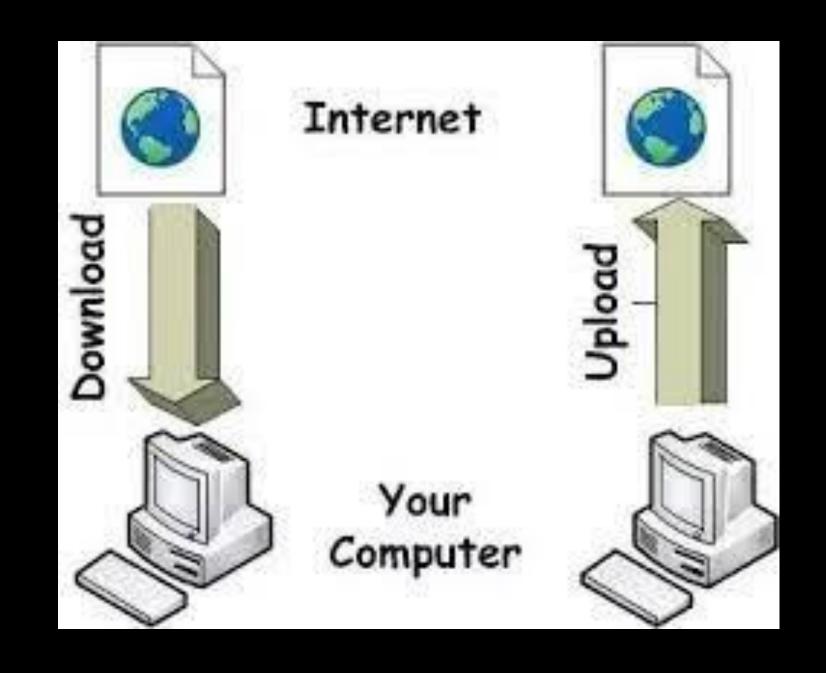
# BROADBAND STUDY

St. Clair County
Project Kick-off Meeting
January 18, 2022



# DEFINITION OF "BROADBAND"

According to the Alabama Broadband Accessibility Act, the Alabama Legislature found that a preferred internet download speed of 25 megabits per second (Mbps) and upload speed of 3 Mbps, or greater, is important for economic development, education, health care, and emergency services. The Act set these as minimum thresholds for an internet service to be deemed "broadband".



### FEASIBILITY STUDY

Broadband data is collected by Sain Associates, and they create a Broadband Feasibility Study.

#### Objectives of the Study:

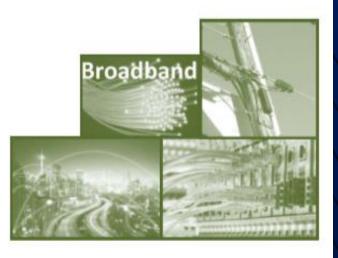
- 1. Define clear broadband coverage goals and benchmarks.
- 2. Document existing broadband infrastructure and coverage areas.
- 3. Develop a plan for addressing gaps in broadband service.
- 4. Develop short and long-term recommendations.
- 5. Compile information needed to apply for grant and/or other funding.

Broadband Feasibility Study Elmore County, Alabama

PREPARED FOR: Elmore County

PREPARED BY: Sain Associates, Inc.
Sain Project #: 18-0290

November 18, 2019











## POTENTIAL STAKEHOLDERS

Who does this study potentially benefit?

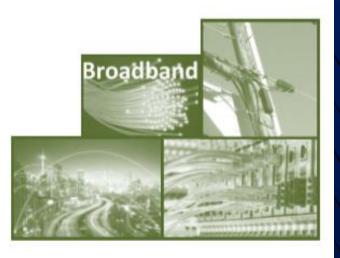
- St. Clair County businesses and residences
- St. Clair County municipalities
- St. Clair County government offices
- St. Clair County economic development
- St. Clair County board of education
- Pell City board of education
- St. Clair County public safety and health care providers
- Local internet service providers

