union_public	General 2020	Phone 2020	Farm 2020	Description	Valid Values, Format or Type
`id`	●	●	●	This table's primary key. Unique for this table.	integer
`survey_name`	●	●	●	Indicates the source of the record. Currently there are three possible values: GENERAL2020: the 2020 Online Broadband Survey with speedtest open to the general public. FARM2020: the Spring 2020 Online Broadband survey with speedtest that was specifically targeted to farmers. PHONE2020: the phone-based survey specifically for residents with no internet access at all.	GENERAL2020, PHONE2020, FARM2020
`Duration`	●	○	●	For online surveys only, the number of seconds in which the user was engaged taking the survey.	integer (seconds)
`RecordedDate`	●	●	●	Date and time at which this record was written to the database.	YYYY-MM-DD HH:MM:SS
`Progress`	●	●	●	For online surveys, the Qualtrics-generated percentage of the survey that the user completed. For phone-based surveys, an estimate of the percentage of the survey that was completed. Note that a user could skip (not answer) many questions and still obtain 100%. This can be used as an indicator of responses that should be ignored, but it is not guaranteed to indicate a valid response. Typically, responses less than 30% complete will have no meaning for analysis and can be ignored.	integer (percentage)
`Finished`	●	●	●	Indicates if the user fully completed the survey. Note that incomplete survey responses often have valuable data. For phone surveys this field is True only if the user completes the entire phone survey. For online surveys see also, Progress field. For phone surveys see also, exit_flag.	Boolean: True, False
`BrowserName`	●	○	●	The name of the web browser in which the user completed the survey. NULL for phone responses.	Chrome, Edge, Firefox, MSIE, Safari, Safari iPad, Safari iPhone, et. al.
`BrowserVersion`	●	○	●	The version of the web browser in which the user completed the survey. NULL for phone responses.	string, browser dependent
`OperatingSystem`	●	○	●	The name of the operating system on which the user completed the survey. NULL for phone responses.	Android, iPad, iPhone, Macintosh, Windows NT, et. al.
`UserLanguage`	●	●	●	The language in which the survey was taken. There are two possible values, EN for English or ES for Spanish. For phone survey responses, this value is derived from the phone number which the user called. There are different phone numbers for the English and Spanish versions.	EN, ES
`inst`	●	○	○	For General Survey responses only, this field is directly copied from the URL parameter by the same name. Some institutions and agencies have used this as a way to identify their constituents in the data. See also, group, source.	string
`group`	●	○	○	For General Survey responses only, this field is directly copied from the URL parameter by the same name. Some institutions and agencies have used this as a way to identify their constituents in the data. See also, inst, source.	string
`source`	●	○	○	For General Survey responses only, this field is directly copied from the URL parameter by the same name. Some institutions and agencies have used this as a way to identify their constituents in the data. See also, inst, group.	string
`user_loc_type`	●	○	●	For General Survey only, question: "Which best describes the location you are reporting: Home, Farm, Business?" The type of location for which the user completed the survey. Options are "Home", "Farm","Business" or NULL. This field is always NULL for phone responses. This field is always "Fram" for Farm Survey responses.	Home, Farm, Business, NULL
`Q1_5`	●	○	○	For the General Survey only. Question: "Is this home used for a business? (Excluding work-from-home for a company.)" Note that this question only appears to users that indicated they were at a home. NULL indicates that the user was not presented the question.	Yes, No, NULL
`user_county`	●	○	●	User selected County name. The county name is selected from a drop down of all valid county names in the state. This field is NULL for phone survey responses. See county_name for the name of the county derived from the geocoding process, based on the user's provided address. This field does NOT contain the word "County".	string, NULL

Field	Col1	Col2	Col3	Description	Values
`user_zip_code`	●	●	●	User entered zip code. For phone responses given by voice, the zip code was transcribed by a human and is subject to error or misinterpretation.	string, NULL
