**Broadband Challenges**

What barriers or other issues can you identify that may impede the increase of broadband access and use across the state?

**Answer Options**

**Response Text**

Speed and access at a reasonable cost.
Local interest. Many do not see big picture need for it
Money
Lack of accessibility for local government
Lack of understanding
The telecommunications infrastructure is fragmented and does not meet the current or future needs of Iowans in capacity, access, and cost.

Telecommunications policy is fragmented and is a barrier to developing the physical infrastructure required to be globally competitive.
The high cost of putting in the infrastructure, especially in rural areas, with no regulatory certainty for cost recovery for the providers. No borrowing and business plan certainty.
1. Obviously the expenses of creating a broadband network across the state will be monumental.
2. Lack of familiarity with new technology
3. Uncertainty over standards - should we act now or wait for more guidance
4. Resistance to change
The number of users accessing at the time.
The different providers used by each office in the county.
Money/budgeting
High Cost. Missing infrastructure.
Many rural areas, particularly in northeast Iowa are situated in locations where wireless broadband is not possible. Wired broadband not always feasible; nor is broadband over power-lines. The latter causing considerable interference to many public safety, business, and other radio services.

**FUNDING**

Cost
Reception
This topic is something I've not read about and I'm not aware of any of the issues.
Cost.
End user location and cost to the end user to bring broadband to them.
Cost is always a barrier in anything. Access for those folks in the rural areas (out in the unincorporated or small cities) can also be an issue.
unknown, not very informed about the access and use
More Federal support with funding for rural areas.
The cost of having to go narrowband. A lot of agencies have a hard time getting funds.
cost of towers, number of towers to adequately cover rural areas
Necessary funding. Lack of public, private partnerships. Infrastructure lacking in many small communities.
Need strategic plan & timetable to start implementation in phases.
Terrain and infrastructure
Incentives for carriers to upgrade infrastructure
Rural area business loss due to lack of broadband
Limited amount of providers.
Geography.
Lack of completion in providers.
Current infrastructure levels.
Money
Cost, lack of availability
County tax dollars demand. Restricted budgets by Law Enforcement.
to slow in the rural areas
The cost of the build out in the rural areas. The cost per customers is often 3-4 times higher than in-town or urban construction.

Lack of funds, lack of service providers, lack of fiber lines, lack of encouragement or incentives for providers
Money/Budget
To get broadband to consumers requires hardware in the form of cable lines or phone lines or other such equipment. Putting this type of Technology infrastructure in place comes at a steep price.
don't know much about the issue.
None
In some of the more rural areas, it would be less cost effective to serve every household or business. The providers would probably be very reluctant to invest the cash that it would take to start up some of those areas.
The cost of equipment and the fiberglas to make all the connections to have the speeds that are required to make broadband possibly for everyone in Iowa.
Large companies are not interested in Iowa because of our dense rural population.
exenses and not available to all areas of our county
Installation cost of fiber optic lines; Cost to the end consumer; Lack of technology or cost of technology for fast internet via satellite or land based antenna system
lack of population to fund the costs for the company's to sell the service to
Lack of understanding of why it is so very important
connectivity and Money
Federal and state funding
Lack of fiber in the rural area. Small tell. co. and coops are loosing customers.
Return on investment for the carrier

