Resource Support Office Hours

Tools to Help Advance Health Equity Work

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

Learning Objectives

In this session, we will…

- …provide an overview of online tools that can be used to identify sub-county geographic areas like zip codes and census tracts to drive public health programming and resources using an “equity lens” approach.
- …help improve your understanding of how these online tools can be used to assist with prioritizing outreach efforts to COVID-19 cases from NC COVID or CCTO.

Overview

This session is for subjects related to conducting supplemental outreach to under-resourced communities:

- Using the SVI Tool to identify census tracts of interest
- Using NC COVID reports and workflows to identify case patients in areas of interest
- Using CCTO to identify individuals who have requested resource follow-up
- Other topics related to outreach to under-resourced communities as outlined in the guidance

Panelists
Erika Samoff – *Surveillance Manager* Erika.samoff@dhhs.nc.gov
Chris Kippes – *Program Director of COVID-19 Response and Special Projects* Chris.Kippes@dhhs.nc.gov
Teresa Wiley – *Director of Community Network Development* twiley@carolinactc.org
Elizabeth Murray – *CT Project Manager* elizabeth.m.murray@dhhs.nc.gov

Recap of Resource Office Hours

Resource Office Hours covered topics related to supplemental outreach to under-resourced communities:

- Using the SVI Tool to identify census tracts of interest
- Using NC COVID reports and workflows to identify case patients in areas of interest
- Using CCTO to identify individuals who have requested resource follow-up
- Other topics related to outreach to under-resourced communities as outlined in the guidance

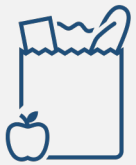
The State's prioritization guidance can be found here, and the supplemental guidance for resource outreach can be found here.

Using NC COVID & CCTO to Identify Individuals of Interest

- **Running NC COVID Reports** outlines using NC COVID reports and workflows to identify case patients within the categories shown in the supplemental guidance document.
- **Checking Resource Needs in CCTO** describes how to identify individuals who have requested resource follow-up through a CCTO assessment.
- **Verifying Case Flow and Notification (last page)** describes how to use CCTO to identify case patients whose notifications were not delivered (Priority Group 3).

Using SVI Tools to Identify Census Tracts of Interest

- **SVI (Social Vulnerability Index) Tools** can be used to identify individuals in census tracts of the greatest need.
  - NC SVI Tool
  - NC SVI Table
  - NC Vaccination and SVI Tool
- **Running NC COVID Reports** can provide support for applying the information from these tools.



Introduction

Introduction – Prioritizing Resource Support

Priority	Time from specimen collection to case review	Population	Action
1	Any ('last in, first out')	**Cases reported to be linked to a cluster/outbreak** Individuals reported to the local health department with known epidemiologic links to a cluster, outbreak or location or event associated with two or more cases **Cases reported as *living* in a congregate or healthcare setting** Individuals reported to the local health department as residing in a congregate living setting (e.g., correctional facilities, homeless shelters, migrant farm worker housing, skilled nursing, mental health and long-term care facilities)	Case investigation and contact tracing
2	Up to 5 days ('last in, first out')	**Cases known to be *working or potentially exposed* in a high-density setting should receive case investigation and contact tracing** • Healthcare settings (e.g., acute care, skilled nursing, mental health and long-term care facilities) • Congregate settings (e.g., correctional facilities, homeless shelters, migrant farm worker camps) • Critical infrastructure work settings (e.g., food processing plants, manufacturing plants, transportation, food service to critical workers, first responders) • Community settings with large numbers of people (e.g., mass gatherings, religious events). Indoor settings should be prioritized over outdoor settings.	Case investigation and contact tracing
3	Up to 5 days ('last in, first out')	**Case patients whose CCTO record indicates their text was not delivered**	Notification phone call to provide isolation instructions and links to resource info; no case investigation interview nor contact tracing
4	Up to 10 days ('last in, first out')	**Case patients in populations most likely to have resource needs**; populations can be defined by geography (zip or address), race/ethnicity, age according to local needs.	

See here for the complete prioritization guidance document.
Today's session will be focused on Priority Group 4; support for identifying Priority Group 3 can be found here (last page).

Introduction – Prioritizing Resource Support

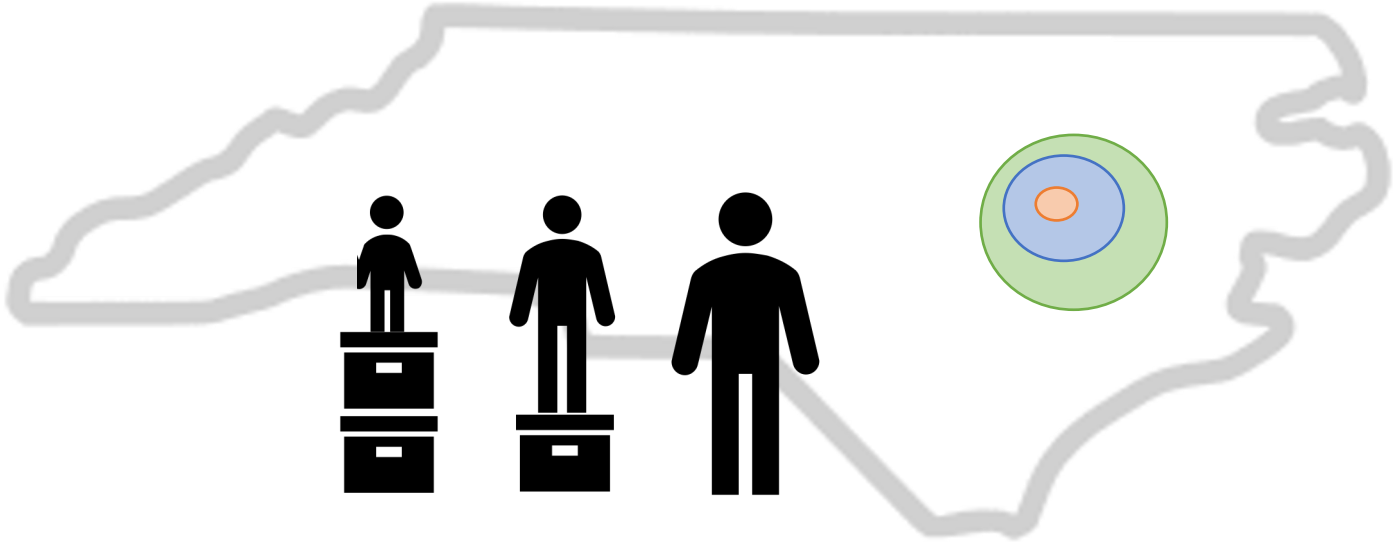
Priority	Time from specimen collection to case review	Population	Action
4	Up to 10 days ('last in, first out')	**Case patients in populations most likely to have resource needs**; populations can be defined by geography (zip or address), race/ethnicity, age according to local needs.	Notification phone call to provide isolation instructions and links to resource info; no case investigation interview nor contact tracing

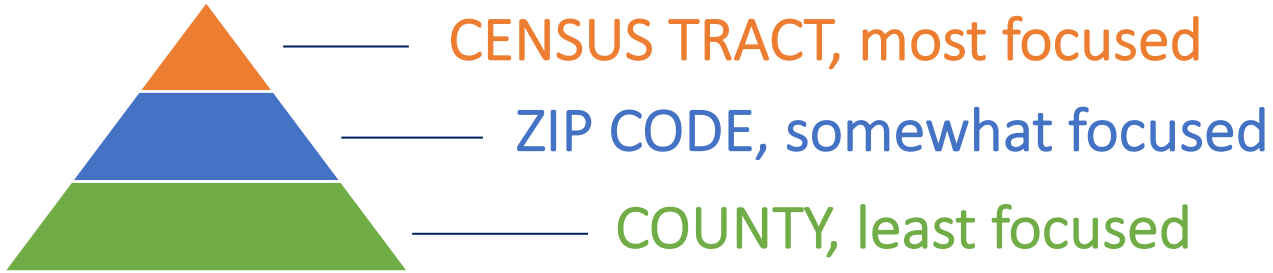
See here for the complete prioritization guidance document.
Today's session will be focused on Priority Group 4; support for identifying Priority Group 3 can be found here (last page).

Identifying individuals by specific geographic area helps us support people may be most in need.

Geographic categories can be used to identify groups of people who may be under-resourced (i.e., using an equity lens.)

Smaller categories, such as **census tracts**, can be more useful, as they provide a greater level of focus on a particular area.

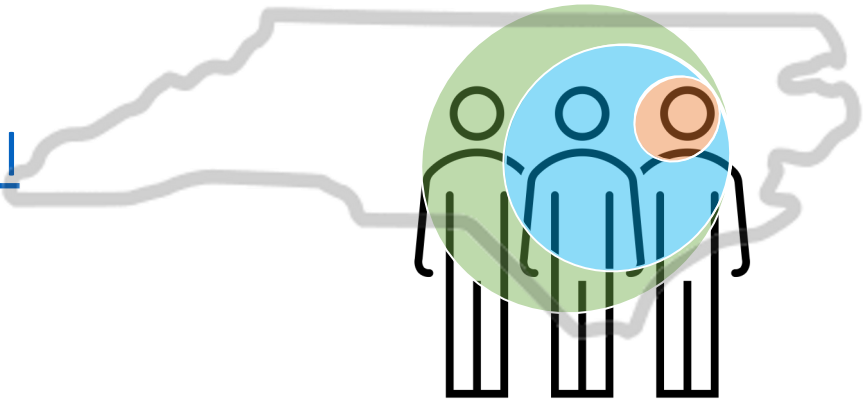




NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

Why use census tracts?

