

Data Documentation

Webpage 2

1. Social Vulnerability Composite Index for the US and NC
 - a. **Data Source:** data for all the calculations required by this page is from [Household Pulse Survey of United States Census Bureau](#).
 - b. **Update Schedule:** weekly data from April 23 are updated on each Thursday with a lag of 1 week
 - c. **Calculation:** for both the **entire population** and the **different subgroups**, the composite index is calculated as following,
 - i. Composite Index = Average of {%Anxious, %Worry, %Little Interest, %Depressed, %Delay in Healthcare, %Unable to Get Healthcare, %Food Insecure}
 - ii. %Anxious, %Worry, %Little Interest, %Depressed, %Delay in Healthcare and %Unable to Get Healthcare are calculated following the same procedure as the same variable in Webpage 2
 - iii. Question asked: food sufficiency in the last 7 days
Notations for the answers:
 1. ET: number of people who answered “Enough of the types of food wanted”
 2. EF: number of people who answered “Enough food, but not always the types wanted”
 3. SN: number of people who answered “Sometimes not enough to eat”
 4. ON: number of people who answered “Often not enough to eat”
$$\%Food\ Insecure = (SN + ON) / (ET + EF + SN + ON)$$
2. %Change in Employment compared to Jan 2020 for the US and NC
 - a. **Data Source:** [Opportunity Insight](#) (Collected from [Earnin](#), [Paychex](#), and [Intuit](#))
 - b. **Update Schedule:** daily data from Jan 8, 2020 to the most recent observation are updated irregularly.
3. %Change in Low Income Household Earnings compared to Jan 2020 for the US and NC
 - a. **Data Source:** [Opportunity Insight](#) (Collected from [Earnin](#) and [Homebase](#))
 - b. **Update Schedule:** daily data from Jan 8, 2020 to the most recent observation are updated irregularly.
4. %Change in Low Income Education Outcomes compared to Jan 2020 for the US and NC
 - a. **Data Source:** [Opportunity Insight](#) (Collected from [Zearn](#))
 - b. **Update Schedule:** weekly data from Jan 8, 2020 to the most recent observation are updated irregularly.
 - c. **Calculation**
 - i. % Change in Low Income Education Outcomes = Average{Engagement_inclow, Badges_inclow}

- ii. Engagement_inclow: data for % change of students using Zearn platform relative to Jan 6, 2020 to Feb 21 2020 for schools in the 25% of ZIP codes with the lowest median income, from [Opportunity Insight](#).
- iii. Badges_inclow: data for % change of students achievements earned (badges) on Zearn platform relative to January 6-February 21 2020 for schools in the 25% of ZIP codes with the lowest median income, from [Opportunity Insight](#).

5. % of Population Delaying Healthcare for the US and NC

- a. **Data Source:** data for number of people surveyed who experienced delay in getting medical care and unable to get medical care for both the UNS and NC is from [Household Pulse Survey of United States Census Bureau](#).
- b. **Update Schedule:** weekly data from April 23 are updated on each Thursday with a lag of 1 week
- c. **Calculation:**
 - i. % of Population Delaying Healthcare = Average of {%Delay in Healthcare, %Unable to Get Healthcare}
 - ii. Notations for the answers to the survey question:
 - 1. Y: number of people who answered “Yes” to the survey question
 - 2. N: number of people who answered “No” to the survey question
 - iii. Question asked: In the last four weeks, did you delayed getting medical care because of COVID-19 Pandemic?
 $\% \text{ Delay in Healthcare} = Y / (Y + N)$
 - iv. Question asked: In the last four weeks, did you needed medical care for something unrelated to COVID-19, but did not get it?
 $\% \text{ Unable to Get Healthcare} = Y / (Y + N)$

6. % of Population Experiencing Anxiety or Depression for the US and NC

- a. **Data Source:** data for number of people surveyed who experienced anxious, worry, little interest and depressed for both the UNS and NC is from [Household Pulse Survey of United States Cencus Bureau](#).
- b. **Update Schedule:** weekly data from April 23 are updated on each Thursday with a lag of 1 week
- c. **Calculation:**
 - i. % of Population Experiencing Anxiety or Depression = Average of {%Anxious, %Worry, %Little Interest, %Depressed}
 - ii. Notations for the answers to the survey questions:
 - 1. N: number of people who answered “Not at all” to the survey question
 - 2. SD: number of people who answered “Several days” to the survey question
 - 3. MH: number of people who answered “More than half the day” to the survey question
 - 4. NE: number of people who answered “Nearly everyday” to the survey question
 - iii. Question asked: Over the last seven days, frequency of feeling nervous, anxious, or on edge

$$\% \text{ Anxious} = (MH + NE) / (N + SD + MH + NE)$$

- iv. Question asked: Over the last seven days, frequency of not being able to stop or control worrying

$$\% \text{ Worry} = (MH + NE) / (N + SD + MH + NE)$$

- v. Question asked: Over the last seven days, frequency of having little interest or pleasure in doing things

$$\% \text{ Little Interest} = (MH + NE) / (N + SD + MH + NE)$$

- vi. Question asked: Over the last seven days, frequency of feeling down, depressed, or hopeless

$$\% \text{ Depressed} = (MH + NE) / (N + SD + MH + NE)$$