Logistics
fiber, cost,
Getting out to rural areas will remain a challenge. Our rural residential density is very thin, making wired solutions for broadband expensive to install. Our area also has dead spots in the cellular network and we do not have even 3G coverage in all areas of the county.
1.Logistics.2.Cost /Fiber Mile.3.Retreating USF funds.4.Loss of long distance, both intra and interstate revenue.0-2500 line companies.
Lack of affordable connection options to rural communities and offices.
Our county has an issue with remote locations as well as an issue with topographical barriers.
reliable broadband access in rural areas is almost nonexistent without individuals having to purchase extensive amounts of hardware or equipment
lack of consistency between broadband providers
rapid technical changes making current equipment obsolete
The main issues in Dubuque County are topography for line-of-sight connections and not having access to wired broadband in all areas of the county that need wired access.
Its availability to everyone
Topography and utility access to difficult to reach sites that will serve all residents and the general public.
Lack of incentives for providers to serve very low populated areas that are difficult to provide service to.
Money
cost to provide to more isolated areas or residents. Access and reliability if the system is routed through fiber
buried within transportaion rights-of-way. Cost to the individual.
1. There are multiple carriers and plans vary greatly.
2. Rural Access is poor for most carriers.
Rural areas served by providers who will not invest in providing broadband to small population areas. It is
costly to provide broadband to only 2 or 3 houses in a 1 mile section - but that is what it will take - similar to
electric cooperatives providing electricity to only one or two customers in a 1 mile section. Of course -
ultimately it comes down to money.
lack of high-speed infrastructure within the state in some areas.
None
Lack of service
I really do not know anything about this issue.
I take it you mean "broadband internet access"? If so i would say money, and stakeholders interest to make
things easier for he consumer due to a lack of fiscal motivation.
At this time none, broadband is a backup system only and and there many types of backup systems like
WENS which we are deploying as our backup system. Are real focus is on updating our primary systems of
vhf only.
1) cost of providing broadband access in rural communities without dense populations
2) Numerous small providers
3) End Cost to users
The cost of erecting adequate towers for coverage across the state.
Cost to lease tower space/buildings
Cost of equipment and the maintenance,
The connectivity options available in the area... most rural area's have dialup or satellite internet only.
One barrier would be cost and access. How do you get fiber/broadband connection to rural areas while
keeping costs affordable?
In rural areas some telecommunication companies do not have the infrastructure needed to handle the higher
speeds or increased bandwidths and they are in control of a certain area and will not let other potential
companies that may have the infrastructure come in to this area.

Funding, lack of understanding it's use or how its used, no local IT to assist with technical questions/issues,
Cost to build infrastruture, improvements to current system to maximize the best service, fees/costs to
maintain, municipalities taking business from private sector.
None in our county. Between the phone companies (Alpine and Northeast Iowa Telephone) and REC
(Allamakee-Clayton) cover most of the county. Mediacom also covers county. Windstream customers are
more poorly served in the southern part of the county, only.
how wil it effect me and what I do?
As I understand it it would require a large number of hotspots to have broadband statewide. Last time I
looked at it for county wide it was cost prohibitive.
rural locations
none

The infrastructure that is currently available. Even the current ICN network of services is becoming aged. This
system is also not available as a backup for when the main access points fail to function. Second is the ability
to serve the more remote geographic regions of the state with these types of services.
Mediacom holds the monopoly to broadband access.
lack of competition in the rural areas,infrastructure,
Cost and in rural areas provider ability to provide greater band access
Cost
Expense with installing broad band capabilities to rural areas. We are a fairly rural area but outside of our towns it is very expensive to receive broadband internet. I have a relative in Iowa that pays over $60/month just for basic 1mg internet and the company says it's due to their rural location on the farm. All they can get is satellite internet.
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Response Text
Cost
Lack of local funding
Money
The telecommunications infrastructure is fragmented.
Telecommunications industry uncertainty especially for rural providers because the "universal service" concept is no longer a priority, and the desires of the wireless, big providers are what is promulgated by the FCC.
Cost
The number of users accessing at the same time.
money
High Cost.
terrain and distance from broadband provider. Sattelite providers and wireless providers do not like the use of local-customer owned relay stations.
Limited infrastructure
FUNDING
Reception
Cost. Reaccuring charges.
Location.
The rural aspect
sorry not known
Distance between users in rural areas makes it harder and more expensive to use and to provide. So more concentration on easier access to funds is needed.
The barrier would have to be the cost.
cost of towers
Lack of fundings.
infrastructure
Incentives for carriers to upgrade infrastructure
Geography
money
Availability
Restricted budgets for law enforcement to cover
speed of broadband
Cost and time it will take to pay back the investment.
Lack of funding
Budgets
The lack of technology infrastructure in rural areas
No Answer
Initial cost.
The high cost per mile per customer that we have in Iowa.
not available in all areas of the county
Cost to the end consumer.
low cost equipment
Getting the message out to those in Iowa who stand to gain so much
Money
Funding
slow internet speeds
ROI
cost
Geographic issues. Woodbury has a huge rural area. At this time, cellular coverage is still spotty in some areas of the SE part of the county.
Logistics
High cost to connect to servers that are on broadband (we are a satellite office in a park setting).
Disbursement out into the remote areas. Just getting "high speed" internet into the county seat, doesn't help areas of the county with physical/topographical issues that can't get ANY internet.
cost
Topography.
Incentives to provide service to sparsely populated areas.
IDK
Cost to the individual.
Rural access is the major barrier in our area...4G is not available in all areas of Emmet County. In certain areas even access is an issue.
Money
Lack of infrastructure
Rural areas don't have it available
Lack of service
Lack of knowledge
Money
Unreliable with to many different players controlling a part in one system, that is too costly
Cost of providing access in rural areas.
Owning or leasing tower space.
Availability
Cost
Allow greater competition for services between potential providers.
Lack of Understanding
Improvement to current system. Upgrading building wiring from Cat 5 or Cat 5e to cat 6 to maximize the best services available will be costly.
If we have a barrier, it would be for higher speed.
LACK of understanding of what it will do for me, my business, the County
Money.
I have none
The cost of installing the infrastructure for the provision of services in an equitable fashion to all areas of the state.
Lack of competition
lack of competition.
Provider ability
Cost
Cost
| Response Count | 78 |
Better access to the State owned fiber network,
Get buyin from local elected officials
Funding and support of State and Federal Government to local government

