

AMERICAN FORK CITY COUNCIL
JUNE 18, 2019
WORK SESSION AGENDA

WORK SESSION

The purpose of City Work Sessions is to prepare the City Council for upcoming agenda items on future City Council Meetings. The Work Session is not an action item meeting. No one attending the meeting should rely on any discussion or any perceived consensus as action or authorization. These come only from the City Council Meeting.

The American Fork City Council will meet in a work session on Tuesday, June 18, 2019, in the City Administration Office Conference Room, located at 51 East Main Street, commencing at 4:00 p.m. The agenda shall be as follows:

1. Presentation and discussion on Market Study and Feasibility Report for municipal Broadband Services.
2. Adjournment

Dated this 14 day of June, 2019.



Terilyn Lurker
City Recorder

- In accordance with the Americans with Disabilities Act, American Fork City will make reasonable accommodations to participate in the meeting. Requests for assistance can be made by contacting the City Recorder at 801-763-3000 at least 48 hours in advance of the meeting.
- The order of agenda items may change to accommodate the needs of the City Council, the staff, and the public.

CITY COUNCIL STUDY ITEM

City of American Fork
COUNCIL WORK SESSION
JUNE 18, 2019

Department Recorder

Department *Tenilya Lunken*

STUDY ITEM Presentation and discussion on Market Study and Feasibility Report for municipal Broadband Services.

BACKGROUND

American Fork City has received a market study and feasibility report regarding municipal broadband services. The reports have been prepared by Design Nine Inc. Andrew Cohill from Design Nine will be in attendance to discuss the results of the reports. Based on the information presented and feedback from the city council or staff during the work session, additional analysis and subsequent pro forma will be provided to the City.

SUPPORTING DOCUMENTS

AmFork_broadband_survey_results_v1 (PDF)

AFFiber_cost_study (PDF)

RESIDENTIAL AND BUSINESS BROADBAND SURVEY RESULTS

City of American Fork, Utah



Attachment: AmFork_broadband_survey_results_v1 (Market Study and Feasibility Report)

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Disclaimer

The telecommunications business is continually evolving. We have made our best effort to apply our experience and knowledge to the business and technical information contained herein. We believe the data we have presented at this point in time to be accurate and to be representative of the current state of the telecommunications industry.

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AMERICAN FORK RESIDENTIAL SURVEY RESULTS

In early spring of 2019, a broadband survey was conducted in American Fork. Paper surveys were mailed to residential addresses in the city, and the online (Web) version of the survey was publicized on social media. Residents were encouraged to complete the survey online or fill out and return the paper version by surface mail. Businesses were encouraged to complete a separate business-focused survey, and the results of that are included later in this report.

A total of 840 responses were collected in the residential survey. Not all responders answered every question. Note that because of rounding errors, not all percentages sum exactly to 100%.

Some of the key findings from the results are listed below.

89% of respondents are interested in having access to Gigabit fiber

55% of residents are "not satisfied" or "only somewhat satisfied" with current Internet service.

87% of respondents agree that the City should help facilitate better Internet access

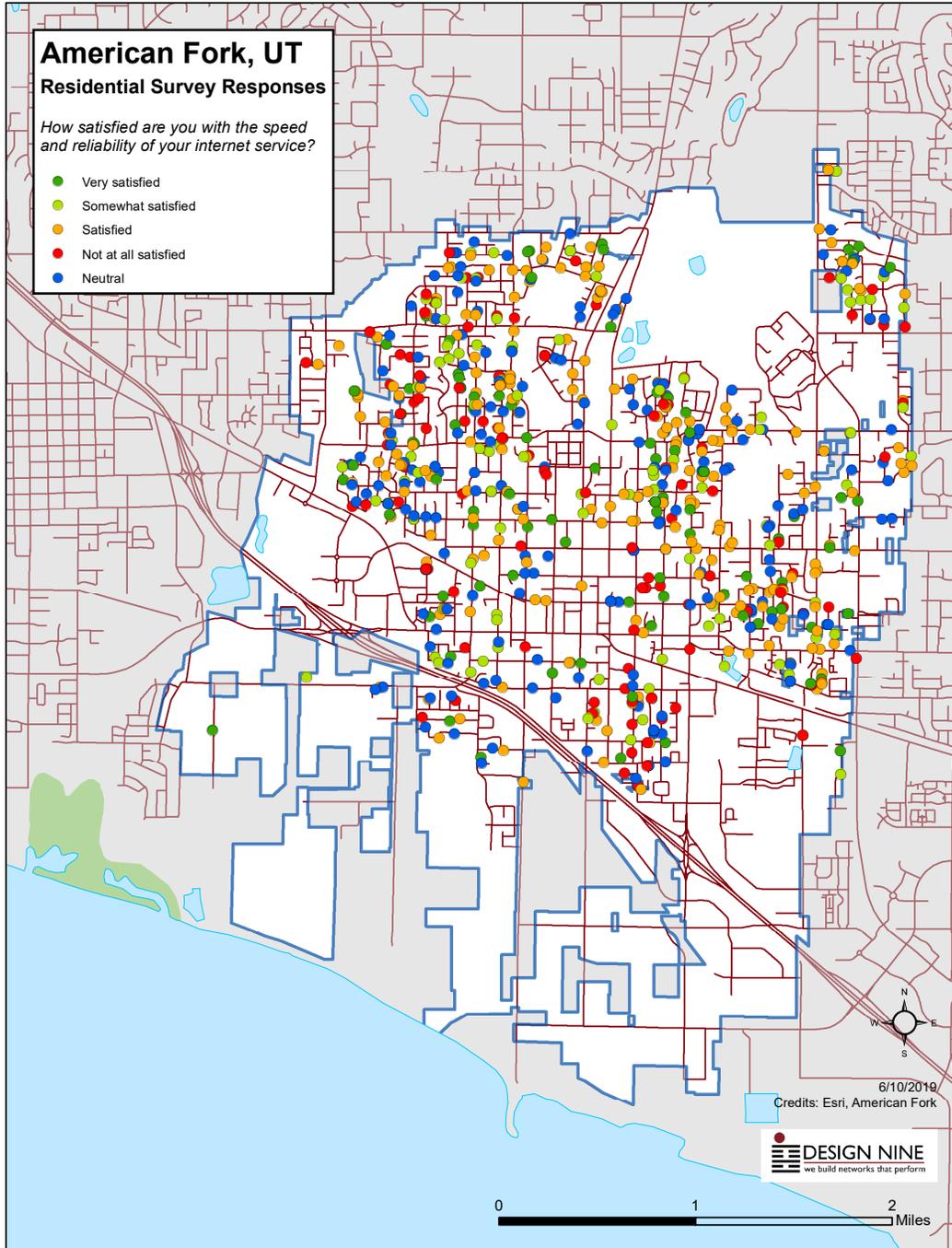
39% of residents have 9 or more Internet-connected devices in their home.

52% of respondents report they have trouble using common Internet services

47% indicate that availability of broadband Internet is affecting where they choose to live.

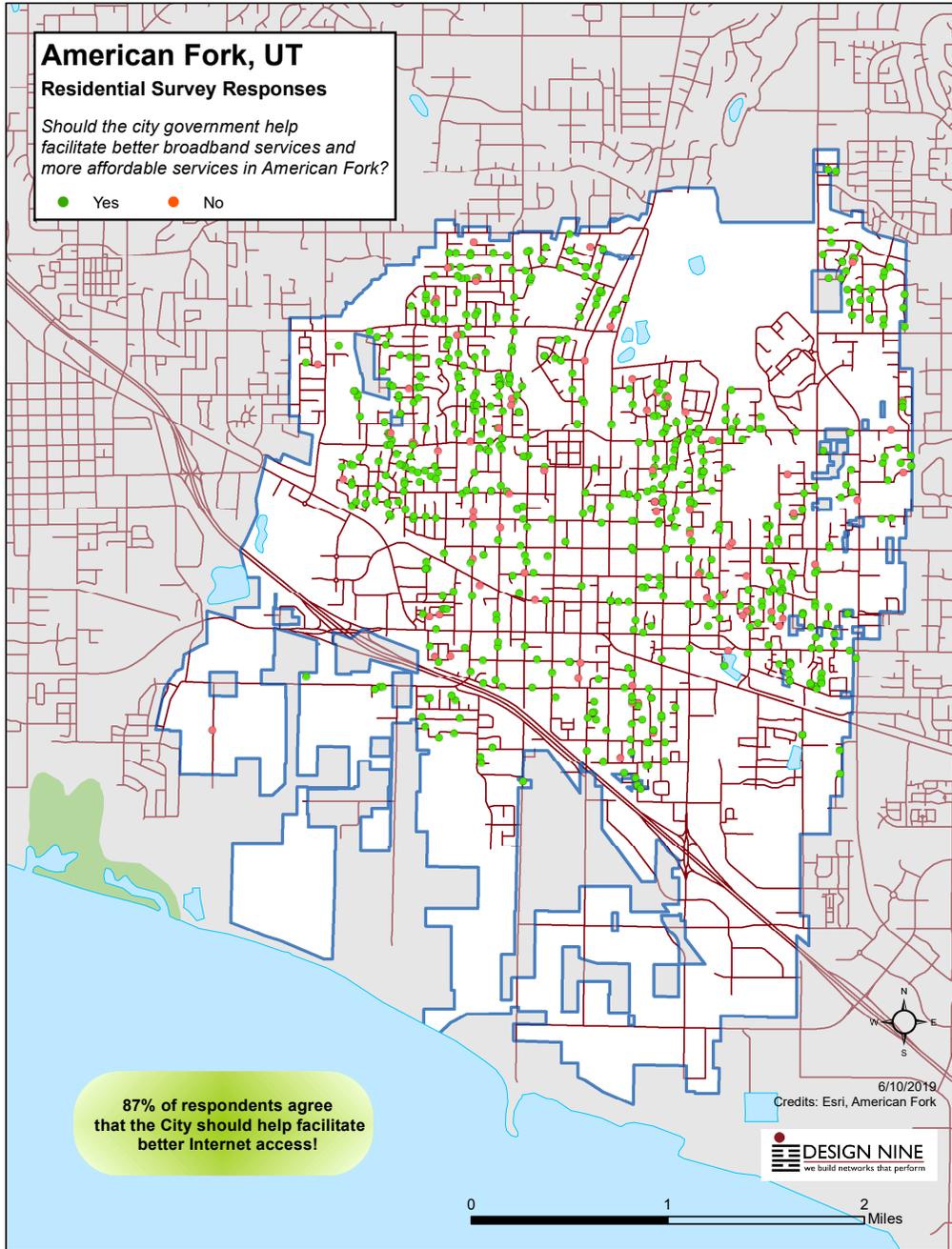
DISTRIBUTION OF SURVEY RESPONSES

The map below shows the geographic distribution of responses to the residential survey, coded according to their satisfaction with their existing Internet service. Residential Survey Summary Data



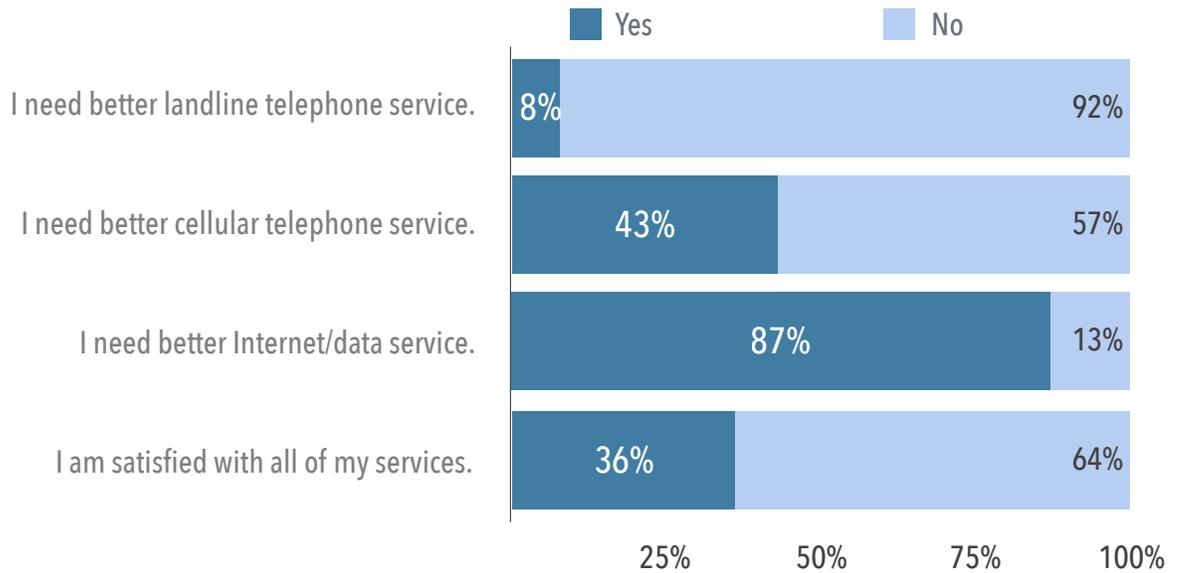
Attachment: AmFork_broadband_survey_results_v1 (Market Study and Feasibility Report)

The map below shows the geographic distribution of responses to the residential survey, coded according to whether they agree that the city government should help to facilitate better and more affordable broadband services in American Fork.



RESIDENTIAL SURVEY SUMMARY DATA

1. Select the items you agree with below



2a. Total number of adults in household

1	2	3	4	5	6	+7
64	536	114	68	20	4	4
8%	66%	14%	8%	2%	0%	0%

2b. Total number of K-12 Students in the house hold

1	2	3	4	5	6	+7
140	129	75	66	19	6	4
32%	29%	17%	15%	4%	1%	1%

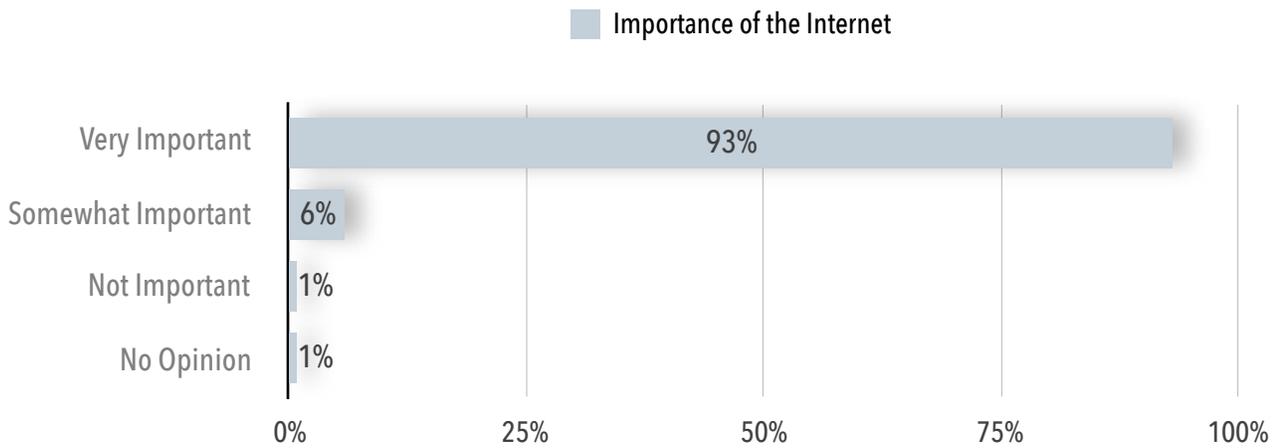
2c. Total number of college students in household (get rid of "blank" cat)

1	2	3	4	5	6	7+	Blank
176	58	6	4	0	0	0	401
27%	9%	1%	1%	0%	0%	0%	62%

3. How many total Internet users in household

1	2	3	4	5	6	+7	Blank
53	212	118	157	107	84	73	36
6%	25%	14%	19%	13%	10%	9%	4%

4. How important is Internet access to you or your household?



5. For your household, how much do you spend each month for local and long distance telephone , TV, and/or Internet? Do NOT include cell phones.

\$50 or less	\$50-75	\$75-100	\$100-150	\$150-200	More than \$200/month
186	158	146	167	105	59
23%	19%	18%	20%	13%	7%

6. How much do you pay now for at home Internet access each month?

No Internet	I only use free hotspots	\$10 to \$20	\$21 to \$40	\$41 to \$60	\$61 to 80	More than \$80/month	I don't know
6	0	8	226	249	157	142	34
1%	0%	1%	27%	30%	19%	17%	4%

7. What type of Internet do you have at home?

Dial-up	1	0%
Cable modem	335	42%
DSL line	113	14%
Fiber	133	17%
Satellite	12	2%
Cellular wireless	8	1%
Wireless WISP	54	7%
I don't know	107	13%
Other	37	5%

Other types of Internet (open ended question)

Comcast

I have AFConnect and love it

I have AFConnect and love it

A F connect

AF Connect

I am a satisfied AF Connect customer

Af connect

I AM NOT EXACT ON THE TYPE I DO HAVE A MODEM. I HAVE XFINITY/COMCAST

AF connect

AF Connect... whatever that is.

