

# **BROADBAND FEASIBILITY STUDY**

**Presentation to Board of County Commissioners January 14, 2021** 



### Finding of the Feasibility Study

- 1. The study demonstrates demand for high-speed internet
- 2. The study demonstrates and confirms areas with under and unserved residents
- 3. The county desires to serve the needs of these under and unserved residents
- 4. The study identified about 3,000 under and unserved residents
- 5. The county desires to both retain and expand business and economic development opportunities
- 6. The county desires to reduce operating cost and enhance services for its residents and businesses



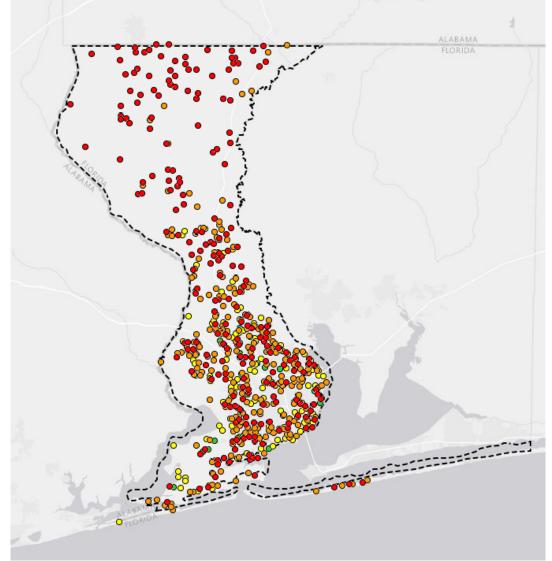
Magellan



## ESCAMBIA COUNTY BROADBAND STUDY

#### **Survey Overview – Survey Locations & Speeds**

- Less than 25
- 25 to less than 100
- 100 to less than 400
- 400 or more





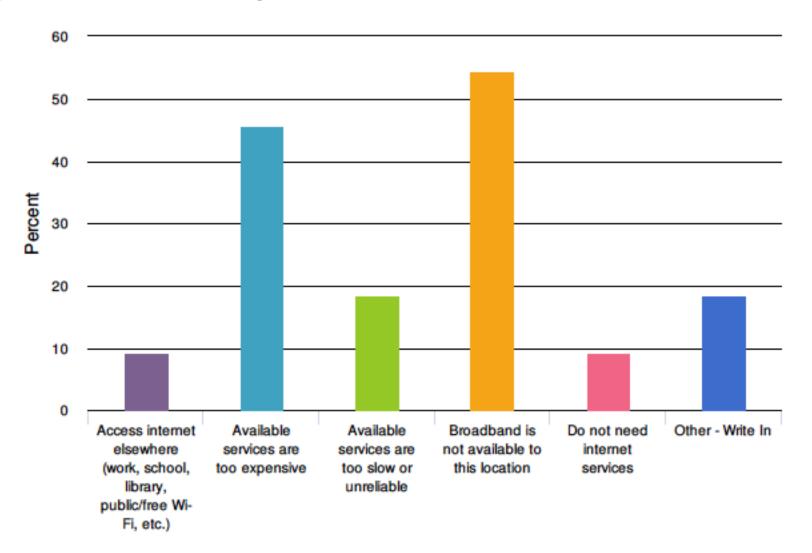
### ESCAMBIA COUNTY BROADBAND STUDY

#### **Survey Overview – Internet Access/ Essential Service**

- 1. 92% of locations surveyed have internet access
- 2. 93% of those respondents believe Internet is an essential service like water and electric.
- 3. 8 10% of respondents DO NOT have Internet access



