

Communications Survey

Results and Analysis for Town of Bayfield, Wisconsin

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Abstract: This document describes the results of a communications survey that was offered to 258 full-time resident households in the Town of Bayfield, Wisconsin. The survey was conducted in March 2017. Survey responses were accepted until September 2017. Resident addresses for survey participants were provided by the Bayfield County Wisconsin Land Records Office.

The purpose of the survey was to establish baseline data for communication types, usage, and satisfaction levels for town residents. The survey captured data for landline use, cell phone use and availability, broadband use and availability, and associated vendor usage and satisfaction data. An analysis of the data is provided, the notion a communication gap is defined and explored, and the future of communications in the town is discussed.

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Communications Survey Summary

The Town of Bayfield, Wisconsin and Its Need for a Communications Survey

The Town of Bayfield, Wisconsin is a scenic, rural community with a population of 680 at the 2010 census. It is located in northern Wisconsin on the shore of Lake Superior adjacent to the Apostle Islands National Lakeshore, at the tip of the Bayfield Peninsula. The town is L shaped and surrounds the City of Bayfield. It has a total area of 134 square miles of which 89 square miles is land and 44 square mile is water. Much of the land area is hilly, forested, and somewhat topographically challenged with some agriculture spread throughout the town. It is sparsely populated with a population density of 7 people per square mile. The town is a vacation area used throughout the year and is home to many retirees from the upper Midwest region as well as retirees from the east and west US coastal areas.

A communications survey was conducted by the town to determine the types of communication facilities that were being used and whether they were effective for the town's residents. The survey was offered to all of the town's 258 full time resident households on record by the Bayfield County Wisconsin Land Records Office as of February 2017. The survey captured data for landline use, cell phone use and availability, broadband use and availability, and captured associated vendor usage and satisfaction data. The intent of the survey was to identify communication facilities that need to be improved to accommodate current and future safety, entertainment, health, security, social, and economic requirements of the community.

Communications Survey Results

The communications survey had a very high participation rate with 50% of survey candidates participating in the survey. Most (64.3%) survey respondents had written comments in their survey responses indicating a high level of interest in the survey topics. Several survey respondents explicitly thanked the communications committee for working on this important issue (Comments: 2, 4, 25, 42, 69, 77).

Overall, the survey shows 82.8% of homes have a landline, 94.4% own a cell or smart phone, and 98.4% use internet services in their homes. The percentage of the Town of Bayfield households with a landline (82.8%) is much higher than the national average which is 45.9% as of December 2016 (National Health Information Survey). This discrepancy in landline usage may be explained by the poor cell phone coverage and poor cell phone provider satisfaction shown in the survey. Households simply need a landline to communicate effectively in the Town of Bayfield.

Internet

Almost all survey respondents have internet access at home (98.4%) and most respondents use CenturyLink (70.9%) or Charter(24.8%) as their internet provider. Approximately half of survey respondents were satisfied with their internet service and half were not. The level of satisfaction varied greatly between service providers. For example, 40.2% of survey respondents who use CenturyLink as an internet service provider are satisfied while 59.8% are dissatisfied with their service. Respondents who use Charter as an internet service provider were 82.8% satisfied and 17.2% dissatisfied.

Approximately 57% of the comments listed in the **Communication Survey Comments** section of this document are internet related. Respondents who use CenturyLink as an internet service provider returned 85% of the internet comments while those who use Charter returned 15% of the comments.

Many internet survey comments are related to internet speed and most are associated with CenturyLink customers (Comments: 1, 2, 3, 4, 8, 9, 13, 18, 19, 23, 24, 25, 29, 30, 41, 44, 45, 46, 47, 50, 52, 53, 56, 58, 63, 64, 65, 66, 70, 71, 73). Some internet comments are associated with the lack of choice that is available for internet service providers (Comments: 7, 11, 27, 54, 74, 79, 83). Several respondents commented on the need to improve internet speeds to accommodate future town growth and business requirements (Comments: 23, 25, 28, 54). A complete list of internet service providers referenced in the survey along with internet provider satisfaction data is shown in the document section titled: **Internet Associated Survey Data**.

