



Presentation Item 1

Receive a presentation regarding Community Broadband services and provide direction to the City Manager.



City of San Marcos

City Council Work Session

Community Broadband

August 17, 2021



Purpose

Seeking Council direction on how the City can assist in providing citizens affordable, accessible and reliable internet services.



Agenda

- Today we will review the following:
 - Brief overview of how broadband is defined
 - Current service availability
 - Review other programs and initiatives
 - Considerations for Council
 - Hold discussion and provide direction



Definition of Broadband

- Broadband is the technology of transmitting data in a continuous flow over a wired or wireless internet connection
- **Federal Communication Commission (FCC) defined broadband speed** is a minimum of 25 Mbps download and 3 Mbps upload



Current City Services

Fiber

- In 2000, the City signed a franchise agreement with Grande Communication for 12 strands of dark fiber to connect city facilities.
- In 2018 the City contracted for a Master Fiber Plan to connect City facilities, critical infrastructure, and field assets.
- Project is funded by General, Water, and Electric capital improvement project funds.
- Started fiber installation in 2020.



Current City Services

Wireless

- All city facilities provide public wireless access
- In 2014 public wireless was installed to provide internet service in Rio Vista park, San Marcos Plaza, Veramendi Park, and City Park
- Two city owned cellular towers have been installed to services City owned field assets – City Cemetery and new Public Service Complex
- American Recue Funds have been approved by Council to expand public wireless access at the Library and in city parks



San Marcos Internet Services

- Currently 8 internet providers servicing San Marcos
- San Marcos is the 39th most connected city in Texas
- Less than 6.3% of consumers in San Marcos only have access to 1 or fewer wired provider
- The average download speed in San Marcos is 127Mbps.

Source of information -- BroadbandNow.com

Study performed in 2021- This data is calculated from FCC datasets which providers are legally required to supply twice a year.



San Marcos Internet Services

Types of Available services:

- Digital Subscriber Line (DSL): Slow, reliable, and often the most affordable.
- Cable: A balance of speed and value.
- Fiber: Limited availability, fast speeds, and higher pricing.
- Wireless – LTE, Point to Point, or Satellite

Source of information -- BroadbandNow.com

Study performed in 2021- This data is calculated from FCC datasets which providers are legally required to supply twice a year.

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San Marcos Internet Services

ISP	Service Type	Availability	Speed up to
Century Link	DSL	92.7%	100mbps
Century Link	Fiber	43%	940mbps
Spectrum	Cable	95.1%	1,000mbps
Grande	Cable	68.5%	940mbps
Grande	Fiber	*Information not available	1,000mbps
Rise Broadband	Line of site Wireless	60.3%	50mbps
Viasat	Satellite	100%	100mbps
Hughesnet	Satellite	100%	25mbps
Ranch Wireless	Wireless	100%	25mbps
VTX1	Wireless	100%	6-30mbps

Source of information – Broadbandnow.com

This data is calculated from FCC datasets which providers are legally required to supply twice a year.



San Marcos Internet Services

ISP	Service Type	Cost	Speed
Century Link	DSL	\$50.00	100mbps
Century Link	Fiber	\$65.00	940mbps
*Spectrum	Cable	\$18-\$110	30-1,000mbps
**Grande	Cable	\$10-\$65	25-940mbps
Grande	Fiber	\$89.00	940Mbps
Rise Broadband	Line of site Wireless	\$35.00	Up to 25mbps
Viasat	Satellite	\$70.00	25mbps
Hughesnet	Satellite	\$50.00	25mbps
Ranch Wireless	Wireless	\$120.00	25mbps
VTX1	Wireless	\$35.00	6-30mbps

* Spectrum - Internet Assist program is available to qualifying low-income families and senior citizens, \$17.99/mo, 30mbps

** Grande Comm - Internet First program is available to qualifying low-income families – per Grande Comm. Service is \$10/mo. 25/3

Source of information – Broadbandnow.com

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San Marcos Internet Services

While each household will have their own definition of what good internet speed is based on their needs, below are industry guidelines on different speeds and what they can handle:

Internet Speed	Users Supported	Speed Summary
25 Mbps	1-2	Basic
100 Mbps	3-4	Average
200 Mbps	4-5	Fast
500 Mbps	5+	Very Fast
1000 Mbps	5+	Gigabit



San Marcos Internet Services

Speed	At least one provider	At least three providers	At least two providers	Only one provider
25/3 Mbps	100%	100%		
100/10 Mbps	99%	2%	81%	16%
250/25 Mbps	99%	1%	21%	77 %

Source: broadbandmap.fcc.gov Area Summary for San Marcos, Texas

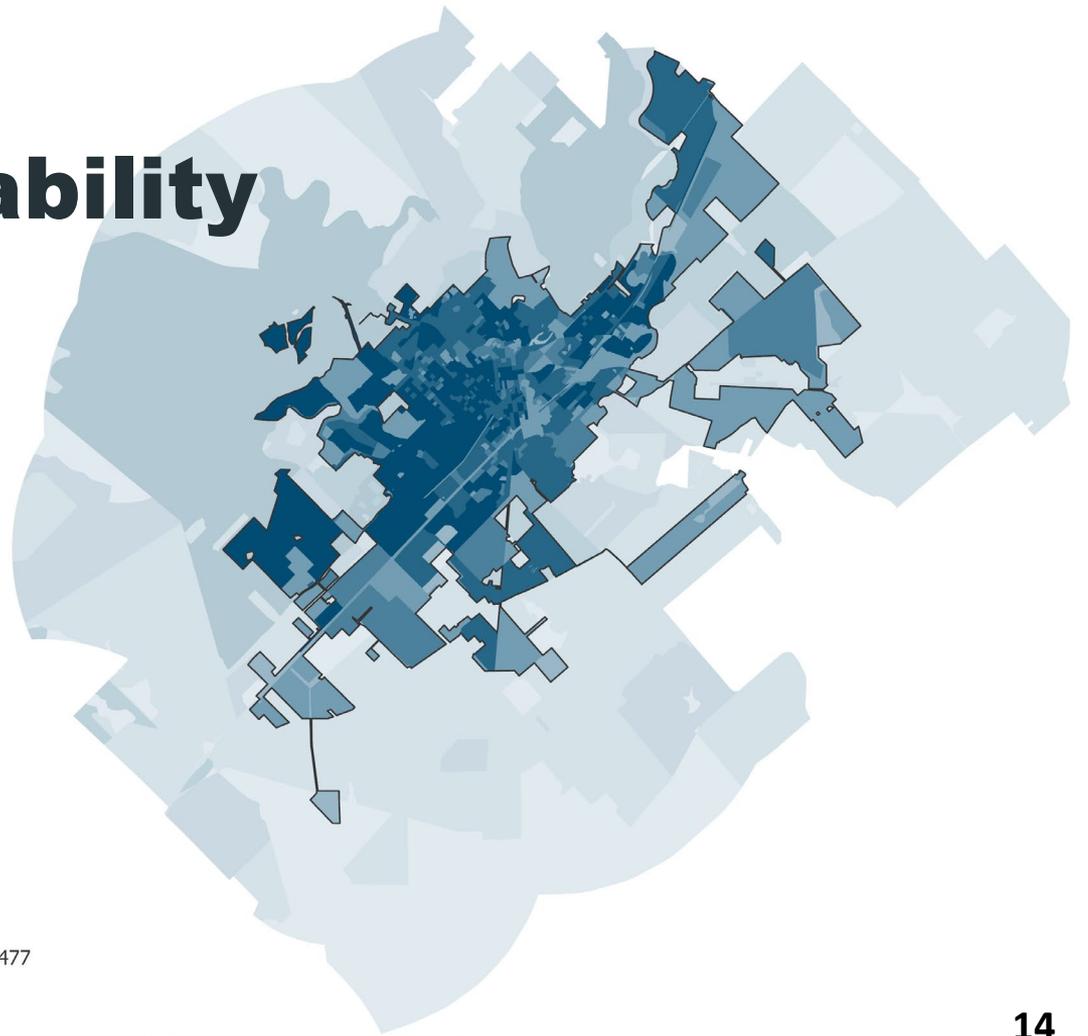
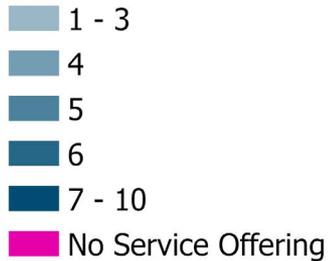
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Service Availability