#### **Survey Overview – Why No Internet**





### ESCAMBIA COUNTY BROADBAND STUDY

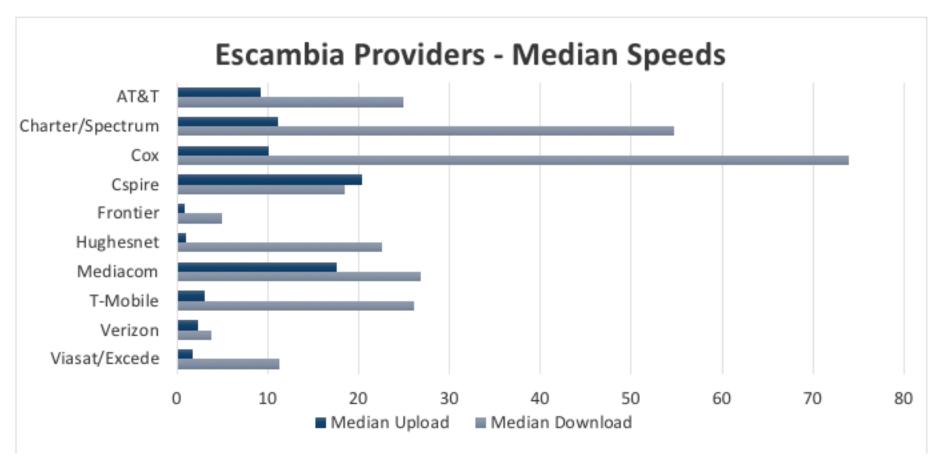
#### **Survey Overview – Providers**

Value	Percent
Cox	43.6%
AT&T	19.2%
Charter/Spectrum	18.7%
Frontier	9.6%
Excede/Viasat	4%
Mediacom	1.4%
HughesNet	1.3%
Other	1.1%



### **ESCAMBIA COUNTY BROADBAND STUDY**

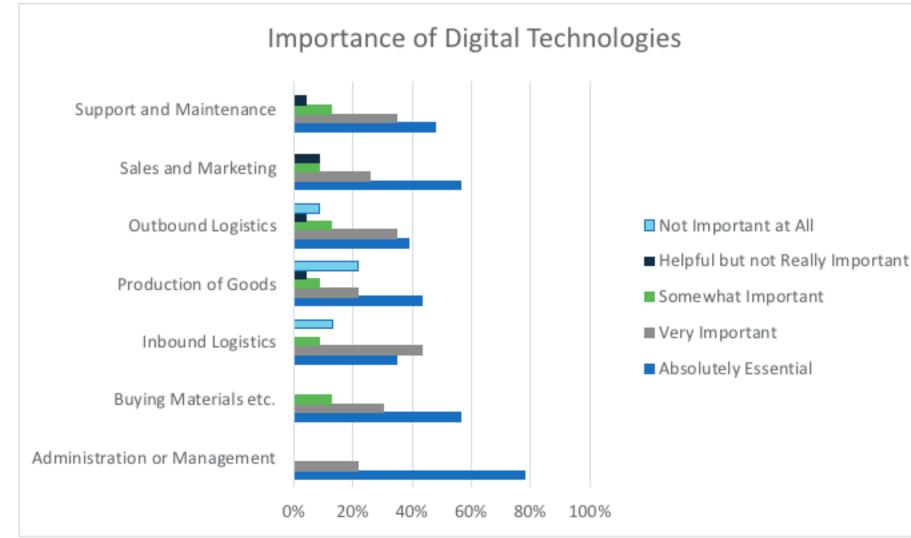
#### **Survey Overview – Median Speeds**





