

UTC Project Information	
Project Title	Inventory of Greenhouse Gas Emissions from On-Road Vehicles in Midwestern USA States and Integrated Approach to Achieving Environmental Sustainability in Transportation
University	NEXTRANS Central State University (Wilberforce, OH)
Principal Investigator	Ramanitharan Kandiah, PhD, PE Associate Professor of Environmental Engineering International Center for Water Resources Management Central State University, Wilberforce, OH 45384 rkandiah@centralstate.edu Krishnakumar V. Nedunuri, PhD Professor and Chair International Center for Water Resources Management Central State University, Wilberforce, OH 45384 knedunuri@centralstate.edu
PI Contact Information	
Funding Source(s) and Amounts Provided (by each agency or organization)	Estimated costs: \$ 200, 000.00 With \$100,000.00 from NEXTRANS Support and \$100,000.00 Cost Share from Central State University, NetIncubator and RAPCA
Total Project Cost	
Agency ID or Contract Number	DTRT12-G-UTC05
Start and End Dates	6/1/2014
Brief Description of Research Project	Green House Gases (GHG) are connected to global warming and hence to climate change. Emissions from on-road vehicles significantly contribute to GHG in the atmosphere. This situation calls for environmental sustainability with the least impact on the transportation sector. Environmental sustainability of the transportation industry should start with the understanding the complexity and the evaluation of the existing status with respect to economy, social behavior and movement patterns, and geography. We propose to monitor changes in climate and environmental parameters with concomitant changes in technology enabled integration and other sustainability factors.

	<p>In the first phase, an inventory of current GHG emissions across spatial, temporal, and stakeholder levels from on-road vehicles are studied as a baseline to monitor impacts from the existing technological, policy, social, health, and economic drivers, including disparities that are controlling the transportation sector. In the second phase, alternative scenarios to the existing on-road mobile transportation system will be evaluated in order to reduce the GHG emissions. This will be looked into the aspects of the transportation mode, traffic network systems and alternative energy.</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 	

