

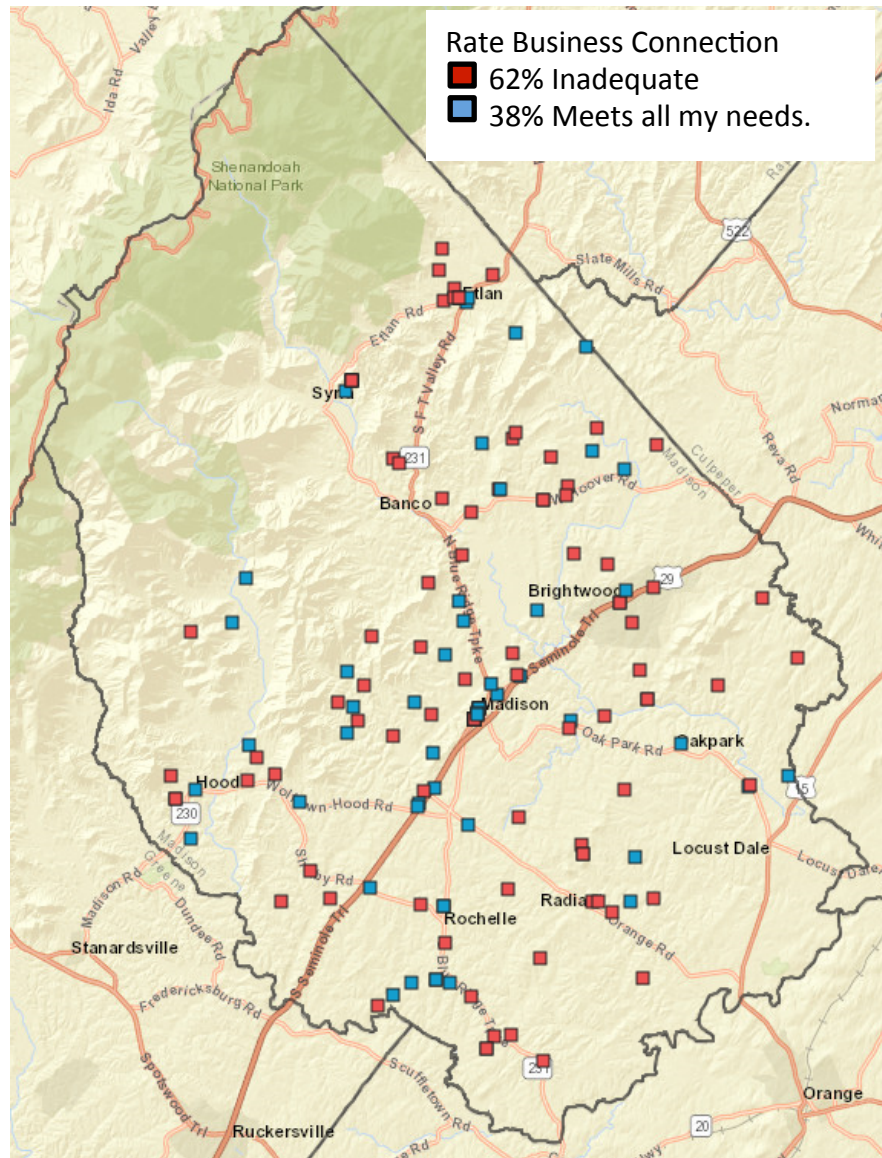
Madison County

Broadband Survey Analysis
June 2017

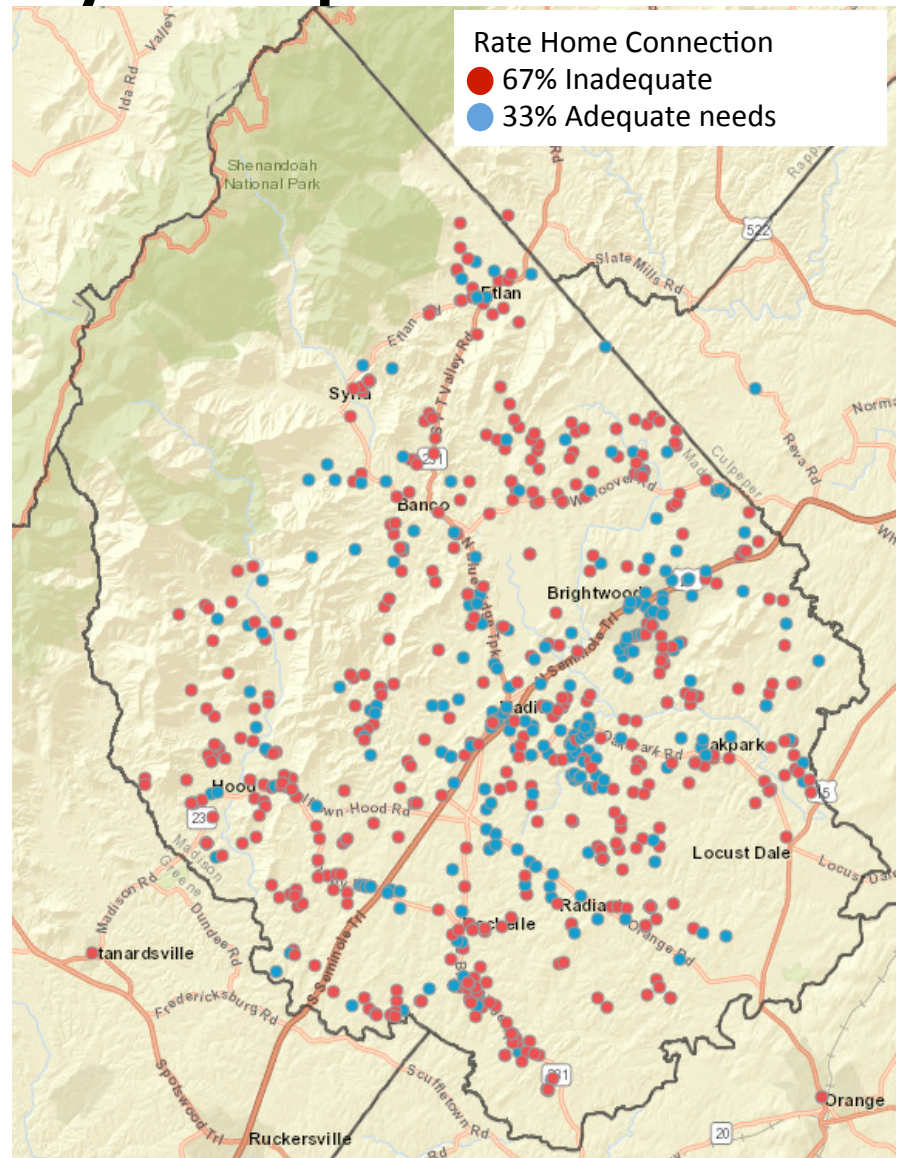
Madison County Survey

- 1019 responses;
 - 1015 Residential address points geocoded
 - 186 Business address points geocoded
 - Occupied housing units 5003 (2015 data)
 - Based on 5,003 occupied housing units, this represents Madison households with **95% (+/- 2.74%) accuracy.**
 - 64% of all respondents were over the age of 45