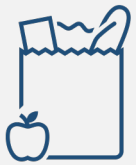
- **Census tracts are subdivisions of counties** for which the Census collects statistical data.
  - Looking at data at the county or zip code level can sometimes “mask” or hide important differences that may exist within a county.
  - Most people do not know which census tract they live in or the geographic boundaries that define census tracts.
- There are online tools from the Census Bureau that can help determine this information.
  - https://www.census.gov/geographies/reference-maps/2020/geo/2020pl-maps/2020-census-tract.html



Agenda for Today's Office Hours

Q&A will be monitored throughout each module and reviewed at the end of the presentation.

1	How to Get a List Of Your Cases in NC COVID
2	How to Identify High-Priority Census Tracts
3	How to bring it together: SVI Tool Use Case
Attendee Q&A	



Using NC COVID to Identify Priority Cases

Work Cycle of an NC COVID Event

How a new event moves through NC COVID

A person gets a positive COVID test.

North Carolina
COVID-19 Surveillance System

The lab is imported or manually entered into NC COVID.

Workflow Queues

LHD Acknowledgement Needed
LOCAL - Lab result review required

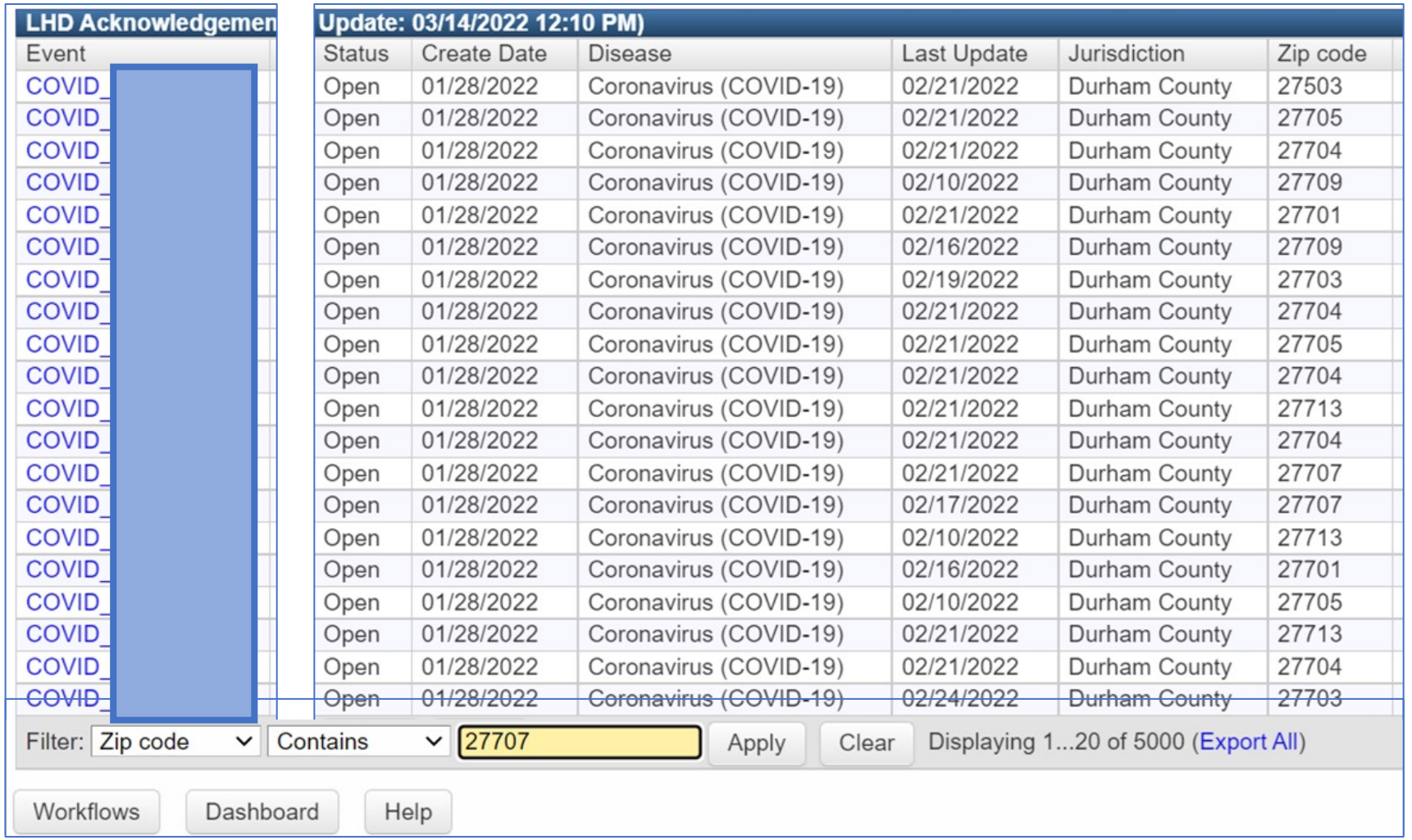
- *The event needs to be assigned to the appropriate LHD group in the Investigation Trail of the Admin pkg*
- *Review and acknowledge the lab for the event. All imported and manually entered labs must be reviewed and acknowledged.*

Workflow Queues

Event Classification status: 1. Original Assignment

The event will stay in the Original Assignment workflow for your county until all case follow up is complete and the event is assigned to the State.

Using the Lab Acknowledgement Workflow to Identify Cases in Under-Resourced Zip Codes



LHD Acknowledgemen

Update: 03/14/2022 12:10 PM)

Event	Status	Create Date	Disease	Last Update	Jurisdiction	Zip code
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27503
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27705
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27704
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/10/2022	Durham County	27709
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27701
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/16/2022	Durham County	27709
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/19/2022	Durham County	27703
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27704
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27705
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27704
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27713
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27704
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27707
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/17/2022	Durham County	27707
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/10/2022	Durham County	27713
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/16/2022	Durham County	27701
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/10/2022	Durham County	27705
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27713
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/21/2022	Durham County	27704
COVID_	Open	01/28/2022	Coronavirus (COVID-19)	02/24/2022	Durham County	27703

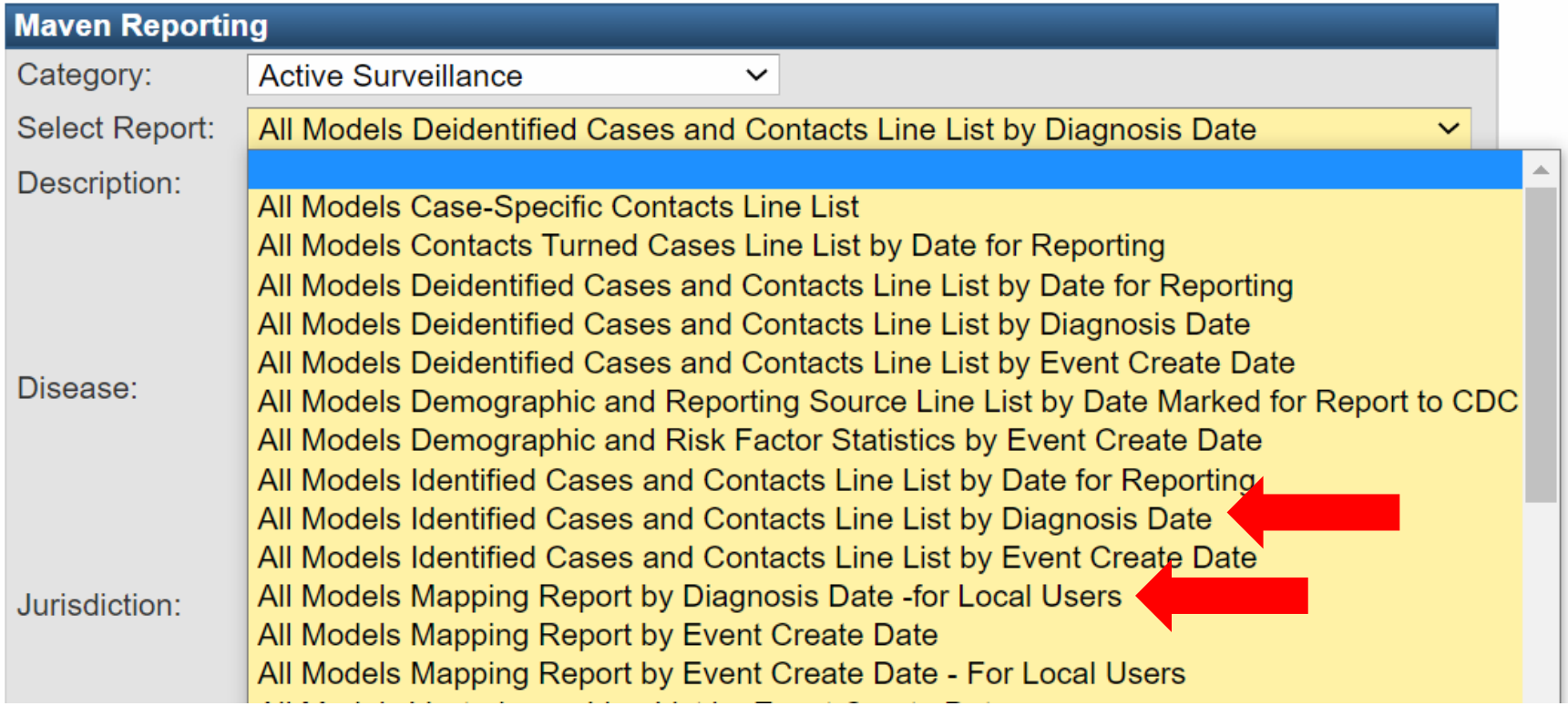
Filter: Zip code | Contains | 27707 | Apply | Clear | Displaying 1...20 of 5000 (Export All)

