exclusively by it for municipal or public purposes shall be exempt from taxation." The question that must be answered, though, is "What is a sufficient municipal or public purpose?"

When it comes to telecommunications services specifically, the **Florida Supreme Court** determined that "a municipality, using infrastructure advantages gained from its pre-existing utility operations, may enter a market in which a high level of service and competition already exists without introducing new levels of service, fostering innovation or encouraging infrastructure investment. If that is the case, the municipal telecommunications company does not provide a service that is essential to the health, morals, safety, and general welfare of the people within the municipality." Municipalities must review their unique circumstances with their own legal council to make any determinations.

These bullets summarize key components of the Florida Statutes. Each municipality should have their attorney review laws in their entirety before taking any actions.

Where to Find Funding (State/Federal)

Broadband Funding Programs



GRAPHIC COURTESY OF FLORIDA LEAGUE OF CITIES

This graphic illustrates funding sources from the federal government through state administrators and into specific programs. Each acronym represents an individual program that is described within this report.

Broadband Opportunity Program – Round Two closed July 2023, to be awarded in 2024*

Per Section 288.9962, Florida Statutes, the Broadband Opportunity Program was established with the Office of Broadband. This grant program provides funds for the installation and deployment of broadband internet infrastructure in unserved Florida communities, providing valuable telehealth, economic, educational and workforce development opportunities to offer a brighter future for all Floridians. It was created to expand broadband service to unserved areas, which will encourage job creation, capital investment and the strengthening and diversification of local economies.

In 2022, the Florida Legislature appropriated \$400 million in American Rescue Plan Act (ARPA) State and Local Fiscal Recovery Funds (SLFRF) for this program. Grant awards are capped at \$5 million per project. Forty percent of the total allocation was set aside for rural community applicants and Florida's three Rural Areas of Opportunity (RAOs). Emphasis was placed on community engagement and public-private partnerships to ensure project viability and sustainability.

Round one application window:

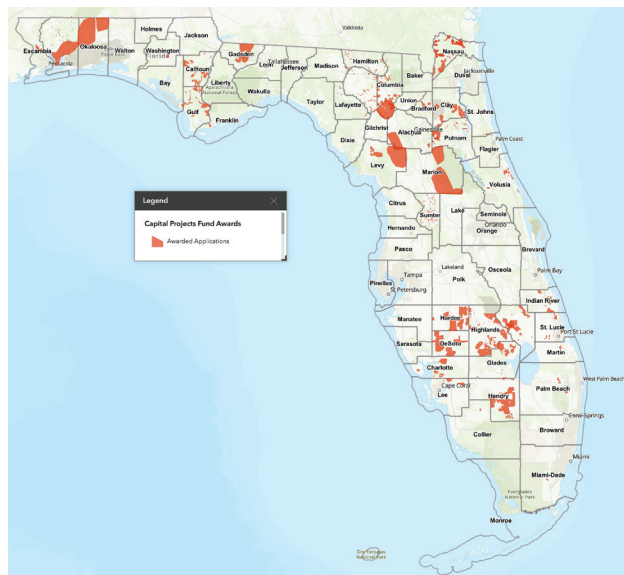
November 2, 2022, through
December 9, 2022.

**From early to mid-2023, the
Office of Broadband awarded
over \$160 million for investment
in more than 90 cities, towns
and villages across Florida.**

Round two application window:

May 10, 2023, through July 21, 2023.

\$133 million is available to be awarded from the Round Two Application Window. Awards are anticipated to be made in early 2024.



GRAPHIC COURTESY OF FLORIDA COMMERCE

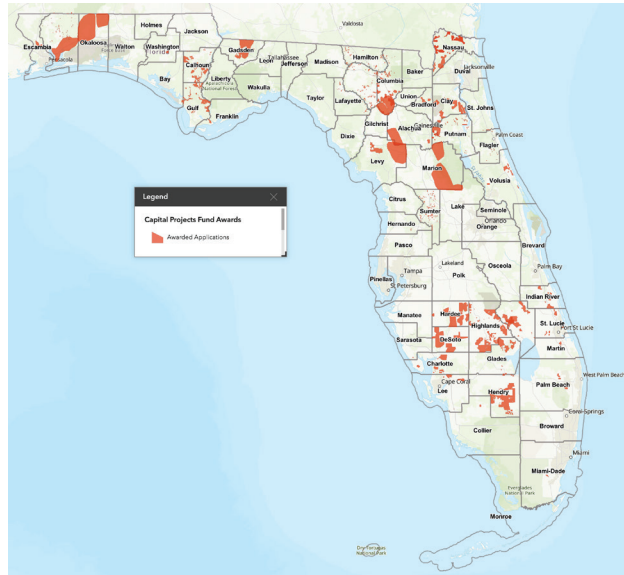
**If funds are not exhausted after round two awards are made, Florida Commerce can hold another round of funding.*

Capital Projects Fund

The Capital Projects Fund (CPF) was established in ARPA. ARPA appropriated \$10 billion to provide payments to states to "carry out capital improvement projects." Florida was allocated \$366 million, and all funds must be spent by December 31, 2026.