Madison Survey Responses



11/29/18

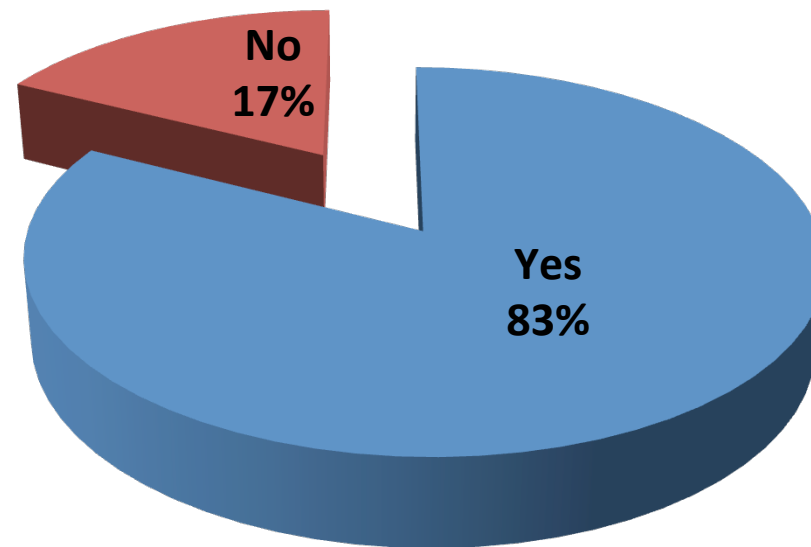


Prepared by CIT

3

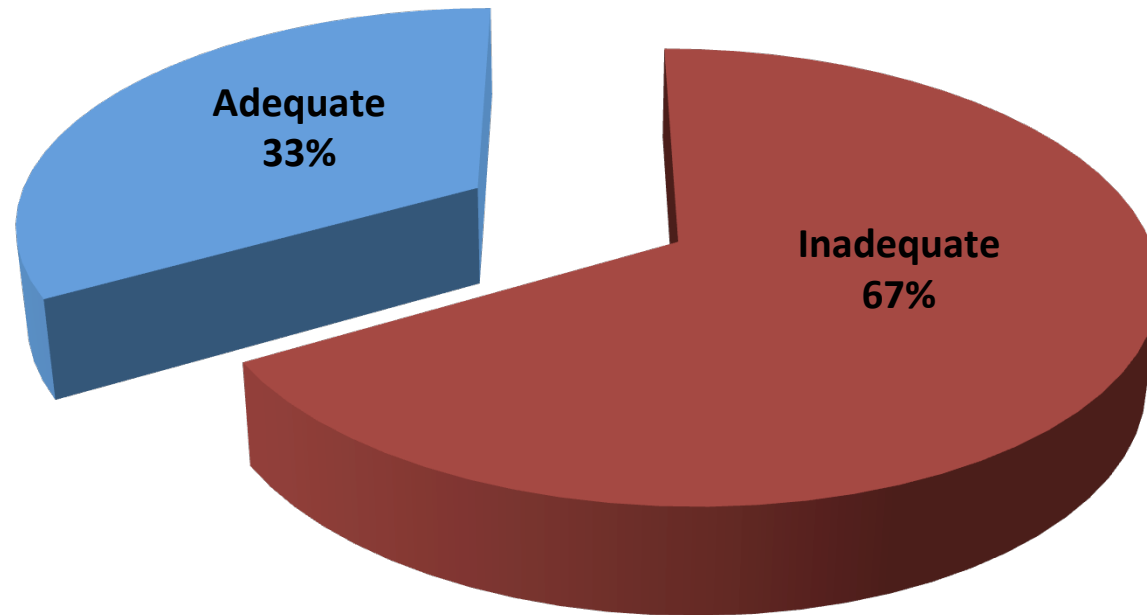
Madison County

Do you have Internet Service at Home?



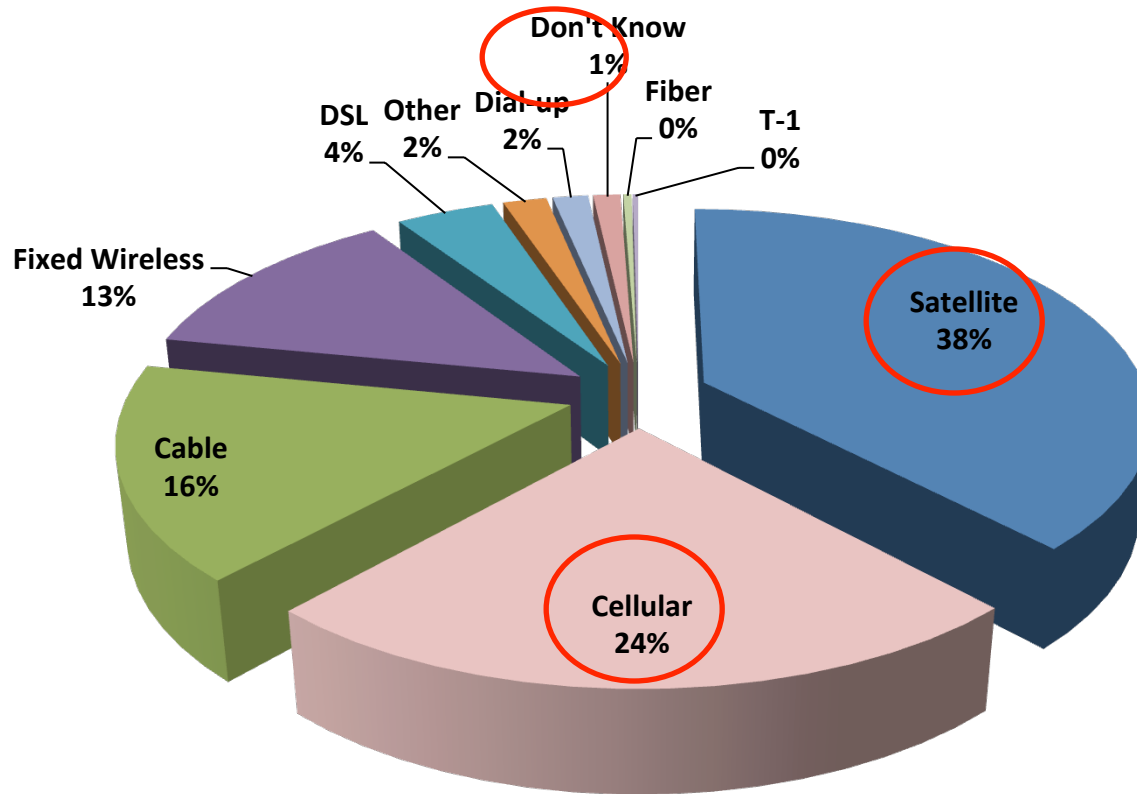
Madison County

Residential Internet Service Satisfaction



Madison County

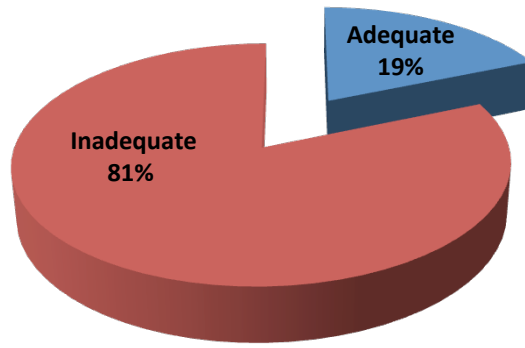
Type of Internet Access Reported



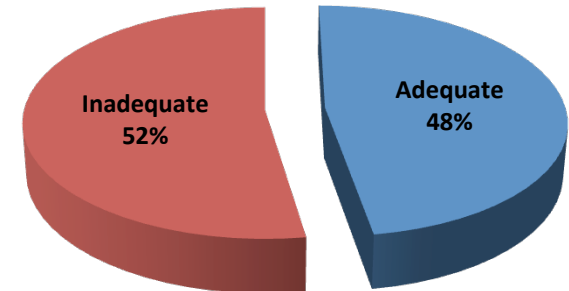
Take away: 64% of respondents depend on inadequate services

