

Grant Deliverables and Reporting Requirements for UTC Grants

UTC Project Information	
Project Title	The Impact of Mobility on the Spread of Infectious Diseases to and from High Risk Environments
University	Cornell University
Principal Investigator	Samitha Samaranyake
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Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT: \$60,636 Cornell: \$30,000
Total Project Cost	\$90,636
Agency ID or Contract Number	Sponsor Source: Federal Government CFDA #: 20.701 Agreement ID: 69A3551747119
Start and End Dates	Start date: 06/01/2020 End date: 09/30/2021
Brief Description of Research Project	Transportation flows play a critical role in the propagation of infectious diseases. Mitigating the spread of such diseases requires understanding this dependency and building epidemiological models that explicitly account for transportation flows. In epidemiological studies, compartmental models such as the susceptible, exposed, infectious, and recovered (SEIR) model are an important tool in understanding how infectious diseases propagate through a population. Due to the importance of travel on the dynamics of the disease spread, there has been renewed interest in directly modeling transportation flows through the use of spatial meta-population SEIR models. This project will explore models for explicitly integrating transportation flows in SEIR models with a focus on high risk environments.
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	

Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none">• Reports• Project Website	http://ctech.cee.cornell.edu/final-project-reports/