Planning your Broadband Vision:



Eric Poole

Executive Director, ICG

MODERATOR





Director
Office of Broadband
Department of Economic Opportunity

The Florida Office of Broadband: Local Technology Planning Teams

Katie Smith, Director Florida Office of Broadband

01/26/2023



FLORIDA OFFICE OF BROADBAND

Established: July 1, 2020, at the Florida Department of Economic Opportunity

Statutory Authority: Sections 288.9961, 288.9962, and 288.9963, Florida Statutes.

The Office of Broadband is responsible for:

- Developing, marketing, and promoting broadband Internet services in the state.
- Creating a strategic plan to increase the use of broadband Internet services in the state.
- Reviewing and verifying public input regarding transmission speeds and availability of broadband Internet services throughout the state.
- Building and facilitating Local Technology Planning Teams (LTPT) or partnerships.
- Participating in the Federal Communications Commission (FCC) proceedings that are related to the geographic availability and deployment of broadband Internet in Florida.
- Establishing the Broadband Opportunity Program and rulemaking for the program to award grants to applicants
 who seek to expand broadband to unserved areas.
- Developing a map of broadband Internet service availability throughout the state.

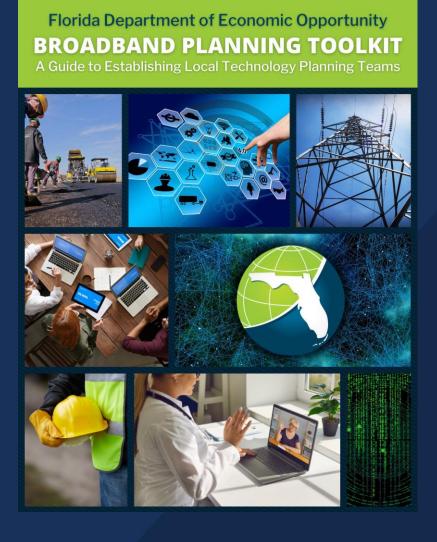
LOCAL TECHNOLOGY PLANNING TEAMS

Section 288.9961(4)(b), F.S., directs the Office of Broadband to build and facilitate Local Technology Planning Teams, which shall work with 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.

*The teams or partnerships must be proactive in fiscally constrained counties with identifying grant opportunities and applying for federal grants for broadband internet service.

LOCAL TECHNOLOGY PLANNING TEAMS TOOLKIT



Facilitating Agency

Department of Economic Opportunity

Implementation Level

County, Region, or DEO Approved Partnerships

Authorized Establishing Parties

County Administrator, County Manager, or a Designee

Number of Members

At least one representative from each industry sector listed in section 288.9961, Florida Statutes

Direct Contact and Technical Assistance

Florida Office of Broadband

LOCAL TECHNOLOGY PLANNING TEAMS TOOLKIT



















Facilitating Agency

Department of Economic Opportunity

Implementation Level

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County Administrator, County Manager, or a Designee

Number of Members

At least one representative from each industry sector listed in section 288.9961, Florida Statutes

Direct Contact and Technical Assistance

Florida Office of Broadband

TECHNICAL ASSISTANCE

Broadband Planning Toolkit

The Broadband Planning Toolkit was developed by the Office to assist rural and urban communities with:

- Establishing Local Technology Planning Teams;
- Identifying the availability and accessibility of broadband internet services in each county/region;
- Creating an inventory of assets that can be used in the expansion of broadband services;
- Hosting community meetings;
- Addressing digital literacy and inclusion;
- Engaging community stakeholders and local internet service providers; and
- Developing and executing broadband solutions.

External Broadband Presentations

The Florida Office of Broadband provides technical assistance to communities and organizations throughout the state, presenting on broadband expansion, federal and state funding opportunities, and broadband initiatives.

COMMUNITY ENGAGEMENT

Importance of Community Engagement

Each federal funding opportunity requires local, community engagement. These funding opportunities include:

- Broadband Opportunity Program;
- Capital Projects Fund;
- Digital connectivity and inclusion Programs; and
- Broadband Equity, Access, and Deployment.