AF Connect

AF Connect is my only option - I understand it is part fiber, part not (not fiber to my house, but near for several houses...)

Ethernet

Af Connect

Network connection to a neighborhood switch in the backyard directly to my router.

vivint

AF Connect

Comcast

AF Connect

AF Connect

Rise broadband. Radio internet

AF Connect

I think it's DSL, but not sure. It's from AF Connect.

AF Connect

share with neighbors because individual price for our home is too high

I also usmy phones cell service

AF Connect

AF connect

AF connect

Century Link, bundled with phone service.

We'd love fiber or DSL options.

AF Connect Internet

Service from AF Connect

AF Internet (Ethernet)

AF Connect broadband

AF Connect

AF Connect, not sure what they have

AF connect

In not actually sure. We have AF Connect.

AF Connect

CAT-5 to the house, fiber to neighborhood hubs (AFConnect)

Direct line ethernet to a port at the back of our home.

I have what AF Connect provides.

Comcast

CenturyLink HSI

comcast without TV

AF Connect

AF Connex Fiber to the Box, Ethernet to the home.

AF Connect - Ethernet service direct.

We need fiberoptic cable lines ran to our side of the street. For whatever reason, no lines were ran when the home was built in 2014.

AF Connect

I think its fiber to the node. Then ethernet to the prem.

AF Connect

afconnect wired/copper Ethernet.

Broadband via AF Connect. 20 mbs up, 10 mbs down, Actual is 10 up and 10 down. Download is affected by my internal infrastructure: a 10 mbs switch is in the mix.

AF CONNECT

AFConnect.com A mixture of fiber and cable

AF Connect

Af net Ethernet 10Mbps

Comcast. (DSL?)

Wireless ISP?

AF Connect

Xfinity

comcast

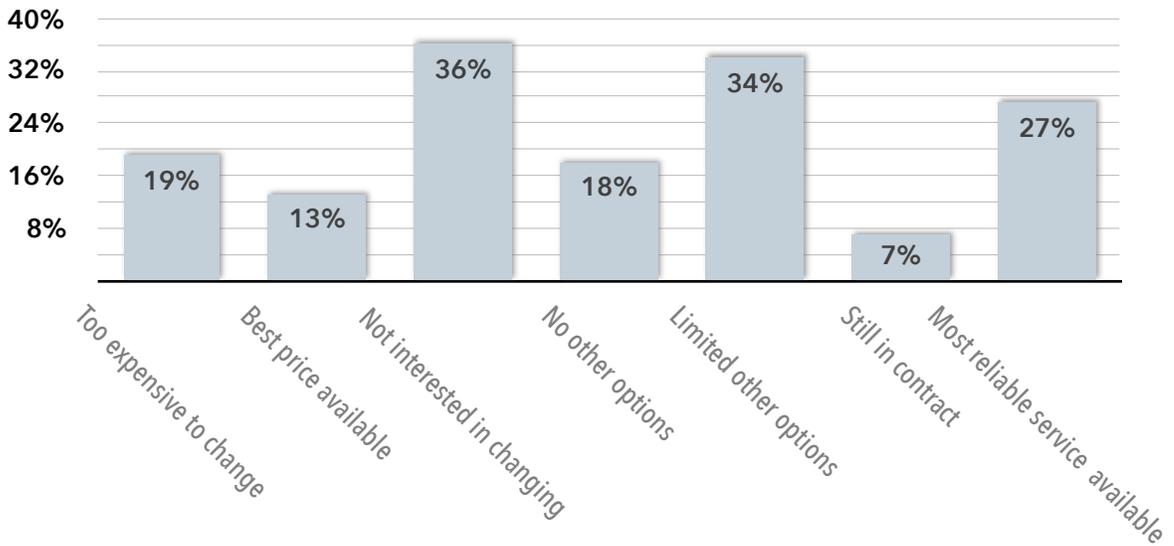
AF Connect

it's fiber to the back yard, then copper to my home... it's very slow 15 down and perhaps 6 to 8 up.

AF Connect

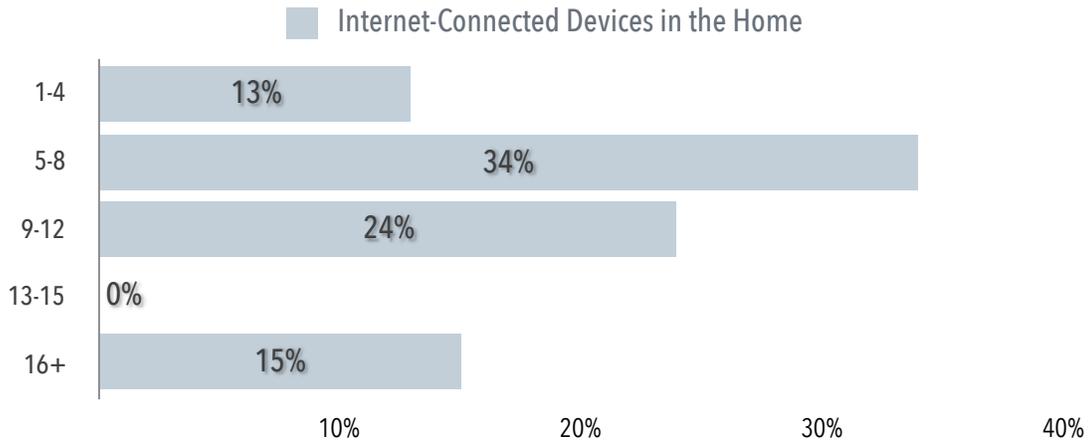
18% of respondents indicated they have no alternative to their current Internet provider

8. Based on the type of Internet connection you selected above, why do you still have it? (select all that apply)



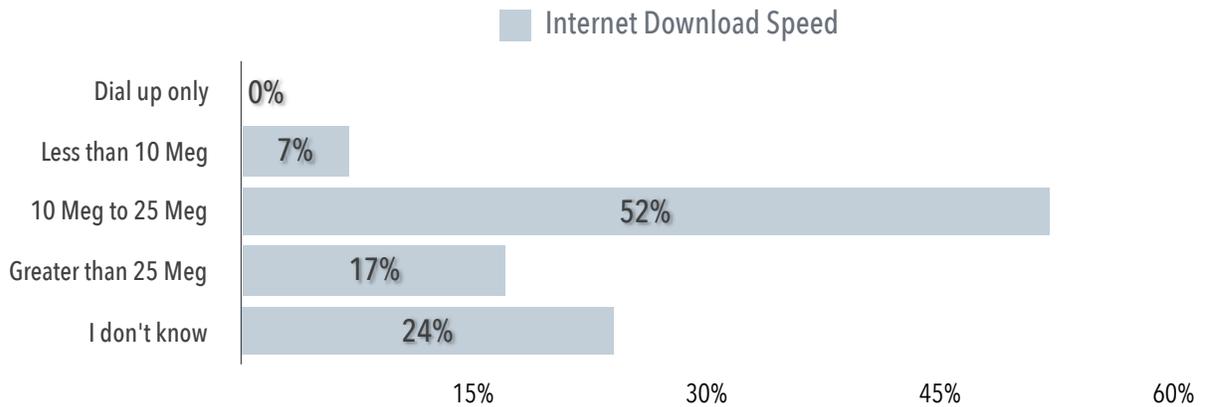
9. How many devices (for example computers, cellphones, smart TVs) connect to the Internet in your household?

39% of residents have 9 or more Internet-connected devices in their home



10. What is the speed of your Internet Connection?

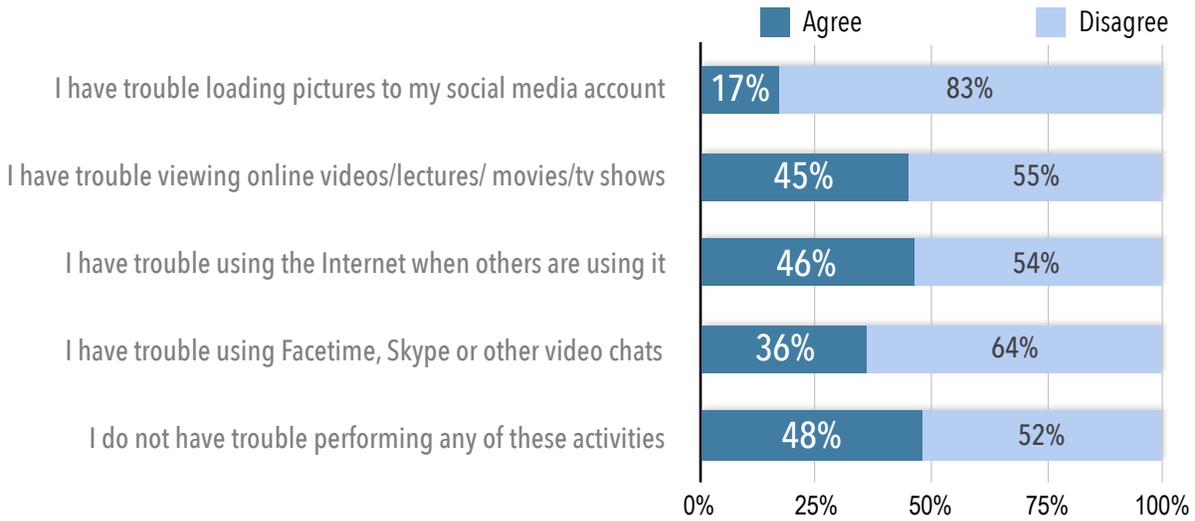
As few as 23% of residents have Internet service that meets the FCC definition of broadband (25 Meg down, 3 Meg up).



Attachment: AmFork_broadband_survey_results_v1 (Market Study and Feasibility Report)

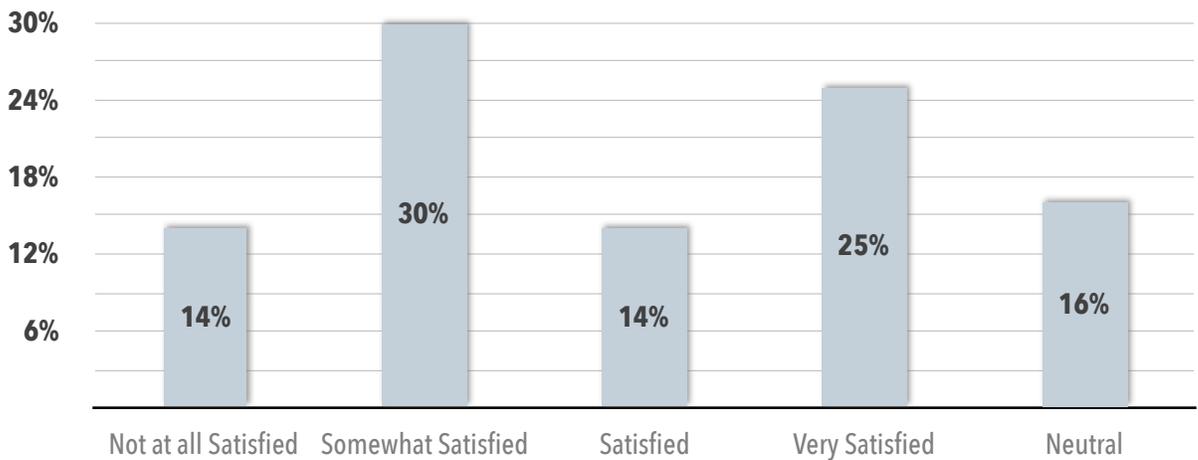
11. Select the items you agree with below

52% of respondents report they have trouble using common Internet services



12. How satisfied are you with the speed and reliability of your Internet Service?

Only 49% of residents are "satisfied" or "very satisfied" with their current Internet service.



13. Select all items you use the Internet for now

Email	820	85%
Access news and current events	739	76%
Homework	554	57%
Use a VPN (Virtual Private Network) for work or	372	38%
Download or listen to music or audio books	705	73%
VoIP (Vonage, Skype, FaceTime)	512	53%
Online Backup (files, photos, music)	589	61%
Telemedicine, tele-health	212	22%
Online gaming	419	43%
Social media and social networking	731	76%
Shopping	756	78%
Online banking	703	73%
Home security	317	33%
Smart speakers	447	46%
Other	62	6%

Other uses for the Internet

HVAC, sprinklers, garage door opener, solar production, etc.

Video streaming services.

Work

daytrading

Work from home

Entertainment (Youtube, Netflix, etc)

Youtube as main form of video entertainment in home.

Steaming TV

Streaming videos

Smart home, like Ecobee thermostat

Telecommuting.

In-home secure backup wireless network (1GB+), Currently don't have a home security system but am planning on adding it.

Sprinkler systems

Continuing education

Netflix, Prime Video, Hulu

Media server

Work

I work from home. A reliable network is very important to me.

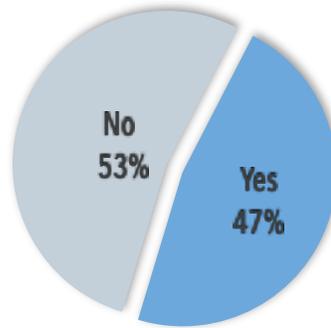
TV and Movie Streaming ie - Vudu, Netflix, etc

TV shows and movies
 Streaming Television
 Smart TVs
 Media streaming services
 Tivo, smart TV, smart phone
 Television
 Livestreaming, remote access to files from work,
 Streaming movies and it doesn't work well for that ! It keeps glitching and buffering.
 Family History work
 Work- real estate searches and downloading forms
 Streaming movies and TV shows
 Twitch streaming
 Smart TV - video streaming (Netflix/Hulu), research/online courses
 Video Streaming
 I stream TV with YouTube TV
 Streaming television and movies
 Church use.
 General info ... dictionary, thesaurus, encyclopedia, maps, etc.
 TV and video streaming. Netflix, Amazon Prime, YouTube
 Also use Internet for Work stuff when I telecommute. I telecommute at least 4 times in a month.
 Running a server for website
 Run several business servers for my own businesses out of home. While it is a residential address I have a public IP for fastest speeds possible which still isn't as good as it could be if other more reliable services were available where I am.
 printers, smart tv's, smart dvd players
 Home business
 TV. We use Hulu Live
 Video Streaming services
 Research, Family history
 Sprinkler System
 Working at home.
 personal research, church
 In-home climate control (Nest)
 garage door, thermostat
 Software development
 Streaming video
 Business / employment.
 Work occasionally
 live streaming apps
 smart TV, watching streaming programs
 Streaming tv/movies Garage, sprinkler system
 Do not use internet at the home
 church stuff on our website
 Business mtgs
 Genealogy
 We do part time work from home to supplement our living expenses

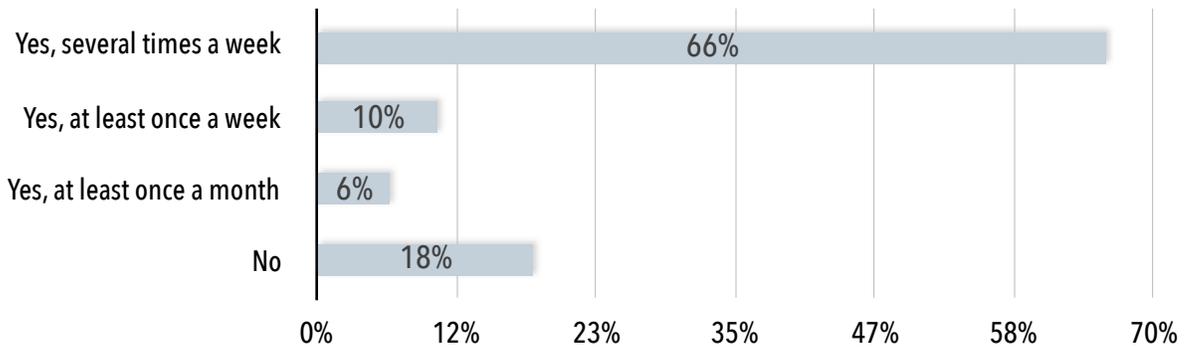
Solar panel power production reporting
smart sprinkler controller, smart thermostat
Software development/work
finding information

14. High speed, affordable Internet influences where I choose to live?

Availability of broadband Internet is affecting where people choose to live.



15. Does anyone in your household use / need the Internet to complete school assignments or job training course work?

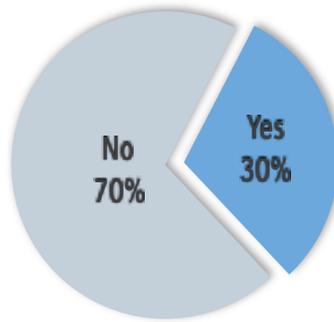


16. Who is your Internet Service provider?

Some responses included more than one provider.