`Q2_5`	●	○	●	For the General Survey, the question: "Are you currently at this location?" For the Farm Survey, the question: "Are you currently at this farm office?" Yes/No value provided by the user to indicate if they completed the survey while physically at the location provided in the user address fields. NULL for phone responses. Users that indicated they were not at the location were not provided the speedtest. This question was used to ensure speedtest data was only collected when the internet connection was at the physical address provided by the user. For example, if the user completed the survey for their home address while on the internet at their work location, the speedtest data would be meaningless.	Yes, No, NULL
`Q3_1`	●	○	○	Do you use cellular service at this location? (multiple choice)	see codebook
`Q3_2`	●	○	○	How satisfied are you with the cellular service at this location?	see codebook
`Q3_3`	●	○	○	Excluding cellular, what is the primary type of internet service used at this location?	see codebook
`Q3_4`	●	○	○	How satisfied are you with your primary internet service at this location?	see codebook
`Q4_2`	●	○	○	Question: "Do you currently subscribe to the fastest speed possible from your internet service provider?" This question appears only on the General Survey for users that completed a speedtest and had less that 25 Mbps downstream OR 3 Mbps upstream. This question is used to help eliminate locations that may in fact have high-speed service, but do not subscribe to a service tier that would enable 25/3 throughput. If this question is presented to the user, a response is required in order to continue the survey.	Yes, No, Not Sure, NULL
`Q5_1_1`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) None, internet only	value, -1 if not selected, NULL if not presented
`Q5_1_2`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) Cable or satellite TV	value, -1 if not selected, NULL if not presented
`Q5_1_3`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) Premium TV channels	value, -1 if not selected, NULL if not presented
`Q5_1_4`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) Home phone	value, -1 if not selected, NULL if not presented
`Q5_1_5`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) Cell phone	value, -1 if not selected, NULL if not presented
`Q5_1_6`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) Home security	value, -1 if not selected, NULL if not presented
`Q5_1_7`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) Not sure	value, -1 if not selected, NULL if not presented
`Q5_1_8`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) Other	value, -1 if not selected, NULL if not presented
`Q5_1_8_TEXT`	●	○	○	In addition to internet access, what other services, if any, are bundled with your primary internet service? (select all that apply) Other text	free form string, NULL or -1
`Q5_2`	●	○	○	What is the total cost per month for this service, including any items that are bundled?	see codebook
`Q6_1_1`	●	○	○	Which of the following reasons explain why you do not have high-speed internet service at this location? (select all that apply) High-speed internet service is not available at this location	value, -1 if not selected, NULL if not presented
`Q6_1_2`	●	○	○	Which of the following reasons explain why you do not have high-speed internet service at this location? (select all that apply) Service is available, but it is too slow or unreliable	value, -1 if not selected, NULL if not presented
`Q6_1_3`	●	○	○	Which of the following reasons explain why you do not have high-speed internet service at this location? (select all that apply) Service is available, but it is too expensive	value, -1 if not selected, NULL if not presented

Field				Description	Values
`Q6_1_4`	●	○	○	Which of the following reasons explain why you do not have high-speed internet service at this location? (select all that apply) Use cellular internet service instead	value, -1 if not selected, NULL if not presented
`Q6_1_5`	●	○	○	Which of the following reasons explain why you do not have high-speed internet service at this location? (select all that apply) No need for internet access at this location	value, -1 if not selected, NULL if not presented
`Q6_1_6`	●	○	○	Which of the following reasons explain why you do not have high-speed internet service at this location? (select all that apply) Don't own an internet capable device (e.g. laptop, tablet, computer)	value, -1 if not selected, NULL if not presented