For a capital project to be eligible to use CPF grant funds, it must meet the following criteria:

- ▶ The project invests in capital assets designed to directly enable work, education and health monitoring.
- ▶ The project is designed to address a critical need that resulted from, was made apparent by or exacerbated by the COVID-19 pandemic.
- ▶ The project is designed to address a critical need of the community to be served by it.



GRAPHIC COURTESY OF FLORIDA COMMERCE

The Office established three programs (Broadband Infrastructure Program, Digital Connectivity Technology Program Replace, Multi-Purpose Community Facilities Program) to use funds from the CPF to deploy broadband infrastructure in unserved and underserved areas and prioritize rural areas. [Map Link](#)

1. **Broadband Infrastructure Program (BIP) (application window has closed)**

- ▶ 70% of the total CPF allocation (totals \$247.8 million)
- ▶ The application window was open from February 28, 2023, through April 21, 2023, **and over \$150 million was invested in more than 45 cities, towns and villages across the state.**

2. **Digital Connectivity Technology Program (DCTP) (Additional program information to be released from Florida Commerce)**

- ▶ This project will make computers, laptops and tablets available to qualifying households and Multi-Purpose Community Facilities through a long-term, no-cost loan program administered by eligible local entities.
 - Subrecipients will maintain ownership of the devices throughout the term of the loan.

- ▶ Qualifying households will also be eligible to borrow equipment, such as routers, needed to access the internet. Subrecipients will develop a monitoring plan to ensure that households with no computers are prioritized over those receiving laptops from school districts and other programs.
- ▶ Allowable costs will include purchasing of equipment, damage insurance, payment for training on the use of devices and equipment, as well as installation in the borrower's home if requested.
 - Subrecipients will be allowed up to 5% of the award amount for program administration.
- ▶ Program is funded with 5% of the total CPF allocation and totals \$13 million.
- ▶ This funding has not yet been awarded to the Department of Commerce.

3. Multi-Purpose Community Facilities (MPCF) Program

- ▶ The primary objective of the MPCF Program is to provide funds to subrecipients for the construction of or improvements to buildings designed to jointly and directly enable work, education and health monitoring in eligible communities with an identified critical need.
- ▶ The facilities will also be required to provide a public location for access to digital devices for educational opportunities, such as digital literacy classes or other online learning experiences. Other educational services may include high school equivalency programs, classes offered by accredited colleges or vocational training.
- ▶ To maximize the use of CPF funds, subrecipients will be encouraged to submit projects that combine other functions. Other functions may include recreation, such as basketball courts or exercise areas. Facilities may also house other community services such as police, fire or other municipal services. Communities will also be encouraged to use existing facilities where feasible.
- ▶ Program is funded with 25% of the CPF allocation, totaling \$87 million.
- ▶ **The 90-day application window will be open from July 5, 2023, through October 5, 2023.**

Eligible projects in the MPCF program are those to construct or improve buildings that are designed to jointly and directly enable work, education and health monitoring and will include the following:

3-A. Workforce Education Broadband Infrastructure and Connectivity Projects

- ▶ Broadband Internet construction, operation and maintenance jobs are in high demand and offer high-quality job and career opportunities to workers. Also, other industry sectors in high demand need broadband infrastructure and connectivity to build a talent pipeline.

- ▶ Constructing or improving buildings that provide workforce training or career counseling services to provide community members with the knowledge and skills to work in:
 - Broadband construction, operation and maintenance
 - Nursing and critical health professions
 - Law enforcement
 - Information technology programs.

- ▶ Eligible subrecipients: municipalities, county governments, nonprofits or private entities, broadband training institutions, law enforcement academies, nursing and critical health profession programs and information technology programs.

3-B. Community Libraries Infrastructure and Connectivity Projects

- ▶ Constructing or improving libraries that provide public access to the internet for purposes including work, education and health monitoring.
- ▶ Eligible subrecipients: libraries.