LINKS TO IMPORTANT RESOURCES

The Florida Office of Broadband website (<u>www.FloridaJobs.org/Broadband</u>) hosts the following resources:

- The Florida Strategic Plan for Broadband.
- The Faster Florida Broadband Map.
- Florida's Broadband Availability Map and Internet Speed Test.
- Local Technology Planning Teams Broadband Planning Toolkit.
- State and federal broadband funding opportunities.

Link to Strategic Plan

• https://FloridaJobs.org/docs/default-source/Community-Planning-Development

Link to Florida Statute 2288.9961, Promotion of broadband adoption; Florida Office of Broadband

https://www.flsenate.gov/laws/statutes/2021/288.9961

Link to the Local Technology Planning Team Page

• https://FloridaJobs.org/Community-Planning-and-Development/Broadband/Office-of-Broadband/Itpt

Thank You



If you have questions about this presentation or need to discuss a future project, please contact our office.

www.FloridaJobs.org/Broadband



Katie Smith, Director Office of Broadband

Email: Broadband@DEO.MyFlorida.com







JOE CARELLA

Director of Grants, PMP



BROADBAND



JAN 26-27, 2023 SAWGRASS MARRIOTT ST. JOHNS COUNTY







"P4": Planning and Public/Private Partnerships



Proven Process. Proven Results.

Over 400 co-operatives, municipalities, and broadband providers and municipalities rely on Magellan to develop their strategies, and their fiber and broadband networks.

- Purpose-built to support economic development, education, healthcare, smart city, and the "internet of things".
- Custom-designed fiber & broadband networks to achieve each community's unique goals.
- Customized financial and operational strategies.



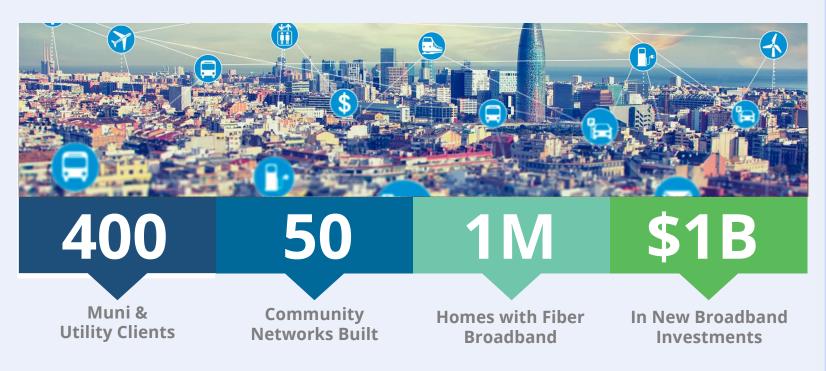
About Magellan







Overview



In just last six months, an additional \$115 million raised!



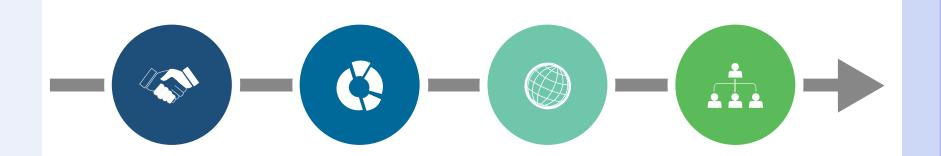
About Magellan







Planning, Engineering, Implementation & Funding



Broadband Planning

- Feasibility Studies
- Market Assessments
- Business Plans
- Financial Plans
- Roadmaps

Design & Engineering

- Fiber To The Premise
- Backbone Fiber
- Electronics
- 4G/5G
- Rapid Design

Turnkey Implementation

- Procurement
- Project Management
- Construction Mgmt.
- Inspections
- Launch
- Operations

Funding & Grants

- Over \$400M Awarded
- Funding Strategy
- Grant Writing
- Compliance & Ongoing Oversight



Turnkey Broadband Development



Section 288.9961(4)(b), Florida Statutes, directs the (DEO) Office of Broadband to build and facilitate local technology planning teams (LTPT) representing crosssections of the community.

County-LTPT Goals, as suggested by DEO:

- a. Work with rural communities help understand current broadband availability;
- b. Locate unserved households and underserved residents and businesses;
- c. Identify assets pertinent to broadband deployment;
- **d. Build PARTNERSHIPS -** with broadband service providers and local domain experts;
- **e. Identify opportunities** to **leverage assets** and **reduce barriers** accelerate deployment of broadband internet services in the community; and
- **f. Identify funding opportunities** provide support in applying for federal and state grant which enable broadband infrastructure deployment.