Comcast	43%
CenturyLink	15%
Other	40%
Rise broadband	1%
No Response	1%

17. Do you have data caps on your current Internet service?

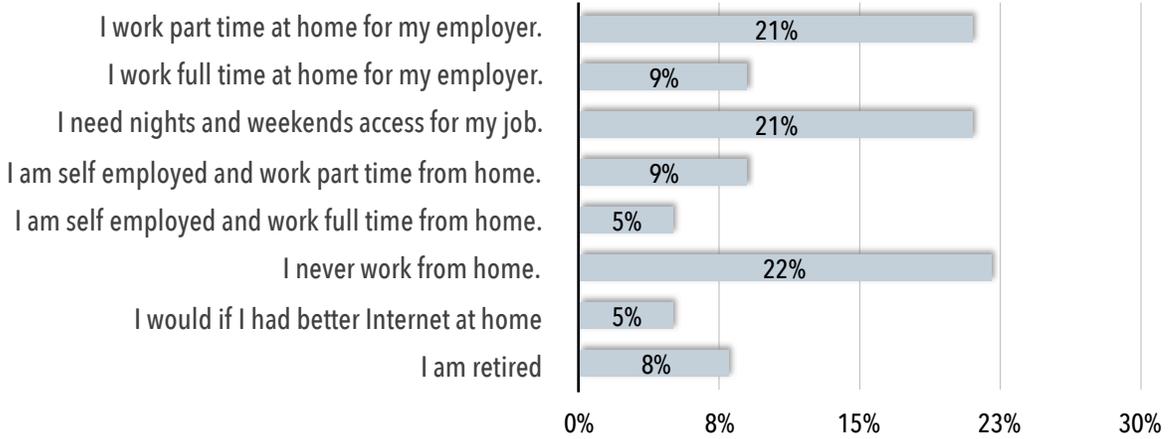


18. If you have data caps, have you exceeded those caps?

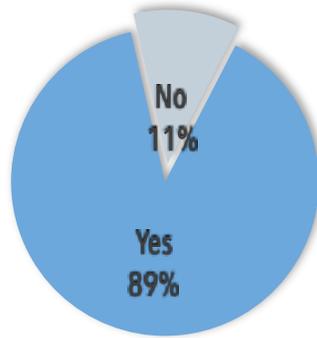
Yes	18%
No	56%
I don't know	26%
No response	0%

19. Do you work from home?

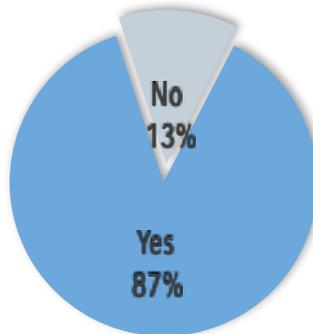
30% report working from home part or full time—the Internet has made residential neighborhoods into business districts. Home-based jobs and businesses reduce traffic congestion and reduce road maintenance.



20. I am interested in Gigabit fiber Internet Services.



21. Should the City government help facilitate better broadband services and more affordable services in American Fork?



22. Any Other Comments

Comcast needs some real competition to cause them to make decisions that they don't have to worry about today.

Let the free market do it. Every other city has invested millions and then sold it to a private company for a huge loss. Leave it alone but reduce the red tape to allow the free market to do it.

I think I am pretty satisfied with my internet service and access. I would like to say that question 2-C should have a "0" option. I do not have any college aged people in my home. You need to make sure that all answers will cover all situations.

Bring Utopia to American Fork! It's a travesty we don't already have it!

government involvement and funding should be minimal. I don't want to see an increase in taxes to support this. Funding should come from business investment and long term returns from monthly payments.

I moved into my current home thinking I could get AF Connect internet service. But when they came out to my home they said it couldn't be done. I spent the next few days looking for any other affordable and fast providers, but no one else but Centurylink could really give us a reliable connection and a decent price.

My internet is AF Connect. For the price it is adequate but it goes down a lot and customer service could be a lot better.

Pleaaaaase facilitate better internet options. AF Connect is absolutely terrible. My wife works full time from home and she is often late for shifts due to internet outages or slow speeds. My brothers and I game online together and the running joke is that if we want to play a new game, we have to wait a week for my internet to finish downloading it. There are no other faster options where we live. I have hounded both Comcast and Vivint to try to get them to expand in our area, but to no avail. Furthermore, AF Connect is not professional. When they "buried" our line and installed internet to our new home, they just draped the cable across the backyard and left. I had high hopes when we moved here because supposedly AF Connect was a fiber connection. I did not know fiber could be so slow.

Let the market deal with this, not the local government.

Next to roads, upgrading to citywide fiber is my number one priority for city money.

The current city internet is terribly slow and unreliable but affordable. I had to switch to Comcast because every time it rains the city internet goes out. With my work I need reliable internet and fast internet. It would be great to have another option so I don't have to deal with Comcast and their terrible service.

We hate Comcast and are paying an unreasonable amount for our internet service, but it's the only option available with the speed and reliability we need. Please, please bring Fiber to AF!!!

The ONLY reason I use Comcast is because it has the fastest options available. If there was something faster and more reliable, or a fiber option, I wouldn't hesitate to switch in a heartbeat. It most definitely would need to be affordable though. This is something that would attract LOTS of

business to AF as well, having a good fiber infrastructure. Where everything is done online, it'd be stupid not to be laying fiber EVERY time someone is tearing up the road.

Google Fiber please!!!!

I would pay more to get Gigabit internet.

As explained above, for the most part, we are doing fine with our current service. We don't have an extremely large budget for such, and would welcome any competition which may help with pricing. The questions above which are yes/no answers don't give much wiggle room for in between. For example, we don't NEED better cellular or internet service, it seems to meet our current needs, but would like an improvement if available.

Leave it alone

Get it everywhere. So many houses have fiber going to their door and one house over is screwed. Not to mention one street over where I am.

I think speeds are ok for now. In the near future, I think that need will change dramatically.

It would be nice to have a strong broadband service but I don't think it is the city's responsibility to provide it. Perhaps they could be involved in facilitating involvement from reliable companies. Some areas do not have access to Comcast, Century Link, etc. Others are forced to choose just one option like Direct TV. We have been fairly satisfied with AFConnect service. It is not perfect but has been the most reliable and accessible of all broadband providers in our neighborhood.

The only internet option we have is AF Connect and we've had tons of issues with it. It cuts out regularly and lags constantly. I work from home and it's extremely inconvenient and impacts my job performance to only have this one, limited, overpriced option. It's insane that we only have one company to pick from as they have no incentive to do better. With internet connectivity being so crucial to society today, please, please take the initiative to advance our city in this area.

I'd love an affordable fiber line and I'd rather not support the ISP monopoly companies.

I have AF Connect. They have great service, the speed is adequate for our family's needs, it functions well for our VOIP, and they haven't raised their price from \$39.95 in over a decade. I'm quite satisfied with what we have. Thanks!

I currently have 250 Mbps download speeds through Comcast. Though I would like faster download speeds, 250 is enough for me to get by. My biggest concern is the upload speed and the data cap. Streaming Video is the biggest issue currently as it eats up all of my data. I have to limit how much I stream. Also I use a custom backup server to backup all of my files but it's unfortunately extremely slow do to the 15-25 Mbps upload speeds with Comcast. I would absolutely use google fiber 1 Gbps symmetrical service. I work in the tech industry and would be more than happy to assist in any way possible to get a service like google fiber to American Fork. My email is apwalden87@gmail.com.

We would like to have cable but the cable company refuses to run the cable down our street. The cable ends 3 houses down from us.

Interested in better options, but I want the free market to provide those. Not interested in paying more in city taxes to facilitate better broadband services. The water/garbage/sewer fees are already high enough (when I moved here, the water/garbage/sewer cost was literally two times the amount that I payed in Layton, Utah).

We currently have AF Connect and speed and reliability is terrible. We are looking at switching to another provider.

If we want high speed internet, Comcast is our only choice. This makes it difficult to negotiate on price. Plus, my family only needs internet; we do not want a phone / cable / internet bundle and it would be great if the city offered a broadband option for this. thanks!

AFCConnect needs major overhaul and upgrades. It's way over-sold. I was with them several years ago and never could have stable connectivity. I still see so many complaints on social media about it going down or being unstable. I'm happy to support locally owned companies and services. Since you all sold AFCConnect, it's gone downhill.

I am open to better broadband services, including municipal fiber, if the city is transparent about costs, financing, construction impact, etc. My current internet service is good, but having more competition in American Fork for wired connections (not wireless, which is not as cost effective and seems less reliable than cable) would be a welcome improvement.

Comcast is pricey, but the service is excellent.

I would absolutely welcome more affordable and reliable internet. I have had multiple points where my ability to interact with colleagues at work as been impacted by poor quality of service for a week or two at a time. Though I wouldn't complain about getting faster speeds (I had 100MB in rural Idaho for less cost than 50MB in American Fork), the reliability, especially during high-use periods is a big issue for me.

Comcast has 0 competition for high speed. I work from home, and regularly need high download speeds for specific projects. I lived in Provo when Google Fiber came in. My internet bill went from \$100 for 150 Mbps, to \$30 for 250Mbps. For no other reason than Comcast finally had competition.

Overall I am very disappointed that AF did not join the Utopia network to provide infrastructure to the residences years ago. Lots of capital dollars were invested and it was a chance to complete the install regardless of the sunk capital costs before. It would be great to see a cost-analysis between what was proposed by Utopia a few years ago and this new project with Design Nine. I like the Utopia network gave you several more options for Fiber Gigabit service providers thus keeping prices considerably lower than slower cable networks with really Comcast as your monopoly option. Whatever the solution I would expect the network to be "open" and multiple ISPs competing to keep pricing low and improving over time. The average Gigabit speed (down/up) on Utopia is \$50/mo this is reasonable. We are a household that uses internet-only service (\$54/mo @ 150Mb down 10 Mb up Comcast service). We do not have cable, satellite, or phone (though may consider this for a security system backup in future) and feel that Gigabit service capability is a minimum requirement not only in existing neighborhoods but should be a minimum code requirement for all new developments and homes being built within the city going forward. Excited though at the possibility that a network would be implemented within the city soon - excited to hear more details.

Under Utopia cities were hamstrung at a huge cost to taxpayers by the requirement that they outsource the Internet Service Provider function to commercial interests. So AFC must not promise more than they can deliver. Provo is the example we wish AFC could more closely emulate.

Where we live in AF has the worst internet options in the Valley. It's either Comcast \$\$\$ trying to always upsell you and raise the prices or various other lower speed wireless options which get bogged down under high load times.

I WOULD LOVE INTERNET THAT IS CHEAPER THAN WHAT I AM PAYING NOW! AS LONG AS IT IS UNLIMITED.

Wish the city would offer reduced cost internet for low income adults. We have a program through Century Link for low income people, but it is only 1.5 mb costing \$18.94 a month. It works okay for the cost, and I am grateful to have even that. Being on an extremely limited budget and with disabled adult in the house it would be nice to have other low income options with better speed. If/when that goes away, we may no longer be able to afford any internet service at all.

American Fork facilitating broad band would depend on the cost to its citizens.

Let the market work. Stay out of it, and make sure you don't get in the way.

If you can fix AF Connect's speed, that's fine. But recently we've had a lot of slow speeds and outages.

I am disgusted with AF City Connect. I live in an established area and neighbors around me have the service. I tried to get it. Apparently, a line was severed and AF City Connect will not repair or replace it in order to connect me to the service. I tried for three years and eventually gave up. That is unacceptable. If this survey is to gauge voter support for an upgrade to internet service, I WOULD NOT support taxpayer funding of such an upgrade unless there was a guarantee of FAR BETTER service than currently exists and more priority given to repairing the deplorable roads in American Fork.

A lot of my issues are when people are home like on spring break or anything like that my internet slows down a lot. So we need to look at something faster the only other option we have right now is Comcast and honestly its pretty pricey but if I didn't have these issues working from home we would have to move to that. If we had fiber option and didn't have that slowing down issue with higher usage of people on it in the area then i would move to fiber.

Would be really cool to have fiber in this area. I don't like having to use Comcast because it's the fastest option available. As a young family, we don't use cable we only use the internet and stream any shows that we're interested in watching. \$75 a month for internet through Comcast is more expensive and slower than what I was paying in Provo for Google Fiber. They have a monopoly on high speed in the area and its irritating to have to work with them every year to negotiate a deal rather than just getting a flat rate month to month price. I would gladly swap to an AF city internet plan if they offered a faster speed at a decent price.

I pay a lot of money to have unrestricted access to the internet at high speeds. I recognize that it is a choice that we make as a household, but we wish there were affordable options for reliable fast internet, because we need it for work and school for our family.

1. Upload speeds faster than 5 Mb/s are not affordable in my area. Upload speeds are important to internet customers as well as download speeds. 2. I previously paid \$50 a month for 100 Mb/s down and 100 Mb/s up. At my current price range of \$60 a month, I receive 50 Mb/s down and 5 Mb/s up. This is the only affordable option with speeds of 50 Mb/s or higher for downloads.

At my street address, CenturyLink only offers 1.5Mbit. I had been with CenturyLink for 14 years when I moved to my new house, so I was pretty sad about that. I tried Comcast/Xfinity, and the speeds were nice, service reliable, but they sent me nasty letters each month telling me that I was an excessive user. After one year at \$40 a month, they doubled my cost to \$80 a month. I switched to AF Connect, and have been happy. I on average have a 1-2 hour outage every month, but when that happens I just use my mobile device hotspot for the duration of the outage. The price is \$40/month + \$5 for a static IP address. The \$40 a month I save vs. Comcast more than makes up for the occasional use of my mobile service. Rise is unreliable for everyone in my neighborhood who have

tried it. So the only real options are Comcast at \$80 a month or AF Connect at \$40 a month. I am happy with AF Connect, but would love other options.

Currently Comcast is the only ISP offering a decent speed for service. I was with AFConnect but dropped them due to the lack of speed and no interest of allowing greater speeds the 30mb. Now I'm spending nearly \$100 month for a cable modem and terrible customer service. My research has shown that other ISP's are available but not in our city. I would love to have more options for a ISP, might create better service from the existing providers if they had a little competition.

AF Connect has been unreliable - had to upgrade my service to not have outages (wasn't a speed problem, but upgrading put me on different static IP which has been better), but still have times when it goes out completely or is slow. Not pleased with reliability or service provided there.

We use AFConnect and the service can be spotty. We also have a signal booster for our cell phones from Tmobile.

I wish we had more (faster, reliable) options in our neighborhood. We are limited where we live.

My provider is AF Connect. The biggest complaint is that it goes down way to often. Our phone is ip so when we lose the internet we have no dial tone. The cost is the only reason I'm staying with them. However, I continue to look.

It is inconceivable to me that the only option I have is Comcast. I hate not having choices and being subject to their out of control pricing and restrictions. They can do it because they have a monopoly. If there were any other option, I would bail on them. I thought monopolies were illegal...guess this one slipped through the cracks. I would welcome any other option! Get Comcast out or at least make them compete for my money.

I dislike having to go with Comcast as my only option for fast internet. The other available options in American Fork aren't even comparable due to much slower speeds for similar pricing to Comcast and I would happily go with another service if it was capable of meeting the speeds I want for a reasonable price. Another issue would be contracts that you have to go with. Flexible contracts or month to month would be nice.

I have been pleased with AF Connect so far. I do see a drop in speed when everyone is using the internet all at once which I know happens. I am open to any improvements on the fiber optic side or gigabyte side as well.

AFConnect has provided reliable and fast enough speeds for our needs.

Internet should be a city utility.

The city should never be involved in providing broadband services beyond zoning and facilitating installation. Cost is a major issue. Price it too high (Such as Comcast) and it will not be successful.

It would be nice to see American Fork City get a more reliable internet service that is faster and can withstand more than one to two devices on at a time. If there is more than two people using the internet at once, it is very slow. I also know that my internet is going to quit working every time it rains and it gets very discouraging.

Why does an American Fork internet survey ask about Rise Broadband but doesn't ask about AF Connect?

We are very limited as to what internet providers service this area. Super frustrating. I have asked AF connect several times to come to this area. They told me NO!

We currently use AF Connect. Service has been good but when compared to what is now available, it is slow and somewhat limiting. Would LOVE access to true high-speed internet and would LOVE to have this be something supported by the city. Thank you!

I believe the city should only facilitate broadband services if the costs of doing so are minimal. Otherwise, there are private companies that could provide this service.

Google fiber would be nice

Once my contract ends the price will go up. Wish we had more options and better prices.

Provo City has Google Fiber and Orem City has Utopia. I think AF City should look in to something similar.

Afcnet is a deprecated unreliable system. Comcast prices and data caps are less than desirable. Please replace afcnet or facilitate a comcast competitor to install infrastructure like verizon 5g, utopia, or some other provider.

I'm not a fan of the government having more access to things I do, I don't need more tracking of what I do by any government agency. Please do not get into the business of Internet, if anything give incentives to the already available ISPs to pull fibre all through the city so we can all get it.

I don't understand why AF city did not update their telephone and data lines when they ripped up the streets for irrigation years ago. Century link can only offer 1.5 Mbps and Comcast is horribly unreliable not to mention their customer service. I have had them have to test my line several times because I cannot maintain proper speeds. Cities around AF offer fibre, I think they need to also.

I was very disappointed with the lack of options for Internet when I moved to AF. I really just had to settle for Comcast because there wasn't anything else good that was available.