Cell Phone

Nearly all survey respondents have a cell phone (94.4%) but only 65.4% of them have cell phone coverage at their home; 34.6% of respondents have no cell phone coverage at home. This fact may explain why the town residents have a much higher landline presence than the national average and it may explain why 84.2% of survey respondents are dissatisfied with their cell phone service. Many of the comments (48.1%) in the **Communications Survey Comments** section are related to poor or non-existent cell phone coverage throughout the town. Some examples include: (Comments: 3, 5, 6, 7, 8, 9, 10, 12, 13, 16, 21, 43, 47, 49, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 65, 67, 69, 70, 71, 72, 76, 77, 80, 81, 82, 83). One comment (Comment: 12) describes significant public safety and security related issues because of the lack of adequate cell service in the area.

Verizon (68.9%) and AT&T (15.1%) provide the bulk of the town's cell phone service. Both service providers have high dissatisfaction rates; AT&T has an 81.3% dissatisfaction rate while Verizon has a 61.7% dissatisfaction rate. A complete listing of the town's cell phone service providers, their home coverage data, and satisfaction data is provided in the section titled: **Cell Phone Associated Survey Data**.

Understanding the Communications Gap

Some residents in the Town of Bayfield have high speed internet service as measured in mega-bit-per-second (Mbps). High speed internet is considered by this author to be any speed over 25 Mbps. Many Charter customers have internet speeds that range from 30 to over 100 Mbps. A few residents use fiber-to-the-home solutions and report speeds of 200 Mbps with 1 Gbps speeds available. However, many survey respondents comment explicitly on how slow their internet is (Comments: 2, 8, 9, 13, 26, 27, 56, 58, 78). All comments that describe their internet speed as slow, very slow, or explicitly provide slow speed numbers have CenturyLink as their internet service provider. Some internet service providers, like Charter, have continually increased their internet speed significantly and broadly over the past few years while other internet providers appear to increase speeds slowly, one or a few customers at a time.

The communications gap is a notion where residents of a particular town, city, or area have a broad gap in internet service levels. For example, some residents may have 50 - 200 Mbps service while others have 1.5 - 10 Mbps service. Further, a resident of a given area has only one choice for their internet service provider. Thus, those residents who have poor internet service will continue to have poor service while those who have high speed service will continue to have their internet service improved over time. As the communications gap widens, those with fast internet speeds get faster while those with slow internet speeds stay stagnant and slow. As a result entertainment, health, social, safety, security, and economic issues follow in parallel to the broadening communications gap.

Some examples of the social-economic affects caused by the communications gap include real-estate value variations where homes with fast internet services sell faster and at a higher price than those with slow internet service. Those with higher speed internet services will have more options for entertainment, security services, telecommuting, online shopping, remote education, remote medical diagnostics and monitoring, etc. In essence, the communications gap creates a population of those who have acceptable internet service and a population of those who do not. We must change the way and the speed in which internet services are rolled out and enhanced or the communications gap will continue to widen at a faster pace.

What is The Town of Bayfield's Communications Future?

This communications survey shows that the Town of Bayfield's current communications infrastructure for cell phone and internet services is unacceptable. If the town's communication infrastructure continues to improve slowly, one or a few households at a time, then the town's residents may never reach their potential for entertainment, safety, health, security, social, and economic services in the community.

A strong and robust fiber infrastructure is fundamental to resolving the communications gap; as fiber is the "data freeway" used to carry large amounts of broadband data. The Town of Bayfield has three fiber providers; CenturyLink, Charter, and Norvado. Fiber-to-the home is the ultimate internet service solution and can provide gigabit service to the home. However, fiber-to-the-home is expensive for remote sparsely populated and topographically challenged areas. Some internet providers report costs of \$30,000 per mile to lay fiber in the area. Broadband grant proposals have been submitted to the State of Wisconsin to help fund fiber extensions to underserved areas of the town. Other grants proposals submitted to the Federal Communications Commission's (FCC) Connect America Fund (CAF) may provide additional financial assistance for fiber rollout. Extending fiber infrastructure and rollout in the town does not necessarily provide fiber-to-the-home service as almost all internet services in the town use copper wire or cable to connect the home to the fiber head.

