SA DIGITAL CONNECTS

A San Antonio and Bexar County, Public-Private-Community Collaboration

Preliminary mapping offers insight into household need and points to next steps for future iterations.



What this is

District, Precinct, and Census block-level estimates of the # and % of households:



- Without adequate digital <u>access</u>

 Self-reported usage to reliable internet and devices (from SASpeakUp, ACS)
- Self-reported slow / unavailable service (from SASpeakUp) and recorded zip-level avg. speeds (from BroadbandNow)
- Facing <u>affordability</u> barriers

 Household self-reported inability to afford a monthly bill (from SASpeakUp)



What this is not

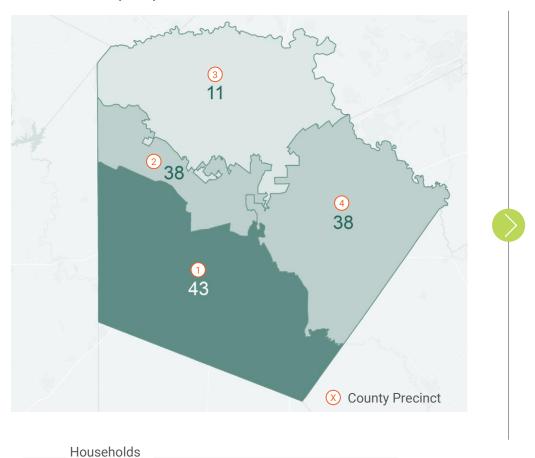
- Assessment of verified need based on actual usage, household-level coverage
- Verified adoption based on usage (e.g., from Microsoft, Google)
- Validated assessment of realized speeds (e.g., from speed tests) and household-level fiber / asset maps
- Comparison of household income to cost of available services and price benchmarks



<20K

ACCESS | Households without adequate digital access by Precinct

Households per precinct in 000s¹



	Households without internet	% of total households	Households without devices	% of total households without devices
Precinct 1	43K	26%	21K	13%
Precinct 2	38K	23%	17K	10%
Precinct 3	11K	17%	7K	5%
Precinct 4	38K	23%	20K	12%
County Total (SA+Bexar)	130K	20%	65K	10%

^{1.} Based on Census ACS and SASpeakUp responses of residents reporting that they lack access to the internet Source: SASpeakUp (2019); US Census (2020); BCG analysis

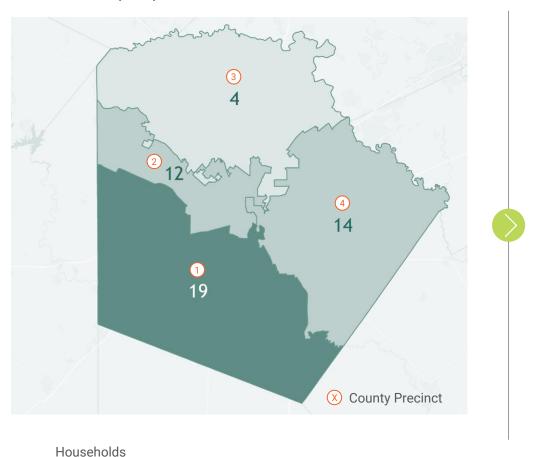
20-40K

40K+



AVAILABILITY | Households with limited broadband <u>availability</u> by Precinct

Households per precinct in 000s¹



15K+

5-15K

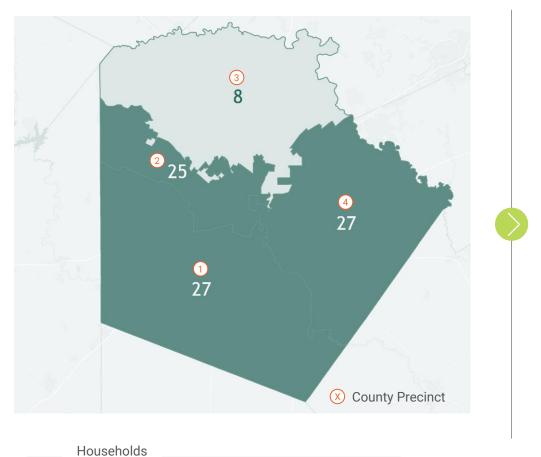
<5K

	Households with limited broadband availability	Households without internet	% of disconnected household limited by availability
Precinct 1	19K	43K	44%
Precinct 2	12K	38K	31%
Precinct 3	4K	16K	33%
Precinct 4	14K	38K	38%
County Total (SA+Bexar)	50K	130K	38%

^{1.} Based on SASpeakUp responses reporting slow or unavailable service as residents' primary reason for not using the internet and BroadbandNow data on average speed per zip code Source: SASpeakUp (2019); BroadbandNow; BCG analysis



AFFORDABILITY | Households with limited broadband <u>affordability</u> by Precinct