Broadband Feasibility Study Elmore County, Alabama

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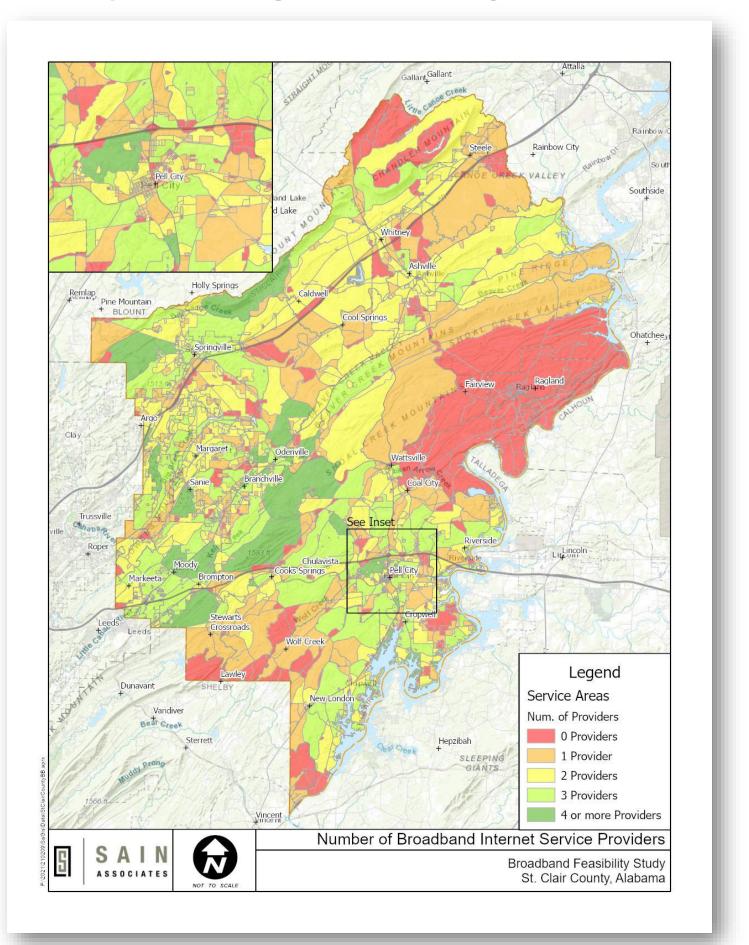




#### ORIGINAL MAP OF BROADBAND SERVICE PROVIDERS

#### **Initial Assessment**

- Broadband Service by Area
  - 0 Providers (Unserved) 18.8%
  - 1 Provider (Underserved) 26.1%
  - 2 or more Providers 55.1%
- Broadband Service by Potential Customers
  - 0 Providers 7.4%
  - 1 Provider 16.7%
  - 2 Providers 75.9%



# COMMUNITY BROADBAND SURVEY

- Survey asks about the following:
  - Address
  - Level of Service Feedback
  - Internet Speed Test for Each Location
  - Broadband Availability
- In addition to the survey, we obtain GIS data from the County and Internet Service Providers.



# CLIENT RESPONSIBILITIES

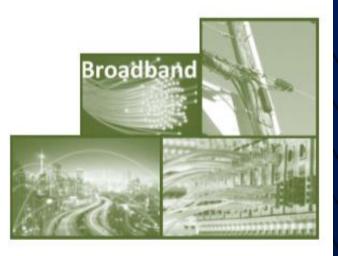
- Define GOALS for broadband coverage throughout the County
- Provide map and other information to support the project
- Advertise and promote the Public Survey to obtain as many business and residential responses as possible
- Prioritize parameters for project analysis
- Help coordinate with local internet service providers

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## PROJECT IMPLEMENTATION ANALYSIS

Based on the Broadband Feasibility Study, potential projects are analyzed with cost estimates and prioritized into an implementation plan that can meet the County goals and objectives.

