From: (null) jrpmapalmer <jrpmapalmer@frontier.com>

Sent: Friday, June 15, 2018 10:34 PM

To: Comments, Urc

Subject: Broadband Expansion in Rural areas in Indiana

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To whom it may concern,

I am a resident in an area that is poorly served by broadband communication services. I am also a member of the Franklin County Economic Development Commission. I am recently retired from a high tech job that sometime was performed from my home. Lack of good, reliable service was a handicap at times. I cannot imagine trying to run a business that relied heavily on those communication services.

As an example, I have:

- -a landline with DSL internet service through Frontier. While I appreciate having service that is faster than "dial-up", that speed is too slow for many functions such as "Voice over IP" or other processes that need much faster speeds
- a mobile smart phone through Sprint with the closest tower being 8 miles from my home and it is impossible for my cell phone to adequately connect to the internet for data transmission and I use my home WiFi to get data through my cell phone

A couple of months ago the Frontier land line and internet service were interrupted for 4 days. At my home we could barely make a phone call on the mobile phones and internet access was impossible. If I were running a business that would have been a disaster not being able to receive orders or financial trans actions. Not to mention the safety aspects of not being able to contact emergency services.

I would suggest that what is needed is:

- an expansion of mobile phone communication towers in rural Indiana. This can be difficult in the geography in southeastern and southern Indiana, but I believe this is the best use of funding
- Traditional towers placed my keys apart will probably not be adequate to reach into the valleys and hollows found in the area
- Efforts to come up with an alternative such as smaller, mire closely placed towers should get priority
- many rural areas have 50 plus year old copper phone lines and replacing them will be very expensive and even with repeaters/signal boosters DSL is the fastest service available
- fiber optic cabling would be great, but wiring everyone would be very expensive and require a long timeframe

Thanks for allowing me to share my thoughts. I believe this is the most important problem to resolve in rural and small communities in Indiana. Not having access to broadband service will cripple any economic development efforts in our state's rural areas.

John Palmer

Franklin County Economic Development Commission jpalmerfcedc@gmail.com 765-338-8201

Sent from my iPhone

From: Larry Hamann <bsm46350@yahoo.com>

Sent: Friday, June 15, 2018 4:59 PM

To: Comments, Urc Subject: Net Neutrality

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I strongly feel that access to the Internet be equal for everyone. I am highly disappointed with FCC 's effort to put control into five Corporations to control Internet access. I sincerely hope that the commission and the state of Indiana put laws in place to block this attempt at Power grab by these five corporations.

Thank you for your attention.

Larry Hamann 177 Sagamore Pkwy LaPorte, In 46350

PS: I'm not a robot.

Sent from Yahoo Mail on Android

From: Michele Risinger <director@hartfordcity.lib.in.us>

Sent: Friday, June 15, 2018 3:53 PM

To: Comments, Urc **Subject:** Broadband study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

My library has been circulating hotspots to help some with the lack of decent internet in the rural areas of Blackford County. We've already had two not returned, so this is not a long term solution.

Hartford City has fiber installed by Mainstream from the previous push for rural broadband, but they will not sell to residents even if we have one of their connection boxes in our yard.

Michele Risinger Library Director Hartford City Public Library 314 N High St Hartford City IN 47348 765-348-1720 http://hartfordcity.lib.in.us

From: Miriam Robeson <miriamrobeson@gmail.com>

Sent: Thursday, June 14, 2018 1:21 PM

To: Comments, Urc

Subject: Indiana Rural Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To Whom it May Concern:

I am writing per the invitation of Representative Don Lehe about my concerns and recommendations regarding broadband access in rural Indiana.

I live on a farm in the middle of Carroll County. The nearest city is approximately 25 miles away. The nearest town is approximately 5 miles away. My internet access is via Broadway Broadband, who provides 10 Mbs internet speed, recently increased from 6 Mbs.

Our farm is dependent upon reliable and fast internet access. I use internet access to access my bank accounts, pay farm bills, and communicate with vendors. My son uses the internet to track the markets and place orders for seed, fertilizer, etc. We both communicate with each other and share data about the farm operation via DropBox.

However, in order for our farm operation to grow, we need significantly faster internet access. We are currently installing a new scales system for our semi trucks. Each truck will be supplied with a device which automatically communicates with that scales. That communication occurs over our broadband account.

We are also installing security cameras and other monitoring equipment both for the safety of the farm and to monitor activity on the farm. Each of these cameras will communicate wirelessly to a central location. Additionally, our ability to share large files, such as field or equipment schematics, is hindered by our slow internet speed.

It is said that each "device" connected to the internet needs at least 1 Mbs of speed just for the most basic of communication (getting the weather, for example). This is a cumulative number. On the farm, we currently have 7 desktop computers and dozens of handheld wireless devices, including diagnostic devices or data capture and transmission devices - all of which is used with our farm equipment. If each of them requires a mere 1 Mbs of speed just to access the internet, we have - at any one time - more then 50 devices seeking capacity on our farm internet bandwidth.

The current standard of 10 Mbs as meeting the definition of "broadband" is laughable. When towns and cities boast broadband speeds in the 100s of Mbs to residences, our available speed at 1/10th of that rate stifles our ability to expand our farm operation and use the technological tools that are available to us.

As the pioneers of rural electrification in my grandmother's time, the REMCs have proven to be well-organized providers who have both the reach and the technological capacity to deploy fast broadband internet to rural homes and businesses. Unfortunately, in the 21st Century, they lack the financial resources or government backing (either in funds or facilitation) to make this an achievable goal. Yet, commercial deployment (via CenturyLink, etc.) of reasonable broadband to the rural area is widely considered to be financially

unfeasible. We need to find a result that pushes adequate speeds to the rural businesses and home so that Indiana Agriculture can continue to be the world presence that it has been for decades.

Please consider making rural broadband speeds of at least 50 Mbs to the last mile a priority, and please consider recommendations which would make installation of rural broadband at adequate speeds achievable by our local REMC providers.

Peace, Miriam Robeson 1799 N 200 E Flora IN 46929 MiriamRobeson@gmail.com

From: Daniel Verheyden <danielinthelionsden1@gmail.com>

Sent: Wednesday, June 13, 2018 9:20 PM

To: Comments, Urc

Subject: Comment Regarding IUSF - Broadband study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To Whom it may concern:

I operate a small software development business out of my home in the rural Grant County Indiana area. The subject of Broadband deployment (expansion and improvement) is of great interest to me. As a professional in the computer software, networking, internet, and web technology industry I have some observations about rural broadband which I hope will be helpful to the IURC. In the Grant County area broadband access is significantly lacking in the areas outside of Marion, Gas City, and Upland. Residents in these rural communities have virtually no access to a wired internet connection and must rely on Wireless Internet Service Providers (WISP). I am serviced by a local WISP, Eastern Indiana Wifi. They provide a reasonable wireless broadband connection from a nearby tower with speeds of 25Mbps down and 5Mbps up, and one terabyte of data usage per month.

However, there is one major draw back to their service. A customer must have an unobstructed line of site from their home/business to the tower. Any trees or buildings between the customer and the tower prevent the service from working. This leaves many homes in the area without access to the service. The Commission should investigate solutions that will allow these local Wireless Internet Service Providers to operate a wireless service that has the ability to penetrate obstacles between provider towers and customers homes while still providing reliable speeds and data connectivity. In addition to improving the quality of wireless service the Commission should look into investing in helping the existing local providers expand their fiber optic networks to reach potential customers who are unable to be serviced via the wireless infrastructure and/or to provide better service to those being serviced by an inferior wireless service (speeds less than 25Mbps). Finally, any disbursements from the IUSF should be directed to these existing providers. These providers have shown great innovation and a desire to help communities that have been overlooked by the giant telecom/cable internet service providers and their efforts should be rewarded.

So sum up these are my suggestions:

- 1. Invest in existing providers.
- 2. Invest in technologies to allow wireless internet service that can penetrate obstacles (trees) between customers and provider towers.
- 3. Invest in expanding fiber optic networks.

Feel free to contact me with follow up questions.

Thank you for your time,

Daniel Verheyden

9474 E 100 S Marion, IN, 46953

765-506-4799

From: dar.jgr@tds.net

Sent: Wednesday, June 13, 2018 5:19 AM

To:Comments, UrcSubject:broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I strongly urge that you do whatever you can to ensure that we Indiana residents have the necessary internet connections. This is imperative. I read that 'network neutrality' has been cancelled. It's my understanding that this is bad for consumers but is to the internet providers' advantage. Please do what's right for Indiana constituents to protect us.

Joanne Ratcliff 2272W 650N Delphi, IN 46923 74-686-2786

From: Ann Ice <annxice@gmail.com>
Sent: Tuesday, June 12, 2018 4:13 PM

To:Comments, UrcSubject:Broadband Comment

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To whom it may concern,

At the address below we and others in our area have horrible internet and TV antenna services. I can not get cell phone talk/text/data at this address on a regular bases. When we have storms like we have had in the recent past our TV stations go "no signal", I can't get the weather by internet on my phone because it says "can not connect". We have no way to keep track of the weather storms, tornadoes ect...

We need more towers or saddle-lite directed to our area. We also need water in our area also as some people have to haul water or wells are not reliable.

Ann Ice 8839 N Nixon Road Hazleton, IN 47640 812-784-2285

From: Pat <wilkinsonp@frontier.com>
Sent: Tuesday, June 12, 2018 12:37 PM

To: Comments, Urc **Subject:** Broadband service

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

We live in Clay County in the country and have our broadband service through Frontier. It is better than it used to be; however, the speed is too slow to take advantage of streaming movies and purchased instructional video programs . One of our neighbors, who lives three miles south of us in the Eel River Bottoms, can not receive the Internet at all.

Students in our area are at a great disadvantage because they are required to use computers for their homework, as they no longer have books to bring home with them.

If our society expects us to conduct business over the Internet and our students to do their homework using the Internet, everyone needs to have access to high-speed Internet that is affordable.

Patricia Wilkinson



Virus-free. www.avast.com

From: Kirk Janowiak < kirk.janowiak@gmail.com>

Sent: Monday, June 11, 2018 6:07 PM

To: Comments, Urc

Subject: Rural Broadband Access for Small and At-Home Businesses

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To the Indiana Utility Regulatory Commission:

I am a regular consumer of Internet access. My needs vary from personal to professional. While I can generally tolerate some of the inherent lack of bandwidth and overall speed of my local rural access for my personal use (I begrudgingly have learned to live with streaming media buffering and dropouts), the lack of true broadband access negatively impacts my professional life and ability to generate needed income.

Both my wife and I have small businesses we operate from within our home. We live in a rural area fairly close to the local municipality of West Lafayette.

We currently have a phone--based DSL connection to the Internet. It is "supposed" to approach "broadband" rates, but never has since we turned it on. It performs about twice as fast as a dial-up service (some days it almost approaches 3x dial-up speeds). We previously had to rely upon a very slow and inconsistent satellite Internet service that was only marginally faster than a dial-up service.

Today, A simple, static web presence (a web page with the business name, services offered, and contact information, for instance), aids advertising for our businesses somewhat, but does not allow either of us to set up or run any sort of online-based catalog or ordering service within which we may easily interact with our customers or potential customers. Our bandwidth its simply too narrow to allow any kind of mature site development or maintenance.

In a similar vein, I am a consultant and writer who regularly needs to interact via online platforms with customers and contracting firms. I cannot rely on my internet connection to provide enough bandwidth to support video conferencing (Zoom, Skype, LogMeIn, etc.) or other synchronous communications requiring a screen presence.

In addition, as more and more services designed for small businesses and for consulting agents move into the cloud, we find we are at a distinct disadvantage. Our internet connectivity and bandwidth is too spotty and slow to be considered reliable (by any commonly understood measure of the term) and we cannot always access cloud applications or, more importantly, cloud data, when it is needed. I have often been interacting with a customer or a contracting firm on the phone and have needed access to collaborative files that reside in a cloud database. Too many times I have experienced embarrassment and a failure to be able to deliver my end of the business agreement when such a file does not finish downloading until AFTER the phone call has ended...if it ever does, indeed, finish downloading!

It becoming more and more critical for small and at-home businesses to have access to quality, high speed, broadband Internet service in rural areas.

Thank you for your consideration,

Kirk A. Janowiak 2502 W 500 N West Lafayette, IN 47906

Hadley, Ryan E	
From: Sent: To: Subject:	Roger <rogermayer05@gmail.com> Monday, June 11, 2018 10:19 AM Comments, Urc Internet Service</rogermayer05@gmail.com>
	RNAL email. Exercise caution. DO NOT open attachments or click links from unexpected email. ****
that they upgraded the	but two miles out side of the Milan town limit. We have Frontier phone service. They said speed in Milan and that distance would determine our speed. This was completed he end of February 2018. We have seen no increase in speed here.
Our only Internet Prov	ider is Frontier. There is no cable access available.
-	le is 1.5 Mbps down load and .36 up load. I have called Frontier checking on availability told that we have the highest speed available.
By today's standards n	ny speed is less than stone age.
-	ontier has no reason to make improvements. They have no competition. They need to the poles to get the speed up.
	est Virginia rural area and he has higher speed than we do. The West Virginia legislators beed for rural areas. His phone service is with Frontier.
Roger & Janice Mayer	

From: J Kress <visionr40@gmail.com>
Sent: Sunday, June 10, 2018 4:04 PM

To: Comments, Urc **Subject:** Frontier Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** _____

You need to look at Frontier landlines in the field. I spent 32 years with Ameritech. I live in a Frontier service area and their care of their landline facilities is terrible. A buried load point ped across from my house has been open with no cover for years. As I drive the roads around my house there are problems with poor maintenance on both aerial and buried facilities.

You need to go cellular to provide service to rural communities.

Bad care of the buried and aerial and buried facilities will not provide for dependable broadband to rural communities. And I see no improvement in the future.

Please call me if you have any questions.

John Kress 765-717-2412

From: dadtafour <dadtafour@aol.com>
Sent: Sunday, June 10, 2018 8:41 AM

To: Comments, Urc

Subject: More Broadband choices

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Looking forward to more Broadband choices at affordable prices in the Denver and Chili In. Area Thanks Mr.Wrightsman

Sent from my Sprint Samsung Galaxy S7.

From: Elmer Spence < forditous@yahoo.com>

Sent: Sunday, June 10, 2018 5:34 AM

To: Comments, Urc **Subject:** Broadband internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Please keep the government out of the internet delivery business. The free market will take care of itself and the tax burden is already overly burdensome.

Thank you, Elmer Spence

Sent from Yahoo Mail on Android

From: Gary Rodgers <gary.rodgers@mail.com>

Sent: Saturday, June 09, 2018 1:22 PM

To: Comments, Urc

Subject: Broadband in Rural areas

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hello URC

i presume you are aware of the growing disastrous sham of Industrial Wind Turbines and the associated electromagnetic interference. This disrupts broadband in the very rural areas where expanded and uninterrupted broadband means the difference between life and death for people who live and work in those areas.

Please do what you can to expand coverage.

Regards, Gary Rodgers 765 520 6267

--

Sent from my Android phone with mail.com Mail. Please excuse my brevity.

From:	Sam Callender <sambc45@icloud.com></sambc45@icloud.com>
Sent:	Saturday, June 09, 2018 10:46 AM
To:	Commonts Urc

To: Comments, Urc

Subject: Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** _____

I live in Bringhurst 46913 and am limited to expensive and highly limited satellite internet, 10 gigs of 4g data per month then slows to 2g. Is there a reason for this? Lived in Lafayette and had unlimited high speed data with Comcast but not out here. Now my neighbor just less than a mile down the road has unlimited high speed data through AT&T but I live beyond the "cut-off". We operate a small farm business and broadband is very important to us and I'd be interested in any future updates if they were to happen.

Thanks!

Sam C.

Sent from my iPhone

From:

765 4277826

Sent:	Friday, June 08, 2018 6:54 PM
To:	Comments, Urc
Subject:	Broadband access
**** This is an EXTER unexpected email. **	RNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or ***
	ghly competitive system with multiple providers to drive costs down, or we need a government at controls price. The current monopoly situation is too expensive for everyone!
Dennis Savaiano	
Dasavaiano@gmail.c	om

Dennis Savaiano <dasavaiano@gmail.com>

From: Jennifer Kempf < jakempf82@gmail.com>

Sent: Friday, June 08, 2018 5:28 PM

To: Comments, Urc **Subject:** Need broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I live in a rural area and can only use a hot spot. We have tried other things but this is by far the fastest and it is not fast.

Please put towers and affordable internet in the country too.

Jennifer Kempf

-

Thanks,

Jennifer

From: Wilma Strasburger <wlsewing12@gmail.com>

Sent: Friday, June 08, 2018 5:17 PM

To: Comments, Urc

Subject: Re: Improving Broadband service

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

It would sure be helpful to have better broadband service in rural areas instead of the internet un-connecting so much. We can't even

update Windows without it stopping the process in the middle of the update and then it fails.

From: Earl Schroeder <earleschroeder@yahoo.com>

Sent: Friday, June 08, 2018 4:46 PM

To: Comments, Urc

Subject: Where is the money going?

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

We have been paying a 'tax' on our telephone bills for years that supposedly was to help install the infrastructure leading to 'fast' internet service to everyone including the 'far out' rural areas.

Your group of 'watchdogs' have consistently approved rate increases for the electric industry (Vectren in our case) and now we are seeing the newly upgraded site in West Franklin being demolished in the near future to allow a 'new' gas electric generation facility.

Aren't you folks charged with only approving rates and construction on our behalf that will provide utilities at a reasonable price? We have NO choice but to use the only facility available in our area.

I have attended 'rate proposals' public meetings in the past where one of your members fell asleep during the proceedings. That tells me a lot about the lack of interest.

We retirees have no way to make more money. Our only choice is to spend less. GE has lowered their expenses by cancelling our medical coverage at our expense. Many of us dedicated 30 or more years during the prime time of our lives to these companies who now are cutting benefits that we have surely earned during our working years.

IURC.... Please keep us in mind in the future.

From: Sent: To: Subject:	David Desper <davelittlelong@att.net> Friday, June 08, 2018 4:39 PM Comments, Urc Broadband Networks</davelittlelong@att.net>
**** This is an EXTERNAL email unexpected email. ****	. Exercise caution. DO NOT open attachments or click links from unknown senders or
Commission, I was finally able to 7pm to 11 pm. Currently the se	ervice. After complaining for 7 months and filing a complaint with the Indiana Regulatory of get service 24 hours a day. Previously I was not able to get service from approximately ervice is very slow and can not always get good service. We need quality high speed pecially since East Noble School Corporation students must do their schoolwork online.
Thanks,	
Dave Desper	
Sent from my iPhone	

From: Simmons, Scott <scott.simmons@nwsc.k12.in.us>

Sent: Friday, June 08, 2018 4:07 PM

To: Comments, Urc **Subject:** Indiana Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Northwestern School Corporation is a 1:1 digital learning district where all students in grades K-12 have an Apple iPad and take it home daily. Many of our students in our district lack viable internet connectivity or have no connectivity at all. It would greatly beneficial for our students to have equitable, reliable, and robust connectivity to a access information needed for learning. Our district supports any improvements made in this area that will lead to a better learning environment away from school for our students.

Regards,

Scott T. Simmons, MEd Director of Curriculum, Technology & Assessment Northwestern School Corporation 3075 N. Washington St. Kokomo, IN 46901 765-457-8101 x1111

Email: scott.simmons@nwsc.k12.in.us

Twitter: @SSimmons710

[&]quot;In education, our learning not only impacts our own growth, but the growth of others that we serve." George Couros

From:	Brian Short <bri> dive.com></bri>
Sent:	Friday, June 08, 2018 1:26 PM
-	Camara anta Illua

To: Comments, Urc **Subject:** Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I live in a rural community about 5 miles from Richmond. In 1996 I was told by Verizon I would have access to DSL within a year. It actually took 19. During that time period I was forced to go to a brick and mortar college. At this time the degree I received is offered only on-line through that same college. The top speed of my broadband is 24mb/s. In comparison to what's in town at 100mb/s. I continue to get buffering. There is no competition to switch to.

From: piotter < piotter@rtcol.com>
Sent: piotter < piotter@rtcol.com>

To: Comments, Urc

Subject: Comments on broadband availability

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Just a few comments

In rural areas, internet service may be slow to nonexistent and, for sure, is expensive.

Students in rural areas do not have adequate access to quick, inexpensive internet.

Schools are sometimes forced to accomodate access after classes to students doing research, which may raise property taxes.

Small businesses in rural areas are at an unfair disadvantage due to lack of access for advertising and creating a customer base.

Farms are being managed more and more through internet access-based programs. Farmers are disadvantaged by lack of solid, speedy internet service.

Individuals that are granted the ability to work from home are disadvantaged when internet service is weak, poor, slow or unavailable.

Rural development organizations need to recognize the benefits that can be had when a small community and/or rural areas are provided with good, reliable internet service.

