



Agenda

City of Lucas Technology Committee Meeting February 12, 2019 7:00 PM

City Hall - 665 Country Club Road – Lucas, Texas

Notice is hereby given that a meeting of the Technology Committee will be held on Tuesday, February 12, 2019 at 7:00 pm at Lucas City Hall, located at 665 Country Club Road, Lucas, Texas 75002-7651 at which time the following agenda will be discussed.

Call to Order

- Roll Call
- Determination of Quorum
- Reminder to turn off or silence cell phones
- Pledge of Allegiance

Citizen Input

The Citizen Input portion of the agenda is an opportunity for the public to address the Technology Committee on any subject. By completing a "Request to Speak" form and submitting to the City Secretary, citizens have an opportunity to speak at the Technology Committee meeting. However, in accordance with the Texas Open Meetings Act, the Technology Committee cannot discuss issues raised or make any decisions but may refer items to City Staff for research and possible inclusion on a future agenda.

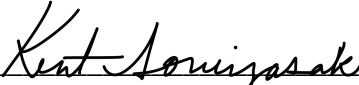
1. Citizen Input (**Technology Committee Chairman Paul Rathgeb**)

Regular Agenda

2. Consider approving the minutes of the January 24, 2019 Technology Committee meeting. (**City Secretary Stacy Henderson**)
3. Provide update on communication activities and community outreach. (**Technology Committee Member Mark Skaggs**)
4. Provide further insight into the 2018 Technology and Communication Survey Results. (**Technology Committee Member Mark Skaggs**)
5. Discuss the AT&T service map of the City of Lucas. (**Technology Committee Member Mark Skaggs**)
6. Consider setting specific goals for the Technology Committee. (**Technology Committee Member Mark Skaggs**)
7. Discuss the process of operating as a Technology Committee. (**Technology Committee Member Mark Skaggs**)
8. Adjournment.

Certification

I do hereby certify that the above notice was posted in accordance with the Texas Open Meetings Act on the bulletin board at Lucas City Hall, 665 Country Club Road, Lucas, TX 75002 and on the City's website at www.lucastexas.us on or before 5:00 p.m. on February 7, 2019.



Kent Souriyasak, Special Projects Coordinator

In compliance with the American with Disabilities Act, the City of Lucas will provide for reasonable accommodations for persons attending public meetings at City Hall. Requests for accommodations or interpretive services should be directed to Stacy Henderson at 972-912-1211 or by email at shenderson@lucastexas.us at least 48 hours prior to the meeting.



City of Lucas Technology Committee Request February 12, 2019

Requester: Technology Committee Chairman Paul Rathgeb

Agenda Item Request

Citizen Input

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA



City of Lucas Technology Committee Request February 12, 2019

Item No. 02

Requester: City Secretary Stacy Henderson

Agenda Item Request

Consider approving the minutes of the January 24, 2019 Technology Committee meeting.

Background Information

NA

Attachments/Supporting Documentation

1. January 24, 2019 Technology Committee minutes

Budget/Financial Impact

NA

Recommendation

NA

Motion

I make a motion to approve the minutes of the January 24, 2019 Technology Committee meeting.



City of Lucas
Technology Committee
Regular Meeting
January 24, 2019
7:00 PM

City Hall – 665 Country Club Road – Lucas, Texas
MINUTES

Call to Order

Councilmember Fisher called the meeting to order at 7:00 pm. It was determined that a quorum was present.

Committee Members Present:

Paul Rathgeb
Mark Skaggs
Trey Sleeper

City Staff Present:

City Secretary Stacy Henderson
Special Projects Coordinator Kent Souriyasak
Bill Baxter, City IT Consultant

Committee Members Absent:

George Brody
Dennis Scully

City Council Liaison Present:

Councilmember Debbie Fisher

Regular Agenda

Councilmember Fisher introduced herself, discussed her background, information pertaining to the Committee's responsibilities associated with the Open Meetings Act requirements, and the reasons why the Technology Committee was formed. Councilmember Fisher had each Committee member introduce themselves and discuss their technology background.

- 1. Appoint Chairman and Vice Chairman of the Technology Committee to serve for a period of one (1) year with a term ending December 31, 2019.**

MOTION: Committee Member Paul Rathgeb volunteered to serve as Chairman of the Technology Committee. Committee Member Sleeper seconded the motion to appoint Paul Rathgeb as Chairman of the Technology Committee to serve for a period of one (1) year with a term ending December 31, 2019. The motion passed unanimously by a 3 to 0 vote.

MOTION: Committee Member Trey Sleeper volunteered to serve as Vice Chairman of the Technology Committee. Committee Member Skaggs seconded the motion to appoint Trey Sleeper as Vice Chairman of the Technology Committee to serve for a period of one (1) year with a term ending December 31, 2019. The motion passed unanimously by a 3 to 0 vote.

2. Establish a recurring meeting schedule for the Technology Committee.

The Committee discussed holding monthly meetings and eventually moving to quarterly meetings.

MOTION: A motion as made by Committee Member Skaggs, seconded by Vice Chairman Sleeper to hold Committee meetings the second Tuesday of each month at 7pm in the Council Chambers. The motion passed unanimously by a 3 to 0 vote.

3. Discuss the Technology Committee's mission, the future of internet connectivity technology, and the City of Lucas' current standing regarding internet connectivity.

Bill Baxter, IT Consultant for the City of Lucas explained that he was also the Chairman of the Technology Committee at the Town of Fairview that shared similar internet restraints. Mr. Baxter shared some of the experiences that Fairview had also been facing and explained that Fairview continually invited representatives from the internet providers to their meetings to encourage participation and ways in which they could assist in providing better connectivity, and suggested Lucas do the same. Mr. Baxter stated that Lucas must stay in front of the internet service providers at all times in order to assist in moving forward their efforts. Mr. Baxter stated that more information was needed from the citizens and suggested the Committee concentrate on a particular zone and conduct a survey, finding out what internet service provider were in that area, and what the future looked like for that area.

The Committee discussed with Councilmember Fisher ways in which to reach out to residents and suggested starting with contacting the HOA President of neighborhoods to reach out to their community and also invite them to the Technology Committee meetings.

Committee Member Skaggs volunteered to contact the HOA in Zone 1 and begin discussions.

The Committee discussed with Mr. Baxter ways in which to work with the various internet providers and different approaches that could be taken.

Chairman Rathgeb recapped the following action items from this meeting:

- Special Projects Coordinator Kent Souriyasak would be sending HOA information to Committee members.
- Committee Member Skaggs would contact HOA's to assist with gathering information for their particular zone of the City.
- Chairman Rathgeb would write a newsletter article for the March edition getting information out about the Technology Committee
- Councilmember Fisher would be conducting research to find out what companies were located within the City's rights-of-way.
- Committee Member Skaggs would attempt to locate a dark fiber map of the City.

4. Adjournment.

MOTION: A motion was made by Chairman Rathgeb, seconded by Committee Member Skaggs to adjourn the meeting at 8:05 pm. The motion passed unanimously by a 3 to 0 vote.

Paul Rathgeb, Chairman

Stacy Henderson, City Secretary



City of Lucas Technology Committee Request February 12, 2019

Requester: Technology Committee Member Mark Skaggs

Agenda Item Request

Provide update on communication activities and community outreach.

Background Information

At the January 24, 2019 meeting, the Technology Committee discussed various ways of reaching out to Lucas residents and inviting them to the Technology Committee meetings. The purpose of the community outreach is to acquire more feedback and information regarding internet service for each specific residential area, subdivision, and neighborhood.

Committee Member Mark Skaggs volunteered to reach out to the community in order to encourage residents to attend the meetings and provide more feedback for the Technology Committee. The communication efforts include:

1. Sharing upcoming meeting dates on Nextdoor, Facebook, and at Homeowners Associations' meetings.
2. Researching primary contacts of all the Homeowners Associations in the City of Lucas.
3. Recruiting Lucas residents to volunteer with the Technology Committee to help research more information on potential opportunities to improve internet service.

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

There is no motion required, this is a discussion only.



City of Lucas

Technology Committee Request

February 12, 2019

Requester: Technology Committee Member Mark Skaggs

Agenda Item Request

Provide further insight into the 2018 Technology and Communication Survey results.

Background Information

The 2018 Technology and Communication Survey was available electronically and in paper form to residents from September 24 through October 19. The survey was designed to explore strategies to address deficiencies and identify solutions to technology-related services available to Lucas residents. The survey results were presented at the November 1, 2018 City Council Meeting where the City Council approved to establish an ad hoc Technology Committee.

Committee Member Mark Skaggs requested from City Staff to view and analyze the technology section of the survey submissions. The purpose is to obtain further insight from the resident comments, satisfaction and dissatisfaction, and Internet Service Provider information per zone. By re-entering the technology section of the survey results, Committee Member Mark Skaggs will provide the Technology Committee with further information regarding the survey data and commonality from the resident comments.

Attachments/Supporting Documentation

1. More Learning from the Fall 2018 Internet Survey

Budget/Financial Impact

NA

Recommendation

NA

Motion

There is no motion required, this is a discussion only.

More learning from the Fall 2018 Internet Survey

Mark Skaggs, Lucas Tech Committee, Feb 5 2019

Getting more insights out of the existing survey data

Problem: Original data was collected and grouped together making it difficult to get further insight.