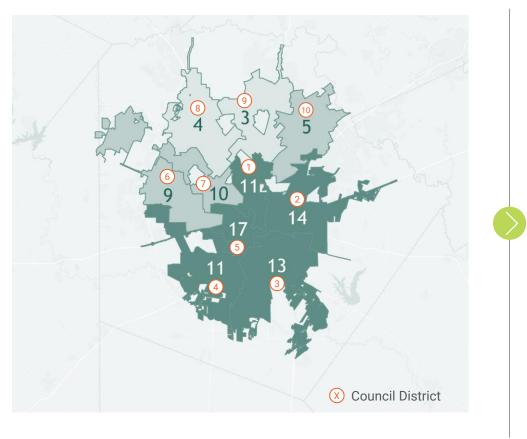
	Households without affordable internet	Households without internet	% of disconnected household limited by affordability
Precinct 1	27K	43K	64%
Precinct 2	25K	38K	66%
Precinct 3	8K	16K	75%
Precinct 4	27K	38K	72%
County Total (SA+Bexar)	90K	130K	68%

^{■ &}lt;10K ■ 10-20K ■ 20K+

^{1.} Based on SASpeakUp responses of residents reporting that high internet plan pricing is their primary reason for not using the internet Source: SASpeakUp (2019); BCG analysis



ACCESS | Households without adequate digital <u>access</u> by District



	Households without internet	% of total households	Households without devices	% of total households without devices
District 1	11K	25%	6K	14%
District 2	14K	27%	6K	12%
District 3	13K	25%	7K	14%
District 4	11K	23%	6K	12%
District 5	17K	38%	11K	23%
District 6	9K	17%	4K	7%
District 7	10K	18%	4K	7%
District 8	4K	7%	2K	4%
District 9	3K	6%	3K	6%
District 10	5K	9%	2K	6%
City total	100K	20%	53K	10%
County Total (SA+Bexar)	130K	20%	65K	10%

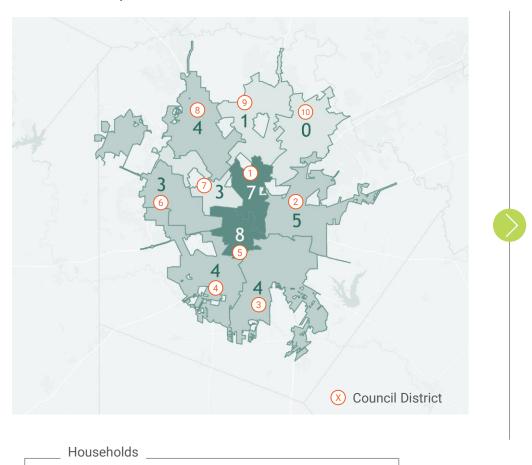
^{1.} Based on Census ACS and SASpeakUp responses of residents reporting that they lack access to the internet Source: SASpeakUp (2019); US Census (2020); BCG analysis



3K

AVAILABILITY | Households with limited broadband <u>availability</u> by District

Households per district in 000s¹



5K+

3-5K

	Households with limited broadband availability	Households without internet	% of disconnected household limited by availability
District 1	7K	11K	64%
District 2	5K	14K	36%
District 3	4K	13K	32%
District 4	4K	11K	39%
District 5	8K	17k	44%
District 6	3K	9K	32%
District 7	3K	10K	29%
District 8	4K	4K	100%
District 9	1K	3K	50%
District 10	<1K	5K	<1%
City total	40K	100K	41%
County Total (SA+Bexar)	50K	130K	38%

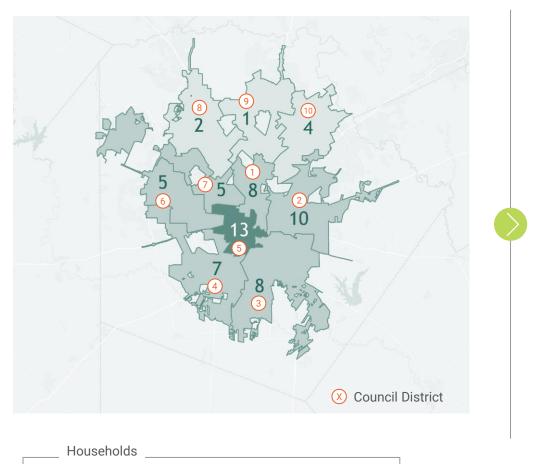
^{1.} Based on SASpeakUp responses reporting slow or unavailable service as residents' primary reason for not using the internet and BroadbandNow data on average speed per zip code Source: SASpeakUp (2019); BroadbandNow; BCG analysis



<5K

AFFORDABILITY | Households with limited broadband <u>affordability</u> by District

Households per district in 000s¹



5-10K

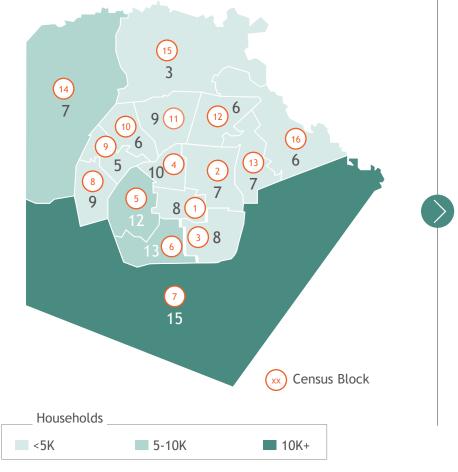
	Households without affordable internet	Households without internet	% of disconnected household limited by affordability
District 1	8K	11K	75%
District 2	10K	14K	69%
District 3	8K	13K	65%
District 4	7K	11K	59%
District 5	12K	17k	73%
District 6	5K	9K	52%
District 7	5K	10K	53%
District 8	2K	4K	50%
District 9	1K	3K	50%
District 10	5K	5K	80%
City total	64K	100K	65%
County Total (SA+Bexar)	90K	130K	69%