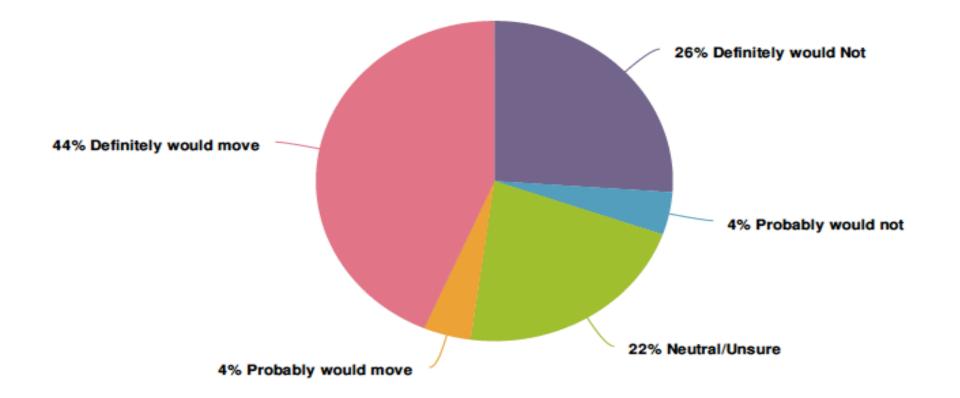
### **ESCAMBIA COUNTY BROADBAND STUDY**

#### **Survey Overview – Business Needs for Digital Technologies**



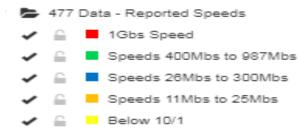


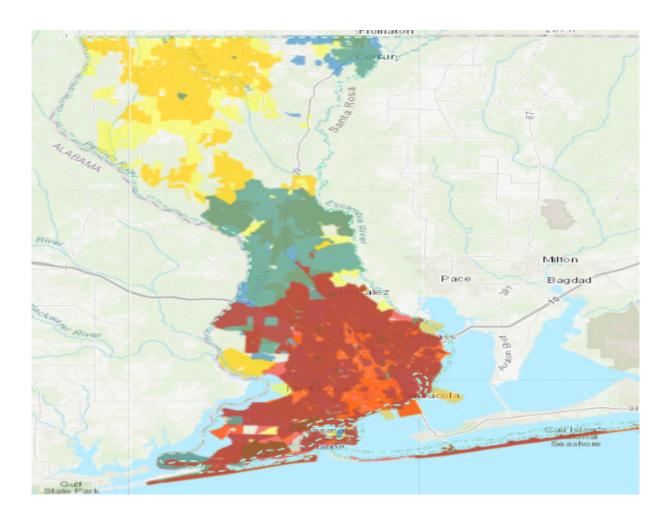
**Survey Overview** – If your organization were able to get much faster and less <sup>9</sup> expensive internet services elsewhere with comparable business characteristics, how likely would it be to move from your current location?





#### 477 Map

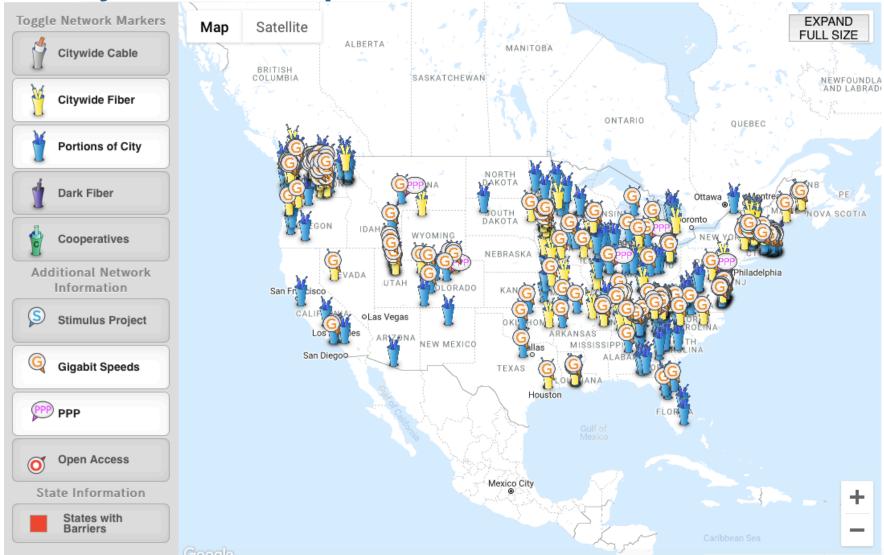






### **ESCAMBIA COUNTY BROADBAND STUDY**

#### Community Network Map: More than 560 are served by some form of municipal network (updated January, 2020):





#### What are the benefits to residents

1 Gigabit & 150 Megabit Internet for 3,000 Underserved Residents and Businesses

Symmetrical Service County & Businesses – Same Upload & Download

Locally Owned and Operated – Speeds from 1Gig to 10 GIG

Fully Redundant System with 99.999% uptime. No Throttling or Data Caps

Dollars Stay Local, Reinvested in Community



## ESCAMBIA COUNTY BROADBAND STUDY

#### What are the benefits to the greater community

Economic Development – retain and grow businesses	
Education – Provide futureproofed connectivity to all students/schools	
Healthcare – Support telehealth needs of residents and providers	
County Agencies – Support future capabilities and reduce operating costs	
Self-Determination – Control over the future of Escambia's connectedness	5



