

Request for Research Funding for FY 2019-2020

Requesting Office	District VI	Priority	1 of #
Proposed Title	Assessing the Health Impacts of Complete Street Projects in Florida: Development and Application of an Assessment Tool		
Justification	<p>Transportation is one of the most important functions of the modern society. Transportation projects can have tremendous impacts on the health of the general public through their positive and/or negative effects on physical activity, air quality, and traffic crashes. For a long time, transportation policies and investment decisions gave little attention to public health impacts. Things have begun to change in recent decades. Many states and metropolitan planning organizations (MPOs) now include public health goals and health criteria in transportation planning and project selection processes. The public health community has also begun to partner with transportation planning agencies to integrate health considerations in transportation work. As a result of collaboration between transportation and public health communities, Health Impact Assessment (HIA), a systematic framework developed by public health researchers, has emerged as a preferred approach for considering how transportation and land use decisions can impact public health. Currently, several transportation related HIA tools exist and successful applications of the tools in US metropolitan areas have been reported. For example, the Integrated Transport and Health Impact Model (ITHIM) is a comprehensive tool that estimates the potential health effects of transportation mode shifts through changes to physical activity, air pollution, and traffic injuries. Applications of ITHIM for HIA of regional transportation plans have been conducted in Nashville, Tennessee and Sacramento, California. It is noted that the US Center of Disease Control and Prevention (CDC) was involved in the application in Nashville. Both studies demonstrate the applicability of ITHIM in the US and provide useful guidelines for other metro areas interested in ITHIM applications.</p> <p>The Florida Department of Transportation (FDOT) in 2014 adopted its Complete Street Policy and established the Complete Streets Program to oversee implementation of the Policy. The concept of complete streets refers to streets that are planned, designed, operated, and maintained to enable safe and convenient travel for users of all ages and abilities regardless of their modes of travel. Complete streets allow for safe travel by those walking, cycling, driving automobiles, riding public transit, or delivering goods. In adopting the Policy, FDOT acknowledges that increasing active transportation participation while reducing pedestrian and bicyclist accidents is important for the Department to achieve its goal in promoting safety, quality of life and economic development in the State. With the Complete Street Policy in place, projects promoting active transportation are going to be proposed in the State of Florida. However, assessment of the projects' health impacts in terms of increasing participation in active transportation, improving air quality, and reducing traffic crashes has not been attempted in the State.</p> <p>The need arises now to begin developing a HIA tool specific for Florida's unique demographics and build environment. The outputs of this tool can help the State's transportation planning organizations identify and select projects that achieve a balance between economic development and public health. They can also help educate stakeholders and the general public on the relationship between transportation and health, leading to increased participation in active transportation by the general public.</p>		
Impact	<p>The developed HIA tool can produce projection of disease specific health outcomes (e.g., cardiovascular disease, cancer, and traffic crash mortality) for projects involving walking and bicycling. As demonstrated by previous HIA works in the US, health impacts is certainly a top priority of the general public when it comes to selecting projects for public funding. The assessment results produced by the proposed HIA tool can help FDOT and the State's MPOs gain public support for projects promoting the complete street policy. It can also serve to bring attention to the State's transportation sector about the specific health impacts transportation projects can have on the general public, thus facilitating a partnership between transportation and public health communities in the State. All of these expected benefits from the proposed HIA tool development and application can contribute to FDOT's efforts in promoting safety and quality of life in the State.</p>		
Affected Offices	Roadway Design Office		
Existing Work	<p>Existing work on health impact assessment for regional transportation plans have been done in few metropolitan areas in the US. The assessment processes and tools available are region specific. Research work is required to identify specific planning requirements, data, and methodologies necessary for the development and application of a HIA tool for Florida's unique demographics and built environment.</p>		

Keywords Used	Health impact assessment, complete street		
Funding Request	\$275,000	Anticipated Duration	24 months
Project Manager	Neil Lyn District Statistics Administrator Planning and Environmental Management Office Florida Department of Transportation - District 6 Phone: (305) 470-5373 E-mail: Neil.Lyn@dot.state.fl.us	Contracting Method	direct contract with university
Urgency	1= highest, most immediate need	The rate of traffic accidents involving pedestrians and bicyclists in Florida has historically been among the highest in the US. With the implementation of the Complete Street Policy, FDOT hopes to address this issue. A HIA tool that specifically assess a project's potential in reducing traffic crashes and other public health hazards is urgently needed to address issues involving safety and quality of life.	
Implementability	1=greatest likelihood of and proximity to implementing results	A HIA tool will be developed and delivered, which is directly implementable by the agency. To demonstrate the implementability of the proposed HIA tool, as part of the project, assessment of health impacts will be conducted for projects involving complete streets in Miami-Dade County's 2040 Long Range Transportation Plan as a case study. The tool can be applied to other areas in the state.	
Project Benefits (Succinct, complete explanation)			
This project will develop a HIA tool for quantitative assessment of public health impacts of transportation programs and projects. The tool will be able to address health impacts of various types of projects (design, operations, planning, safety, policy, etc.), and quantify the relationships between transportation outcomes (physical activity, modal shifts, vehicle emissions, safety, etc.) and potential health outcomes (cardiovascular disease, diabetes, depression, fatality, etc.). This project will advance the understanding of transportation project impacts on public health outcomes, promote a standard framework and tool for conducting HIA for transportation project evaluation, and lead to better policy and investment decisions incorporating public health objectives.			
Project Benefits (Select all that apply and explain)	Quantifiable Benefits (units, dollars, etc...if applicable)	Methodology or Data Sources Used to Determine Quantifiable Benefits. If not applicable, please give justification of project benefits	
<input type="radio"/> Materials Enhancement	N/A		
<input type="radio"/> Materials Savings	N/A		
<input type="radio"/> Time Savings	N/A		
<input type="radio"/> Lives Saved/Injuries Prevented	1. Enhanced public awareness of health benefits of complete street projects 2. Greater public support of complete street projects	The developed HIA tool can produce projection of disease specific health outcomes (e.g., cardiovascular disease, cancer, and traffic crash mortality) for projects involving walking and bicycling. When such information about specific health benefits is made available to the public, complete street projects that promote physical activity, improved air quality, and/or reduced traffic crashes are more likely to be favored by the public.	
<input type="radio"/> Other (Explain)	Better planning and investment decisions	The developed HIA tool enables the quantification of project health benefits and facilitates informed project selection and investment decisions.	