Helen Piotter

Sent via the Samsung Galaxy S8 Active, an AT&T 4G LTE smartphone

From: FRANK Culp <FKCULP@msn.com> **Sent:** Friday, June 08, 2018 12:23 PM

To: Comments, Urc Subject: rural internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

i do not think the state government should be paying to provide internet to rural areas you choice where you live, and what it costs

thanks frank culp

From: Vince Frazier < vincefrazier@gmail.com>

Sent: Friday, June 08, 2018 12:10 PM

To: Comments, Urc **Subject:** broadband access

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

As a business owner, based in rural Posey county, the lack of decent internet service is SEVERELY inconvenient to our WEB business.

Rural internet isn't a luxury. It's a necessity.

We spend countless hours every week waiting on our internet, which crashes frequently. This is no way to run a business.

Posey county, and surrounding areas, need REAL internet service. Now.

Thanks,

Vince Frazier Frazier Aviation LLC, a Team Rocket authorized distributor. 3963 Caborn Road North Mount Vernon, IN 47620

812-464-1839 office, Mon-Thur 8am-4:30pm 812-449-0230 cell, all other hours

www.flaircraft.com www.flyboyaccessories.com toll free 1-888-835-9269 or 1-888-8FLYBOY

From:	Edward Clark <eeclark@gmail.com></eeclark@gmail.com>
Sent:	Friday, June 08, 2018 12:09 PM
T	Carrage and a line

To: Comments, Urc

Subject: Broadband for all Hoosiers

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** _____

It is the 21st century and every Hoosier needs high speed internet access. Net neutrality needs to be a part of that as well.

Right now we are locked into a limited number of vendors to choose from. We need more competition so that we can get the best prices as well.

Sincerely, Edward Clark Jr Mount Vernon, IN

From:	Jerry Hall <halljer@hotmail.com></halljer@hotmail.com>
Sent:	Friday, June 08, 2018 12:07 PM
То:	Comments, Urc
Subject:	You need to look at Cleveland, where the city provides city wide WiFi for everyone. Our area should be a model for that kind of support for the entire country! Think about that legacy!
**** This is an EXTERNAL ema	il. Exercise caution. DO NOT open attachments or click links from unknown senders or
Sent from my iPhone	

From: Diane Conner <conner1799@gmail.com>

Sent: Friday, June 08, 2018 12:05 PM

To: Comments, Urc **Subject:** high speed internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I wholeheartedly support the research into offering high speed internet to those of us in rural Indiana. Access to high speed internet will assist rural areas to grow and thrive. My current internet service provider is telling me that there are trees growing and interfering with my ability to send and receive a signal. Currently my speed is often less than 1 mbps download and .5 upload. Not much better than the old dial-up. I'm told by my local REMC (Miami-Cass County) that they can offer a satellite internet but it will cost more and speed is better (12 mbps) but to expect outages when it storms. In Indiana that can be frequent. It is very discouraging to those of us who are at the mercy of internet providers who provide slow and poor services. Please help us! Thank-you for your consideration.

Respectfully, Diane Conner

From: Boyle, Dee <Boyle.Dee@Sgcs.K12.In.Us>

Sent: Friday, June 08, 2018 11:30 AM

To: Comments, Urc

Subject: IURC Broadband Comment

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I hope study results would be posted so we can shop competitively. Maybe even involving the Better Business Bureau so we know what companies are reputable. Thanks for doing this study, it is very needed.

Dec Boyle

CONFIDENTIAL I

CONFIDENTIALITY NOTICE: This electronic mail transmission, and any attachments, contains information that is confidential. The information belongs to the sender and is intended only for the use of the person or entity to whom it is addressed. If you are not the named recipient, you are hereby notified that taking, copying or disclosing this information is strictly prohibited. If you have received this transmission in error, please immediately notify us by telephone at 260-693-2007 to arrange for the return of the message and any attachments. Thank you.

From: Bret Berry <bre>
Bret@berrysworld.com>
Sent: Friday, June 08, 2018 10:57 AM

To: Comments, Urc **Subject:** How about "no"?

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

With enough federal funds (DEBT), I'm sure you can find enough large carriers to make the *investment* to live off the gov't dime and throw us some broadband. We'll never know the REAL cost of it anyway. Why not just try to maintain the roads with our own money and quite trying to provide everything we might need (as long as the Feds pay). You are a large part of the problem. I realize you have to do the 'dog and pony show' of inviting comments. It's how the system works....meanwhile, buy up everything comrades.

Your involvement insures that cost-effectiveness goes out the window and someone will have to pay for someone else, **as well as** your cost of insuring that someone will pay for someone else. Same old story.

Bret Berry

From: Christopher Jansen Law LLC <christophertjansen@gmail.com>

Sent: Friday, June 08, 2018 11:02 AM

To: Comments, Urc Subject: Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I reside and work in a rural community. My town is just shy of 10,000 residents. I maintain an office inside city limits. I reside outside of city limits. I have at least two opportunities for quality high speed internet in town for by business, however, there are somewhat frequent issues. Between the service being "down" to technicians advising that the equipment provided by their own companies are not capable of performing to the services offered, there are minor issues.

However, our residential service is at best marginal. Between VOIP phones, streaming internet television services, online gaming, and online video messaging, the services will sometimes work, or be out for weeks at a time. In 2017, we were out of service at least 5 separate times. Some of these outages for at least a week or more. This interrupts services we pay for which are not discounted when the service is out. I have burnt up multiple modems with technicians advising we are fortunate we have not had a fire before.

What I have learned from the various individuals at various levels within the system (installers, technicians, owners of the subcontractor business installing lines, and through telephone calls to the company), is that basic trunk lines of which multiple persons could tie into are not extended along rural routes too far/far enough. In our case, we have been told that the residential line, coming off the trunk line, starts over 3/4 mile down the road, then continues to our residence. There are at least 5 residences that this applies to.

With this in mind, my comments are that:

- 1. Our local residential rates are under \$100 for internet alone, high speed at that. It is appropriate.
- 2. Our local (rural) residential services are available, but not supported by the infrastructure in place.
- 3. Our local small business rates (3 employees) for the same services are not affordable (last quote was \$350.00/month).

I hope this information is helpful. I trust it doesn't come across as a person complaining, but an assessment of this local situation.

Best Regards, Chris Jansen

> Christopher T. Jansen Attny No: 31356-57 Christopher Jansen Law, LLC 228 South Main Street Kendallville, IN 46755 (260)599-4206 jansenlaw@att.net

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Ahlen < lpahlen@purdue.edu>
y, June 08, 2018 10:39 AM

To: Comments, Urc

Subject: IURC Comment Phase - Broadband Internet

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Broadband internet access for Indiana citizens is becoming a necessity for many services provided by our educational system and our state services. In addition, many private support services are utilizing high content network traffic for delivery of healthcare.

However, the same infrastructure is becoming an increasingly core segment of our entertainment systems. As such we have a divide between core necessary services and elective entertainment sector.

I feel that the IURC should be supportive of a base level of infrastructure perhaps even with state subsidies. However, the tier services that are needed to support the high-bandwidth/high-content entertainment should not receive state support.

Perhaps a two tiered system that shifts revenue from purchasers of high level entertainment services to support the low tier necessary element of support services is in order and justifiable.

In most cases, those who can afford the high level tier will choose to fund that which could help support the low tier for those who cannot afford or choose not to subscribe to the high tier.

- Lon Ahlen

From: Kimberly Okeley <kjokeley@gmail.com>

Sent: Friday, June 08, 2018 10:33 AM

To: Comments, Urc

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Monticello Indiana needs decent cost effective and affordable internet for its citizens.

Kimberly J Okeley

From: Curt K <senork@outlook.com>
Sent: Friday, June 08, 2018 9:09 AM

To: Comments, Urc

Subject: Comments about internet service in rural Pulaski County Indiana

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I am a rural customer of Century Link in Winamac Indiana, currently the only interent plan that I am aware of being offered to me is for 10mbps, at a cost of \$45 monthly. By today's standards this speed is on the low end. When renewing my contract for this service I have asked to be put on the list for upgrades, and I have not been notified of anything. The representative from Century Link tells me that upgrading in the rural areas is expensive. It probably is.. however, CL needs to keep in mind that north of the Tippecanoe River, a person living in the rural areas and wanting either a land line phone service or internet service CL is the only carrier minus the satellelite services. I have been with CL since it was United Telephone, Sprint, Embarq, and now Century Link, starting in 1971. I feel that they have made sufficent revenues from phone services since then because they were the only service available, and still are in some areas.

I urge you to discuss with Century Link the possiblity of upgrading internet services in their service area.

From: McGowan, Craig - RD, Jasper, IN <Craig.McGowan@in.usda.gov>

Sent: Friday, June 08, 2018 8:31 AM

To: Comments, Urc **Subject:** Broadband Installation

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A suggestion that may have value is to incentivize Water Utility systems that are adding or replacing water mains to include Broadband pipes within the trench being dug for main installation. Currently, some Broadband companies have been willing to share the cost of the trenching, but Water Utilities are still hesitant due to future maintenance difficulties. Perhaps if there were more financial benefit to consider this option, water utilities may be more willing to partner with this industry to get Broadband out to Rural areas.

Craig McGowan
CP Southern District Director
Community Programs
Rural Development
United States Department of Agriculture
1484 Executive Boulevard | Jasper, IN 47546
Phone: (812) 482-1171 ext 3443 | (855) 541-9020
www.rd.usda.gov | "Committed to the future of rural communities"

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From:

Nashville, IN

Sent: Friday, June 08, 2018 2:57 AM To: Comments, Urc Subject: Comments re broadband deployment **** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** I received an email from my State Rep discussing your study on broadband deployment and that you are seeking comments on the matter. I live in Nashville, IN and all around me throughout most of Brown Co. broadband is either limited or non-existent. I have for years worked in the tech industry and reliable broadband for me personally has been a necessity, which is one of the reasons we purchased a home located where we did, for broadband access. So understandably my position will be one towards increasing broadband access. Yet, I also have the position that less government regulation and oversight is better. Just as electricity found it's way to the outer reaches of society, broadband eventually will. As the technology improves and transmission becomes cheaper, the market and business of broadband will see to it. Of course in the case of electricity government oversight and regulation pushed that outward. Now that those transmission lines and structure exists, attaching broadband to it requires less investment. A couple of local companies are already in the process of making this happen. Satellite transmission is also already available as well, albeit more expensive and restrictive, much slower, and less reliable, yet offers an option. Until broadband expands it's reach to the more remote areas, people like myself will seek out residence where broadband is currently available, and will be no worse off for doing so. Let the process happen on it's own. Respectfully, **Scott Hampton**

Scott Hampton <politics@creed3.com>

From: Krista Smith <kkjdb@comcast.net>
Sent: Thursday, June 07, 2018 7:18 PM

To: Comments, Urc

Subject: rural internet connection study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

There is a need for affordable, rural, fast internet connection in our state. I pay \$92 a month for only internet connection from Comcast. I use the internet for my job and only pay this because there simply is no alternative available in my area. Comcast has been allowed to have a monopoly, even though these are supposed to be illegal in our country. If there is no viable competition, they can charge whatever they want and get a way with it. I'm fortunate to be able to pay their cost right now but many cannot and I don't know that I will be able to forever. With all of our technology in today's world, you would think that this could be offered at a more affordable price to all in rural areas.

From: District 1 Council Member < district1@butler.in.us>

Sent: Wednesday, June 06, 2018 3:54 PM

To: Comments, Urc

Subject: re: internet service Butler

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

The city of Butler is in need of a dependable internet provider. The only options available for internet in the city of Butler is Frontier and Mediacom, both of whom currently provide service that is not reliable and often creates interruptions in service. IF there was a provider looking for a town or city to serve, would it be possible for Butler to be consider for future service? Any information and/or assistance would be appreciated greatly.

Jerry Eldridge Butler City Councilman District 1 260 570 6643

This institution is an equal opportunity provider.

From: Ryan Daniel <rdaniel@columbiacity.net>
Sent: Wednesday, June 06, 2018 3:06 PM

To: Comments, Urc **Subject:** IUSF Broadband Study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To Whom it May Concern,

The City of Columbia City is a growing (8th fastest in Indiana) community in Northeast Indiana that has been hampered by poor, inadequate, or nonexistent internet service. We are bookended with Warsaw on the West side and Fort Wayne on the East side. Both of these communities have multiple fiber service providers, and yet, in Columbia City we have ZERO residential fiber providers. Instead, we currently have two cabled providers – Centurylink and Mediacom.

Centurylink has verbally told us that they don't plan to put additional resources into markets like ours because their focus is on metropolis areas like Minnesota and Seattle. They have told customers who have poor connections to wait until other customers drop off and then their service will improve. They provide "fast" internet service of up to 20 Mbps download speed and 1 Mbps upload speed. These speeds, poor customer service, and lack of investment all but disqualify them as a provider to our community.

Mediacom has recently upgraded their service to provide fairly strong speeds over copper. Many residents in our community can get up to 100 Mbps download speed and 20 Mbps upload speeds. However manageable this is at the current time, Copper will not be able to manage the growing internet needs of our community into the future. They have fiberoptic cable throughout our community, but will only provide it to businesses who pay for the connect – it is currently not available to residential homes.

Please know that I believe we are fortunate to at least have one provider that can give adequate speeds in our community. However, I am fearful of the challenges the future will bring for my community. The largest deterrent to progress and growth in rural communities is (and will continue to be) broadband infrastructure. It is as important to residents as Sewer and Water, as unconscionable as that sounds. The needs of the future can be handled by fiber. There is a strong need for the telecom industry to expand their fiber footprint and allow residential access to these lines, not just businesses. I believe you will see many cities start to take the step of creating their own fiber utilities in order to create the necessary bandwidth and backbone to provide adequate and acceptable speeds to residents and industry.

I would strongly encourage the IURC, Elected Officials, and Members of the Telecom Industry to find additional resources, policies, and programs to create stronger and longer-term links to the technological revolution.

Thank you,

Ryan L. Daniel Mayor, City of Columbia City *Building a Future Together* 112 S. Chauncey Street Columbia City, IN 46725 260,248,5111

From: Roy Wrightsman < roy.wrightsman@gmail.com>

Sent: Wednesday, June 06, 2018 12:45 PM

To: Comments, Urc

Subject: Public Comment on HEA 1065

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Good Afternoon,

As a rural citizen in Parke County, an elected county council representative in said county, and a homeowner and father who struggles to connect his family, I would like to provide comment on the expansion of broadband to rural areas. I've had several contacts with members of the general assembly, fellow local elected representatives, and fellow local citizens about this subject.

In the mid 2000's, the state deregulated the telecom industry, with the intention that this would accelerate the expansion of reliable internet service to rural indiana. Further, the federal government and state government have provided several programs and incentives to further promote this expansion. These programs have all failed for rural citizens in much of the state. These programs have been cherry picked by the large telecom companies to expand their services to urban and suburban areas as they fully understand that rural communities and areas do not provide enough density to recover their investment. However, this is a public utility, much like electricity or home phone services, which are supposed to be provided for the greater good. These federal and state programs have been created with the best intentions, but these companies have boondoggled the intentions to utilize these funds for their own higher density service areas.

In Parke County, we have a local company who has taken it on their own initiative to provide complete high speed access to their coverage area. This company, Bloomingdale Home Telephone Company, has delivered on the expectations of delivering a reliable, high speed internet connection to its ENTIRE service area. They have done this nearly entirely on their own as a public utility. They wish to expand and serve more of rural Parke County, but lack the resources and certainly cannot compete with the large telecoms that have cornered the existing programs that are out there. They have been stymied at every turn, beaten by the red tape of these programs and the large telecom in the area's false assertions to the government that they have extended their service to the last mile.

At my residence, I have no access to reliable high speed internet service through a wired delivery method. Yes, I can subscribe to satellite at it's high costs, low data allowances, and high latencies or cellular service at it's high costs, lower data caps, and unreliable delivery. In fact, my family built this house in 2013, right next to our previous residence. In this residence, we had a land line telephone through AT&T. When we built the new house, we had it moved to the new one. We later disconnected it due to cost and went with a different method to receive telephone calls. I have inquired a few times about getting the landline connected (it's still there) and they inform me that I am not eligible for a land line phone. Exactly how is that "extended to the last mile?"

It is my desire that this program will promote the expansion of wired, high speed, reliable internet service to the areas of the state that have little to no hope of receiving this from the big telecom companies as it is today. The availability of internet service is a quality of life issue, an economic issue, an educational issue, and a communications issue today. The economy, education, and quality of life in today's society is driven by being connected and much of our great state remains dramatically disconnected. If we are going to continue to make

our state a state that works, we must make it a priority to deliver this important public utility to all of our residents, urban, suburban, and rural, not just deliver higher speeds to our suburban areas as has been done in the past.

In closing, I wish to support the extension of this service to our rural residents and suggest that partnering with companies, such as the Bloomingdale Home Telephone Company, Smithfield, and Endeavour to name a few that actually wish to extend this service and provide a high quality utility to ALL residents. These companies will meet the spirit of the programs and actually deliver on the promise to provide this service. The large telecom companies have no intention of actually delivering on their promise to extend to the last mile and will continue to hide under some conditions or obscure or lacking oversight to pad their pockets and expand their service in suburban areas. They fully admit that they aren't going to invest in the infrastructure in these rural areas to deliver a quality utility service.

Thank you for your time and consideration.

-Roy Wrightsman
Parke County Council
Parke County Redevelopment Commission

From: outlook_237B4BE7CA9361DC@outlook.com

Sent: Wednesday, June 06, 2018 12:34 PM

To: Comments, Urc

Subject: Switzerland County and SE Indiana broadband

Attachments: Telemedicine in Southeastern Indiana in a Globalized World_copied to send (1).pdf

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Dear General Counsel Beth Heline,

Tucked into the heel of Indiana, Switzerland County is small (220 sq. mi.), rural, low income (lowest per capita income in Indiana) and hilly. As a result, broadband is not always available or affordable. Part of the difficulty of finding a solution is the fact that it's difficult to ascertain which areas are lacking and what's available. Having heard that the state is offering a planning grant for this, I hope to get more information about how this will be implemented and truly hope to be eligible.

Today, at a board meeting of the Southeastern Indiana Regional Planning Commission, we discussed the possibility of doing this planning study regionally, as most of our region has the same aforementioned challenges. Do you think it would be possible to do a regional planning study? I believe that we would be more competitive to providers if we could work regionally and would hopefully be able to get better service.

Additionally, many of our schools have adopted "e-learning" days which have been very successful for those students who have internet. Unfortunately, 25-30% of the children in Switzerland County lack service. Our County, and most of the region, is also medically underserved and underserved for mental health services. On top of all that, the opioid epidemic is raging and services for combatting addiction are often unavailable. As such, we could make a good case for implementing Telemedicine here. I have attached a research paper I did for my MPA at IUPUI concerning Telemedicine in SE Indiana. I really hope you can help us develop this necessary utility in rural Indiana.

Sarah Brichto

Sincerely,

Sent from Mail for Windows 10

Telemedicine in Southeastern Indiana in a Globalized World

What exactly is Telemedicine? Simply stated, Telemedicine is the delivery of healthcare through the use of telecommunications. While this definition is simple, the actual machinery involved is extremely complicated. Broken into its' necessary components, Telemedicine involves healthcare, technology, the internet, insurance, government and consumers. Within each of the aforementioned systems are individual components. The system of Healthcare, or medicine, includes physicians, nurses and other human health workers who work in places including hospitals, clinics, private offices, etc. which are regulated by the government, American Medical Association, States, etc., which may be standardized by nations, NPOs, agencies, etc. With medicine come health records and documents, educational materials, etc. and all the rules and regulations of HIPAA, confidentiality, intellectual property rights and security. Technology includes hardware and software which is constantly changing and being developed at blinding speed while conforming to certain standards and guidelines protected by intellectual property and patent law. The internet, while not a series of tubes, is also a constantly changing and developing communication delivery system that is sometimes regulated and controlled by various organizations. Insurance and other systems of payment for services are intricate involved webs of payments and compensations and transference of risks that involve government, designated groups, healthcare systems, etc. Governments are systems of people and laws that control and determine the dynamics of a country but also regulate standards of healthcare delivery and payment as well as internet access and consumer safety. Consumers purchase these goods or services with a dizzying variety of options often difficult to understand. For Telemedicine to successfully operate, these systems must work together in a sort of evolving mechanical ecosystem, not a simple operation. Added to the complications of so many systems working together is the speed of change within all the systems, some fueled by money others fueled by government changes but each system in constant flux.

By: Sarah Brichto

This paper will take an overview of Telemedicine and the necessary systems and components

necessary for successful operation and the barriers to and benefits of bringing Telemedicine to

Southeastern Indiana.