Solution:

1. Re-enter the internet section of the paper surveys question by question, including all comments.
(note: still need raw online survey data to do the same)
2. Break down all of the comments including random notes in each paper survey to create a summary to better know what is on people's minds.

Results

1. We can now see data like:

- a. “How many people in Zone 1 have AT&T Fiber and are dissatisfied?”
- b. “How is AT&T doing compared to Frontier in terms of satisfaction across the city?”
- c. “What is the breakdown of speeds reported by people in Saddlebrook Estates?”

2. We also can answer questions like:

- a. What are the top 3 topics that came up most often in the written comments?
- b. Which areas of the city shared the most comments?
- c. How many people shared that poor internet is negatively affecting living in Lucas or moving to Lucas?
- d. How many people asked the city to help out on this topic vs how many people thanked the city for looking into this topic?

Soon

Coming soon....

1. Option to map the comment topics to the areas of the city.

See if there's more the data can tell us

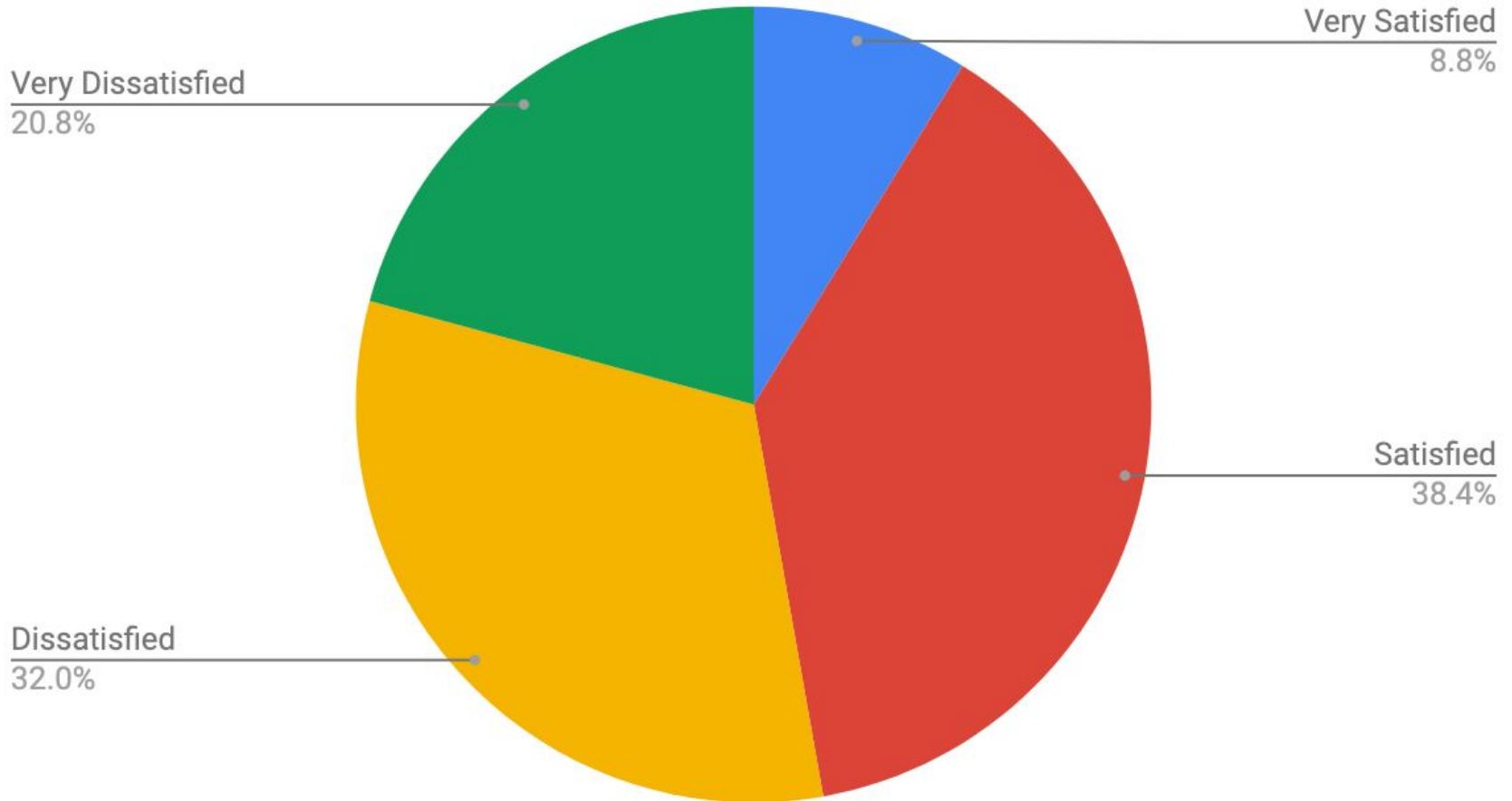
Easy to assume “Fiber solves everything”

More likely “One size doesn't fit all” and we'll need multiple approaches

(caveat being data over electrical grid)

Dig into the data to see what our residents are REALLY saying

Satisfaction with Internet across the City of Lucas



That's lots of dissatisfaction

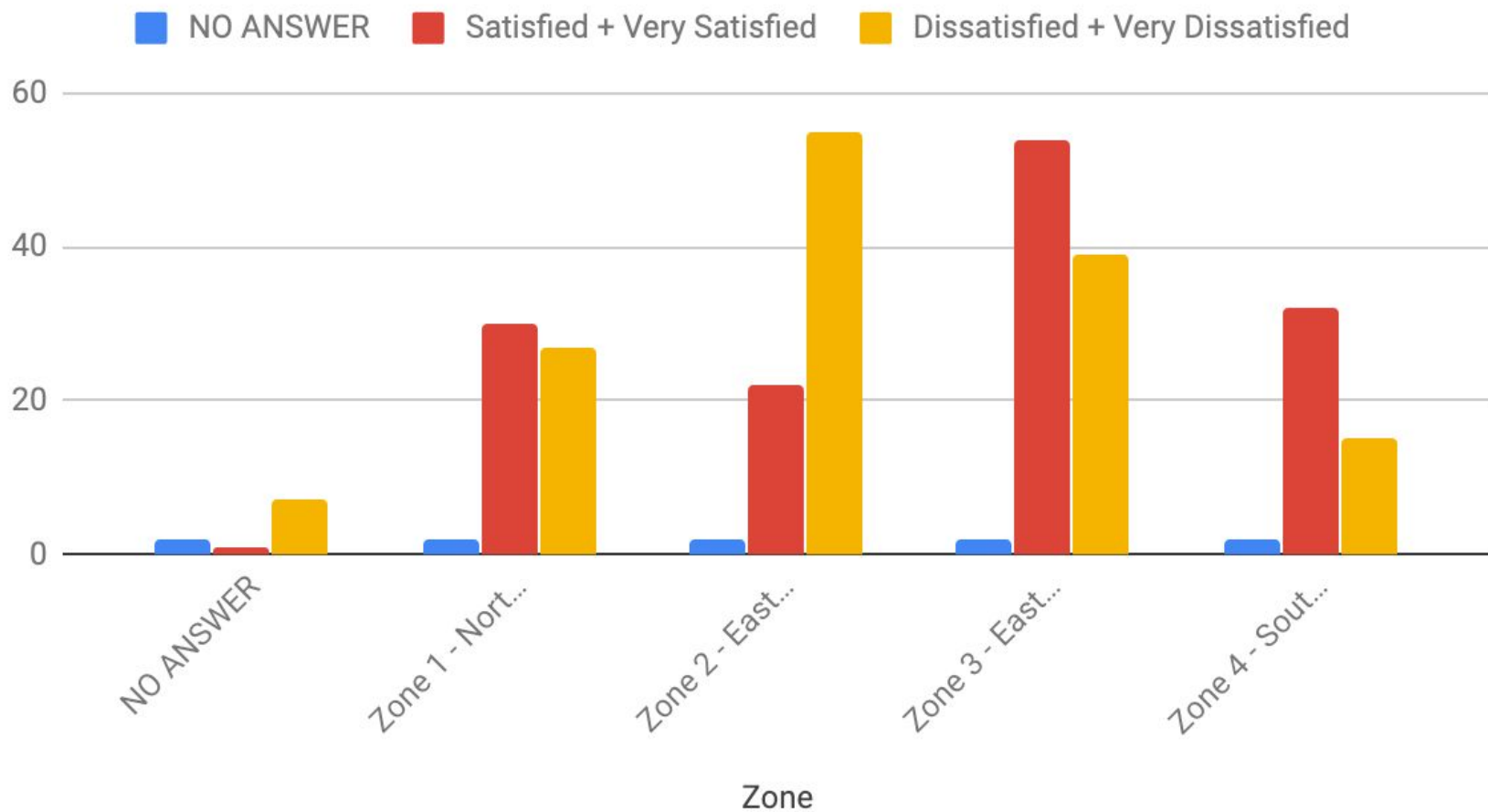
Combined approach to changing this:

1. Raise the average satisfaction by eliminating the dissatisfaction.
2. Find what is causing satisfaction and add more

Find out:

1. Who specifically is happy and why?
2. Who specifically is unhappy and why?
3. What do the comments tell us?

Satisfaction by Zone



What we see per Zone

- Zone 4 has the best ratio of satisfaction to dissatisfaction (2.1 : 1)
- Zone 3 is next (1.4 : 1)
- Zone 1 is about 50/50 (1.1 : 1)
- Zone 2's ratio is definitely a problem (0.4 : 1)

Check on how 3 elements affect satisfaction per Zone

1. Speed
2. Delivery mechanism
3. Provider

Speed

- We logically know “more speed = better” because you can stream more movies, work from home, play games etc.
- The survey data shows a shift from “dissatisfaction” to “satisfaction” between 20MB and 100MB.
- Causal or correlated? I know from personal experience going from 5mps to 25mps was directly correlated to my satisfaction. I think it’s safe to assume the same for others.