Madison County

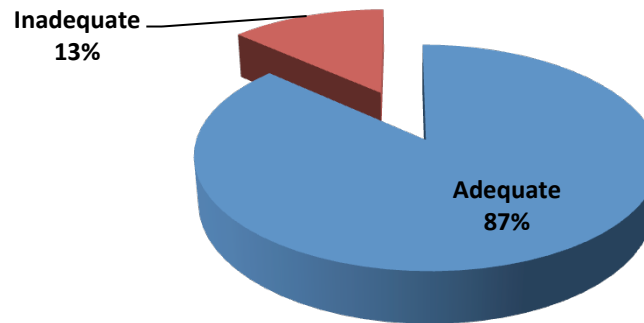
**Satisfaction with Cellular
Internet Service**



**Satisfaction with Fixed
Wireless**



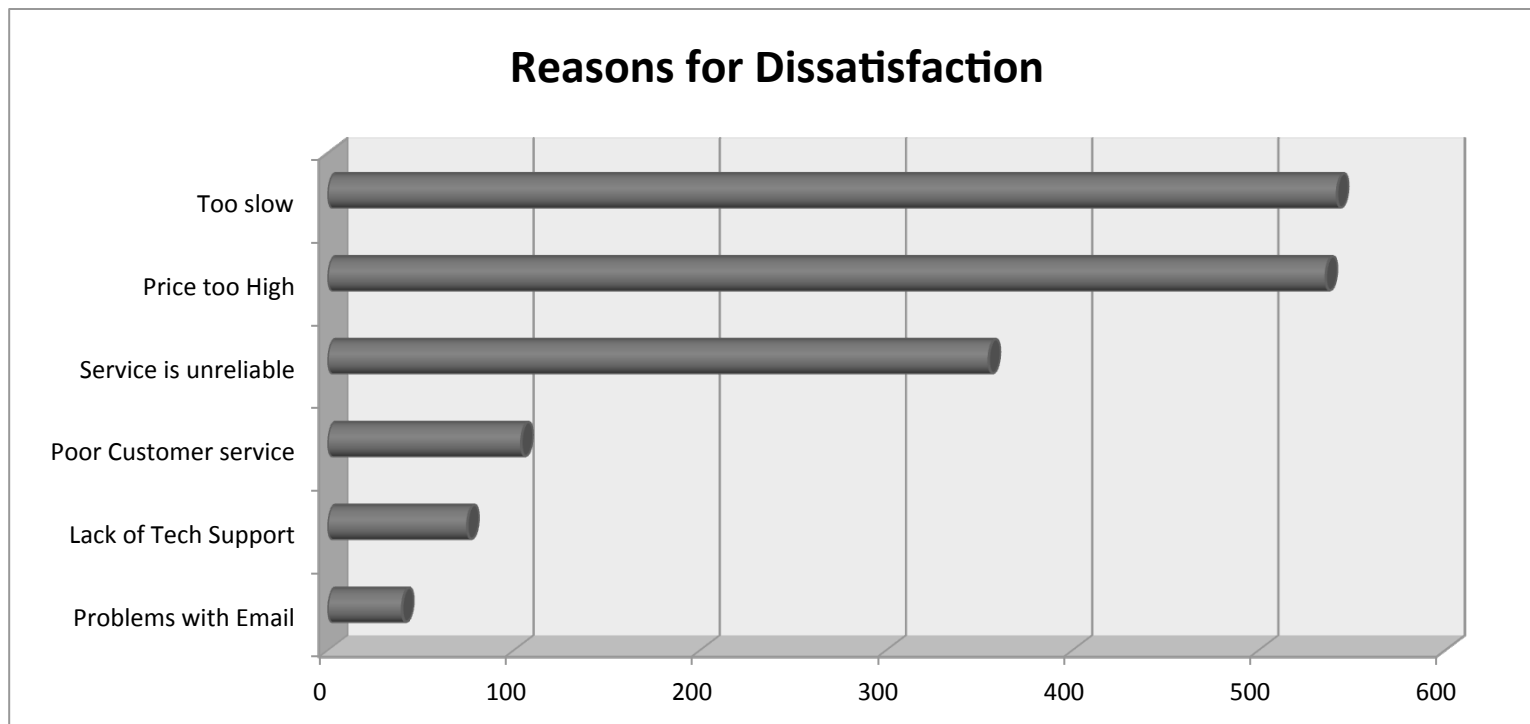
**Madison Co - Satisfaction with Cable
Internet Service**



Madison County

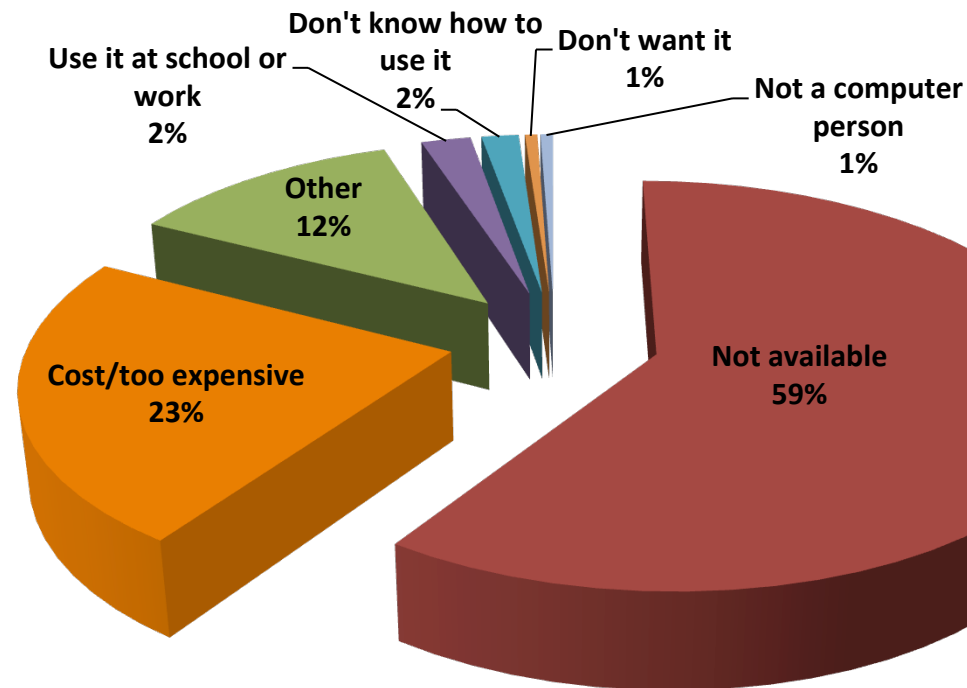
What are your reasons for any dissatisfaction with your home Internet service?		
Check all that apply:		Percent
Connection too slow/not enough bandwidth	486	87.25
Price too high	367	65.89
Service is unreliable	334	59.96
Poor customer service	79	14.18
Lack of technical support	64	11.49
Problems with email	36	6.46

Of those respondents who have Internet service at home, and responded that their Internet service was inadequate, 557 provided reasons for their dissatisfaction.



Madison County

What is the main reason you do not have Internet access at home?