Local Technology Planning Teams (LTPT)

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Florida Statewide Grant Programs – Sourced from Federal Awards

- a. American Rescue Plan Act (ARPA) Fiscal Recovery Funds (FRF) \$400 million.
 - a. Partial Florida FRF allocated to DEO Broadband Opportunity Program (BOP)
 - b. Application window closed December 9, 2022.
 - c. Public challenge window to close January 28, 2023.
 - d. Awards expected in February / March. (DEO governs, of course.)

b. ARPA - Capital Projects Fund (CPF) - \$366 million.

- a. Florida FRF allocated to DEO Capital Projects Fund Program (CPF).
- b. Application window expected to open shortly. (Perhaps after BOP awards?)
- c. Application window closing and challenge window dates, and awards per DEO.

c. NTIA – Broadband Equity, Access, and Deployment (BEAD) – Amount TBD.

- a. Florida DEO Developing Five-Year Statewide Plan to address all unserved households.
- b. Florida DEO to Develop Initial Proposal to address unserved households in State, including YOUR County!

d. NTIA - Digital Equity Act (DEA) - Amount TBD.

a. Florida DEO Developing Statewide Plan to address digital equity.



#Access67

Florida Funding Sources

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BEAD Program - \$42.45 billion for broadband infrastructure planning and implementation. Focus on **UNSERVED locations** (those that lack 25/3 Mbps fixed terrestrial service).

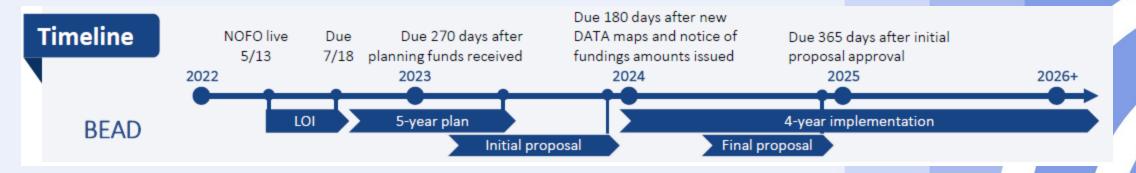
- Planning for deployment of Internet
- 2. Deploying or upgrading Internet
- 3. Installing Internet in multi-tenant buildings
- 4. Implementing adoption and digital equity programs
- 5. Workforce and job training.

Florida awarded its BEAD Planning funds on November 29, 2022.

NTIA's Plan for BEAD Allocation to States (based on FCC maps):

- 1. Minimum allocation, per IIJA Statute (P.L. 117-58, or "BIL").
- 2. PLUS proportion of high-cost unserved locations in state out of high-cost unserved locations nationwide (10% reserve).
- 3. PLUS proportion of unserved location in state out of unserved locations nationwide.

NTIA's
Broadband
Equity, Access
and Deployment
Program (BEAD)





FLORIDA ASSOCIATION OF COUNTIES #Access67

What Can Your County Do to Prepare Now?

- Develop a high-level approach. Prioritize and rank what is most important to you:
 - What role(s) should your County play?
 - Identify your assets including rights of way, utility poles, accelerated permitting, etc. **Preparations**
 - Identify available funding Internal? External? Possible grants?
 - Do you want to seek grant funding for infrastructure?
- Actively participate in your County's Local Technology Planning Team (LTPT) meetings.
 - Meet regularly!
- **Identify potential partners**: ISPs, fiber and fixed wireless technology firms.
- Outreach efforts to encourage your residents to take DEO survey.
- Outreach efforts to encourage your residents to take DEO speed test.
- Examine the FCC and DEO maps for unserved areas.
 - Do you have unserved locations? How many?
 - Actively submit location ("fabric") changes to FCC maps, to DEO maps.
- As a government, your County can continually submit new locations to FCC map and challenge availability reported by ISPs.
- Determine if any County FRF funds remain uncommitted.

County Preparations

(Now)



What Can Your County Do to Prepare Next?

- Your County has some time, but must move soon with deliberate speed on planning.
- Create a broadband technical strategy and/or feasibility plan.
- Create a broadband funding strategy.
- Identify potential providers as partners.
- Identify areas of need, working with providers.
- Start design and engineering work to be ready for grant programs.
- These require some investment but with possibility of improved access and great return.



