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## Development of an Implementation Plan for Sustainable Transportation Infrastructure Systems in Iowa

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### Abstract

The need to incorporate sustainability principles and practices is increasing due to both environmental and economic reasons. It is imperative to identify and operationalize sustainability strategies into core administrative, planning, design, construction, operational, and maintenance activities for the transportation infrastructure systems using a comprehensive systems approach and the integration of sustainability in decision-making processes. The primary goal of this study is to develop an implementation plan for achieving more sustainable transportation infrastructure systems for Iowa DOT and local road agencies. The specific objective this proposed research is to develop a systemic methodology for identifying best sustainable practices for implementation in transportation infrastructure practices in Iowa by: 1) surveying other states and leading European highway agencies, 2) identifying existing sustainability attributes, 3) evaluating sustainability assessment tools, 4) developing detailed goals and work tasks and making recommendations to implement sustainability practices and 5) preparing at least two shelf-ready ideas based on identified target areas to be put into practice through small scale pilot projects.