Defining Telemedicine

How is Telemedicine defined? As a relatively new technology and concept, not only is the emerging

practice of Telemedicine and Telehealth still being developed, but the language and definitions for

Telehealth/Telemedicine seem to be dependent on the source of information. The Federal

government alone has seven definitions for Telemedicine and Telehealth. The U.S. Department of

health and human services defines telehealth as the use of telecommunications and information

technology to provide access to health assessment, diagnosis, patient care and information. (Gold,

2014)

A more elaborate definition of Telehealth from the World Health Organization (WHO) reads:

"...the delivery of health care services, where distance is a critical factor, by health care

professionals using information and communication technologies for the exchange of valid

information for diagnosis, treatment and prevention of disease and injuries, research and

evaluation, and for the continuing education of health care provider, all in the interests of

advancing the health of individuals and their communities" (World Health Organization,

2010).

While this definition is useful for a world standard, as it is inclusive and all encompassing, it's also

lengthy enough to induce a nap. Contributing to the confusion, some publications interchange the

terms Telehealth and Telemedicine with a simple "also known as" reciprocity even while the terms

are used for different specific purposes. (Nordrum, 2015). For example, even using the same

aforementioned WHO document, researchers find Telemedicine and Telehealth used

interchangeably but conclude that for WHO,

By: Sarah Brichto

For: Professor Laura Littlepage

Dec. 2016

"... Telemedicine should include: providing some sort of clinical support, overcoming a

barrier of proximity, using some sort of information and communications technology, and

for the overall benefit of the patient." (Clemens Scott Kruse PhD, 2016)

Going back to the origin of the words, "Tele "comes from the Greek "at a distance". Medicine is

derived from the Latin "meden" for healing. Health comes from Old English for hero or man and

has come to mean wellness. So the terms mean wellness (Telehealth) and healing (Telemedicine) at a

distance (Harper 2016)

Google, most simply defines Telemedicine as the remote diagnosis and treatment of patients by

means of telecommunication technology. Meanwhile for Google, Telehealth is a collection of means

or methods for enhancing health care, public health, and health education delivery and support using

telecommunications technologies. Telehealth encompasses a broad variety of technologies and

tactics to deliver virtual medical, health, and education services.

Outside the World Health Organization, telemedicine differs from Telehealth in that telemedicine

can directly deliver services where telehealth more strictly conforms to the WHO definition by being

confined to medical professionals' use. Telemedicine includes online, telephone or other remote

connection between patients and MD's for treatment or monitoring purposes; consultation between

healthcare professionals to diagnose illness or give second opinions; etc.

This definition confusion is a reflection of some of the difficulties facing adoption of this

technological service. When telemedicine is offered, what exactly is it and who gets to create the

standard? While medicine is highly regulated and information regarding health is guarded and

confidential, the lack of specificity in the field of Telemedicine is problematic. Added to this chaos is

the speed of globalization and information exchange which has become an almost wild west

atmosphere of "tele-possibilities" in the world.

Dec. 2016

Focusing on rural Southeastern Indiana, this paper will primarily use the term Telemedicine (except

in direct quotes) and will assume both direct service provision and inter-professional consultation. A

rose by any other name, Telemedicine has the potential to provide accessible, cost effective, high-

quality health care services across geographic and resource deprived barriers. This is particularly

beneficial for rural and underserved communities in developing countries as well as in underserved

regions in the USA. (World Health Organization, 2010) To fully consider Telemedicine in Indiana

it's important to look at this technology within the lens of globalization and the changes our

"flattened" world have made on service delivery and consumer expectations. While globalization has

unleashed a technological leap in possibilities for unlimited access to information, this access is

limited to those areas that have the capacity to make this exchange. Unfortunately, access is more

readily available in affluent areas where there is more money, more people and more services- the

exact places that least need the benefits of remote access. This inequity is most pronounced in

developing regions in the world and areas in the United States that are devolving economically-rural

areas and the "rust belt". While federal programs like Medicare aim to focus funding on rural areas

that are most in need of specialized healthcare, rural areas, they are least likely to have the ancillary

services and staff (broadband strength, trained personnel, equipment) to make use of telemedicine

programs.

What Is Globalization and how does it affect Telemedicine?

Globalization is a process of interaction and integration among the people, companies, and

governments of different nations, a process driven by international trade and investment and

aided by information technology. This process has effects on the environment, on culture,

on political systems, on economic development and prosperity, and on human physical well-

being in societies around the world. (SUNY Levin Institute, 2015)

By: Sarah Brichto

Globalization of Healthcare effects human physical well-being and includes many of the players in

this definition, but it's complicated by the restrictions and protections required by the intimacy and

relationship between patient and Physician, a relationship that deserves respect in the practice of

medicine.

While technology trends spur innovation into this age old practice, other forces such as

epidemiology are important drivers. Writing about cholera in 1858, epidemiologist John Snow wrote,

"This disease travels along the great tracks of human intercourse, never going faster than people

travel, and generally much more slowly." (Amory-Winslow, 1943) Now virulent diseases like Ebola

can travel intercontinentally in hours, as happened recently in the Ebola outbreak in Houston,

Texas. Healthcare providers are being challenged by a flattening of threats as well as a flattening of

resources.

Practically, in Thomas Friedman's flat view of the world, globalization in healthcare boils down to

the fluid flow of services, expertise and information across borders, in effect "flattening" the service

and delivery of healthcare around the world.

Medical Tourism and Medical Professional Multinationalism

Research for Globalization and medicine often turns up articles about Medical Tourism. People of

means have long traveled to the United States and other developed countries for high quality

medical care but more recently, global availability, competition and standardization of care is

reversing this trend. In increasing numbers less affluent people from developed countries are

traveling to the "third world" for high quality medical care at affordable prices. (Herrick, 2007) To

meet the increased demand, modern facilities are being built in developing countries hiring staff

(MDs, Nurses and technicians) who are trained to US and European standards.

This trend toward medical tourism outside the United States is attributed to the extraordinarily high

cost of medical treatment in the United States. While the Affordable Care Act has made progress in

By: Sarah Brichto

Dec. 2016

Dec. 2016

ensuring US citizens have some insurance coverage, some affordable plans have such high deductibles that traveling outside the United States for procedures is still more affordable than out of pocket expenses in the United States, with cash customers often paying much more than insurers

for procedures.

Locally, at Kings Daughters Hospital (KDH) in Madison, Indiana, David Ommen, Community Relations Director at KDH, has not seen overseas medical tourism, but instead has seen regional tourism with local patients comparing services in Louisville, Cincinnati, Indianapolis, etc. (Ommen, 2015) Domestic medical travel is relatively common especially for patients seeking high quality specialized care in renowned hospitals like the Mayo

As patients move themselves from country to country seeking medical care, medical professionals are also on the move. Physicians, medical technicians, nurses and other medical professionals and specialists are moving to other countries to work, becoming exports themselves via immigration or expatriation. This movement enables skilled medical practitioners to relocate to places where there's a higher demand, better benefits, more training opportunities, etc. (Johns Hopkins Staff, 2014). While this migration pattern may benefit medical professionals it can also be detrimental to their source countries, resulting in more "brain-drain" to the source country. On the other hand, developed countries are concurrently recruiting medical professionals from less developed countries who have received comparable training at home in internationally accredited programs, thus driving down wages/costs in developed countries. This results in a "flattening" of wages while elevating skills through international standardization.

Outsourcing and Collaboration and Information Sharing

Information Technology is enabling medical services to be provided remotely both intra and internationally and is considered a form of telemedicine. Outsourced services include medical transcription, the reading of X-rays and MRI's, treatment planning and the interpretation of some

For: Professor Laura Littlepage

By: Sarah Brichto

lab tests. While there is some reluctance to participate in this, the Affordable Care Act has facilitated

the transfer of insurance and networks across state borders through exchanges that involve Medicaid

subsidies. Even so, some states prohibit the transfer of records and documents across state borders

and overseas. Meanwhile HIPAA, the Health Information Portability and Accountability Act lack

statutory clarity regarding offshoring so offshoring is permitted through some interpretations of the

rules. (McDonald, 2015) Even given the complications of permissibility, outsourcing results in lower

costs, higher quality and greater convenience. (Herrick, 2007)

The flow of information is often seen as the most beneficial aspect of the globalization of

healthcare. Collaborations can include the sharing of ideas, technologies, physical and procedural

tools that improve the skills of medical providers and the outcomes of patients. Other collaborations

can be the flow of expertise to help design and develop hospitals, facilities and programs.

Management and accreditation expertise collaborations would "flatten" service provision.

Healthcare systems can be improved through financial collaborations between private healthcare

organizations, insurers, NGOS, government agencies, academic centers, Investors, etc.

Besides collaborating on large scales, physicians can also collaborate in patient treatment, especially

regarding treatment of chronic conditions that require a lot of monitoring and interaction, through

case management. American health care providers can collaborate with lower cost providers in

developing countries to perform labor- intensive medical tasks that don't require the physical

presence of a doctor.

Locally Ommen of KDH agrees, "As the art and science of medicine advance there will be more

collaboration between MDs and organizations to improve the knowledge base. These collaborations

will be international and interagency and they are the future of medicine". (Ommen, 2015)

By: Sarah Brichto

Dearborn County Hospital (DCH), recently acquired by Tristate Health, serves local residents primarily from Dearborn, Ohio and Switzerland counties in southeastern Indiana. Close to the Ohio border, Dearborn County Hospital is 30 miles from University Hospital in Cincinnati, Ohio. To improve care DCH began utilizing specialists available in Cincinnati for stroke care through an onsite Stroke Robot affiliated with the University of Cincinnati Medical Center Stroke team for expedient stroke assessment. This technology has enabled DCH to administer care to suspected stroke victims "... immediately upon the patient's arrival in the department."

Michael Schwebler, newly appointed CEO/President of DCH, believes Telemedicine will provide savings in efficiency for hospitals and patients. In his previous job, serving as Executive Director of Heart and Vascular Service Line where he was responsible for the business operations of the heart hospital and The Christ Hospital Cardiovascular Associates physician network, he had first-hand experience with Telemedicine. In this senior administrative position at Christ hospital, Mr. Schwedler directed or oversaw strategic planning, implementation and execution of the service line's programs and departments including but not limited to the cardiac catheterization lab, electrophysiology lab, structural heart, cardiovascular and thoracic surgery, advanced vascular program, cardiovascular imaging, sleep center, wound center, cardiac rehab, heart failure, left ventricular assist (mechanical heart) program, integration of the Lindner Center for Cardiovascular Research and several nursing units and/or floors including the Cardiovascular Intensive Care Unit and heart failure unit. (DCH Names New President/CEO, 2016)

During his time at Christ Hospital in Cincinnati, Ohio, Mr. Schwebler witnessed the positive effects of using Telemedicine for Heart patients. In a two-year pilot program, heart patients made their medical visits through telemedicine at home in an effort to reduce heart failure readmissions and long term care. In this program of the nearly 60 patients cared through telemedicine, only one

By: Sarah Brichto

succumbed to heart failure. While patients could receive timely care, heart specialists could also

concurrently see multiple patients in a day, reducing their "windshield time" and increasing

efficiency. (Michael Schwebler MBA, 2016).

Efficiency and increased pressure to lower costs and increase access to healthcare has pushed

Indiana legislators to "fully jump into the age of telemedicine", (Russell, New Law paves way for

Indiana to fully embrace telemedicine, 2016). On July 1, 2016, Governor Mike Pence signed into law

House Enrolled Act No. 1263, a law supporting Telemedicine by reversing a long standing Indiana

law that required physicians to meet in person with patients before writing prescriptions.

In this law, "Sec. 6. (a) As used in this chapter, "telemedicine" means the delivery of health care services using electronic communications and information technology, including:

(1) secure videoconferencing;

(2) interactive audio-using store and forward technology; or

between a provider in one (1) location and a patient in another location."

(http://iga.in.gov/static-documents/4/6/a/1/46a1685d/HB1263.06.ENRS.pdf, 2016)

Supported by physician associations, hospitals, insurance companies and tech companies,

this new law expects to enable patients to sit at home, in their car or in the office and ask a

doctor about symptoms through a video call. (Russell, New Law paves way for Indiana to

fully embrace telemedicine, 2016).

However, further language on the bill suggests a more restricted use of this technology:

"(b) The term **does not include** the use of the following:

(1) Audio-only communication.

- (2) A telephone call.
- (3) Electronic mail.
- (4) An instant messaging conversation.
- (5) Facsimile.

(6) Internet questionnaire.

(7) Telephone consultation.

(8) Internet consultation." (http://iga.in.gov/static-

documents/4/6/a/1/46a1685d/HB1263.06.ENRS.pdf, 2016)

So while the aim may be to increase efficiency while decreasing costs, Indiana remains conservative

in fully adopting this technology. Even so, pressure to increase the savings to patients of, on average,

\$200/visit plus hours of time (according to an internal study by Anthem) may be bolstered by

increased interest in patients to make medicine more convenient.

Insurance/Government

In a successful Telemedicine pilot program, Stanford Medicine's "Clickwell Care" targeted specific

needs in a focus group and achieved 60% telemedicine adoption. (Srinivasan, 2016). This program

was targeted at Stanford Medicine's low-utilizing ACO population in an effort to improve their

general health.

ACO is an acronym for Accountable Care Organizations which, like Health Maintenance

Organizations (HMOs), are entities that are accountable for the overall health services to a

population. Spurred on by the affordable care act, ACO's seem to be an attempt by the federal

government to reward medical practices that are proactive about improving the health of their

patients rather than simply providing acute care. This approach is a real time exercise in population

health management that will align reimbursement of care with improvement in overall health of a

population. This can be reflected in a comparison of the current state of volume based

reimbursement or "fee-for-service" medical practices to the future state of risk-based

reimbursement. In other words, ACO's offer financial incentives to Healthcare groups that improve

the overall health of a specific population (the group) by moving the focus of the healthcare practice

from treating sick people to keeping people from getting sick.

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The challenge to physicians and medical practices seems to be not just how to improve the entire

population of their practice, but how to track this population when the most in need of

improvement are often the least likely to visit a physician.

In the Stanford "Clickwell Care" program it was found that this low-utilizing ACO population was

more likely to use emergency medicine than primary care not because they didn't want to use

primary care but because primary care was inconvenient. To improve accessibility to this

comparatively young, tech –savvy patient population, Stanford improved accessibility by expanding

hours and building virtual visit functionality into its preexisting software making healthcare

accessible from a smartphone or computer. To implement these improvements, Stanford only

introduced the virtual visits into existing primary care relationships rather than offering virtual visits

as a substitute. As a result, after a year of operations, the clinic saw 55-60% of clinic visits were done

virtually with the remainder done in person. The reduction in costs was 30% lower for virtual visits

compared to in-person visits.

It's important to consider, when looking at medical coverage and costs, to include Medicare &

Medicaid coverage. Briefly, Medicare is health insurance for people 65 or older, people under 65

with certain disabilities, people with End-Stage Renal Disease (ESRD) (permanent kidney failure

requiring dialysis or a kidney transplant). Part A Medicare (Hospital Insurance) helps cover:

inpatient care in hospital, skilled nursing facility care, hospice care, home health care and Part B is

supplemental (requires a monthly premium payment) and covers: services from doctors and other

health care providers, outpatient care, home health care, durable medical equipment and some

preventive services. (What's Medicare?, 2015)

Telemedicine, according to one of the definitions of the Federal Government, is:

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"For purposes of Medicaid, telemedicine seeks to improve a patient's health by permitting two-way,

real time interactive communication between the patient, and the physician or practitioner at the

distant site. This electronic communication means the use of interactive telecommunications

equipment that includes, at a minimum, audio and video equipment. Telemedicine is viewed as a

cost-effective alternative to the more traditional face-to-face way of providing medical care (e.g.,

face-to-face consultations or examinations between provider and patient) that states can choose to

cover under Medicaid. This definition is modeled on Medicare's definition of telehealth services (42

CFR 410.78). Note that the federal Medicaid statute does not recognize telemedicine as a distinct

service." (Telemedicine, 2016)

The Department of Health and Human Services proposed services 42 CFR Parts 405, 410,

411,414,417, 422, 423, 424, 425 and 460 [CMS-1654-P]; Centers for Medicare & Medicaid Services,

includes proposed payment for Telemedicine services in 2017. Medicare regularly updates their

payment systems to stay current with changes in medical practices. The changes adopted for 2017

will establish payment (RVU's- Relative Value Units- for PFS- physician Payment Schedules) for

Telemedicine Services among other revisions. Past services have included psychiatric evaluations,

diabetes management, alcohol counseling, depression screens, etc. (List of Telehealth Services,

2016). For the current "schedule" Telemedicine services have expanded to include: End-stage renal

disease (ESRD) related services for dialysis; Advance care planning services; Critical care

consultations furnished via telemedicine using new Medicare G-codes. (Proposed Policy...CY 2017,

2016). Medicare G-codes have to do with the function of various therapies; physical, speech,

occupational, etc.

Like the limitations the Indiana law placed on Telemedicine requirements, Federal requirements for

Medicare payment include:

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• The service must be furnished via an interactive telecommunications system

• The service must be furnished by a physician of other authorized practitioner

• The service must be furnished to an eligible telehealth individual;

The individual receiving the service must be located in a telehealth originating site.

After all these conditions are met, Medicare will pay a facility for the originating site and a separate

payment for the distant site.

Another limiting factor is within the definition of a "Telehealth originating site". To meet this

requirement the originating site (where the patient is) must be located in a rural health professional

shortage area (HPSA) or in a county that isn't within a metropolitan statistical area (MSA). These

two qualifiers (HPSA and MSA) are determined by two different Federal agencies.

To be determined a Health Professional Shortage Area (HPSA) a region must be one of the

following:

a) a county or a group of contiguous counties whose population centers are within 30

minutes travel time of each other,

b) a portion of a county(s) whose population has limited access to contiguous area

resources, as measured by a travel time greater than 30 minutes, and/or

c) established neighborhoods and communities within metropolitan areas which display a

strong self-identity, have limited interaction with contiguous areas, and have a minimum

population of 20,000.

In addition, the place/region must be one of the two following things:

a) A ratio of population to full-time-equivalent primary care physician of at least 3,500:1

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b) A ratio of population to full-time-equivalent primary care physician of less than

3,500:1 but greater than 3,000:1 and an unusually high need for primary care services or

insufficient capacity of existing primary care providers. (Health Professional Shortage

Areas (HPSAs)

In other words, the place/region needs to have some sort of name or identity apart from the

whole and it needs to have very few physicians available to the place/region. This determination

is made by the U.S. Department of Health and Human Services.

Meanwhile, a Metropolitan Statistical Area (MSA), the other criteria a Telemedicine originating

site cannot be within to be eligible for Medicare payment is a determined by the US Office of

Management and Budget (OMB) using statistical forecasted data from the US Census. To meet

the MSA standard the place/region must have at its' core an urban population of at least 50,000

in one or several counties, with the addition of adjacent outlying counties that have a high degree

of social and economic interaction with the central (core urban) county or counties as measured

through commuting/working in one area and living in the other.

In other words, to be eligible for Medicare coverage of Telemedicine a person must be in a place

that doesn't have much to do with an urban center and also doesn't have many doctors.

To facilitate access to these determinations the Centers of Medicare and Medicaid Services have

developed an eligibility analyzer on their website: https://www.cms.gov/Medicare/Medicare-

General-Information/Telehealth/index.html in HRSA's Medicare Telehealth Payment Eligibility

Analyzer . (Telemedicine, 2014)₽

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If Medicare and Medicaid have expanded coverage of Telemedicine expenses, then how have

private insurers responded? Reimbursement has been one of the main barriers to a more

widespread adoption of Telemedicine. This is seen on the verge of change in 2016. (Lacktman,

Five forces driving telemedicine expansion in 2016, 2016). Beginning with the expansion of

Federal (Medicare, Medicaid) coverage there are other legislative initiatives taking place like the

Telehealth Parity Act of 2015 which is still making its' way through Congress. This Act would

expand coverage outside the rather narrow limits of Rural Health Centers and other locations

deemed eligible by Census statistics and the Office of Management and Budget. The Parity Act

would expand originating location through a three phase plan expanding outward and city-ward

from the least populated areas that are currently covered by Medicare into Metropolitan

statistical areas over 50,000 and then into individual homes by the third phase. (Lacktman,

Congress Wows With Medicare Telehealth Parity Act of 2015, But Will It Succeed?, 2015).

In addition to current and pending federal coverage, private insurers are also quickly changing

their coverage of Telemedicine services. Cigna has been covering MDLIVE Telemedicine

services for self-insured since January of 2014. United Healthcare, Aetna, Humana and other

companies are considering comparable plans for virtual visits.