Satisfaction based on Internet Speed

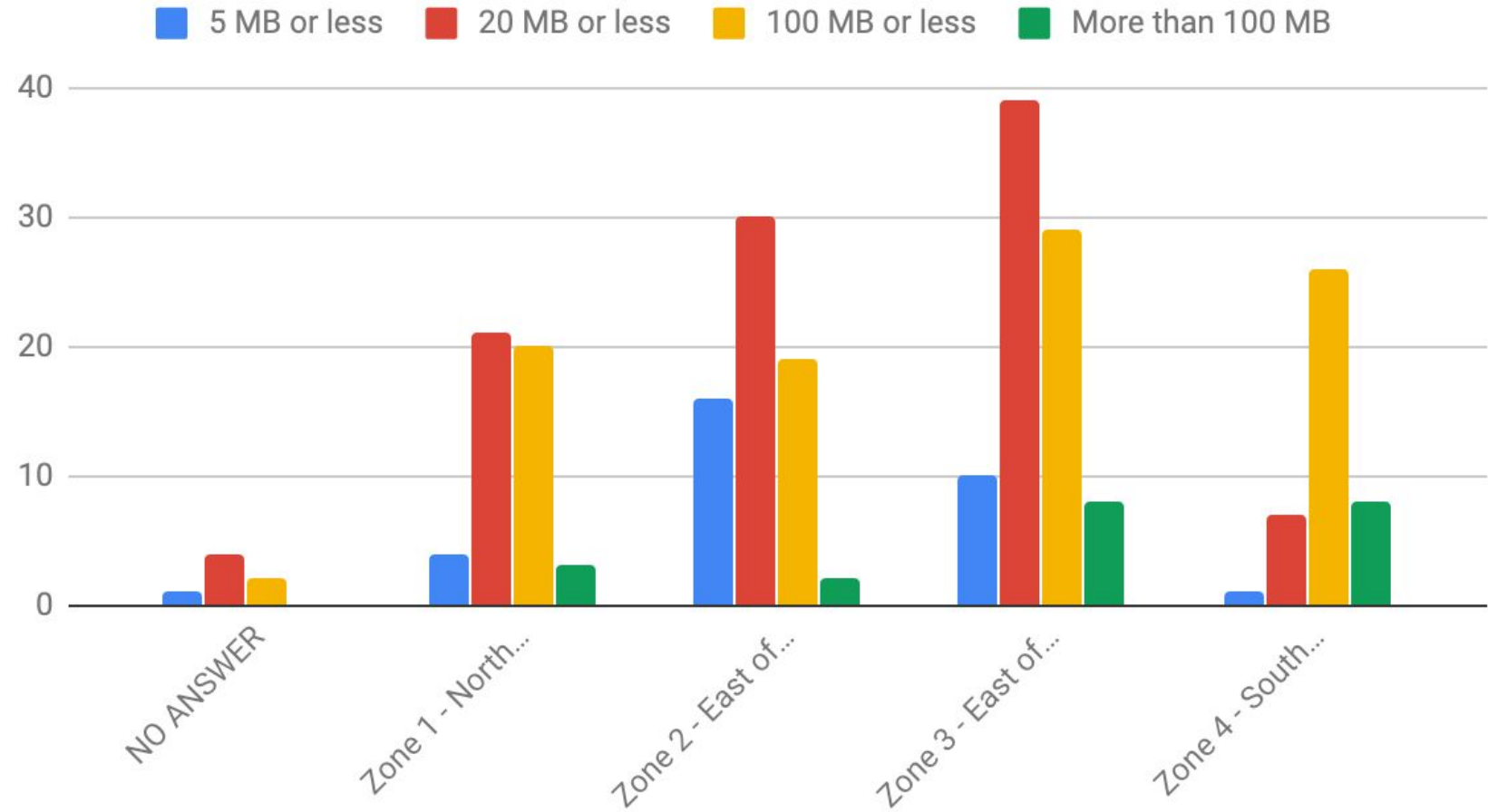
— Satisfied + Very Satisfied — Dissatisfied + Very Dissatisfied



1. Speeds per Zone

- Check how the <20MB numbers compare to the >20MB
- Confirm “more speed is better”

Internet Speed By Zone



Look at the Speeds per Zone

Look at ratio of “> 20MB” vs “<20MB” per zone

- Zone 4 ratio is 4.25 to 1
- Zone 3 is .76 to 1
- Zone 1 is .92 to 1
- Zone 2 is .45 to 1

Zones 3 and 1 are similar;

Zone 2 supports that there is a negative experience under the cross over point(<20MB).

Conclusion on Speed

Obviously more speed is better....

....AND we likely can improve overall satisfaction if we push ISPs to offer more services on the positive side of the crossover point between 20MB and 100MB.

Be Aware: that crossover point will keep going higher and higher as time progresses, especially as video, streaming, and cord cutting become the standard.

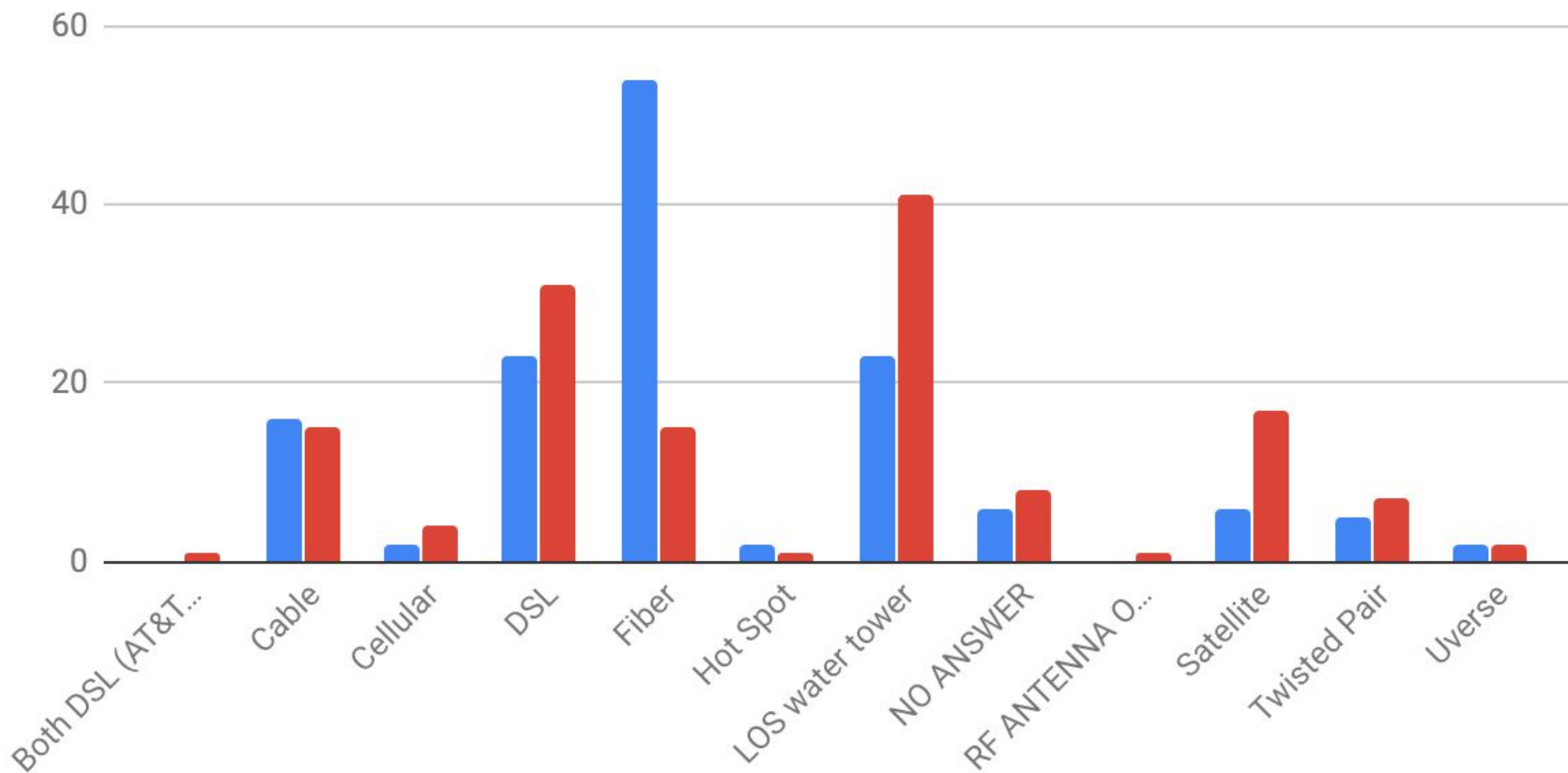
2. Delivery mechanism and satisfaction

We all talk about Fiber as the answer because we equate it with speed and reliability.