Take Away: The majority without home Internet service say it is because it is not available

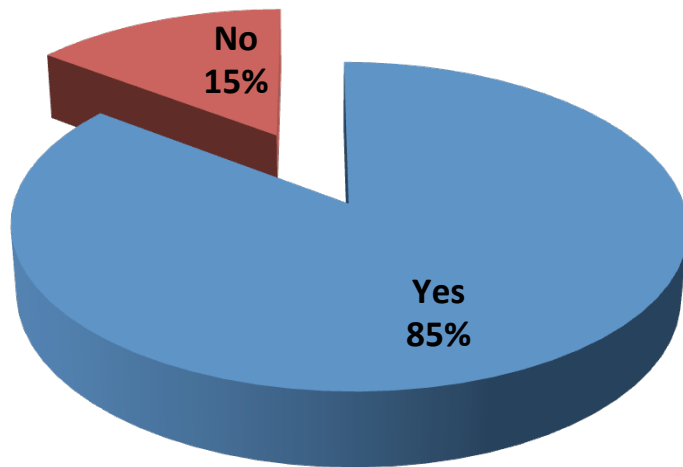
Madison County

“Other” reasons for no Internet access at home?

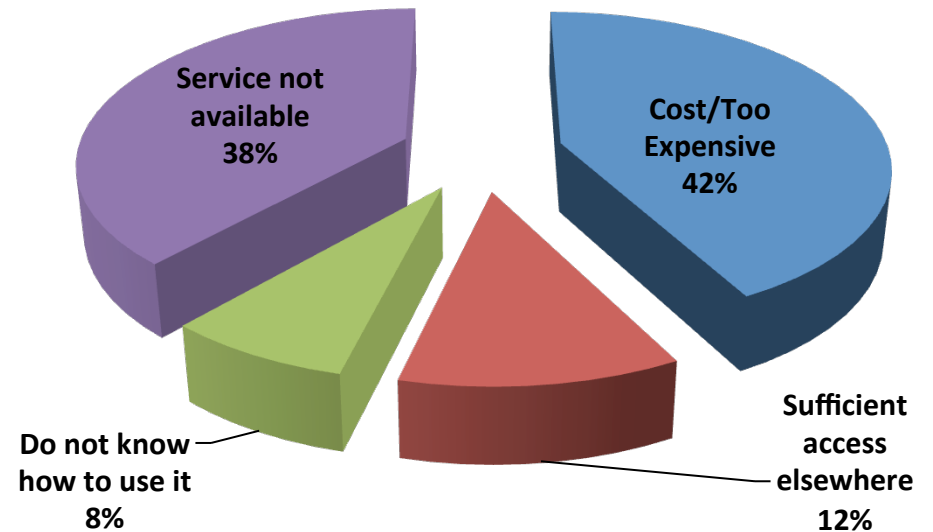
- The only internet service available is "dial-up" way too slow to be practical
- don't know
- Only available is satellite or cellphone. Neither is an option for streaming because of very low data restrictions and high cost
- Both not available- no reliable phone lines, no cable in proximity, cost is prohibitive.
- Don't know how to get it installed at my farm
- length of contract
- limited options for the cost; no truly high speed, unlimited option
- Only satellite is available and it is too slow and unreliable.
- I don't know if I can get any Internet where I live and feel any company will sell me anything for the sale
- Dial up is too slow
- Cost and uncertain due to tree line.
- The only available providers are expensive and provide poor service.
- Can't really get it inside house. No service inside the house.
- Most options are not available where I live and the ONE that is available is quite expensive because there is no competition.
- Don't live there on land I own.
- Only satellite available and it's not good and cost too much
- cost too much for the access/speed available at my location
- The quality of the wireless and land line local internet services are not good. Too slow and expensive to upgrade
- No reception
- I'm not sure if I want the option of unlimited Internet interfering with my lifestyle
- Very slow, we can't watch movies with out it buffering. And paying \$87. Not with the \$
- Cannot get High speed, dial up only

Madison County

Do you have a personal computer?