3-C. Community Health Infrastructure and Connectivity Projects

- ▶ Constructing or improving community health centers that, in addition to engaging in health monitoring, provide a broader range of services including activities such as access to job counseling and employment services.
- ▶ Projects must deploy broadband infrastructure for the purpose of improving access to community health services.
- ▶ Projects promoting digital connectivity technology projects that include the purchase and/or installation of devices and equipment to facilitate broadband access where affordability has been identified by the recipient as a barrier to broadband adoption and use.
- ▶ Grants will be awarded to healthcare facilities, multi-purpose community centers, community anchor institutions or other entities for deploying broadband infrastructure or purchasing digital health devices and equipment to enable access to telehealth services.
- ▶ Projects will include the build-out of broadband infrastructure.
- ▶ Projects must show a collaborative partnership between the local governments and the broadband ISPs and describe sustainable measures to ensure current and future service needs are provided to residents, businesses and anchor institutions.
 - A key component of the application is the feedback provided by LTPTs that describes the consultations and collaborative relationship with the applicant.

- ▶ Eligible subrecipients: municipalities, county governments, nonprofits, or private entities (such as ISPs), cooperatives and electric utilities.



VIDEO: Florida Commerce's Technical Assistance Webinar for the MPCF Program

BEAD Program

The BEAD Program, part of the Infrastructure Investment and Jobs Act (IIJA), allocates at least \$100 million for states to expand broadband infrastructure and connectivity programs. The BEAD Program provides federal funds for grants to states to expand high-speed internet service access by funding planning, infrastructure deployment and adoption programs.

- ▶ The Office of Broadband submitted the *Prosperity Through a Connected Florida* project proposal in August 2022.

Prosperity Through a Connected Florida will identify Florida's broadband internet availability and affordability, incorporate the Florida Digital Adoption and Use Plan, Florida Strategic Plan for Broadband and serve as a benchmark for adopting strategies, goals and measures to successfully connect all Floridians.

- ▶ In November 2022, the **National Telecommunications and Information Administration (NTIA)** awarded the Office **\$5 million** for the Five-Year Action Plan.
- ▶ On June 26, 2023, the NTIA announced Florida's BEAD allocation: **\$1.17 billion**.
- ▶ **Municipalities should prepare for LTPT involvement and the plan's release later this year to be in a good posture to apply for the available funding. Joining an LTPT is a one-stop shop to identify areas of need, prepare your municipality to apply and become ingratiated with Florida Commerce's processes.**
- ▶ Period of Performance: All funds must be expended by December 2029.

Florida Commerce's July 2023 Virtual Workshop Presentation

Funding from the Digital Equity Act

The Digital Equity Act creates three sequenced programs to promote digital inclusion.

Digital Equity Planning Grant (DEPG)

- ▶ In November 2022, the Office of Broadband was **awarded \$2.4 million** by the NTIA to fund activities including:
 - Conducting a needs assessment
 - Creating a digital equity plan for Florida
 - Reaching out to underrepresented communities.

Digital equity: *The condition in which individuals and communities have the information technology capacity necessary for full participation in society and the economy within the state and strategies for overcoming them.*

- ▶ This funding provides the state with the resources to fully research and create a plan to reduce or eliminate these barriers through a data-driven [Florida Digital Adoption and Use Plan](#).
 - The Office of Broadband hosted six in-person meetings and three webinars to identify and address concerns related to broadband availability and accessibility.

State Digital Equity Capacity Grant Program

- ▶ \$1.44 billion in awards from NTIA to states over the next two years to implement their State Digital Equity Plans.
- ▶ **These funds are expected to be distributed to Florida Commerce in early fall 2024 but must be distributed before November 2024.**
- ▶ **Municipalities should be involved with their LTPT beforehand to ensure they have the best chance to receive funding by being equipped to apply once the capacity grant application window opens.**
- ▶ Funds awarded under this program can be used only for the following purposes:
 - To update or maintain the state's Digital Equity Plan (no more than 20% of the amount awarded)
 - To implement the state's Digital Equity Plan
 - To award sub-grants to "eligible entities" to assist in the implementation of the state's plan
 - To pursue digital inclusion activities in the state consistent with the plan
 - To report back to the state on related activities
 - To determine the efficacy of efforts (no more than 5% of awarded funds can be used).
- ▶ No more than 3% can be used for administrative purposes.