Workflows | Dashboard | Help

Using NC COVID Reports to Find Cases in Specific Census Tracts & Zip Codes

Basic principles:

- Reports can include geographic data AND race, ethnicity, gender, age, and other useful information
- Reports can turn into spreadsheets



Reports that include census tract:

- *Identified Line Lists (also has race/ethnicity, age, and gender)*
- *Mapping Reports*

Using NC COVID reports: Report Output

Identified Line List by Diagnosis Date

Earliest Covid-19 diagnosis date
Event ID
Create Date
Disease
Classification Status
Last Name
First Name
Middle Name
Birthdate
Age
Gender
Pregnant
Race
Hispanic

Street
Street1
Street2
City
State
Zip
County
Census Tract
Home Phone
Work Phone
Cell Phone
LHD Nurse
Assigned Group
Assigned User

Outbreak
Event Status
Clinical Outcome
Symptom Onset Date
Diagnosis Date
Date Initial Report to PH
Date Identified as Contact
Specimen Date
MMWR Week
MMWR Date
Hospitalized?
Patient Interviewed?
Interview Date
Other interviewed?
Other interviewed date
Date reported to CCTO
Email

Mapping Reports

EARLIEST_DIAGNOSIS_DATE
EVENT_ID
MESSAGE
CREATE_DATE
PERSON
DISEASE
CONTACTPOINT_TYPE
STREET1
STREET2
CITY
STATE
POSTAL_CODE
COUNTY
COUNTRY
HOME_PHONE
WORK_PHONE
MOBILE_PHONE
TRACT
BLOCK
LATITUDE
LONGITUDE

Follow Along

PUT IT INTO PRACTICE:

If you would like to follow along with our demo on screen to go through the processes we discuss today, please take this time to log into NC COVID.

LOGGING ON...

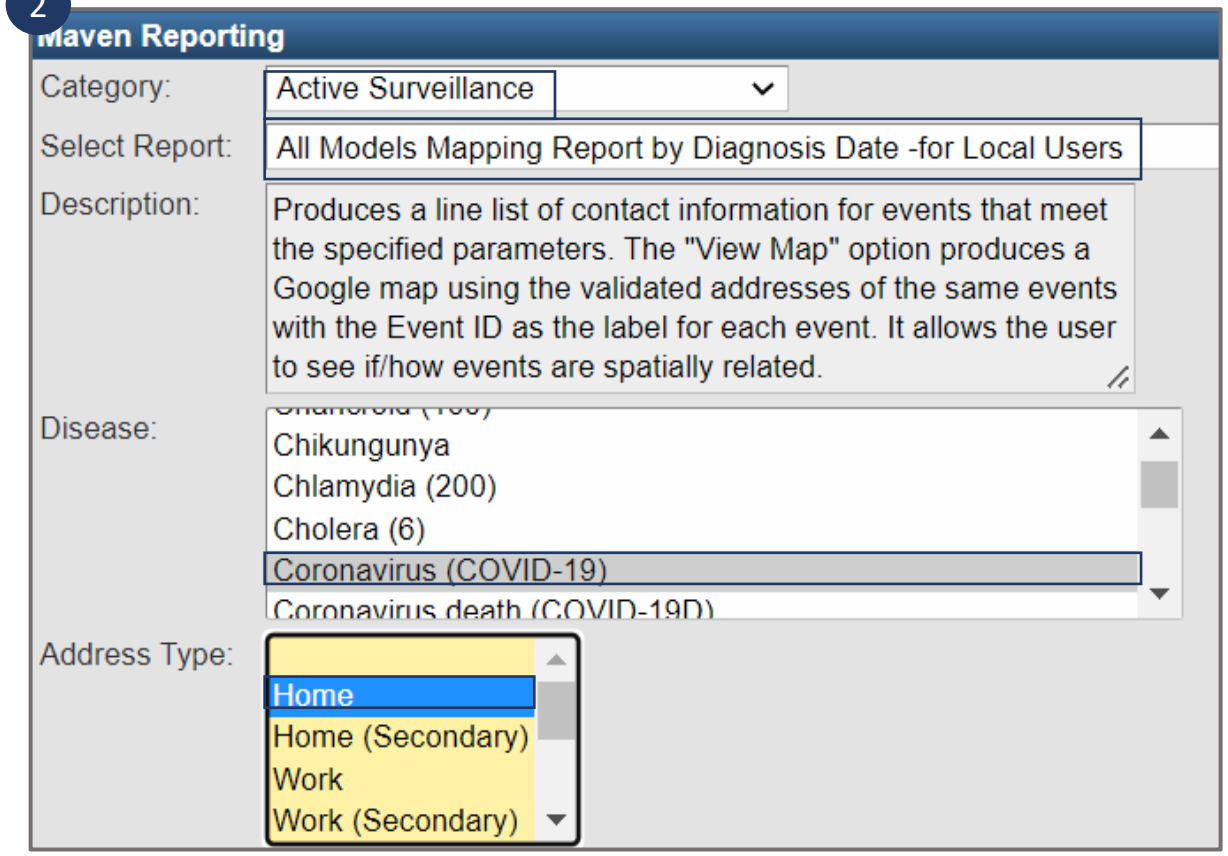
PLEASE SIT TIGHT AS OTHERS WORK!

Using NC COVID Reports: Reports with Census Tract (1/2)

1. Click the report icon.
2. Make the following selections:
   - **Active Surveillance** for *Category*
   - Either **Identified Line List** or **Mapping Report** for *Select Report*.*
   - **Coronavirus (COVID-19)** for *Disease*
   - **Home** for *Address Type*.

1

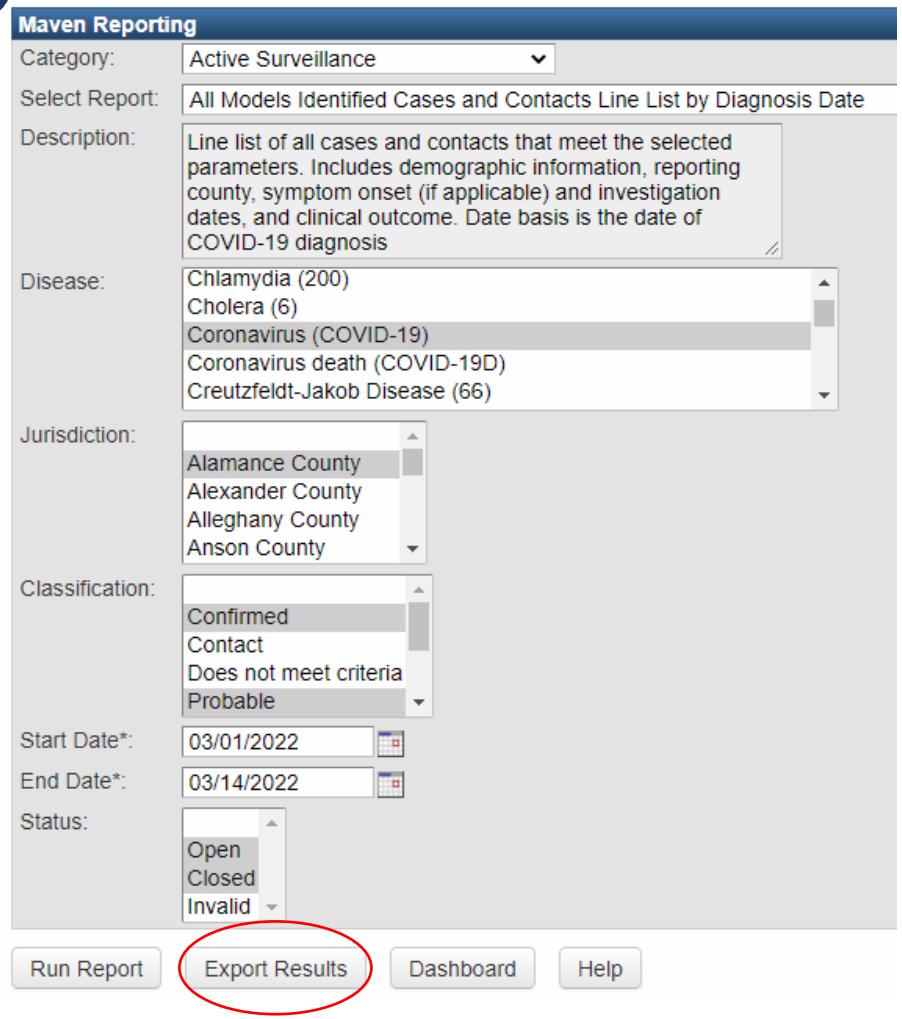
2



Using NC COVID Reports: Reports with Census Tracts (2/2)

3. Make the following selections:
   - **Confirmed** and **Probable** in *Classification*.
   - *Start Date* and *End Date*
4. Export your results and download the .xls file. Save the file as an Excel file (.xlsx format). You can then filter this spreadsheet on the zip code or census tract of interest.

