

EXHIBIT F

| UTC Project Information | |
|---|--|
| Project Title | Modeling Future Outbreaks of COVID-19 Using Traffic as Leading Indicator |
| University | Embry-Riddle Aeronautical University |
| Principal Investigator | Scott Parr, Dahai Liu, & Sirish Namilae |
| PI Contact Information | parrs1@erau.edu |
| Funding Source(s) and Amounts Provided (by each agency or organization) | Center for Advanced Transportation Mobility & USDOT, and Embry Riddle Aeronautical University (match) |
| Total Project Cost | \$150,000 |
| Agency ID or Contract Number | 69A3551747125 |
| Start and End Dates | 11/01/2020 – 10/31/2021 |
| Brief Description of Research Project | <p>The movement of people is inherently connected to the spread of viral diseases. Infected individuals expose others as they travel between home, work, school, shopping, and recreation destinations. Understanding the relationship between social/economic activity and the spread of COVID-19 could prove invaluable, as the nation looks to reopen. Unfortunately, some states that reopened first are experiencing spikes in COVID-19 cases. For example, Florida, which entered Phase 1 of the reopening process on May 18, 2020, recorded significant increases in the daily number of COVID-19 cases approximately two weeks later and by June 9th saw the highest single day increases in positive cases. Prior research has demonstrated how drastic changes in human behavior can be measured using highway volume data as a representation of personal activity. As states begin to reopen, it would appear that increases in highway traffic might be a leading indicator of where and when outbreaks of COVID-19 are likely to occur. This research will investigate and model the relationship between roadway traffic and viral outbreaks. The traffic informed SIR model developed by this research will help identify where and when second wave outbreaks are likely to occur and assist in the planning of recovery effort.</p> |

| | |
|---|--------------------|
| <p>Describe Implementation of Research Outcomes (or why Not implemented)</p> <p>Place Any Photos Here</p> | <p>Forthcoming</p> |
| <p>Impacts/Benefits of Implementation (actual, not anticipated)</p> | <p>Forthcoming</p> |
| <p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website | <p>Forthcoming</p> |



U.S. Department of Transportation
Office of the Secretary of Transportation