^{1.} Based on SASpeakUp responses of residents reporting that high internet plan pricing is their primary reason for not using the internet Source: SASpeakUp (2019); BCG analysis

10K+



ACCESS | Households without adequate digital access by Census block

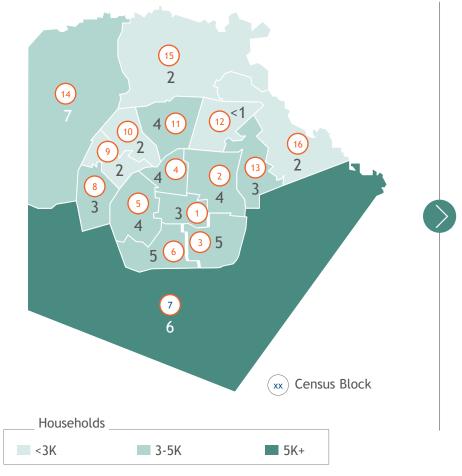


1. B	ased on Census ACS and SASpeakUp responses of residents reporting that they lack access to
the	nternet Source: SASpeakUp (2019); ACS (2019); BCG analysis

•			•	
	Households without internet	% of total households	Households without devices	% of total households without devices
Block 1	8K	28%	9K	36%
Block 2	7K	18%	6K	15%
Block 3	8K	25%	9K	26%
Block 4	10K	29%	7K	22%
Block 5	12K	29%	13K	32%
Block 6	13K	29%	14K	31%
Block 7	15K	33%	8K	17%
Block 8	9K	19%	4K	9%
Block 9	5K	12%	3K	7%
Block 10	6K	15%	6K	15%
Block 11	9K	20%	3K	7%
Block 12	6K	16%	3K	10%
Block 13	7K	18%	6K	17%
Block 14	7K	12%	4K	7%
Block 15	3K	8%	<1K	1%
Block 16	6K	15%	3K	7%
County Total (SA+Bexar)	130K	20%	100K	15%



AVAILABILITY | Households with limited broadband <u>availability</u> by Census block

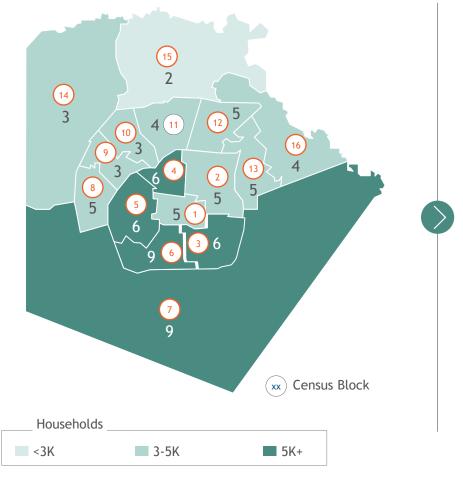


^{1.} Based on Census ACS and SASpeakUp responses reporting slow or unavailable service as residents' primary reason for not using the internet Source: ACS (2019); SASpeakUp (2019); BCG analysis

	Households with limited broadband availability	Households without internet	% of disconnected household limited by availability
Block 1	3K	8K	44%
Block 2	4K	7K	64%
Block 3	5K	8K	64%
Block 4	4K	10K	39%
Block 5	4K	12K	32%
Block 6	5K	13K	44%
Block 7	6K	15K	36%
Block 8	3K	9K	32%
Block 9	2K	5K	39%
Block 10	2K	6K	39%
Block 11	4K	9K	50%
Block 12	<1K	6K	<1%
Block 13	3K	7K	36%
Block 14	7K	7K	100%
Block 15	2K	3K	50%
Block 16	2K	6K	36%
County Total (SA+Bexar)	56K	130K	43%



AFFORDABILITY | Households with limited broadband affordability by Census block



^{1.} Based on Census ACS and SASpeakUp responses of residents reporting that high internet plan pricing is their primary reason for not using the internet Source: ACS (2019); SASpeakUp (2019); BCG analysis

	Households without affordable internet	Households without internet	% of disconnected household limited by affordability
Block 1	5K	8K	73%
Block 2	5K	7K	75%
Block 3	6K	8K	75%
Block 4	6K	10K	59%
Block 5	6K	12K	52%
Block 6	9K	13K	73%
Block 7	9K	15K	62%
Block 8	5K	9K	52%
Block 9	3K	5K	59%
Block 10	3K	6K	59%
Block 11	4K	9K	50%
Block 12	5K	6K	80%
Block 13	5K	7K	69%
Block 14	3K	7K	50%
Block 15	2K	3K	50%
Block 16	4K	6K	66%
County Total (SA+Bexar)	82K	130K	63%