Digital Equity Competitive Grant Program

- ▶ \$1.25 billion in awards from NTIA to establish the Digital Equity Competitive Grant Program
- ▶ Funding is awarded no more than 30 days after capacity grant funding has been awarded
 - Cannot be later than December 2024.
- ▶ **These funds are expected to become available in fall 2024. Municipalities should be involved with their LTPT to ensure they are ready to apply to NTIA once the capacity grant application window opens.**
- ▶ Any of the following, if they are not serving/have not served, as administering entity under the state program are eligible:
 - A political subdivision, agency or instrumentality of a state, including an agency of a state that is responsible for administering or supervising adult education and literacy activities, or for providing public housing, in the state
 - Indian Tribe/Alaska Native entity/Native Hawaiian organization
 - A foundation, corporation, institution or association that is a not-for-profit and not a school
 - A community anchor institution
 - A local educational agency
 - The entity that carries out a workforce development program
 - A partnership between any of the entities described above. Any additional entities approved by NTIA.
- ▶ Eligible activities must support at least one of the following, to benefit covered populations:
 - Develop and implement digital inclusion activities
 - Facilitate broadband adoption to provide educational and employment opportunities
 - Implement training and/or other workforce development programs
 - Make equipment, instrumentation, networking capability, hardware and software, or digital network technology available at low/no cost
 - Construct, upgrade, expand or operate new or existing public access computing centers through CAIs (Community Anchor Institutions i.e., school, library, hospital)
 - Maximum 10% for administration; maximum federal share of any project is 90%; maximum 10% for evaluation.

Best Practices/ Success Stories

City of Winter Haven

The story of how the **City of Winter Haven** was able to put in place a fiber optic network is a culmination of collective effort, determined vision and leadership, and serendipity that stretched over 19 years.

1: IT Gets a Seat at the Table

In 2003, Winter Haven formed a Technology Services Department and hired an IT director. The information technology function was previously handled by the Data Processing unit under the Finance Department. With a seat at the executive table, the IT Director created the City's Information Technology Plan to serve as a roadmap for technology investment. The first strategy was to create a solid computing infrastructure, which included high-speed fiber optic connectivity.

2: Dig Once

Without a municipal electric utility, the City did not have the resources, knowledge or experience to build a fiber optic network. The Technology Services Department adopted an incremental approach to fiber optic



construction, known as "dig once," inspired by similar efforts and circumstances by the **City of Santa Monica, CA**. Fiber optic conduit was put in place in coordination with other capital projects, such as trail and utility projects, substantially reducing the cost of constructing the fiber network. The first dig once project was the 2004 revitalization and beautification of the City's downtown area. Underground fiber optic conduit was installed underneath brick pavers, connecting City facilities to a major fiber point-of-presence, or hub, in a data center in downtown Winter Haven. For 15 years thereafter, the city installed fiber conduit incrementally, as part of utility water line extensions, water line evacuations; sewer line replacements; recreation trail projects; a pedestrian bridge project, and transportation and road projects. Slowly, steadily, and with great persistence, the city built its all-underground fiber optic conduit network one project at a time. The large capital expenditures and political risk associated with fiber enterprises were mitigated by installing fiber conduit over an extended period.

3: Broadband Polk

In 2012, the City participated in the Broadband Polk Initiative, a countywide collaborative effort led by **Polk Vision** and the **Central Florida Regional Planning Council** (CFRPC) involving **Polk County** citizens, business leaders, civic organizations, nonprofits, educational institutions, economic development professionals and high-tech experts to create the Broadband Polk Plan. The plan's objective was to facilitate increased opportunity, innovation and efficiency by ensuring that every individual, corporation, nonprofit, visitor, government entity and community partner in Polk County has access to affordable high-speed internet service.

The Broadband Polk effort helped bring community awareness to the importance of broadband and its impact on education, governmental services, public safety, economic development and quality of life. In a 2015 study, the **Brookings Institute** ranked the Winter Haven-Lakeland Metropolitan Statistical Area (MSA) seventh from the bottom for broadband adoption. At the time, Winter Haven had used its fiber optic network for internal purposes and to connect City facilities. The Technology Services department began to explore the feasibility of making the fiber strands available to the community.

4: Broadband Study

In 2014, the City hired Magellan Advisors to perform a broadband study to examine organizational and community needs, business opportunities and models, and the financial feasibility of a broadband enterprise. Magellan identified the major opportunity for the City to adopt an open-access dark fiber community broadband business model. The open-access dark fiber model would open the City's fiber network for telecommunication service providers to service clients. This change allows providers to use dark fiber, or unused excess City fiber optic strands, to reach new customers without expending capital for infrastructure improvements. The City would collect revenue from service providers offering services on the City's fiber network.