What else can we see in the data?

Satisfaction Based on Delivery Type

■ Satisfied + Very Satisfied ■ Dissatisfied + Very Dissatisfied

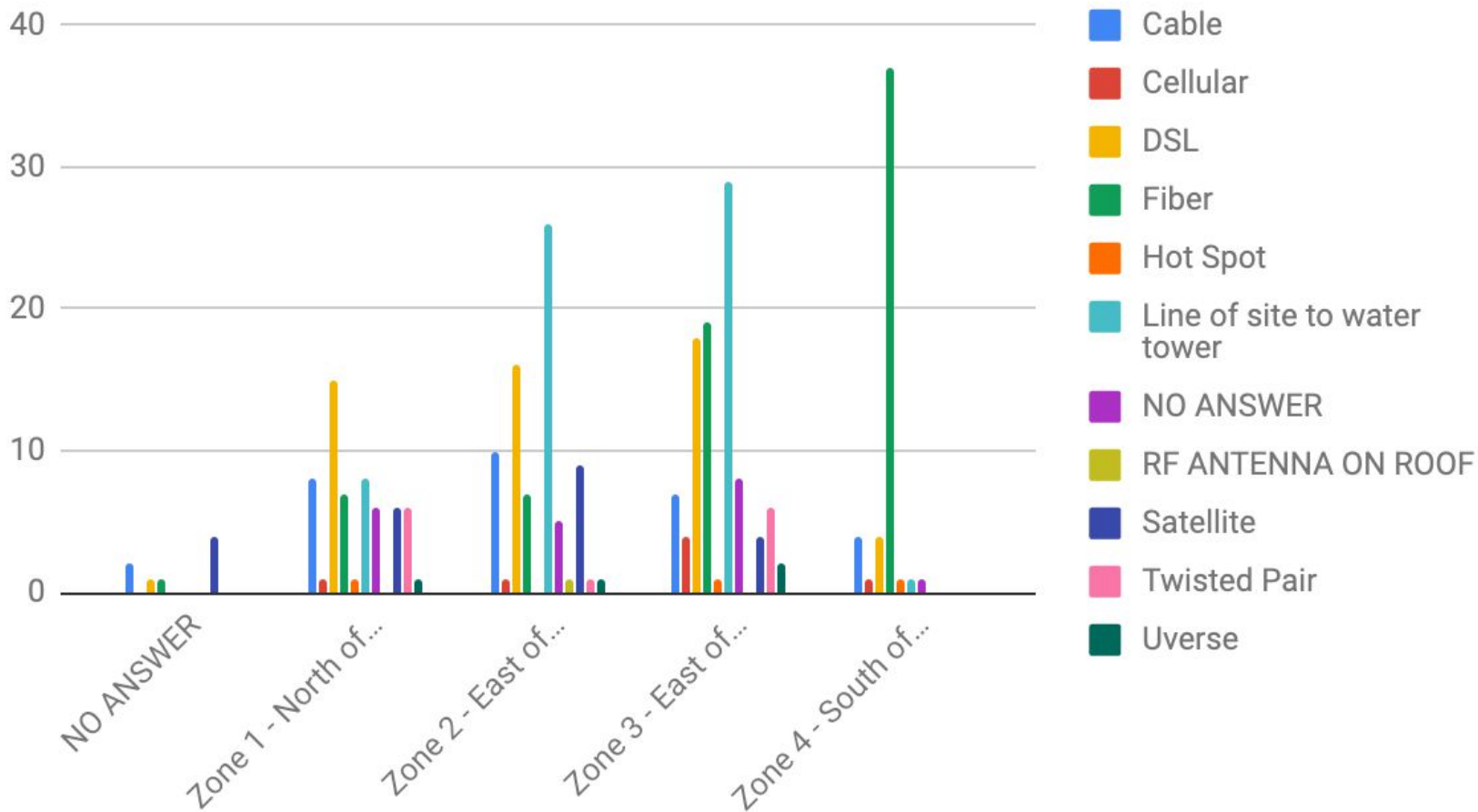


Speed and Reliability

- Fiber kills it for satisfaction.
- Cable is about 50/50.
- Fiber and Cable also tend to be more trouble free.
- Then things go negative on DSL, RF to the Tower, Satellite, etc.

What does the data show for each zone?

Delivery Type by Zone



Fiber good, “LOS to tower” bad

Fiber in Zone 4 FTW!

Zone 3 has Fiber but also a heavy dose of “LOS to tower”.

Zone 2 gets dragged down by the “LOS to tower”

Zone 1 is mixed and heavier on DSL

Conclusion on Delivery type

Fiber for everyone would be great, but can we improve significantly by upgrading “LOS to tower” in the meantime?

Could it provide a BIG win the the people with the least connectivity?

3. Provider

The different providers are associated with their technology.