County Preparations

(Very soon)

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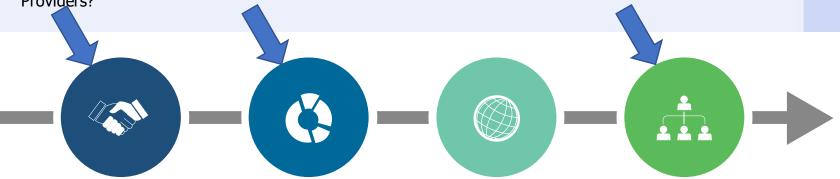


Where is YOUR County? How Can Magellan Help?

Starting with feasibility study & grant strategy? Working with Providers?

Starting with broadband network design, including fiber & wireless?

Starting with grant funding applications, to support design &/or implementation?



Broadband Planning

Design & Engineering

Turnkey Implementation Funding & Grants

- Feasibility Studies
- Market Assessments
- Business Plans
- Financial Plans
- Roadmaps

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- Over \$400M Awarded
- Funding Strategy
- Grant Writing
- Compliance & Ongoing Oversight



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Relationship Entry Points.

Where might Magellan meet to support your County?



Joseph Carella
Director of Grants, PMP

Thank You!



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Questions?

Contact Info?

Senior Planner
FSU Department of Urban
and Regional Planning









Deputy Director

Apalachee Regional Planning Council





BROADBAND



JAN 26-27, 2023 SAWGRASS MARRIOTT ST. JOHNS COUNTY



Planning your **Broadband Vision:** From Feasibility to Future-Proofed

Introduction



Kwentin Eastberg, AICP Apalachee Regional Planning Council



Billie Ventimiglia, MSP FSU Dept. Urban & Regional Planning



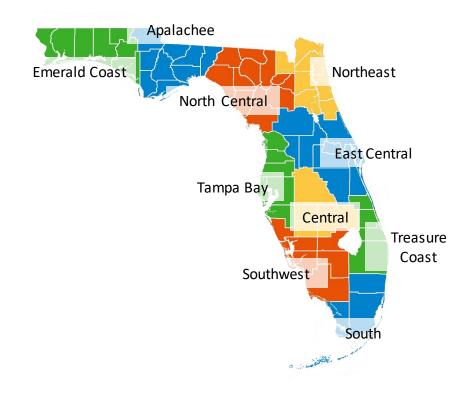
Context

Who are we, and what do we do?



Florida Regional Councils Association FRCA

FRCA is an alliance of Florida's 10 **Regional Planning** Councils (RPCs) and serves to enhance regional prosperity throughout the state. RPCs are multipurpose entities that partner with local governments, as well as state and federal agencies, to solve problems at the regional level and help communities grow.





Florida Regional Councils Association FRCA

5 Primary Focus Areas

- \$ Economic Development
 - Transportation
 - Emergency Preparedness
 - Resiliency
- Regional Conveners



Apalachee Regional Planning Council – ARPC

- Provides technical assistance to member local governments
- Serves as a regional convener
- View ourselves as an extension of county staff



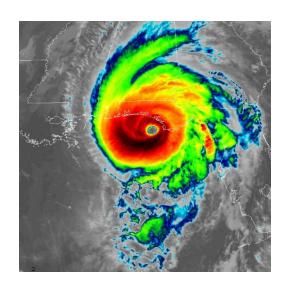


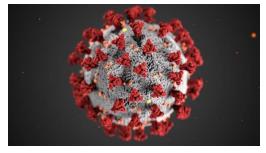
Regional Background

- 2018 Hurricane Michael
 - \$1.3B Timber Lost



• 2022 – Wildfires









Importance Of Broadband

Government Services

Makes services readily available to residents

Telehealth

 Improves healthcare outcomes and extends reach of service

Education

 Allows opportunity for distance learning

Public safety

 Increases emergency services response time and connectivity

Economic

Development

- Aids local businesses with productivity
- Allows for remote work for employees





Context Continued...



- Rural counties are currently experiencing significant disparities in broadband provision compared to more urban counties.
- The quality and availability of broadband service creates a service gap in rural counties.
- Broadband is not considered a public utility, there is not a requirement for universal provision.
- There are significant barriers to establishing municipal broadband throughout the state.