`Q6_1_7`	●	○	○	Which of the following reasons explain why you do not have high-speed internet service at this location? (select all that apply) Not comfortable using the internet	value, -1 if not selected, NULL if not presented
`Q6_1_8`	●	○	○	Which of the following reasons explain why you do not have high-speed internet service at this location? (select all that apply) I worry about privacy and computer viruses	value, -1 if not selected, NULL if not presented
`Q6_2`	●	○	○	Which of the following is the biggest reason you do not have high-speed internet service at this location? (select only one)	see codebook
`Q11_1_1`	●	○	○	How often do you or someone from this location purposely travel to the following places in your community to access internet? Public library, school, park, county office, college, university	see codebook
`Q11_1_3`	●	○	○	How often do you or someone from this location purposely travel to the following places in your community to access internet? Restaurants or retailers	see codebook
`Q11_1_6`	●	○	○	How often do you or someone from this location purposely travel to the following places in your community to access internet? Someone else's home	see codebook
`Q7_1_1`	●	○	○	Why don't you use cellular service at this location? (select all that apply) No cellular coverage at this location	value, -1 if not selected, NULL if not presented
`Q7_1_2`	●	○	○	Why don't you use cellular service at this location? (select all that apply) Cellular service is available but too slow or not reliable	value, -1 if not selected, NULL if not presented
`Q7_1_3`	●	○	○	Why don't you use cellular service at this location? (select all that apply) Cellular service is available but too expensive	value, -1 if not selected, NULL if not presented
`Q7_1_4`	●	○	○	Why don't you use cellular service at this location? (select all that apply) Don't own a cellular internet capable device	value, -1 if not selected, NULL if not presented
`Q7_1_5`	●	○	○	Why don't you use cellular service at this location? (select all that apply) Not sure	value, -1 if not selected, NULL if not presented
`Q8_1`	●	○	○	About how many employees work at this location?	see codebook
`Q9_1_1`	●	○	○	Which age groups live in this home? (Select all that apply.) Children under 18	value, -1 if not selected, NULL if not presented
`Q9_1_2`	●	○	○	Which age groups live in this home? (Select all that apply.) Adults age 19 to 64	value, -1 if not selected, NULL if not presented
`Q9_1_3`	●	○	○	Which age groups live in this home? (Select all that apply.) Adults 65 and older	value, -1 if not selected, NULL if not presented
`Q9_2_1`	●	○	○	Do any students live at this home? Primary school (Kindergarten to 8th)	value, -1 if not selected, NULL if not presented
`Q9_2_2`	●	○	○	Do any students live at this home? High school (9th to 12th)	value, -1 if not selected, NULL if not presented
`Q9_2_3`	●	○	○	Do any students live at this home? Community College	value, -1 if not selected, NULL if not presented
`Q9_2_4`	●	○	○	Do any students live at this home? Other college or university	value, -1 if not selected, NULL if not presented
`Q9_2_5`	●	○	○	Do any students live at this home? Adult learners / career training	value, -1 if not selected, NULL if not presented

Field				Description	Values
`Q9_3`	●	○	○	What is your household's highest level of school completed?	see codebook
`Q10_1_1`	●	○	○	Please rate your skills in regard to the following online activities: Using a desktop or laptop computer	see codebook
`Q10_1_2`	●	○	○	Please rate your skills in regard to the following online activities: Saving/opening downloaded files	see codebook
`Q10_1_3`	●	○	○	Please rate your skills in regard to the following online activities: Knowing which words to use for online searches	see codebook
`Q10_1_4`	●	○	○	Please rate your skills in regard to the following online activities: Knowing what information is safe to share online	see codebook
`Q10_1_5`	●	○	○	Please rate your skills in regard to the following online activities: Installing apps on my mobile device	see codebook
`Q10_1_6`	●	○	○	Please rate your skills in regard to the following online activities: Creating something new from images, music and video	see codebook
`county_name`	●	●	●	County name based on Census data and geocode. This data always incudes the word "County". For online responses only, if the Census and geocode systems cannot resolve the county name, this filed will contain the user selected county. For phone responses if the Census and geocode systems cannot resolve the name it will be NULL.	county name including "County", or NULL