We would love to switch to more affordable internet.

We need more options in American Fork, to allow for competition and better pricing. I currently only have one option for the speeds that I need.

Look at Spanish Fork as a model. They had better prices than any other provider, better speed, quick service response. We lived there 7 years, and were surprised to find our only option was CenturyLink when we moved to American Fork. NO OTHER SERVICE is available at our home. That's a real problem for competition. And as a result, CenturyLink had slowly and regularly raised my internet price since I've lived in American Fork.

Depends on the price of the service and what "fee" fees you try and add on to generate more revenue. You're competing with "bundles" that tend to lock customers into a provider for phone, TV and internet. Dish has no internet offering so that an option. Gigabit speeds aren't something I require and my current connection is reliable and fast enough for what I do.

I moved from Murray where I had fiber optic. I got spoiled. My internet now is very difficult to deal with at times.

Reliability is important. AF connect seems to go down on Friday's, and weekends and miraculously works on Monday.

I don't now how to answer the last question. The services must be paid for and our community benefits as a whole when these services are made affordable. With that said, the city would have to use tax dollars and I don't know if I agree that tax dollars should be used for fiber Internet service. I do know the old phone company never had the city/state/federal government subsidize

for the building of infrastructure; they financed the cable themselves. They were a utility which gave them advantages along with disadvantages.

Please make your survey mobile friendly. Hard to have confidence in your technology company if you totally miss in such a simple thing.

We currently have AF Connect as our internet provider. We pay a lot of money and don't get anywhere near the internet speed we are paying for. We pay for 60 MB's but only get around 17Mbs. It's down quite often as well.

Please provide a fast reliable service at a comparable rate!!

City shouldn't own the service

No Caps!

I have been wanting fiber to the home for years. I almost didn't buy our house because of it. Let's stop feeding the devil, Comcast, and give us a good affordable fiber option.

I am very satisfied with Comcast. The internet has been more reliable in the past year than any service I have used (Google fiber, CenturyLink, veracity, etc.). With how many devices we have (and we stream our TV services), we need at least 50mpbs. Comcast is the only option at that speed or faster at my house. For now, with a good temporary deal, it is very affordable. In a year when our promo rate expires it will be very high. In other cities I have been able to get a locked in lifetime rate for a reasonable price, or switch between different providers. It would be nice to have more options.

Depending on the cost, I am in favor of the city investigating the Gigabit Fiber Internet Service. But I don't want it to drive AFConnect out of business if I can't afford to go Fiber.

We don't have access to AF Connect in our area. Also Century Link, which we had until a year ago, doesn't have speeds available above 20. Century Link was charging us as much for 20 as Comcast is charging for 100. We need the high speed, but Comcast is the only option.

We moved in a year ago and where we came from we got fiber internet 100 megabits for 40 bucks. We now pay 40 bucks for barley 10 gigabits now cause that was all that was in our area. We were highly disappointed to learn this and have been hoping for better options.

AF connect having too many outages

I would gladly pay for Gigabit fiber if it was available.

I really wish the City would look into a city service such as Utopia or partner with another fiber optic provider such as CentraCom. The old AF Connect system is so old and outdated and doesn't hold up to the needs of residents, especially if several households in the same neighborhood are online at the same time. If I had any other options at my house I would switch. Even if it meant paying more.

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Google Fiber!

We live on one of the busiest streets in the city but are so limited in so many services NOT available in this area! So many On social media complain about Internet service within American fork city let's do something about it let's get something better for everyone Thanks

I live barely too far from AF CONNECT lines to get service. I hate that since I can only get internet coverage from COMCAST in my home, so I am at their mercy because there is no competition. They price jump at will and have terrible customer service too. I can't even get broadband. I would love fast reliable internet, especially fiber optics.

Do not try fixing what's not broken. AF connect is the best thing we have in this city. Most of us know the gentleman that handles our service by first name and our service is flawless. My friends, family and co-workers around the state are always jealous about my internet. In 14 years our internet has been down twice for less than 10 minutes. Send that broadband company packing, and protect our AF connect.

Please make this better! We've tried 4 different companies and the only one that "works" is still the pits :(

I wish we had more options available where we live. My family that lives in Provo gets better internet for better prices. I am stuck with 3 options. 2 crappy and 1 super expensive option.

Please bring a better service to AF!!

PLEASE do this. I cannot wait to get rid of Comcast.

What is the projected date when all of this will be made available to the public?

Only if it can be done in a fiscally responsible way without incurring additional taxes on citizens. Perhaps businesses could help with these monies, like not having additional tax breaks.

Hope City considering getting better internet service

I would be very likely to get gigabit fiber if it were available. Your question #12 combined speed and reliability into one satisfaction measure. I am actually satisfied with the speed of my wireless (50 mbps) *in theory* --but in practice, it is often slower than advertised, and it also goes down fairly often. So fiber would give me better reliability plus a higher speed (which would generally be desirable even though the status quo is often approximately adequate)

Please help, I'm a digital millennial in an analog town. My neighborhood is where cell service goes to die, so that offloads even more of what I do to home internet.

We tried to get faster internet with centurylink. The tech came and told us that the problem is the cables that run to the house . They said that we could not get faster service because of the distance from their server and the old cables.

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I believe the city should encourage any new business but that there should still be a free market.

AF Connect service generally works well, but there are periods of time when connections are dropped, and service is poor. If those poor service periods were fixed, we would be very happy.

We signed up for AF Connect 12 years ago and it was on par with everyone else speed wise. Unfortunately, they have never upped the speed as everyone around them did even though the city was wired with fiber. Now AF Connect is the dinosaur while everyone else offers 100-150 mbps internet. While the price is cheaper than the rest which is why we haven't switched services, it is riding the fine line of unacceptable in today's data driven world and we need a better option.

I live in a brand-new build out in American Fork, and I have 1 Internet provider that can meet performance of 100+MB/s. The fact that our development was brand new, and I have one provider, and there's a monopoly on reliable services baffles me. I could have easily moved to Saratoga Springs or Eagle Mountain, and received 1GB fiber internet for 80 dollars a month, instead i pay 140 (promotional) for speeds that are way slower than that, and have a cap involved.

AF Connect frequently bogs down in the evenings to the point it no longer functions.

We have AF Connect. When it works, it's great, but reliability is really hit-and-miss. We have to reset our router often, and we've never had a provider before that goes down as much as AF Connect. It slows down or doesn't work at all regularly, and we have to reset the router, which usually fixes it. We thought it was the router, so bought a second brand-new one that was better and recommended by AF Connect, but still have the same problems. There isn't 24/7 customer service, but thankfully the rare complete outages that a router reboot doesn't fix don't last for more than a day usually.

AF Connect is what we had for 5 years, and its reliability was pretty bad as well as the speed was hampered. When I could get comcast for \$30 a month(\$10 cheaper) I saw an improvement on both upload and download speeds at a reduction of price, I currently get 60-80MBPS down and 13 MBPS up, compare that to AF Connect where I only got 40MBPS down and 15MBPS up and I had constant service issues requiring modem reboots as well as service outage. With Comcast a lot of the headaches have disappeared, my rate with them is now \$40 a month. I would prefer fiber the service needs to be a lot more reliable, and the speeds and latency should be much better than cable. The Fiber I had when I was in Orem(2009-2011) was significantly better than what I have experienced in American Fork.

AF Connect isn't even available where I live. I subsidize AF Connect since I live in AF and pay taxes, but I can't take advantage of it. I don't think Governments should be in the Internet business. And I'm not sure I would sign up for AF connect if available, as other options are cheaper and provide faster speeds.

Gigabit service would be fantastic. I fully support it.

Please don't add us to any mailing lists or spam. No advertising or soliciting.

Internet options in the north east corner of American fork are horrible!!!! Please help

Coming from Provo with Google Fiber, it was very hard to switch to the very noticeably inferior cable internet I have now, which costs more money for a fraction of the speed.

N/A

This would be great as a private venture but the local government should not be funding something like this.

I would only look at changing if the price is right. Have stayed with af connect for this reason. They have always treated us well when there are problems

I'm upset that the only option for broadband internet to my address is from AF Connect.

My upload speed is less than 1 mbps. Even with pairbonding we cannot get more than 12 mbps upload. These restrictions prevent me from being able to work from home, which is pushing me to move. I would rather stay in a American Fork if I could, which would require faster internet.

Our household is very much in favor of this broadband project moving forward.

Comcast essentially has a monopoly where I live. The only other choice is Century Link DSL which is less than 5Mbps. Currently, we pay \$150 per month to Comcast for 1Gbps down and 40 Mbps up (only Internet with no TV or phone services) which includes a \$50 per month fee to avoid the 1TB cap which we hit nearly every month simply streaming Netflix/Hulu and my wife teaches English to Chinese children from home 10 to 20 hours a week. I am in a role at work that requires that I am available nights and weekends and need to rely on a reliable internet connection. I am very interested in Gigabit fiber that is symmetrical or at least offers uploads speeds considerably faster than Comcast's 40Mbps service. We have considered moving to another city nearby that offers more affordable / better gigabit internet service.

Please bring fiber internet to American Fork!! Comcast has the market cornered here as there are no other reliable, high speed options but the price is insane and they can jack it up as high as they want since they don't have any REAL competition. We contacted CenturyLink about service at our house. We don't live in the boonies of AF but the BEST speed they could offer was 3 mbps. What?! My family needs reliable, fast internet for work and schoolwork from home and that just leaves us with Comcast.

It's funny that AF Connect wasn't even included in the internet provider options on this survey.

The Internet provider we have now is AF Connect and they have a hard time keeping their system up and running. We are forever losing the Internet! We need reliable service which we have been unable to receive in the 20 years we have lived at this address. We had the same problem with Utah Broadband.

We use AFConnect and it's reasonable although not super reliable

Under 2-B and 2-C you didn't have the option to put 0 so I just put 1

We had Google Fiber in Provo and got tremendous download and upload speeds with low latency. I would love having faster upload speeds because the plan I have with Comcast offers only 10Mbps upload. I often need to upload large media files to the internet so higher upload speeds would significantly impact me for the better. American Fork should be a front runner in reliable, affordable gigabit internet to residents and businesses, especially considering the tech boom (of which I'm a part) in the area. Thank you for the survey!

The city should focus on fixing our roads. It would be OK for them to support this if it doesn't cost anything.

I love my afconnect

My internet is adequate, but I only have one reasonable option and the max speed is no longer competitive. I would love to have options and gigabit service would be a dream. I fully support the city getting behind the effort. The internet is an increasingly mandatory tool for most people. I have considered moving to Provo for Google Fiber. I think people would factor that into a move to AF if they had something similar.

We just moved here from Longmont, Colorado, where gigabit internet was set up by the city for all residents. That was awesome! It was much better priced and had much better speeds than other providers. I look forward to the same here!

It would be nice to get Gigabit fiber internet, and I would sign up for it immediately. However, I am not sure that is the city government's job to ensure my internet access.

City says no city internet service to our location, but when we were blue staked, they found internet on our property. There isn't a node near us.

Thank you!

Current provider, AFConnect, WAS relatively excellent 10 years ago but has not kept up with the speeds/reliability requirements of my current needs. My next door neighbor has cable internet and gets far better speeds and reliability than I do but truly has a utility bill that is nearly 3 times mine. I pay for upgraded speeds and am on the fastest available. It will usually meet my current needs but there are a several times a week that I hit the speed cap of the line. I will say that AFConnect does have excellent service but has not followed through on promises of burying my feed in my neighbors yard.

In question 21, I interpret "facilitate" to mean that the city will allow the free market to work without undue government interference.

Please get fiber internet.

Payson has fiber, Provo has fiber, we need fiber.

Link up with Google Fiber

We use AF Connect and are very happy with them.

I currently have Comcast because I need the speed and there are no other options-but it is WAY to expensive. PLEASE make available a FAST (100 mbps or faster) internet service that is reasonably priced. Currently AF Connect is WAY to slow!

I think American Fork City needs to improve roads and modernizing infrastructure. They do not need to try to compete with commercial business that are already available. Do not compete with areas that are not your expertise. You have enough work to do in things you are qualified and expected to do to maintain our city and keep it a beautiful.

My only complaint with my current service is network reliability, and if it goes down on a Friday night there isn't any customer support until Monday morning. Otherwise I've been a long time customer of AF Connect and I've been otherwise pleased. Faster speeds are always desired.

Comcast is not bad it is just that they have a monopoly on the market in our area. Century Link tells me they are not available. i tried Rise Broadband but that was a disaster. I used to have AF Connect at my old house and it was 80% reliable. If i could get internet and phone/fax for \$50 or less per month with downloads up to 50 or 100 mps that would be my goal.

Were I live and I want to be over 25 Mbps I only have Comcast as my choice. I pay a lot for internet vs. my 3 brothers that all live in different cities getting way more than me for less. Also, I have to connect my cell phones to the internet or I would have no cell service. Carrier Sprint. Leave 5 miles from my home and I have full LTE!

Video streaming is very important to me! I watch very little TV, and if find most of my entertainment on streaming channels like PBS, News channels, Netflix, and Amazon Prime.

Pretty, pretty please bring Gigabit Fiber to American Fork. We need it desperately. Our Comcast internet is very, very expensive and doesn't live up to its promises, but there is no other service we can switch to. We use Internet for everything, and the poor service messes up our work and home school.

Choices are limited and all are too expensive. Faster download speeds don't help if sites are slow. Questions 2 would likely result in more accurate data if "0" were an option. Comcast internet/cable TV, etc. services are part of my HOA fee, so I am unsure of the exact cost. And the HOA negotiated a discounted 10-year contract. Of course, if AF city offered services with support at a lower fee, that would be very persuasive, but otherwise, not so much.

Government should not facilitate private businesses.

We want FIBER!!!!

Im within the generational gap, where my satisfaction with the local government is greatly, rather primarily, influenced by internet speeds and services. 100mb is far and devoid of my current needs.

The response to Google Fiber internet in the Provo and Salt Lake areas shows there is a significant demand for gigabit fiber internet. I know the Utopia fiber network also covers a significant area of the valley, and the demand has been similarly significant in those areas. If American Fork were to deploy gigabit fiber internet in the city, demand would mirror the rest of the Utah areas, as well as driving competition with current internet providers in the area.

I am extremely interested in better broadband services and am willing to pay for it.

We need faster internet in this area. It should also be affordable and have no data caps.

I would think there is a Federal Grant we could qualify for

We use AF connect. It is Ok for the most part It can be a bit slow at times and at least 4 times a week between 10 pm and midnight it almost completely stops working. im a night owl and watch a lot of Netflix at that time.

Please provide a high speed alternative!

Facilitate, but don't create a government service

American Fork city is not fiscally competent enough to oversee an internet upgrade city wide. Please remember the blunder we are still working through when the city decided to try and fix the water situation. Yes, we're still paying the price for that. Remember when the city tried to buy the old school next to city hall? Yeah, how long has it taken for anything to be done while the building deteriorates. The private sector is capable of handling the cities internet needs.

I was among the very first AFConnect subscribers. I would like it to be a little better, but there are no other good alternatives out there.

Spending way too much money for what I get from Comcast/Xfinity. Though there are 100's of channels offered, only a handful have content that interest us. A la carte TV is what I have been asking for from Comcast/Xfinity; but to no avail. Also, way too much money being charged by Comcast/Xfinity for internet that slows down when more users are online. Century Link does not cover the specific location of my home. I have used AF Connect in the past; however, it does offer the speed for upload and downloads that I desire. If there was an affordable option for Gigabit Internet, I would leave Comcast/Xfinity in a short heart beat!

My husband is a software developer and often works from home. Our internet speeds meet his needs, but only barely. It would be very beneficial for us if the city would invest in better internet infrastructure.

Thank you for the survey. We would APPRECIATE better internet service.

I would only be interested in a locally facilitated broadband service if it were taken seriously. AF Connect appears to be run as somebody's hobby and is an unrealistic choice for service. Poorly managed and poorly supported. Nobody currently associated with AF Connect should be considered to have any role in a new service. As it stands, I would not subscribe to a local service until it had been running for at least 12-18 months based on American Fork's current handling of local internet.

Comcast is gouging customers with their products and services, and they can because there are no other services available at our location. DSL rates would only 1 couple] MB/s. Additionally, if CentryLink was available I would not choose them because of the poor service they provide. This is by experience from our last location in American Fork where we had Gigabit Fiber to the home from CentryLihnk. CentryLink throttled the connection which prevented even basic YouTube viewing. CentryLink is not available at our current location. The only other options are broadband wireless which we have heard from neighbors is poor. I will say that Comcast has very reliable service... if you lease their modems. More competitive options would be nice.

Government has no place in commercial ventures. If I remember correctly, the city already tried getting involved in internet services and it didn't turn out as expected. The company AFConnect uses the fiber-optic network that came from that venture. This sounds like an unnecessary repeat. American Fork City needs to stay out of the internet business and stick with government.