Internet Service Offerings
Speeds at or Greater than
25 / 3 Mbps

Number of Service Offerings



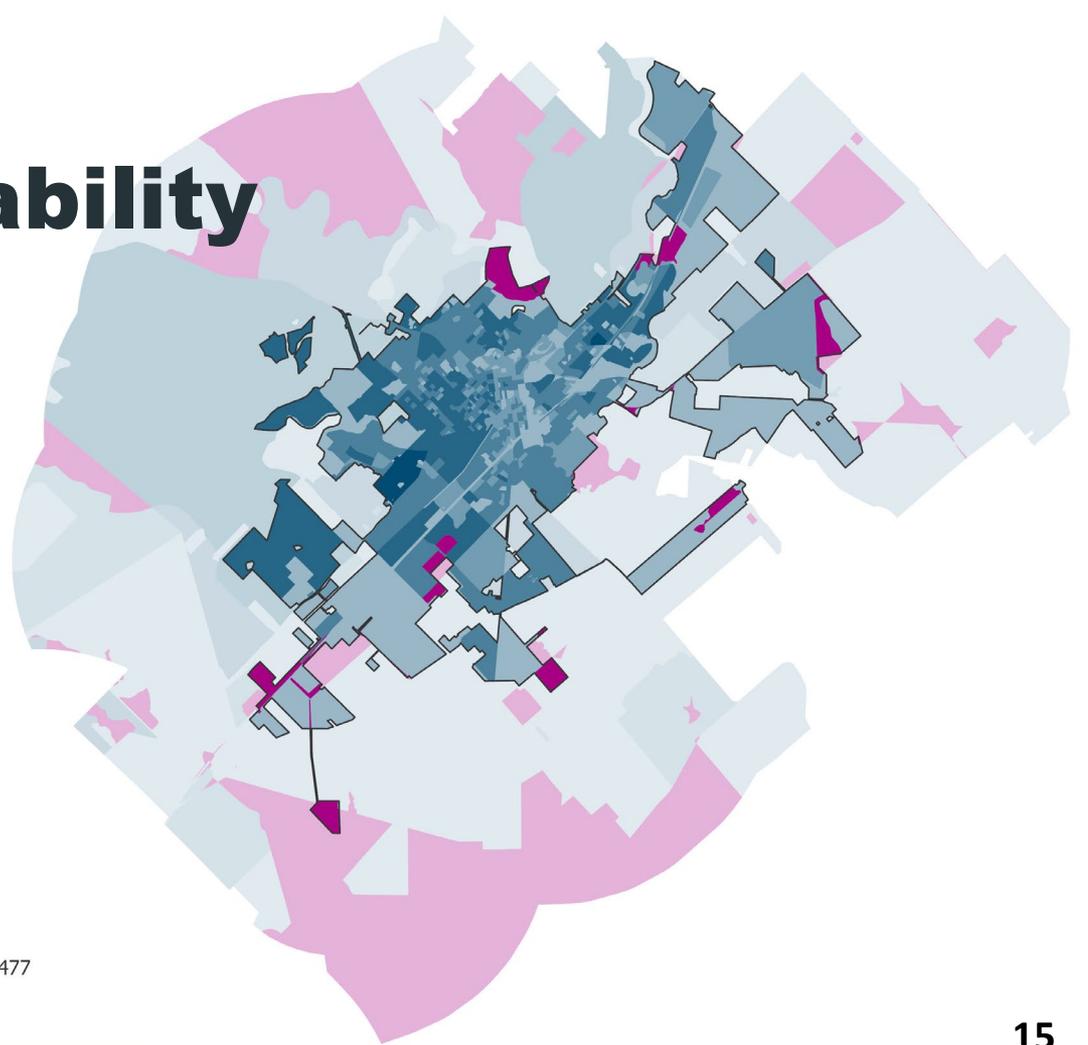
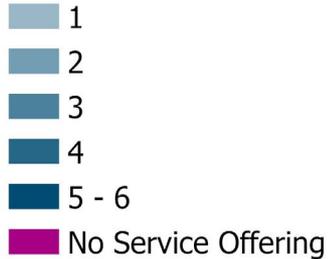
Source: FCC
<https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>
Data as of June 30, 2020
Geography: Census Blocks