`county_code`	●	●	●	FIPS county code from the Census service, based on the non-obfuscated lat/long for the actual address of the user.	string, e.g. 067
`state_code`	●	●	●	FIPS state code from the Census service, based on the non-obfuscated lat/long for the actual address of the user.	string, e.g. 37
`location_type`	●	●	●	The confidence level of the geocoding system for this location. Locations that are not "ROOFTOP" are approximations. "ROOFTOP" indicates that the returned result is a precise geocode for which location information is accurate down to street address precision. "RANGE_INTERPOLATED" indicates that the returned result reflects an approximation (usually on a road) interpolated between two precise points (such as intersections). Interpolated results are generally returned when rooftop geocodes are unavailable for a street address. "GEOMETRIC_CENTER" indicates that the returned result is the geometric center of a result such as a polyline (for example, a street) or polygon (region, county or state). "APPROXIMATE" indicates that the returned result is approximate. See: https://developers.google.com/maps/documentation/geocoding/overview	APPROXIMATE, GEOMETRIC_CENTER, RANGE_INTERPOLATED, ROOFTOP, NULL
`census_geoid`	●	●	●	Complete Census block identifier from Census based on fomatted_address.	e.g. 3708792010212327
`ip_location`	●	○	●	Approximate Lat/Long of the service provider's POP, based on the user's IP address.	e.g. 36.2142,-81.6660
`ip_city`	●	○	●	City of the service provider's POP, based on the user's IP address.	string, e.g. Boone
`ip_region`	●	○	●	State of the service provider's POP, based on the user's IP address.	string, e.g. North Carolina
`ip_postal`	●	○	●	Zip code of the service provider's POP, based on the user's IP address.	string, e.g. 28607
`ip_country`	●	○	●	Country of the service provider's POP, based on the user's IP address.	string, e.g. US
`dl_speed`	●	○	●	Speedtest download speed. NULL if the user opted out of the speedtest or used the phone survey.	float (Mbps)
`ul_speed`	●	○	●	Speedtest download speed. NULL if the user opted out of the speedtest or used the phone survey.	float (Mbps)
`latency`	●	○	●	Speedtest latency. NULL if the user opted out of the speedtest or used the phone survey.	float (milliseconds)
`jitter`	●	○	●	Speedtest jitter. NULL if the user opted out of the speedtest or used the phone survey.	float (milliseconds)
`ASN_ServiceProvider`	●	○	●	Service provider Autonomous System Number, followed by service provider name.	e.g. AS2029 Service Provider
`ASNumber`	●	○	●	Service provider ASN with no name.	e.g. AS2029
`SPName`	●	○	●	Service provider name with no ASN.	e.g. Service Provider
`SPName_ASN`	●	○	●	Service provider name, followed by service provider ASN.	e.g. Service Provider, AS2029

Field				Description	Values
`c_no_cell_service_available`	●	○	●	User indicated that no cell service is available at the location. For this and all calculated fields (those that being with "c_") see the document entitled "NC Broadband Survey Calculated Fields".	True, NULL
`c_no_internet`	●	●	●	User indicated that no internet of any type is available at the location.	True, NULL
`c_no_wireline_internet`	●	●	●	User indicated that no wireline internet is available at the location.	True, NULL
`c_great_grant_eligible`	●	●	●	Based on the user's responses, this location could be eligible for a GREAT Grant. Other factors, such as county wealth level must also need to be validated. This flag is True when the user has indicated that no service provider is available, or if they have service, but the speedtest yielded results slower than the 10/1 Mbps threshold. For the phone-based responses, if the user indicated that no service provider is available, this flag is True.	True, NULL
`c_primary_reason_no_internet`	●	●	●	User indicated primary reason that they do not have internet access. If user indicated they do have internet, then this field is NULL.	Not available, Too expensive, Other reason, No answer, NULL
`c_no_internet_due_to_provider`	●	●	●	User indicated that a reason they do not have internet is due to lack of a provider offering service.	True, NULL
`c_no_internet_due_to_expense`	●	●	●	User indicated that a reason they do not have internet is that it is too expensive.	True, NULL
`c_K12_student_present`	●	●	○	User indicated that a K-12 student is present at the location. This field is always NULL for the Farm Survey.	True, NULL