Although fiber rollout is slowly progressing, the town needs to evaluate and implement internet infrastructure and cell phone solutions that allow closing the communications gap fast. The town needs internet and cell phone solutions that can leverage its expanding fiber infrastructure while servicing customers in sparsely populated and topographically challenged areas in an efficient and cost effective manner. Wireless solutions like AT&T's Project AIGGig, Microsoft's "TV White Space", and small cell technology solutions allow many customers to be serviced with high speed internet effectively and efficiently without laying and/or upgrading copper or cable infrastructures.

Small cell technology is a proven, efficient, and cost effective way to roll out internet and cell phone services. It is used for large buildings, building complexes, campuses, and a growing number of rural areas to provide or improve broadband services. A small cell technology service offering gives residents a choice of service providers (copper, cable, or wireless based) while improving internet and cell phone services across a broad topographically challenged area. Further, wireless solutions in general allow future internet and cell phone service upgrades to be performed broadly and effectively. State of Wisconsin broadband grant proposals have been submitted to help fund potential small cell broadband solution rollouts that would affect many of the town's residents.

Wireless broadband solutions are an effective way to narrow the town's communications gap. Reducing the gap is critical for the town's residents to compete economically, advance socially, enjoy new forms of entertainment, implement new security and surveillance solutions, age gracefully at home, etc. Some survey respondents are in favor of additional cell towers to improve cell phone coverage and enhance broadband effectiveness in the community (Comments: 12, 50, 53, 57, 59, 83) while others are not (Comment: 82).

This Communications Survey has determined that the Town of Bayfield currently has an inefficient and ineffective communications infrastructure with a large and growing communications gap. The town must continue to drive for more fiber presence (data freeways) and explore alternative cost effective solutions for connecting its households to fiber heads; thus, reducing or eliminating its communications gap. Reducing the town's communications gap will provide many new opportunities for its residents and visitors who live, work, and enjoy this beautiful area.

General Survey Data

The number of survey forms sent was 258 and 129 completed surveys were returned for a 50% participation rate. Many survey respondents had written comments associated with them (64.3%). All comments can be found in the **Communications Survey Comments** section. A high percentage of respondents (82.8%) have land line phones and a majority of them (81.9%) use CenturyLink as their land line vendor while 18.1% use Charter for their land line vendor. A very high percentage of the survey respondents have a cell phone (94.4%) and have internet access at home (98.4%). A breakdown of internet and cell phone usage, vendor, and satisfaction levels is found in their respective sections of this document.

Number of surveys sent: 258	
Total respondents: 129	50%
Number of respondents with comments: 83	64.3%
Land Line Phone (direct question):	
Yes: 106	82.8%
No: 22	17.2%
Land Line Vendor (direct question):	
CenturyLink: 86	81.9%
Charter: 19	18.1%
Cell Phone (direct question):	
Yes: 119	94.4%
No: 7	5.5%
Internet at home (direct question):	
Yes: 125	98.4%
No: 2	1.6%

Table 1. General and Communications Type Survey Data

Internet Associated Survey Data

Most survey respondents (98.4%) have internet access at home. However, only 51.6% of respondents are satisfied with their internet service. Most survey respondents use CenturyLink as their combined landline(82.8%) and broadband provider (70.9%). Charter provides landline and broadband services to 17.2% and 24.8% of survey respondents respectively. Two respondents use Excede satellite internet services. The table below shows the breakdown of internet providers referenced in the survey and shows general internet service satisfaction levels. The section titled **Internet Service Provider Satisfaction Data** shows satisfaction and dissatisfaction rates for all internet service providers referenced in the survey.