Lets invest in a single infrastructure solution that all carriers would have access to for providing services to the citizens of Iowa. A fiber Highway so to speak, similar to our interstate and highway systems. UPS, FedEx, other shipping/trucking companies and business don't build their own roads for their services, they use a highway infrastructure system built for all to provide services and good to Iowans.

Federal level--really need FCC regulators to understand the financial ramifications of their decisions. Need more comprehensive policy without so much big, wireless company influence.
State level - need the same from the IUB
Local level - need to continue to educate our legislators (already doing with ITA and RIITA)
Educate the populace and customers.
Need our legislators to advocate for the needs of the rural areas.
Any grants etc. to help build infrastructures locally for economic development and business customers.

Grant funding may work, but there will be many requesting funds from the same source at about the same time. A build-out target date far enough into the future to keep us timely, while also allowing for some generation of necessary funds will help. Perhaps an appropriation...but I wouldn't count on that.
None
make it affordable
Publicly funded wireless and fiber access points the way we fund roads. Set maximum rates for those using that infrastructure. Include free low end service.
For wireless, consider local/neighborhood relay stations... working in some locations here in northeast iowa/Winneshiek County. Alternate satellite into local neighborhoods... Develop agreements with ISP to help rather than hinder this possibility
FUNDING
Improve equipment quality
We need a system that law enforcement/ems could use that would not have a charge. Should be set up like our narrband radio system where the airways are free.
Sure. Wireless is a method to bring access to areas that otherwise would be inaccessible or too costly to reach, but wireless has limitations and possible problems as well.
None
again unknown
Less rhetoric and more action with funding
Applying for grant money.
coordinated efforts between providers, local, state and federal agencies to identify specific locations which need to be covered.
Strong leadership for the Governor and the legislators making it a priority.
Build out a robust system
State funding to provide incentives to carriers
Utilize new technologies.
grants or fund raises
Providers need to provide access to high speed internet to all customers, especially those who live in the very rural/sparcely populated areas.
Since the Federal system says we have to have it, then let them furnish some dollars to the local and County Law Enforcement Agencies to help make it doable for smaller agencies.
need to put in infrastructure to fix this
More pressure on the FCC has not seemed to help so some type of a State USF might be a good option.
Since we are saying this is an Iowa initiative the USF change should be spread across all customers both landline and wireless since the cell towers need the landline connections to operate.
The state needs to get more involved
Help from the State or Federal Government when they aren't shut down.
Find a way to make the process of getting broadband access to consumers profitable
No Answer
None.
We need Federal and State help for the small local telcos here in Iowa to add this equipment to there already existing networks.
link to those that internet is not available to some people in the county
Research and development for faster and cheaper land based antenna systems; Create or expand tax incentives for R&D; Create or expand tax incentives for fiber optic installation; Allow income tax deductions to the end consumer for internet expense.
find a way to use the ICN network to help reduce the costs to get the service to rural parts of Iowa
Newspaper and TV Ads
Direct correspondence with Boards of Supervisors
Contact the elected officials and voice your concerns and support.
cheaper satelate systems
unknown
government and ind. working together
Denser cell tower network. I have a preference for hard wire solutions, but they will require a significant investment in this county.
Consolidation of redundant services.
Grant program to provide funding to connect outlying county offices to centralized servers that use broadband.
Increased expansion of satellite, cellular, radio, and other types of internet to wirelessly spread the connectivity around the county. Reliance on phone lines is NOT the answer. There are areas in our county where you can't even get dial-up internet because the phone lines are too poor. Maybe there is some way to transmit the signal over power lines, which are already spread throughout rural areas.
none
Work on creating a wired and wireless network that will serve nearly everyone in our county and state.
Restrict almost all development in areas that cannot get access including residential subdivisions, schools, government buildings and businesses. Support local telephone, cable and utility companies that want to expand broadband access to new areas of the County and State.
Provide access incentives through federal and other taxing entities.
NKR
provide where it may be done efficiently to reduce this cost.
More towers
Mandate that all rural areas (and I mean rural unincorporated Iowa and small towns) be provided with broadband service. Provide funding - however funding cannot be used to improve the broadband that is already in place - that will not solve the problem. It must be for providing service to the rural unincorporated areas of the state and Iowa's small towns. If you don't provide funding it will be so expensive to the consumers in rural Iowa that you might as well have not done it - rural Iowans won't be able to afford it. Encourage build-out of fiber systems

