



<b>UTC Project Information</b>	
Project Title	The Next Generation of Transportation Asset Management
University	Florida International University
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Funding Source(s) and Amounts Provided (by each agency or organization)	ABC-UTC funds: \$70,000 Match funds : \$35,000
Total Project Cost	\$ 105,000
Agency ID or Contract Number	69A3552348322
Start and End Dates	January 1, 2024 - June 30, 2025
Brief Description of Research Project	<p>Transportation asset management (TAM) is a strategic approach to optimizing the performance, safety, and cost-effectiveness of transportation networks. This proposal seeks to conduct a synthesis study of current review of transportation asset management programs (TAMP) (at the national, state, and various international programs), specifically related to bridge assets, to reveal high-level trends, identify gaps, and ultimately provide a comprehensive framework for United States Department of Transportations (US DOT) to incorporate into their unique TAMPs to address current and future needs related to next generation asset management programs.</p> <p>Many U.S. state departments of transportation have developed comprehensive plans aligned with FHWA guidelines, utilizing data-driven analysis to guide maintenance and investment decisions. These plans focus on pavement and bridge assets as priority areas, and some include other focus areas such as geotechnical or hydraulic assets. Emerging trends point to the integration of new technologies like AI and sensors to enable predictive maintenance and a shift from reactive to proactive asset management.</p> <p>While some states have robust programs in place, gaps remain in fully implementing risk-based, lifecycle-driven asset management across networks. Internationally, asset management strategies focused on disaster risk reduction reflect a similar evolution toward more proactive, technology enabled techniques.</p> <p>There is a lack of consistent standards across jurisdictions, limited data sharing, and integration across assets. Developing a new framework could accelerate the adoption of next generation transportation asset management by</p>

	facilitating a common vision, highlighting best practices, providing implementation resources, and promoting greater collaboration across transportation agencies.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	The outcomes will be tracked and reported once they are identified.
Impacts/Benefits of Implementation (actual, not anticipated)	The impacts will be tracked and reported once they are identified.
Web Links <ul style="list-style-type: none"> <li>• Reports</li> <li>• Project website</li> </ul>	<a href="https://abc-utc.fiu.edu/research-projects/the-next-generation-oftransportation-asset-management/">https://abc-utc.fiu.edu/research-projects/the-next-generation-oftransportation-asset-management/</a>