1



2

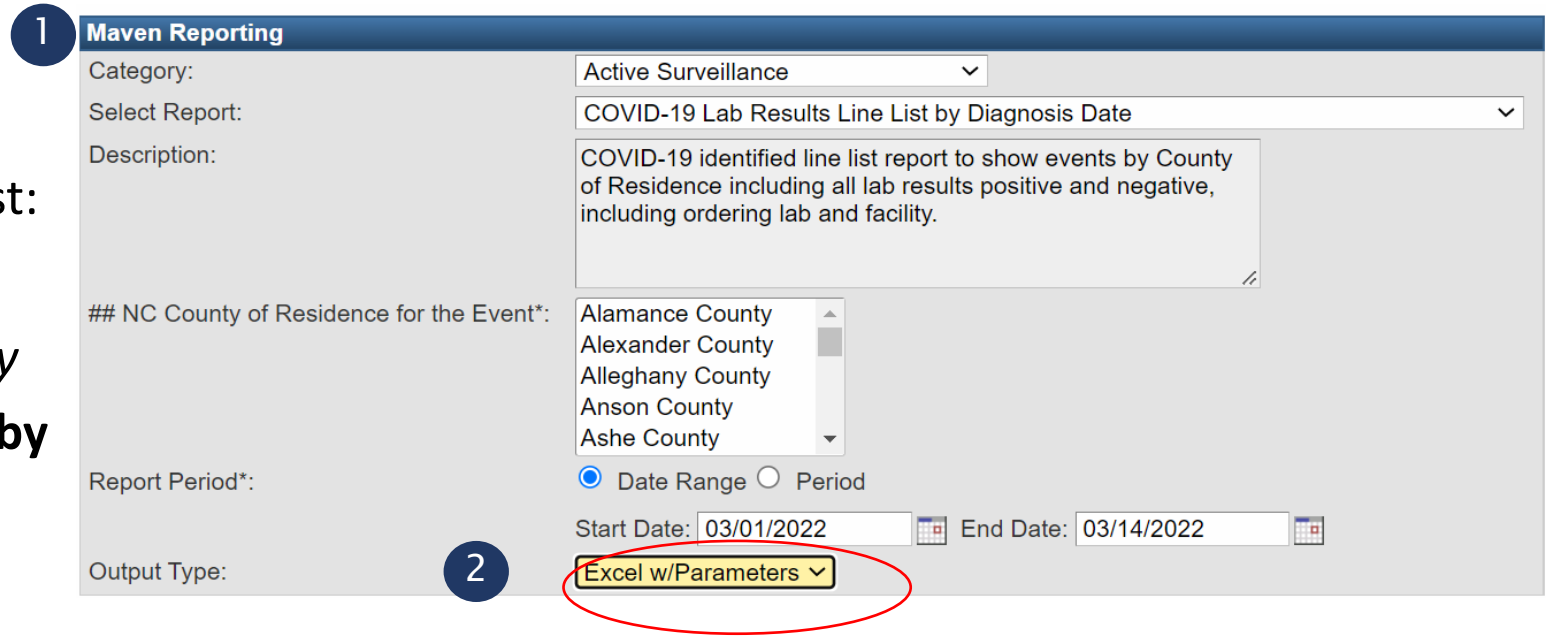
CITY	STATE	POSTAL_CODE	COUNTY	COUNTRY	TRACT
Durham	NC	27705	Durham County	USA	011204
Durham	NC	27705	Durham County	USA	000402
Durham	NC	27701	Durham County	USA	001100
Durham	NC	27704	Durham County	USA	001710
Durham	NC	27704	Durham County	USA	001710
Durham	NC	27713	Durham County	USA	002022
Durham	NC	27704	Durham County	USA	000101
Durham	NC	27712	Durham County	USA	001707

Using NC COVID Reports: Identifying Cases With Lab Results From Sites of Interest

Basic Principle: Looking at where the person was tested can help identify people who may need resource support

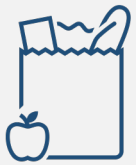
To run the COVID-19 Lab Results Line list:

1. Make the following selections:
   - **Active Surveillance** for *Category*
   - **COVID-19 Lab Results Line List by Event Create Date** for *Select Report*.
   - **Date Range** for *Report Period*.
2. Select **CSV** or **Excel** for *Output Type*, and then click "Run Report."



The time to run the report will vary depending on how much data is being pulled and the time the report is being run. If the report information disappears, reselect the report name and the information on your run will reappear.

Please be mindful of the impact of reporting on the system and run in chunks.

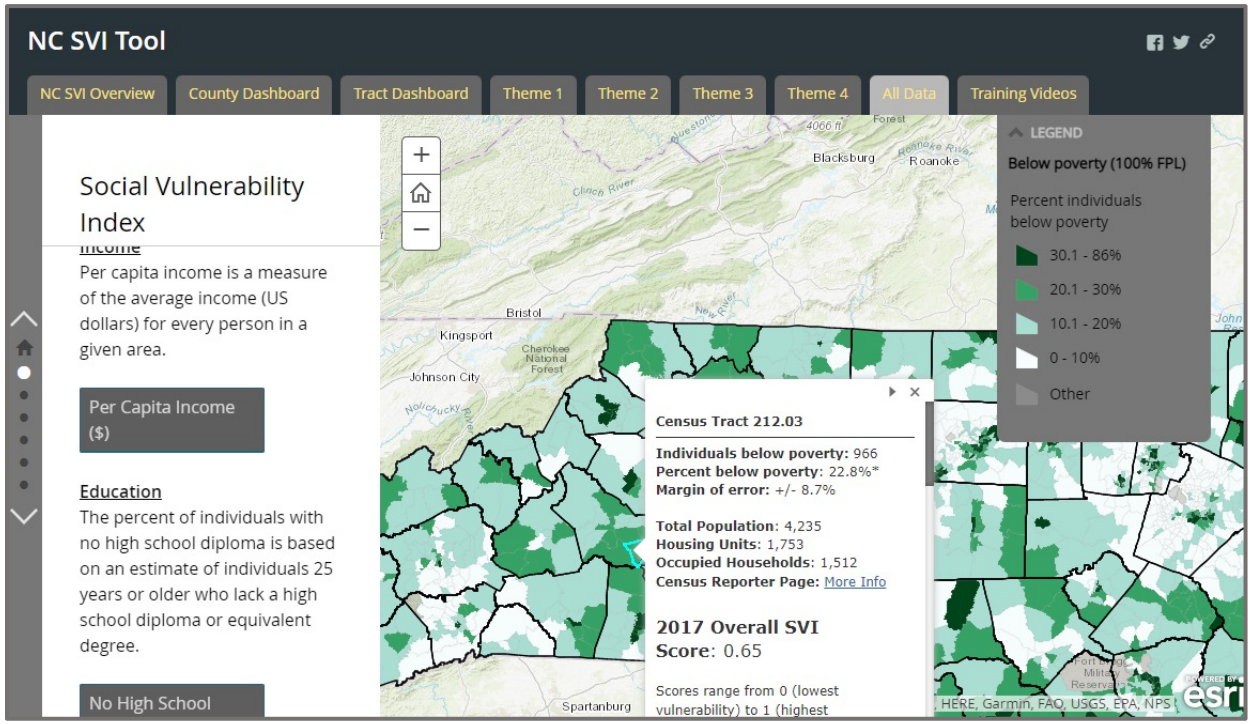


Identifying Priority Census Tracts

OK, I've got my case lists. Now, which census tracts do I filter for?

Basic principle: Looking at various factors like housing and income, you can identify geographic areas where people are more likely to have resource needs

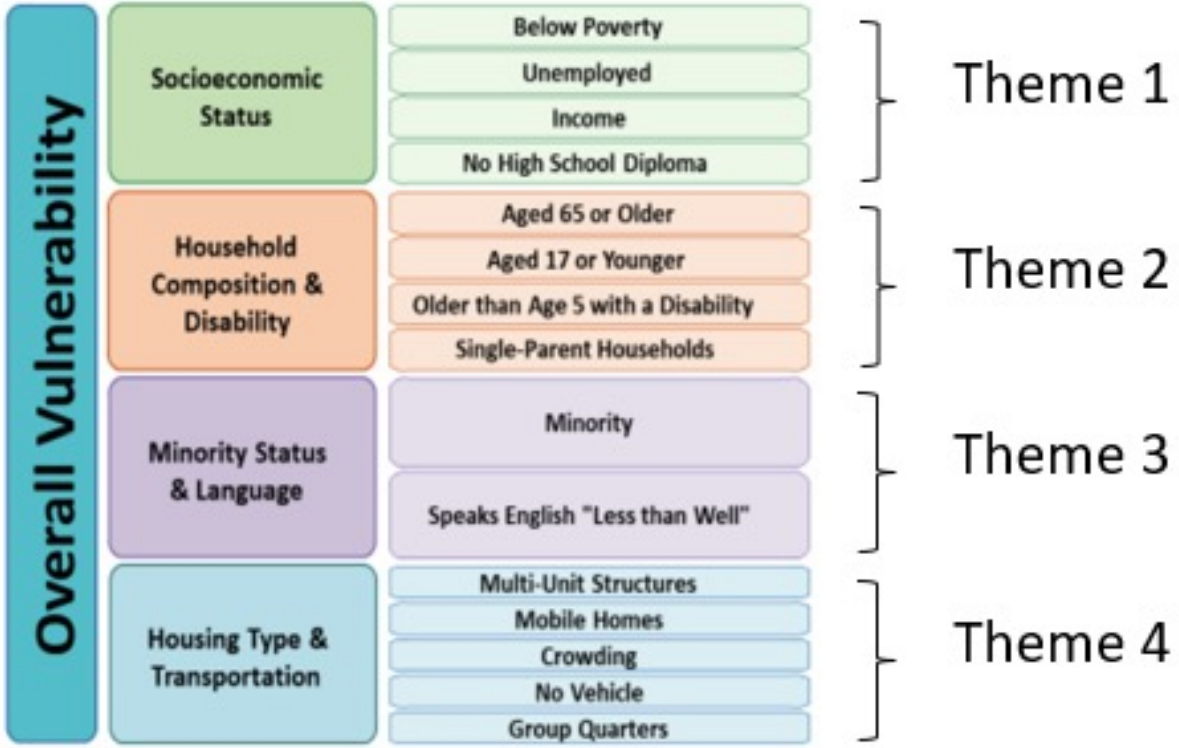
To identify census tracts with the greatest Social Vulnerability Index (SVI) value in your county, use the "All Data" tab on the **SVI tool** to see a map of census tracts by SVI.