Internet at home (direct question):

Yes: 125	98.4%
No: 2	1.6%

Internet company (direct question):

CenturyLink: 83	70.9%
Charter: 29	24.8%
Excede Satellite: 2	1.7%
Verizon: 3	2.5%

Satisfied with Internet Service (direct question):

Yes: 65	51.6%
No: 61	48.4%

Table 2. Internet Availability, Provider, and General Satisfaction Data

Internet Service Provider Satisfaction Data

The following table shows all internet service providers referenced by survey respondents and their corresponding satisfaction and dissatisfaction levels. CenturyLink, which is used by 70% of survey respondents, has the lowest satisfaction level (40.2%) and the highest dissatisfaction (59.8%) of all major internet service providers referenced in the survey. Charter provides internet services to 24.8% of respondents and has a high level of satisfaction (82.8%) and the least number of dissatisfied respondents (17.2%).

Satellite internet provider, Excede, has few users and all of them are dissatisfied with their internet service. Survey respondents that use Verizon had a high dissatisfaction level (66.7%) but the low satisfaction level may be skewed by the overall poor cell phone satisfaction levels referenced in the **Cell Phone Associated Survey Data** . Survey respondents who had no internet service provider specified (No Vendor Specified), had Satisfied and Dissatisfied rates that approximated the general "Satisfied with Internet Service" question above.

<u>Internet Provider</u>	<u>Satisfied</u>	<u>Dissatisfied</u>
CenturyLink: (82)	33 (40.2%)	49 (59.8%)
Charter: (29)	24 (82.8%)	5 (17.2%)
Excede Satellite: (2)		2 (100%)
Verizon: (3)	1 (33.3%)	2 (66.7%)
No vendor specified: (9)	5 (55.6%)	4 (44.4%)

Table 3. Internet Provider Satisfaction and Dissatisfaction Data

Cell Phone Associated Survey Data

The survey found 94.4% of respondents have cell phone(s) but only 65.4% of respondents have cell phone coverage at home. A large majority of respondents (84.2%) are dissatisfied with their cell phone service. The table below shows a breakdown of cell phone providers referenced in the survey and shows general cell phone coverage and satisfaction data. Please note that some of the vendors referenced in the survey are not cell phone service providers but are cell phone brands.

Cell Phone (direct question):

Yes: 119	94.4%
No: 7	5.5%

Cell Phone Provider (direct question):

Straight Talk: 4	3.3%
AT&T: 18	15.1%
Verizon: 82	68.9%
LG: 2	
Samsung: 1	
Consumer Cellular: 4	3.3%
Trackfone: 6	5.0%
Republic: 1	0.8%
T-mobile: 1	0.8%

Cell Coverage at residence (direct question):

Yes: 83	65.4%
No: 44	34.6%

Satisfied with Cell Service (direct question):

Yes: 18	15.8%
No: 96	84.2%

Table 4. Cell Phone Provider and General Cell Phone Coverage and Satisfaction Data

Cell Phone Coverage and Satisfaction Data

The following table provides a breakdown of cell phone coverage and satisfaction data for all cell phone service providers, types of providers, or cell phone brands referenced in the survey. Please note that some vendors referenced in the survey are cell phone service providers while others are cell phone brands, and others may be considered "other phone communication types". No attempt was made to "normalize" the data. It is presented in an "as is" manner.

Vendor	Coverage at Home		Satisfied with Services	
	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
StraightTalk: (4)	3 (75%)	1 (25%)		4 (100%)
AT&T: (17)	13 (76.5%)	4 (23.5%)	3 (18.8%)	13 (81.3%)
Verizon: (80)	59 (73.8%)	21 (26.3%)	31 (38.3%)	50 (61.7%)
LG: (2)	1 (50%)	1 (50%)	1 (50%)	1 (50%)
Samsung: (1)	1 (100%)		1 (100%)	
Consumer Cellular: (4)	2 (50%)	2 (50%)		4 (100%)
TracFone: (6)	1 (16.7%)	5 (83.3%)		6 (100%)
Republic: (1)	1 (100%)			1 (100%)
T-Mobile: (1)		1 (100%)		1 (100%)
No Vendor: (9)	4 (44.4%)	5 (55.6%)	3 (42.9%)	4 (57.1%)

Table 5. Cell Phone Coverage and Vendor Satisfaction Data

Communications Survey Comments

The following are comments taken directly from the Town of Bayfield Communication Survey, The comments section has a reference number, survey comment, and a data reference number (DRN) associated with them. The reference number is used to reference a comment from document text while the DRN is used to associate a survey comment to its source data.