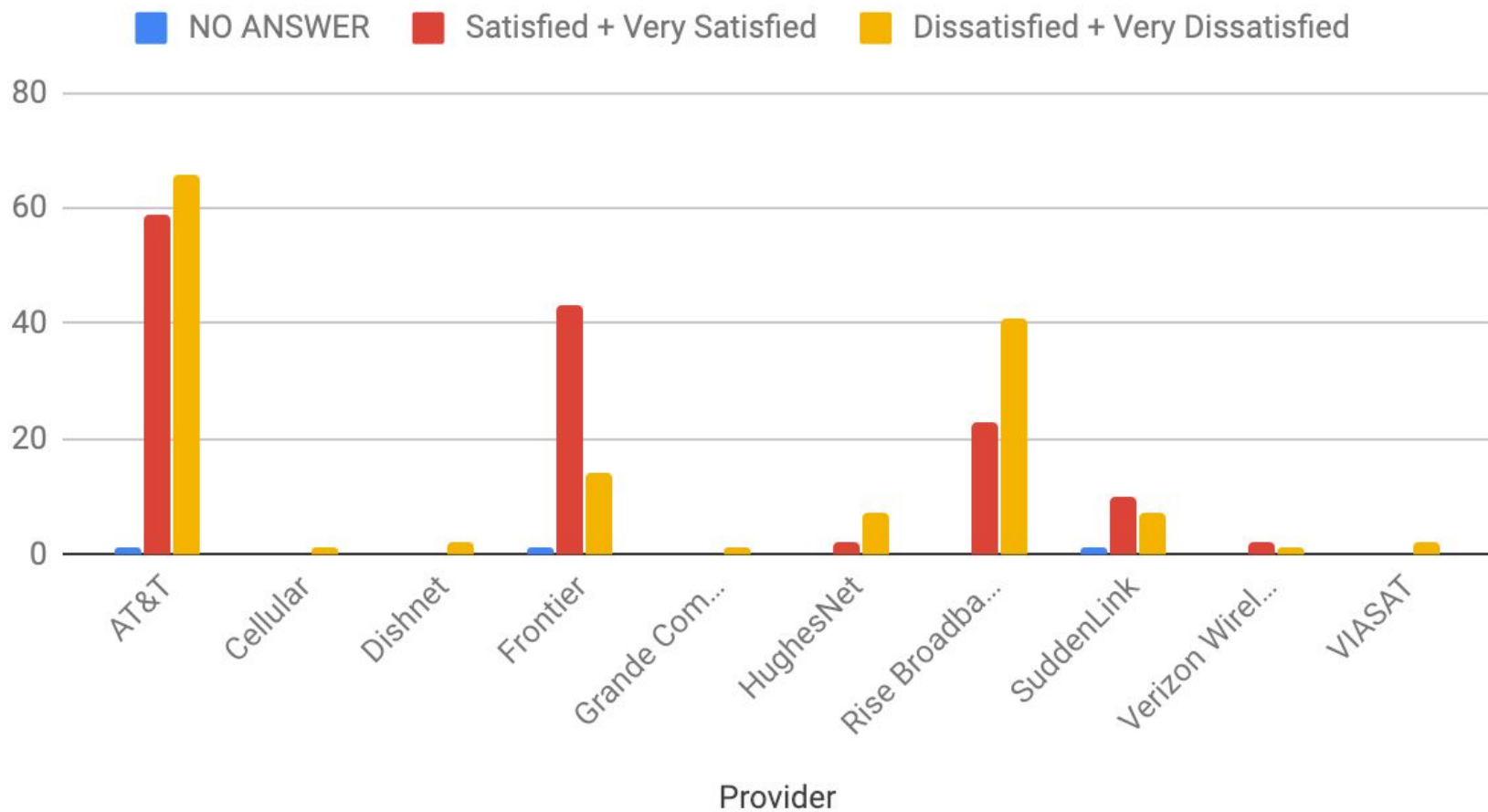
HughesNet = Satellite

Rise = LOS to Tower

Frontier = fiber

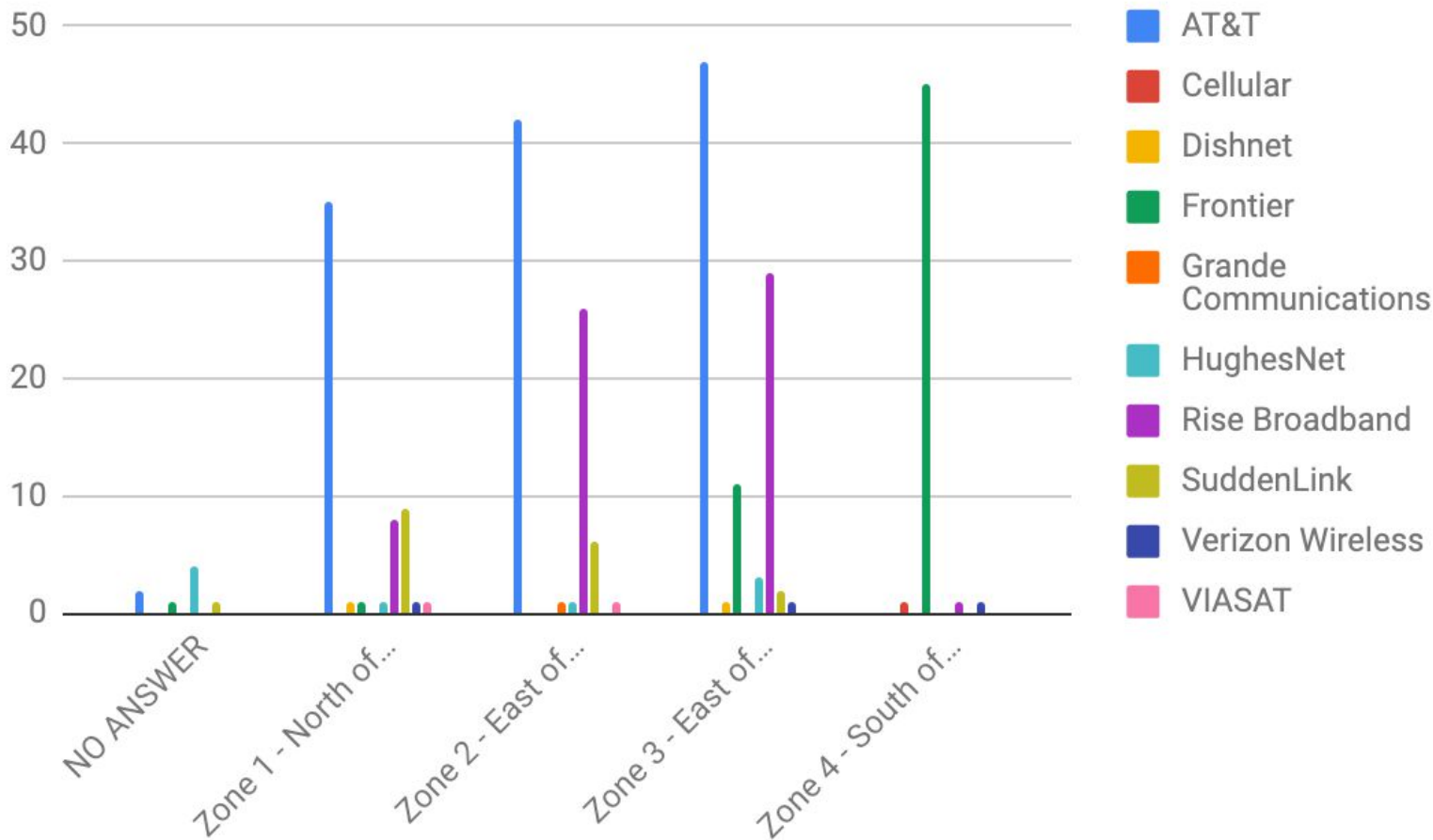
No surprises in the data.

Satisfaction by Provider



How does it look by Zone?

Provider by Zone



AT&T serves a lot of our residents

Happy Zone 4 is full of Frontier and Fiber

A little Frontier in Zone 3 helps make up for the “LOS to tower” from Rise

Zone 1 benefits from AT&T but doesn't get much win from fiber

Zone 2 pays the price of having to use Rise

Conclusions on Providers

AT&T serves 43.2% of the responders*

Rise serves 21.9%

Frontier serves 19.9%

At 84.9%, these 3 companies are the leverage points for improving existing service in the city.

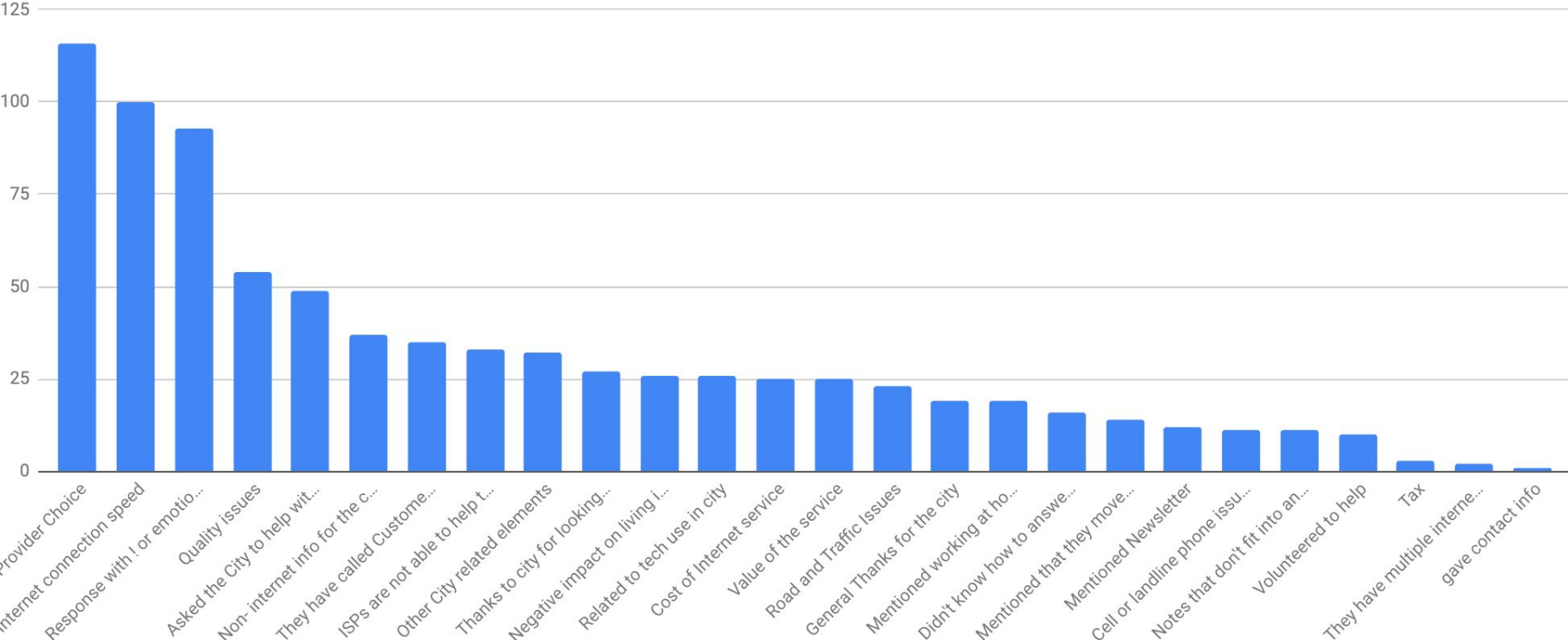
*Note: Corroborated by The AT&T service map we built showing they service 42.78% of the addresses in Lucas

What about all the written comments?

Read through all the comments and coded each one against 31 topics.

Topics like speed, choice, quality, cost, negative effects of poor internet on living here, asking the city for help, expressing emotion and thanks, plus other non-internet related issues (roads).

Break down of written comments from Fall 2018 Survey



Top 10 topics

#	TOPIC	# comments	%
1	Provider Choice	116	53.5%
2	Internet connection speed	100	46.1%
3	Response with ! or emotion words	93	42.9%
4	Connection Quality issues	54	24.9%
5	Asked the City to help with the internet problem	49	22.6%
6	Non- internet info for the city	37	17.1%
7	They have called Customer Service	35	16.1%
8	ISPs are not able to help them	33	15.2%
9	Other City related elements	32	14.7%
10	Thanks to city for looking at internet problem	27	12.4%

Wrap up Part 1

More than ½ the city is dissatisfied.

Residents are energized, want choice, speed, quality and are asking the city for help.

The data confirms what we instinctively know, i.e. speed and fiber win. Reliability too.

Also “one size might not fit all” in terms of solutions.

Wrap up part 2

Fiber is associated with speed, and reliability, and Frontier.

LOS to Tower is associated problems and Rise.

AT&T with it's mixed services is in the middle, but serves 2x the customers

It will likely take multiple approaches to improve satisfaction dramatically and quickly.