Anthem Blue Cross has an active Telehealth Program in California intended to improve access to

healthcare for rural populations. (Anthem Blue Cross Telehealth Program- Provider Manual,

2015). Telehealth for Anthem is defined as, "a health care delivery method that applies high-

speed telecommunication systems, computer technology and specialized medical cameras to

examine, diagnose, treat and educate patients at a distance." (Anthem Blue Cross Telehealth

Program- Provider Manual, 2015)

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The objectives of this program include increasing access to care, timeliness to diagnosis and treatment, improving quality of care and supporting providers with continuing education. Unlike the Federal restrictions to live video feeds (simultaneous), this program allows store and forward (asynchronous) consultation. "Store and forward" software stores and encrypts documents/data and transmits it later. This type of link is often the only possible form of telemedicine in areas with limited internet speed and can take many hours and even overnight to send information. Meanwhile, simultaneous live consultations require much more broadband capacity, about 5 Megabits per second, which can be impossible for many rural areas to accomplish/find a provider for which this is financially feasible (Allen, Founder, SDFI (Secure Forensic Digital Imaging) Telemedicine, USA, 2016).

This Anthem program is "open access" with multiple sites across the state which can connect patients with specialty locations for a variety of services. Anthem provides and facilitates:

Training for telehealth services, technical support, access to discounted high speed telephone rates, assistance in using telemedicine apps, reimbursement and monitoring. The presentation sites (where the patient goes) provides: a trained telehealth coordinator who gives patients information and gets patient consent, facilitates and develops live video telehealth appointments, maintains records, and assumes responsibility for the site. The specialty center (where the medical professionals are) trains the staff in telehealth, establishes protocols for either store and forward or live feed uses of telemedicine, provides appropriate care, provides information, protects confidentiality and maintains medical records consistent with state and federal standards.

This plan map of telehealth services in California for Anthem is starting to become available in other states, including Indiana where they are offering their pioneered service, LiveHealth By: Sarah Brichto

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Online. This program connects board certified doctors from one site to patients who can get health care without appointments or waiting. The average cost of this type of visit is \$49, offering a saving of \$200 for each online visit (but it's unclear who gets the savings). (Russell, New Law paves way for Indiana to fully embrace telemedicine, 2016). John Jesser, Vice President of provider engagement strategy and president of LiveHealth Online for Anthem considers this program to be a shift from past building and doctor—centric medicine to a more consumer-centric practice. The LiveHealth Online's service offering is available 24 hours a day, 7 days a week, 365 days a year and adds a new layer of access and convenience to patients (consumers). (Q&A with John Jesser on the Future of Telehealth, 2015). Anthem with revenues of \$74 billion in 2014, experiencing consistent annual growth and has had over \$3 billion in operating cash flows and was rated 38 on the Fortune 500 list for 2014 all of which puts the company in a good position to invest in telemedicine.

While Anthem's Telemedicine savings are cited as \$200/visit, other estimates are not as hefty. A study in 2014 found a savings of about \$100/visit for Telemedicine compared to in-person care. In this study by Dale Yamamoto, Sinusitis and colds were the most sought after telehealth service. Utilizing telehealth saved about 70% of the average costs of care for the commercial market. (Yamamoto, 2014)

This cost saving incentive for employers and employees alike is one of the forces currently pushing Telemedicine forward. With the Affordable Care Act (ACA) employers have felt a 6% rise in benefits costs and a potential excise tax that is pushing employers to try new options to keep healthcare costs in hand. According to a recent Business Group Health survey, 74% of employers plan to offer Telemedicine services up from 48% last year in an effort to reduce hospital emergency visits. (Lacktman, Five forces driving telemedicine expansion in 2016, 2016)

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Estimates from analysts at Towers Watson predict that U.S. companies could save up to \$6

billion annually if all employees used telehealth at maximum capacity. (Nordrum, 2015) Both

CVS and Walgreens are working to offer customers 24-hour video access to medical care for

conditions like allergies, bladder infections, bronchitis, etc. through their laptops and cellphones.

Hospitals and doctors at the Cleveland Clinic and University of Washington Medical Center are

also introducing online clinics for virtual visits that cost less than \$50.

Alaska has pioneered the use of Telemedicine beginning in 2001 and now serves about 27,000

people each year at over 200 sites throughout the state. Funded by several federal sources, tribal

governments and Alaska Native regional nonprofit organizations the Native American recipients

of these remote telehealth services comprise about 17% of patients in Alaska. Telehealth gives

every Alaska Native access to remote medical care at an estimated savings of \$8 million

annually for transportation alone.

Technology

The considerable potential for profit is another factor in the development of Telemedicine. The

global market for Telemedicine was \$14.3 billion in 2014 and is expected to expand to over \$36

billion over the next five years. In addition to medical services provided, the industry is

correlated to the development of computers and information technology and is estimated to be

valued at \$584.6 million in revenue for 2015 (Brown, 2015). By the year 2021, analysts predict

365% growth in revenue and patient numbers in the Telemedicine industry- a six-fold increase.

Compared to revenue in other health sector industries, Telemedicine is almost twice as profitable

with profit margins of 16.7% compared to the sector average of 8.6% profit. As an industry,

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Telemedicine bears substantial costs in technology and labor as it's a highly skilled business, but has reduced costs in rent, utilities and other overhead expenses.

International markets are also driving the demand for telemedicine. At present, over 200 academic medical centers in the United States offer video consultations to various parts of the world. These collaborations between U.S. healthcare systems and other countries offer benefits to global patients as well as enabling U.S. researchers to reach patients with rare diseases overseas for clinical trials, etc. As mentioned earlier, the various trends in globalized medicine; medical tourism, information sharing, outsourcing, etc.; could all utilize aspects of Telemedicine to reduce travel and costs and increase efficiency. Patients could virtually visit specialists from their home countries and doctors could provide care to long distance patients immediately. Researchers too are studying best practices for developing personalized Telemedicine for chronic disease management with an aim at sharing information, research and best practices internationally to increase uniformity of healthcare and to speed up research results. (Dinesen, 2016) These types of international collaborations will benefit everyone as the results should result in better standardized care for patients in every country.

Another interesting factor in the increase in Telemedicine use is the advent of accountable care organizations (ACOs). As previously mentioned in reference to Stanford's Clickwell Care program, there are already innovative Telemedicine programs that benefit ACO's by making medicine more accessible, and therefore accessed, presumably resulting in a healthier and less costly collective group. Even so, it's unclear whether the aim of targeting this tech savvy, generally younger, healthier population is an effort to improve health or improve tracking/data collection of these younger, less costly users. Whatever the motivation, the improved collective

health will benefit the group by increasing benefits and decreasing costs.

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Considering all the aforementioned realized benefits and potential benefits of adoption of

telemedicine, the barriers need to be considered. Internationally, the barriers most frequently

cited in literature/research are:

• For Patients-age, education, limited computer literacy and limited bandwidth availability,

etc.

• For Organizations-cost and reimbursement, legal liability, security and confidentiality,

old equipment, etc.

• For Staff- technical challenges, resistance to change, licensing, etc. (Clemens Scott Kruse

PhD, 2016)

In addition there is a dearth of telemedicine research in the more disadvantaged parts of the

world where this technology is best positioned to serve. Another area that remains underreported

is documentation of the actual realized quality care through Telemedicine, even though some

studies find no higher mortality rates through Telemedicine use. (Frackt, 2016)

Focusing on barriers in the United States in general and Southeastern Indiana in particular, cross

state licensing; reimbursement; lack luster broadband availability and resistance to new-tech use

are the most frequently cited barriers to adoption.

Cross state licensing- Governmental regulation barriers

As evidenced in Indiana's House Enrolled Act 1263 adopted July, 2016, Indiana's legislature

expanded Telemedicine's scope, especially through a more lenient definition of the patient-

physician relationship enabling remote prescriptions. However, this same bill posed more

specific restrictions on certification requirements for providers outside of Indiana. Physicians

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who provide care in Indiana but are located in another state will need to be certified by Indiana's Board of Medicine and be subject to the courts of law in Indiana. Those physicians located outside of Indiana but who practice predominately in Indiana are exempt from this restriction but the law is fuzzy about what exactly "predominately" means. It's suggested that this restriction is aimed at Telemedicine companies rather than individual doctors, but the intent is unclear and establishes an unnecessary burden on providers.

Considering that the presumed intent of the federal government's restriction of Telemedicine to rural locations was to improve medical care for rural areas, it's interesting to look at comparative maps of Illinois, Indiana, Ohio and Kentucky (Indiana and its' neighboring states). Eastern Indiana, with only a handful of small local hospitals, would be well served by a preponderance of hospitals just over the border in Cincinnati and Toledo, Ohio and Louisville, Kentucky, while Illinois could be well served utilizing health care from Vincennes, Lafayette and Terre Haute, Indiana. With the understanding that laws can be modified, there's hope that this law can be modified or that the Endorsement/Reciprocity stated in Physician Licensing requirements of Indiana will bring about their approval. In Indiana, "Endorsement of license is entirely at the discretion of the board of Indiana (Medical). A License in another state does not assure license in Indiana", but "Must verify each state where applicant holds a medical license and AMA and Federation of State Medical Board verification." (Chart of Physician Licensing Requirements by State Susskind Susser PC, 2014) Financial incentives to loosen this restriction could come through the federal government in forms such as the "Meaningful Use" criteria of Electronic Health Records (HER) by which Medicare will provide payments if medical providers meet certain numbers using EHR in a meaningful way. (Clemens Scott Kruse PhD, 2016). In a pinch, the federal government could remove this restriction to interstate commerce through citing the

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supremacy clause in the constitution which, "establishes that the federal constitution, and federal

law generally take precedence over state laws, and even state constitutions." (Supremacy Clause-

Legal Information Institute)

Reimbursement-Insurance/Government/Consumers

As previously mentioned in this paper, reimbursement is becoming less of a problem with

Medicare expanding the covered territory and private insurers meeting consumer demand.

Accountable Care Organizations (ACOs) could also drive coverage expansion as organizations

attempt to improve the overall health of a group to derive benefits for the whole group, as ACO's

were created to do. If use of Telemedicine seems to reduce hospitalizations, which are extremely

costly, then Telemedicine coverage could see a much more robust adoption, but there is not

enough accumulated data to make that case. Additionally, worldwide, even practices that are

poised and open to adopting this new technology are reluctant to make the large expenditure on

equipment and training because of uncertainty about reimbursement. Then too is the problem of

"fee for service" in a lack of definition of which service, what fee? With

synchronous/simultaneous Telemedicine there are two services: the provider/physician and the

presenting site and personnel there. (Clemens Scott Kruse PhD, 2016) Additionally, the

flexibility of the definition of telehealth could be a legal factor in reimbursement issues.

(Dinesen, 2016)

Broadband

Internationally, it's clear that ubiquitous broadband access would help bridge the gaps in service

availability in the world. However, access continues to be a problem, largely in less affluent

regions, both domestically and internationally. So what's involved with bringing broadband to an

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area? Tony Clark, General Manager of internet provider, SEI Communications in Dillsboro, Indiana had an explanation. For the more robust signal that live streaming would require, fiber optic cable would be best as it can handle large amounts of data, unlike copper asynchronous digital subscriber line (DSL) which began as dial up service. For fiber optic cable a cable needs to be installed either on poles above the ground, where it's vulnerable to weather related outages or underground, which is more expensive but more stable. According to Mr. Clark, this cable costs about \$70,000/mile to lay and then there are the hook up and monthly costs. For Telemedicine he suggested a dedicated line between the patient and the physician for confidentiality and to prevent hacking. Unfortunately, according to Mr. Clark, cost shares provided by the federal government are being cut by an estimated \$100 million, so jumping into this technology can be prohibitively expensive. Working with a nonprofit in partnership with other organizations like Economic Development organizations could be a feasible way to fund Telemedicine through grants and public/private partnerships.

In both cases where markets fail to make connections available, governments could create policies and programs to bridge the divide. In the United States, the Rural Health Care Pilot Program (RHCPP) was created by the Federal Communications Commission (FCC) to do precisely this. Established in 2007, this program was intended to create a broadband network for public and nonprofit health care providers in rural areas. With an investment of \$417 million, distributed over three years, 69 projects were initiated. (Alverson, 2012) Unfortunately, of the 50 remaining projects, there are still disparities between what was proposed and what was achieved. Even with additional programs that address healthcare inequities: the Connect America Fund; the E-rate program and the Lifeline Program, to name a few, equitable healthcare and internet access has not been realized. (Windhausen, 2015)

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There is a current project asking the FCC to modernize the rural healthcare program to make high capacity broadband available and affordable to rural populations. This program has had tepid and disappointing participation due to a high (35%) applicant match which is challenging for rural communities to afford especially given the lack of reliable information and research extolling the cost benefits and health benefits of this technology. To add to the dilemma, rural populations are facing challenges that include an aging population coupled with diminished job opportunities for working age residents. This lack of job growth and an aging population has resulted in increased poverty and the resulting diminishment of services, including the closure of many community hospitals.

Ward Allen, founder of SDFI (Secure Digital Forensic Imaging) would like to see a different future, "If I could change anything to help this technology I'd improve the internet infrastructure to increase available bandwidth nationwide." To prove his point he suggested an internet speed test at www.speedtest.net, a service that tests upload and download speeds. A local speedtest found wildly divergent results in southeastern Indiana:

SE Indiana Area	Download speed*	Upload speed*
Dillsboro	19.19	2.55
Switzerland Co.	17.13	4.3
Rising Sun	8.5	0.0
Madison	9.01	1.1
Vevay	37.54	4.8
Lawrenceburg	93.68	23.63

^{*}Megabits per second (Mbps)

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According to Mr. Allen, an upload speed of minimally 5.0 Mbps is necessary for

synchronous/real time connections. Given that Medicare only considers payment for

synchronous/real time Telemedicine, it's clear from the local numbers that synchronous

Telemedicine is only possible in Lawrenceburg, which is the closest town to large full-service

hospitals in Cincinnati, Ohio and therefore least in need of Telemedicine services.

Further southwest, in Switzerland County, Indiana, Jon Bond, President of Switzerland County

Economic Development Corporation, believes that with reliable access to the internet, an area

can do almost anything, but the service must be reliable, and there's the rub. While exploring

development opportunities in Asia, Mr. Bond was struck by the difference in broadband

availability. In Thailand he could access the internet anywhere because it has been a

governmental priority and internet is considered more of a regulated utility. Whereas, at home

broadband isn't considered a utility and so far lacks regulation so providers, like telephone

companies, can provide services where the promise of profit is most likely. His solution to this

would be public shaming and possibly the consideration of public safety. Since many people

have abandoned their landline telephones, there is no centralized network of addresses for 911

emergency callers that landline service provided. Adding the responsibility of registering mobile

phones and physical addresses to phone/internet servers could provide an incentive to providers

to improve broadband connectivity through a market competition.

Resistance to use- Physicians and patients

There are commonalities and differences between both patient and physician resistance to

adopting this technology. Of the commonalities, the age of the patient and physician is a cause of

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resistance, with older people less likely to adopt than younger people, both physicians and patient populations.

For patients, the level of education is also a contributing factor in resistance.

Resistance among physicians is more complicated. Internationally, regions where medicine is most scarce (developing countries) are the same regions that limited resources, including lack of internet, lack of equipment, etc., severely restrict adoption of Telemedicine for practical reasons. Looking collectively at developing countries in Africa, for example, this continent has 24% of global disease and 14% of the worlds' population but is served by only 3% of health workers who are paid by 1% of the world's health expenditures. So while Telemedicine is expected to merge into existing health systems to make them more accessible and robust, in much of the developing world, health systems and providers are extremely scarce. (Richard E Scott, 2014) In the developed world the resistance is a different flavor. Some of the different opinions stem from a lack of research and lack of evidence. While international studies have found that the main benefits of Telemedicine are a reduction in hospitalizations, improved patient compliance with treatment plans, improved patient satisfaction, cost effectiveness and improved quality of life, there are also studies that show a lack of evidence of cost effectiveness compared to standard care and treatment. Studies in the U.K. also found a lack of interest in using Telemedicine and the costly monitoring equipment didn't improve the quality of life enough to justify the cost. (Dinesen, 2016)

In the United States some see the main impediment to Telemedicine adoption is physician resistance. This is seen as a two pronged problem based on the aforementioned reimbursement challenge and a concern for quality of care. While these concerns are legitimate, they are

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expected to decrease as younger, more tech savvy and Telemedicine trained physicians take over practices. (Earl, 2015) Other studies suggest that Telemedicine's ease of use could inspire increased use driving up costs and lowering the intended savings. In fact, representatives from the U.S. Health and Human Services office of the Advancement of Telehealth, an agency that has funded \$15 million telehealth projects, want more data, suggesting that there's little evidence that Telemedicine is cost effective and that it's improving access to care for rural patients. (Nordrum, 2015)

Conclusion

Telemedicine is a promising technology that could offer rural and/or underserved residents the possibility of equal access to quality healthcare anywhere in the world. However, there are multiple challenges to make this potential possibility into a reality. As a relatively young program, Telemedicine is under-researched in many areas. In developed countries, there is ample research, especially in specialized areas (teleradiology, telestroke, etc.) that supports the benefits and barriers of Telemedicine. However, in the developing world, where Telemedicine is most promising for improved healthcare worldwide, there is little research which results in less Telemedicine availability. In reality, how would scarce funding best serve a population, through research or programs? Telemedicine research also seems to suffer from radically different conclusions to the basic questions, such as: Are outcomes improved? Is quality of care improved? Are there cost benefits? With the exception of documented savings on travel expenses for veterans in the U. S., there are few definitive results to the aforementioned questions. (McCool RR, 2016) In many cases, research seems to prove opposite conclusions.

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One problem that seems to be in place in developed countries is the difference in lack of services in densely populated regions like Europe compared to more diversely populated areas like Canada, Australia and the United States. In densely populated regions there is less need for remote connections as there is in the United States, Canada and Australia where at least lip service is given to ensuring quality of care to rural populations. As a result, interest in offering specialized medicine remotely is not as pronounced in the densely populated regions where specialized medicine is locally available.

Aging populations are engaging in a tug of war with Telemedicine by necessitating a surge in need for specialized medicine, which Telemedicine could more easily provide, but concurrently this same population has a reluctance to utilize Telemedicine. So while aging populations and impoverished regions seem to offer the greatest need/best use of Telemedicine they seem to be the least likely to actually make use of this technology. Continuing the metaphor of an evolving ecosystem, the systems involved in supporting Telemedicine seem to be engaged in the ebb and flow of punctuated equilibrium rather than steady change. As with punctuated equilibrium, the faster moving systems are generating change toward their needs. (Gould, 1993) In the case of Telemedicine, the markets seem to be in the lead. With both the surge in technological growth and its' profit potential and the push from insurers to reduce costs and change paying structures, money is leading. Helping steer the development of Telemedicine are the consumers most comfortable and accustomed to use this technology as witnessed in Stanford's Clickwell program; younger people.

Government intervention could help bring Telemedicine to the neediest populations by improving the infrastructure and sharing the cost of equipment to support these systems.

Likewise, nonprofits and public/private partnerships could help fill this void. However with the By: Sarah Brichto

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change of administration, the future of the Affordable Care Act is uncertain. With that uncertainty goes the potential of ACOs to help fund initiatives to encourage people to improve their health habits to lessen costly hospital visits and urgent medical needs thereby lowering the cost of care for a community. Current changes may point to less involvement in concerns outside borders and more reliance on markets to form the future. If this is the case, Telemedicine will likely be driven by consumer wishes and the profit motivation of insurance companies. As a result of this profit motive, development of Telemedicine may work toward personal health care that can be diagnosed on a smartphone, as offered by insurance companies and drug stores now. Meanwhile, the more cost intensive specialized synchronous remote Telemedicine that would benefit rural, low income populations in developed countries as well as third world populations will need to rely on nonprofit support, government infrastructure support and the kindness of strangers. As a globalized service, Telemedicine needs to be standardized internationally beginning with the legal definition of Telemedicine and minimal requirements for credentialing and providing services. A young technology, Telemedicine offers a great deal of promise to bring quality healthcare to populations most in need but also needs much more research and dedicated focus to better understand and be able to utilize best practices.

However, as with a complicated, evolving ecosystem, the utter complication of the many individual systems involved and their interrelations coupled with the rate of development and change make a controlled adoption of Telemedicine an extremely difficult undertaking. While technology and internet communication is surging ahead a breakneck speed, the government moves toward change sluggishly under the ever present possibility of complete overhaul through new administrations. Covering costs of the hardware, services and broadband in rural communities where there is a shortage of professionals, funds and services, adopting new,

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untested and potentially immediately obsolete technologies is very risky business indeed. Add to that the rural aging population which is more resistant to using Telemedicine cared for by older MD's who are untrained and unaccepting of this technology, there can be diminished incentive to adopt Telemedicine where it could be most beneficial. It's possible that, looking at this problem through the lens of Daniel Kahneman in Thinking Fast and Slow, there is not enough collective attention available to make Telemedicine a reality in rural Southeastern Indiana. (Kahneman, 2011) The more cognitively easy thing to do is nothing. Simply gathering information for this paper was a continuous struggle to keep current with accurate information about all the components necessary to understand Telemedicine. Extrapolating the difficulty of putting together an overview to actually creating a rapidly evolving Telemedicine system, the challenge is extreme. Given the complication of the systems and the limited resources in rural areas, it's likely that market forces rather than general public welfare concerns will drive the evolution of this technology. With younger people who are more accustomed to internet access and its' immediate information and services, Telemedicine may begin as M-Health; urgent care through smart phones. As this smart population ages, the ease and efficiency of using larger systems like synchronous Telestroke and Telepsychology may become the norm as a result of future simple market demand.