Service Availability

Internet Service Offerings
Speeds at or Greater than
100 / 10 Mbps

Number of Service Offerings



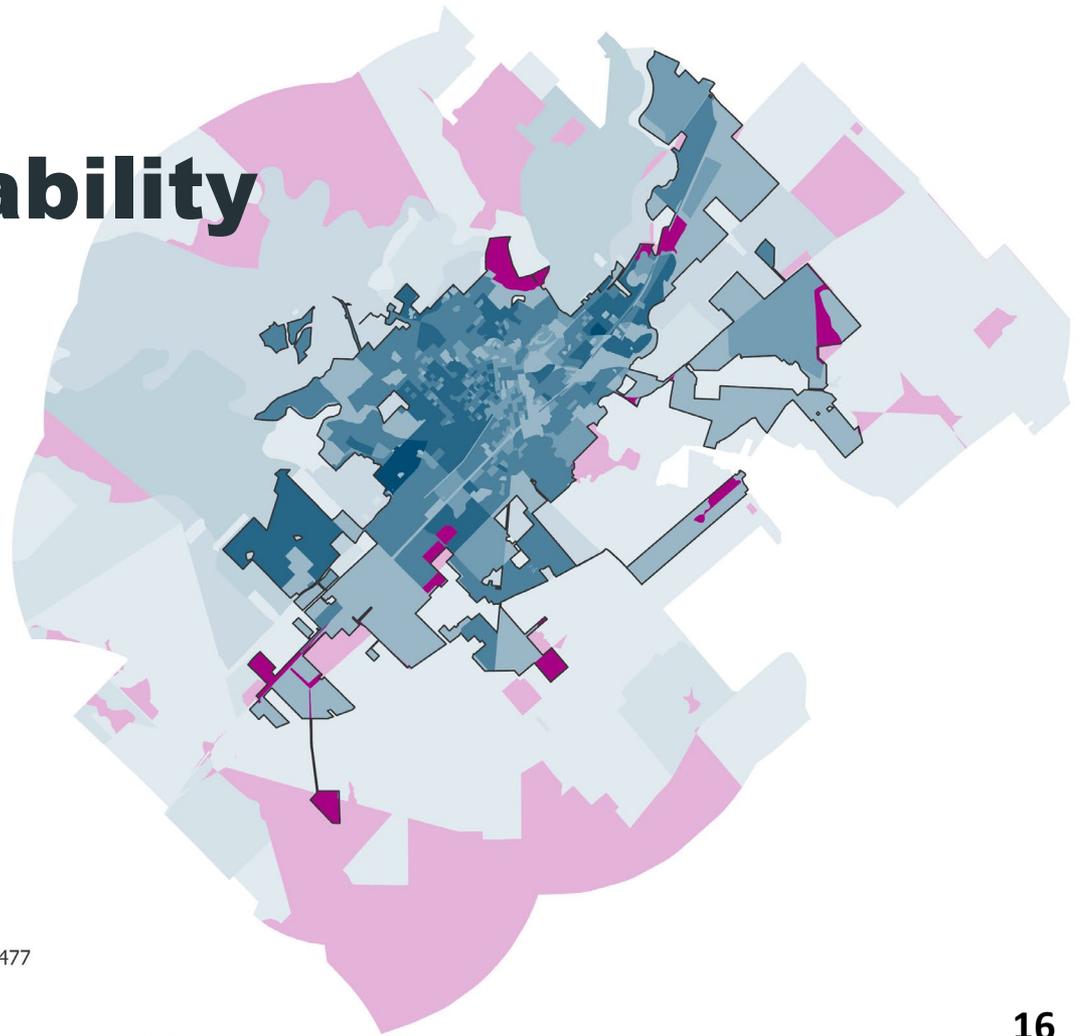
Source: FCC
<https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>
Data as of June 30, 2020
Geography: Census Blocks



