

UTC Project Information	
Project Title	Traffic-Related Air Pollution and Childhood Asthma in the United States: A Burden of Disease Assessment
University	Texas A&M Transportation Institute
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Funding Source(s) and Amounts Provided (by each agency or organization)	Center for Advancing Research in Transportation Emissions, Energy, and Health (CARTEEH): \$125,000
Total Project Cost	\$125,000
Agency ID or Contract Number	Grant Number: 69A3551747128 (TTI-01-10)
Start and End Dates	Start Date: January, 18, 2018 End Date: June 30, 2019
Brief Description of Research Project	<p>Asthma is a chronic airway disease characterized by episodes of coughing, shortness of breath and wheezing. Worldwide, asthma is conservatively estimated to effect more than 334 million people, with varying degrees of intensity. Around 6 million children in the United States are affected by asthma, making the condition the most common chronic lung disease in childhood.</p> <p>In this project, we scale up previous efforts and estimate the burden of incident childhood asthma, attributable to traffic-related air pollution, within the Contiguous United States. We do so overcoming key research gaps in previous research by:</p> <ul style="list-style-type: none"> • using alternative improved land-use regression models to estimate traffic-related air pollution at the census block level, • using meta-analytical pollutant-specific exposure-response relationships for the association between traffic-related air pollution and incident childhood asthma, • underlying the burden of disease assessment with spatially varying asthma incidence rates <p>This project will also:</p>

	<ul style="list-style-type: none"> • compile nationwide data sets of traffic-related air pollution, census population, demographic data, and baseline childhood asthma incidence rates that will be added to the CARTEEH Transportation, Emissions and Health Data Hub (https://www.carteeh.org/research/focus-areas/projects/transportation-emissions-and-health-data-hub/) • configure and parametrize burden of disease assessment tools that will be made readily available and can be applied to other health outcomes, pollutants and scenarios <p>We work on this project in collaboration with the Marshall Research Group at the University of Washington, Seattle. This research group has been modelling air pollution using land-use regression and validating their modeled estimates across the Contiguous United States for years.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project website 	