By: Sarah Brichto

Bibliography

- Accountable care organization. (2016, October 22). Retrieved from www.wikipedia.com: https://en.wikipedia.org/wiki/Accountable_care_organization
- Allen, W. (2016, July 21). Founder SDFI. (S. Brichto, Interviewer)
- Allen, W. (2016, July 21). Founder, SDFI (Secure Forensic Digital Imaging) Telemedicine, USA. (S. Brichto, Interviewer)
- Alverson, D. C. (2012). Broadband Connectivity from "The National Academies Press". Washington, District of Columbia, USA.
- Amory- Winslow, C.-E. (1943). *The Conquest of Epidemic Disease- A Chapter in the History of Ideas*. Princeton: Princeton University Press.
- Anthem Blue Cross Telehealth Program- Provider Manual. (2015, December). Retrieved from www.mediproviders.anthem.com: https://mediproviders.anthem.com/Documents/CACA_CAID_TelehealthManual.pdf
- Bond, J. (2016, Sept. 9). President Switzerland County Economic Development Corporation. (S. Brichto, Interviewer)
- Brown, C. (2015, June 15). *A Comprehensive Analysis of the Telehealth Industry*. Retrieved from www.academicnexus.com: https://academicnexus.com/trading/stocks/comprehensive-analysis-telehealth-industry-2899/
- Chart of Physician Licensing Requirements by State Susskind Susser PC. (2014). Retrieved from www.visalaw.com: http://www.visalaw.com/wp-content/uploads/2014/10/physicianchart.pdf
- Clark, T. (2016, Nov. 16). General Manager, SEI communications. (S. Brichto, Interviewer)
- Clemens Scott Kruse PhD, P. K. (2016, September 15). *Evaluating barriers to adopting Telemedicine worldwide: A systematic review*. Retrieved from Telemed Telecare OnlineFirst/ Journal of Telemedicine and Telecare: http://jtt.sagepub.com/content/early/2016/10/14/1357633X16674087.full.pdf+html
- DCH Emergency Department Changes Result in Increased Patient/Visitor Satisfaction. (2015, June 5). Retrieved from www.dch.org: http://www.dch.org/mediacenter/details.cfm?pageID=29&mediaCenterID=164
- DCH Names New President/CEO. (2016, May 4). Retrieved from www.dch.org: http://www.dch.org/mediacenter/details.cfm?pageID=29&mediaCenterID=218

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- Dinesen, B. B. (2016, March 18). *Personalized Telehealth in the Future: A golboal Research Agenda*. Retrieved from Journal of Medical Internet Research: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4795318/
- Earl, E. (2015, April 17). *Physician adoption the biggest barrier to telehealth*. Retrieved from www.beckerhospitalreview.com: http://www.beckershospitalreview.com/healthcare-information-technology/physician-adoption-the-biggest-barrier-to-telehealth.html
- Eric Brichto, E. (2015, August 5). Director & Counsel, Accreditation Operations- Commission on Accreditation of Healthcare Management Education (CAMHE). (S. Brichto, Interviewer)
- Federal Register- Office of Management and Budget. (2010, June 28). 2010 Standards for Delineating Metropolitan and Micropolitan Statistical Areas; Notice. Retrieved from www.whitehouse.gov:

 https://www.whitehouse.gov/sites/default/files/omb/assets/fedreg_2010/06282010_metro_standards-Complete.pdf
- Federal Register: Part II; Department of Health and Human Services. (2016, July 15). Retrieved from www. gpo.gov: https://www.gpo.gov/fdsys/pkg/FR-2016-07-15/pdf/2016-16097.pdf
- Frackt, A. (2016, May 16). *You Mean I don't Have to Show Up? The Promise of Telelmedicine*. Retrieved from www.nytimes.com: http://www.nytimes.com/2016/05/17/upshot/you-mean-i-dont-have-to-show-up-the-promise-of-telemedicine.html?_r=0
- Gold, A. (2014, April 2). *Study: 7 different federal definitions of telehealth*. Retrieved from www.fiercehealthcare.com: www. fiercehealthcare.com/it/study-7-different-federal-definitions-telehealth
- Gould, S. J. (1993). Eight Little Piggies. New York: W.W. Norton & Co., Inc.
- Harper, D. (2016). *Online Etymology Dictionary*. Retrieved from www.etymonline.com: www.etymonline.com/index
- Health Professional Shortage Areas (HPSAs). (n.d.). Grand Forks, North Dakota.
- Herrick, D. M. (2007). *Medical Tourism: Global Competition in Health Care*. Dallas: National Center of Policy Analysis.
- Hodach, R. M. (n.d.). *How Physician Practices Must Change to Effectively Manage Patient Populations*. Retrieved from www.amga.org: https://www.amga.org/wcm/PI/Collabs/ACO/Articles/CaseStudy_final.pdf

- http://iga.in.gov/static-documents/4/6/a/1/46a1685d/HB1263.06.ENRS.pdf. (2016, April). HOUSE ENROLLED ACT No. 1263. Indianapolis, Indiana, USA.
- Ivaylo VassilevEmail author, A. R. (2015, April 24). *Assessing the implementability of telehealth interventions for self-management support: a realist review*. Retrieved from www.implementationscienci.com: https://implementationscience.biomedcentral.com/articles/10.1186/s13012-015-0238-9
- Jack E. Russo, M. R. (2016, March). *VA Telemedicine: An Analysis of Cost and Time Savings*. Retrieved from online.liebertpub.com: http://online.liebertpub.com/doi/pdfplus/10.1089/tmj.2015.0055?src=recsys
- Johanna TaylorEmail author, E. C. (2015, Dec 1). *Implementing solutions to improve and expand telehealth adoption: participatory action research in four community healthcare settings.*Retrieved from www.bmchealthservices.com:

 https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-015-1195-3
- Johns Hopkins Staff. (2014, July 18). *The Future of Health Care Globalization*. Retrieved from international.blogs.hopkinsmedicine.org: http://international.blogs.hopkinsmedicine.ofg/2014/07/18/the-future-of-health-care-globalization/
- Joint Commission International. (2015, august 6). *Achieve Accreditation*. Retrieved from Jointcommissioninternational.org: http://www.jointcommissioninternational.org/achieve-accreditation/
- Kahneman, D. (2011). Thinking Fast and Slow. New York: Farrar, Strauss and Giroux.
- Lacktman, N. (2015, July 15). *Congress Wows With Medicare Telehealth Parity Act of 2015, But Will It Succeed?* Retrieved from www.healthcarelawtoday.com: https://mediproviders.anthem.com/Documents/CACA_CAID_TelehealthManual.pdf
- Lacktman, N. (2016, Feb. 11). Five forces driving telemedicine expansion in 2016. Retrieved from www.managedhealthcareexecutive.com:

 http://managedhealthcareexecutive.modernmedicine.com/managed-healthcareexecutive/news/five-forces-driving-telemedicine-expansion-2016
- List of Telehealth Services. (2016). Retrieved from www. CMS. gov: https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes.htm
- McCool RR, D. L. (2016, March 22). *VA Telemedicine: An Analysis of Cost and Time Savings*. Retrieved from www.ncbi.gov: https://www.ncbi.nlm.nih.gov/pubmed/26305666

- McDonald, K. (2015, July 27). *Unclear HIPAA rules permit healthcare data offshoring...for now.* Retrieved from searchitchannel.techtarget.com:

 http://searchitchannel.techtarget.com/opinion/Unclear-HIPAA-rules-permit-healthcaredata-offshoring-for-now
- Michael Schwebler MBA, R. F. (2016, September 25). CEO/President Dearborn County Hospital. (S. Brichto, Interviewer)
- Nordrum, A. (2015, September 9). *The Promis of Telehealth: States push fo rinsurance coverage as support for virtual healthcare services swells*. Retrieved from www.ibtimes.com: www.ibtimes.com/promise-tlelhealth-states-push-insurance-coverage-support-virtual-healthcare-services-2087883
- Ommen, D. (2015, August 5). Community Relations at Kings Daughters Hospital, Madison, Indiana. (S. Brichto, Interviewer)
- Proposed Policy...CY 2017. (2016). Retrieved from www.cms.gov: https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-07-07-2.html
- *Q&A with John Jesser on the Future of Telehealth.* (2015, September 24). Retrieved from www.thinkanthem.com: http://thinkanthem.com/insight/qa-john-jesser-future-telehealth
- Richard E Scott, M. M. (2014, Sept 30). *Telehealth in the developing world: current status and future prospects*. Retrieved from www.dovepress.com: https://www.dovepress.com/telehealth-in-the-developing-world-current-status-and-future-prospects-peer-reviewed-article-SHTT
- Russell, J. (2016, April 16). *New Law paves way for Indiana to fully embrace telemedicine*.

 Retrieved from www.livehealthonline.com:

 http://www.livehealthonline.com/en/news/2016/new-law-paves-way-for-indiana-to-fully-embrace-telemedicine/
- Russell, J. (2016, April 16). *New Law paves way for Indiana to fully embrace telemedicine*. Retrieved from www.ibj.com: http://www.ibj.com/articles/58102-new-law-paves-way-for-indiana-to-fully-embrace-telemedicine
- Schwebler, M. (2016, Sept 25). President/CEO Dearborn County Hospital. (S. Brichto, Interviewer)
- Srinivasan, V. (2016, March 9). *How Stanford Achieved 60% telehealth adoption at a primary care clinic*. Retrieved from www.advisoryboard.com: https://www.advisory.com/research/market-innovation-center/the-growth-channel/2016/03/stanford-medicine-virtual-visits

- SUNY Levin Institute. (2015, August 8). *What is Globalization*. Retrieved from Globalization101.org: http://www.globalization101.org/what-is-globalization/
- Supremacy Clause- Legal Information Institute. (n.d.). Retrieved from www. law.cornell.edu: https://www.law.cornell.edu/wex/supremacy_clause
- *Telemedicine*. (2014, January 3). Retrieved from www.cms.gov: https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/index.html
- *Telemedicine.* (2016). Retrieved from www.medicaid.gov: https://www.medicaid.gov/medicaid/benefits/telemed/index.html
- What's Medicare? (2015, june). Retrieved from www.medicare.gov: https://www.medicare.gov/Pubs/pdf/11306.pdf
- Windhausen. (2015, Dec. 16). *Time for the FCC to Modernize the Rural Health Care Program*. Retrieved from www.benton.org: https://www.benton.org/blog/time-fcc-modernize-rural-health-care-program
- World Health Organization. (2010). *Telemedicine- Opportunities and Developments in Member States*. Retrieved from www.who.int/: http://www.who.int/goe/publications/goe_telemedicine_2010.pdf
- Yamamoto, D. (2014, December). Assessment of the Feasibility and Cost of Replacing In-Person Care with Acute Care Telehealth Services. Retrieved from www.connectwithcare.org: http://www.connectwithcare.org/wp-content/uploads/2014/12/Medicare-Acute-Care-Telehealth-Feasibility.pdf

From: Anita Pearman <pearmanclan@embarqmail.com>

Sent: Wednesday, June 06, 2018 12:39 PM

To: Comments, Urc **Subject:** Broadband access

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

We live in a rural part of Hendricks County in Indiana and have little options when it comes to internet. We currently have 3.5 MB download speed, which is basically high speed dial-up!

I have a child that does online classes and our internet is at best semi-reliable on a daily basis.

Downloading a video for class takes all night because of the slow download speed.

Of course, we would love to have the options like Sling TV or using Netflix, but those aren't an option either due to the low speed of our service.

It would be great if they could get fiber optic cable ran so we could really have a better option. I realize that is extremely expensive to do, but it seems that is the only way our internet will improve. We have a satellite internet available to us, but the reception to that is awful. It is a better download speed, but when it is always down there's no point in paying for a service you aren't getting. There are just too many things in the country that interfere with satellite service. I would love to have better service, but if it's going to come at a ridiculous cost then most people won't pay it. There has to be a happy medium. Thank you for looking into this and trying to find a solution. Anita

Pearman

From: Lonny Wagener <lwagener@hotmail.com>
Sent: Wednesday, June 06, 2018 10:33 AM

To: Comments, Urc

Subject: Indiana Broadband service.

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Broadband in Rural Indiana cannot come soon enough. Dialup service just does not get the job done in today's age.

From:	Kristin Newport <knewport5@att.net></knewport5@att.net>
Sent:	Wednesday, June 06, 2018 9:45 AM
To	Comments Urc

To: Comments, Urc

Subject: Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** _____

I don't think one company should have a monopoly in certain areas. I wanted Xfinity Internet, but found out I couldn't get it because bright house had a monopoly in Avon, Indiana. I think there should be a free market for all Internet service providers everywhere so they can compete with each other and consumers can get the best price.

Sent from my iPhone

From: Joseph Higbee <jhigbee@aypcs.net>
Sent: Monday, June 04, 2018 8:11 PM

To:Comments, UrcSubject:Broadband Regulation

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Commission,

In brief, it is my experience as a computer security analyst, parent, and suburban citizen having grown up in central Indiana from poverty to middle-class that broadband has passed the point of being a necessity for living similar to telephone, gas, and electric utilities and should be treated as a basic living necessity and regulated appropriately. Nearly every person today requires or soon will require internet access for almost all civil and public services, education, employment and commerce so this must be considered carefully by your group.

Respectfully,

Joseph Higbee

Sent from my iPad

Vickie Myers <scout11750@yahoo.com></scout11750@yahoo.com>	
Monday, June 04, 2018 8:04 PM	
Comments, Urc	
Net neutrality	
exercise caution. DO NOT open attachments or click links from unknown senders or	
L Indiana Residents. Please make this happen! We as voters will be watching. This is an olic participation is becoming the norm and voicing our concerns.	

From: Tom and Ann <annntom@hotmail.com>
Sent: Monday, June 04, 2018 11:16 AM

To: Comments, Urc **Subject:** broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I live in a rural area and get poor coverage of the internet. Providers need to give us a better product. I live only 20 miles from Indianapolis. I can't imagine how bad it is in more remote areas. Please insure that Indiana enters the 21st century and that all that want it can receive adequate internet coverage.

Tom Hougham 4001 W Hougham Rd Trafalgar, IN 46181

From: Vibbert, Candiss B. <vibbert@purdue.edu>

Sent: Monday, June 04, 2018 9:40 AM

To: Comments, Urc **Subject:** Broadband Access

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Thank you for placing this item on your agenda. Access to fast, reliable broadband is critical for the health and well-being of citizens, for future technological development, and for creation of a culture and environment where citizens wish to move and live.

I live about a half-mile from Purdue University so one would think I have easy access to Broadband. Not so. Cable was placed on the opposite of the road and is not available to me. I live in a woods so satellite access would be spotty at best. Luckily, I can get Broadband through Frontier phone lines. While this is minimally acceptable and Frontier upgraded some of their equipment last winter, I still have a hard cutoff to the speed I can purchase because we live very far from their main equipment. In a time when all of the appliances that one purchases use wireless, broadband is required for many devices.

I know that some electric companies are going to begin to install fiber optics lines. Duke Energy should be encouraged to do this as well. I have been reading that 5K might be an answer for individual broadband needs as well.

We are better off than some of our rural Indiana citizens; high-speed, reliable Broadband access should be a basic offering everywhere. This is an area worth state investment.

Thank you.
Candiss B. Vibbert
vibbert@purdue.edu
765-491-9166

From: Jennifer Hora < jennifer.hora@valpo.edu>

Sent: Monday, June 04, 2018 9:07 AM

To: Comments, Urc
Cc: Jennifer Hora
Subject: Internet availability

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Dear URC,

In studying broadband availability in Indiana, please keep in mind affordability and ease of access; this is especially true for rural areas.

Jennifer J. Hora Associate Professor of Political Science

Department of Political Science and International Relations 1400 Chapel Drive ASB 329 Valparaiso University Valparaiso, IN 46383 (219) 464-5262

From: Jarvis, Charles <cjarvis@iupui.edu>
Sent: Monday, June 04, 2018 8:39 AM

To: Comments, Urc **Subject:** IUSF Broadband Study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

My name is Charles Jarvis I reside at 10636 east County Road 800 south, Camby Indiana I would like to comment on the up coming broad band study. The location where I live is undeserved by all utilities, especially by reasonable and reliable high speed broadband. The only reasonable and economical choice I have is AT&T. They have been reluctant to provide service. I currently have their DSL service. At best is it better than nothing. I believe the reason we in this area are undeserved is our close proximity ti the Indianapolis airport. We are on wells and septic tanks and were the last to even get slow DSL service. There is no cable provider and I checked with an over the air ISP in Mooresville and was told the Hendricks County(where I live) was extremely difficult to work with to expand their service.

I live in the area boarded by Hendricks, Marion and Morgan counties. I am less than 1/2 mile from the Heartland Crossing devolvement, where there are numerous choices for service and competition among vendors. At one time I inquired to AT&T about rerouting my phone service as I am served from the save exchange for better service and was told we do not do that, even though it would be more efficient for them to do so.

I would love to see natural gas expanded to my road. It currently runs down Indiana Hwy. 67 very short distance to C.R 800 south and I know many home owners would be interested. Once again all there services are available to Heartland Crossing, and I realize this is a large concentration of homes however during its development it could have been extended to the surrounding area.

I hope my comments mean something and are considered in your future decisions. I can be reached

By phone 317-856-8397 or e-mail cjarvis@iupui.edu

Thank you for my chance to comment

Charles Jarvis

From: klknock@aol.com

Sent: Monday, June 04, 2018 8:13 AM

To:Comments, UrcSubject:Broadband Coverage

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Please strongly consider coverage in the area West of Greencastle and East of Brazil. We have Verizon and cannot get reliable cell coverage let alone much of any internet. This prohibits us from being able to do work from home and stay reliably connected to the outside world. Thank you.

From: Danny Ratliff <dlr7770@gmail.com>
Sent: Sunday, June 03, 2018 9:19 PM

To: Comments, Urc

Subject: Affordable internet access

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I live in an area 4 miles west of Nashville, and the only internet access I have at the present is sattelite and Verizon WiFi. Both are expensive and charge a lot for the amount of data I need. It would be nice to have an ISP that is more affordable.

Sinc

erely,

Dan

ny Ratliff

From: MARTINA D RUKAVINA <mrukavina6@comcast.net>

Sent: Sunday, June 03, 2018 6:50 PM

To: Comments, Urc **Subject:** Broadband services

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I'm all for quality broadband services at a reasonable price.

Martina Rukavina

3902 Sunset Dr.

Valparaiso, IN 46383

From: Steven J Glass <sglass@indy.rr.com>
Sent: Sunday, June 03, 2018 2:57 PM

To: Comments, Urc

Subject: Rural broadband survey comments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I use the internet for my business, telephone and watching TV. I currently subscribe to Spectrum, who bought out Time Warner (Brighthouse Communications). Since Spectrum has taken over as provider of these services to me, my cable bill has increased dramatically. One of the main drivers of their ability to increase rates so drastically is lack of competition. When an internet service provider (ISP) comes into an area to provide these services, they buy a long-term contract from the state to be the sole provider in the particular area. This leads to an oligopoly, much like AT&T had years ago, which leads to low or no competition with subsequent increased rates to their customers. We in turn have very little in alternatives that we can take advantage of to decrease the amount we pay to have these services. The only alternatives are to watch over the air HD television channels or start removing options from our cable bill to make it more affordable. I would be very happy to see competition be able to come into my area to cause my ISP to lower rates or give me other cheaper alternatives for me to run my business. I look forward to being able to see what you can offer me as a consumer in my area.

Sincerely,

Steven J Glass

Glass Tax Service LLC (317) 858-9576 (317) 946-7010 ShareFile by Citrix Click here to upload files.



Virus-free. www.avg.com

From: Jim Hufstetler <baldachin@sbcglobal.net>

Sent: Sunday, June 03, 2018 2:11 PM

To: Comments, Urc Subject: Comment

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

A utility expands its coverage as any other business: If there is money to be made from the investment and if money is to be saved by expansion.

There are many people who live in an area where the structure cannot offer the higher speeds; to expand the high speed structure in these locations is cost prohibitive.

Therefore, in my opinion the only way to get the utilities to take down the old and install the new is to offer tax incentives.

Thank you.

James W. Hufstetler

"If your hind-sight is 20-20,

you are probably not raising enough dust." (ConfusedUs)

From: David Lehman < lehmandr@gmail.com>
Sent: Saturday, June 02, 2018 9:26 PM

To: Comments, Urc

Subject: Broadband comments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Thank you for the opportunity to submit comments regarding broadband deployment. I live in an area with high speed internet. I would consider moving to another less populated area of the county if I could access internet at a relatively inexpensive price. Current utility providers may be a reasonable resource in order to see this happen.