Technical Assistance & Partnerships

Counties began identifying access to affordable high-speed broadband as a NEED for residents and businesses.

DEO Rural Infrastructure Fund

Liberty & Wakulla Counties

Apalachee Regional Planning Council

FSU Department of Urban and Regional Planning

Broadband Feasibility Study – Implementation Plan



Florida State University





Barnebey Planning & Development Lab



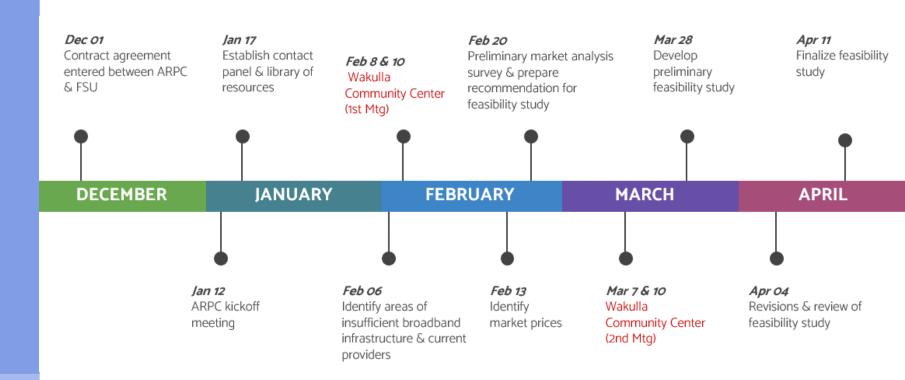
Partnerships Continued...

- ARPC partnered with FSU/Barnebey Lab
 - Provided 8+ months of assistance across 2 semesters
- Worked in both Liberty and Wakulla Counties
 - Data Collection / Surveying
 - Public Meetings
 - Market Analysis
 - Feasibility Studies
 - Story Maps
 - Implementation Plan



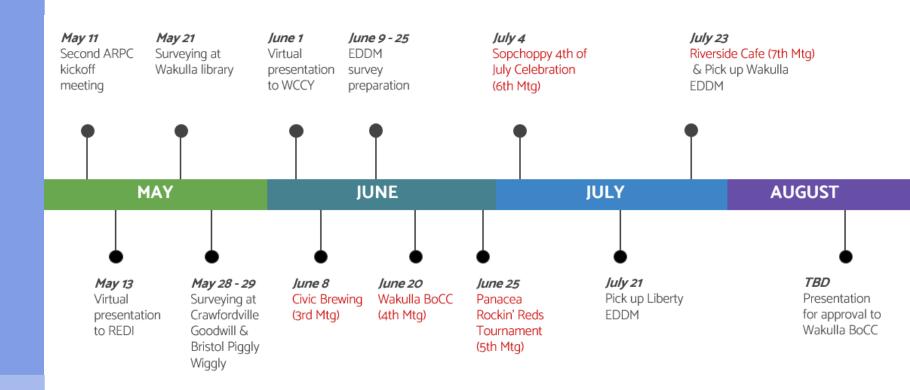
Project Timeline Dec 2021 To Aug 2022

Using Wakulla County as the example





Project Timeline Dec 2021 To Aug 2022





Digital Divide In Florida

Location	Percent of Households with Broadband Subscription	Percent of Households with income < \$35,000 with Broadband Subscription	Percent of Non-white Households with Broadband Subscription	Percent of Age 65 & over Households with Broadband Subscription
Florida	83%	67%	83%	78%
Wakulla	79%	66%	64%	76%



Community Outreach & Innovative

Strategies

Wakulla Meetings:

- 1. Wakulla Community Center
- 2. Wakulla Community Center
- 3. Civic Brewing
- 4. Wakulla BoCC
- 5. Panacea Rockin' Reds Tournament
- 6. Sopchoppy 4th of July Celebration
- 7. Riverside Cafe
- 8. Wakulla BoCC approval