3 leverage points to turn around satisfaction are:

- Pushing past the crossover point between 20MB and 100MB
- The 3 companies that serve 84.9% of the responders
- Fixing LOS to Tower speed and reliability

Next Steps

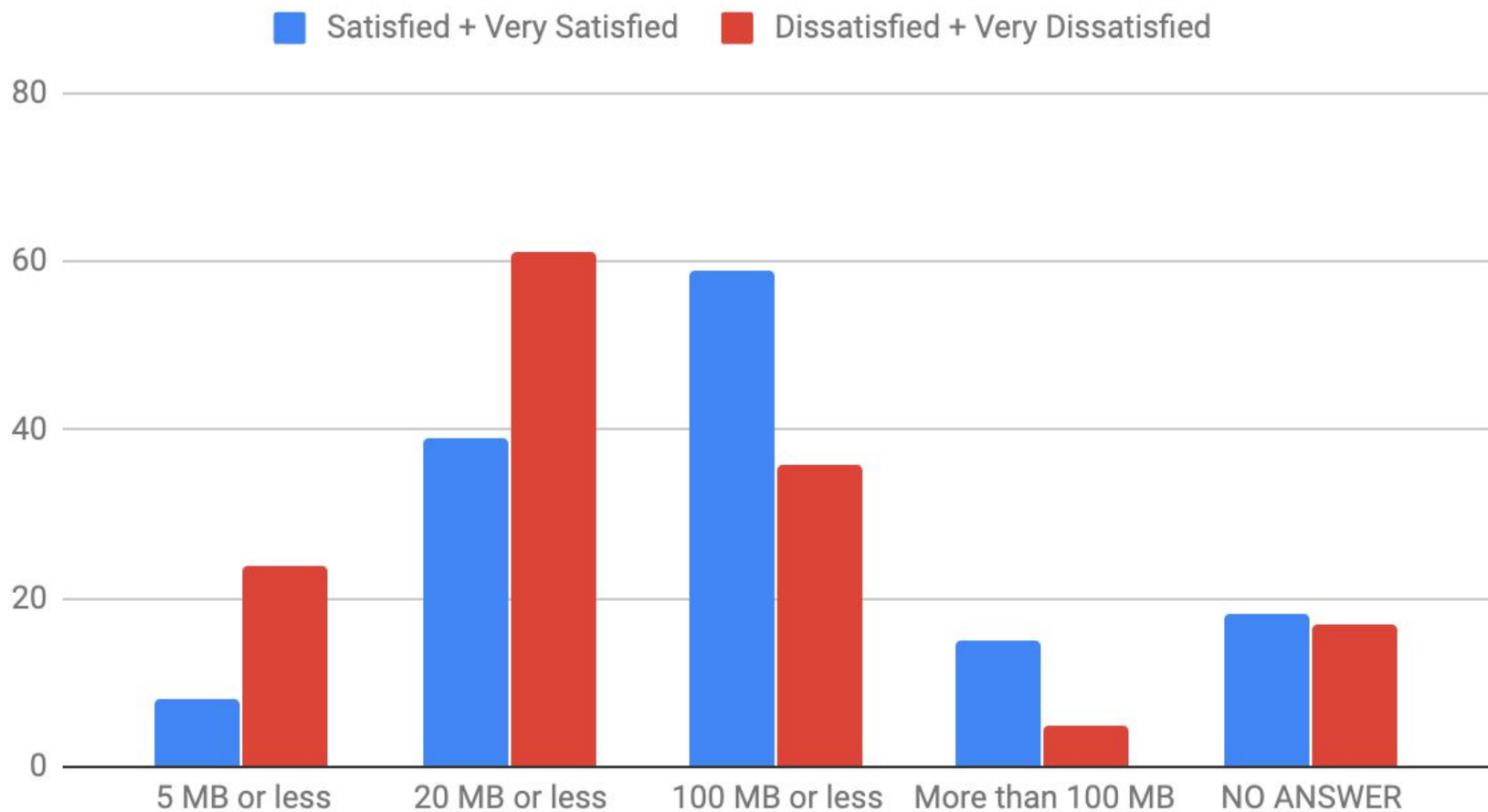
Within the context of our goals and published roadmap:

1. Set a goal for “Resident Satisfaction” taking into account the “crossover point”
2. Dig into the leverage points, gather info on how other small cities solve this issue (electric coop)
3. Recruit more help from residents
4. Work with City Council to:
 - a. Ensure all new development has strong internet
 - b. Understand existing agreements with ISPs wrt exclusivity
 - c. Know what we can leverage wrt existing infrastructure and government regulations, etc

Appendix

Additional data

Satisfaction based on Internet Speed





City of Lucas

Technology Committee Request

February 12, 2019

Requester: Technology Committee Member Mark Skaggs

Agenda Item Request

Discuss the AT&T service map of the City of Lucas.

Background Information

In order to provide the Technology Committee with more information on internet service in the City of Lucas, Committee Member Mark Skaggs has researched and prepared an AT&T service map of subdivisions and neighborhoods. Committee Member Mark Skaggs recruited Lucas resident James Hallock of Claremont Springs to assist in creating the AT&T service map of Claremont Springs, surrounding neighborhoods, and the City. The service map reveals the internet speeds that AT&T services across the City of Lucas. This is intended to be a useful tool for the Technology Committee to develop plans in improving internet service. The service map will also be made available to the public so Lucas residents can be informed of the max speed that is offered at their residential location.

Attachments/Supporting Documentation

1. Mapping Internet Speeds: AT&T

Budget/Financial Impact

NA

Recommendation

NA

Motion

There is no motion required, this is a discussion only.

Mapping Internet Speeds: AT&T

Mark Skaggs, Feb 5, 2019

Building AT&T service maps of Lucas

- Recruited James Hallock of Claremont Springs to re-run his AT&T service script on Claremont Springs, surrounding neighborhood and then the city as a whole.
- We have a list of addresses and max service AT&T offers and they can be loaded into a Google map for a visual representation.
- Some early notes from Claremont Springs that some are not getting the speed they're paying for. Too early to draw conclusions.

AT&T in Lucas

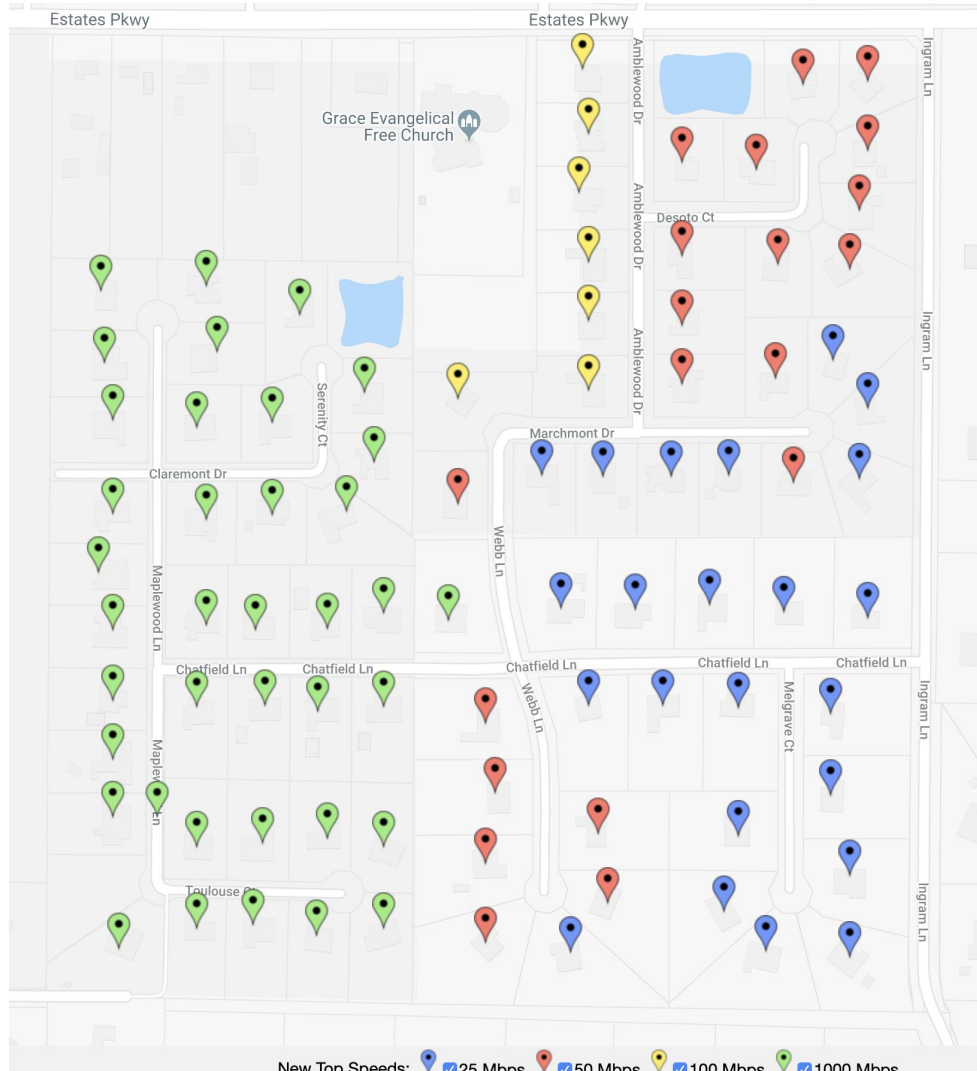
Total Locations in Lucas	2751
Total Locations With	
Service	1177
No Service	1574
% of city serviced by AT&T	
42.78%	

Max Speed	# locations	% of total
1.5	89	7.6%
5	117	9.9%
10	148	12.6%
18	62	5.3%
25	347	29.5%
50	251	21.3%
75	41	3.5%
100	32	2.7%
1000	77	6.5%
768 Kbps	13	1.1%