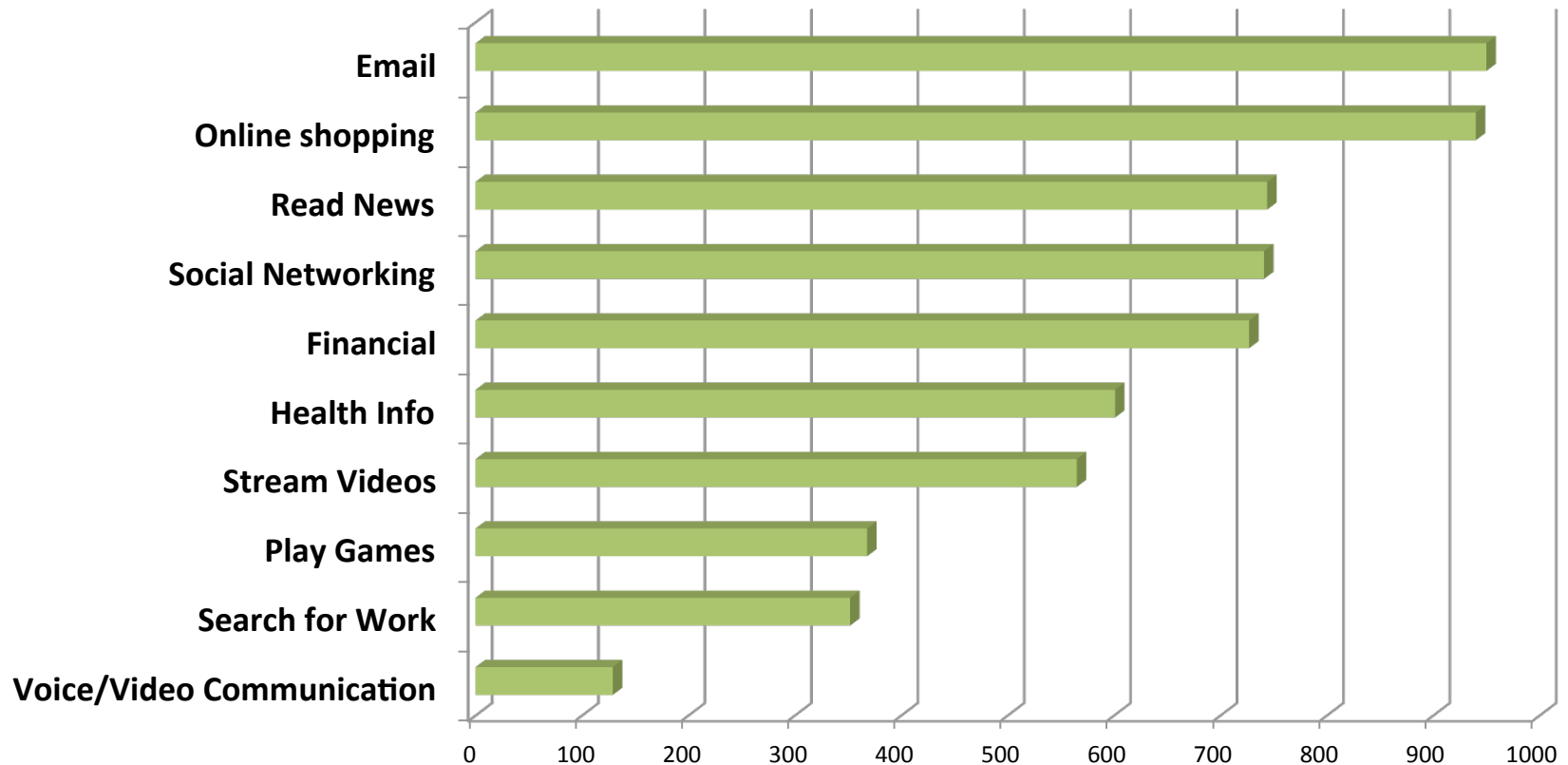


Reason for not having a personal computer



Madison County

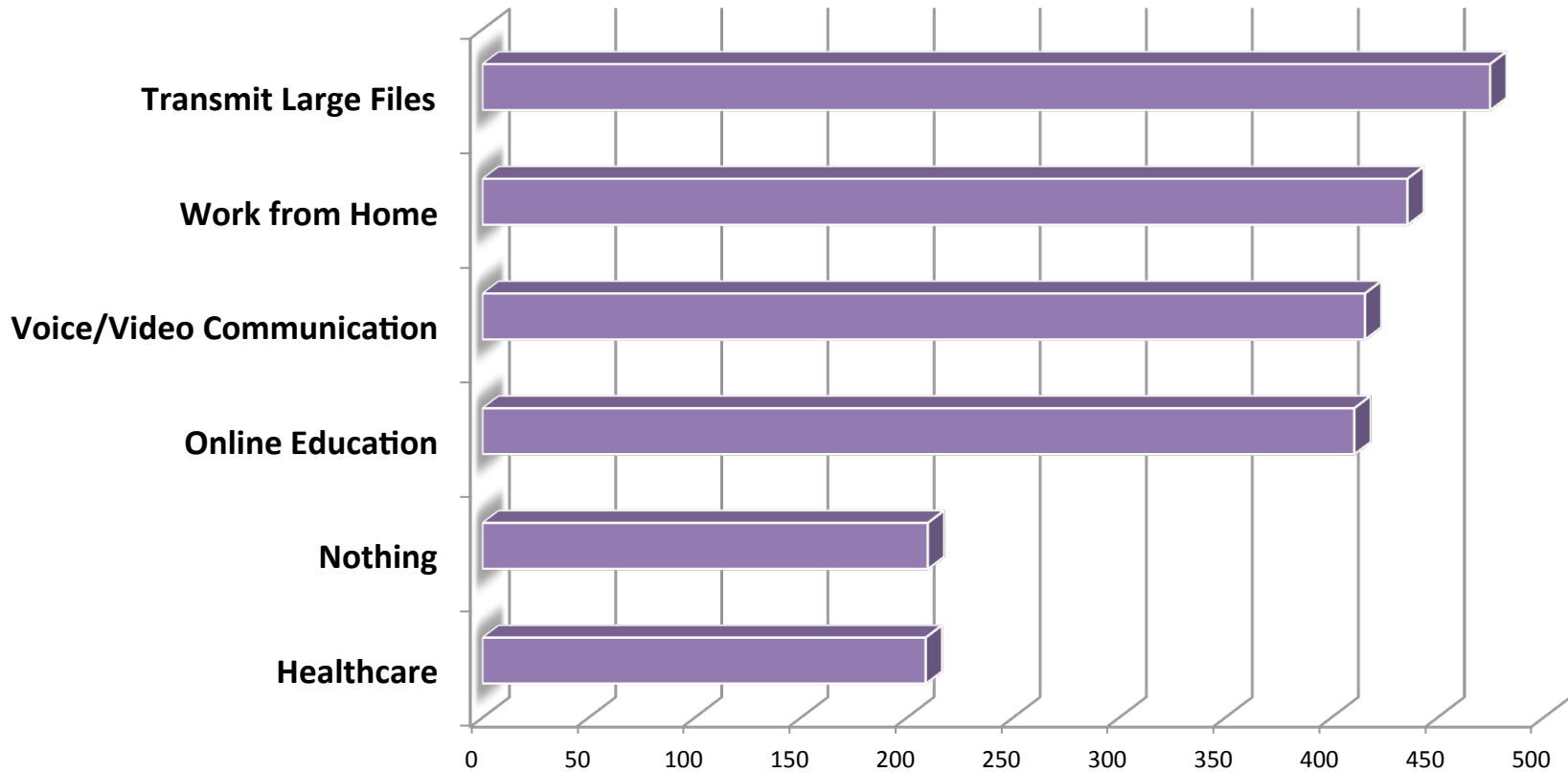
Online Activities



Take Away: Generally low bandwidth applications, consistent with low speed connections.

Madison County

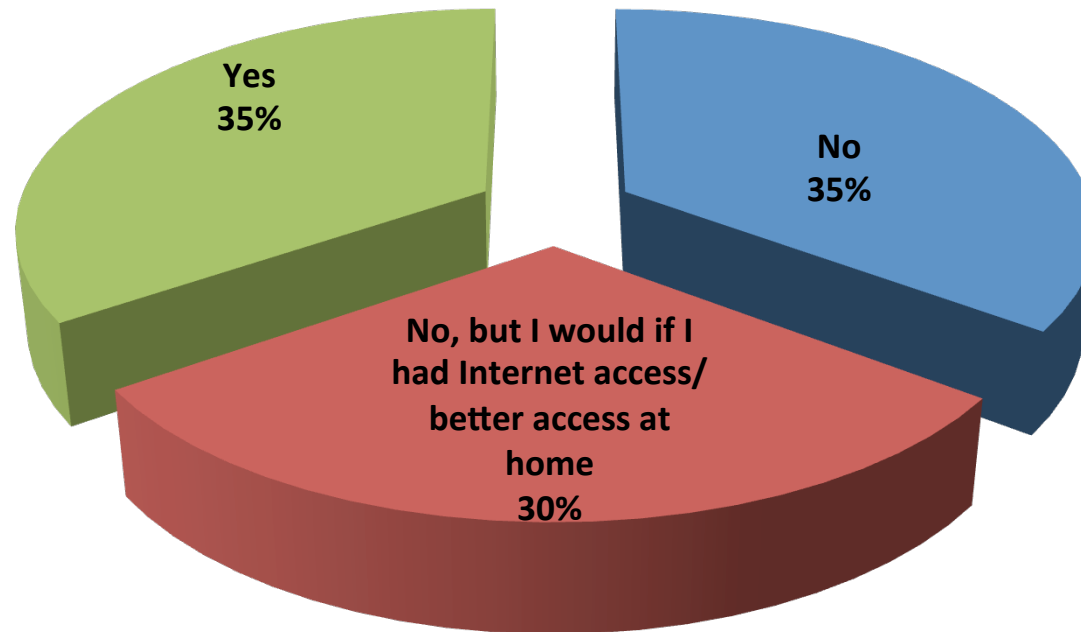
Activities you would do with improved Internet service



Take away: Big bandwidth applications, consistent with desire for faster speeds

Madison County

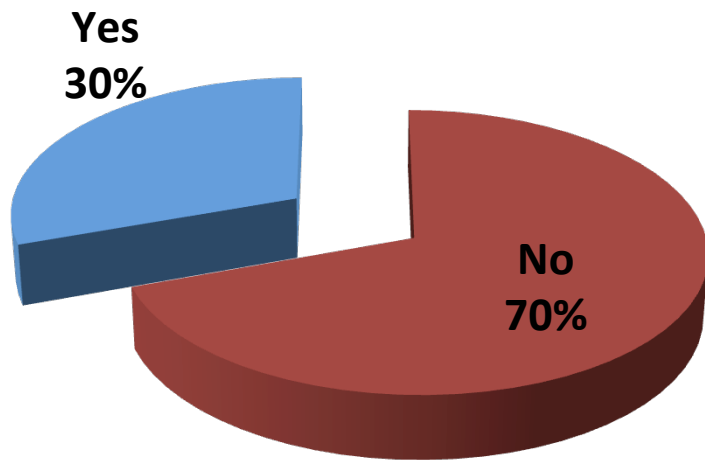
Does anyone work from home? Telecommuting



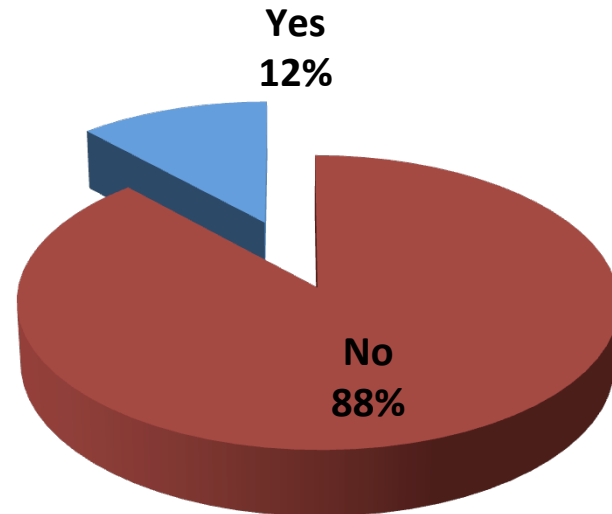
According to 2015 census data, 60.8% of Madison County residents work outside the county

Madison County

K12 Students at home?