Service Availability

Internet Service Offerings
Speeds at or Greater than
250 / 25 Mbps

Number of Service Offerings



Source: FCC
<https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>
Data as of June 30, 2020
Geography: Census Blocks



Review other programs and initiatives

School District Initiatives

- **San Marcos Consolidated Independent School District**
 - AT&T free Wi-Fi hotspots to all students
 - Grande Comm. Internet First Program free to all qualifying students - \$10/mo. for qualifying family's
 - School subsidized cost
- **Lockhart Independent School District**
 - Partnered with third-party provider to manage and provide students free wireless point-to-point service at their homes
 - School subsidized cost



Review other programs and initiatives

Cities

- **Mont Belvieu**
 - Citizen Survey
 - Feasibility study
 - Initial \$13+ Million bond funded
 - \$75 per month fee (1gb connection)
- **City of College Station**
 - Council directed staff to not heavily invest City funds to build the fiber infrastructure
 - Solicited new provider to self fund and install new service



Review other programs and initiatives

Cities cont.

- **City of Bryan**
 - Feasibility study
 - Council voted against due to estimated \$120 Million project cost
 - Solicited new provider to self fund and install new service
- **City of Victoria**
 - Performing a citizen survey on internet accessibility, affordability, and reliability



Census information

City	Classification	Population	City Limit (area = square miles)	Median Household income	Poverty rate %	Average Household Size
Mont Belvieu	52% urban	7,278	16 sq mi	\$94,560	3.82%	2.68
City of College Station	99% urban	121,663	51 sq mi	\$45,820	29.59%	2.53
City of Bryan	98% urban	89,194	54 sq mi	\$45,771	22.76%	2.65
City of Victoria	98% urban	67,078	37 sq mi	\$54,192	17.47%	2.82
City of San Marcos	98% urban	66,952	34 sq mi	\$40,370	32.15%	2.45

Source of information – <https://worldpopulationreview.com/us-cities/san-marcos-tx-population>

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Review other programs and initiatives

State

- **Texas SB5/HB5 – 87th Legislative Session**
 - Created the State Broadband Development Office
 - Financial incentives to promote and expand access to broadband in Texas
 - Award money only to commercial providers unless no commercial provider is available.



Review Other Programs and Initiatives

Federal

- Texas received \$362 million for rural broadband connection
 - Two providers in Hays County received just over \$1.3 Million to support 2,527 rural residents
- FCC established the Emergency Broadband Benefit Program
 - Provide qualifying households with a discount (up to \$50 per month) on Internet bills and a one-time discount (up to \$100) on a computer or tablet.



Review Other Programs and Initiatives

Federal

- FCC announced Emergency Connectivity Fund
 - Provides funding to libraries and school districts to purchase laptops and Wi-Fi hotspots; partner with San Marcos Consolidated Independent School District
- American Rescue Plan
 - Allows funds to be used for broadband infrastructure funding for unserved and underserved households and businesses
- Infrastructure Plan 2021
 - Recipients of funds must offer a low-cost affordable plan
 - Create a permanent federal program to help low-income households access the internet



Key Considerations

City Funded and Owned Broadband Utility

- Startup business in a well-established market
- Competing with local businesses/providers
 - Difficult to provide competitive rates due to more narrow service area
- Large initial capital infrastructure cost (easements, service contracts, pole attachments, underground work)
- On-going maintenance, repairs, and operational expenses:
 - Staffing & Office Space
 - Consulting services
 - 24/7 technical service and support
 - Annual Maintenance/expansion – CIP
- Limited-Service Area – City Limits
- Multi-year implementation



Alternative Options

1. Local partnerships:

- Participate in School District's established programs
- Partner with local providers for infrastructure expansion in targeted areas
- Assist local providers with qualifying for state and federal funds

2. Establish Funding Support Programs:

- Use American Rescue Funds to assist with payment of internet bills for qualifying citizens



Council Direction Requested

- Maintain current service delivery through private providers?
- Continue to explore implementation of alternative options?



Questions?