This area is close to the technical job market and should have internet to match that. I would love to see gigabit or better service become available in the area at a competitive price. Comcast charges \$50 a month extra for unlimited bandwidth in this area due to a lack of competition. Provo and Orem has always had more affordable internet due to the competitive market.

would love to see more high-speed/broadband internet services available in American Fork. Would be thrilled to have the option of gigabit fiber.

We use AF Connect and lose service several times a month which is super frustrating. One of the reasons we chose to live in American Fork (18 years ago) was because of the fiber internet opportunity, but over the years our service reliability has declined.

I am not interested in paying for a product I won't use.

I would support city facilitated broadband if citizen input and/or over site is part of the planning/construction/and management process. I don't want another government service to be allowed to run a muck..

The internet has become an essential infrastructure piece in our day and age, and a city should help support it.

This is an awfully designed survey to take on a phone.

AFConnect has been "fine" for us for many years, but doesn't seem to be keeping up with the speed of the times. It goes offline a bit too frequently, and is slow when we're all using it. We paid for a speed increase, but only notice a very slight increase in performance.

Private service is preferable rather than government involvement. Cost concerns of such an endeavor for the city to pursue.

I do not know what Gigabit fiber is or the cost and reliability of it. My AFConnect is a fantastic price and as or more reliable as most services. The only thing they can do better is in phone response when a customer calls. Service disruption has been very minimal since I have had it. I f

the city wants to encourage people to move here (which I assume they do from all the high density housing going in), superb, affordable and reliable internet service is now a need, not just a perk.

The City needs to encourage the police officers to better control the drivers in AF - especially, around Costco's east entrance. SOOOOOO many violations that impact other drivers & cause accidents & near misses! Utah drivers SUCK!

Fast, reliable internet is extremely important for our family. We have an entire home security system that relies on our wifi connection, as well as our outdoor cameras, baby monitor camera, video doorbell, garage door, and front door lock. Fast and reliable internet allows all of these devices, which are crucial to our family's safety, work properly. Thank you very much for considering implementing a better internet solution for the residents of American Fork!

Anywhere I go in AF that does not have wifi is horrible cell reception and internet.

Nothing the city gets involved in stays inexpensive and not run well. Most all governments, city, state and federal wastes tons of money which always forces taxes to rise. They rarely do anything efficiently. Examples are the costs to run our golf course, city recreation center, and secondary water system. All have cost way more than expected and prices just keep getting higher. Almost all would be better served by private enterprise. Less than 1% of the AF citizens use the golf course ut we are all force to pay for it. Same with the recreational center and library and the list goes on.

Facilitate but not own the service. Minimal regulation as well. Right of ways exist via the power poles and lines. These can be used by other providers just as cable service uses them. I would like to see fiber connection to the home, but that is an expensive implementation. AF Connect has done a good job of maintaining and slowly expanding the old AirSwitch network. Something like that upgraded to fiber might be cost effective if financing for the project is obtainable. However, the ROI may not be there, or if it is, the payback period may be too long.

AF Connect is great, but the service goes down periodically and that can complicate things severely.

While I'm not concerned with my current services, greater bandwidth (Gigabit fiber) would certainly optimize our in-home experience. This said, I would not be willing to pay a substantial amount more for this service. \$50-\$75 is my current preference for high-speed internet. Thanks for conducting this survey. I hope we see fiber here soon!

Internet access should be a city utility, like water and sewer.

I want something that is affordable and can perform fast and efficiently.

It would be nice to have Google Fiber in American Fork City.

Leave the internet alone and do not spend one penny of our tax money on it until every road in AF is drivable. FIX THE DAMNED ROADS!!!!

I think that the city and its citizens are better served by free enterprise than by a city/government.

I would love an alternative to Comcast that does not require me to haggle prices every year.

Internet and TV package provided through our HOA agreement. Comcast.

I'm mainly disappointed that Comcast is my only option for fast, reliable internet. This means cable coming to my home, not over the air. Comcast is charging way too high prices because they know they can. There is no competition for pricing! Thanks

What about *upload* speed? Why do people forget about upload speed? Upload speed is necessary for backups, video upload, file transfers, etc.. Most connections are asymmetric and fail horribly with upload speed. Even cable gigabit download only has a ~30Mb upload - which is inadequate. I have begged, researched, shopped around and decent upload speed is *nowhere* ... except Provo on Google Fiber! I am working to move my business to Provo because it's cheaper in the long run than getting decent *upload* speed in American Fork.

Why doesn't the city install conduit and then allow any qualified, bonded business to compete by pulling media to customers? My understanding is that even newer areas that do have conduit actively *deny* qualified businesses from pulling fiber - possibly due to agreements with existing communication companies. The limited provider lock-in situation is *terrible*. No, I don't want to get communication connections from the city - I want the city to provide the conduit infrastructure and *lease* conduit space to the businesses that will compete for customers - that allows *selection*. If the city provides the connection then there still are limited options.

Reliable service is very important. I do not feel AF connect is reliable enough.

The city should spend their budget on the police force and paying down debt

Comcast is horrible. I would love to have an alternative.

They should facilitate but not incur debt or bonds or increase taxes to do it.

Answer to 21 is yes if this doesn't require a tax increase and is all covered under a monthly service charge.

If people want faster internet, they can fork out the money to a private company to provide it.

I have requested Utopia or an option like it for years. The current options available in AF are more than a decade old. The prices speeds and data caps are ridiculous but possible because the few providers know they don't have innovate or offer anything different. I am a network engineer with 20 years experience and feel the residential internet market needs to change. We are seeing great new options when non-content providers get into the business. Give people the speed and bandwidth and let them decide what they want to use it for

Having a reliable, fast gigabit fiber internet service (as long as it was affordable) in American Fork would be great! I'm so tired of calling Comcast/Xfinity about our internet that is slow or intermittently not working. Ug!

I am very limited in internet choices due to location of trees and 2 story homes

I also need nights and weekends for internet

Current provider is AF Connect

Current provider: AF Connect

Internet connector is AF Connect

No internet

Internet must be dependable and affordable.

Thanks for considering facilitating better service options. I may be interested in Gigabit fiber internet depending on cost

Better cheaper TV service

#19 is the last question. No comment

Use AF Connect

Cell phone service where we are is terrible. We have T Mobile

I have Century Link and am very satisfied!!

AF Connect

I am so switching to AF connect after our contract is over.

AF Connect is provider and does a satisfactory job. Sometimes some repairs take a long time. They are usually less critical.

AF Connect is provider

We would love to see fiber in American Fork. We tried signing up for AFConnect when we moved in 3 years ago but they said that some equipment isn't working that services our street. I've followed up annually and they still can't offer service. We've tried Rise Broadband and the reliability was spotty, especially when there was a storm or wind. Not interested in trying CenturyLink based on what we've heard from others. We can't find another provider.

I'm good with the city facilitating the acquisition of better Internet services, but not with the city owning and operating them.

Need lower price. Retired person

Unless its a great deal and great service, I have no interest in changing.

Last question, Maybe

Internet: AF Connect

Don't want Gov. Controlling internet. Use: AF Connect

I just switched to xfinity to get 150 Mbps. I would like gigabit fiber!!

The infrastructure of AF has not yet caught up to the needs of our area. This isn't a huge issue, just an annoyance that seems to go unresolved for a long time.

No internet

AF connect

We need 24/7 customer service. I've been double charged and haven't been able to get the problem resolved, I also am paying for open NAT but all my equipment says I don't have it. I have a job and can't call during the week.

My cell phone service is atrocious. I have never lived anywhere that my phone service has been so poor. When I am on my cell phone, I have to walk from place to place to even hear or be heard while talking. Sometimes my house phone is bad, not as bad as my cell phone but still leaves a lot to be wanted. I hope your survey letter is going to help this problem. Dea Miller

Nice work and service! AF Connect is Great!

AF Connect

AF Connect

AF Connect

Just LEAVE IT ALONE! AF Connect

AF Connect

Must keep it affordable!

AF Connect

Yes Please to last question!

AF Connect

AF Connect

Xfinity

use Xfinity

use AF Connect

The city needs to get out of the internet business and stay out. The private sector is doing just fine.

The city should not be involved with internet. Let the private sector provide the service and focus on public safety, roads and water.

Current provider: AF Connect. Only change if price is comparable with AF Connect. Same or lower

Provider: AF Connect

Provider: AF Connect

Provider: AF Connect AF Connect has been great! I use antenna t.v. also a lot!

Fixing the streets in Am. Fork is a higher priority. I don't see much progress in the last 2 years.

use: AF Connect

use AF Connect

AF Connect has a problem with keeping connections going.

last question; Yes, if it actually works

Not sure what gigabit fiber is?

use: AF Connect

Use: Infinity

use: AF Connect

Hurry and thank you!

nope

use; vivint wireless

I want comcast!

use AF Connect. I am very happy with AF connect. Reliable, consistent and cost affective. Please do not raise prices!

use AF Connect

Provo's internet service seems to cost less with better service.

We depend on the internet. It has to be affordable. We left AF Connect because it was unreliable and way to expensive. If we could get free Google fiber like we have at a home we rent in Provo that would be great. So far American Fork has proven it cannot supply services at a reasonable price. We are going into retirement and have very limited means.

use: AF Connect

Anything cheaper! what is Gigabit fiber?

Not sure what Gigabit fiber is? Concerning Irrigation water for our yard: I would like someone to help me get my yard sprinkling system turned on and working. Fairly new to the area!

AMERICAN FORK BUSINESS SURVEY RESULTS

A total of 14 responses were collected from businesses in American Fork. Not all responders answered every question.

Some key findings from the results are listed below.

93% of business respondents want better Internet access.

100% of business respondents say the city government should help facilitate better and more affordable broadband service

100% indicated that the Internet is important to the success of their business over the next five years.

Only 29% of businesses are "satisfied" or "very satisfied" with their current Internet service.

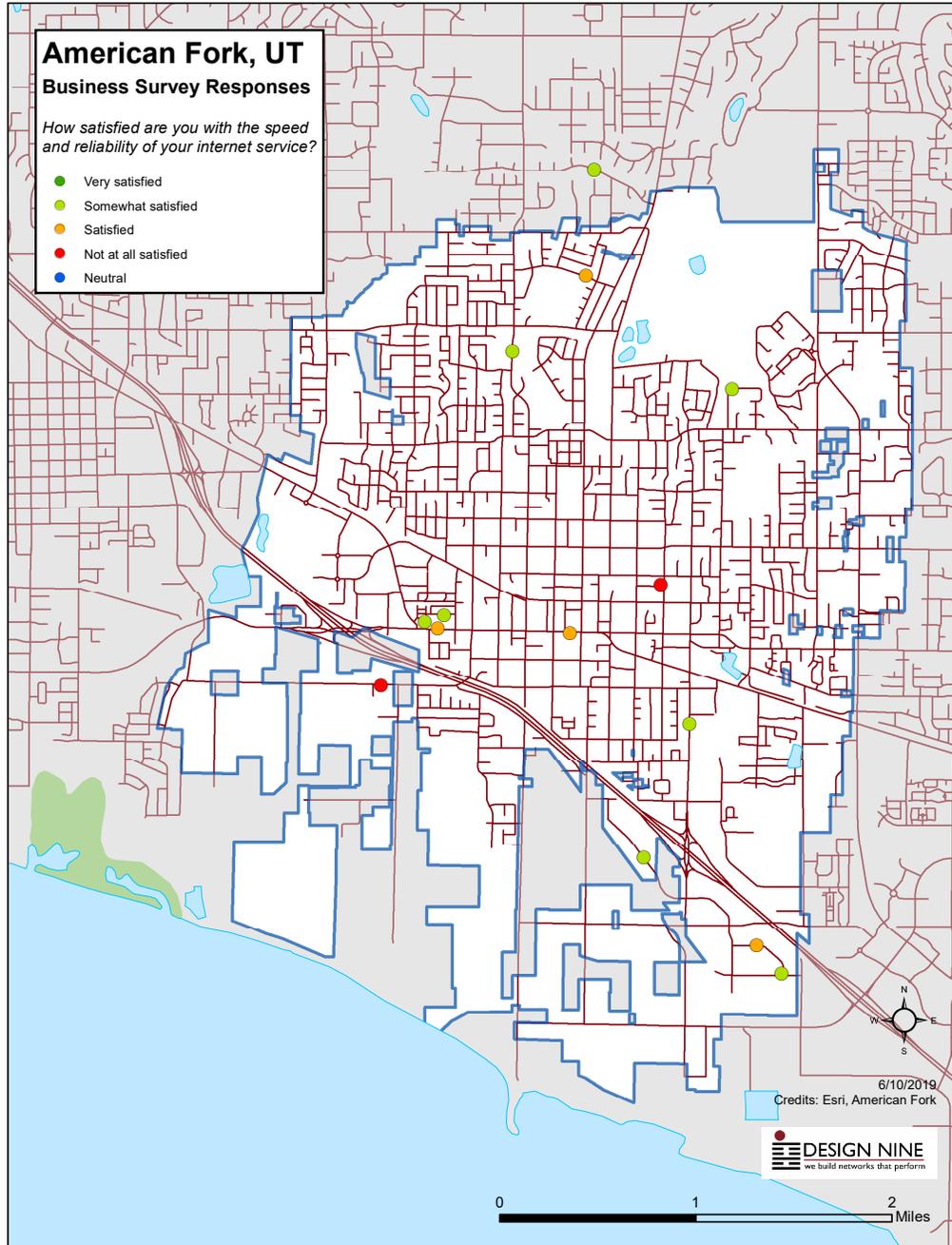
29% of the businesses that responded are home-based.

47% of businesses that responded need employees to be able to work from home.

Home-based workers and businesses need affordable Internet access

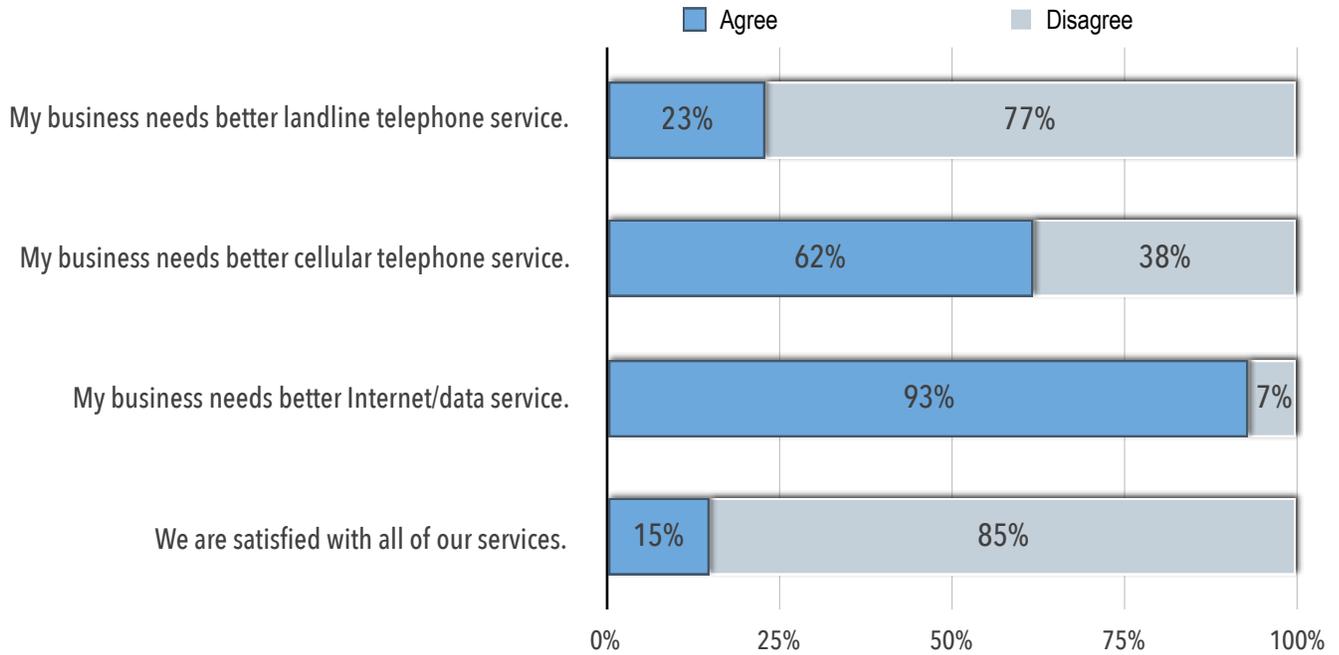
DISTRIBUTION OF SURVEY RESPONSES

The map below shows the geographic distribution of responses to the business survey, coded according to their satisfaction with their existing Internet service.