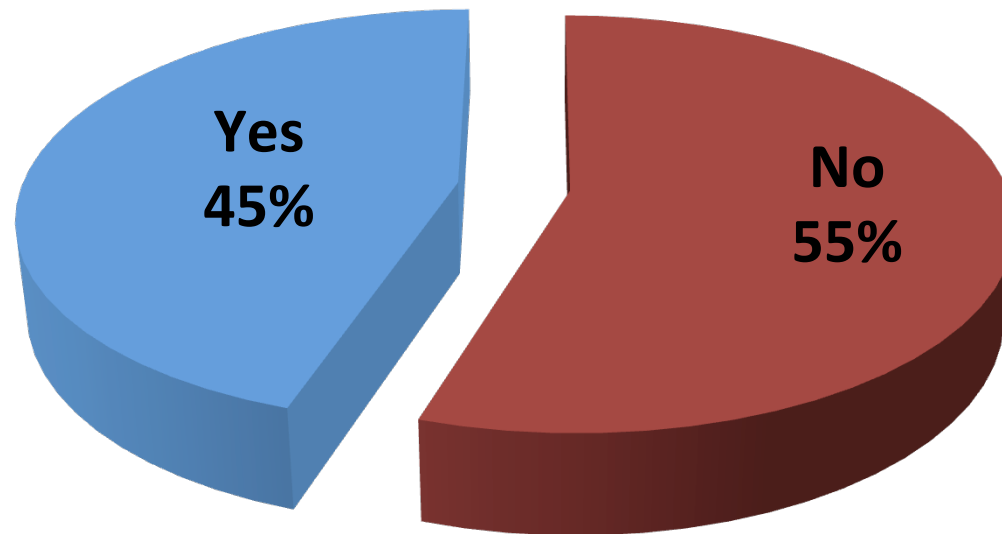
Homeschooled?



Take Away: Most K12 students (57%) have access to the Internet at home after school.
21% no Internet access available after school

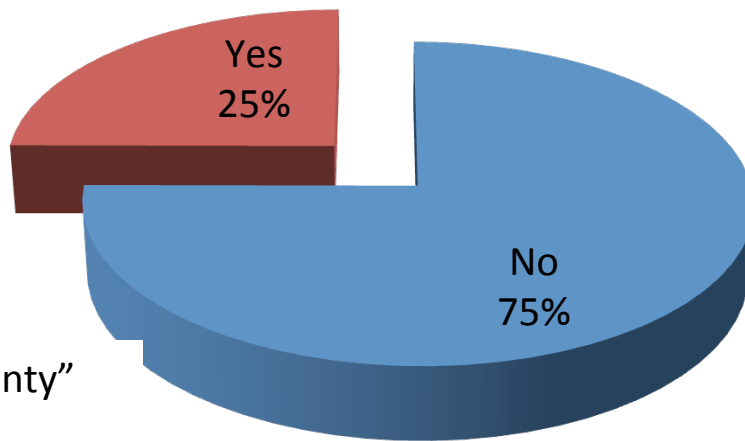
Madison County

Madison Co - Online school/job training



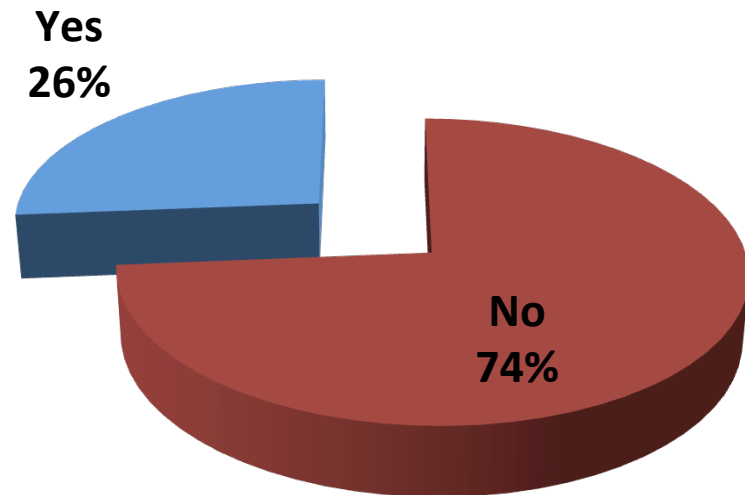
Madison County

Do you own a Business?



197 “in county”
businesses
reported

Home Based Business



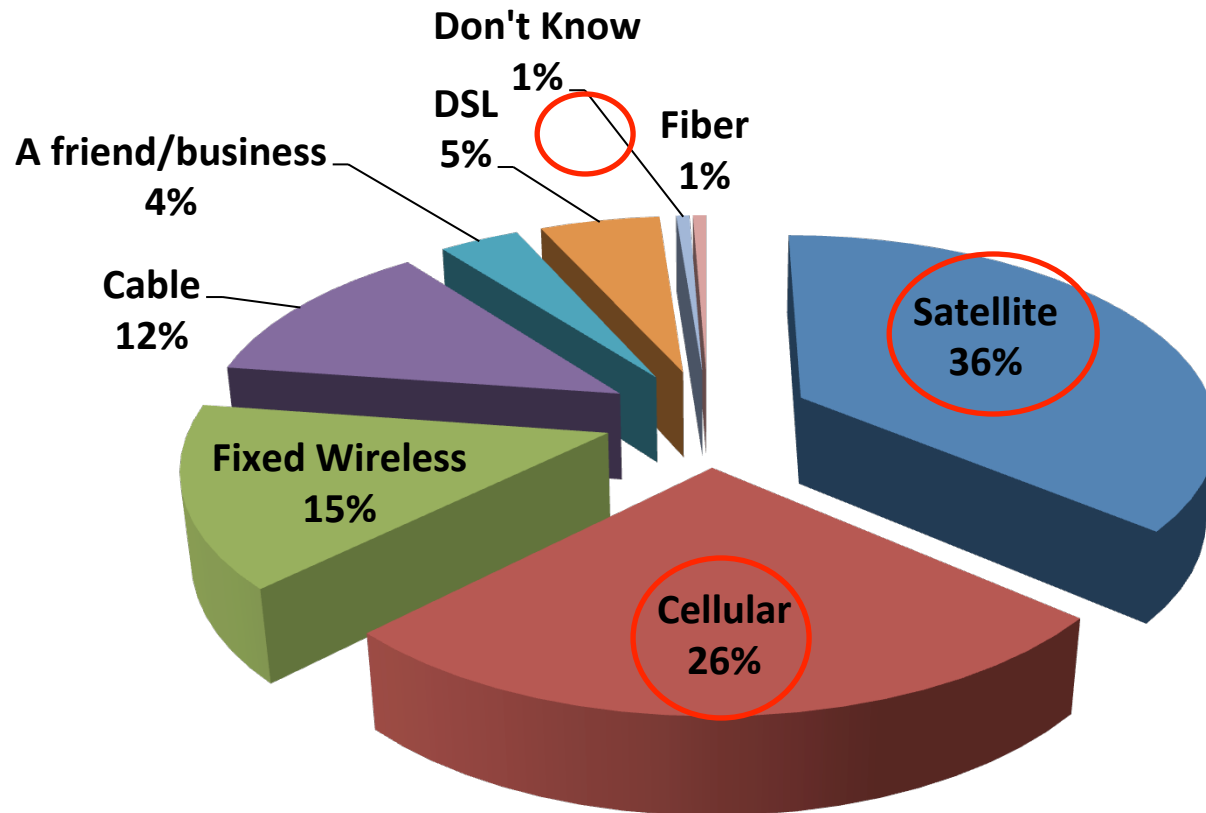
266 reported home based businesses

85% of business owners use the Internet to support their business.