To identify cases who live in these areas, the NC COVID Identified Line List and Mapping reports can then be used. See next slides for details.

CDC/ATSDR Social Vulnerability Index (SVI)

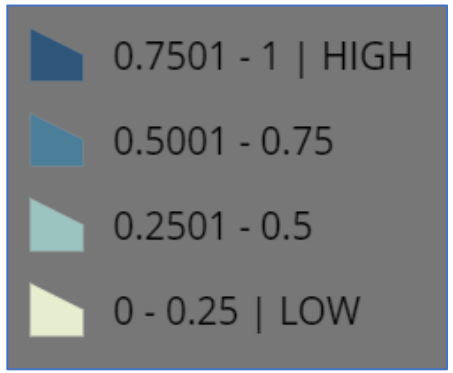
- Data can be accessed as an interactive map and datasets can be downloaded for use.
- There is an overall score as well as a score for four main themes:
  - Socioeconomic Status
  - Household Composition & Disability
  - Minority Status & Language
  - Housing Type & Transportation



Source:
https://www.atsdr.cdc.gov/placeandhealth/svi/index.html

Key Differences Between the Tools Available to You

NC SVI Tool

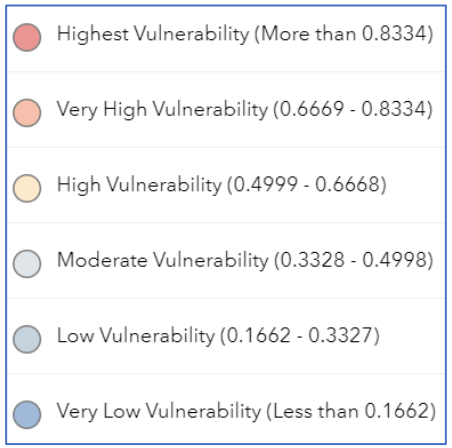


- Based on 2017 CDC SVI data
- Uses four categories (i.e., quartiles) to define SVI levels

WHY SHOULD THIS BE USED?

The tool provides an interactive way to access information on the 2017 CDC SVI data at the county and census tract level, while allowing the user to focus on a specific SVI theme or the overall SVI score.

Vaccine Data with CDC SVI Data

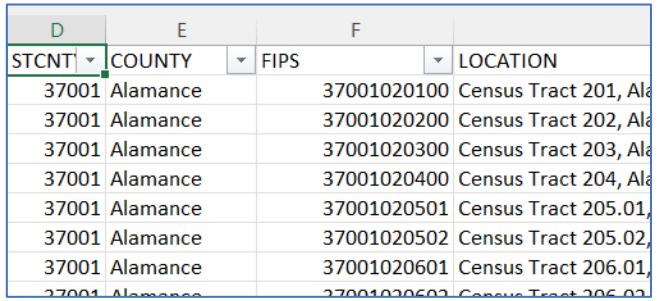


- Based on 2018 CDC SVI data
- Uses six categories to define SVI levels

WHY SHOULD THIS BE USED?

The tool provides an interactive way to access information on the 2018 CDC SVI data at the census tract level using the overall SVI score. It also allows the option of comparing to vaccination status as of May 31, 2021.

CDC SVI Excel File



D	E	F	
STCNT	COUNTY	FIPS	LOCATION
37001	Alamance	37001020100	Census Tract 201, Ala
37001	Alamance	37001020200	Census Tract 202, Ala
37001	Alamance	37001020300	Census Tract 203, Ala
37001	Alamance	37001020400	Census Tract 204, Ala
37001	Alamance	37001020501	Census Tract 205.01,
37001	Alamance	37001020502	Census Tract 205.02,
37001	Alamance	37001020601	Census Tract 206.01,

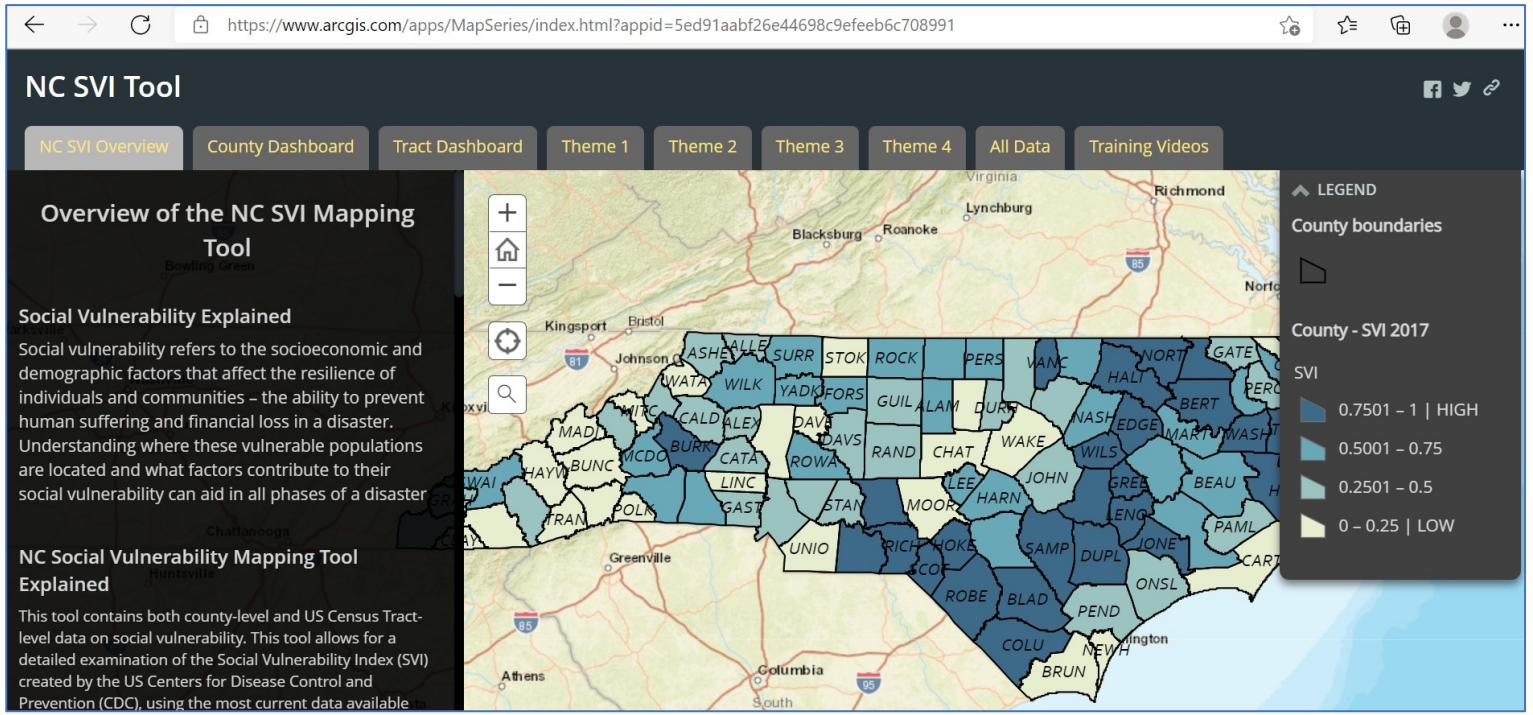
- Most recent data downloaded into an excel with the 2018 SVI values

WHY SHOULD THIS BE USED?

The tool allows you to filter data to easily identify the census tracts for your county *without a visual platform*. It contains information on the 2018 CDC SVI data allowing the user to quickly obtain the actual value for a specific SVI theme or the overall SVI score for the census tract.

NC SVI Tool

- Created by NC Institute for Public Health at the UNC Gillings School of Global Public Health, in collaboration with the Risk Management section of NC DPS.
- Provides interactive way to access information on the **2017** CDC SVI at the county and census tract level.