`c_higher_ed_student_present`	●	○	○	User indicated that a university or community college student is present at the location. This field is always NULL for the Phone Survey and the Farm Survey.	True, NULL
`c_25_3_Threshold_Met`	●	○	●	User completed the speedtest and obtained at least 25 Mbps downstream AND at least 3 Mbps upstream. If the user did not complete the speedtest the field will be NULL.	True, False, NULL
`c_10_1_Threshold_Met`	●	○	●	User completed the speedtest and obtained at least 10 Mbps downstream AND at least 1 Mbps upstream. If the user did not complete the speedtest the field will be NULL.	True, False, NULL
`c_Service_Level`	●	●	●	This is a normalized field providing the level of internet service, if any. For General Survey only, users that completed a speedtest are further qualified with a question regarding their having subscribed to the highest tier service available. See the document entitled "NC Broadband Survey Calculated Fields" for complete details on the logic. For phone-based responses, this field will be "No internet" if the user completed enough of the survey to provide an address, otherwise it will be NULL.	No internet, Over 25/3, Under 25/3, Under 25/3 Fastest, NULL
`p_source`	○	●	○	For phone responses only, indicates the method used, either SMS or CALL.	SMS, CALL, NULL
`call_to`	○	●	○	For phone respones only, the phone number which the user called or texted to complete the survey. Note that phone numbers begin with the country code, +1.	e.g. +19197500553
`p_carrier_MNC`	○	●	○	For phone responses only, which were completed on a cellular phone, the Mobile Country Code followed by <@> then the Mobile Network Code for the phone used to complete the survey. The " <@> " delimiter has spaces on either side and was selected as it was unlikely to ever occur in a string reporting the carrier network identifiers. For voip and landline calls this field will be <@>.	e.g. 311 <@> 489
`p_carrier_name`	○	●	○	For phone responses only, the Carrier Name for the phone used to complete the survey.	e.g. Verizon Wireless, Frontier, CenturyLink
`p_carrier_type`	○	●	○	For phone responses only, the type of phone used.	mobile, landline, voip, NULL

Field				Description	Values
`p_exit_flag`	○	●	○	For phone responses only, a flag used to indicate how far through the survey the user reached. Completed responses will contain VOICE_COMPLETED for voice calls and TXT_FINISHED for text-based responses. Records with STATUS, or SYS_DOWN as exit_flag in the source data will not appear in the union data. See also, Progress.	CALL_HAS_INTERNET, HANGUP_ON_ADDR, STATUS, TXT_FINISHED, TXT_HAS_INTERNET, TXT_NO_CONFIRMED_ADDR, TXT_NO_START, VOICE_COMPLETED, VOICE_INTER_0 VOICE_INTER_1, VOICE_INTER_2
`p_from_city`	○	●	○	For phone responses only, the city associated with the phone number of the user. The user may not actually be anywhere near this location. This can be used to filter, for example, foreign calls.	e.g. BRYSON CITY
`p_from_zip`	○	●	○	For phone responses only, the zip code associated with the phone number of the user. The user may not actually be anywhere near this location.	e.g. 28789
`p_n_reason_no_internet`	○	●	○	Normalized user response to the question: "What is the primary reason there is no internet at this location?" 0: prefer not to answer 1: too expensive 2: not available from a provider 3: any other reason	0, 1, 2, 3, NULL
`p_n_students_present`	○	●	○	Normalized user response to the question: "Do any K-12 students reside at this location?" 0: prefer not to answer 1: yes/si (for Spanish) 2: no	0, 1, 2, NULL
`f_duplicate`	○	○	●	Farm Survey 2020 duplicate response detected. Multiple reposnes with the same street address and IP address were manually flagged in the Farm Survey only.	True, NULL
`f_Q1_3`	○	○	●	What is your relationship with this farm?	
`f_Q2_3`	○	○	●	Is the farm office located inside of a private residence?	see codebook
`f_Q3_1`	○	○	●	Does this farm office currently have wired internet service, such as cable modem, DSL or fiber?	see codebook
`f_Q3_2`	○	○	●	Does this farm office use cellular internet access to conduct farm business?	see codebook
`f_Q3_3`	○	○	●	Does this farm office currently have fixed wireless or satellite internet service?	see codebook
`f_Q12_2`	○	○	●	How important is a reliable high-speed internet service to conduct business as this farm office?	see codebook
`f_Q12_5`	○	○	●	In the future, how important will internet connectivity in your fields be to the productivity of this farm?	see codebook