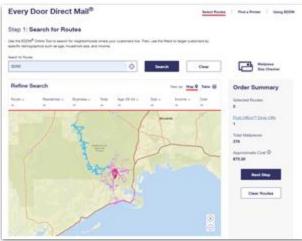


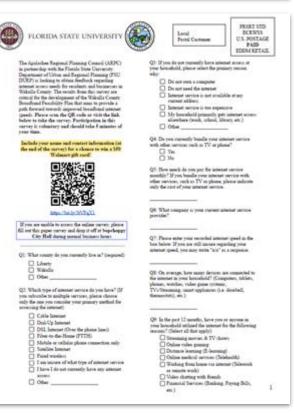
Community Outreach

Innovative Strategies

Every Door Direct Mail (EDDM)

- USPS direct mail program
- Cost effective alternative to traditional postage
- Targeted most rural areas
- Raffle incentive
- Coordinated with local governments and businesses for drop-off locations
- Mail routes and PO boxes
 - o 683 surveys delivered



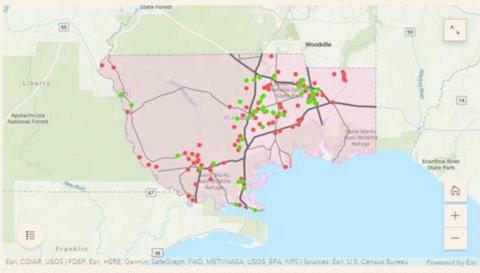




Story Map

Background & Overview Public Outreach Broadband Feasibility Report Broadband Alternatives Results of Survey Questions Survey Link Resources

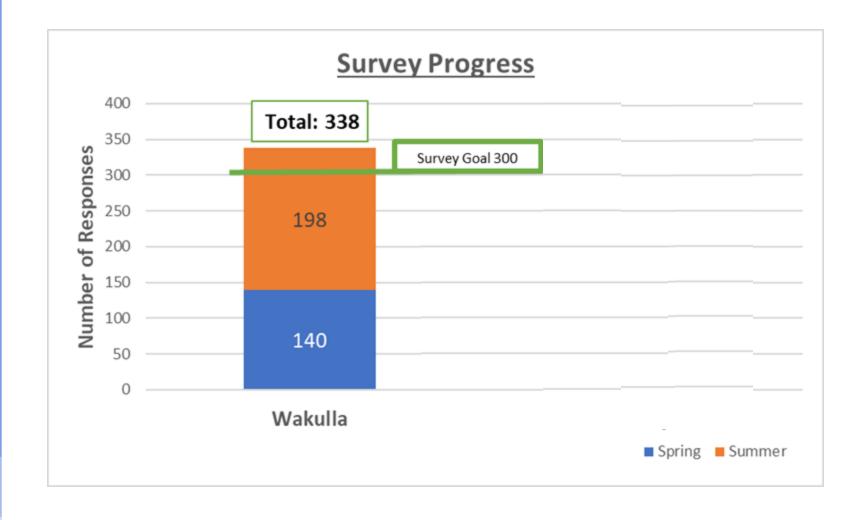
Most survey respondents reported being dissatisfied with their internet quality. Sixty-one percent of Wakulla residents surveyed stated being unsatisfied, with Liberty residents stating a an even larger 75 percent.



The map above plots the Wakulla County survey responses from the pie chart above, so we can get an idea of how the internet quality is across the county. Repondents who answered "Yes" are shown in green and "No" in red.



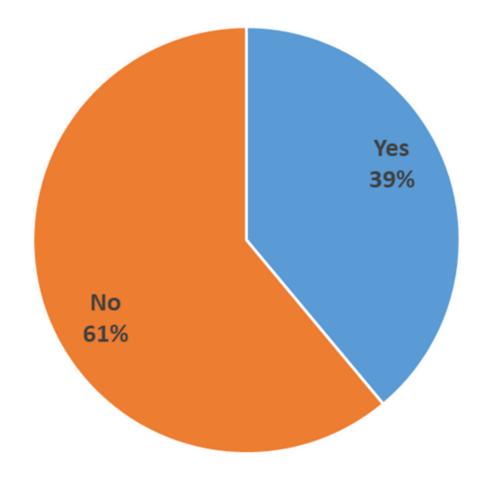
Findings





Findings

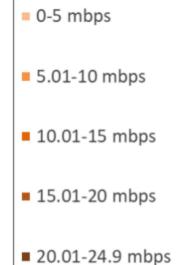
Does your current internet service meet your needs?