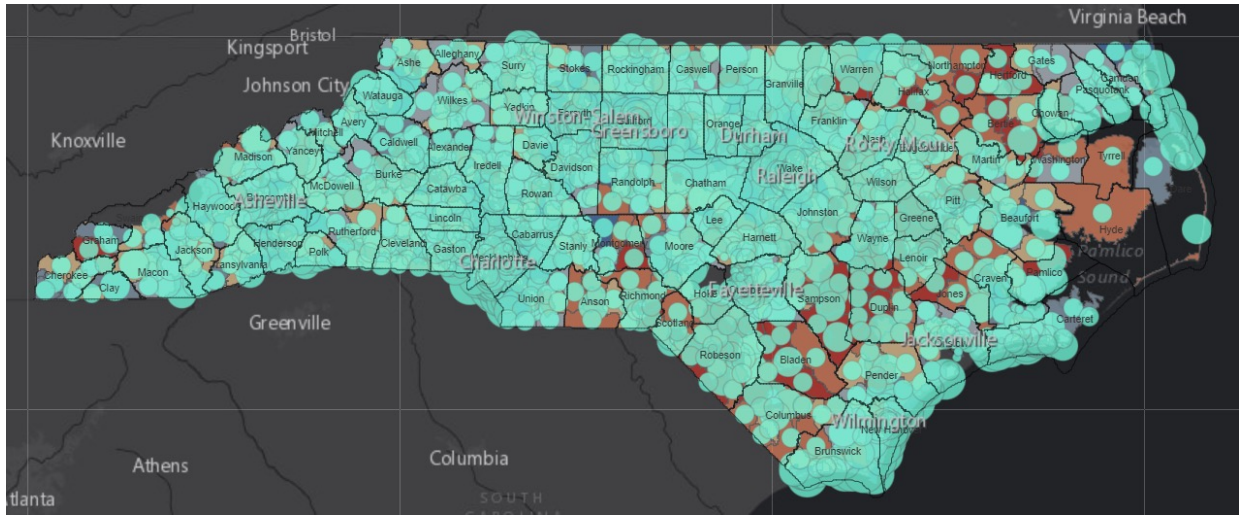
Accessible at the following link:

https://www.arcgis.com/apps/MapSeries/index.html?appid=5ed91aabf26e44698c9efeeb6c708991

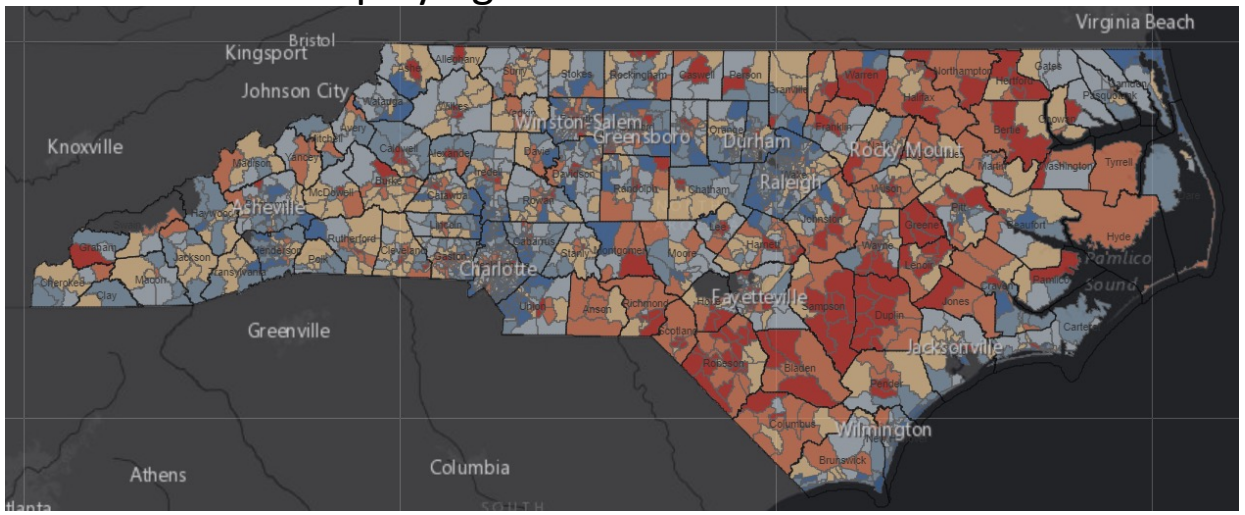
NC Interactive COVID-19 Vaccine Map with CDC SVI

- Earlier in the pandemic, NC DHHS developed an interactive map to look at correlations between vaccination coverage at the census tract level and the **2018** CDC SVI.
- While the vaccine data is no longer updated, this map serves as an excellent resource for visualizing the SVI data for North Carolina.
- It can be accessed at the following: https://nc.maps.arcgis.com/apps/webappviewer/index.html?id=31df85b470ad49809445a2d83e80d269

Vaccine data is the default view



SVI without displaying vaccine data

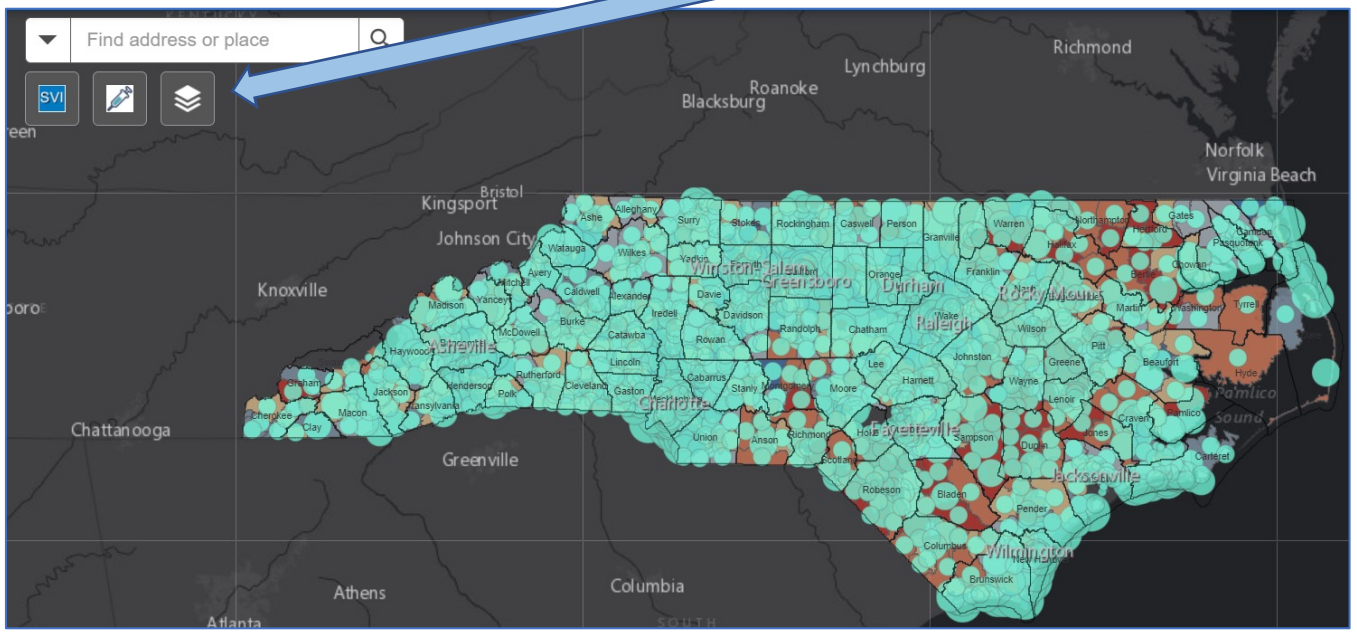


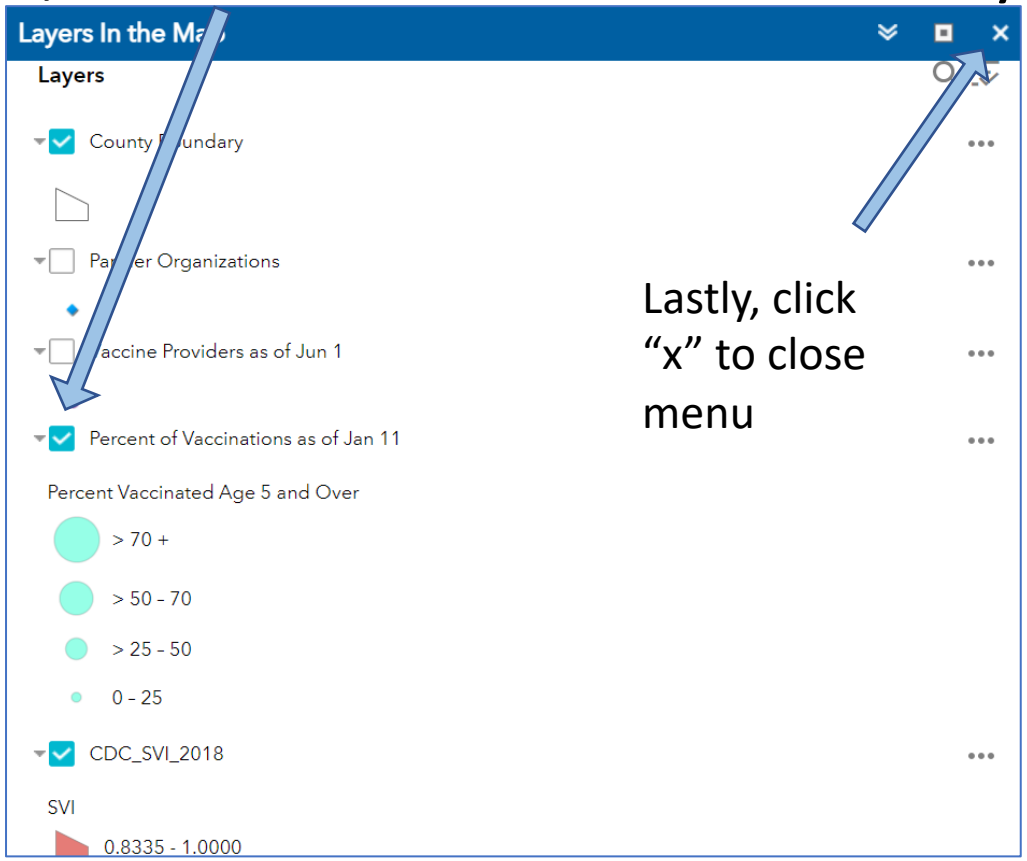
NC Interactive COVID-19 Vaccine Map with CDC SVI

To remove the vaccine data from the map view:

First, click the layers icon to display the Layers menu

Next, uncheck the box for vaccine layer





Lastly, click "x" to close menu

CDC SVI (Excel file)

- We have downloaded the most recent data and created an Excel with the 2018 SVI values.
- It can be filtered to easily identify the census tracts for your county.

