



UTC Project Information	
Project Title	CAV Systems Incorporating Air Pollution Information from Traffic Congestion
University	Central State University
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Funding Source(s) and Amounts Provided (by each agency or organization)	CCAT (\$49,938)
Total Project Cost	\$49,938
Agency ID or Contract Number	69A3551747105
Start and End Dates	6/11/2018 – 12/31/2019
Brief Abstract of Research Project	Through CCAT center, CSU proposes to study air pollutants under different traffic congestion scenarios along selected freeways in Ohio. The study captures pollution intensities in different seasons of the year representing different atmospheric stabilities and concentration of pollutants as a function of hold up times and traffic densities. Our prior work has determined typical hot spots in Ohio along freeways that are prone to high traffic densities and possible congestion. MOVES will be used to generate these scenarios to determine emissions from vehicles in a simulated traffic congestion scenario. ODOT traffic data will be used for these scenarios. Resulting air pollution from emissions will be determined using a dispersion model and compared with NAAQS. A model will be developed to assess severity of air pollution, which will be used to forecast air quality index for the congested areas on freeways. CAV technology will then be deployed to communicate the information to travelers on freeways on radio channels approaching congested areas.
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 	ccat.umtri.umich.edu