If time allows, I would like to ask the IURC to consider pricing regulation for high speed internet. I live in an area with only one provider for high speed internet. As a result, I have no ability to negotiate the price that the company asks for high speed internet. While I can afford the payment, it is sometimes frustrating when I see that company advertise the same service for a lower rate and will not let me receive the same offer.

Thank you for your consideration.

Respectfully,

David Lehman

From: teshag3@aol.com

Sent: Saturday, June 02, 2018 5:16 PM

To: Comments, Urc

Subject: Internet service price hike

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

The internet service price is unusually became very high. The providers divided the service by Counties and there is no competion between them because there is only one provider in most IN counties. e.g AT&T do not serve the Hendricks county unless you bundle all the services. The Government need to regulate this price hike and let the providers compete in free market and stop asigning the counties.

Tesfa from Avon, IN

From: Roger Sopher <hay_you08@yahoo.com>

Sent: Saturday, June 02, 2018 5:15 PM

To: Comments, Urc **Subject:** Who paying

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Who going to pay for it not low-income families



Virus-free. www.avg.com

From: Jess Gwinn <jagmo@bluemarble.net>
Sent: Saturday, June 02, 2018 3:45 PM

To: Comments, Urc **Subject:** internet comments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hello,

I live in Beech Creek Township in Solsberry Indiana and our need for faster internet service is A must. Currently, it is very slow and is quite the concern.

Thank you,

Maureen Forrest

7625 N Newark Rd

Solsberry IN 47459

From: Darrin and Jennifer Warner <warner-jennifer@sbcglobal.net>

Sent: Saturday, June 02, 2018 3:23 PM

To: Comments, Urc **Subject:** Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** ______

I don't know if this is the type of info you want or not. We live at 5306 S The Farm Rd in Rushville. We only have one option for internet, which is TWN. I work from home as a bookkeeper except for 1 day a week. I have 3 kids that are required to complete school work online. Our quality of life is sometimes highly impacted when the internet is not working properly. It is not near as quick as when we had AT&T within Greenfield city limits. My feeling is you should be able to receive the same speed of service wherever you choose to live.

Thank you!
Jennifer Warner
317-498-3810
Sent from my iPhone

From: Larry Moser Larry Moser Larrymsr163@gmail.com

Sent: Saturday, June 02, 2018 2:28 PM

To: Comments, Urc Cc: H4@iga.in.gov

Subject: Internet Accessibility and Cost

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Per Representative Soliday's request for Broadband Access Comments,

It is imperative for everyone to have affordable broadband access in today's world and even more so as we go into the future. Most interactions with business, banking, education, government, healthcare, work and most else we all do in life requires this access to interface with these entities in a reasonably affordable and speedy manner. To put this utility out of reach of any of the general public is to put Hoosiers behind the rest of the nation and the US behind the rest of the world. This is not a viable option for our state or our country. Please vote accordingly. Thanks for considering your constituents.

Alfred L. Moser 163 Southport Ct. Valparaiso, IN 46385

From: Barnett, James E < jebarnet@purdue.edu>
Sent: Saturday, June 02, 2018 11:47 AM

To: Comments, Urc

Subject: We are Slaves to Comcast!

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Thanks for opening up comments concerning High speed internet in Rural Indiana!

We are a Homeschooling family and depend on our ability to download and view educational sites quickly and accurately. As such we are also forced to pay an extreme bill to Comcast the only High speed internet provider available to our community! Comcast has a Monopoly due to a lack of competition, since they are the only provider they can charge Families an average of \$75.00 a month just for Internet service! We see commercials all the time of cheaper providers, but none available in Rural Indiana and the High speed internet promised by AT&T for over 10yrs now is still not available, due to Lobbying groups wanting to maintain their Monopoly! It is essential that Comcast lose their Monopoly and their ability to gouge the hard working peoples pocketbooks in Rural Indiana! Again Thanks and Have a Great Day!

Mr. & Mrs. James Barnett 330 E. Monroe St. Williamsport, IN 47993 (765)585-0127

From: Sue Lopez <cslopez@hotmail.com>
Sent: Saturday, June 02, 2018 11:35 AM

To: Comments, Urc Subject: Rural internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** _____

We live in southeastern Delaware County, Indiana. While we have relatively fast internet connection available. It is costly. I pay \$60 a month for cellular internet that is limited to 10 gigs I also pay \$40 per month for my cellphone which has a limit of 6 gigs.

We cannot stream or watch Utube informative videos without going over our limits.

My husband and I are in our mid seventys, and it is difficult for us to visit the State House. I recently watched the live session of the legislative special session. That sent us over our limit, and I had to pay additional amount. Please help us get reasonably priced faster internet connection.

Sue Lopez Sent from my iPhone

 From:
 bcox197088 <bcox197088@gmail.com>

 Sent:
 Saturday, June 02, 2018 10:58 AM

To: Comments, Urc

Subject: Cable

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I believe this is a great idea, because I can't get (we are rural). Plus I wanna take this time to also to reiterate the importance of medical marijuana he could help a lot this Indiana Hoosiers help

Sent via the Samsung Galaxy, powered by Cricket Wireless

From: Mark Williams <mcw627@yahoo.com>
Sent: Saturday, June 02, 2018 10:25 AM

To: Comments, Urc

Subject: Re: IUSF-Broadband Study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Good Morning,

I read that Indiana is conducting a study on internet service and are soliciting comments from customers. I live at 779 W 50 N, Valparaiso, 46385. My area is semi-rural. My block is 1/2 mile on each side, and contains 33 residences. We are less than two miles from the major shopping center in Winfield, and less than 2 miles from 2 very large subdivisions. My best option for internet service for the last 10 years is through Frontier DSL. It costs \$36.98 per month, and we receive 2.7Mbps download speed and 0.7Mbps upload. The service frequently drops out or experiences significant lags. My neighbors and I filed complaints with the FCC two years ago because the service was so unreliable. I telework two days a week and need reliable internet to work from home, we also use it to watch netflix.

My only other available options are satellite internet, but most of them are slower, more expensive, and have data caps. Comcast internet is at the western side of my block, 1/5 of a mile away, but they will not bring their services down the rest of the block. In contrast, my parents in Merrillville pay less a month for Comcast and get almost 10 times the speed that I do, and its reliable. NITCO services properties one block south of me. I have had them out after getting an advertisement that they service my area, but was then told that my area does not have line of sight of their tower. Verizon Fios buried fiber optic cable on the eastern side of my block, and all throughout my area, but never offered service to any of us. I guess they have some sort of agreement with frontier not to infringe on their territory. My cell phone providers data signal is also very bad where I live, although it was great just 5 years ago.

I would love to have some sort of reliable and competitive service in my area, and I would be more than willing to pay more if I could get anything better. If I can do anything to assist with the study please contact me.

Thank you,

Mark Williams

From: WPSweeney <wps@cinergymetro.net>
Sent: Saturday, June 02, 2018 9:49 AM

To:Comments, UrcSubject:Rural Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Today 39% of rural Americans lack access to broadband.* This places a huge number of Americans at a competitive disadvantage in the global economy.

I submit this is no longer a matter of convenience. It's a matter of necessity.

* http://www.duluthnewstribune.com/business/agriculture/4435292-39-rural-americans-lack-access-rural-broadband

WP Sweeney
Greencastle, IN 46135

From:	J. j. <newfane1967@yahoo.com></newfane1967@yahoo.com>
Sent:	Saturday, June 02, 2018 8:53 AM

To: Comments, Urc

Subject: Re: High Quality Internet Services for Rural Hoosiers

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** ______

Comment

I understand it is not financially wise to provide wire-based internet services to all rural Indiana areas. AT&T has no plans to ever provide wire based internet to my residence.

I currently have the option of satellite internet service but it is a very expensive personal comittment. Most small towns in Indiana have some type of high speed access but that has often only been provided with the encouragement of government. I am not sure that with the rapid changes of technology, money should be invested in "wire-based" services, but I would appreciate some recognition that equal access to technology for all Indiana citizens should be supported.

A voucher? A credit? A discount available for certain unserviced areas?

Thank you for your consideration and work.

J. Johnson 9595 W Co Rd 750 N Elizabethtown, IN 47232

From: Sent: To: Cc: Subject:	Philip Leichty <philip.leichty@gmail.com> Saturday, June 02, 2018 7:26 AM Comments, Urc Virginia Leichty Broadband</philip.leichty@gmail.com>
**** This is an EXTERNAL email. If unexpected email. ****	Exercise caution. DO NOT open attachments or click links from unknown senders or
Dear legislators,	
I've been fortunate to have medic	um high speed broadband in Rensselaer where I live for some time.
able to get Broadband, but it was	years was at Burr Oak Mennonite Church located in Rural Rensselaer. We were finally spotty and slow. I retired 3 years ago. I was informed that a faster Broadband has price for a business. So, I would think that this study is a very good thing.
Philip Leichty Sent from my iPhone	

From: Thomas Knueven <tomknueven@gmail.com>

Sent: Saturday, June 02, 2018 5:41 AM

To: Comments, Urc **Subject:** Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Here in Montgomery County, rural areas, we need high speed fiber broadband

From: jontim <jontim@comcast.net> **Sent:** Friday, June 01, 2018 9:21 PM

To: Comments, Urc

Subject: Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

The price needs to be lowered for everybody. It is very expensive for good internet service. Why should the working class and middle class continue to pay high prices to help pay for everybody else. How about some laws to curb the profits of internet providers and lower the price for everybody.

Sent from my Verizon, Samsung Galaxy smartphone

From: John Richards <4drillerjohn@gmail.com>
Sent: Friday, June 01, 2018 7:55 PM

To: Comments, Urc **Subject:** High speed internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** _____

I would like you to understand that I live on state road three a mile south of Westport in Indiana we have satellite internet.

The internet is slower than when I had dial-up Internet.

We have AT&T Cellular service that is unreliable I would hope that something can be done to upgrade this service to help my business as well as every other business in the area.

This area is a cut through between interstates 65 and 74.

This four mile stretch where our business is located has been unable to grow due to limited internet and cellular service. If you would have any questions you can contact me at 18126624587 or email me at 4drillerjohn@gmail.com. Thanks John Richards.

Sent from my iPhone

From: Dennis Dispennett <dpdispennett@gmail.com>

Sent: Friday, June 01, 2018 7:53 PM

To: Comments, Urc **Subject:** my comments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I have compared prices with all available providers and they are all the same. The providers all must be hooked at the hips with easch other so another provider isn't needed unless they can compete by lower prices. It doesn't pay to spend 50 dollars each month just to pay bills online.

Thanks fro asking, Denny Dispennett

From:	Jeff Dillon <jwdillon10@aol.com></jwdillon10@aol.com>
Sent:	Friday, June 01, 2018 7:49 PM
Го:	Comments, Urc

Subject: Comment on broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** ______

Keep the federal government out of it Let no companies monopolies it Keep it free and fair your the people

Sent from my iPhone

From:	Umwa <umwa1189@yahoo.com></umwa1189@yahoo.com>	
Sent:	Friday, June 01, 2018 6:54 PM	
To:	Comments, Urc	
Subject:	Comments	
**** This is an EXTERNA unexpected email. ****	AL email. Exercise caution. DO NOT open attachments or click links from unknown senders or	
Dear Sirs,		

Since internet services is now a requirement to contact State Officials on a variety of issues my thoughts are that it should be provided to all citizens in the State of Indiana at no charge regardless of income. It should be paid for by the Indiana surplus that has accumulated and be ran by the State of Indiana with minimal Corporate influence.

Bil Musgrave PO Box 565 Boonville, IN 47601

From: Brook Barker

 brookb2011@yahoo.com>

Sent: Friday, June 01, 2018 5:41 PM

To: Comments, Urc Subject: Broad band service

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

This is a touchy subject for me and my family because we have been trying to get broadband service to my home area for years. We currently live at 1272 east markle road smack dab in between huntington and markle on hwy 224. Cable comes from the east and stops a couple miles short of my house and cable comes West and stops a couple miles short of my house. So we're in cables no mans land! We have microwave cable but it's not near fast enough for what we want to use cable for . Neither service providers can tell me why they stop short both was , they just say corporate makes that call. If I remember correctly it wasn't but a few short years ago cable companies were given infrastructure money to help upgrade broadband service to rural areas but they must have spent all of that before they got to us. . . Any help would be appreciated. Thanks! The Barkers

From: Regina Koloj <mrsrkk@gmail.com>
Sent: Friday, June 01, 2018 5:41 PM

To: Comments, Urc

Subject: Broadband Internet...Help needed!!

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hey there,

I am a resident of Rolling Prairie, IN. and I currently pay about 85.00 a month for just internet through Surf Air. I am stuck with this company that offers unreliable dish internet because Comcast and other companies do not service the north side of Highway 20 (across from the United Methodist Chirch) My children and I need the internet service for school. My children use I-pads and I do my classes online as well. As a low income family, it is very difficult to afford this cost and our internet is unreliable as well which makes it difficult for my children and I to do our homework. Please take this into consideration and help us have broadband internet extended to our area and offered at a manageable price.

Thank you for your time and consideration.

Regina Koloj mrsrkk@gmail.com

Regina Koloj

Sent from my iPhone

From:	Dennis Berkemeier < dennis.berkemeier@gmail.com>
Sent:	Friday, June 01, 2018 4:49 PM
To:	Comments, Urc
Subject:	Rural interner
**** This is an EXTE unexpected email. *	RNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or ***
	with the rest of the world. I have stayed in remote areas of England Ireland Austria and Germany with high speed internet

From: Karl D. Madsen <kdmadsen@sbcglobal.net>

Sent: Friday, June 01, 2018 4:40 PM

To: Comments, Urc

Subject: Free Market Forces Should Prevail

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Dear IURC Members,

Regulatory agencies should stay out of high-speed broadband ("broadband") network administration. Free market forces should direct availability, speeds, pricing, ownership, technology, and governance. They should succeed or fail like any other business. True, broadband is part of modern society. Broadband is NOT a utility like natural gas or electricity, so please do not try to turn it into one. The direct competition between providers is the best mechanism for consumers to receive these services at market rates without subsidies from the government. Don't throw it in the utility basket like natural gas or electricity generation and distribution (i.e. NiSource/NIPSCO). For example, let's examine wind-generated electricity. It would not occupy the space it does in Indiana without subsidies. Try running your whole-house air conditioner from a windmill on a 95-degree day in central Indiana when the wind speed hovers around 2 mph while that high-pressure front sits in one place and bakes us. I hope you like sweat and darkness, because that is what you are going to receive from your windmill on a day like that. Unless you haven't noticed, it tends not to be very breezy on the hottest of hot summer days. I do not want to see broadband licenses or operations be doled out to rent-seeking subsidized firms based on the deliberations of lawmakers – either locally or statewide. Incompetence and bad decisions will abound.

Rent-seeking providers line up at the government trough to erect economically unsound infrastructure on the wallets of taxpayers. Our taxes go straight into the operators' pockets since a rational investment analysis without subsidies would point them away from that capital investment. They could never attract subsidy-free public investment since their return on investment would be negative or below the threshold of even the least aggressive investor, like one who simply would be satisfied with the almost non-existent interest available from a savings account at a bank. Service providers concentrate resources where they can make money from their investments. This ensures there is sufficient residual income (i.e. profit) to reinvest in technology and network expansion. There is a reason there is so little inexpensive broadband in the middle of the ocean. Satellites are pricey to design, launch, operate, and maintain. The same theory applies to rural areas where the population density prohibits the same level of investment. There are currently available options in rural areas, and their relative high costs will decrease as technology advances and makes servicing those areas less costly. Consumer prices will then also decrease. Government did not dictate mobile phone availability, and we can't step out in public without having to dodge people mindlessly driving and walking while using them. I also do not see people carrying around portable windmills to power their phones. Why? No one wants them.

Stay out of the broadband regulation industry. Government will just mess it up. Why? Because most lawmakers do not possess much of an education in economics or technology. Many are lawyers, which is even worse. First, any new laws will favor lawyers and ensure their hands are in the stream of litigation (i.e. legal fee revenues) which follows the passage of such laws. We will get laws and regulations that will fundamentally get it wrong on all the areas it is meant to protect or improve: price; availability; corporate governance; consumer experience; technology; and ultimately innovation. Please leave broadband alone. Let it develop at economically sound speeds, prices, and supply.

Sincerely,

Karl D. Madsen

kdmadsen@sbcglobal.net

phone: 219-801-8434

Sent from my iPhone

From: Sent: To: Subject:	Betty Snyder <snyder1604@hotmail.com> Friday, June 01, 2018 4:19 PM Comments, Urc Broadband</snyder1604@hotmail.com>
**** This is an EXTERNAL enunexpected email. ****	mail. Exercise caution. DO NOT open attachments or click links from unknown senders or
	ility of service in Delaware township, Ripley County, IN. We have no good options for cted all the providers that advertise rural service & they all say our area isn't covered.
Thank you,	
Betty Snyder	
2789 E. Mud Pike Road	
Osgood, IN 47037	

From: Beth Arnold barnold1998@yahoo.com

Sent: Friday, June 01, 2018 4:04 PM

To: Comments, Urc

Subject: Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

As a rural education teacher, I am all for broadband Internet available for little or no cost to students and their families.

Thank you.

Beth

From: William 1 Cook <ncsg@embarqmail.com>

Sent: Friday, June 01, 2018 3:56 PM

To: Comments, Urc

Subject: IURC asks Hoosiers to submit comments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hello,

I received an email from Randy Frye in regard to comments to "IURC asks Hoosiers to submit comments"

I live near the intersection of US 50 & SR 101, in an Agricultural zoned location.

The DSL distribution "Box" is on the NE corner of US 50 & 750 East. The COPPER line runs 4,680 feet from there to my house.

When it Rains a lot, the seepage into the ground affects attenuation, (the line was removed from the electric poles and buried in 1994).

About 8 years or more ago there was a move to replace the copper lines with fiber, that did not happen apparently due to the "Economy".

I have received marketing info from CenturyLink indicating availability of 25Mbs, however, the highest for MY area is 10Mbs.

I have done research to learn what IS available in INDIANA, and unless I were to live in a highly populated area, 10Mbs is about tops.

Sometimes my son is using so much Bandwidth, that I can not even open my email.

Being able to reduce attenuation, (lay Fiber to my house, and for me to replace the antique phone wiring in my house to Cat 6 or better), would certainly help,

However, another issue that would help getting "work" done – is to find some Educational Material on how to CONFIGURE Browsers, that is, how to eliminate the Advertising etc.

If a site does not have much server power, ads can cause a LOT of delay. The https://www.fidelity.com/ server is a great example of a site that always immediately opens regardless of bandwidth being used at my location.

If CenturyLink advertises 25Mbs, I would like to understand Why MY area can only get 10Mbs tops - - and the only way for me to begin to understand that is to hope to catch a technician at the "Box" on the corner and ask them, because no one on the phone is going to answer that.

Google, Bing etc can answer a lot of questions, but it would be nice to have a site that Educates people as to what the issues are and what can be done to provide a "Faster" experience. Another issue is that Providers / ISPs are charging too much money for what is being delivered.

Thanks.

Bill

From: Gordon Jackson < jacksongordon@att.net>

Sent: Friday, June 01, 2018 3:48 PM

To: Comments, Urc **Subject:** Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Keep broadband accessible for all. Rural and small towns need affordable and technological access

Gordon Jackson Victoria's Vineyard LLC

From: Terry Flick <leenterry@sbcglobal.net>

Sent: Friday, June 01, 2018 3:43 PM

To: Comments, Urc **Subject:** Broad Band Study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

NOT ONE PENNY OF TAX DOLLARS SHOULD BE USED FOR THIS PROGRAM. IF YOU GUYS WANT TO GIVE BROAD BAND HELP TO SOME PEOPLE THEN TAKE A PAY CUT AND PUT YOUR OWN MONEY INTO THE PROGRAM.

From: warika <warika@aol.com>
Sent: Friday, June 01, 2018 3:00 PM

To:Comments, UrcSubject:Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Access to broadband should be treated as a public utility. The monopoly strong hold on service is counter to the supply and demand economic system we pride ourselves on. We all need it and a select few control it leaving zero competition and encouragement of unfair price practices.

Erika Claus

Small town resident with single provider of essential service

Sent from my Verizon, Samsung Galaxy smartphone

From:	jmwpbc <jmwpbc@yahoo.com></jmwpbc@yahoo.com>
Sent:	Friday, June 01, 2018 3:04 PM
To:	Comments, Urc

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Please stop implementing private development with tax dollars.

Thanks!

Justin Woodward

From: Ed Salm <ersalm47@yahoo.com>
Sent: Friday, June 01, 2018 2:59 PM

To:Comments, UrcSubject:Broadband Study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

There is no question but that the typical American today cannot live effectively without internet access. Every effort should be made to provide internet access to all. It's also important that the cost of access to the internet be the same for all.