#### **Conceptual Network Map**

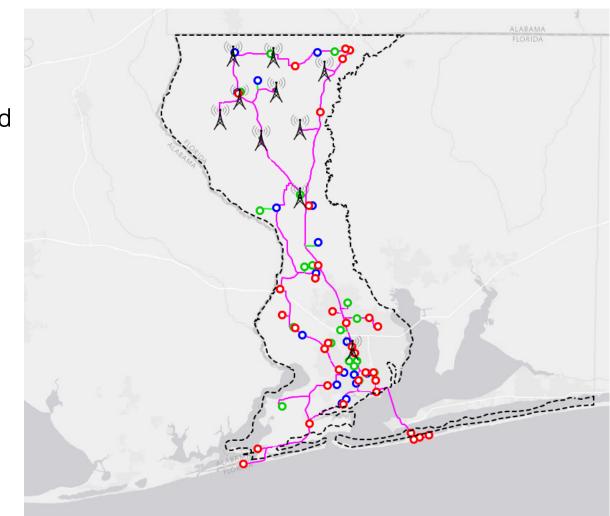
#### Phase 1A:

Fiber Backbone Wireless to 3000 Underserved Residents

Phase 1B:
County Facilities
Community Centers
County Parks

#### Phase 2:

Fiber to 700 + Businesses off the Backbone





### **Financial Feasibility Assumptions**

Item	<b>Expected Results</b>
Residential Take Rate Wireless-Northern part of the county	60%
Business Take Rate for limited network availability	50%
Residential wireless customers within 2 years of launch	1840
Business Customers within 3 years of launch	700
Retail Residential Speeds	150/50Mbps
Business Speeds	500 to 1,000Mbps (Symmetrical)
Connect 76 county facilities circuit cost savings 20 years 1Gig-10Gig speeds	\$9.2M
Cash Balance at Year 20	\$12.2M



#### **Financial Overview- Phase 1A**

Financial Overview Phase 1A Fiber Backbone and Providing Fixed Wireless Internet to 3,000 Underserved Residential Locations

	UNDERGROUND	AERIAL
Premises Served	3,068	3,068
Premises	1,840	1,840
Connected		
Fiber Mileage	93.20	93.20
Retail Price	\$79.00	\$79.00
Speed	150/50Mbps	150/50Mbps
TOTAL Cap- Ex	\$11,655,085.00	\$5,859,685.00
Personnel	4	4
TOTAL Op-Ex	\$557,220.00	\$661,720.00
-		

Year 3.5	
0.00 \$9,423,583.00	)
	Year 3.5 0.00 \$9,423,583.00



### ESCAMBIA COUNTY BROADBAND STUDY

#### **Financial Overview- Phase 1B**

Financial Overview Phase 1B Connecting All County Facilities, Community Centers and County Parks

	UNDERGROUND	AERIAL
County Sites	79	79
Fiber Mileage	62	62
Speed	1-10 Gig	1-10 Gig
TOTAL Cap- Ex	\$7,137,000.00	\$3,206,995.00
Personnel	1	1
TOTAL Op-Ex	\$110,780.00	\$224,000.00
<b>Circuit Cost Savings</b>	\$9,155,000	\$9,155,000
20 Years		
PRO FORMA		
20 YEAR CASH BALANCE	<b>\$(2,397,402.00)</b>	\$347,815.00



### **ESCAMBIA COUNTY BROADBAND STUDY**

#### **Financial Overview- Phase 2**

Phase 2 Enterprise Customer Connections – 1,500 businesses passed, 700 Businesses connected to fiber within 500' of the fiber backbone.

	UNDERGROUND	AERIAL
Businesses	700	700
Connected		
Fiber Mileage	30	30
Speed	1Gig /1Gig	1Gig/1Gig
Avg. Retail Price	\$125	\$125
TOTAL Cap- Ex	\$4,098,562.00	\$1,942,738.00
Personnel	2	2
TOTAL Op-Ex	\$312,000.00	\$316,000.00
PRO FORMA		
Positive Cash Flow	Year 4	Year 4
20 YEAR CASH	\$9,870,600.00	\$11,450,620.00
BALANCE		



#### **Financial Overview- Cumulative Financials**

Financial Overview – Cumulative Financials All PHASES

	UNDERGROUND	AERIAL	
Premises Served	3,028	3,028	
Premises Connected	1,840	1,840	
Businesses Served	1,600	1,600	
Businesses Connected	700	700	
Fiber Mileage	185.20	185.20	
Personnel	7	7	
TOTAL Cap- Ex	\$22,828,847.00	\$11,009,400.00	
TOTAL Op-Ex	\$935,220.00	\$316,000.00	
PRO FORMA			
Positive Cash Flow	3.5	3.5	
20 YEAR CASH BALANCE	\$12,223,198.00	\$22,539,058.00	



### ESCAMBIA COUNTY BROADBAND STUDY Next Steps





### BROADBAND FEASIBILITY STUDY Questions?



