

Attachment F

Covid-19 Grant Outcomes and Accomplishments Final Report

To finalize this award, you are required to provide to the Agency with a narrative of the outcomes and accomplishments related to the funds spent for the specific purpose as stated in the grant contract. You can use the secure link provided below to upload images, brochures, and other information to illustrate your outcomes and accomplishments.

<https://ncosbm.sharefile.com/r-rc7f2ca49d574af2a>

1. Organization:

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| Organization Name: | North Carolina Policy Collaboratory at the University of North Carolina at Chapel Hill |
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2. Outcomes and Accomplishments:

The following provides an overview of activities, findings, and accomplishments from the “North Carolina COVID-19 Mobility and Health Impacts Study” supported by the North Carolina Policy Collaboratory at the University of North Carolina at Chapel Hill. The UNC-CH research partners were the Highway Safety Research Center, Cecil G. Sheps Center for Health Services Research, Gillings School of Global Public Health*, and the Howard W Odum Institute for Research in Social Science.

*In collaboration Department of Statistics at North Carolina State University.

Our research focused on studying the relationships between health policies/executive actions, mobility, road safety and COVID-19 in North Carolina.

Summary of Research Methods and Activities

- National and global C19 studies linking mobility and health were synthesized.
- Temporal/spatial relationships and trends related to mobility, demographics, and NC C19 cases were analyzed via time-series and statistical modelling visualizations. Mobility data included vehicle miles/median distance traveled and proximity of individuals. Health data included confirmed C19 cases and deaths and patient county of residence by date.
- A comparative analysis to find factors associated with the rise of NC fatal and serious injury crashes during the pandemic was performed (examining speed, seatbelt usage, impairment, single-vehicle/multi-vehicle crashes, rurality, and more).
- Tracking of teen driver licensing and crashes during the second half of 2020 was performed. Surveys of and focus groups with NC parents of new drivers were performed to gauge impacts of C19 on supervised driving and parents’ support for relevant legislative efforts.
- A website was launched (www.c19mobilityandhealth.unc.edu) to showcase research updates and results. Data archives were created to enable sharing and offer a public view into the research.

Summary of Research Findings and Conclusions

Project findings are shown on the website and in Tech Briefs, presentations, and publications. Highlights include:

- **At risk groups:** The pandemic disproportionately impacted older and younger NC Black/Latinx people. Because development density alone does not explain COVID spread, mobility must be considered. NC is one of 18 states where long-term care facilities account for half of C19 deaths.
- **Mobility and population trends:** After the State of Emergency Declaration in March 2020, travel dropped in most NC counties, with the largest decrease in urban counties. In July, most mobility measures, except the proximity of individuals, returned to close to pre-pandemic levels. In rural counties, C19 cases and deaths continued to exceed those in other counties, correlating with mobility indices. A county’s risk for a C19 outbreak was higher if nearby counties also had outbreaks.
- **Safety:** Though miles traveled dropped in 2020 vs. 2019, severe/fatal crashes stayed the same. During the pandemic, minor/no-injury crashes fell by 23%, but crashes increased on secondary and local roads, for single vehicles, and with unbelted drivers, all of which have more severe outcomes.

Summary of the Implications and Policy Recommendations From Our Research

Our research implications can help decision makers prioritize limited resources in NC and improve resiliency against future disruptions. Recommendations include:

- Focus on stopping community-spread of C19, and partner with healthcare and community-based organizations to disseminate information and distribute vaccines equitably.
- Improve mobility options in rural and lower-income areas where residents are less able to telework.
- Screen and test nursing home residents, guests, and workers. Improve infection control and continue reporting of C19 in nursing homes.
- Continue messaging about masking, social distancing, and restricting gatherings, as these have resulted in a decrease in C19 transmission.
- Increase messaging about wearing seatbelts, avoiding excess speed, and abstaining from alcohol and drugs when operating motor vehicles. Share findings with law enforcement to inform their efforts.
- Keep the current teen driver learner period, thereby maintaining practice opportunities that help prevent teen crashes and fatalities. Any effects of eliminating the teen driver road test are not yet known.