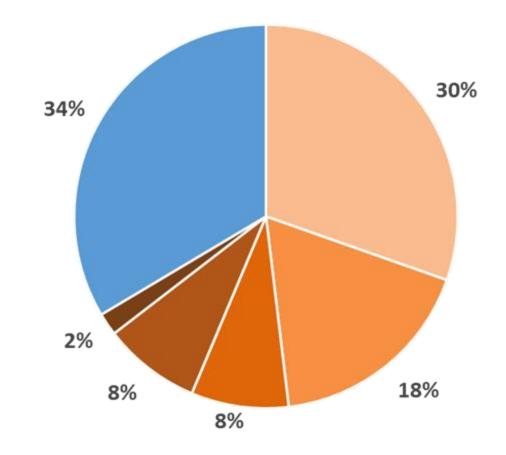
Findings

Current Internet Speed



■ 25 mbps or

greater





Alternatives



Administrative Approach

Public Sector

Local government would be responsible for all infrastructure, implementation, and subscription services, and customers would pay the city directly.

Strengths

- Costs are often subsidized for consumer
- Potentially more equitable options
- Acts as a safety-net
- More public input

Weaknesses

- Slower implementation
- More costs for government
- Bound by legislation

Private Sector

Private corporation would be responsible for all infrastructure, implementation, and subscription services, and customers would pay corporation directly.

Strengths

- More potential capital to work with
- Potentially faster completion
- More market competition
- Less bound by legislation
- Take on any risks and debt

Weaknesses

- Less equitable
- Status quo
- More costs for consumer
- Needs ROI

Public-Private Partnership (PPP)

Collaboration between governments and private entities where private capital is used to stimulate public projects before drawing upon taxes to cover costs.

Strengths

- Combines public and private resources for more overall support
- Faster project completions and reduced delays
- Draws upon expertise of private company
- Reduced policy barriers for private company

Weaknesses

- May incur greater costs for government in long run
- Possible tax increases to cover project
- Limits market competition
- Public reliance on private company



Implementation Strategies

Anchor Points \$

Installation and use of fiber infrastructure connected to public locations throughout the county to create "anchor points".

Strengths

- Provides potentially free internet for residents at public locations
- Already partially available (libraries, schools, etc.)
- Realistic and feasible as costs and infrastructure not as significant as compared to other alternatives

Hybrid Fiber \$\$

Able to address internet coverage issues by pairing together existing fiber infrastructure with new fixed wireless tow installations.

Strengths

- Can offer up to a 10-mile radius signal
- Alleviates the need to run in-ground infrastructure to each resident
- Activates current "dark fiber" networks

Fiber – to – Home \$\$\$

The installation and use of optical fiber from a central point directly to residential addresses and private businesses to provide high-speed internet access.

Strengths

- Fastest and most reliable option
- Allows for market competition
- Grant options
- Favorable policies ("Digonce Policy")

Weaknesses

- Requires travel to site
- Internet services restricted to operating hours of site
- Not personable/lack of customizable technology
- Security risks due to public access

Weaknesses

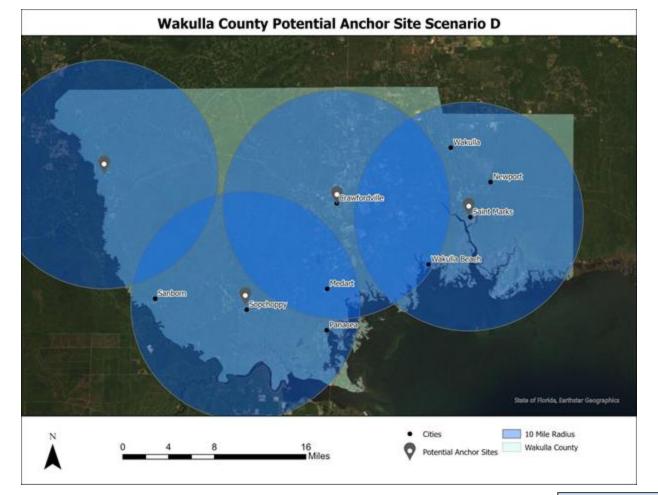
- Signal quality degrades the further away from the signal origin
- Weather can negatively impact signals
- New towers typically cost \$175,000