5: Dark Fiber Enterprise

On December 28, 2015, the **Winter Haven City Commission** unanimously approved a dark fiber lease agreement with a local service provider to lease excess City-owned fiber optic strands. The City began its dark fiber enterprise and leased strands for \$1,050 per month, point-to-point, for each strand. Local public and private organizations can receive secure, all-underground, super-high-speed data communications, starting at 10 Gigabits with the capability of higher speeds, at affordable rates. By 2018, the City had 10 service orders for dark fiber to connect the local state college, four medical clinics, a law office, a charter school, a banking facility and a technology provider.

6: Dark Fiber Expansion

In December 2017, the City Commission unanimously approved the extension of a dark fiber lease agreement with the local service provider.

In January 2018, the City Commission approved funding for approximately 30 more miles of fiber conduit as part of a joint trench project with the **Florida Department of Transportation**.



Coils of fiber cable with 144 individual dark fiber strands.



Pulling fiber cable to the main data center in the heart of Winter Haven.

PHOTOS COURTESY OF CITY OF WINTER HAVEN



7: The Future

The City continues to smartly invest to expand its fiber footprint. The City signed a fiber conduit swap agreement with an ISP to swap 40 miles of fiber conduit, allowing both parties to extend fiber footprints without direct capital outlay.

Keys to Success

As part of the experience in building the City's fiber optic network, the Technology Services Department identified the keys to success:

- ▶ **Have a shared vision.** The importance of a fiber optic infrastructure was not only identified in the City's Information Technology Plan but was also part of the community vision and goals.
- ▶ **Have a smart plan.** Fiber optic conduit was installed along with key capital projects, but not all projects. The conduit was installed only when it made sense in a coordinated, methodical and purposeful fashion. Tools such as GIS maps were used to help visualize the important routes and destinations.
- ▶ **Find a champion.** To sustain the vision and plan over an extended time, a champion is needed. In Winter Haven's case, the IT Director served in this role.
- ▶ **Find friends to help you.** Fiber optic is a foundational infrastructure for government operations, economic development, education and public safety. There are many people in the community that share the same understanding and vision. From letters of support to fiber infrastructure planning and implementation, many City employees and community members gave their time and support.

City of Fort Pierce

FPUAnet Story: Timeline (Bode, 2022)

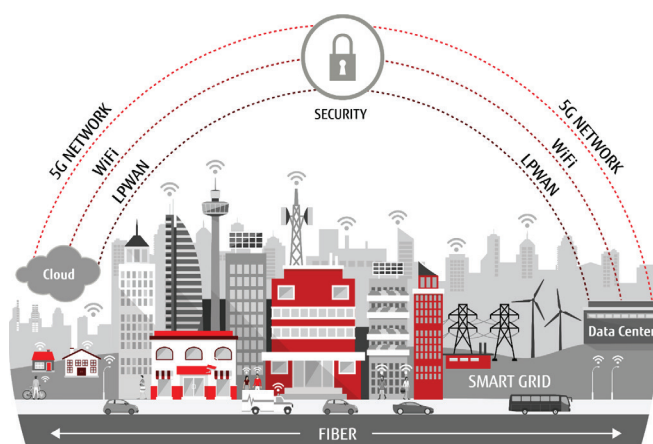
In 1972, the **City of Fort Pierce** created and made a utility authority a part of the government to be known and designated as **Fort Pierce Utilities Authority (FPUA)**. It is responsible for the development, production, purchase and distribution of electricity, gas, water, sanitary sewer collection and disposal, and such other utility services as may be designated by the City Commission.

FPUAnet is a local SMART City Internet Service Provider bringing fiber internet, smart city services and smart grid solutions to Fort Pierce. Since the early 2000s, FPUA has deployed 125 miles of optical fiber via its *FPUAnet Communications division*. Initially, the project focused on bringing ultra-fast broadband to large businesses, schools, hospitals and other community anchor institutions.

In 2018, the FPUAnet decided to expand its footprint to boost the local economy and transform the City of Fort Pierce into a SMART City. With a citywide fiber deployment, FPUAnet will promote the socioeconomic future of our community by attracting new industries, enabling telecommuting and increasing home values. Its fiber network will provide affordable, high-speed symmetrical broadband service to all residents and businesses.

