



**Project Requirements Form USDOT
CREATE UTC Contract Number 69A3552348330
Center Lead: Texas State University; Texas A&M University**

design will bring in transformative research and innovation for coastal pavements which will help in modernizing the transportation systems by providing a more resilient and sustainable coastal protection system and would also help in improving the safety against future climatic impacts. Therefore, the research also addresses the USDOT strategic objectives on *Transformation* and *Safety* as secondary goals.

Outputs:

The research team will prepare the final report that will include a complete description of the problem, approach, methodology, findings, conclusions, and recommendations developed from Tasks.

Outcomes/Impacts:

The research team will prepare the final report, to include a complete description of the problem, approach, methodology, findings, conclusions, and recommendations developed from four tasks. The results of this work will be also presented and published at national conferences such as TRB Annual Meetings and ASCE GeoCongress conferences.

The research team will prepare educational materials that will be incorporated into classroom teaching in courses such as CVEN 720 Design with Geosynthetics. This information will be shared and disseminated to other universities, private industries and government agencies. We anticipate showcasing research demonstration materials like artificial mangroves to K-12 students that visit TAMU for various outreach activities. Our research team will also present them to ASCE-GI Chapter student organizations at Texas A&M University. The proposed workforce development including one doctoral student and one postdoctoral fellow along with undergraduate researcher, outreach activities and education will allow to reach a broad and diverse audience and to educate students on the benefits of this research work.

With respect to commercialization, the team will explore and assess the proposed resilient design system as a provisional patent by discussing with TAMU Commercialization and Entrepreneurship group at College Station, Texas.

Final Research Report: URL to final Report will be provided upon completion.