Reference No.	Comment	DRN
1	We have broadband internet but it is very slow. We usually can't use 2 or more devices at the same time because it basically makes the internet useless. Also, it is pretty discouraging to not have cell service in our area. The providers should get with the times! (DRN 1)	
2	Our internet connection is slow (1.5m High Speed Internet) and is expensive: \$59.00/mo. Plus 4.00 Broadband. It would be so great to get a better connection. 1 Bar, but have a wireless connector in the house so phone works close to the house. Thank You! (DRN 2)	
3	Very poor cell phone service at residence. Very slow internet service at residence. We need super broadband & service in the town to attract home office professionals for economic development. (DRN 3)	
4	Internet so-so, wish it was stronger, faster. Thank you for your work on this. (DRN 5)	
5	Cell phone coverage at home, but poor (DRN 6)	
6	I get cell some of the time. I cancelled AT&T because no service. (DRN 7)	
7	Cell signal sucks in Northern WI. Internet Service limited so you don't have many options. (DRN 10)	
8	Cell phone is spotty 1.25 miles from lake. Internet upload is .33, Download 3 mbs, not adequate for video or normal business. (DRN 11)	
9	Cell phone barely works at home. Internet speeds are so slow it barely works too. (DRN 12)	
10	I have a storage shed which I have no service up by the C&W pit area. Very few places in Town of Bayfield have service. (DRN 13)	
11	Need more options for internet and cable tv. Fiber connection to house would help with both. (DRN 14)	

- 12 Cell phone service is very poor. The Town and County and National Park Service, United States Coast Guard, etc. need it for public safety in the Township, County and those in nautical miles of Bayfield and Ashland County. Establish a tower or communication system adequate to the immediate need. Not excuse this day and age for the less than adequate system presently deployed. (DRN 15)
- 13 Though only about 2 miles north of Bayfield we receive no cell signal at our house. Our CenturyLink internet service is poor. Though we pay for 3MB (download) and .5 MB (upload) internet, we rarely receive those levels even taking into account line attenuation, usual download capability is 1.5-2.0 MB. Our CenturyLink local tech says max for the line on our (public) road is 3.0 MB. Charter does not serve our location. At times of high area use, our internet service slows so to be non-functional at our house. Cell phone used for travel only. (DRN 16)
- 14 A Flip Phone Only. Boycott all i-phones!!! (DRN 19)
- 15 We moved here in January 2017. We had AT&T cell service at that time. We were able to get service in Bayfield/Ashland area but no AT&T service at Apostle Highland Golf Course or Washburn area. Had to switch to Verizon at a cost of over \$400. (DRN 20)
- 16 Many places in the Bayfield and surroundings have weak or no cell phone signal which is a significant problem with dropped calls and/or lack of cell access at work projects. Property values in areas without cell access may be severely affected. (DRN 25)
- 17 We have Tracfones and no service, even with a tower only 3 miles away. Not willing to purchase or pay for phone service for a cell phone. (DRN 27)
- 18 For internet are at end of a line and service from mid-June to mid-Oct. is slow. Finally got an extender for cell phone. That works. (DRN 28)
- 19 Would like access to local TV Channels that are from WI from Cable and Sat providers. (DRN 29)
- 20 Have High Speed WIFI. (DRN 31)
- 21 Satisfied with cell service means I recognize that I will not have full service in this area. It is a trade off for living in a semi-remote area. It does not disappoint me. Service at my home is usually good- although not great- especially in the summer. No cell service at either home or work. (DRN 32)
- 22 Cell Coverage via WIFI calling only. (DRN 33)
- 23 Internet is usually sufficient for us but our out-of-state (grown) Kids comment on the speed. Sometimes our downloads seem to take a long time. My/Our area OK for cell service, if you go up the hill to Betzold Road and J, I lose it. Internet service OK but computer tech person says its slow...we're on the end of the line she says. (DRN 34)