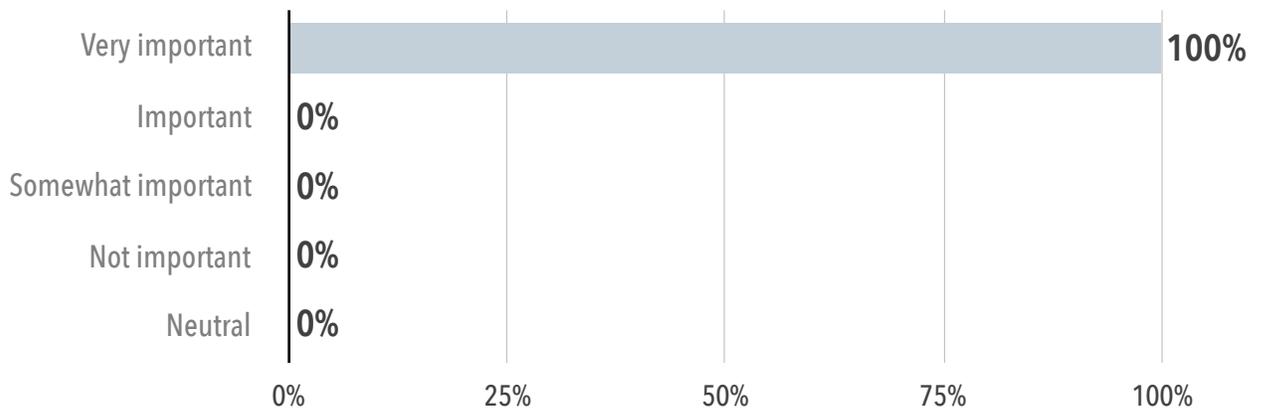


BUSINESS SURVEY SUMMARY DATA

1. Select the items you agree with below



2. How important do you think Internet technology will be for the success of your business over the next five years?



Attachment: AmFork_broadband_survey_results_v1 (Market Study and Feasibility Report)

3a. Total number of employees

1 to 10	64%
11 to 40	29%
41 to 80	0%
81 to 150	0%
Over 150	7%

3b. Total number of Internet users

1 to 10	79%
11 to 40	14%
41 to 80	0%
81 to 150	0%
Over 150	7%

4. If you are a business, what type? (select all that apply)

Retail / Wholesale	2	10%
Professional / Office	7	33%
Government	0	0%
Educational	0	0%
Medical	2	10%
Non-Profit	0	0%
Manufacturing	2	10%
Restaurant/Food Service	0	0%
Communications/Technology	1	5%
Construction / Maintenance/ Repair	3	14%
Agriculture/Forestry	0	0%
Other	4	19%

Other types of businesses

- Recreational/Amusement service
- Portrait Photography
- Entertainment
- Home Services (Residential Cleaning Service)

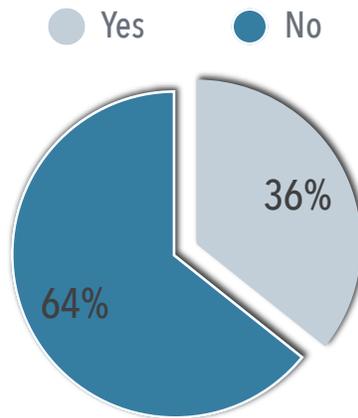
5. Is this a home-based business?

29% of the area businesses that responded are home-based

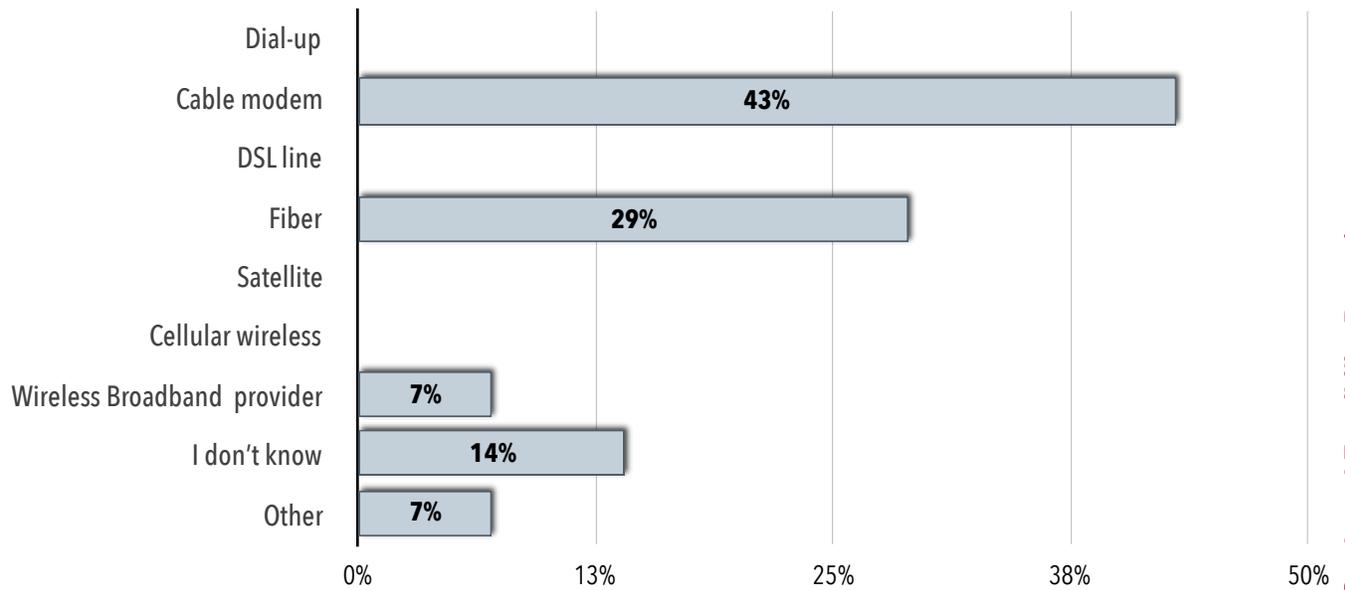
6. How much do you pay now for Internet access each month? If you select 'No Internet', please skip to question 13.

No Internet	\$0 to \$50	\$51 to \$100	\$101 to \$150	\$151 to \$300	\$301 to \$500	\$501 to \$1000	\$1001 to \$5000	\$5000+	I don't know
0	2	5	1	3	1	1	1	0	0
0%	14%	36%	7%	21%	7%	7%	7%	0%	0%

7. Are you satisfied with what you pay for Internet service?

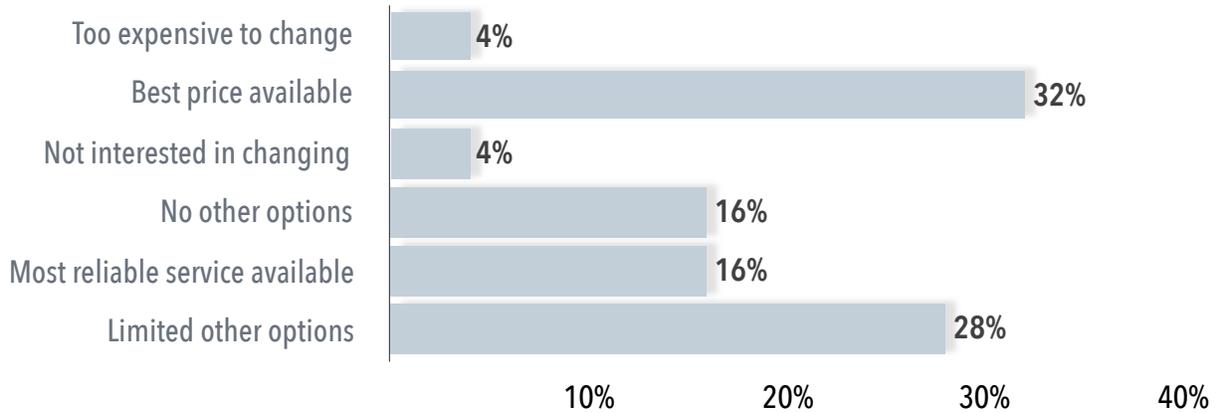


8. What type of Internet do you have?



9. Based on the type of Internet you selected above, why do you still have it?

Respondents could choose more than one option.

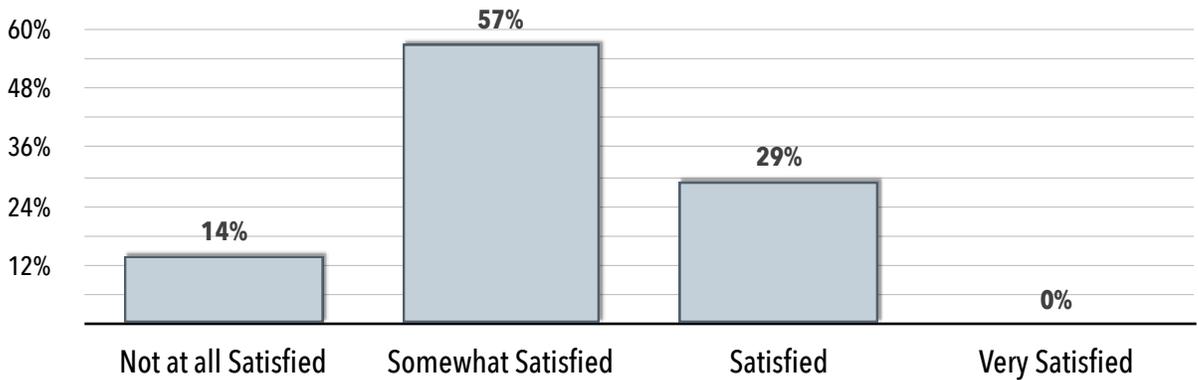


Attachment: AmFork_broadband_survey_results_v1 (Market Study and Feasibility Report)

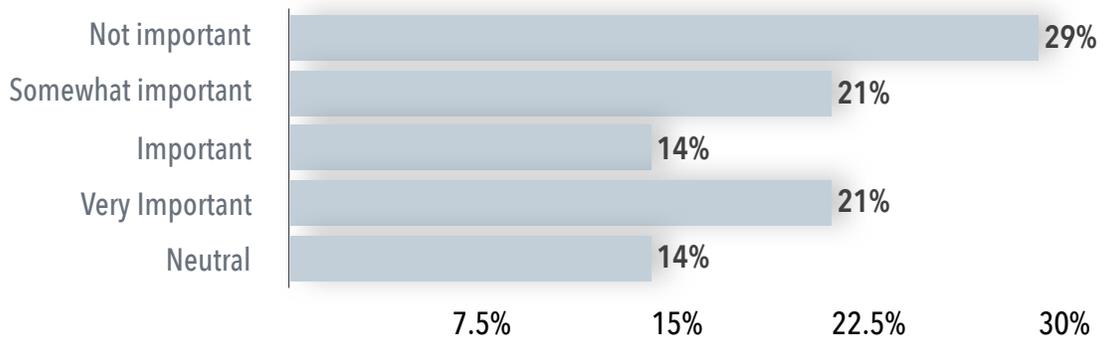
10. What is the speed of your Internet connection? (A Gigabit is 1000 Megabits (Mbps))

Dial up only	512 k -1Mbps	1-5 Mbps	5-10 Mbps	10-50M bps	50-100 Mbps	100+M bps	Gigabit	I don't Know
0	0	1	3	3	4	1	0	2
0%	0%	7%	21%	21%	29%	7%	0%	14%

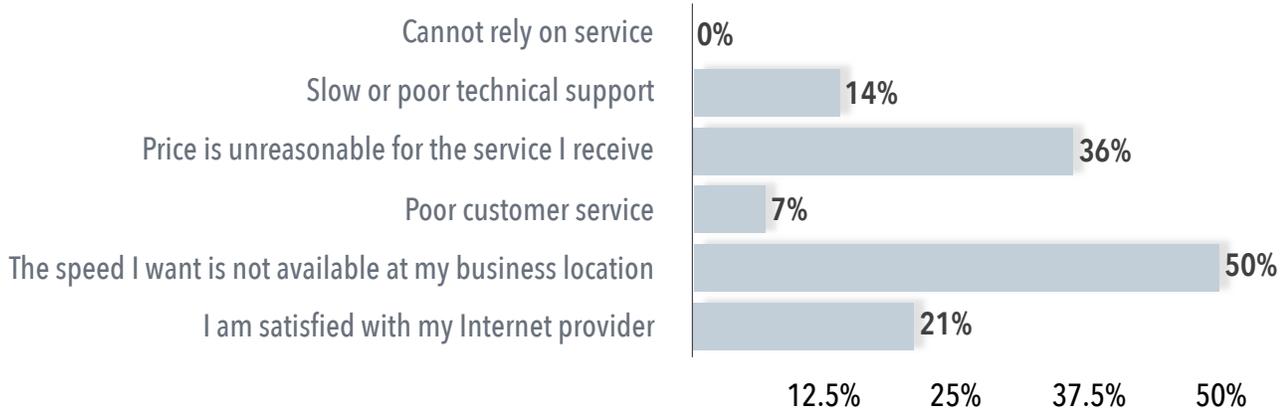
11. How Satisfied are you with the speed and reliability of your Internet service? (get rid of neutral?)**



12. How important is a redundant or second Internet connection to your business?



13. Please select all that apply to your current Internet provider



14 . Select all the items you use the Internet for now(Select all that apply)

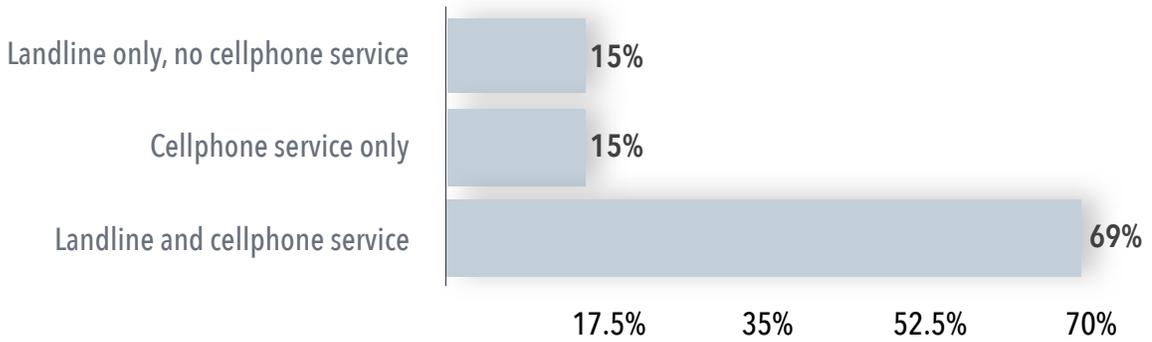
Email	14	100%
Communication between headquarters and remote sites	9	64%
VoIP Internet phone (Vonage, Skype, etc.)	12	86%
Online Backup (files, photos, music)	12	86%
Transfer large files	10	71%
Monitor / control security, alarms, health, processes, etc.	11	79%
Processing credit card / debit card transactions	6	43%
Ordering / managing inventory	11	79%
Maintaining a Web presence, or blog	10	71%
Social media (Facebook, LinkedIn, Google+, Instagram)	12	86%
Receiving and processing online orders	7	50%
Cloud-based business, accounting or other services	9	64%
Smart TV	4	29%
Other	1	7%

15. Who is your Internet Service provider?

Some responses included more than one provider.

Comcast	6	77%
Century Link	1	8%
AF Connect	4	31%
Veracity	1	8%
Centracom	1	8%

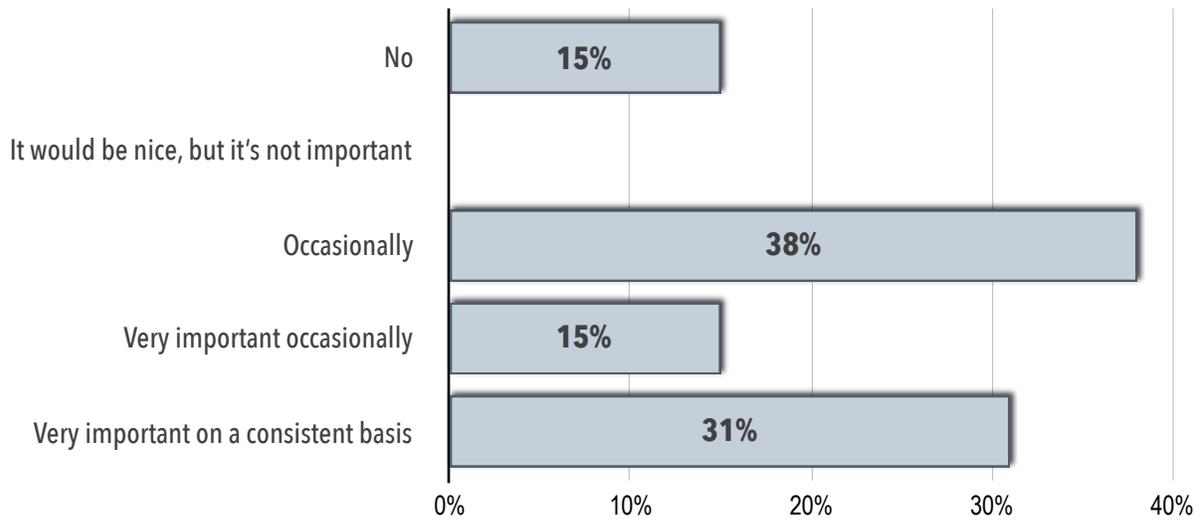
16. What kind of telephone service do you have?