#### Objectives of the Analysis:

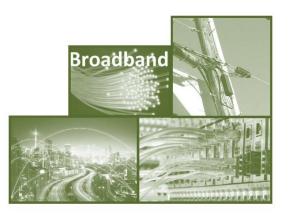
- 1. Determine parameters for analysis.
- 2. Develop detailed project areas.
- 3. Develop budgetary cost estimates.
- 4. Prioritize into a 5-year implementation plan.

Broadband Project Analysis Elmore County, Alabama

PREPARED FOR: Elmore County

PREPARED BY: Sain Associates, Inc.
Sain Project #: 20-0015

October 15, 2020







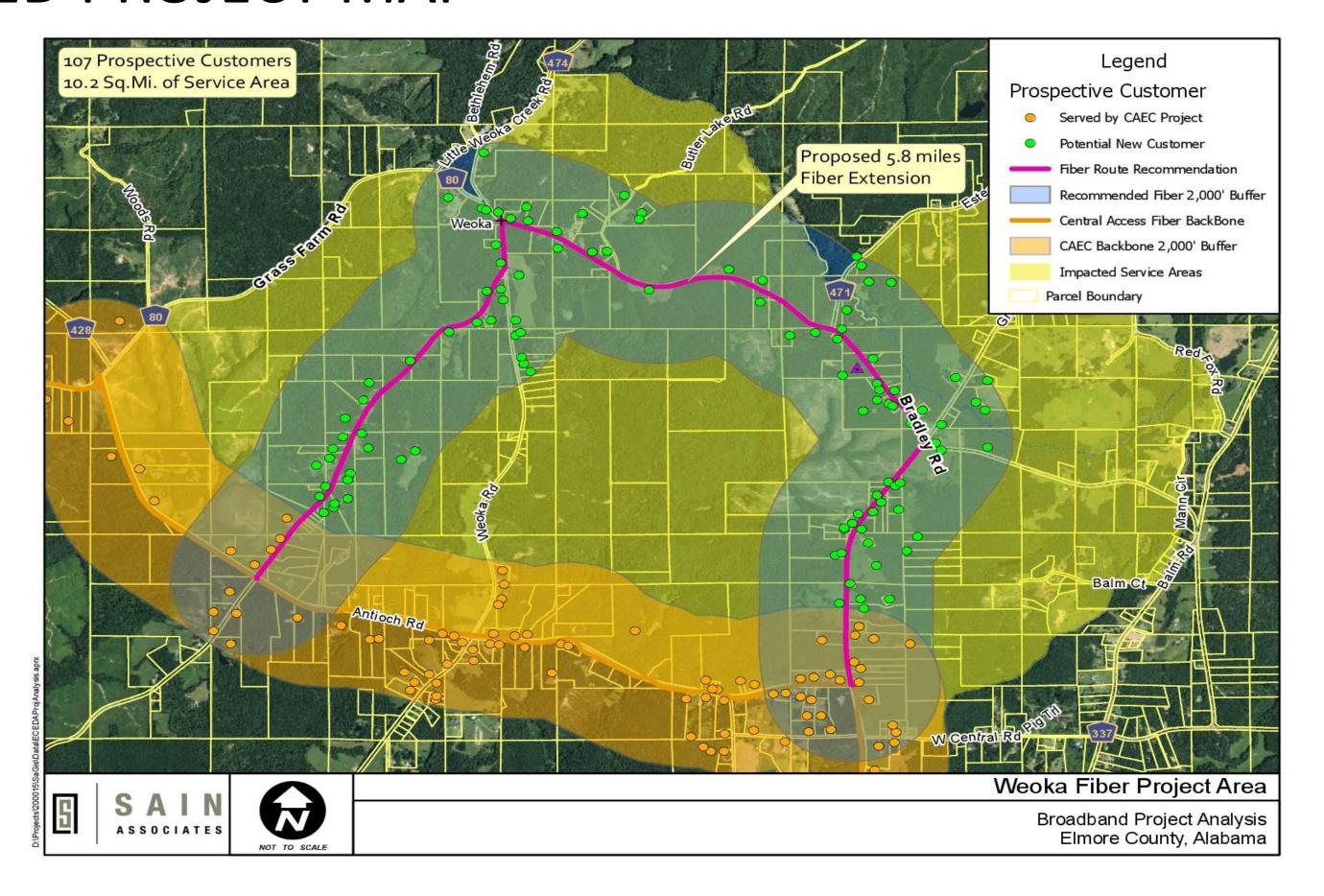


#### PARAMETERS FOR ANALYSIS

- Number of potential customers
- Type of potential customer (residential vs. commercial)
- Number of potential school students to be served
- Amount of unserved or underserved area addressed by the project
- Total cost of the project
- Cost per potential customer

Project Name	Fiber Source	All Potential New Customers	Students in Proposed Service Area	Unserved Area Mitigated (sq.mi.)	Under-Served Area Mitigated (sq.mi.)	Service Area Coverage (sq.mi.)	Population Density per Sq. Mi.	Miles of Fiber	Cost of Fiber	Equip. for Existing Tower	Cost of Equipment	New Fixed Wireless Towers	Cost of New Tower	Construction Cost Estimate	Tie-On Cost 100% Opt-In	Total Cost at 100% Opt-In	Cost per Potential Customer
Atkin Hill Fiber	CA	430	252	0.4	6.1	9.8	216.8	9.7	\$ 509,250.00	0	\$ -	0	\$ -	\$ 509,250.00	\$ 2,150,000.00	\$ 2,659,250.00	\$ 6,184.30
