Statewide Non-Motorized Traffic Monitoring Study

PROBLEM
The Louisiana Department of Transportation and Development (DOTD) has funded several research activities in the last five years to better understand the increasing walking and biking activities in the state. A recent Federal Highway Administration (FHWA) report identified “improve data collection and analysis to advance safety for all users” as one of the five opportunities to advance Complete Streets’ efforts. To further this effort, there are a few critical problems in the existing practice to be solved: (1) consolidating non-motorized traffic data collected by public agencies to reduce overlapping work, (2) rotating temporary counters in considering multi-agency collaborations, and (3) investigating the role of new technologies and data products in non-motorized traffic counting.

OBJECTIVE
The objectives of this research are to:
1. Consolidate non-motorized traffic data collected by LTRC/DOTD to date onto a GIS platform
2. Explore the possibilities of consolidating non-motorized traffic data collected by other public agencies onto the same GIS platform.
3. Refine expansion factors for short-term counters with additional data.
4. Evaluate emerging data products by comparing them with counting data collected to date in Louisiana.
5. Evaluate opportunities for and needs pertaining to expanding counting locations to support DOTD's needs.

METHODOLOGY
To achieve the objectives of this project, the research team will employ a series of tasks. First, they will review emerging data sources, methods, and technologies for non-motorized traffic counting. They will then continue collecting, managing, and mapping non-motorized traffic counting data. Next, the team will test and refine expansion factors for short-term counters and will then test non-motorized traffic counting data from data product vendors. They will follow this with evaluating opportunities for expanding counting locations. Lastly, a final report will be prepared and will detail the team’s findings.

IMPLEMENTATION POTENTIAL
The proposed research plans to consolidate and map all the non-motorized traffic data collected with DOTD/USDOT funding support. Data consolidation will help DOTD gain a better understanding about what data has been collected and how the collected data informs our understanding of active transportation demand around the state.