From: geraldine Moore <gerrisumnermoore@gmail.com>

Sent: Friday, June 01, 2018 2:58 PM

To: Comments, Urc **Subject:** Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Yes small rural towns in Indiana would like the same kind of service that the large cities have. We do not want to be left out. Sincerly,

Geraldine Moore

From: Ralph & Sue Sweet <ralphsweet@yahoo.com>

Sent: Friday, June 01, 2018 2:53 PM

To:Comments, UrcSubject:Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

We have the slowest internet in the world and I don't mean just Indiana, but thruout the nation, mostly at least. we live in rural Wilkinson IN and the fastest speed available in our central office (Century Link) is 3 megs. I am sure that most of rural IN is in the same boat. Should and could be much better.

From: Starr Pranger <pam.pranger@gmail.com>

Sent: Friday, June 01, 2018 2:52 PM

To: Comments, Urc **Subject:** broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Need for increased competition. Currently areas of one one service only and that service is SLOW!

When ask re service from other vendors they say the "agreement" does not allow them into my area.

What agreement - that sounds like intentionally creating monopoly areas and no competition, to keep prices high and service poor.

Poor service prevents small business from developing as commerce today depends on fast internet please address this problem.

bartswanson9@gmail.com

(219) 465-1448

From: Sent: To: Subject:	Bart Swanson
**** This is an EXTER unexpected email. **	RNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or ***
Hello,	
	al areas, there is either one high-speed broadband provider or no provider. We pay far more than atively inferior service.
	sternet and DSL and neither has speeds of more than 11 mbps. We have also tried Verizon cellular erage is spotty, expensive, and greatly reduces battery life for connected devices.
Bart K. Swanson	
347 Arlington Court	
Valparaiso, IN 46383	-9531

From: jeffery abbott <jvdjabbott@hotmail.com>

Sent: Friday, June 01, 2018 2:25 PM

To:Comments, UrcSubject:Rural Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To Whom It May Concern -- Please consider making rural broadband a priority. It can be difficult to great any kind of quality internet or streaming services in rural areas and with many school districts going to e-learning environments, it makes it extremely difficult on families with school age children to have the ability get on line and access information and technology

Thank you

From: David Hurd <uhurdme@sbcglobal.net>

Sent: Friday, June 01, 2018 2:19 PM

To: Comments, Urc **Subject:** High speed Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

We have public libraries, school libraries and other resources for public use. If this will raise our taxes like the recent gasoline tax (our roads are still in horrible shape and the quality of work and materials have declined significantly) then as a tax payor and registered voter, I am against this. Woody, you are going up against a very wicked liberal this November so behave!

Sent from Yahoo Mail on Android

From: Mike Alverson <MAlverson@co.hendricks.in.us>

Sent: Friday, June 01, 2018 2:09 PM

To: Comments, Urc

Subject: WiFi

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Please help the rural areas anyway you can to get fiber optic type wifi.

Mike Alverson Chief Building Inspector

355 S. Washington St. Rm. 212 Danville, IN 46122 317-718-6026 www.co.hendricks.in.us

From: Sent: To: Subject:	Erin Richards <erinrichards@rocketmail.com> Friday, June 01, 2018 1:51 PM Comments, Urc Broadband in rural areas</erinrichards@rocketmail.com>
**** This is an EXTERNAL email. unexpected email. ****	Exercise caution. DO NOT open attachments or click links from unknown senders or
society. I have the options of sat slow and unreliable in recent ye entertainment, so I must use ove even get internet through my ce phone service is currently. If we	in rural areas. Internet is a way of life, and is increasingly necessary to function in rellite internet, which isn't a good option, or centurylink internet, which has become ars. Because our internet options are poor, I can't stream television or other er the air antenna or expensive satellite television. My cell service is also poor, so I can't illular provider. I think internet service should be provided and regulated like land line move with the times and realize land lines are going away, we could transfer that law to time and concern with rural Americans!
Erin Harris	
Sent from my iPhone	

From: Mark <m_d_dougherty@hotmail.com>

Sent: Friday, June 01, 2018 1:43 PM

To: Comments, Urc

Subject: IUSF - Broadband Study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I do not have any type of internet service at my house and have been trying for years to find a carrier that would provide it. If there is any additional information that would be helpful to this study, please let me know.

Thanks, Mark

From: Hamilton, Brenda
 sprenda.hamilton@huntington.in.us>

Sent: Friday, June 01, 2018 1:31 PM

To: Comments, Urc

Subject: Huntington County Indiana

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Internet and cell phone coverage in my home area, NW corner of Huntington county, is truly disappointing. I myself have not taken the time to look into every avenue, BUT, my son, 30 yrs., Travis Hamilton, who lives ½ mile west of our home, has tried every internet system available to our area. We have heard it all from "you must be on the curve of the earth because your neighbors have our unit on their tower or barn" to "you are on the very edge of our service area it will be weak but should work". The only internet we could find without costing a large sum each month was through our phone lines at frontier. (my sons home doesn't have a land line anymore, previous customers disconnected & frontier won't come out and hook it up)

Cell phone at its best, must be in TEXT form not voice. In an emergency, which happened last month for the 1st time, the 911 call would not go through. I had to call a neighbor who placed a call to 911 for me through her land line phone which all took minutes of time. Thank goodness everything turned out to be okay, but that incident proved to me that you can NOT count on a cell phone in our area. Our area is Frontier phone lines. The cost of having to keep the land line plus wanting the ability to use a cell phone is ridiculous. It blows me away that in this day in time cell phone that works best in my area will not work in other areas. One of our favorite fall retreats is on the West Central and Southern, Parke County for instance, side of Indiana. No cell phone service, no communicating with staff at work, no checking on the kids, etc. I know this is a problem nationwide and hopefully will be resolved soon.

My husband & I would like to buy, sell, trade items through the internet. Many people are doing this with great success. This is not possible in our remote rural area. We would have to be in town to process our trading. I hope that our area, Warren Township, Huntington County, Indiana will see a major improvement in cell tower & internet service with a reasonable cost very soon.

Brenda Hamilton Huntington County Deputy Treasurer 201 N Jefferson St., Room 104 Huntington IN 46750 260-358-4862

From: Debbie Turner <debina211@gmail.com>

Sent: Friday, June 01, 2018 1:31 PM

To:Comments, UrcSubject:Centurylink

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I live in the country and even though I am one of the lucky ones to have CL they suck! Internet is never consistent.

From: Sent: To:	Karen Kay Leonard <kkbleonard@sbcglobal.net> Friday, June 01, 2018 1:30 PM Comments, Urc</kkbleonard@sbcglobal.net>
Subject:	Internet regulation
**** This is an EXTERN unexpected email. ***	IAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or *
· · ·	rtant for our present & our future that Internet financial barricades stay down. People may have sing, but consumers all should have the fullest, fastest access available without regard to
Sent from my iPhone	

2215 E 350 N LaPorte, IN 46350

From: Clifford Peterson < c.b.peterson@icloud.com>

Sent: Friday, June 01, 2018 1:19 PM

To: Comments, Urc

Subject: rural internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

AT & T very briefly had a rural-friendly hot spot plan for SW Michigan and maybe LaPorte County.

We went to sign up, and it had been withdrawn.

The ISPs should be encouraged to offer affordable unlimited data hotspot plans.

If they would, all areas with good cell coverage could have good internet service.

Clifford Peterson

From: David Kenning <dfkenning@gmail.com>

Sent: Friday, June 01, 2018 1:20 PM

To: Comments, Urc Subject: Net Neutrality

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To the members of the Indiana Utility Regulatory Commission:

It it important that all internet customers in Indiana have equal access. Please keep net neutrality an important part of your decision making.

Thank you, David Kenning

From:	Bill Smith < billsmith49@earthlink.net>
Sent:	Friday, June 01, 2018 12:55 PM
_	6

To: Comments, Urc

Subject: Broadband access in Indiana

Hello

I would like to submit my opinion about Broadband internet access in Indiana Currently, there is almost no competition in Plainfield. The two choices are AT&T and Spectrum. Neither company has plans to bring high speed networks into our area because they don't want to spend the money. Our government should implement policies or laws that either open up markets to allow other companies access to place fiber optic in our area or government should be allowed to place them themselves. Either of these changes would challenge these companies to recognize that high speed internet service is the future and they will need to join the movement to this or cease being a provider of internet service.

Thank You Bill

From: loustultz1950 <loustultz1950@yahoo.com>

Sent: Friday, June 01, 2018 1:14 PM

To: Comments, Urc

Subject: Rural affordable internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

The rural community has become an outcast for families to receive reliable cell phone service and affordable internet. Modern technology with all banks, medical facilities and businesses has become a necessity not a luxury for consumers. It is time for all technology companies to supply reliable services to all consumers not just the municipalities.

Sent from my Samsung Galaxy smartphone.

From: Richard Cain <rlcain@onlyinternet.net>

Sent: Friday, June 01, 2018 12:44 PM

To: Comments, Urc

Subject: IUSF-Broadband Study, rural internet service

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

General Counsel Beth Heline

Re: IUSF-Broadband Study Indiana Utility Regulatory Commission 101 West Washington Street, Ste. 1500 E Indianapolis, IN 46204

Beth Heline,

Kevin Mahan, my state rep., has asked me to respond to you concerning the need for high speed rural internet service in Blackford County, IN.

My location has access to only ONE internet provider and the service is <u>extremely slow</u>. So slow that we can't stream content, send large attachments or download large files.

This is 2018- why can't high speed Internet service be available to EVERYONE in the State of Indiana? If the state government wants our people to help the state grow we need to have high speed internet service for everyone, not just the more populated areas of Indiana.

thanks for your effort to get the internet up to the year 2018 speed for everyone in Indiana!

Richard Cain 1907S-300E Hartford City, IN 47348

From: Patrick and Sherry Bogue <psbogue@tds.net>

Sent: Friday, June 01, 2018 1:03 PM

To: Comments, Urc

Subject: broadband availablility

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Dear Sharon Negele,

You asked for our input on the broadband internet situation. I genuinely believe that internet will eventually go to all wireless.

For right now, the only broadband available to us is through TDS and they are really raking us over the coals for it. We are paying \$185 per month for minimal cable and internet. TDS has forced us to pay for home phone service as well, and will not give us cable and internet without paying for the home phone. I feel that the service providers are taking advantage of folks like us by requiring things that we don't want. We haven't used the home phone in years. Can you do something to prohibit that?

Thanks,

Sherry Bogue



From: Sent: To: Subject:	twhitmer@tds.net Friday, June 01, 2018 1:01 PM Comments, Urc Broadband
**** This is an EXTER unexpected email. **	NAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or **

You might want to look at TDS, they tell customer they can get high speed internet and forget to tell if they have a phone Keg close to them. This happened to me. You might ask them why they don't place more of their Keg out on their network. Oh I guess they cant afford is since service is slim sometimer

ted

From:	stevegookins@gmail.com
Sent:	Friday, June 01, 2018 12:58 PM
To	Commonts Urc

To: Comments, Urc

Cc: Randall Frye; Randall Frye

Subject: Rural area

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** ______

I live in rural Indiana (Ripley County). Our land line phone provider does not offer broadband internet.

We subscribe to a wireless service which is slow and inefficient.

I urge the commission and General Assembly to address ASAP.

I live on a farm and my cell phone serves as my internet but many times my phone does not have capacity to download or load materials.

Steve Gookins 5448 W CR 650N Osgood,In 47037 812-756-8003 cell 812-689-4355 home stevegookins@gmail.com Sent from my iPhone

From: Dan Gangler <dan.gangler@inumc.org>

Sent: Friday, June 01, 2018 12:53 PM

To: Comments, Urc

Subject: Broadband accessibility

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I believe all Hoosiers, regardless of how rural they might be, need access to high speed broadband. This is how we in America communicate in this day-and-age.

Daniel R. Gangler
10696 Stillwater Road
Clermont, IN 46234-7701
317-293-8335

Sent from Mail for Windows 10

From: Sent: To: Subject:	Tom Moorman <tmoorman@centurylink.net> Friday, June 01, 2018 12:33 PM Comments, Urc There's a fiber optics cable that passes in front of many houses for several miles. It was put in with "tarp" money several years ago and no one along the way was allowed to get it. I called my telephone company about it and they told they were not</tmoorman@centurylink.net>
**** This is an EXTERNAL ema unexpected email. ****	il. Exercise caution. DO NOT open attachments or click links from unknown senders or
Tom Moorman	
Sent from my iPhone	

From: Lloyd, Kyle <Kyle.Lloyd@va.gov>
Sent: Friday, June 01, 2018 12:19 PM

To: Comments, Urc

Subject: wifi

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I realized that WIFI access was very inviting to me whenever I needed connectivity...

Kyle D. Lloyd, B.S., CPS

Certified Recovery Peer Specialist

VA Cell Phone >>> {765} 661-4331 or {800} 360-8387 x73734

"Age is an issue of mind over matter. If you don't mind, it doesn't matter."

>>> Mark Twain



[PLUS "1" takes you to the VETERANS' CRISIS LINE]



http://www.mentalhealth.va.gov/index.asp

http://www.mentalhealth.gov/

http://maketheconnection.net/

http://zerosuicide.sprc.org/



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rom: Johnny Pittman <jdpittmanjr@hotmail.com></jdpittmanjr@hotmail.com>				
Sent:	Friday, June 01, 2018 12:10 PM			
To:	Comments, Urc			
Subject:	Internet			
**** This is an EXTER unexpected email. *	RNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or ***			
Broadband should be	e treated like phones—and enjoy title II protections.			
Johnny Pittman				

From: Roger Jr. <independence1776@hotmail.com>

Sent: Friday, June 01, 2018 11:46 AM

To: Comments, Urc **Subject:** Broadband Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I'd love to see high speed Internet access in my area. We have some with the phone company but it isn't fast. Just basic service that can't handle streaming a movie very well. I live at 1162 S State Road 101 Dillsboro, Indiana 47018.

From: Jeffrey Waldo <jcwaldo@msn.com>
Sent: Friday, June 01, 2018 11:45 AM

To:Comments, UrcSubject:Rural broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

In this day and age, one simply cannot function without the internet, much like not having a phone was 50 years ago. The cost of broadband is prohibitively expensive for many, so whatever can be done to bring cost down and make it available to everyone should be done. If that means classifying it as a public utility like water and electric, then so be it.

Thanks, Jeff Waldo Hope, IN

Sent from my HTC

From: Kevin Copple <kcopple34@hotmail.com>

Sent: Friday, June 01, 2018 11:43 AM

To:Comments, UrcSubject:cost vs actual usage

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

The theory sounds good but cost vs actual usage should be the driving factor.

Sent from my iPhone

From: Dwayne Muhlenkampd@jayremc.com>

Sent: Friday, June 01, 2018 11:36 AM

To: Comments, Urc **Subject:** broadband study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Leave it develop on its own. If people want it their going to get it. Do not throw tax dollars at it. You keep wasting tax dollars and making people pay more, pretty soon the people paying the taxes won't be able to afford internet either.

From: cinstam@aol.com

Sent: Friday, June 01, 2018 11:30 AM

To:Comments, UrcSubject:Rural broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I know constituents in Heston would appreciate it. Still some weak spots near the Michigan border.

From: kmjshockley@frontier.com **Sent:** Friday, June 01, 2018 11:35 AM

To: Comments, Urc **Subject:** Internat In our Area

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

The only providers for this area, that I know of, are Frontier and hughesnet. We currently have Frontier, which is becoming more expensive, yet is very slow. Highest is also very costly. I hope that in the near future, we can get faster internet at a reasonable price.

Thank you for your t8me.

Mary Jo Shockley

Sent from Yahoo Mail on Android

From: Jane < jane.staracademypc@gmail.com>				
Sent:	Friday, June 01, 2018 11:22 AM			
To:	Comments, Urc			
Subject:	Rural Internet server			
unexpected email. ** Could small towns be	RNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or *** e on a transponder or single server so that all residents access for a lesser fee? (as we are) might access through nearest town?			
Sent from my iPhone				

From: Susan Martin <smartin89@frontier.com>

Sent: Friday, June 01, 2018 11:04 AM

To: Comments, Urc Cc: 'Susan Martin'

Subject: Comments: Internet Study

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

My comments regarding internet availability.

It is NOT the responsibility of government NOR taxpayers. It is up to individuals who want to pay for their own internet wants. The library, paid for by taxpayers, has it for free to all individuals who want to use it and choose not to pay for it themselves.

Susan Martin, Valparaiso, Indiana

From:	Teresa Holland <ask4arn@att.net></ask4arn@att.net>
Sent:	Friday, June 01, 2018 11:16 AM

To: Comments, Urc

Subject: Broadband Availability & Services - Comment

**** Thi	is is an EXTE	RNAL email.	Exercise caution	n. DO NOT o	pen attachments	s or click links fror	n unknown	senders or
unexpec	ted email. '	****						

Hello,

Consumers should have more than one choice of provider. We finally now have two providers after having had only one for many years (XFinity/Comcast). Also, given that the monthly rate almost doubles after completing the initial sign up deal, consumers should be able to select the channels they want on cable versus having to choose from a bundled plan. Any of the plans involve repeated channels, many channels you would not choose, channels not in your language but you are charged for these. In today's age, this should not be that difficult to technically provide. This does not seem to differ between providers. This would make the high cost of internet services much more palatable. Also, rate increases should be regulated as to prevent such high increases over a two year period for example. This was done in the past when Indiana Bell telephone was seen as becoming a monopoly, however; this concern does not seem to apply to broadband providers, even though they may be the only provider in your area.

Finally, all PBS stations, WFYI, Muncie, and Bloomington should be offered in the Indpls metro area and possibly beyond. My cable company Att U-verse offers WFYI and Bloomington, which are almost exactly the same. Whereas, Muncie PBS is different, but is not offered. Would be even better if I could get all locally via antenna. Anyone with Broadband for internet should have at least a fast enough speed to conduct business and to watch educational videos without constant buffering or reloading.

Thank you for allowing comments. Teresa Holland, Greenfield, Indiana ask4arn@att.net

From: Jim Gronceski < jimgronceski@yahoo.com>

Sent: Friday, June 01, 2018 11:13 AM

To: Comments, Urc **Subject:** Rural Broad band

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I service many Indiana communities and having reliable high speed internet is important to the continued development and success of Indiana.

My customers use it for communicating with remote devices such as municipal wells, water towers and lift stations. The rural customers are significantly impacted by poor internet connection options. This frequently requires very expensive alternative methods to get reliable systems.

Jim Gronceski

Field Technical Specialist
jimgronceski@yahoo.com
BL ANDERSON
4801 Tazer Drive Lafayette, IN 47905
Office 765-463-1518
Fax 765-446-8390
Cell 765-426-0828
www.blanderson.com

From: Tim Fuller <fuller.tim@gmail.com>
Sent: Friday, June 01, 2018 11:12 AM

To: Comments, Urc **Subject:** broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Nice service. It should all be private. No taxpayer involvement. If it is viable, it will pay for itself. If it is really valuable to the residents, they will be willing to pay a little more if need be.

It is nice for anyone. If it costs a little more, then necessity is a personal judgement. The risk should be on the provider, not on the taxpayers.

From: Wood Daniel <dan.wood@sbcglobal.net>

Sent: Friday, June 01, 2018 11:10 AM

To: Comments, Urc **Subject:** broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I am extremely opposed to you raising my rates to pay for someone else's broadband. Too bad if you live where there isn't fast broadband, move if you want it or pay for it yourself! Why don't you use the taxes already imposed on my phone bill to pay for wiring schools for internet? That tax should have been eliminated years ago! Name one school in the state that doesn't have high speed internet?

Another scam to tax me more!

I SAY NO MORE!!!!!!!! ENOUGH IS ENOUGH!!!!

Sincerely,

Overtaxed taxpayer!!!!

From: rawrajah415@cs.com

Sent: Friday, June 01, 2018 11:01 AM

To: Comments, Urc

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Bring back net neutrality

Sent from AOL Mobile Mail Get the new AOL app: mail.mobile.aol.com

From: jeremy cummins <AGjeremyc@hotmail.com>

Sent: Friday, June 01, 2018 11:05 AM

To: Comments, Urc

Subject: HIGH speed internet in Rensselaer Indiana

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Dear sir/madam:

My wife and I are sending these comments regarding our available internet in Rensselaer. We are just 2.5 miles south of the Walmart in Rensselaer among a small group of houses and directly on the highway. It has been for several years now and the small foreseeable future, only one way to get internet at our home and that is via Centurylink and DSL. We have attempted to get it via Hughesnet satellite with no good outcome. We recently saw Centurylink post \$45/month for life for high speed internet (HSI) but the most we can get is a whopping 3.5Mbps service for the same price as the up-to-25Mbps service is paying. We have recently brought home a Mobile Beacon that we borrowed from someone to see if it works in our home, and it had remarkably better results, but still a far cry from anything like the 100+Mbps that some in town that have cable or fiber optics can enjoy for under \$60/month. I think we reached speeds around 25Mbps download and similar for upload using the mobile beacon on the Sprint network. However, as the cost is nearly not worth it, we declined to purchase it for now.