Weoka FW***	CA	290	137	21.4	14.9	37.6	26.8	0.0	\$ -	2	\$ 65,000.00	1	\$ 207,500.00	\$ 272,500.00	\$ 362,500.00	\$ 635,000.00	\$ 2,189.66
Deatsville FW	UN	290	571	3.2	10.3	13.5	59.6	0.0	\$ -	1	\$ 32,500.00	1	\$ 207,500.00	\$ 240,000.00	\$ 362,500.00	\$ 602,500.00	\$ 2,077.59
Atkin Hill FW	CA	185	401	0.3	5.7	8.9	188.7	1.0	\$ 52,500.00	1	\$ 32,500.00	0	\$ -	\$ 85,000.00	\$ 231,250.00	\$ 316,250.00	\$ 1,709.46
lightwood FW**	UN or CA	274	103	5.3	7.0	13.5	58.9	0.0	\$ -	0	\$ -	1	\$ 207,500.00	\$ 207,500.00	\$ 342,500.00	\$ 550,000.00	\$ 2,007.30
Balm Rd Fiber	CA	136	34	1.8	4.8	10.3	78.3	4.1	\$ 215,250.00	0	\$ -	0	\$ -	\$ 215,250.00	\$ 680,000.00	\$ 895,250.00	\$ 6,582.72
Weoka FW*	CA	260	105	19.2	12.6	33.1	28.6	3.4	\$ 178,500.00	1	\$ 32,500.00	1	\$ 207,500.00	\$ 418,500.00	\$ 325,000.00	\$ 743,500.00	\$ 2,859.62
Coosa River FW	CA	228	117	12.0	13.4	25.4	26.0	3.2	\$ 168,000.00	1	\$ 32,500.00	1	\$ 207,500.00	\$ 408,000.00	\$ 285,000.00	\$ 693,000.00	\$ 3,039.47
Ware FW	CA	297	135	18.8	16.8	38.6	22.2	0.1	\$ 5,250.00	1	\$ 32,500.00	3	\$ 622,500.00	\$ 660,250.00	\$ 371,250.00	\$ 1,031,500.00	\$ 3,473.06
Jackson Lake FW	UN	192	220	3.3	2.5	6.5	82.3	0.0	S -	0	\$ -	1	\$ 207,500.00	\$ 207,500.00	\$ 240,000.00	\$ 447,500.00	\$ 2,330.73
