

Local Economic Impacts on North Carolina Counties by the Covid-19 Pandemic

This research will measure the county-level economic impact of the SARS-COV-2 virus and resultant COVID-19 cases and deaths during the severe economic downturn caused by the mandatory stay-at-home orders enacted during the second quarter of 2020. In addition, for each county the research will estimate the pattern of economic recovery after the lockdown-caused recession. The motivation for the research is to estimate the fiscal impact of the pandemic-induced recession and subsequent recovery for each county in North Carolina County.

The second quarter lockdown of the U.S. economy had different regional economic impacts across the various United States. For example, April 2020 state unemployment rates varied from 28.2 percent in Nevada to only 7.9 percent in Connecticut. In North Carolina, the impacts of the shutdown have also varied widely across counties. April 2020 county unemployment rates ranged from 24.5 percent in Dare County to 6.4 percent in Bertie County. In April 2020, 41 of the 100 North Carolina counties had an unemployment rate higher than the overall state unemployment rate of 12.5 percent.

Table 1 shows the increase in county unemployment rates from March, 2020 to April, 2020. Dare County's unemployment rate increased by 16.9 percentage points in one month: from 7.6 percent in March to 24.5 percent. North Carolina's seasonally unadjusted March to April unemployment rate increased by 8.2 percentage points from 4.3 to 12.5. Dare County's April unemployment rate is now almost double the state average unemployment rate.

In addition to the Dare County experience, some large metro counties also had large increases in their unemployment rates from March to April. Catawba County's unemployment rate increase by 14.8 percentage points, New Hanover County's by 11.1 percentage points, Randolph County's by 10.9 percentage points, and Guilford County's by 10.3 percentage points. It is likely that the May county unemployment rates, to be released next month, will reflect an additional increase on the order of 5 to 8 percentage points above the April rates for some of the hardest hit counties.

In April 2020, 11 North Carolina counties had unemployment rates in excess of 15 percent. When the May unemployment rates are released it is likely that in these 11 counties the unemployment rate will exceed 20 percent and one or two could approach 30 percent. The impact that these high unemployment rates will have on county finances can be devastating but to date have not been estimated. Counties rely on property tax and sales tax as the principle sources of revenue. With high unemployment rates both revenue sources are likely to be adversely affected. The goal of the proposed research is to estimate to what degree county revenues will be impacted by both sources.

High rates of unemployment also result in lost wages. The Quarterly Census of Employment and Wages provides detailed information on job losses by sector during the second quarter of 2020 and also the negative impact on wages for each county. Comparing these data to the pattern of unemployment, lost jobs, and lost wages experienced in each county during the "Great Recession," we can estimate the county-specific revenue impacts expected during 2020 and 2021. These estimates can help inform county and state policy makers about how to adjust expectations of future revenues which can help in setting budget and services priorities in the coming quarters.

Table 1
North Carolina Counties with the Largest Percentage Point Change in Unemployment Rate
(March-April 2020)

Rank	County	March to April Change
1	Dare County	-16.9
2	Alexander County	-16.6
3	Catawba County	-14.8
4	Buncombe County	-14.1
5	Caldwell County	-11.9
6	Brunswick County	-11.5
7	Yadkin County	-11.5
8	Burke County	-11.4
9	New Hanover County	-11.1
10	Rockingham County	-10.9
11	Randolph County	-10.9
12	Haywood County	-10.7
13	Guilford County	-10.3
14	Iredell County	-10.2
15	Rowan County	-9.9
	North Carolina	-8.2

Preliminary List of Data Sources

Local Area Unemployment Statistics

State Monthly Unemployment Rate January 2019 – September 2020
 County Monthly Unemployment Rate January 2019 – September 2020
 State Monthly Unemployment Rate December 2007 – December 2010
 County Monthly Unemployment Rate December 2007 – December 2010

Quarterly Census Employment and Wages

State Monthly/Quarterly Employment by Sector January 2019 – July 2020
 County Monthly/Quarterly Employment by Sector January 2019 – July 2020
 State Monthly/Quarterly Employment by Sector December 2007 – December 2010
 County Monthly/Quarterly Employment by Sector December 2007 – December 2010

Annual Financial Information Report (State Treasurers Office)

County Financial Revenue by Source
 County Financial Expenditures by Source

Budget

John Connaughton

Summer 2020	\$10,000 + 32.3% fringe	\$13,230
2 course buyout		\$34,460

Craig Depken

Summer 2020	\$10,000 + 32.3% fringe	\$13,230
2 course buyout		\$41,448

One Master's level GA (20 hours) for Fall 2020:	\$	5,000
Miscellaneous software and data	\$	<u>1,500</u>

Total		\$108,868
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