Legislate that big providers must provide this service in rural areas. If the small cooperatives can do, then so can the larger companies.

Work with entities that are large enough to have the motivation to make a change in the market and can still sustain a profit. Make a plan for changing these services that makes financial sense to them.

State owned
tax incentives to providers
Use existing infrastructure such as tower space/buildings.
More cell towers to allow for better access without having to run physical wires or fiber to every door.
Competitive marketplace with more than one provider
Set up micro-wave networks or other wireless access for these areas, so that there could be increased competition for these services.
Educating the uses of broadband
None really...maybe rewire one floor or a few departments at one time to spread cost over two or three budget years.

None
education
Don't have any.
Develop a cost sharing arrangement for getting this accomplished. I would also like to voice caution on building this agreement upon the user fees of individuals that already have this access though.
Free market
not sure. educate communities on the importance of broadband so that they can find providers who will service their area

None
I don't know exactly
Tax breaks for broadband companies who will commit to installing the infrastructure for rural access. Offer price reducing incentives for families based on income and local options.
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**Broadband Challenges**

What recommendations do you have to overcome these barriers?
Relying on our excellent local telephone companies (Northwest and Palmer) and the opening up of the fiber network to more businesses and citizens, reasonable price, that it becomes easier and more cost effective for local governments to access. Higher access speeds/capacity, State wide accessibility, and lower cost. Will continue to grow exponentially, and is critical to the economic development of our rural areas. If don't have high capacity broadband, there will not be growth.

I don't see broadband as an "optional" direction to consider. Broadband is coming here. We need to identify expectations, standards, and funding options and get the word out so progress can begin. I want to be able to access the information that I need at the time I need it. more affordability. Wireless mobile at virtual reality data rates without dead spots. As technology increases, other transmission methods may be developed.

I believe that the rapid advancement and growth of technology will outpace our ability to fully utilize what is offered. Soon, our systems will cease to function as we cannot keep up with the changes and our systems will become obsolete.

IMPROVEMENT

Quality and speed

The needs will continue to increase as more and more services become web based, which will drive both the need to reach as many users as possible and the need to provide faster connections at an affordable rate. As always speed and volume to carry larger and larger amounts of data. just make it available.

100 plus speeds

In the future I look for better communication with other agencies. an expansion of current capacity, with realistic limitations.

If you want to stimulate economic development, this is a necessary. In the next 5 years, I expect some development.

this is a rural county with very hilly terrain, expectation is to have the same capabilities as all other users.

10 MBPS in rural areas

They are only going to increase. would like them in all schools and large corporations.

Anyone who wishes to receive high band internet access would have it available to them at a reasonable cost.