87% say the Internet is important or critical to their business.

Madison County

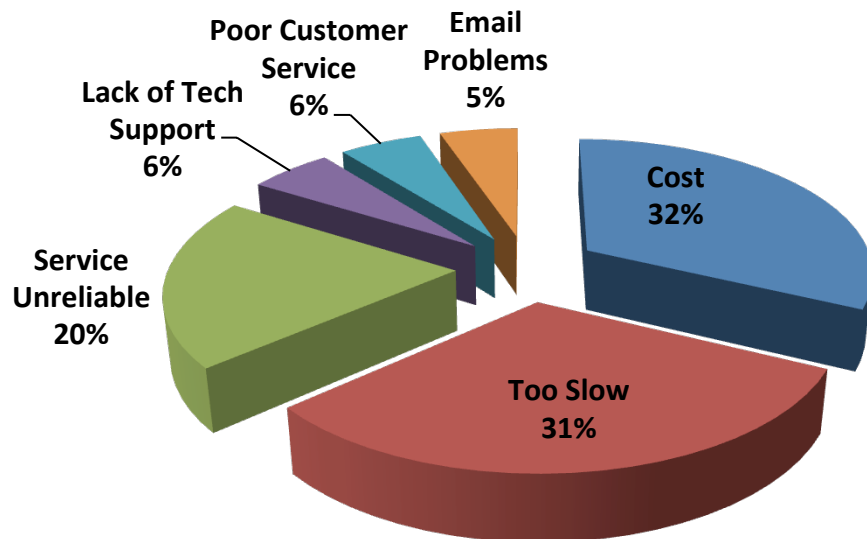
Madison Co - Type of Internet Access for Business



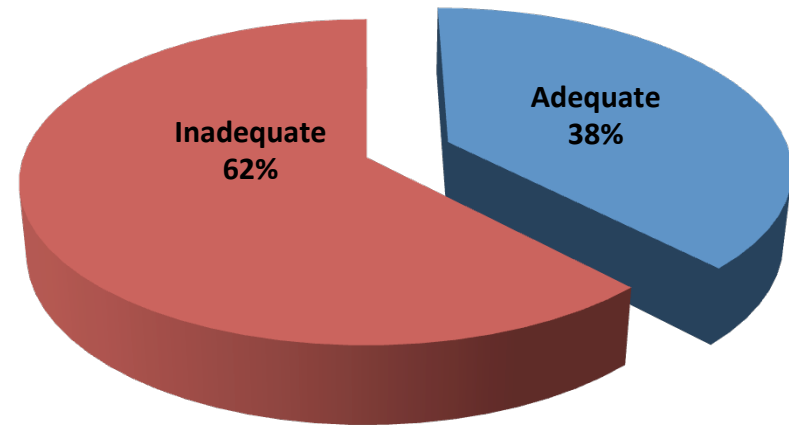
Take Away: 67% of businesses depend on inadequate services

Madison County

Reason for Business Dissatisfaction



Satisfaction with Business Internet Access

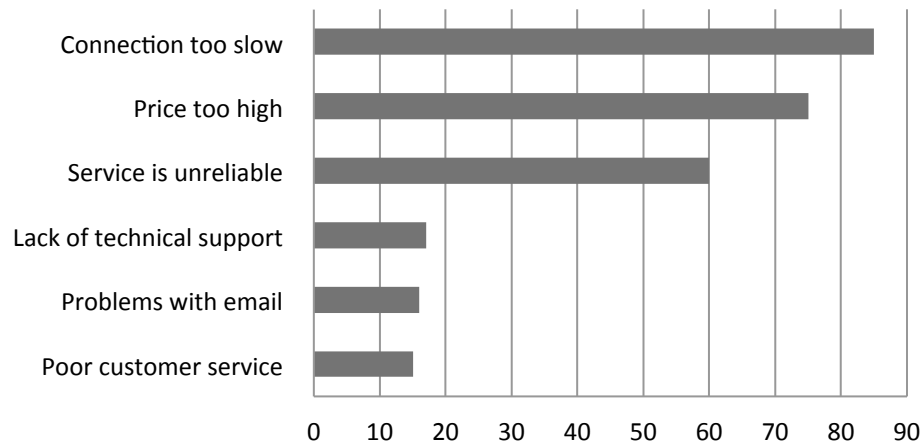


Madison County

Reason for Dissatisfaction of Business Internet Service - 103 total business responses		
Check all that apply		Percent
Price too high	75	72.82
Service is unreliable	60	58.25
Lack of technical support	17	16.50
Connection too slow/not enough bandwidth	85	82.52
Problems with email	16	15.53
Poor customer service	15	14.56

Of the respondents that reported their business had Internet service and responded that their service was inadequate, 103 provided reasons for their dissatisfaction.