Ware FW	ZA	290	98	18.8	14.6	36.4	22.7	0.1	\$ 5,250.00	0	\$ -	3	\$ 622,500.00	\$ 627,750.00	\$ 362,500.00	\$ 990,250.00	\$ 3,414.66
Riddle Fiber	CA	131	56	11.4	4.3	15.7	47.7	9.9	\$ 519,750.00	0	\$ -	0	\$ -	\$ 519,750.00	\$ 655,000.00	\$ 1,174,750.00	\$ 8,967.56
Redland Fiber	CA	131	48	3.3	1.2	8.4	82.5	5.7	\$ 299,250.00	0	\$ -	0	\$ -	\$ 299,250.00	\$ 655,000.00	\$ 954,250.00	\$ 7,284.35
Hwy 231 Fiber	CA	63	32	1.6	4.1	6.1	74.1	4.1	\$ 215,250.00	0	\$ -	0	\$ -	\$ 215,250.00	\$ 315,000.00	\$ 530,250.00	\$ 8,416.67
Weoka Fiber	CA	107	29	7.5	2,4	10.2	55.9	5.8	\$ 304,500.00	0	\$ -	0	\$ -	\$ 304,500.00	\$ 535,000.00	\$ 839,500.00	\$ 7,845.79
Titus FW***	CA	97	44	9.1	5.3	14.4	16.2	0.0	\$ -	1	\$ 32,500.00	1	\$ 207,500.00	\$ 240,000.00	\$ 121,250.00	\$ 361,250.00	\$ 3,724.23
Buyck Fiber	CA	44	24	3.2	0.8	4.0	53.3	4.5	\$ 236,250.00	0	\$ -	0	\$ -	\$ 236,250.00	\$ 220,000.00	\$ 456,250.00	\$ 10,369.32
Eclectic FW	WS	95	365	0.9	4.7	5.6	27.7	0.5	\$ 26,250.00	1	\$ 32,500.00	1	\$ 207,500.00	\$ 266,250.00	\$ 118,750.00	\$ 385,000.00	\$ 4,052.63
Tallassee FW	ZA	53	1	0.2	8.9	9.2	11.5	0.6	\$ 31,500.00	0	\$ -	1	\$ 207,500.00	\$ 239,000.00	\$ 66,250.00	\$ 305,250.00	\$ 5,759.43
Totals^	1	2732	1963	114.4	106.3	241.6		52.7		8		11				+	