As for why we need it...My wife requires internet for her job, and until we called about the \$45/month plan, we were paying them \$70+/month for the same service. And I know they were ok with that and would have never changed the price without us asking. The speed of service we get now is barely enough to stream one video and only get a few buffer pauses. It would not be good for video-conferencing or the like, but I'm sure you already know that. It is barely compatible with today's technology, and our cell phones get super-fast speed if I want to pay for the data as well. To say we feel left out when we are literally so close to the fiber optics in town and the end of the cable network, is putting it politely. I have even offered to volunteer my time and labor for up to a week (and I own my own handyman business) to both the cable company and Centurylink if they would run fiber optics my direction. I suppose for the 10-20 houses they may pick up for the cost it would be to lay the infrastructure may not be worth it, but it would be more than worth it for those of us who are paying the heavy cost for little to no service while those who live around the corner are paying less for 100 times more. To even try to see our online bank statements or save stuff to the cloud feels like pulling teeth and many times just times out on us because the speed of service is so slow. We have often thought of just dropping the internet altogether for those reasons alone, and I am sure we're not alone.

Thanks for allowing me time to introduce you to the outskirts of Rensselaer Indiana's "high" speed internet.

Sincerely

Jeremy and Cindy Cummins 8679 S US Hwy 231 Rensselaer, IN 47978 PS. To be fair, when using Hughesnet service it showed speeds of over 100Mbps on speed tests, but would not be picked up on several pieces of our technology, and they only blamed our equipment and not theirs. I also still had Centurylink service at the same time, and side by side comparisons (my wife and I have exactly the same kind of laptops) showed Centurylink faster than Hughesnet time and again and that was when we were only getting up to 1.5Mbps from Centurylink! And we swapped her laptop and my laptop from Centurylink to Hughesnet and back again with identical results with laptops that were less than 1 year old.

From: Tracy-Heather McIntosh <sunnsand771@gmail.com>

Sent: Friday, June 01, 2018 11:02 AM

To: Comments, Urc **Subject:** Broadband for all

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

As a parent of a child who is a college graduate who is also a single mom, our daughter is struggles financially just to meet basic needs such as food, housing and transportation. She works full-time for a dentist office and qualifies for no government aid and does not receive child support.

Our family knows first hand the struggle through our daughter's experiences of trying to find free access to Wi-Fi to complete school work, pay bills online and pay taxes or pay fees to state government services. This isn't about the ability to access the Internet for entertainment purposes.

Our family supports affordable and consistent broadband for all Hoosiers.

Respectfully: The McIntosh Family 317.709.6238

From: Duane Ehlers <dehlers@purfybr.com>
Sent: Friday, June 01, 2018 11:01 AM

To: Comments, Urc

Subject: Broadband Internet Service Availability

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Dear Commission,

I live in a rural area and there is no AT&T or Comcast available. We have it about a half mile away on both the North and South sides of our area, but for some reason no one will run lines to us. I guess there are not houses??? However, we do have Verizon MIFI, and Satellite service. So without a very competitive rate, they can keep it for now.

Duane M. Ehlers 17022 White Oak Ave Lowell, IN 46356-9409

From: Lisa Trigg <lisatrigg46135@gmail.com>

Sent: Friday, June 01, 2018 11:01 AM

To: Comments, Urc

Subject: Broadband Deployment

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Making broadband more available is important. It is also important to make it affordable.

Providers who bundle broadband with other services -- Television and Phone -- tie the customer's cost of broadband internet access to a bundle. If a person does not also buy television and phone services, the cost is higher for broadband. That can make it less affordable for people who simply want reliable broadband internet, but do not want or need phone and television services.

Please rule the cost of broadband internet service should not be tied to purchase of additional services or bundles.

Thank you, Lisa Trigg 309 S. Jackson St Greencastle IN 46135 765-247-8212

From: Bill Butler <w.butle@yahoo.com>
Sent: Friday, June 01, 2018 10:42 AM

To: Comments, Urc

Subject: IURC asks Hoosiers to submit comments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Please make telephone and broadband service available to all Hoosiers at a reasonable cost.

From: Debi Shields <debis1238@gmail.com>
Sent: Friday, June 01, 2018 10:41 AM

To: Comments, Urc

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

It wont be fair, it will be expensive, we know what your up too, educate the rich make the poor pay for it, reinstate net neutrality. I'm sick of this fascist administration.

From: Sent: To:	Casey Wells <casey.wells916@gmail.com> Friday, June 01, 2018 10:40 AM Comments, Urc</casey.wells916@gmail.com>
Subject:	Comments
**** This is an EXTEI unexpected email. *	RNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or ***
Do not regulate intervoid.	rnet. If people in rural areas want high speed internet and their is a market, a company will fill that
Otherwise, those citi towards subsidizing live there because I	zens should move to an area that currently has high speed internet. My tax dollars should not go infrastructure for rural Indiana. I grew up in rural Indiana, with extremely slow internet. I no longer enjoy amenities such as high speed internet. It's a give and take. Many rural areas currently have r streaming and most online activities as it is.
Casey Wells	
Lafayette, IN	

From: Edward Formanek <Edward.Formanek@OntarioSystems.com>

Sent: Friday, June 01, 2018 10:37 AM

To: Comments, Urc

Subject: Comments on Broadband Internet in Indiana

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Good morning,

This is in regards to my State District Rep soliciting feedback on the topic of Broadband networks.

I work for a tech company, but live in rural Randolph County. We use a wireless internet provider. The service is acceptable, but other of my neighbors who cannot get the line of sight access to my provider are not able to use it. I know one such neighbor who works for the same company as me but has to drive into Muncie to work every day because they cannot get the wireless reception.

Our school also has remote work days, but that is dependent upon the student having access to internet.

Not sure if that is the kind of feedback you are looking for. Let me know if I can be more specific.

Respectfully,

- Ed Formanek

Ed Formanek

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Attention: This message and all attachments are private and may contain information that is confidential and privileged. If you received this message in error, please notify the sender by reply email and delete the message immediately.

From: Michael Rooney <mgrrooney@yahoo.com>

Sent: Friday, June 01, 2018 10:37 AM

To: Comments, Urc

Subject: Internet cost and service

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

The cost of rural internet is exorbitant in most cases and the service is horrendous. Can you imagine your service goes down, you call and they set an appointment sixteen days in the future. To top it off then they charge a service charge and the problem is on their line. What the heck is that all about!

Sent from Yahoo Mail on Android

From: Frank Wise <fwise@brownsburg.org>
Sent: Friday, June 01, 2018 10:36 AM

Comments His

To: Comments, Urc Subject: Rural Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. **** ______

I agree that rural areas are in need of better access to Internet. I live south of Danville Indiana east of State Road 39 and County Road 200 E. There is nothing available except wireless and then you are locked in at high prices and limited amount of Gigs.

Frank Wise 508 E Edgewood Drive Danville, Indiana 46123

Sent from my iPhone

From: Christina Shepard <annieoakley17@gmail.com>

Sent: Friday, June 01, 2018 10:34 AM

To: Comments, Urc **Subject:** Internet rural areas

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hi,

We live in Clayton, Indiana, town of 972 people, just outside of Plainfield. Our internet service provider is TDS. It is terrible, yet the best in our area.

It requires us to have a landline phone, which we do not even use. The internet is through the phone cable. You can hardly get online with a data cord. It is even more difficult with a wifi router in the house.

We have sprint on our cell phones. Sprint goes into LTE mode when we get home, meaning, no data, or barely data. Of course, we cannot access wifi in our house on our phones because TDS, who has the monopoly on service, has a terrible signal.

When we have tried to work with TDS on this issue, it is always our fault. We have replaced four wifi receivers, paying them each time, because they say the receiver is bad. The service is the same, and we feel trapped in their monopoly. We do not have any cable tv.

We do not use satellite because if there is a storm, you have no signal again.

Sincerely,

Christina Shepard

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From: Shellie Neal Johnson <shellieneal@gmail.com>

Sent: Friday, June 01, 2018 10:16 AM

To: Comments, Urc

Subject: Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

This is an extremely important subject for my household. One that causes a daily struggle.

Homework, pill pay, bank reconciliation, school registration, weekly/daily school assignments and grades, FAFSA just to name a few of the things we're unable to do from home.

I haven't even went as far as contacting Xfinity requesting a quote of \$175,000.00 to have it ran to my home. In the age of internet being a must from school to individual medical information and everything in between the industry is severely lacking in keeping up with the 21st century.

Please take this topic very seriously.

Thank you

Shellie Neal

From: Wilkerson, Sherri UTC CCS <Sherri.Wilkerson@carrier.utc.com>

Sent: Friday, June 01, 2018 10:06 AM

To: Comments, Urc

Subject: Competition for High Quality Internet Service

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

You asked for comments and as a residential home owner I feel there are not enough options for service. In my area Comcast is it. In my opinion this is a monopoly. We should be able to get several options to compete on price and service so the consumer will benefit.

Thanks for considering my comment.

Sherri R. Wilkerson

Quality Engineer UTC Climate, Controls & Security | Carrier 0: 317.240.5222 sherri.wilkerson@carrier.utc.com

Sent from my iPhone

From:	Christopher Smalley <christopherdsmalley@hotmail.com></christopherdsmalley@hotmail.com>
Sent:	Friday, June 01, 2018 10:06 AM
То:	Comments, Urc
Subject:	Internet
**** This is an EXTEF unexpected email. **	RNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or
The internet is overu availability by our go	sed by school systems in place of teaching by teachers. I do not support subsidizing internet vernment .
Thank you, Chris Smalley	

From: gitalpesh@yahoo.com

Sent: Thursday, May 31, 2018 11:44 AM

To: Comments, Urc

Subject: Internet and phone service provider

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hello,

we are small business owner in Clay City, Indiana, 47841.

our phone service and internet provider charges are very high because there is no competition and they don't offer any promotion offers. its very hard to survive and afford to pay all bills. we hope you can do something.

thank you.

Pat Pine.

From: Maynard Brandon < MGBrandon@nwcable.net>

Sent: Tuesday, May 29, 2018 11:47 PM

To: Comments, Urc

Subject: Re: IUSF-Broadband Study

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Ms. Heline,

I hope the study, which is probably being paid for in part by my taxes, is a bit more informed that this quote from the Background section:

"In order to gain access to the Internet, it is generally necessary for a customer to have some sort of broadband connection – such as wireline (DSL, cable, fiber, etc.), fixed or mobile wireless (e.g., LTE/4G), or Wi-Fi."

At the risk of playing Mr. Moto, I point out that there is no Wi-Fi access to the internet without a broadband connection on the other end of that "Wi-Fi."

Maynard Brandon Nashville, IN mbrandon@acm.org

From: jonesnuc@aol.com

Sent: Tuesday, May 29, 2018 6:35 PM

To: Comments, Urc

Subject: Rural Broadband Service

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

With the technology leading to a more mobile platform, we need to have this service available in the rural along with the smaller towns in our state.

I am in the energy profession and depend on a mobile platform. I have found that many areas in Indiana have no broadband coverage. We need to get in the times and provide these technologies, for these areas and all areas of the state.

Les Jones

From: Kim Saylor <ksl420@gmail.com>
Sent: Tuesday, May 29, 2018 11:25 AM

To:Comments, UrcSubject:Broadband

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

In an age when we use the information highway more than we do library's reducing or limiting access to the internet is a disservice to education and our freedoms. We need net neutrality and open sourcing on information. Please do not do yet another thing to regress progress. Sincerely, Kim Saylor

From: Amy Voorhies <busymother73@hotmail.com>

Sent: Tuesday, May 29, 2018 10:02 AM

To: Comments, Urc **Subject:** internet comments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To Whom It May Concern,

I received an email from our state rep. asking us to send our comments to you about the need for low cost internet services for daily task. I would like to add my comments.

I live in Popcorn, Indiana. I do have internet through Excede although it is very slow, limited, can not stream any movies and very few video feeds. It cost me \$60.68 a month.

Schooling is a huge part of our internet needs. I have a senior in high school that is unable to take advantage of all the extra learning offered through the internet. The internet is not only used for school, but I also have business needs for the internet. I am the secretary and treasure for our local church, community cemetery, and our rental properties. We have renters that are trying to get their masters through the internet. This has proved to be very trying due to the poor internet services in our area.

Nothing is free and I do not expect or want the government paying for our internet! Although I would like to receive an affordable internet that I am not getting ripped off by the provider. I have neighbors that are less than a half mile from my home that receive high speed internet at a third of my cost. When I contact this provider, their comment to me is that it has to stop somewhere.

If you feel that you can help this issue while not putting any more expenses on government, then by all means I will support that.

Thank you for your time, Amy Voorhies busymother73@hotmail.com

From: MaryAnn Dunfee <madunfee@yahoo.com>

Sent: Sunday, May 27, 2018 6:48 PM

To: Comments, Urc Subject: Internet connection

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hello,

I live in Owen County at 285 Cedar Lane which is the last road in Clay Township before the county line for Greene County. I have DSL internet connection although Fiberoptic cable had been laid 18 years ago along the next north-south road -- Switchboard Ln. The fiberoptic cable was never extended west the 1/2 mile to our home. I have a slow internet connection and extremely limited cell phone service through Verizon. Cell service is so poor that a landline phone is required for telephone service.

I am grateful for internet & telephone service but will be happy to have it be improved.

Yours truly, MaryAnn Dunfee

From: Anne Ryan Miller & Steve Miller <anstmiller@aol.com>

Sent: Sunday, May 27, 2018 12:59 AM

To: Comments, Urc

Subject: high speed / broadband for Brown County

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hi there,

We personally are fortunate that we have a fiber optic line running right through our property and therefore have had service for many years. However, I can't tell you what a hardship it is (in this day and age) for many people that I know. The cost for data through their cell phone lines is hugely expensive. It is unfair to have such high rates just because they are a captive audience.

I would applaude any efforts to bring better service to our county. I believe it would attract many more skilled people and companies to our area and overall be very good for our economy. thanks, anne

Anne & Steve Miller
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812-988-9766
anstmiller@aol.com
www.AnneRyanMillerGlassStudio.com

From: Venstra, Elizabeth <erytting@iu.edu>

Sent: Friday, May 25, 2018 5:35 PM

To: Comments, Urc

Subject: rural internet access

Signed By: erytting@iu.edu

Dear Indiana Utility Regulatory Commission,

I hear that you are seeking public comment on access to broadband networks, and I'm writing to share my thoughts as an individual who lives in a rural area (Solsberry, in eastern Greene County). Please note that my technical knowledge regarding the different types and qualities of internet access is not very extensive, but I hope you'll take my comments as indicative of the need for reliable, fast internet access in general.

I work in Bloomington, some 15 miles from my home. Although it isn't a terrible commute, I take the opportunity to work from home one to two days a week (as meetings and other commitments permit), for numerous reasons. Working from home allows me to reduce the money I spend on gas and my carbon footprint through reduced travel. It also allows me to be closer to my young child and his daytime caregiver, and thus to be more involved in his early years. And it makes our busy lives as a family with two fulltime earners easier by allowing me to shift more quickly between work and home responsibilities at the beginning and end of the day.

Reliable high-speed internet access is critical to my ability to work from home, and I'm lucky that I've mostly been able to have it. We are Smithville customers, and we were grandfathered into a relatively inexpensive plan some years ago. Most days, the internet is fast and reliable enough that I can work with no problems, including joining video calls with my work team on Zoom. (However, I do sometimes need to ask that others in the home not watch videos online while I'm dialing into meetings.) Based on some of my neighbors' comments, I don't think everyone in Solsberry can say the same, and when I called Smithville about some problems we were having a year or so ago (which fortunately seemed to iron themselves out), a representative I spoke with told me that they were restricting new customer sign-ups or upgrades in our area because of limited capacity. So I worry that, if my husband and I choose to build a new house on our farm down the road (which I would very much like to do), we may have trouble getting adequate internet access.

I believe that reliable and widely available high-speed internet access should be considered a form of basic infrastructure for the 21st century. Internet access is really a critical route to entrepreneurship these days, and I'd like to think that it could help keep beautiful rural areas like Greene County attractive as a place to live for a wide range of people.

Thank you for considering my comments!

Sincerely,

Elizabeth Venstra Solsberry, Indiana

From: Terry Fenimore <tlfenimore@gmail.com>

Sent: Friday, May 25, 2018 5:00 PM

To: Comments, Urc

Cc: 'tlf'

Subject: Frustration with Century Link DSL service.

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I am paying for a Century Link 25 meg DSL line, but its reliability is terrible. The connection (via a Century Link bonded router) is quite variable. Sometimes all the speed that we get, if any, is in the 3 to 6 meg range. Then after several days, it goes back up to the "paid-for" 24 - 25 meg range. And there is no communication as to why. ???

When Customer Service is called, they promise that a tech will be out on a certain date to fix things, but they never show. This service is terrible, but we live out in the country and they are the only show in town (except for satellite services). We need affordable and accessible options for high speed service in the rural 46181 area.

Regards,
Terry Fenimore, PE
7503 S. Poplar Point Dr.
Trafalgar, IN 46181
tlfenimore@gmail.com
317-878-5584

From:	James Hert <jlhert53@sbcglobal.net></jlhert53@sbcglobal.net>
Sent:	Friday, May 25, 2018 4:17 PM
То:	Comments, Urc
Subject:	Broadband service
**** This is an EXTERNAL email. E	xercise caution. DO NOT open attachments or click links from unknown senders or

unexpected email. **** _____

Rural Indiana is being left behind economically due to lack of high speed internet service. Please help any way you can. The country works best when everyone has opportunities. Previous generations recognized this with their support of universal access to utilities like telephones and electrical utilities as I'm sure you already know. Thanks in advance. James Hert 15354 W 275 N Dugger IN 47848 812-798-2119

From: jpwaynemore@yahoo.com
Sent: jpwaynemore@yahoo.com
Friday, May 25, 2018 2:13 PM

To: Comments, Urc

Subject: High speed Internet in southern Greene county

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I live in southern Greene County only a few miles from the West Gate tech park and have tried for years to get high speed internet. Despite the fact fiber runs right down the county road I live on I have been told it is for business customers only. Smithville has repeatedly told me there are not enough customers in my location to make the investment. Should the decision be made to fund additional fiber I ask that the the companies that own the line have to make a significant contribution to the effort. Too many times I have seen companies such as Smithville receive a subside only to turn around and profit for many years and significantly increase rates on customers. We are quickly being left behind due to the fact our children do not have fast reliable Internet available to them. I currently receive Internet via line of sight however the speed does not qualify as high speed nor is the connection reliable. Per my provider they are limited on speed due to the fact Smithville refuses to run fiber to their tower location again due to costs. Thanks for your time and consideration in this matter. V/r,

Jason

From: Sent: To: Subject:	SCOTT EMERY <honeybekde@comcast.net> Friday, May 25, 2018 2:06 PM Comments, Urc Comments on the Broadband Study</honeybekde@comcast.net>
**** This is an EXTERNAL eunknown senders or unexpe	email. Exercise caution. DO NOT open attachments or click links from ected email. ****
Hello,	
I'd like to make a few cor	mments for the Broadband Study. This is such a "first world" problem.
I've seen comments like this	S:
Many Hoosiers need high-quality inte purchases and enjoying media servio	ernet service for daily tasks like completing school work, operating a business, paying bills, making ces.
expect or demand it to come to the	eed for School work. But businesses will locate to where there is high speed internet, not nem. The others, for the most part, are conveniences, not needs. How much should the of taxes, for someone else's conveniences?
Scott Emery	
Bloomington	

From: Jean Lawson < jean_lawson2002@yahoo.com>

Sent: Friday, May 25, 2018 11:04 AM

To: Comments, Urc

Subject: Broadband connections

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Sir/Madam:

I am a rural resident in Bartholomew county Indiana who has trouble with all my communication services. Starting with the simple land line phone, which is provided by AT&T in my area, to my internet servie, television service, and any other type of communication that is possible. All my service suppliers are limited.

The services available (ATT) is working one minute and out the next. One never know when there will be service or not. This area is well populated and another service comes within one quarter of a mile to my house but mainly stays on the state road.

I have been charged continually for the service that does not work according to the advertisements. I am totally unhappy with the services available and as a senior citizen and a widow I need reliable services.

Perhaps there could be laws to keep companies from over extending services that they can not maintain or accomodate appropriately.

Thanks for you time and consideration in this matter.

Sincerely,

Jean H. Lawson

From: lynletsing «lynletsing@aol.com»

Sent: Friday, May 25, 2018 10:57 AM

To: Comments, Urc

Subject: Internet

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

I live in Brown County and the lack of high speed internet is a serious issue. Children in school have notebooks which work fine in the classroom but when they get home..nothing. We own a business that depends on high speed internet and we have to leave home to find it. Fix this!

Lyn Letsinger-Miller Brown County Art Gallery Foundation