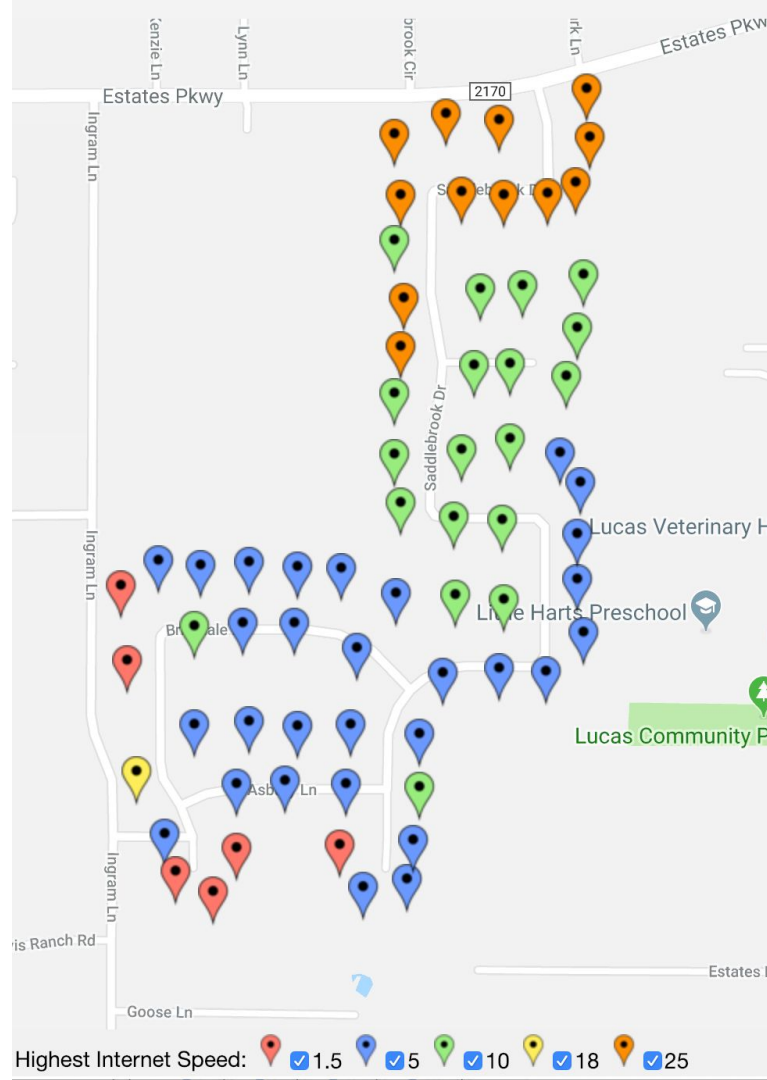
Street	Highest Internet Speed	city	state	zip
612 MELGRAVE CT	25	Lucas	Texas	75002
705 WEBB LN	50	Lucas	Texas	75002
1818 DESOTO CT	50	Lucas	Texas	75002
1814 DESOTO CT	50	Lucas	Texas	75002
1804 DESOTO CT	50	Lucas	Texas	75002
1800 DESOTO CT	75	Lucas	Texas	75002
1801 DESOTO CT	50	Lucas	Texas	75002
1805 DESOTO CT	50	Lucas	Texas	75002
1809 DESOTO CT	50	Lucas	Texas	75002
1813 DESOTO CT	50	Lucas	Texas	75002
810 AMBLEWOOD DR	50	Lucas	Texas	75002
806 AMBLEWOOD DR	50	Lucas	Texas	75002
802 AMBLEWOOD DR	50	Lucas	Texas	75002
1810 MARCHMONT DR	50	Lucas	Texas	75002
1806 MARCHMONT DR	25	Lucas	Texas	75002
1802 MARCHMONT DR	25	Lucas	Texas	75002
1803 MARCHMONT DR	50	Lucas	Texas	75002
1807 MARCHMONT DR	50	Lucas	Texas	75002
1811 MARCHMONT DR	25	Lucas	Texas	75002
1815 MARCHMONT DR	25	Lucas	Texas	75002
1819 MARCHMONT DR	25	Lucas	Texas	75002
1823 MARCHMONT DR	25	Lucas	Texas	75002
709 WEBB LN	100	Lucas	Texas	75002
803 AMBLEWOOD DR	100	Lucas	Texas	75002
807 AMBLEWOOD DR	100	Lucas	Texas	75002
811 AMBLEWOOD DR	100	Lucas	Texas	75002
901 AMBLEWOOD DR	100	Lucas	Texas	75002
905 AMBLEWOOD DR	100	Lucas	Texas	75002
909 AMBLEWOOD DR	100	Lucas	Texas	75002
1816 CHATFIELD LN	25	Lucas	Texas	75002
2020 CHATFIELD LN	1000	Lucas	Texas	75002