- Show table

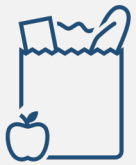
	A	B	C	D	E	F	G	H	I	J	K	L
1	ST	STATE	ST_ABE	STCNT	COUNTY	FIPS	LOCATION	RPL_Theme1	RPL_Theme2	RPL_Theme3	RPL_Theme4	RPL_Themes
2	37	NORTH CAROLINA	NC	37001	Alamance	37001020100	Census Tract 201, Alamance County, North Carolina	0.6210	0.6993	0.5724	0.7286	0.7038
3	37	NORTH CAROLINA	NC	37001	Alamance	37001020200	Census Tract 202, Alamance County, North Carolina	0.9459	0.9427	0.9382	0.5904	0.9324
4	37	NORTH CAROLINA	NC	37001	Alamance	37001020300	Census Tract 203, Alamance County, North Carolina	0.8459	0.9607	0.9659	0.9491	0.9773
5	37	NORTH CAROLINA	NC	37001	Alamance	37001020400	Census Tract 204, Alamance County, North Carolina	0.8797	0.8291	0.9502	0.9468	0.9607
6	37	NORTH CAROLINA	NC	37001	Alamance	37001020501	Census Tract 205.01, Alamance County, North Carolina	0.6950	0.6171	0.7253	0.2816	0.6127
7	37	NORTH CAROLINA	NC	37001	Alamance	37001020502	Census Tract 205.02, Alamance County, North Carolina	0.9565	0.7667	0.9253	0.8988	0.9579
8	37	NORTH CAROLINA	NC	37001	Alamance	37001020601	Census Tract 206.01, Alamance County, North Carolina	0.0324	0.2263	0.1691	0.0277	0.0227
9	37	NORTH CAROLINA	NC	37001	Alamance	37001020602	Census Tract 206.02, Alamance County, North Carolina	0.0810	0.8185	0.2077	0.6015	0.2457

How can this information inform public health practice and equity work?

- It can provide a picture of where vulnerable populations reside in your county.
- It allows you to plan and provide resources using an equity-based approach.

Pandemic Response Example:

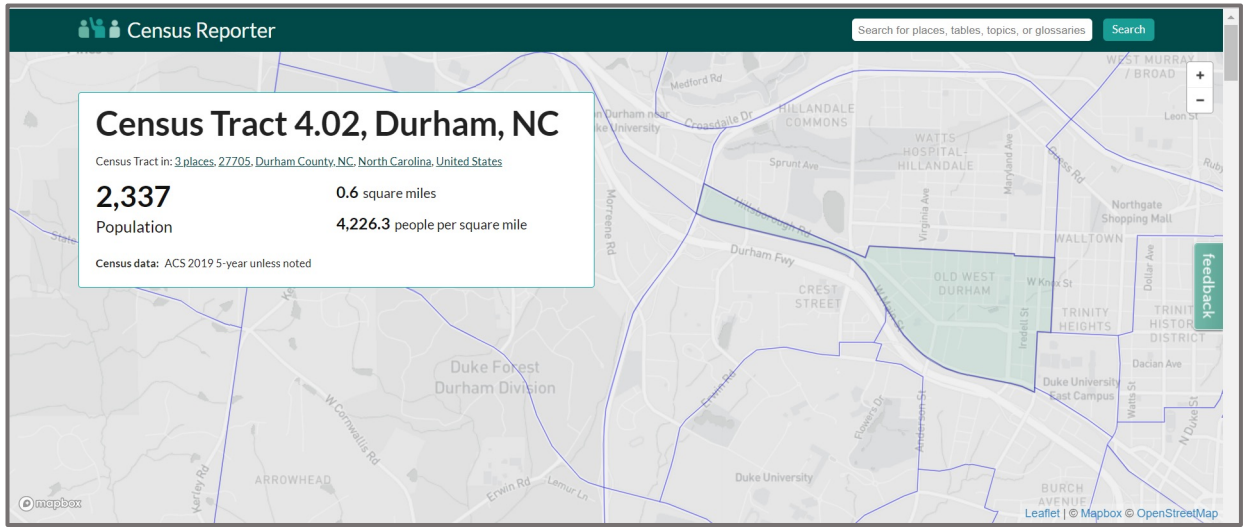
- Helped to guide decisions on where to establish testing or vaccination sites (especially at the earlier stages of the pandemic when resources were limited).



SVI Tool Use Case

Before Getting Started

- Determine if you will only use the overall index or if you will use information from any of the four major themes (e.g., Socioeconomic Status, Household Composition & Disability, Minority Status & Language, and Housing Type & Transportation)
- Download the census tracts map for your county from the Census Bureau website (see slide #9)
  - *Note that census tracts display differently in different platforms. A census tract that is shown as **4.02** in the SVI Tool will be displayed as **000402** in NC COVID – adjust your filters accordingly.*



TRACT	E
011204	
000402	
001100	
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001710	
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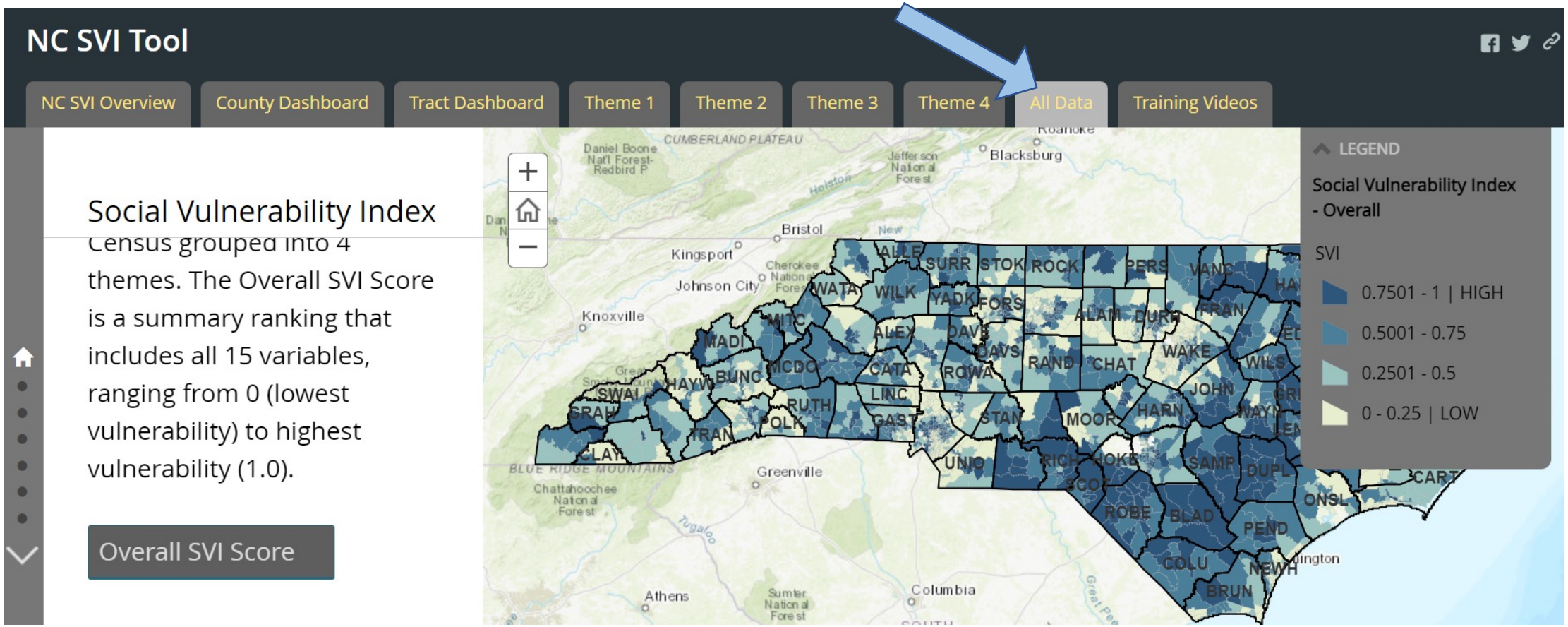
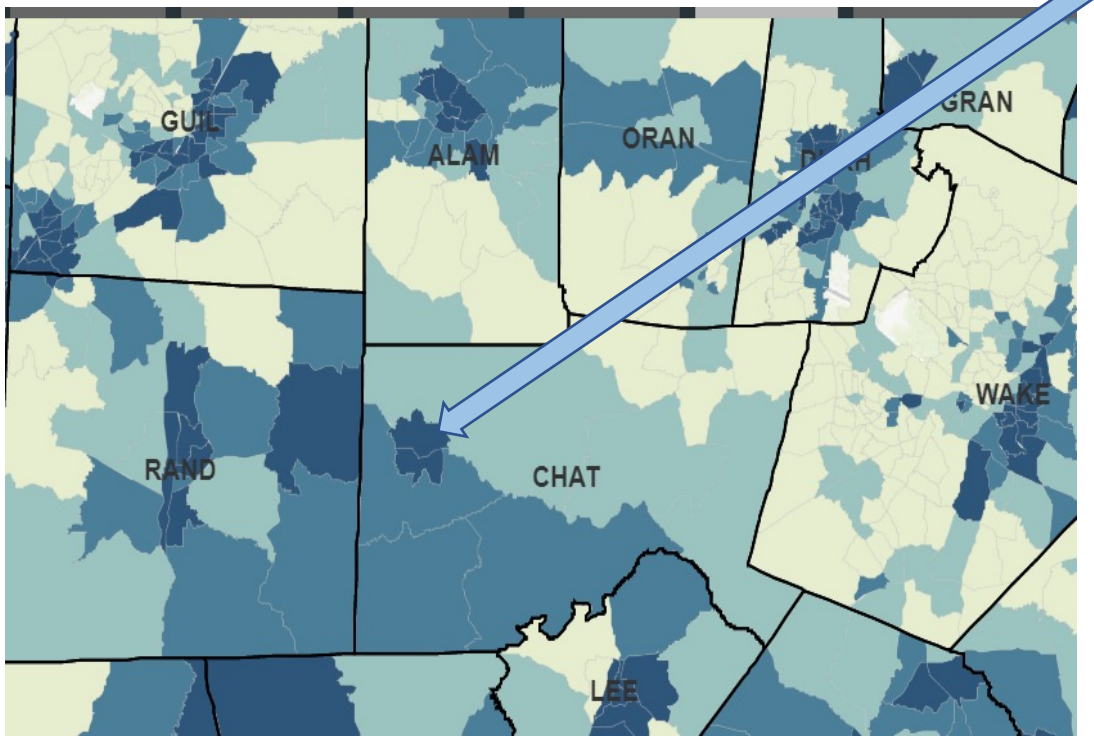
Use Case: NC SVI Tool