- 24 We have a TracFone for travel but we currently do not have cell phone reception at home. Our internet is faster than it used to be but it still is slower than in other places. (DRN 37)
- 25 So glad to see this issue addressed. I telecommute and it's an issue. (DRN 38)
- 26 Cell service is spotty - Internet is slow and unreliable. No options other than CenturyLink for internet. (DRN 39)
- 27 CenturyLink is our only option. No cell service and sub-standard internet speed. (DRN 40)
- 28 If we want to have our young people come back here to work and live and be a part of our community we have to look at the future of our township. High speed internet and phone service is crucial to our growth and future. (DRN 42)
- 29 Internet slow and unreliable. (DRN 43)
- 30 We are in a dead zone- slow internet- and NO cell service. (DRN 44)
- 31 I would like to see cable TV option available on Chequamegon Rd (aka Sanitarium Rd.). (DRN 45)
- 32 The Town's only involvement should be to convince service providers to invest and upgrade service to our area, but there is a definite need for better service. (DRN 47)
- 33 Although we have cell coverage, the surrounding area does not. (DRN 48)
- 34 Cell coverage not awesome. (DRN 49)
- 35 People, often hunters, on Happy Hollow Rd. often drive to and stop @ the end of our driveway because there is a spot w/service there. Our internet is acceptable for what we use it for. We mainly use cells for on the road, would not get by very well w/out our landline. There is a problem with cell service blackouts ("all lines are currently busy") when lots of tourists are in the area. (DRN 51)
- 36 It is all over priced! People need an affordable option. (DRN 52)
- 37 Happy we have service but wish it was better. (DRN 53)
- 38 I have a signal repeater from Verizon connected to my satellite modem to get better cell phone signal. (DRN 56)
- 39 Flip phone, not a smart phone. (DRN 57)
- 40 Ability to use cell phone very spotty. (DRN 60)
- 41 Service is not good with Charter. Keeps cutting off. Not strong enough. (DRN 62)

- 42 Some dropped calls on cell phone, and need to be pointed towards the cell tower. Internet is via a Verizon hot spot. It goes 'dormant' a lot and especially in the evening goes dormant every few minutes. Thanks for starting to work on this issue. (DRN 63)
- 43 Cell phone coverage very limited- generally satisfied with internet service. (DRN 64)
- 44 Not having a fast (high speed) internet is less appealing. (DRN 65)
- 45 Always problems with Charter. I have no service. (DRN 66)
- 46 We are paying high-speed internet service rates, but are NOT getting high-speed service. (DRN 67)
- 47 I have a cell phone that's turned off a home. If I'm going somewhere I'll take it and turn it on when I have service. I pay for high speed internet through CenturyLink but it's not really high speed. (DRN 69)
- 48 Verizon is the only cell phone provider that functions in our area. If there was another provider I would go with them because Verizon is a rip-off. I think our internet service is fine, but when others use it they say it is so slow. (DRN 72)
- 49 Cell if I'm in the right place outside. (DRN 73)
- 50 Had to get a little cell tower for my home. Works off WIFI. But during power outages won't work. Internet is too slow where I live. (DRN 75)
- 51 We are unable to respond because all of our experiences are now in N. Caroline. Best of luck with your survey. (DRN 76)
- 52 Cell service at our home is hit and miss. One notch above dial-up. (DRN 77)
- 53 Internet connection is slow from time to time. At times, the internet flat out doesn't work. Cell phone in our area is terrible! We need more coverage for Red Cliff, Corny, and Herbster. Towers can be designed to blend into the surroundings. (DRN 78)
- 54 Cell phone and broad band service is very inconsistent in the Town of Bayfield. I have excellent phone, broadband, and cell phone service at my home. However, cell phone coverage is poor throughout the town. Broadband service is slow and unreliable through much of the town. (DRN 81)
- 55 Comment removed because respondent's name and address were present. (DRN 82)
- 56 NO cell service at all- None at all. Internet very slow- works sometimes. (DRN 85)
- 57 Cell phone service north of Bayfield is nonexistent. Need more towers! We have to pay Charter extra to get decent speed (Business package) 60 mbs. (DRN 86)
- 58 Cell service is sporadic or non-existent. Internet is technically 4 bps not even close. Very