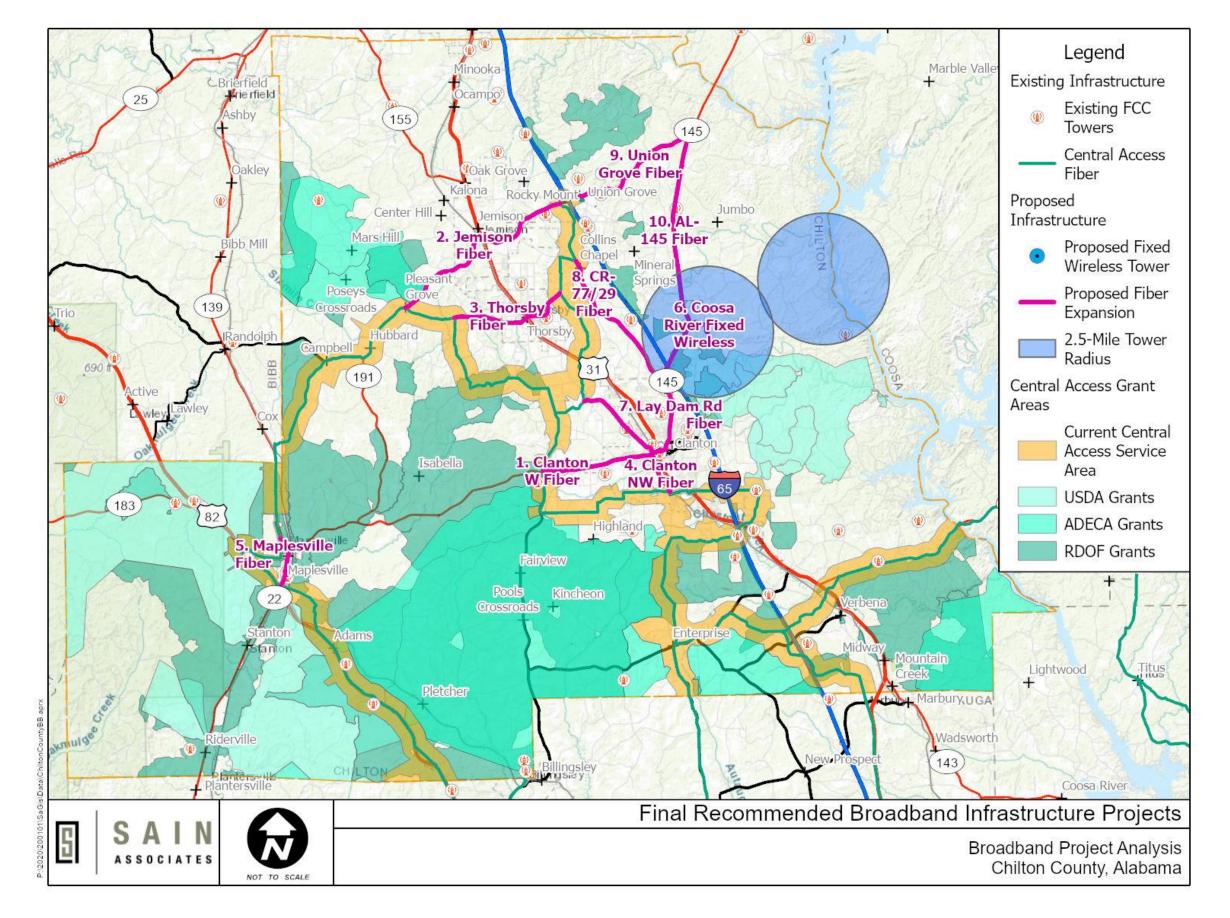
#### DETAILED PROJECT MAP



#### PROJECT IMPLEMENTATION PLAN

Project Name	Estimated Construction Cost	Population Served	Annual Expenditure
Year 1		2,931	\$869,400.00
Atkin Hill (Fiber Option)	\$611,100.00		
Balm Road Fiber	\$258,300.00		
Year 2		1,496	\$816,600.00
Weoka Fixed Wireless (Option B)	\$327,000.00		
Coosa River Fixed Wireless	\$489,600.00		
Year 3		2,032	\$896,100.00
Deatsville Fixed Wireless	\$288,000.00		
Jackson Lake Fixed Wireless	\$249,000.00		
Redland Fiber	\$359,100.00		
Year 4		855	\$792,300.00
Ware Fixed Wireless (Option A)	\$792,300.00		
Year 5		1,201	\$882,000.00
Riddle Fiber	\$623,700.00		
Highway 231 Fiber	\$258,300.00		
Total Project Implementation		8,515	\$4,256,400.00

#### PROJECT RECOMMENDATIONS



# BENEFITS OF THE STUDY

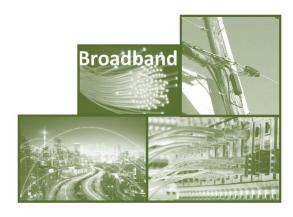
- 1. Identifies areas with greater need for broadband infrastructure based on objective analysis
- 2. Develops a plan that can be used to partner with internet service providers in obtaining grants for infrastructure expansion
- 3. Provides the County with a plan and budget for addressing broadband shortfalls in the County
- 4. Develops prioritized infrastructure projects to address critical broadband needs
- 5. Promotes commercial and industrial growth by identifying areas where broadband would attract economic development
- 6. Promotes residential growth by suggesting projects in areas that would serve more residents and/or students

Broadband Project Analysis Elmore County, Alabama

PREPARED FOR: Elmore County

PREPARED BY: Sain Associates, Inc.
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October 15, 2020









# QUESTIONS?



### THANK YOU

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