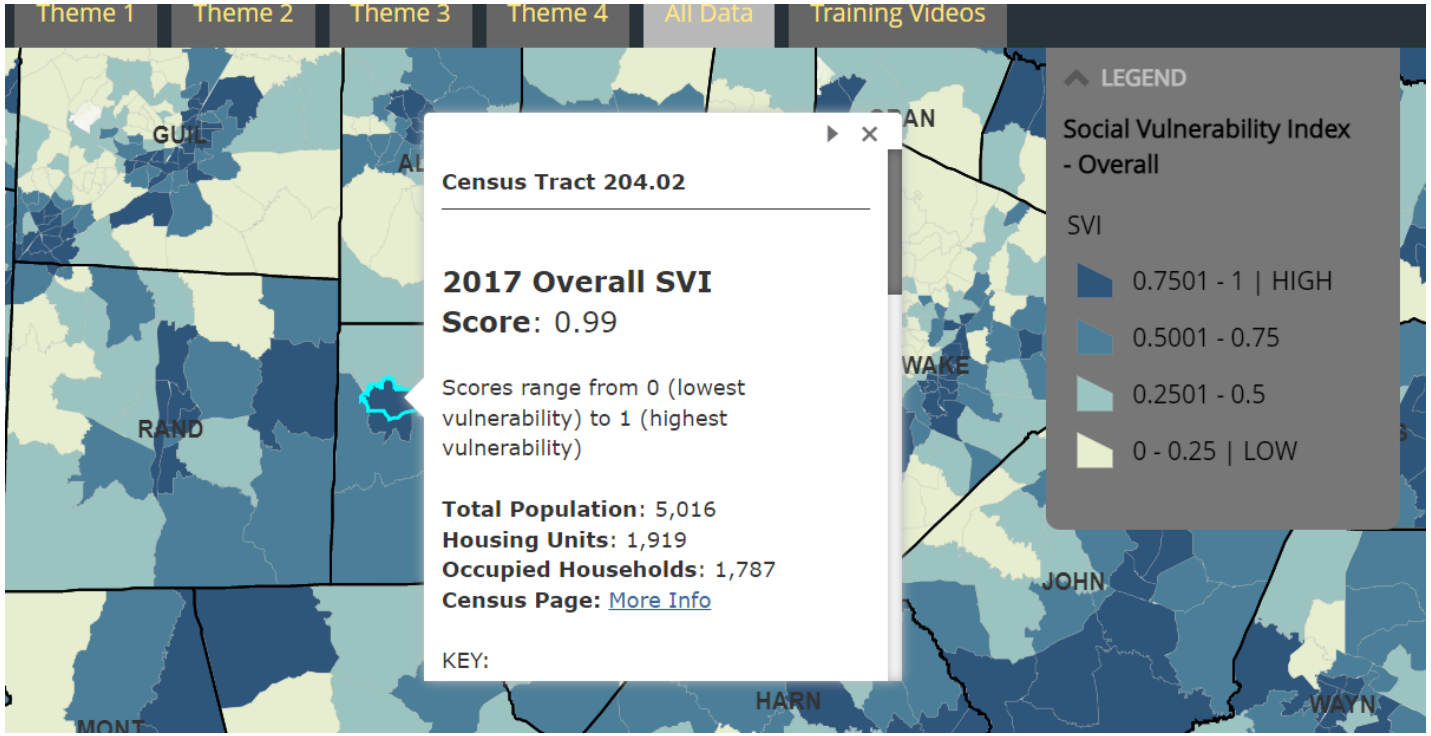
- Click on the “All Data” tab to access the SVI - Overall map
- You can then zoom into your county to see the census tracts with the highest SVI values



Use Case: NC SVI Tool

- Click on the census tract(s) with the darkest color to get additional information on the tract

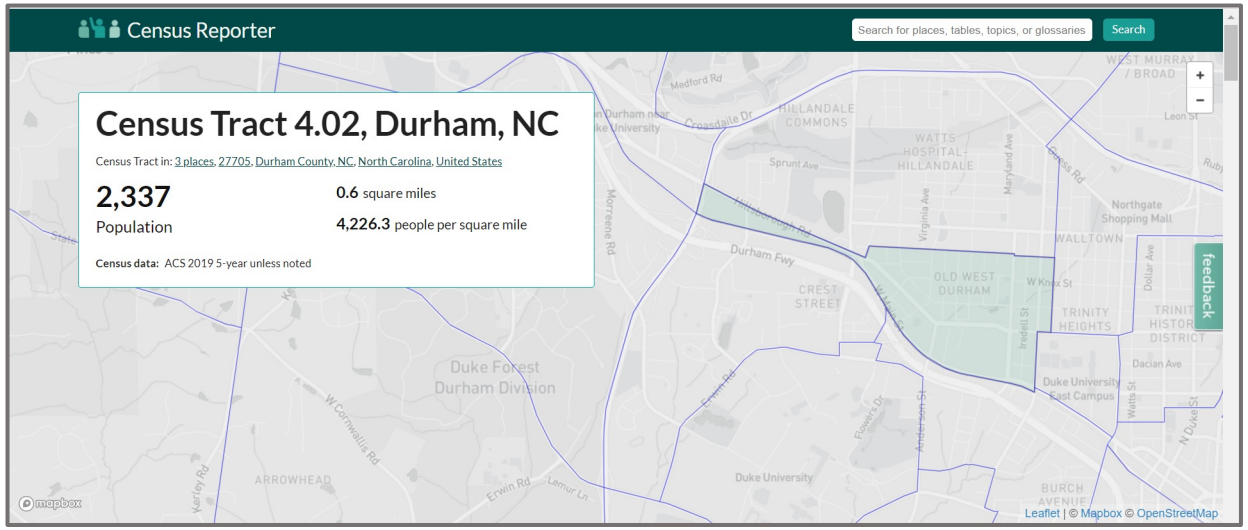




Bringing It All Together

Now that you have identified census tracts or zip codes that are high priority…

- Filter your workflow to show high priority zip codes and make calls to case patients in those zip codes
- Filter your report to show high priority census tracts and make calls to case patients in those census tracts
  - *Note that census tracts display differently in different platforms. A census tract that is shown as **4.02** in the SVI Tool will be displayed as **000402** in NC COVID – adjust your filters accordingly.*



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Questions?

Today's panelists can support questions related to:

- Using the SVI Tool to identify census tracts of interest
- Using NC COVID reports and workflows to identify case patients in areas of interest
- Using CCTO to identify individuals who have requested resource follow-up
- Other topics related to outreach to under-resourced communities as outlined in the guidance

Panelists
Erika Samoff – *Surveillance Manager* Erika.samoff@dhhs.nc.gov
Chris Kippes – *Program Director of COVID-19 Response and Special Projects* Chris.Kippes@dhhs.nc.gov
Teresa Wiley – *Director of Community Network Development* twiley@carolinactc.org
Elizabeth Murray – *CT Project Manager* elizabeth.m.murray@dhhs.nc.gov

OTHER TOPICS:

- **Documenting referrals**
- **Finding contacts with resource needs**
- **Best practices for resource linkage**
- **Mapping techniques**

…and any other topic related to reaching out to under-resourced communities!