Neighborhood Visualizations

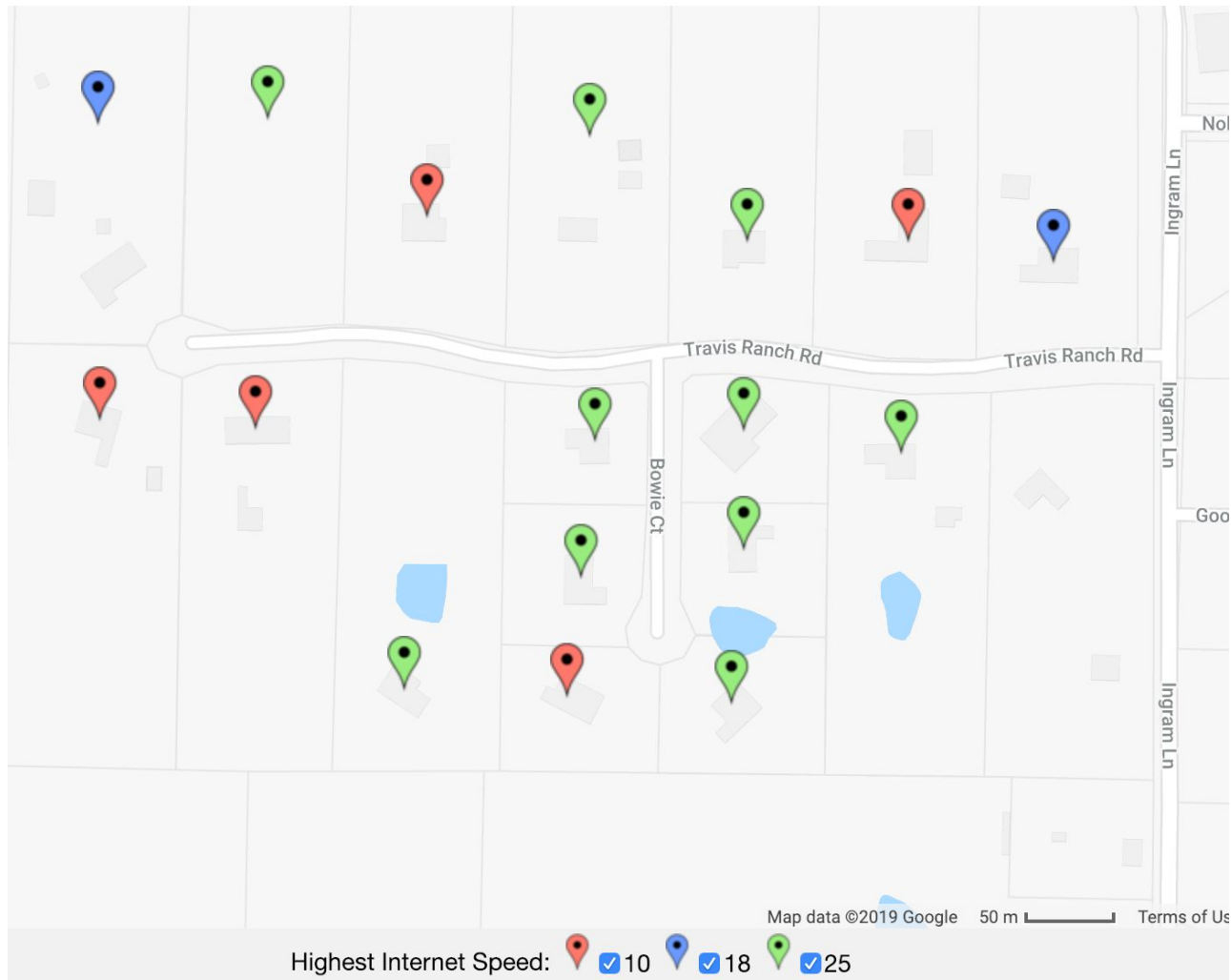
Claremont Springs



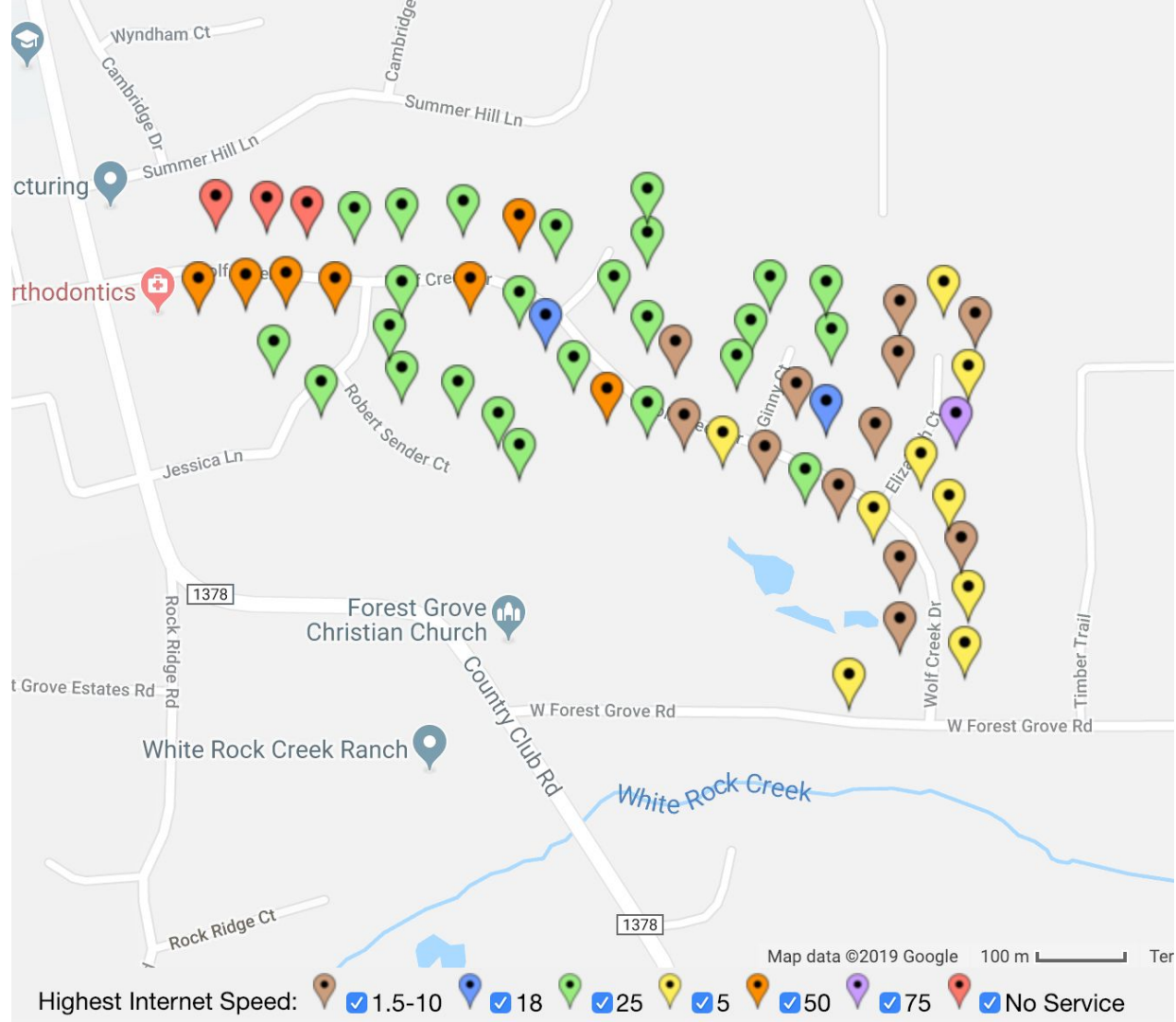
Saddlebrook



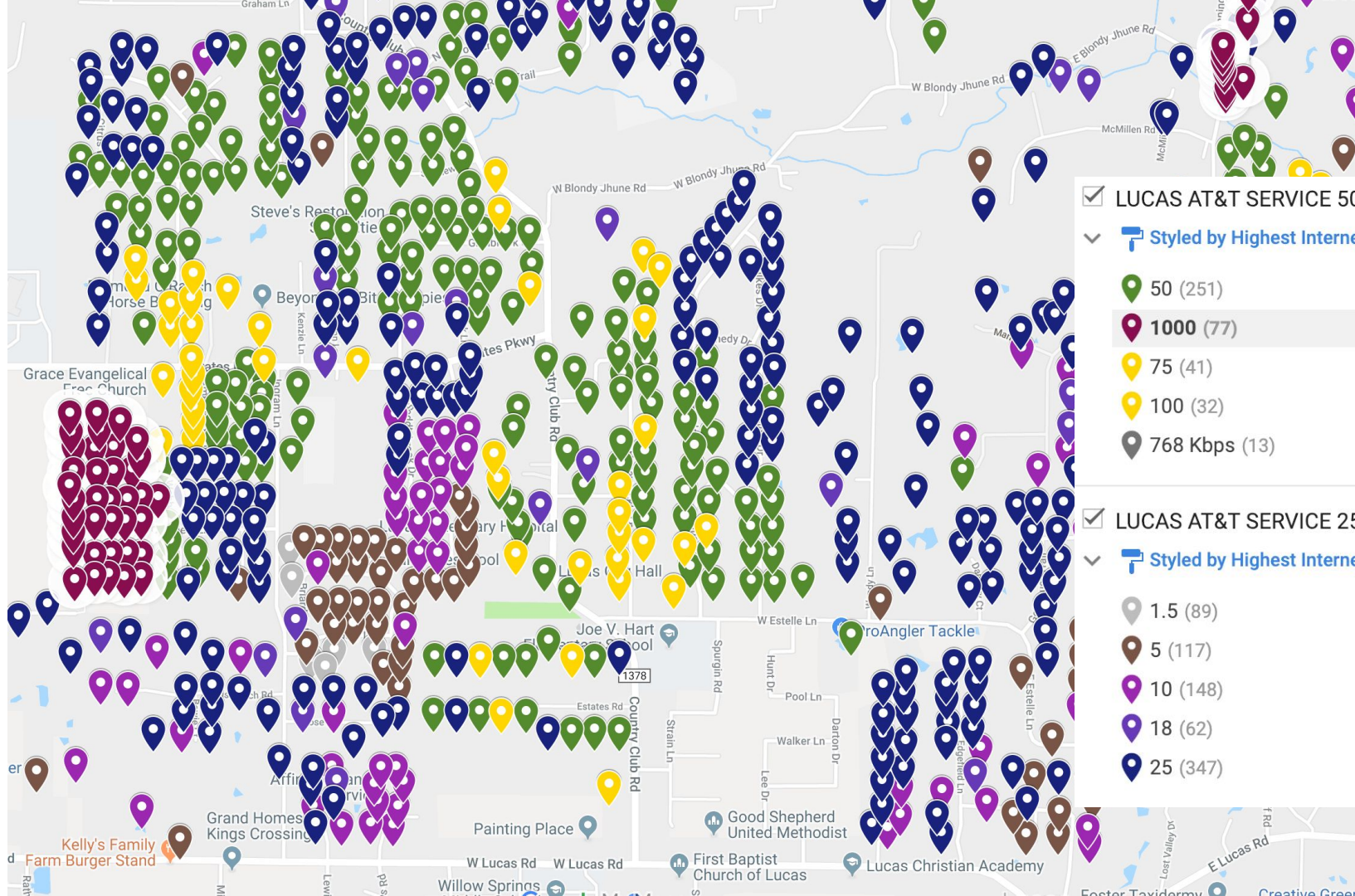
Travis Ranch



Wolf Creek



Putting All of Lucas on one map is confusing



LUCAS AT&T SERVICE 50MB OR H... ⋮

Styled by Highest Internet Speed

- 50 (251)
- 1000 (77)
- 75 (41)
- 100 (32)
- 768 Kbps (13)

LUCAS AT&T SERVICE 25MB OR L... ⋮

Styled by Highest Internet Speed

- 1.5 (89)
- 5 (117)
- 10 (148)
- 18 (62)
- 25 (347)

Conclusion

The speed map for what AT&T serves across the city is a useful tool in knowing where AT&T is, as we plan on how to improve Internet across Lucas.

It's also useful for residents to know the max speed offered at their location as well as checking to make sure they're actually getting the bandwidth they are paying for.



City of Lucas

Technology Committee Request

February 12, 2019

Requester: Technology Committee Member Mark Skaggs

Agenda Item Request

Consider setting specific goals for the Technology Committee.

Background Information

In order to develop plans to improve internet service in the City of Lucas, it is important for the Technology Committee to consider setting specific goals. By developing short- and long-term goals, it will help the Technology Committee stay focused on accomplishing assignments throughout the year. Worthwhile goals can help create a sense of mission for the Technology Committee to identify and address priority concerns. Goals can be revisited and prioritized throughout the year to ensure each goal can be accomplished within a reasonable amount of time and assistance.

As revealed in the 2018 Technology and Communication Survey Results, more than 50% of the residents who submitted the surveys were dissatisfied with their internet service. Achieving resident satisfaction regarding internet service should be considered a primary goal for the Technology Committee. In order to achieve this goal, devising a strategic plan to improve resident satisfaction and internet service should also be taken into consideration.

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

Technology Committee Member Mark Skaggs recommends that the Technology Committee develop a strategic plan by the end of 2019 to increase residential internet speeds and improve resident satisfaction within two years.

Motion

I make a motion that the Technology Committee will develop a strategic plan by the end of 2019 to increase residential internet speeds and improve resident satisfaction within two years.



City of Lucas

Technology Committee Request

February 12, 2019

Requester: Technology Committee Member Mark Skaggs

Agenda Item Request

Discuss the process of operating as a Technology Committee.

Background Information

As a committee, it is important to understand how to move quickly on resolving the issues of internet service in the community. In order to formulate goals and plans, committee members should consider how to operate as a committee. For Technology Committee members to be accountable in accomplishing tasks and goals, there should be clarity regarding the process of how the committee operates. This is to ensure the committee is operating efficiently and effectively to resolve concerns of internet service. By creating an outline of planned activities and responsibilities, each committee member can provide feedback and insights at the Technology Committee meetings.

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

There is no motion required, this is a discussion only.