17. Do you or your employees use a VPN (Virtual Private Network) to obtain remote access for your work or to a company network?

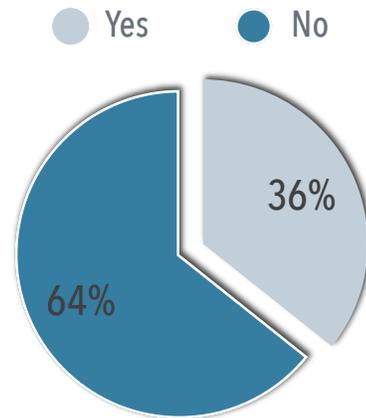
Yes	No	I Don't Know
6	7	1
43%	50%	7%

18. Do you or your employees need or want to work from home?



84% of businesses that responded need employees to be able to work from home

19. Does limited Internet access at employees' residences impact your business?



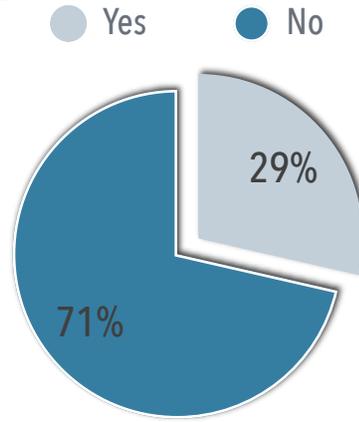
Attachment: AmFork_broadband_survey_results_v1 (Market Study and Feasibility Report)

20. Do the existing internet service options impact your business's decision to relocate or stay in the County?

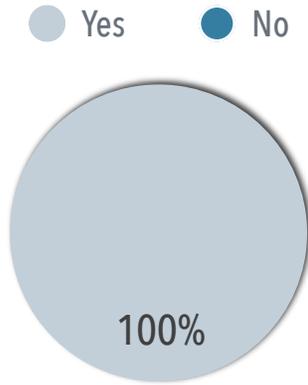
If yes, briefly state why:

We have to have internet service in order to continue with our business. The faster and cheaper it is, the better we are able to compete

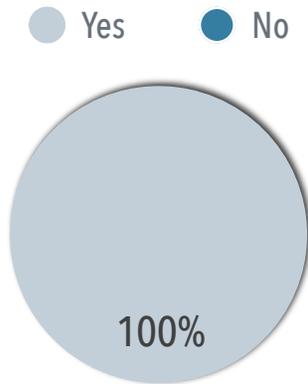
Provo's fast and inexpensive internet is very attractive as an alternative city for the location of my business



21. We are interested in fiber delivered Internet Service.



22. Should the City government help facilitate better broadband services and more affordable services in American Fork?



23. Any other comments?

AFCConnect offers the same service today as 20 years ago. Times have changed. If they can't hit 100Mbps then we need new options.



American Fork Cost Studies

May 13, 2019

For the purpose of developing early, pre-engineering cost estimates, four residential areas in American Fork were studied. Maps and cost estimates for each study area are included later in this document. Pre-engineering cost estimates provide an early look at the cost of build out; these estimates do not include formal pole surveys or the significant expense of route engineering. Even after route surveys are performed, and engineered route blueprints are developed, the true cost of construction is not known until the construction bid documents are prepared and bids are received.

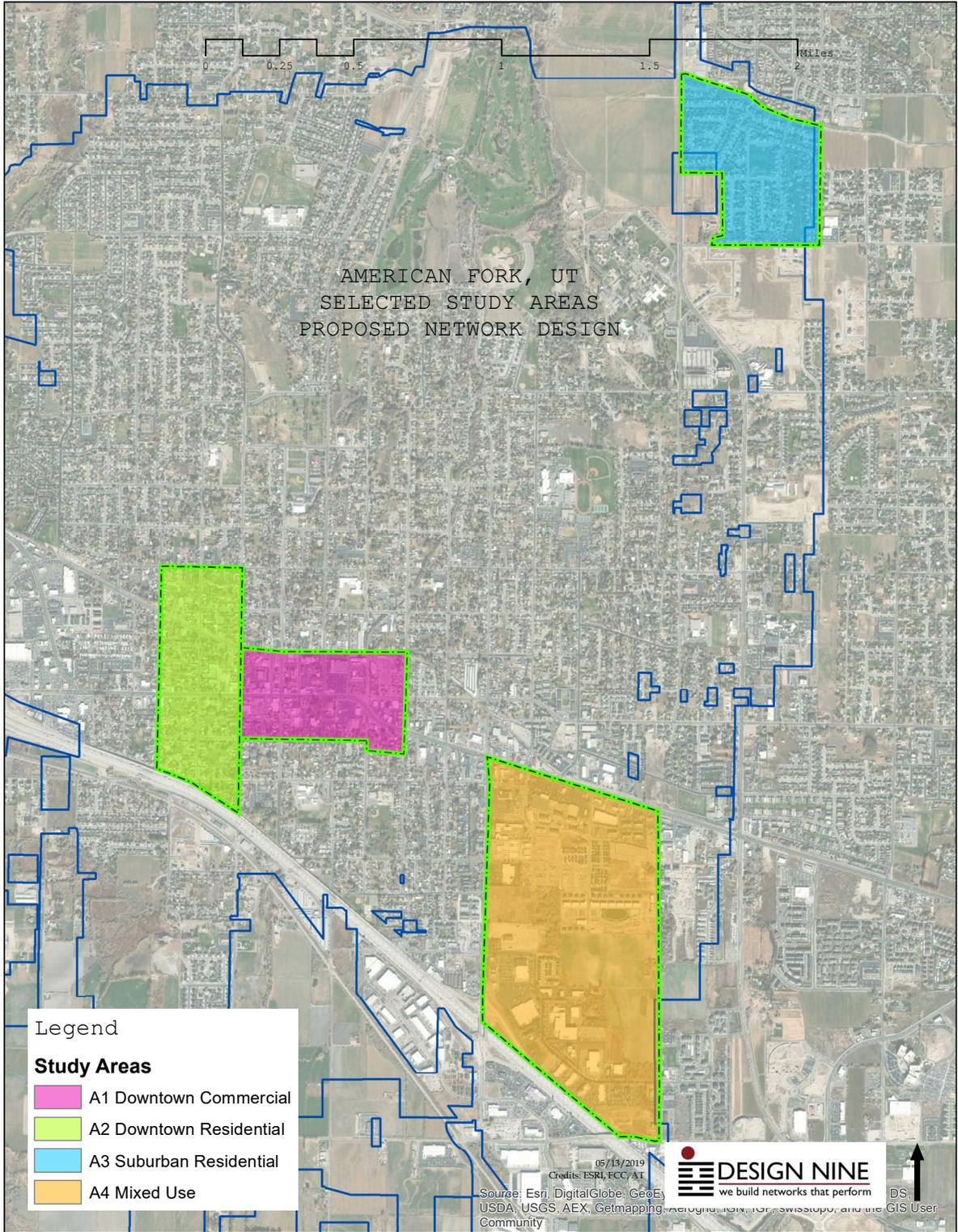
The neighborhoods were selected by examining existing telecom infrastructure, noting where electric and telecom utilities were aerial, and where utilities were underground. Design Nine staff performed a field survey of the City, taking notes on lot size, condition and amount of overhead and underground utilities, pole span length, average drop length from poles to residential premises, and other factors which would impact construction costs.

Design Nine created study area maps, which became the basis of the study area cost estimates.

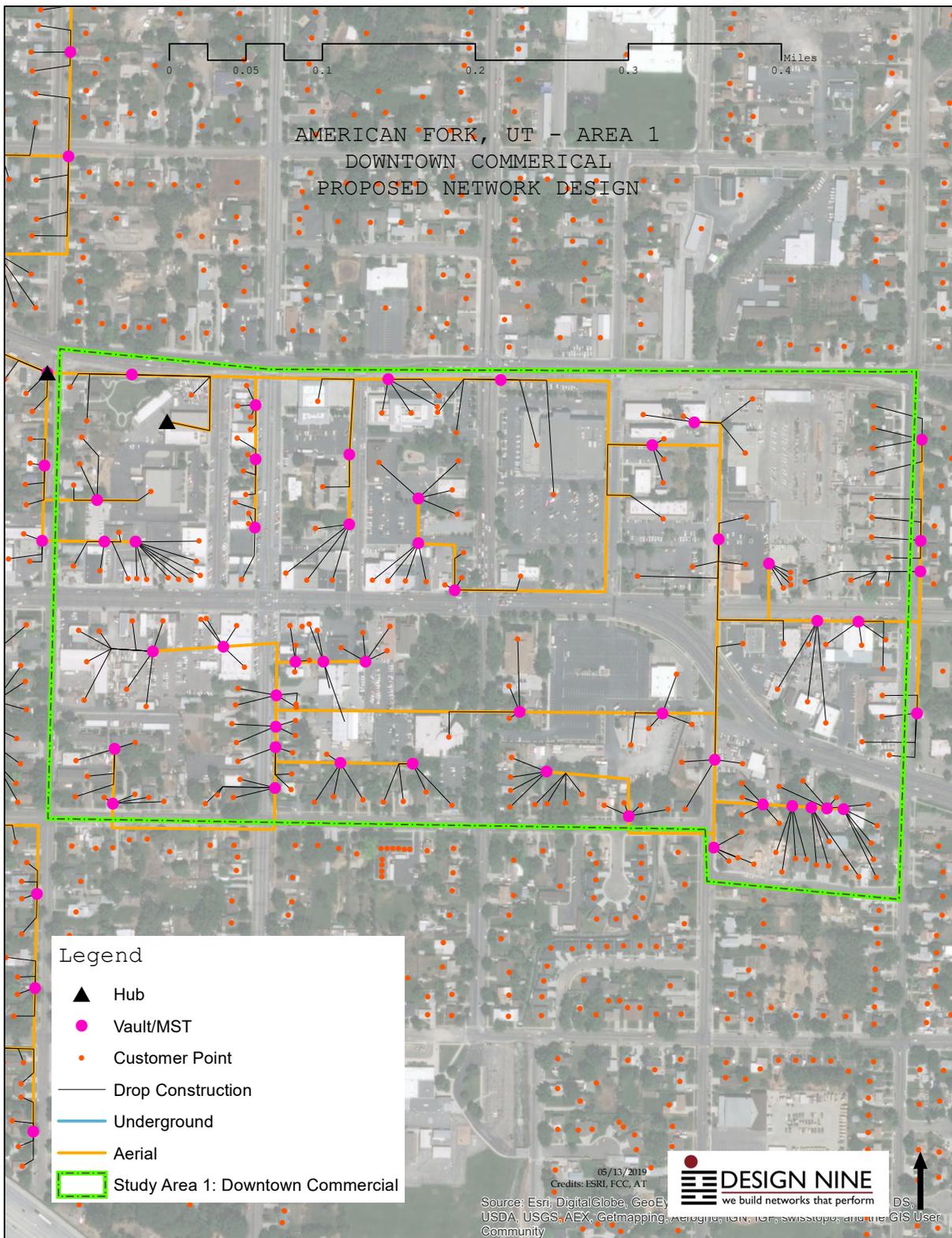
Design Nine then performed a GIS level design using ESRI ArcGIS. This analysis identified inputs into the construction estimates, including total distances of fiber and conduit, fiber strand counts, splice counts and locations, MST (Multi-port Service Terminal) count and locations, drop type (underground vs. aerial) and length, number of poles for aerial buildout, and number of maintenance holes for underground buildout.

Using the inputs into the construction estimates and unit cost per item as well as labor costs for installation of items from previous projects in similar conditions we arrived at a construction estimate for each of the study areas in American Fork.

We created a cost for the total network to include in our financial pro-forma by utilizing the study areas and extrapolating each study area cost estimate as a percentage of the City represented by each of the study areas. We also included core electronics, a pre-fab equipment shelter, and remote cabinets in our overall costs.



Attachment: AFFiber_cost_study (Market Study and Feasibility Report)



Attachment: AFFiber_cost_study (Market Study and Feasibility Report)



American Fork I - Downtown Commercial Route Overview

0	ITEM/PROJECT	VALUE
1	Miles of Fiber / Conduit Installed	2.94
2	Number of Handholes Installed	0
3	Splice Closures Installed	13
4	Cabinets Installed	0
5	Homes passed	203
6	Number of Customers Connected	102
7	Take Rate - Percentage of the Buildings Passed who are connected with a drop and ONT	50%
8	Aerial - Percentage of construction labor expected to be installed on utility poles.	100%
9	Trenching - Percentage of construction installed by trenching (Mini-ex, bucket, hand dig, trencher).	0%
10	Boring - Percentage of construction installed by boring or other HDD methods.	0%
11	Slot Cutting - Construction installed in streets using diamond saws and similar specialty equipment.	0%
12	Rock Saw - Construction method used to install conduit in ROW where rock prevents the use of other methods.	0%
13	Direct Bury - Percentage of construction installed by direct bury methods (plow, vibratory plow,	0%
14	Aerial Info	100% Aerial Construction Estimated for this Neighborhood.
15	FOSCs	Fiber Optic Splice Closures (FOSCs) placed for every 16 buildings passed (16 drops to a FOSC, 4 to an MST).
16	Other Notes	Estimated labor rates are based upon common rates seen for recent medium sized rural projects.

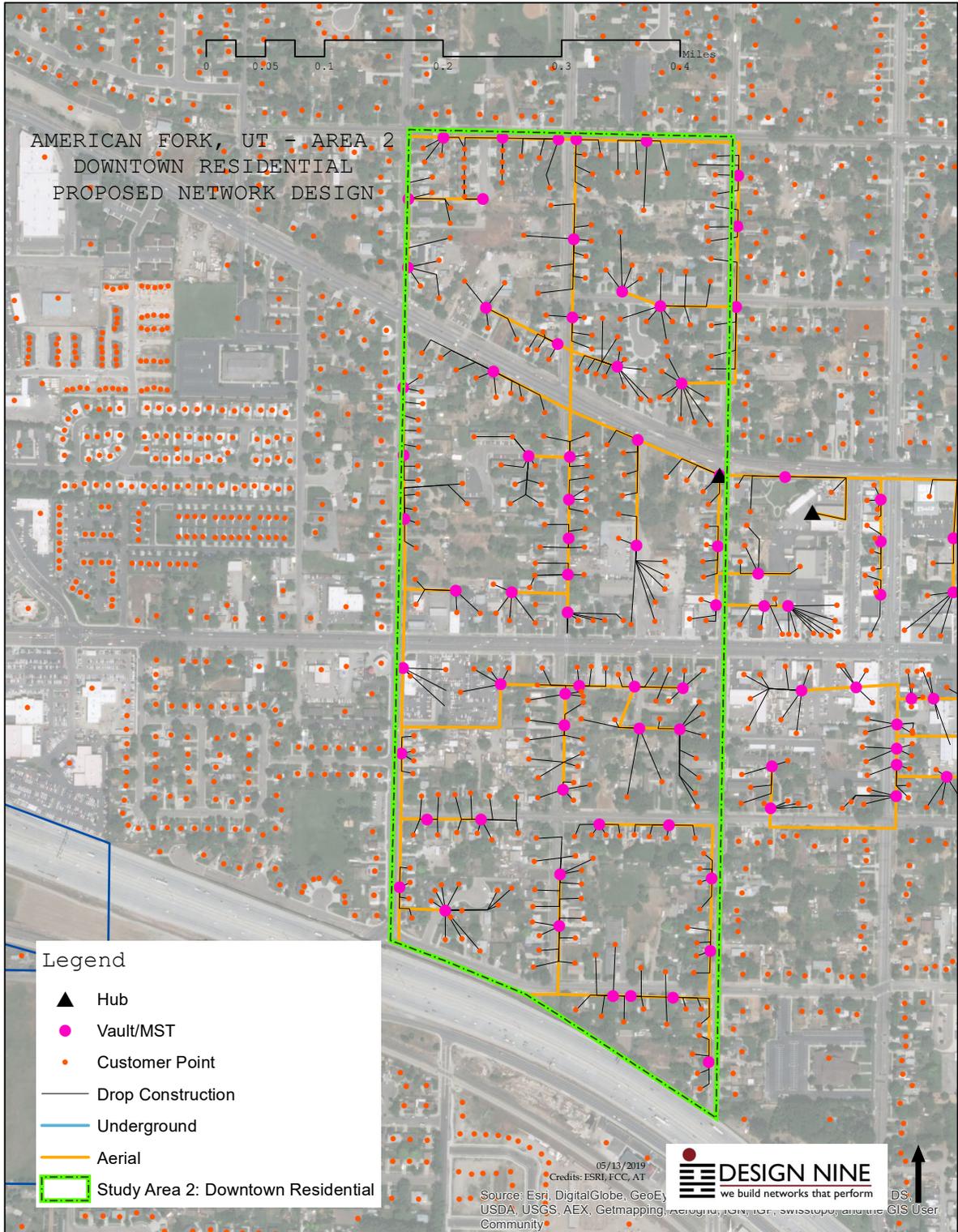


American Fork I - Downtown Commercial Cost Summary

0	ITEM/PROJECT	ESTIMATED
1	American Fork I - Downtown Commercial Construction Materials	\$45,321.25
2	American Fork I - Downtown Commercial Distribution Labor	\$199,625.00
3	American Fork I - Downtown Commercial Structures, Cabinets, and Equipment	\$44,345.90
4	American Fork I - Downtown Commercial Drop Construction	\$29,070.00
5	Network Construction Subtotal	\$318,362.15
6	Project Management, Network Engineering, Integration, and Testing	\$25,468.97
7	Engineering, Permitting	\$28,652.59
8	Misc Fees, Advertising, Technical Services	\$2,500.00
9	Bookkeeping and Administration	\$750.00
10	Other Costs Subtotal	\$57,371.57
11	Project Total	\$375,733.72
12	Contingency at 10%	\$37,573.37
13	Project Total (with contingency)	\$413,307.09