FPUAnet

Improved Infrastructure
Efficient Public Utilities
Improved Transportation
Reduced Environmental Footprint
Safer Communities
Cost Savings
Economic Development



Increased Workforce Engagement
More Effective, Data-Driven Decision-Making
Enhanced Citizen and Government Engagement
Increased Digital Equity
Higher Quality of Life
Revenue Generation

GRAPHIC COURTESY OF THE CITY OF FORT PIERCE



GRAPHICS COURTESY OF CITY OF FORT PIERCE

Lincoln Park SMART Neighborhood

Lincoln Park neighborhood was targeted for revitalization and historically has the lowest broadband adoption tracks in **St. Lucie County**. This project is funded collaboratively by the City of Fort Pierce, St. Lucie County, **Allegany Franciscan Ministries** and FPUA.

- ▶ Fiber to every parcel
 - 470 services
- ▶ Public Wi-Fi in five locations



Downtown SMART City Initiative

- ▶ Fiber to every parcel
 - 400 services
- ▶ Public Wi-Fi
 - Three locations
- ▶ SMART Kiosks
 - (4) 65-inch double-screen kiosks

Community Outreach and Recognition

- ▶ Digital divide award
 - Broadband Communities Summit – Cornerstone Award
- ▶ Podcasts
 - Community Broadband (Jason Mittler, FPUAnet Manager, Fort Pierce Utilities Authority, and Javier Cisneros, P.E., Director of Utilities, Fort Pierce Utilities Authority)
 - Broadband Bunch (Jason Mittler and Rachel Tennant, Public Affairs and Sustainability Manager, Fort Pierce Utilities Authority)
- ▶ National articles
 - January 2, 2022. Fort Pierce, Florida Utility Aims To Deliver Affordable Fiber To All (Community Networks)
 - December 2021. Florida's Fort Pierce Utilities Authority Revitalizes Community With Fiber-Based Broadband (Broadband Communities).

What's Coming Next – Future (Five-Year Plan/ Digital Equity)

While maintainable, reliable adoption of broadband service is the long-term goal, in some areas of the state, the cost of providing service is too high to be completely covered by customer charges — at least in the short term. The state has developed funding mechanisms and a plan to consider federal funding streams to ensure that broadband services can be deployed in Florida communities. The state will consider other federal funds to support adoption and usage efforts and programs.

Each potential source of funding brings a set of guidelines that the Office of Broadband can use to create a robust program that interconnects separate funding sources to maximize the effectiveness of the whole. This effort should be done by leveraging each funding source into a primary focus and supporting activities. For example, the Capital Projects Fund may be best suited for projects directly strengthening the workforce by improving job training, community connectivity, and health and human services, while the BEAD Program may be better suited to fund planning, infrastructure deployment and adoption efforts.

The common denominator for every funding program is municipal involvement in their LTPTs. This is the one-stop shop for local governments. By simply joining an LTPT, cities will be brought up to speed with the development in their community, identify their individual unique needs and select funding opportunities they can pursue collaboratively with a provider – all while being backed by the support of the Office of Broadband.

Resources forthcoming to look out for:

- ▶ BEAD Five-Year Action Plan (Late 2023)
- ▶ Digital Equity Plan (October 2023)
- ▶ BOP Round Two Awards (January 2024)
 - Potential Round Three Application Window (Spring 2024)

Contact Information:

Florida Department of Commerce – Office of Broadband

Broadband@Commerce.FL.gov

850.717.8526

National Telecommunications & Information Administration – BroadbandUSA

BroadbandUSA@NTIA.gov

202.482.2048

For the most up-to-date information, visit the [FloridaCommerce website](#).

References

Bode, K. (2022, January 5). Fort Pierce, Florida Utility Aims To Deliver Affordable Fiber To All. Retrieved from CommunityNets.org: bit.ly/3L7HfZ5

Florida Association of Counties. (2023). Planning your Broadband Vision: From Feasibility to Future-Proofed. Retrieved from FAC Broadband Summit: bit.ly/3DXYOGO

Florida Department of Economic Opportunity. Local Technology Planning Teams. Retrieved from Florida Commerce: bit.ly/47Bi76f

Florida Department of Economic Opportunity. Local Technology Planning Teams – Broadband Planning Toolkit. bit.ly/3YE6NCK

NTIA - U.S. Department of Commerce. Community Connectivity Framework. Retrieved from National Transportation Information Administration. bit.ly/3YGtHJB

A special thanks to our contributors: FLC Legislative Coordinator Matt Singer, FLC Legislative Policy Analyst Michaela Metcalfe, our partners at Florida Commerce, and the Cities of Winter Haven and Fort Pierce.