It will not happen, due to restricted budgets, unfunded mandates from the federal system will not be completed. I think this is a real issue for rural customers. They need broadband as much as anyone and maybe more. The opportunity for broadband access across the state will help promote economic development in all of our communities.
Public wireless access everywhere to all parts of every county
Would love free local access for Emergency Management and Public Safety
I see the population in Iowa concentrating in urban areas. I think that the need for rural access will begin to shrink over time
No Answer
The needs will most likely increase.
We have many companies here in Carroll Co. and all across Iowa that do business all over the USA and abroad. They need this Fast broadband service, or they can't stay competitive in this new global market.
I expect that expansion of broadband access will continue at the same pace as the last 10 years. the need grows everyday many more services can be delivered if broadband internet access were available
Every Iowan to have access to fast and efficient electronic information and email availability
Sooner the better
Make the service affordable
poor
the need will continue to be more demanding
Gradually holes in the cellular network will fill in. Wired access may never come.
High costs for sparsely populated areas.
The need for access is growing just as fast if not faster than the ability for service providers to provide the access. I don't know the answer, but hope this gets addressed.
I will continue to meet my internet needs in my rural home on my own as I have been for years
Broadband will become as readily available as electricity.
None
There is a thirst for information that may become a need with more reliance on e-commerce.
I anticipate that as more and more people give up their home lines, more towers will be needed.
I believe that younger generations expect broadband service and without it they will not reside in Iowa. Young entrepreneurs will not locate here. Business is more and more reliant upon internet sales and services - without broadband they will not locate in rural Iowa. If Iowa wants to retain young people and be viable to new business then they need to figure out a way to provide this service.
9-1-1 text and video, rural expansion, cost minimization.
Unknown
Like roads and electricity, broadband access is available to all areas of Iowa.
full phone access for all electronic services in a waterproof and durable format that allows for easy transport.
With the changing of technical system will not be able to keep up with changes.
Access to high speed broadband
No current expectations.
More readily available fiber access with greater bandwidths in town... better wireless coverage in the country
Increased speed and capacity. As technology increases more devices may be accessing the network.
More and more of our field work documentation and communication involves real time mobile internet connectivity. Mobile data transfer will only increase in the future.
N/A
Faster access to sites. More options for cellular services.
unknown
We could then eliminate using cell cards in our squad cars to move data.
More wireless access
That this type of service becomes as accessible and available as what the direct dial telephone lines were that became more common in the late 60s and early 70s.
fiber infrastructure
We will have telepsychiatric services and this will require greater band width so we need to have this deliverable with out any interruptions in the feed.
As access grows, so do the options and the costs for basic internet drop while growing the speeds available.
## Broadband Challenges

What are your expectations for future access needs?

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Private verifiable connections (SHH Equivalent) need to be the default.
Please support Western Iowa Networks in effort to increase broadband service to rural areas.
The time is right in this technological era. More on line purchasing.

This will fall to the wayside, as powers to be in Washington do not care about the small counties and cities of the Midwest. They can not agree to disagree! What a social system that has developed. We are going backwards.

Thank You for seeing the need to get some kind of help for this concern. It will benefit the small local telecos and many small and middle sized businessth that are handicapped by not having this service.
Glad to see the Governor is supporting Broadband expansion
Broadband can't stand still but needs to keep up with the growing technology
Signs of the times.
Technology will evolve to provide broader access and reduce costs over time. Allowing individual choice and private commercial enterprises to meet needs may provide access people want at affordable price.
This is something that I have always strongly believed in - we are at a great disadvantage not only personally but economically without access to broadband service in our personal lives and businesses. Iowa will miss opportunities.
We have broadband available in Cedar Rapids so I am not sure what the issues are.
Where did this come from, and why is this a priority? I see more traditional or resource based issues as a priority for government. I am not convinced we need to "connect every Iowan."
Broadband is a good thought for NGO but not responders with limited budgets.

I think if a company with control over an area can not service that area with adaquate broadband access and speeds, they should be forced to allow other companies to provide that service if they are interested in doing so. None
The City of Charles City was granted a fiber optics project looping fiber around the city. The County will able to tap into the fiber. Not sure what it all means for us yet.
Cost ? before we jump on the merry go round how about defining what it is we want to do with it and how is it better than what we have today?
I have different issues with my computer but it is because I am on the stse server for services. I am too far from the courthouse to be connected to there internet.
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