American Fork I - Downtown Commercial Infrastructure Analyses

0	ITEM/PROJECT	ESTIMATED
1	Total cost per mile	\$140,580.64
2	Distribution construction cost per mile	\$108,286.45
3	Distribution cost per mile (no drops)	\$98,398.69
4	Cost per building passed	\$2,036.00
5	Average cost of a drop, cost to connect after primary construction is completed	\$242.50



Attachment: AFFiber_cost_study (Market Study and Feasibility Report)



American Fork 2 - Downtown Residential Route Overview

0	ITEM/PROJECT	VALUE
1	Miles of Fiber / Conduit Installed	3.56
2	Number of Handholes Installed	0
3	Splice Closures Installed	20
4	Cabinets Installed	0
5	Homes passed	304
6	Number of Customers Connected	152
7	Take Rate - Percentage of the Buildings Passed who are connected with a drop and ONT	50%
8	Aerial - Percentage of construction labor expected to be installed on utility poles.	100%
9	Trenching - Percentage of construction installed by trenching (Mini-ex, bucket, hand dig, trencher).	0%
10	Boring - Percentage of construction installed by boring or other HDD methods.	0%
11	Slot Cutting - Construction installed in streets using diamond saws and similar specialty equipment.	0%
12	Rock Saw - Construction method used to install conduit in ROW where rock prevents the use of other methods.	0%
13	Direct Bury - Percentage of construction installed by direct bury methods (plow, vibratory plow,	0%
14	Aerial Info	100% Aerial Construction Estimated for this Neighborhood.
15	FOSCs	Fiber Optic Splice Closures (FOSCs) placed for every 16 buildings passed (16 drops to a FOSC, 4 to an MST).
16	Other Notes	Estimated labor rates are based upon common rates seen for recent medium sized rural projects.

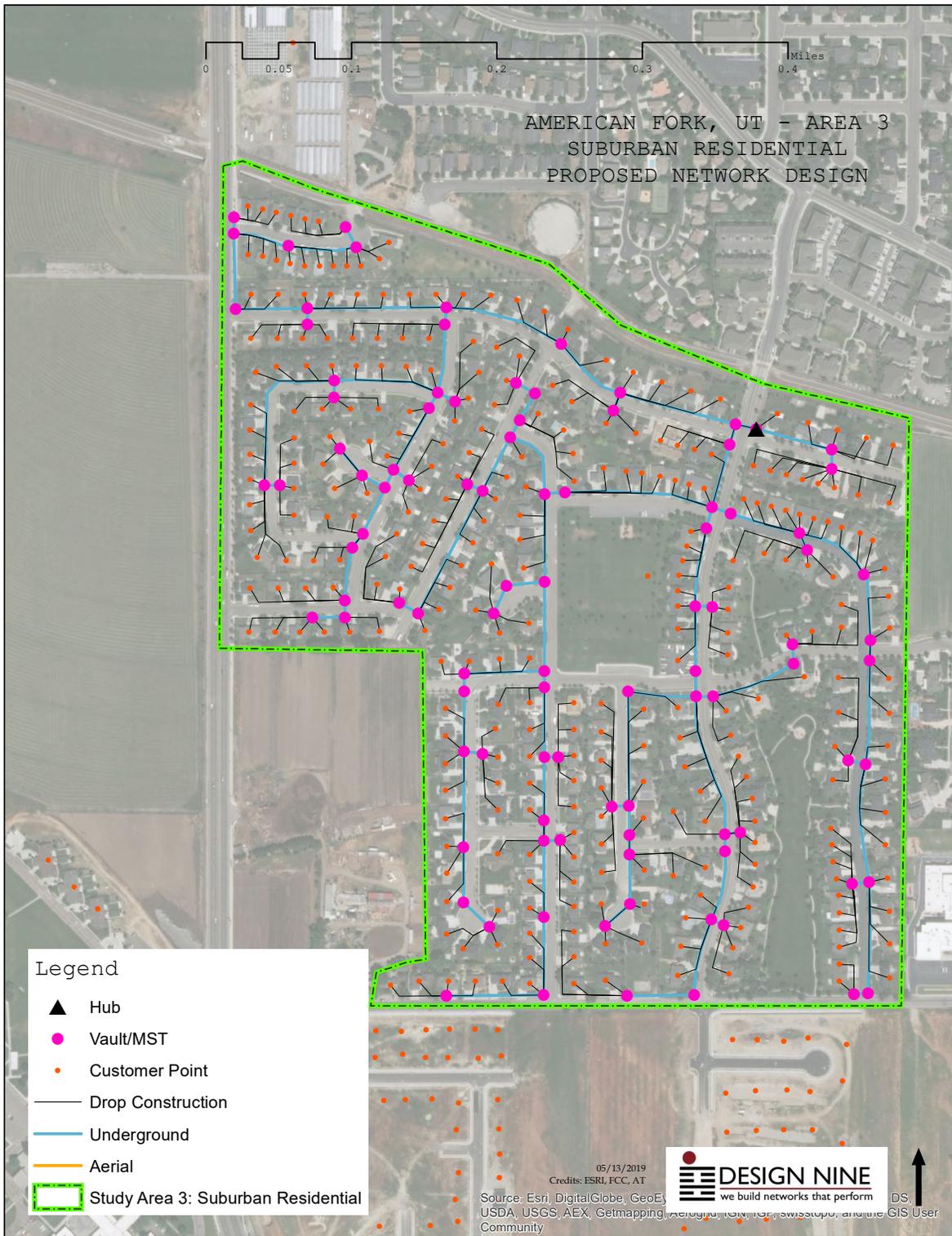


American Fork 2 - Downtown Residential Cost Summary

0	ITEM/PROJECT	ESTIMATED
1	American Fork 2 - Downtown Residential Construction Materials	\$56,416.25
2	American Fork 2 - Downtown Residential Distribution Labor	\$377,682.50
3	American Fork 2 - Downtown Residential Structures, Cabinets, and Equipment	\$61,518.40
4	American Fork 2 - Downtown Residential Drop Construction	\$43,320.00
5	Network Construction Subtotal	\$538,937.15
6	Project Management, Network Engineering, Integration, and Testing	\$43,114.97
7	Engineering, Permitting	\$48,504.34
8	Misc Fees, Advertising, Technical Services	\$2,500.00
9	Bookkeeping and Administration	\$750.00
10	Other Costs Subtotal	\$94,869.32
11	Project Total	\$633,806.47
12	Contingency at 10%	\$63,380.65
13	Project Total (with contingency)	\$697,187.11

American Fork 2 - Downtown Residential Infrastructure Analyses

0	ITEM/PROJECT	ESTIMATED
1	Total cost per mile	\$195,839.08
2	Distribution construction cost per mile	\$151,386.84
3	Distribution cost per mile (no drops)	\$139,218.30
4	Cost per building passed	\$2,293.38
5	Average cost of a drop, cost to connect after primary construction is completed	\$242.50



Attachment: AFFiber_cost_study (Market Study and Feasibility Report)



American Fork 3 - Suburban Residential Route Overview

0	ITEM/PROJECT	VALUE
1	Miles of Fiber / Conduit Installed	3.53
2	Number of Handholes Installed	62
3	Splice Closures Installed	20
4	Cabinets Installed	0
5	Homes passed	313
6	Number of Customers Connected	126
7	Take Rate - Percentage of the Buildings Passed who are connected with a drop and ONT	40%
8	Aerial - Percentage of construction labor expected to be installed on utility poles.	0%
9	Trenching - Percentage of construction installed by trenching (Mini-ex, bucket, hand dig, trencher).	25%
10	Boring - Percentage of construction installed by boring or other HDD methods.	75%
11	Slot Cutting - Construction installed in streets using diamond saws and similar specialty equipment.	0%
12	Rock Saw - Construction method used to install conduit in ROW where rock prevents the use of other methods.	0%
13	Direct Bury - Percentage of construction installed by direct bury methods (plow, vibratory plow,	0%
14	Aerial Info	No Aerial Construction Estimated for this Neighborhood.
15	FOSCs	Fiber Optic Splice Closures (FOSCs) placed for every 16 buildings passed (16 drops to a FOSC, 4 to an MST).
16	Other Notes	Estimated labor rates are based upon common rates seen for recent medium sized rural projects.

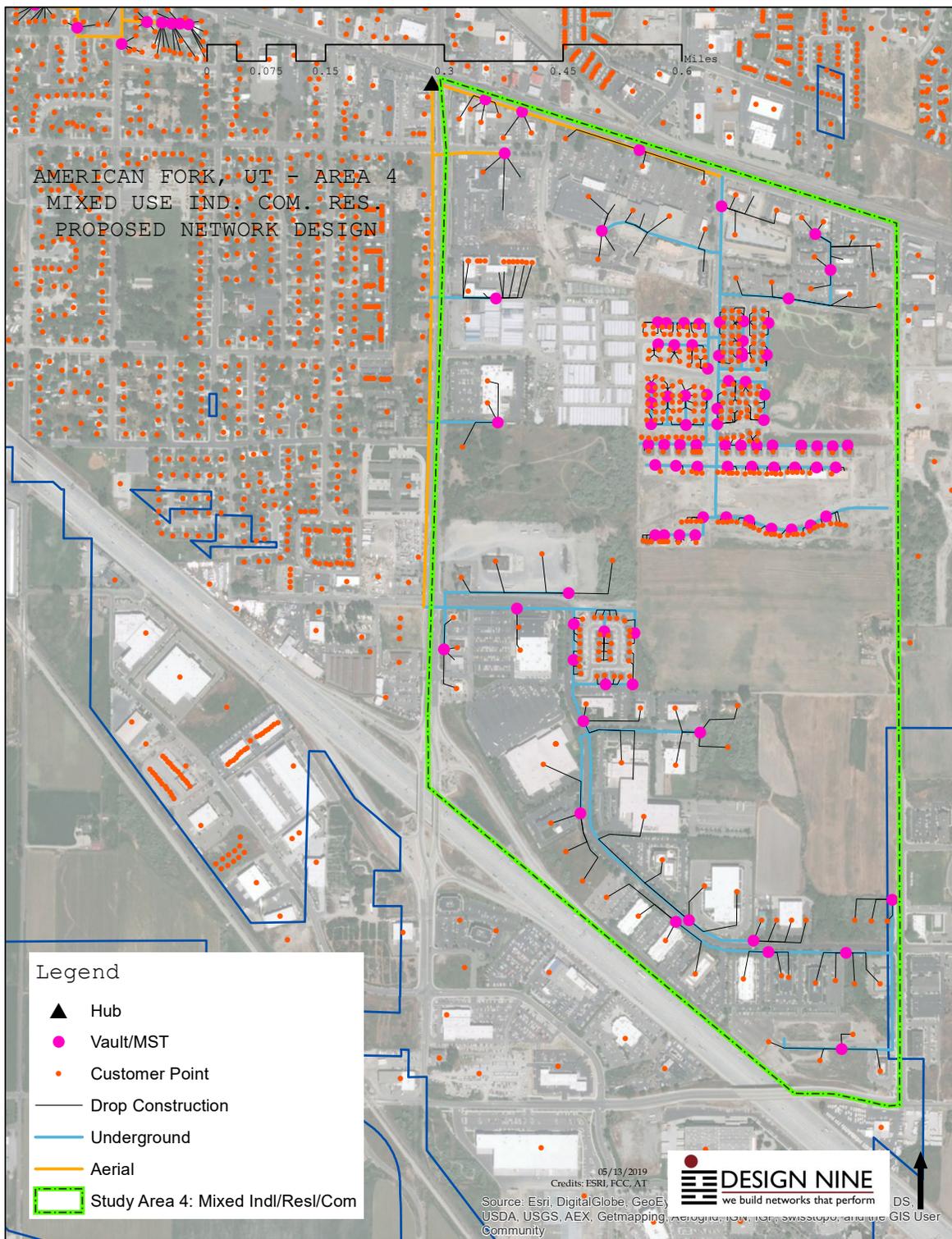


American Fork 3 - Suburban Residential Cost Summary

0	ITEM/PROJECT	ESTIMATED
1	American Fork 3 - Suburban Residential Construction Materials	\$90,220.07
2	American Fork 3 - Suburban Residential Distribution Labor	\$344,461.25
3	American Fork 3 - Suburban Residential Structures, Cabinets, and Equipment	\$32,950.00
4	American Fork 3 - Suburban Residential Drop Construction	\$68,355.00
5	Network Construction Subtotal	\$535,986.32
6	Project Management, Network Engineering, Integration, and Testing	\$42,878.91
7	Engineering, Permitting	\$48,238.77
8	Misc Fees, Advertising, Technical Services	\$2,500.00
9	Bookkeeping and Administration	\$750.00
10	Other Costs Subtotal	\$94,367.67
11	Project Total	\$630,354.00
12	Contingency at 10%	\$63,035.40
13	Project Total (with contingency)	\$693,389.40

American Fork 3 - Suburban Residential Infrastructure Analyses

0	ITEM/PROJECT	ESTIMATED
1	Total cost per mile	\$196,427.59
2	Distribution construction cost per mile	\$151,837.48
3	Distribution cost per mile (no drops)	\$132,473.46
4	Cost per building passed	\$2,215.30
5	Average cost of a drop, cost to connect after primary construction is completed	\$500.00



Attachment: AFFiber_cost_study (Market Study and Feasibility Report)



American Fork 4 - Mixed Industrial/Commercial/Residential Route Overview

0	ITEM/PROJECT	VALUE
1	Miles of Fiber / Conduit Installed	5.79
2	Number of Handholes Installed	29
3	Splice Closures Installed	25
4	Cabinets Installed	0
5	Homes passed	384
6	Number of Customers Connected	154
7	Take Rate - Percentage of the Buildings Passed who are connected with a drop and ONT	40%
8	Aerial - Percentage of construction labor expected to be installed on utility poles.	25%
9	Trenching - Percentage of construction installed by trenching (Mini-ex, bucket, hand dig, trencher).	40%
10	Boring - Percentage of construction installed by boring or other HDD methods.	35%
11	Slot Cutting - Construction installed in streets using diamond saws and similar specialty equipment.	0%
12	Rock Saw - Construction method used to install conduit in ROW where rock prevents the use of other methods.	0%
13	Direct Bury - Percentage of construction installed by direct bury methods (plow, vibratory plow,	0%
14	Aerial Info	40% Aerial Construction Estimated for this Neighborhood.
15	FOSCs	Fiber Optic Splice Closures (FOSCs) placed for every 16 buildings passed (16 drops to a FOSC, 4 to an MST). This area is a mixed PON and Active Ethernet construction estimate increasing the number of splices and fiber count in the overall model
16	Other Notes	Estimated labor rates are based upon common rates seen for recent medium sized rural projects.

Attachment: AFFiber_cost_study (Market Study and Feasibility Report)



American Fork 4 - Mixed Industrial/Commercial/Residential Cost Summary

0	ITEM/PROJECT	ESTIMATED
1	American Fork 4 - Mixed Industrial/Commercial/Residential Construction Materials	\$120,753.42
2	American Fork 4 - Mixed Industrial/Commercial/Residential Distribution Labor	\$432,498.89
3	American Fork 4 - Mixed Industrial/Commercial/Residential Structures, Cabinets, and Equipment	\$51,805.05
4	American Fork 4 - Mixed Industrial/Commercial/Residential Drop Construction	\$129,345.00
5	Network Construction Subtotal	\$734,402.36
6	Project Management, Network Engineering, Integration, and Testing	\$58,752.19
7	Engineering, Permitting	\$66,096.21
8	Misc Fees, Advertising, Technical Services	\$2,500.00
9	Bookkeeping and Administration	\$750.00
10	Other Costs Subtotal	\$128,098.40
11	Project Total	\$862,500.76
12	Contingency at 10%	\$86,250.08
13	Project Total (with contingency)	\$948,750.84

American Fork 4 - Mixed Industrial/Commercial/Residential Infrastructure Analyses

0	ITEM/PROJECT	ESTIMATED
1	Total cost per mile	\$163,860.25
2	Distribution construction cost per mile	\$126,839.79
3	Distribution cost per mile (no drops)	\$104,500.41
4	Cost per building passed	\$2,470.71
5	Average cost of a drop, cost to connect after primary construction is completed	\$1,000.00