Weaknesses

- Most expensive option (fiber typically costs \$74,000 per mile)
- Costs based on usability of current lines and/or require newly constructed lines
- Need ROI so costs may be higher for consumer



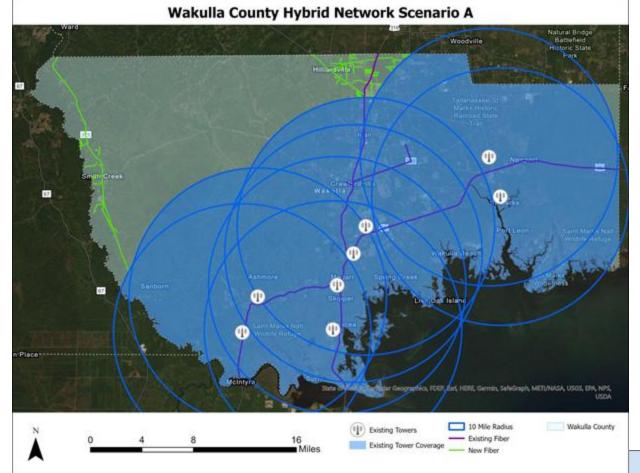
Anchor Points Example



Anchor Points D		
Cost Formula	\$112,000 per anchor point site	
Anchor Points to be Implemented	4	
Total Cost Estimate	\$448,000	
Percent of Population Covered	93%	



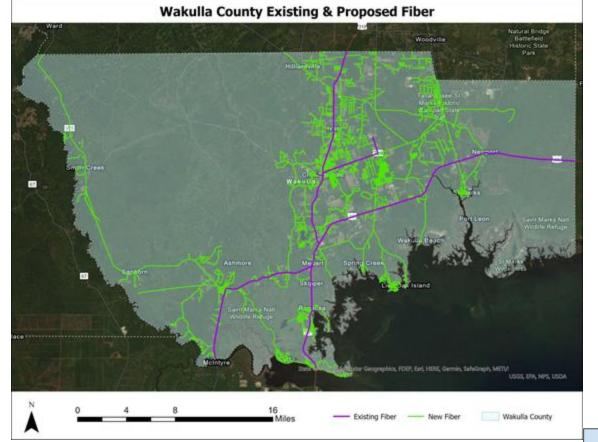
Hybrid Model Example



Hybrid Network A				
Cost Formula	\$175,000 per tower + \$74,000 per mile of fiber + \$600 per home			
Existing Infrastructure	10 towers, 64 miles of fiber			
Additional Infrastructure Needed	0 towers, 58 miles of fiber			
Total Cost Estimate	\$5.1 million			
Percent of Population Covered	100%			



Hybrid Model Example



Fiber-to-Home				
Cost Formula	\$74,000 per mile of fiber + \$600 per home			
Existing Infrastructure	64 miles of fiber			
Additional Infrastructure Needed	671 miles of fiber			
Total Cost Estimate	\$58 million			
Percent of Population Covered	100%			



Deliverables



Feasibility Report

Chapter 1: Introduction

- Project Background
- Executive Summary

Chapter 2: Barriers and Limitations

- Time
- Funding
- Government Regulations
- Provider Willingness
- Insufficient Data

Chapter 3: Community Survey & Outreach

- Survey Methodology
- Public Workshops
- Final Surveys & Outreach Results
- Survey Limitations and Future Opportunities





Feasibility Report

Chapter 4: Broadband Alternatives

- Administrative Approaches
- Implementation Strategies

Chapter 5: Cost Estimates

Implementation strategy cost scenarios & estimates

Chapter 6: Next Steps

- Approval
- Implementation
- Conclusion

Chapter 7: Appendices

 Supporting maps, outreach materials, and references





Lessons Learned





Lessons Learned

- Full broadband provision in Rural counties is a priority, however there are significant barriers.
- Internet should be considered a public utility.
- Funding is coming, but slowly and rural counties are struggling in the meantime. However, counties need to position themselves in a way to leverage funds when they become available.
- The heavy reliance on internet technologies during the height of COVID-19 and since then has underscored this divide.



Planning your Broadband Vision: FROM FERSIBILITY TO FUTURE PROOFED_

Please use the microphones in the audience! State your name and organization.



COCKTAILS & CONNECTIONS

Reception

5:00 PM - 6:00 PM