- slow. Have had a technician out multiple times. (DRN 87)
- 59 The saying here is if you can't see the person you're calling your cell phone won't work. Quit worrying about killing damn bird and Lets get a working cell phone service. (DRN 88)
- 60 Cell phone service is spotty when traveling around in our area. (DRN 90)
- 61 Sometimes have cell service. (DRN 91)
- 62 Our cabin in the Town of Bayfield has NO cell phone service! (DRN 92)
- 63 Rain- no internet. Very slow speed on Ski Hill Rd. (DRN 93)
- 64 Internet not too bad (DRN 94)
- 65 They do not work. Phone not at all, internet slow. (DRN 96)
- 66 Lack of cell home service impacts our life and business. High speed internet is lacking from our provider - we are at the end of the line so speed is mach slower than in other areas. (DRN 98)
- 67 Poor Coverage 200 yards west... (DRN 99)
- 68 I have been fortunate to have good service from both CenturyLink and Verizon. (DRN 102)
- 69 Smart phone use (Verizon service) is real bad @ our property- Flip phone use (Verizon service) is fine @ our property. Verizon is carrier in both cases. Only prbs we have had w internet is 1) when we lose electricity (Xcel) or 2) when fiber optic cable is out (twice this season, Hwy 13 construction). Thank you for the survey questions and for your work! (DRN 105)
- 70 Our cell phone coverage is very poor and unreliable, many times cannot even get coverage. Our internet service is average but very slow at high use times. It also goes our frequently. (DRN 109)
- 71 Both cell phones (ours and other family member - with different service providers) and internet are unreliable and slow. (DRN 110)
- 72 Used to have Charter where we first lived, much better service/price. Bad current location for cell phone even with booster in house. Cell coverage poor lots of dropped calls. Internet OK, not great, slow. (DRN 112)
- 73 Mostly satisfied with internet service, but sometimes slow with streaming movies. (DRN 113)
- 74 This area lacks good internet choices. They are expensive and rarely work well. (DRN 114)

- 75 I'm thinking of getting a smart phone. (DRN 115)
- 76 Cell Service at home and in Town is inconsistent especially when there are more users (i.e. anytime but winter). Data Service is almost always poor. My home internet is adequate with little interruption in service. Actually has improved in last two years. (DRN 116)
- 77 We have to go to top of hill to get cell service. There's a tower by the Siskiwit Lake Area, but we don't get any coverage from it. Thank you for asking. (DRN 120)
- 78 For Verizon we have to have a network extender. Visitors with AT&T and other carrier's have no service here. For our internet we have DSL (slow). (DRN 121)
- 79 There is only one provider available (internet). We are not able to get any service over 3mbps (internet). (DRN 123)
- 80 Gaps in cell service. Have AT&T. Microcell at home so service is good. CenturyLink DSL service is too slow, and only option. (DRN 124)
- 81 We currently live at Waterford on the Bay but also have a home up in the orchard area by Rocky acres on County J. There is no cell coverage up at that house. That is always a challenge. (DRN 126)
- 82 Don't want cell service at local residence. Don't expand cell service in our area. Internet service is too expensive. There are a lot of concerns about potential impacts of RF waves from cell towers, phones, etc. on human health and the biosphere. We are happy to not have cell service here. Please do not bombard us with additional waves. (DRN 127)
- 83 AT&T poor, Charter very poor, Mostly satisfied with cell service in our area, sometimes satisfied with internet, Charter service is terrible. If there was another provider I would try them. AT&T coverage is poor. We need more cell towers for better coverage. (DRN 129)