Business Reasons for Dissatisfaction

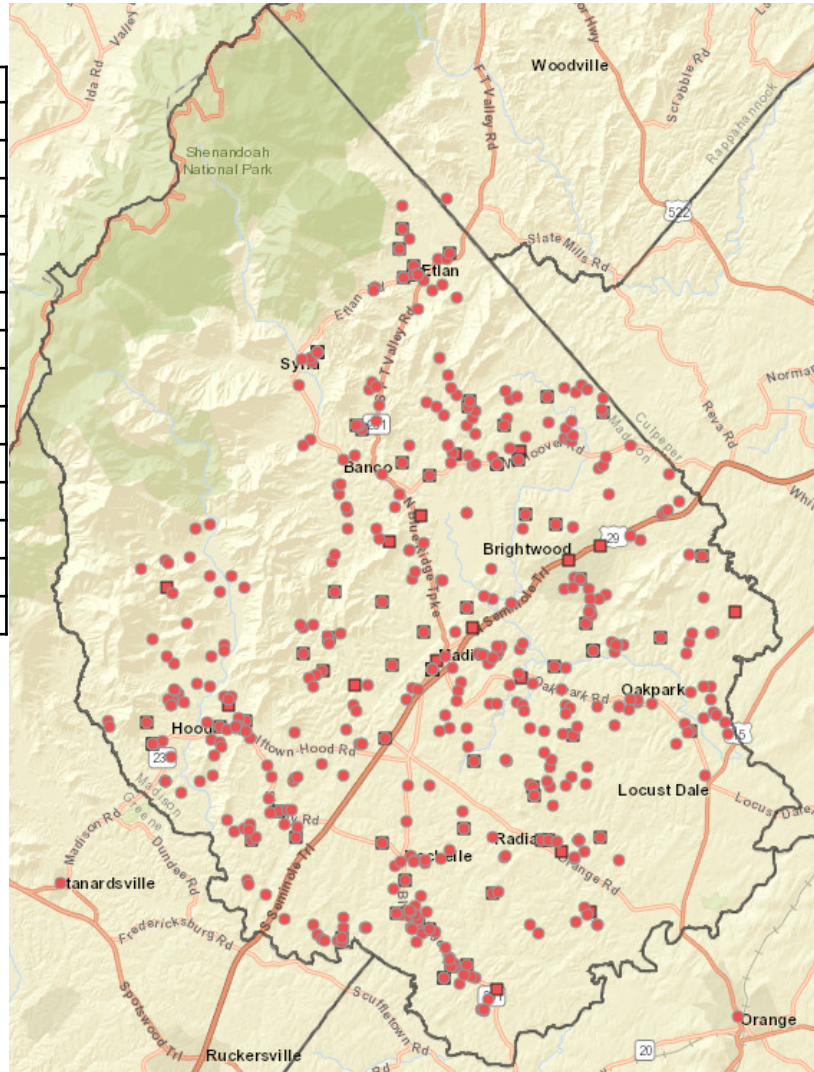


Same dissatisfaction reasons as residential dissatisfaction

Inadequate Service Locations & Counts

Inadequate Business Location Counts	
Madison	36
Rochelle	11
Etlan	9
Aroda	6
Brightwood	6
Reva	6
Haywood	4
Syria	4
Radiant	3
Banco	2
Graves Mill	1
Locust Dale	1
Madison Mills	1
Orange	1

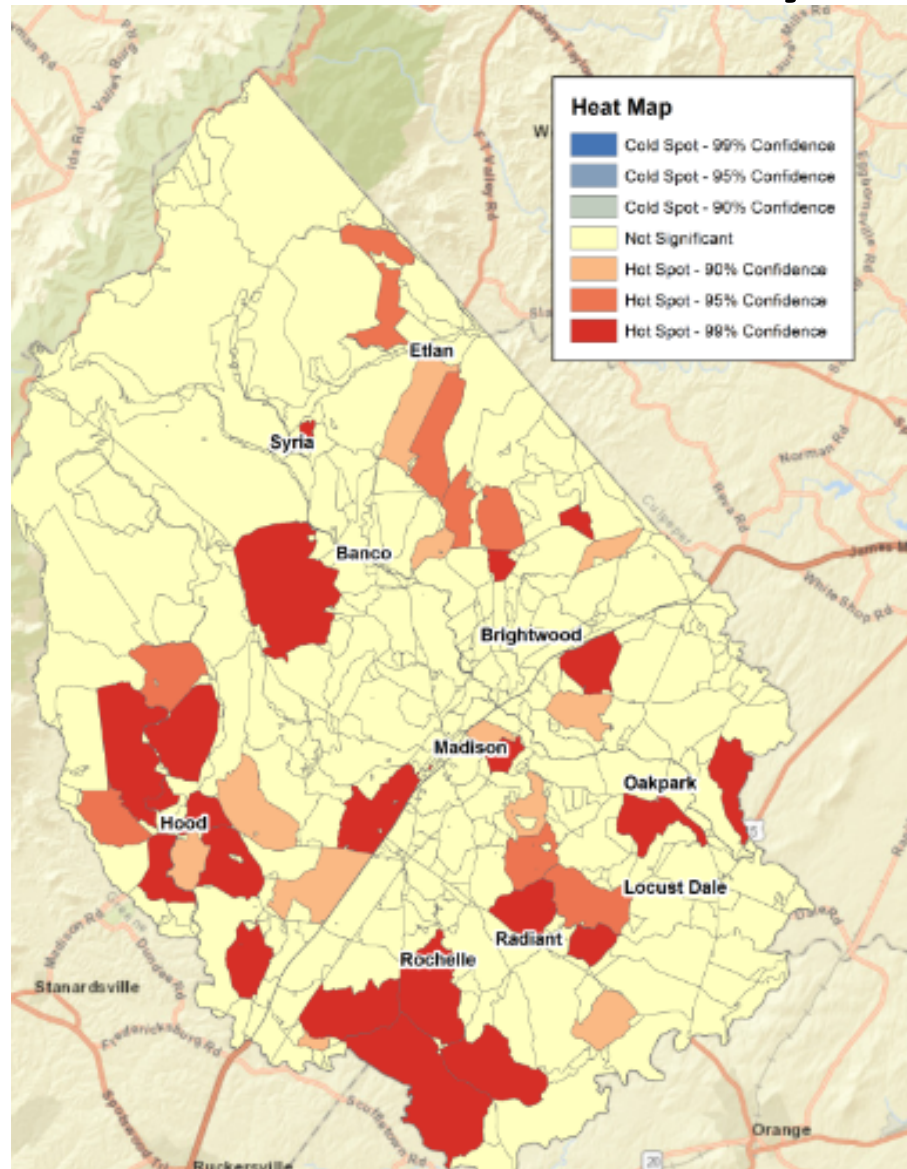
Need to identify
Madison addresses
more accurately.



Inadequate Residential Location Counts	
Madison	225
Rochelle	65
Aroda	40
Etlan	37
Reva	36
Brightwood	23
Syria	20
Radiant	17
Haywood	14
Locust Dale	14
Oak Park	11
Hood	9
Orange	8
Banco	5
Graves Mill	5
Wolftown	4
LEON	3
Culpeper (though we are in Madison Co	1
Madison Mills	1
Orange (Madison County)	1
Pratts	1
Sperryville	1
Stanardsville	1

Madison County

Heat Map: the darker the red, the more concentrated “inadequate” Internet service” responses were reported in that area.



Assessment Based

COMMUNITY BROADBAND NEEDS

Needs Identified (Previously)

- **Technology Adoption**

- Digital Literacy

- 20% of population are seniors and 12% of population have a disability
 - **OPTION: Implement and promote library computer classes with seniors/groups**

- Affordability

- 35% of population may have affordability challenges
 - **OPTION: Consider a computer refurb/donation program such as Virginia Star - a statewide student training and refurbishment program; <http://vastar.org/>**

- **PPEA** ?-our process is based on a locality adopting the PPEA. If Madison gets to the point of RFP and has not adopted the PPEA they will lose a lot of flexibility and the alternative approach typically results in far fewer (usually very limited) responses.

Needs Identified

Madison County Survey

Demand –

– Residential

- 67% state their home Internet is inadequate
 - 64% of those depend on cellular, satellite or dial-up services
- 17% state they have NO access at all
- 30% of residents would telecommute if they had better access.
- 30% of respondents have K12 students, 12% are homeschooled
- 45% of respondents use the Internet for school and work purposes
- 26% of respondents report home based businesses
- **OPTION: Expand access and capacity**

– Businesses

- 25% of respondents own a business
- 62% of businesses state they need better access than they have today
- 87% of business owners say the Internet is important/critical to their businesses
- 67% of businesses depend on inadequate services; cellular, satellite and DSL
- 26% (of all respondents) have home based businesses
- **OPTION: Expand access and capacity**

Next Steps

- Identify and Prioritize Goals Based on Needs
 - Assessment findings need to be conveyed to the BoS.
 - Committee passes their recommendations to BoS, or leaves the decisions to the BoS accepts.
- Determine the role the local government will assume in achieving the goals
 - Review CIT Partnership Models Handout
 - Decisions need to be adopted by the COUNTY - county procurement needs to put out the RFP
- CIT will draft Requirements Document for potential RFP
 - CIT will formally document chosen goals, role, assets to be shared, local considerations etc. to include in RFP
- Seek private partner(s)
 - CIT will provide a custom RFP based on goals and roles etc.

Questions? Comments?



Contact Information

Chuck Kirby
Director of Broadband Programs
Chuck.Kirby@cit.org
540-309-4313

Jean Plymale
Broadband Project Manager
Jean.Plymale@cit.org
540-250-2751